



## Where is the power? Transnational networks, authority and the dispute over the Xayaburi Dam on the Lower Mekong Mainstream

Oliver Hensengerth

To cite this article: Oliver Hensengerth (2015) Where is the power? Transnational networks, authority and the dispute over the Xayaburi Dam on the Lower Mekong Mainstream, *Water International*, 40:5-6, 911-928, DOI: [10.1080/02508060.2015.1088334](https://doi.org/10.1080/02508060.2015.1088334)

To link to this article: <https://doi.org/10.1080/02508060.2015.1088334>



© 2015 The Author(s). Published by Taylor & Francis.



Published online: 20 Oct 2015.



Submit your article to this journal [↗](#)



Article views: 3274



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 28 View citing articles [↗](#)

## **Where is the power? Transnational networks, authority and the dispute over the Xayaburi Dam on the Lower Mekong Mainstream**

Oliver Hensengerth\*

*Department of Social Sciences and Languages, Northumbria University, Newcastle-upon-Tyne NE1 8ST, UK*

*(Received 18 August 2014; accepted 26 August 2015)*

Accounts of hydro-hegemony and counter hydro-hegemony provide state-based conceptions of power in international river basins. However, authority should be seen as transnationalized as small states develop coping strategies to augment their authority over decision-making processes. The article engages Rosenau's spheres of authority concept to argue that hydro-hegemony is exercised by actors embedded in spheres of authority that reshape actor configurations as they emerge. These spheres consist of complex networks challenging customary notions of the local-global dichotomy and hydro-hegemony. Hydro-hegemony is therefore not fixed. The article examines these processes by analysing the dispute over the Xayaburi Dam in the Mekong Basin.

**Keywords:** water governance; hydropower; scales; transnational authority; water-energy nexus; Mekong

### **Introduction**

Power asymmetry in international river basins has been analysed as a source of conflict (Liebman, 2005) and as a source of cooperation. Zeitoun and Warner (2006) developed their hydro-hegemony model to argue that hegemony can have beneficial as well as detrimental effects depending on the strategies of hegemons. Daoudy (2009) pointed out that power asymmetries can lead to bilateral and basin-wide arrangements as traditional sources of power – geographic position, military and economic resources – may be less important than other sources such as bargaining and issue-linkage used by disadvantaged states. Similarly, Dinar (2009) explained that weaker states have the capacity to influence the hydro-political context; and Kuenzer et al. (2013) argued that upstream–downstream conflicts are subject to complex power plays that determine the distribution of hydropower costs and benefits. A number of authors have taken these lines of analyses further by analyzing the ability of international river basin organizations to absorb upstream–downstream tensions (De Stefano, Edwards, De Silva, & Wolf, 2010; Giordano et al., 2013; Pearse-Smith, 2012; Wolf, Yoffe, & Giordano, 2003).

In presenting these arguments, the literature largely engages premises from mainstream international relations theory, particularly neorealism, neoliberal institutionalism and regime theory. This produces state-based accounts of conflict and cooperation. The state is black-boxed and preferences taken for granted. Yet, when looking specifically at hydropower it is necessary to realize that hydropower plants are transnational projects that see the involvement

---

\*Email: [oliver.hensengerth@northumbria.ac.uk](mailto:oliver.hensengerth@northumbria.ac.uk)

of a plethora of state and non-state actors, thus reducing the state's ability to make autonomous decisions. We therefore need to look at how dominant domestic elites embed themselves in transnational networks in order to augment their power position to forward their goals in the contest over the development of the international river basin.

The article proposes to reconceptualize authority and hegemony in the field of international development, using hydropower policy in international river basins as a case study. It engages Rosenau's (2003) spheres of authority concept to show that authority should be analysed as being exercised by actors embedded in transnational spheres of authority. As spheres of authority emerge, actor configurations are reshaped. These spheres of authority, while they may change, consist of complex networks of domestic government actors, domestic and transnational civil society organizations, multinational corporations, donors from developed countries, new donors from emerging economies, and international river basin organizations. The result is the emergence of spheres of authority in a process that questions the local–global dichotomy and customary notions of hegemony and counter-hegemony.

These processes influence the nexus. 'Nexus' has appeared in different constellations and complexities, including water–energy (Siddiqi & Anadon, 2011) and water–food–energy–climate (Beck & Villarreal Walker, 2013). In this article, it is understood as water–energy in the way that describes competition between different goods: energy production versus environmental and social protection. This materializes as competition between bureaucracies in charge of producing these goods: the environment and energy bureaucracies. In transboundary basins these competing bureaucracies become part of spheres of authority. Domestic authority and bureaucratic conflicts acquire a transnational dimension.

As Scott et al. (2011) point out, water–energy nexus is primarily understood in input–output terms “mirrored by footprint calculators”, with lack of attention to the institutional problems of in-tandem resources management, including scalar mismatches. Hussey and Pittock (2012) argue that water and energy are often managed separately. This is also true for the Xayaburi case, in which the aim of energy production overrides the consideration of externalities produced by hydropower plants.

The article examines these processes by analyzing the dispute over the Xayaburi Dam. It argues that Laos acquires hydro-hegemonic characteristics for the purpose of Lower Mekong development through the creation of a transnational network that transcends traditional notions of scale. Rather than examining what sort of power Laos possesses, the purpose of the article is to analyze the strategies of government actors to safeguard their interests vis-à-vis the Mekong River Commission (MRC), donors from developed countries, and the downstream riparians Cambodia and Vietnam.

The article begins with an overview of the literature on hydro-hegemony and counter hydro-hegemony. It then analyzes the literature on transnational authority, arguing for a reconceptualization of the idea of hegemony in transboundary basin politics. The article then applies these ideas to hydropower politics, focusing on the dispute around the Xayaburi Dam. The events examined concentrate on the period between October 2010 when the Lao government submitted the planning documents for Xayaburi to the MRC Secretariat and November 2012 when the government held the groundbreaking ceremony.

Data come from interviews conducted during a four-week field stay in Laos in September 2011 with personnel in the MRC Secretariat, national development agencies, researchers and civil society organizations. Information from personal communication with a former advisor to the MRC was added in August 2014. A total of 21 interviews were conducted. Interviewees were chosen for their knowledge of MRC procedures and policies, decision-making processes for the Xayaburi Dam, and the evolution of regional water politics. Where interviews are cited in the text they appear coded to ensure

anