



Reconceptualizing hegemony: the circle of hydro-hegemony

Article

Accepted Version

Menga, F. (2016) Reconceptualizing hegemony: the circle of hydro-hegemony. *Water Policy*, 18 (2). pp. 401-418. ISSN 1366-7017 doi: <https://doi.org/10.2166/wp.2015.063> Available at <http://centaur.reading.ac.uk/72319/>

It is advisable to refer to the publisher's version if you intend to cite from the work.

Published version at: <http://dx.doi.org/10.2166/wp.2015.063>

To link to this article DOI: <http://dx.doi.org/10.2166/wp.2015.063>

Publisher: IWA Publishing

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

www.reading.ac.uk/centaur

CentAUR

Central Archive at the University of Reading

Reading's research outputs online



Reconceptualising Hegemony: The Circle of Hydro-Hegemony

Filippo Menga, University of Manchester

filippo.menga@manchester.ac.uk

This is an Accepted Manuscript of an article published by IWA Publishing in *Water Policy*, Volume 18, Issue 2, pages 401-418, available online: <http://wp.iwaponline.com/content/18/2/401> [Article DOI: 10.2166/wp.2015.063].

If you beat your head against the wall, it is your head that breaks and not the wall.

Antonio Gramsci, *Letters from Prison*, 1930

Abstract

This paper proposes a partial reconceptualization and a redesign of the Framework of Hydro-Hegemony (Zeitoun & Warner, 2006; Cascao & Zeitoun, 2010), an analytical tool devised to study how power, hegemony, and power asymmetries can influence transboundary water politics. This is done by presenting the original Circle of Hydro-Hegemony (CHH), an analytical framework that places the neo-Gramscian notion of hegemony at the centre of its structure, to illustrate how various forms of power are connective in the function of hegemony. Following a theoretical discussion on how the concepts of power and hegemony can interact, the case of the Aral Sea basin in Central Asia will provide a practical application of the CHH to transboundary water politics.

Keywords: Power; Hegemony; Hydro-hegemony; Hydropolitics; Aral Sea Basin.

1. Introduction

The purpose of this paper is to propose a partial reconceptualization of the Framework of Hydro-Hegemony (hereinafter FHH) (Zeitoun & Warner, 2006; Cascao & Zeitoun, 2010), an analytical framework devised to study how power, hegemony, and power asymmetries can influence transboundary water politics. Since its appearance in 2006, the FHH has informed a vast body of literature addressing the role of power and discourse in hydropolitics (see, among others, Water Policy, 2008; Daoudy, 2009; Dinar, 2009; Zeitoun, Eid-Sabbagh, Talhami, & Dajani, 2013; Zeitoun & Mirumachi, 2008; Zeitoun, Mirumachi, & Warner, 2011), thus contributing to expand the water discourse to a more critical perspective. As Warner and Zeitoun (2008: 803) argued, International Relations (IR) theory and transboundary water interactions can be usefully combined to better understand political processes and power relations in international river basin, and to avoid the traditional “water wars” and “water peace” discourses.

Yet, while the concepts and analytical tools proposed by the FHH have proved valuable to analyse the discursive constructions and the invisible forces that can influence international water relations, I argue that a more in-depth theoretical discussion is needed to appreciate how the concepts of power and hegemony can interact. A different and more nuanced understanding of their relationship can open the way to a new analytical approach to studying power in hydropolitics, one in which the various forms of power are connective in the function of hegemony. Furthermore, the current structure of the FHH seems to favour power over hegemony, and this does not appropriately represent the intimate connection between these two concepts. Throughout this paper I will therefore propose a redesign of the structure of hydro-hegemony, the Circle of Hydro-Hegemony (hereinafter CHH), an analytical framework that explicitly shows that the neo-Gramscian notion of hegemony and not power is at the centre of its structure.

The rest of this paper is divided into five sections. The next two sections provide theoretical insights into the notions of power and hegemony in social sciences, to then explain how these two concepts are intimately connected, and to subsequently illustrate the subjects of power and

hegemony in water relations and the FHH. The fourth section presents the CHH, outlining its rationale and analytical insights, while in the fifth section the Aral Sea basin in Central Asia serves as a platform to illustrate how the CHH can be used to analyse transboundary water politics. The final section concludes, discussing the limitations of this study as well as the implication of the findings to future research in the field of critical hydropolitics.

2. Power

In this section I will attempt to define power, keeping in mind, however, that this is an essentially contested concept in politics, one that can be given different interpretations and meanings (Berenskoetter & Williams, 2007; Lukes, 1974), and its appropriate definition remains a controversial matter (Waltz, 1986). The first modern analysis of political power can be traced back to the work of Machiavelli (1958), who argued that power is not to be considered as a means to an end but as the end itself, and described how it can be acquired, retained and expanded. A competing analysis was that of Hobbes (1995), according to whom power is linked to sovereignty and consent. For him, state power originates from a contract through which people voluntarily confer their power to a man or to an assembly, which will guarantee peace and stability.

The end of the Second World War and the progress of political science brought an increasing interest to the study of power in the social sciences. In particular, Max Weber's *Theory of Social and Economic Organization* (Weber & Parsons, 1947) had a strong impact on future theorisations on power. According to Weber, power is the capacity of one actor to realize its will in a social relationship, despite the opposition of other actors. The concept of power is therefore associated to that of domination. In Weber's view, political power is not based on social and economic factors but on three different sources of legitimation: charismatic authority (of a particular leader or of a certain institution, as in the case of dictatorial regimes during the last century); traditional authority (based on tradition and longevity, typical of pre-modern societies); and rational-legal authority (typical of modern societies and based on the belief that rationally established rules are legal).

Following up on Weber's ideas, Robert Dahl, who implicitly considered power as a relation among people from a behavioural science perspective, defined it as the ability of A "to get B to do something that B would not otherwise do" (Dahl, 1957: 203).

2.1. Three dimensions of power

Bacharach and Baratz (1962) further expanded the concept of power and developed a new theoretical model to include "what does not happen" in decision-making processes. The first face of power, or overt, is related with Dahl's idea of A imposing its will to B, and is directly observable in the decision-making process, where a group makes decisions that directly affect another group¹. The second face of power, instead, involves the dynamics of the non-decision-making process, and resides in the ability to create and reinforce "barriers to the public airing of policy conflicts" (Bacharach & Baratz, 1962: 948), or to use influence to limit the breadth of a discussion and to avoid conflicts from even being brought up to the political forum. Just because something did not happen, it doesn't mean that nothing happened.

Using as a starting point the work carried out by Dahl and by Bacharach and Baratz, Steven Lukes (1974, 2005b) further developed the study of power, finding its two-dimensional view inadequate, as it relies on the supposition that power – when associated with conflict – can actually be observed. Moreover, previous interpretations of power did not consider the ability of an actor to influence the norms and values accepted by others. For instance, "A may exercise power over B by getting him to do what he does not want to do, but he also exercises power over him by influencing, shaping or determining his very wants" (Lukes, 1974: 23). Since power can be hidden and not always visible, Lukes ideated a theoretical framework with three dimensions of power. The first, overt or hard dimension of power, is similar to Dahl's idea of power, and it is represented by the material capacity of A having B doing something against his will. The second dimension of power

¹ This is also in line with the influential work carried out by Harold Lasswell in *Politics: Who Gets What, When, How* (1936), in which power was seen as the ability to influence other people and to participate in the decision-making process.

is less visible, covert, and refers to Bacharach and Baratz's second face of power: it is the ability to control the political agenda and to create barriers that would impede certain issues to be discussed. But Lukes' original contribution to this debate stems from the idea of a third dimension of power, which he considers as the most effective among the three. This third dimension, power through domination, is hidden and goes beyond the domains of decision-making and setting of the political agenda, to encompass the area in which the preferences and perceptions of others are formed and shaped. As Lukes observes, "is it not the supreme exercise of power to get another or others to have the desires you want them to have - that is, to secure their compliance by controlling their thoughts and desires?" (Lukes, 1974: 23). This ideological dimension of power, which can be defined as power over ideas or ideational, draws on the Gramscian concept of hegemony to explain how the powerful secures the willing compliance of those they dominate (Lukes, 2005a).

Lukes (2005b) subsequently delved on the work of Michel Foucault to further expand his power analysis. Foucault's vision of domination framed in *Discipline and Punish* (Foucault, 1979) is seen by Lukes as helpful in understanding how domination can be secured through acquiescence, as well as Foucault's ideas on the link between power and knowledge and on power as a productive force. In the *History of Sexuality* (1998), Foucault introduced the popular concept of power/knowledge, to explain how power is formed by accepted forms of knowledge and truths. Power is ubiquitous, and it cannot be wielded but it is rather part of discourses. Power must be understood as the multiplicity of force relations within the context in which it operates. According to Foucault, "Power is everywhere; not because it embraces everything, but because it comes from everywhere [...] power is not an institution, and not a structure; neither is it a certain strength we are endowed with; it is the name that one attributes to a complex strategical situation in a particular society" (Foucault, 1998: 93).

As a result, Lukes finally defined the power of an actor as "his ability to avoid or resist performing positive actions" (Lukes, 2005b: 480), bringing the example of how the US under the Bush Administration showed its power by not performing certain actions, such as ratifying the

Kyoto protocols or joining the International Criminal Court. In relation with the work of Lukes and Foucault, and therefore with the connection between knowledge, ideas and power, it is worth noting that also Susan Strange (1994) recognised the existence of a third dimension of power, which originates in the “knowledge structure”. This third level of power, is the level at which power is exercised by the strong over the weak in the realm of ideas, to the extent that the weak “believe that the value-judgments of the strong really are the universally right and true ones” (Strange, 1994: 176). In her study of power relations in the field of finance, Strange made an interesting distinction between structural power and relational power. She noted how in the post-war period, the United States used their structural power to extend or restrict the range of options open to others (Strange, 1990), while Japan used its relational power stemming from its global position as a major creditor and aid donor. If, on the one hand, relational power is clearly seen by Strange as “the ability of A to get B by coercion or persuasion to do what B would not otherwise do” (Strange, 1989: 145), on the other hand, the definition of structural power is less straightforward. Structural power, which has four dimensions – security, production, finance and knowledge – is eventually defined as “the power to decide how things shall be done, the power to shape frameworks within which states relate to each other, relate to people, or relate to corporate enterprises” (Strange, 1998: 25).

Thus, if structural power is interpreted as the ability to shape and influence relational frameworks, it is clear its connections with Lukes’ ideational power and with the Gramscian notion of hegemony. Along the same line, Gill and Law (1988) drew from the work of Lukes to also identify three dimensions of power. While the first two dimensions (open or overt and covert) are similar to those observed in this analysis, it is with the third, structural power – which derives from Lukes’ third dimension – that they brought a fresh contribution to the debate. According to Gill and Law, structural power is the “definite attraction and limitation systems with the physical and normative aspects to shape the relations of parties” (Gill & Law, 1988: 74). This dimension of power encompasses both material and normative aspects that work together in the creation of a system of incentives and constraints.

2.2. From hard to soft power

What emerges from this overview is that power is not a single entity but it represents a variety of concepts and ideas. One aspect nevertheless appears clear. As Clegg and Haugaard noted, “power as domination, which is linked to (the capacity for) violent agency, is the dominant perception of power in everyday speech [...]. However, if we look to the academic social science literature, increasingly the conception of power as essentially grounded in coercion represents a minority view” (Clegg & Haugaard, 2009: 3). The focus has thus moved from “hard” to “soft” power, the first being visible and concrete, and the latter being hidden and more sophisticated. On the one hand, hard power corresponds to Dahl’s definition of power, or to Lukes’ first dimension, and is the ability to coerce, which derives from a country’s military, economic and technological might and, especially in hydropolitics, from a country’s geographical position, (i.e. being upstream or downstream). On the other hand, soft power, as it was originally defined by Joseph Nye, “[i]s the ability to get what you want through attraction rather than coercion or payments” (Nye, 2004: 256). A few years later, Nye added to his analysis a new form of power, “smart power”, which he defined as “the ability to combine hard and soft power into a successful strategy” (Nye, 2009).

Nye’s concept of soft power can here be adapted and used to represent the second and third dimensions of power as they were analysed previously, as it proves efficient in encapsulating power in its more abstract dimension, especially if compared with hard power. Moreover, Nye’s soft power is partly corresponding to Bacharach and Baratz second face of power. Based on the analysis of power carried out so far, it is possible to attempt an initial schematization (Figure 1) of the different dimensions (or faces) of power observed, that will be subsequently adapted to the more specific application of the concept of power to water relations.

Figure 1: Schematic representation of the three dimensions of power (source: Author).

As it was observed, defining power in politics can be challenging, as it is a concept that can be associated to different interpretations and meanings, based on different perspectives and epistemologies, and to this day, there is not a universally accepted definition of power. Jonathan Gaventa observed that “power is often assumed, rather than defined or addressed or used in a coherent manner” (Gaventa, 2003: 12). Nevertheless, for the purpose of this work, power needs to be somehow defined, or at least the definition needs to be narrowed from the many available in the literature. Without aspirations of being definitive or absolute, the following working definition serves to frame the concept of power within this research. Based on the assumption that power is indeed a multifaceted concept, power is here seen as the ability, or capacity, of one actor to get the desired outcome through coercive, bargaining and ideational/discursive means. These three aspects are intimately correlated and overlap with the Gramscian definition of hegemony based on force and consent, as it will be shown in the next paragraph.

3. Hegemony

The term hegemony (from Greek *hēgemonia*, “to lead”), defined by the Oxford English Dictionary as “leadership or dominance, especially by one state or social group over others”, originally indicated the predominance of a city state over another in ancient Greece. In modern times, however, the revamp and first modern definition of the term hegemony can be attributed to the Italian philosopher Vincenzo Gioberti, who defined it as “that sort of supremacy, pre-eminence, superiority, not legal nor juridical in the strict sense of the word, but morally efficient, that among several congeneric, unilingual and compatriot provinces, one exercises over the others” (Gioberti, 1851, vol. II: 203). This definition became progressively popular and successfully penetrated the political language, with an increasing association of the term hegemony to the term leadership, notably as it was done by *The Times* in 1860 with reference to the Prussian hegemony/leadership over the German Confederation. In that occasion, the newspaper stated that “it is a glorious ambition which drives Prussia to assert her claim to the leadership, or as that land of professors

phrases it, the “hegemony” of the Germanic Confederation” (The Times, 1860). This last point calls for a distinction between the orthodox realist usage of the term in IR – which refers to the dominance of one state over one or more other states through the exertion of the Weberian “power over” (Gill & Law, 1989: 476) – and the usage originating from the work of the Italian political theorist Antonio Gramsci.

Gramsci developed the theory of hegemony in his monumental work *Quaderni del carcere* (Gramsci, 1975b), that he wrote between 1929 and 1935 while imprisoned by the Italian Fascist regime. The Gramscian concept of hegemony refers to the relations between classes and between the State and the civil society. In the struggle for hegemony in the civil society a political party, for instance, needs to get ideological and cultural consent. Once the consent from the civil society is obtained, the party can act as State and use its force to create a new historical bloc. Thus ideologies, for Gramsci, are assessed for their social effects rather than on their effective value (Fairclough, 2010: 62). Hegemony denotes the success of a dominant class in presenting its view of the world and its ideology, in achieving an intellectual and moral leadership in a way that the other classes accept it and consider it common sense.

As Ekers and Loftus noted, Gramsci's development of hegemony has two related facets. The first refers to “the maintenance of one social group's dominance over subordinate groups, accomplished through relations of consent and coercion” (Ekers & Loftus, 2008: 702). The second refers to how hegemony can be maintained, and this is done reproducing “the social relations that are foundational to a given social formation” (Ekers & Loftus, 2008: 702). More specifically, the State consolidates its hegemony and creates in people certain expectations and behaviours through a set of “private institutions” usually considered outside of the State, such as the Church, trade unions, schools and the intellectuals. The latter, are considered an efficacious instrument to affirm hegemony, such as the Italian philosopher Benedetto Croce, described by Gramsci as a “lay Pope” for his influence on Italian politics (Gramsci, 1975a: letter 210). If a government is not able to create its own class of intellectuals, it will only exercise dictatorship and not hegemony.

Coercion and consent come together, and they are, in the function of hegemony, “connective” (Gramsci, 1975b: Q12§1). Although both force and consent are necessary for a hegemonic order to survive, it is primarily on consent that a State needs to base its relations with the civil society. It is based on these assumptions that Gramsci criticizes the Italian Fascist regime, which in his view represents an element of weakness of the bourgeoisie, as it is a regime based on force rather than on consent (Mordenti, 1996). Machiavelli’s image of the Prince, half beast (lion, fox and centaur) and half man – the metaphorical representation of a good ruler – is revisited by Gramsci as the combination of consent and coercion necessary to govern, “to the extent that the consensual aspect of power is in the forefront, hegemony prevails” (Cox, 1983). To say it with the words of Gramsci, “the 'normal' exercise of hegemony [...] is characterized by a combination of force and consent, which balance each other variously, in a way that force does not stand above consent, on the contrary, force should appear as if it is sustained by the consent of the majority” (Gramsci, 1975b: Q13§37, 1638). When the State dominates instead of directing, the result is dictatorship without hegemony (Gramsci, 1975b: Q15§59), or, in other words, domination and not hegemony.

3.1. Hegemony applied to IR

Now that the notion of hegemony has been outlined, it is possible to examine how this concept can be applied to IR. The notion of hegemony adopted in this study refers to the Gramscian notion of coercion and consent, which was originally conceived and applied at the State level (referring to “internal” hegemony in the era of Italian city-states or in Fascist Italy). In IR theory, two main approaches to hegemony can be identified: a conventional realist one and a critical neo-Gramscian perspective. As Bieler and Morton (2004: 87) observed, “conventional IR theory, reduces hegemony to a single dimension of dominance based on the economic and military capabilities of states”. This idea of hegemony – that can be linked to the first dimension of power, “hard power”, as it refers to domination through coercion – is at the origin of the hegemonic stability theory (HST), conceived by Robert Keohane (1984). HST is based on two central propositions: i) “Order

in world politics is typically created by a single dominant power. Since regimes constitute elements of an international order, this implies that the formation of international regimes normally depends on hegemony”; ii) “The maintenance of order requires continuous hegemony” (Keohane, 1984: 31). Hence, according to Keohane, cooperation, order and stability can be achieved through the activities of a hegemonic power (as in the cases of *the pax Britannica* in the nineteenth century and the *pax Americana* after the Second World War), which “must possess enough military power to be able to protect the international political economy that it dominates from incursions by hostile adversaries” (Keohane, 1984: 39).

In contrast with this approach, the neo-Gramscian perspective of hegemony developed by Robert Cox broadens the domain of hegemony going back to the Gramscian theorisations, and defines it as an expression of widely-based consent supported by material resources and institutions. As in the Gramscian thought, “dominance by a powerful state may be a necessary but not a sufficient condition of hegemony” (Cox, 1981: 139). For Cox, hegemony is based on three spheres of activity: 1) the social forces engendered by the production process; 2) the forms of state; 3) world orders (Cox, 1981: 137-8). In addition, within each sphere of activity Cox identified three categories of forces (or potentials) that interact: material capabilities/power (as industries and armaments), ideas (intersubjective meanings and collective images of social order held by different groups of people) and institutions (a particular amalgam of material power and ideas which help maintaining stability). These three forces act together in a reciprocal relationship to constitute an historical structure.

In the world order, world hegemony is a “social structure, an economic structure, and a political structure; and it cannot be simply one of these things but must be all three” (Cox, 1983: 172). Therefore, also when hegemony is studied at the world level, it appears as a complex of universal norms and institutions which create rules of behaviour for states and for the different forces operating within the civil society. The hegemon is the first amongst equals, as for example the United States at the UN General Assembly in comparison with Canada. Both countries have one

vote and are formally on the same level, but the vote of the United States has a different weight in terms of influence than that of Canada (Zeitoun & Allan, 2008). This is the fundamental difference between hegemony and other forms of control such as imperialism or mere domination: hegemony can manipulate inter-state relations without a superior body, while, on the contrary, imperialism is based on formal rule and military imposition (Keohane, 1991). The key requirement for a hegemonic order to survive is that the hegemonised perceives the existing situation as right and proper. When consent vanishes and order starts being contested, as for instance in the case of the Arab states in 2011, there is not anymore hegemony and power can be toppled (Keucheyan, 2012). Further contributing to this neo-Gramscian perspective, the Belgian political theorist Chantal Mouffe (2008) conceived hegemony and a hegemonic order as something fixed through nodal points, “which discursively fix the meaning of institutions and social practices and articulate the ‘common sense’ through which a given conception of reality is established” (Mouffe, 2008).

Whether the notion of hegemony is approached from a realist or from a neo-Gramscian perspective, in both cases it is clear how this concept is intimately correlated to that of power (see Figure 2). The main difference is that for the former approach, the focus is on hard power, for the latter is on a combination of hard (coercion) and soft (consent) power. Considering hegemony only as a form of domination based on material capabilities seems somewhat reductive. On the subject of consent, in particular, it can be observed how, over the last five centuries, many thinkers have converged on one point: hard power alone is not enough to maintain supremacy.

Figure 2: Schematic representation of the three dimensions of power overlapping with hegemony (source: Author).

For Machiavelli, a Prince had to be respected to obtain obedience, and Gramsci, as it was widely observed, believed that force should appear as sustained by consent. Nye, similarly, understood the effects of soft power, intended as the power to persuade and to co-opt people rather than coerce them, as more effective than those of hard power: “if I can get you to want to do what I want, then I

do not have to force you to do what you do not want to do” (Nye, 2002: 9). The reciprocal relationship between material capabilities, ideas and institutions devised by Cox, further confirms the idea of several forces acting together in a structure.

Thus, there appears to be an intimate connection between material power and the invisible soft power of persuasion which is at the basis of the concept of hegemony. It can be argued, therefore, that with respect to hegemony power can be considered as the means to an end, with the end being the achievement and retention of hegemony. Power cannot be understood as the end itself (as for instance Machiavelli argued), as it is always wielded to get a desired outcome.

3.2. The framework of hydro-hegemony

Now that the key concepts of power and hegemony have been illustrated and connected, it is possible to briefly illustrate the subject of power and hegemony in water relations and the FHH. The first attempts to study how control of water resources is related to power dynamics and not to the idea of water-wars, can be traced back to Frederick Frey (1993), Peter Gleick (1993), and Miriam Lowi (1993). Among the four factors or characteristics that make water likely to be a source of strategic rivalry, Gleick identified “the relative power of the basin states” (Gleick, 1993: 84)², using as an example the case of Turkey and its use of power for political goals in the Euphrates River basin, which the country shares with Syria and Iraq. Lowi (1993), adapted Keohane’s HST to the Jordan River basin and the dispute between Israel and Palestine, arguing that when the upstream riparian is also the hegemon (in her acceptance of the term, hegemon stands for the most powerful state in the basin), the chances that cooperation takes place are low since it has no interest or incentive in doing so; cooperation is more probable when the hegemon is located downstream and it

² The other three being the degree of scarcity, the extent to which the water supply is shared by more than one region or state and the ease of access to alternative fresh water sources (Gleick, 1993: 84).

has a critical need of water³. The HST inspired also Frey, who was the first to present a power-analytic framework. Frey reached the conclusion that the least stable situation in an international river basin is obtained when a powerful nation downstream is in need of water and compete for it with weaker nations upstream (Frey, 1993: 62).

Frey's work ignited the conception of the FHH, in which power relation are seen as a dynamic reality, since in international river basins "power and power asymmetry, are constantly being contested and challenged" (Cascão & Zeitoun, 2010: 30) in a quest to change the status-quo. As described by Zeitoun and Warner, the FHH is aimed at analysing hydropolitics avoiding the traditional "water wars" and "water peace" discourses (Warner & Zeitoun, 2008). Applying the Gramscian concept of hegemony and Lukes's three dimension of power to hydropolitics, the FHH looks at how the basin state with more relative power, the hydro-hegemon (HH), "can establish the form of interaction [sic] over transboundary waters that it prefers" (Zeitoun & Warner, 2006: 455). The FHH is the first structured study in the field of hydropolitics that takes power as a key to understand riparian relations, and this is where its importance resides.

The FHH is based on three pillars, which are at the origin of power asymmetries in a river basin. The first and third pillars are respectively riparian position and exploitation potential, but the innovative contribution comes with the second pillar, which is the one centred on power. Lukes's three dimensions of power are applied to hydropolitics to define respectively material, bargaining and ideational power. These forms of power act concurrently to determine who the hegemon is in an international river basin, or the HH. The HH is the basin riparian whose leadership is buttressed by authority, one that carries a hegemonic strategy based on cohesion and compliance and sustained by attraction rather than intimidation, although the two elements indeed coexist (Zeitoun & Allan

³ Dinar et al. (2007: 150) efficiently contradicted Lowi's argument taking as an example the Colorado River salinity issue between the United States and Mexico, where the former – being both the most powerful and the upstream state – not only entered into an agreement with Mexico but also paid the high costs of desalinating the waters flowing downstream.

2008: 9). Force and consent, together with the imposition of ideas and dominant discourses, are more relevant in determining water use and allocation than other instruments such as international water law, water sharing ethics or riparian position (Zeitoun & Allan, 2008: 10).

4. The FHH revisited

The above discussion on power, hegemony and hydro-hegemony provides the elements to make an argument for a partial re-theorization of the FHH. The FHH offers extremely useful insights to the understanding of interstate relations, but does not explicitly show that hegemony and not power is its central element. This is because its current structure based on pillars does not seem to be the most appropriate to represent the intimate connection that these two elements have. As it was widely observed, an analysis of power can benefit from the understanding that power is the means to hegemony, and not vice versa.

As the focus is being placed on hegemony and on the ways in which it can be maintained or contested, why not placing hegemony at the centre of an analytical structure? Moreover, the pillars in the FHH have been used to give estimates of the various levels of power (see for instance Cascao & Zeitoun, 2010) in various river basins. While this can prompt interesting debates and gives an intuitive representation of who is considered the hydro-hegemon in a selected river basin, it can somehow be misleading, in the sense that it can lead to think that there is something that can be defined as “half-hegemony”. Furthermore, since each specific river basin has its own “problemshed”, the relative value of a certain form of power can change according to the basin and to the actors involved, and this cannot be shown in this schematic representation⁴.

Therefore, I argue that representing power through pillars and measuring it, even if through estimates, does not really benefit the analysis of hegemony. I propose a redesign (see Figure 3) of the structure of hydro-hegemony, one that takes into consideration the forms of power in a similar

⁴ This seems to recall Hoffmann’s (1972) conception of world politics in terms of distinct issue areas placed on alternative chessboards, each with a different weight.

way than that adopted by the second pillar of the FHH, but that presents them as interconnected, since they are – to paraphrase Antonio Gramsci (1975b: Q12§1) – “connective” in the function of hegemony, or, in this case, of hydro-hegemony.

Figure 3: The circle of hydro-hegemony (source: Author)

The “circle of hydro-hegemony” embodies the theoretical rationale behind the schematic representation of the three dimensions of power overlapping with hegemony, as it was showed in Figure 2. It also takes inspiration from Cox’s concept of the relationship of forces in an historical structure (Cox, 1981), to display how the three forms of power interact and act together to constitute a hydro-hegemonic setting. While the circle of hydro-hegemony might primarily appear as a cosmetic change of the original FHH, it sets the basis for a different understanding of the complex relationship of forces in interstate relations.

Hydro-hegemony is here defined as the success of a basin riparian in imposing a discourse, preserving its interests and impeding changes to a convenient status-quo. This definition combines elements from the conventional Gramscian definition of hegemony – which denotes the success of a dominant class in presenting its view of the world and its ideology – with aspects related to the management and control of shared water resources⁵.

The three forms of power adopted in the circle of hydro-hegemony are not particularly different from those of the FHH. Material power include the riparian’s position, its size, military might, economic strength and structural capacities. The latter refer to the capacity of realising large

⁵ It is worth mentioning that along with hegemony comes the possibility for counter-hegemony, and consequently for countering hydro-hegemony. In his seminal book *Weapons of the weak: everyday forms of peasant resistance*, James C. Scott (1985) observed how resistance forms a continuous, almost invisible flux, which can be difficult to be observed but also extremely powerful. As Laclau and Mouffe (2001) noted in their theoretical analysis of hegemony, micro-strategies of resistance are always possible, even in the most totalising hegemonic setting.

hydraulic infrastructures (such as dams) and to freely exploit those already existing. It is worth mentioning that the riparian's position can significantly impact on material power and on the ability to exploit water resources. An example is that of a weaker upstream country that cannot exploit its hydroelectric potential, as Tajikistan in the Amu Darya river basin or Ethiopia in the Nile river basin. In this case, their relative material power is considerably lower than that of the downstream countries, Uzbekistan and Egypt, although the latter are geographically disadvantaged by their position (yet, Ethiopia has lately challenged this situation through the construction of the controversial Grand Ethiopian Renaissance Dam) (Gebreluel, 2014). This is because even if they are upstream, the status-quo is such that they cannot take advantage of their position, since the downstream countries successfully impede their hydraulic ambitions. Conversely, the relative material power of a hydro-hegemon in an upstream position, like Turkey in the Tigris-Euphrates river basin, is considerably higher than that of the downstream states, Iraq and Syria.

Bargaining power relates to the ability to set a political agenda and to shift the balance in negotiations limiting the options and alternatives of the counterpart. Ideational (discursive) power refers to the ability to impose a sanctioned discourse or a particular ideology. While this last form of power appears indeed as the most effective of the three towards the achievement of hydro-hegemony, the relative value of each of the three forms of power can vary depending on the situation in which the basin riparians find themselves. Accordingly, rather than measuring the relative weight of each form of power, what seems analytically relevant is to observe which forms of power are more used by each riparian, and trying to understand the reasons behind such choice.

5. Applying the CHH to the Aral Sea basin in Central Asia

The following briefly discusses transboundary water politics in the Aral Sea basin in Central Asia, using the CHH as analytical framework for understanding how various forms of power are connective in the function of hegemony. The Aral Sea basin denotes a competitive hydro-hegemonic setting, marked by a contested control of water resources and a dominative form of

hydro-hegemony exerted by Uzbekistan, that given its water allocation, the total population and the irrigated area of the basin states can be considered the hydro-hegemon (Wegerich, 2008; Menga, 2014; Shalpykova, 2014). In a competitive hydro-hegemonic setting, disputants consider the resources under negotiations as limited, and parties take a position and seek power and control (Jarvis & Wolf, 2010: 129). While this hydro-hegemony might be not particularly clear in absolute terms (Bernauer & Siegfried, 2012), or in comparison with other river basins where the hydro-hegemon appears stronger (e.g. Turkey in the Tigris-Euphrates basin), it is nevertheless rather evident in relation to the two upstream countries, Tajikistan and Kyrgyzstan, that also happen to be the poorer and less developed among the five Central Asian countries. At the regional level, Uzbekistan has been by far the most vocal opponent of the construction of large hydroelectric plants upstream, and has so far managed to impede or slow down their realisation. Uzbekistan has also maintained the consolidated control it has over water resources, keeping unchanged its advantageous water allocation after the collapse of the Soviet Union by signing the Almaty Agreement in 1992, thus continuing to practice the water-intensive cotton monoculture whose income is needed by the Uzbek political elites to support the existing system of social, political, and economic control (Weinthal, 2006). Additionally, since both Kyrgyzstan and Tajikistan depend from Uzbekistan for their imports of natural gas, Tashkent uses the situation to gain leverage on the countries, imposing high purchase prices and uncompromising payment deadlines, and frequently cutting gas supplies, causing serious energy crises (see for instance BBC Monitoring Central Asia Unit, 2012 and 2013).

Over the last two decades, the incompatibility between water demands of irrigation and hydropower gave rise to a tense confrontation amid the upstream and downstream republics on the use and control of the region's water resources. The Uzbek President Islam Karimov, in particular, perceives the development of hydraulic infrastructures upstream as an existential threat to the well-being of his country, and opposes these projects vehemently. In this context, Tajikistan's and Kyrgyzstan's flagship water resources development projects, the Rogun and Kambarata dams, have

crystallised the upstream-downstream tensions over the differing preference of water use. Their construction could entail an irreversible change in the status-quo that the Uzbek government wants to maintain unchanged.

Although the two projects are not identical, their many points in common and the nature of the threat perceived led the Government of Uzbekistan (GoU) to treat them as a single entity. The Uzbek counter-arguments concerning their realisation are essentially three. First, due to the seismicity of the area where they are located, the likely event of a major earthquake could lead to one of the worst man-made catastrophes in history (Karimov, 2010). Second, during the time necessary to fill the two water reservoirs there will be a reduction in the amount of water flowing to Uzbekistan (Interfax News Agency, 2010; Karimov, 2010). Third, the impact of these two outdated Soviet projects should be assessed by means of an “impartial expertise made by international experts under auspices of the United Nations” (Norov, 2009: 2). These are the three contentions forming the Uzbek discourse, that is projected both at the international and domestic level and is disseminated through speeches at international forums, the active criticism of the dams in various settings and the engagement of regional heavyweights such as Russia or Kazakhstan (Menga, 2014).

Based on this brief overview, it is now possible to illustrate the Uzbek hegemonic strategy using the CHH, as shown in Figure 4.

Figure 4: Wielding power: the five tactics forming the Uzbek hegemonic strategy in the Aral Sea basin in the period 1991-2013 (source: Author).

In the period 1991-2013, the Uzbek hegemonic strategy involved the deployment of ideational, bargaining and material power through five main tactics: i) international support⁶; ii) knowledge

⁶ This is done mostly by constantly raising water and hydroelectric issues in the speeches that the Uzbek governments delivers at the UN General Assembly and at other international forums (see for instance Norov, 2009; Karimov, 2010; Ganiev, 2011; Kamilov, 2012).

construction⁷; iii) recourse to international law⁸; iv) active stalling⁹; and v) resource capture¹⁰. The basic goal here is to maintain the status-quo unchanged. This implies the avoidance of changes in water allocation or in the way water is used and shared. While the Uzbek government can do little to control events such as population growth and climate change that might sooner or later impact on the Central Asian rivers and consequently affect the status-quo, some other events such as the construction of large dams can be more easily controlled or contested.

The Uzbek government has therefore used all of the three forms of power to maintain its hegemony and to reassert and consolidate its interests while eroding those of the hegemonised. Uzbekistan used its material (or hard) and soft power to respectively coerce and persuade other actors and get the desired outcome. Yet, hard power never implied the use of violence (although this was sometimes used as a threat), but rather the recourse to other “structural” measures such as the construction of water reservoirs or actively stalling the provision of construction materials.

⁷ Implemented through the construction and dissemination of a science-based knowledge that warns about the catastrophic effects of large hydroelectric dams (among others, The Ecological Movement of Uzbekistan 2010 and 2011; Pravda Vostoka, 2011).

⁸ Starting in 2007, when it ratified both the 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the 1997 Convention on the Law of the Non-Navigational Uses of International Watercourses, the Uzbek government has actively advocated for the respect of the key principles of international water law, notably equitable and reasonable utilization, prior notification, causing no significant harm and consultation between basin riparians (among others, Norov, 2007; Karimov, 2010).

⁹ For what concerns the Rogun Dam, since all of Tajikistan’s rail imports have to pass through Uzbekistan, starting in 2010 the Uzbek authorities have delayed thousands of rail carriages bound to the Rogun construction site that were crossing its border (Eurasianet, 2010). Furthermore, in 2012 Uzbekistan dismantled one of the three major rail links to Tajikistan, making the movement of trains impossible (BBC Summary, 2012).

¹⁰ Over the last few years the GoU has built a number of reservoirs using winter releases of water from the Toktogul Reservoir with the plan of using it for irrigation in summer, becoming less dependent on Kyrgyzstan’s water (Wegerich, 2008). Uzbekistan built these reservoirs without notifying or consulting with Kyrgyzstan, the country whose interests could be potentially harmed by such initiative (Kemelova & Zhalkubaev, 2003).

6. Conclusions

This paper has developed an analytical model that connects the concepts of power and hegemony to revisit the FHH, proposing a redesign of its structure named the “circle of hydro-hegemony”. Hegemony is placed at the centre of this analytical structure, while the various forms of power appear as an interconnected entity that is connective in the function of hydro-hegemony. The results of this analysis suggest that among the three forms of power, the ideational one seems to be the most significant to both maintain and contest hegemony. Going back to Gramsci’s (1975a and 1975b) idea of an “intellectual” hegemony, and more in general to the power theory review carried out above, the ability to impose ideas and influence those of the others is considered an efficacious instrument to affirm hegemony. However, while on the one hand the political setting described by Gramsci featured a lay Pope, Benedetto Croce, which acted as a key instrument of hegemony, on the other hand, Central Asian water politics do not seem to be influenced by a singular actor but rather by a multiplicity of fragmented realities. This is perhaps the reason behind the strong influence that the Soviet Union and its policies still have on water management issues in Central Asia. Uzbekistan’s water hegemony is primarily a result of the decisions taken in the Soviet period, and of the succeeding ability of the Uzbek government to maintain the status-quo unchanged.

The in-depth interdisciplinary theoretical discussion behind the CHH can enhance our understanding of the relationship and interconnections between the notions of power and hegemony, providing insights and a new analytical approach to studying power in critical hydro-politics. Yet, such a focus on theory, rather than on empirical material, also represents a limitation of this study. Further research should focus on the practical application of the CHH to international river basins, to explore the different tactics used by basin riparians to wield power and to better understand how the various forms of power act together in maintaining hegemony. From an analytical point of view, the CHH might also benefit from unpacking riparian position, currently subsumed under material power, to better assess a riparian’s ability to exploit water resources.

Likewise, since hegemony stems from a combination of hard and soft power, Nye's notion of smart power could be further elaborated to understand its application to transboundary water politics.

The study of counter hydro-hegemony also appears as another area that needs further work. The CHH could be employed to examine the continuous process through which a hegemonised basin riparian attempts to challenge and contest a disadvantageous status-quo. In this regard, it would be interesting to compare counter-hegemonic tactics in a number of international river basins, to explore which forms of power are used by different riparians and why and how these differ from those employed by hydro-hegemons. The construction of the Grand Ethiopian Renaissance Dam in the Nile river basin could be for instance compared with the construction of the Rogun Dam in Tajikistan, as in both cases power relationships are being challenged by hegemonised basin riparians. This might apply to the issue of large dams, as it was done in this paper, but also to any other activity aimed at countering an existing hegemonic order.

Acknowledgments

Though all errors and omissions in this work are my own, I would like to thank the three anonymous reviewers for their insightful suggestions and comments that helped me refine and improve the content of this paper. I would also like to thank Annalisa Addis for her advice on how to improve the look of the CHH. This work was also supported by Tallinn University within the framework of a FP7/Marie Curie ITN action (grant No:316825).

References

- Bacharach, P., & Baratz, M. S. (1962). Two faces of power. *The American political science review*, 56(4), 947–952.
- BBC Monitoring Central Asia Unit (2012, December 31). Uzbekistan suspends gas export to Tajikistan.
- BBC Monitoring Central Asia Unit (2013, January 21). Uzbekistan cuts gas supplies to Kyrgyzstan.

- BBC Summary of World Broadcasts (2012, March 30). Uzbekistan reportedly dismantling railway to Tajik south. Avesta website, Dushanbe, in Russian.
- Berenskoetter, F., & Williams, M. J. (2007). *Power in world politics*. London, New York: Routledge.
- Bernauer, T., & Siegfried, T. (2012). Climate change and international water conflict in Central Asia. *Journal of Peace Research*, 49(1), 227–239. doi:10.1177/0022343311425843.
- Bieler, A., & Morton, A. D. (2004). A critical theory route to hegemony, world order and historical change: neo-Gramscian perspectives in International Relations. *Capital & Class*, 28(1), 85–113. doi:10.1177/030981680408200106.
- Cascao, A., & Zeitoun, M. (2010). Power, hegemony and critical hydropolitics. In A. Earle, A. Jägerskog, & J. Öjendal (Eds.), *Transboundary water management. Principles and practice*. London, Washington, DC: Earthscan.
- Clegg, S., & Haugaard, M. (2009). *The Sage handbook of power*. London, Thousand Oaks, Calif: SAGE.
- Cox, R. W. (1981). Social forces, states and world orders: Beyond international relations theory. *Millennium - Journal of International Studies*, 10 (2), 126–155., 10(2), 126–155.
- Cox, R. W. (1983). Gramsci, hegemony, and international relations: An essay in method. *Millennium - Journal of International Studies*, 10 (2), 126–155., 12(2), 162–175.
- Dahl, R. A. (1957). *The concept of power. Bobbs-Merrill reprint series in the Social Sciences: PS-54*. New York: Bobbs-Merrill.
- Daoudy, M. (2009). Asymmetric Power: Negotiating Water in the Euphrates and Tigris. *International Negotiation*, 14(2), 361–391. doi:10.1163/157180609X432860.
- Dinar, A. (2007). *Bridges over water: Understanding transboundary water conflict, negotiation and cooperation. World scientific series on energy and resource economics: Vol. 3*. Singapore: World Scientific.

- Dinar, S. (2009). Power Asymmetry and Negotiations in International River Basins. *International Negotiation*, 14(2), 329–360. doi:10.1163/157180609X432851.
- Ekers, M., & Loftus, A. (2008). The power of water: Developing dialogues between Foucault and Gramsci. *Environment and planning : society and space*, 26, 698–718.
- Eurasianet.org (2010, August 6). Boxcar Diplomacy Puts Tajik Businesses At Tashkent's Mercy. *Eurasianet.org*. Retrieved from <http://www.eurasianet.org/node/61678>.
- Foucault, M. (1979). *Discipline and punish: The birth of the prison*. Vintage Books.
- Foucault, M. (1998). *The History of Sexuality: The will to knowledge* (v. 1). London: Penguin Books.
- Frey, F. W. (1993). The Political Context of Conflict and Cooperation Over International River Basins. *Water International*, 18(1), 54–68. doi:10.1080/02508069308686151.
- Ganiev, E. (2011). *Statement by His Excellency Mr. Elyor Ganiev, Deputy Prime Minister, Minister of Foreign Affairs of the Republic of Uzbekistan, at the General Debate of the 66th session of the United Nations General Assembly*. New York.
- Gaventa, J. (2003). Power After Lukes: An Overview of Theories of Power Since Lukes and Their Application to Development. (draft).
- Gebreluel, G. (2014). Ethiopia's Grand Renaissance Dam: Ending Africa's Oldest Geopolitical Rivalry? *The Washington Quarterly*, 37(2), 25–37. doi:10.1080/0163660X.2014.926207.
- Gill, S., & Law, D. (1988). *The global political economy: Perspectives, problems, and policies*. Baltimore: Johns Hopkins University Press.
- Gill, S., & Law, D. (1989). Global Hegemony and the Structural Power of Capital. *International Studies Quarterly*, 33(4), 475–499.
- Gioberti, V. (1851). *Del rinnovamento civile d'Italia*. Parigi, Torino: G. Bocca.
- Gleick, P. H. (1993). *Water and conflict: Fresh water resources and international security*. [Cambridge, Mass.]: President and Fellows of Harvard College and the Massachusetts Institute of Technology.

- Gramsci, A. (1975a). *Lettere dal carcere*. Torino: Einaudi.
- Gramsci, A. (1975b). *Quaderni del carcere: Edizione critica dell'Istituto Gramsci. NUE: N.S.,1,4*.
Torino: Einaudi.
- Hobbes, T. (1995). *Leviathan*. New York, NY: Fordham University Press.
- Hoffmann, S. (1972). Weighing the Balance of Power. *Foreign affairs*, (July).
- Interfax News Agency (2010, October 12). Rogun project undermines Uzbekistan's water supplies –
Karimov.
- Jarvis, T., and Wolf, A. (2010). Managing Water Negotiations and Conflicts in Concept and in Practice.
In A. Earle, A. Jägerskog, & J. Öjendal (Eds.), *Transboundary water management. Principles
and practice*. London, Washington, DC: Earthscan.
- Kamilov, A. (2012). *Statement by His Excellency Mr. Abdulaziz Kamilov, Minister of Foreign
Affairs of the Republic of Uzbekistan, at the General Debate of the 67th session of the United
Nations General Assembly*. New York.
- Karimov, I. (2010). *Address by H.E. Mr. Islam Karimov, President of the Republic of Uzbekistan, at
the Plenary Session of the UN Millennium Development Goals Summit*. New York.
- Kemelova, D. and Zhalkubaeu, G. (2003). Water conflict and security in Central Asia revisited.
N.Y.U. Environmental Law Journal, (11), 479–502.
- Keohane, R. O. (1984). *After Hegemony: Cooperation and Discord in the World Political
Economy: Cooperation and Discord in the World Political Economy*: Princeton University
Press.
- Keohane, R. O. (1991). The United States and the Postwar Order: Empire or Hegemony? *Journal of
Peace Research*, 28 (4), 435–439., 28(4), 435–439.
- Keucheyan, R. (2012). Gramsci, une pensée devenue monde. *Le Monde Diplomatique*, N. 700 –
July 2012, 3.
- Laclau, E., & Mouffe, C. (2001). *Hegemony and socialist strategy: Towards a radical democratic
politics* (2. ed). London: Verso.

- Lasswell, H. (1936). *Politics: Who Gets What, When, How*. New York: Whittlesey House.
- Lowi, M. R. (1993). *Water and power: The politics of a scarce resource in the Jordan River basin*. *Cambridge Middle East library: Vol. 31*. Cambridge [England], New York, NY, USA: Cambridge University Press.
- Lukes, S. (1974). *Power: A radical view*. *Studies in sociology*. London, New York: Macmillan.
- Lukes, S. (2005a). Power and the Battle for Hearts and Minds. *Millennium - Journal of International Studies*, 33(3), 477–493. doi:10.1177/03058298050330031201.
- Lukes, S. (2005b). *Power: A radical view*. 2nd Edition. Hampshire: Palgrave.
- Machiavelli, N. (1958). *The prince* (8. print). *A Mentor book: MD69*. New York NY: New American Library.
- Menga, F. (2014). *Power and Dams in Central Asia* (Doctoral thesis). University of Cagliari.
- Mordenti, R. (1996). *Quaderni dal carcere di Antonio Gramsci*. Torino: Einaudi.
- Mouffe, C. (2008). Critique as Counter-Hegemonic Intervention. *European Institute for Progressive Cultural Policies (EIPCP)*, 04.
- Norov, V. (2007). *Statement by His Excellency Vladimir Norov, Minister of Foreign Affairs of the Republic of Uzbekistan, at the General Debate of the 62nd session of the United Nations General Assembly*. New York.
- Norov, V. (2009). *Statement by His Excellency Vladimir Norov, Minister of Foreign Affairs of the Republic of Uzbekistan, at the General Debate of the 64th session of the United Nations General Assembly*. New York.
- Nye, J. S. (2002). *The Paradox of American Power: Why the Worlds Only Superpower Cant Go It Alone: Why the Worlds Only Superpower Cant Go It Alone*: Oxford University Press, USA.
- Nye, J. S. (2004). Soft power and American foreign policy. *Political Science Quarterly*, 119(2), 255–270.
- Nye, J. S. (2009). Get Smart. *Foreign Affairs*, 88(4), 160-163.

Pravda Vostoka (2011, March 29). Projekt Roguna - tsunami dlya Sredney Azii. *Pravda Vostoka*.

Retrieved from <http://www.pv.uz/society/proekt-roguna>.

Scott, J. C. (1985). *Weapons of the weak: Everyday forms of peasant resistance*. New Haven: Yale University Press.

Shalpykova, G. (2014). *Unmasking the Face of 'Riparian Cooperation' in the Syr Darya River Basin* (Doctoral thesis). University of Nottingham.

Strange, S. (1989). Toward a Theory of Transnational Empire. In R. Tooze & C. May (Eds.), *Authority and markets. Susan Strange's writings on international political economy* .

Strange, S. (1990). Finance, information and power. *Review of international studies*, 16(3), 259–274.

Strange, S. (1994). Who governs? Networks of power in world society. In R. Tooze & C. May (Eds.), *Authority and markets. Susan Strange's writings on international political economy* . Houndmills, Basingstoke, Hampshire, New York: Palgrave/Macmillan.

Strange, S. (1998). *States and Markets: 2nd Edition*: Bloomsbury Academic. Houndmills, Basingstoke, Hampshire, New York: Palgrave/Macmillan.

The Ecological Movement of Uzbekistan (2010, October 7). Letter of request to the World Bank.

The Ecological Movement of Uzbekistan. Retrieved from http://siteresources.worldbank.org/EXTINSPECTIONPANEL/Resources/Request_Eng.pdf.

The Ecological Movement of Uzbekistan (2011, June 21). Address of the Ecological Movement of Uzbekistan to the President of the European Parliament. *The Ecological Movement of Uzbekistan*.

The Times (1860, May 5). There is probably no statesman of the first class.

Waltz, K. N. (1986). Reflections on Theory of International Politics: A Response to My Critics. In R. O. Keohane (Ed.), *Neorealism and its critics* (378th ed.). Nueva York, EUA : Columbia University.

- Warner, J. F., & Zeitoun, M. (2008). International relations theory and water do mix: A response to Furlong's troubled waters, hydro-hegemony and international water relations. *Political Geography*, 27(7), 802–810. doi:10.1016/j.polgeo.2008.08.006.
- Water Policy (Ed.). (2008). Politics and Power: Hydro-Hegemony [Special Issue], 10(S2): World Water Council.
- Weber, M., & Parsons, T. (1947). *The theory of social and economic organization: Being part 1 of Wirtschaft und Gesellschaft. Translated from the German by A.R. Henderson, and Talcott Parsons* (Rev). London: W. Hodge.
- Wegerich, K. (2008). Hydro-hegemony in the Amu Darya Basin. *Water Policy*, 10(2), 71–88.
- Weinthal, E. (2006). Water Conflict and Cooperation in Central Asia. *UN Human Development Report 2006 - Occasional paper*.
- Zeitoun, M., Eid-Sabbagh, K., Talhami, M., & Dajani, M. (2013). Hydro-hegemony in the upper Jordan waterscape: Control and use of the flows. *Water Alternatives*, 6(1), 86–106.
- Zeitoun, M., & Mirumachi, N. (2008). Transboundary water interaction I: reconsidering conflict and cooperation. *International Environmental Agreements: Politics, Law and Economics*, 8(4), 297–316. doi:10.1007/s10784-008-9083-5.
- Zeitoun, M., Mirumachi, N., & Warner, J. (2011). Transboundary water interaction II: the influence of 'soft' power. *International Environmental Agreements: Politics, Law and Economics*, 11(2), 159–178. doi:10.1007/s10784-010-9134-6.
- Zeitoun, M., & Warner, J. (2006). Hydro-hegemony – a framework for analysis of trans-boundary water conflicts. *Water Policy*, 8(5), 435. doi:10.2166/wp.2006.054.
- Zeitoun M. and Allan J.A. (2008). Applying hegemony and power theory to transboundary water analysis. *Water Policy*, 10(2), 3–12.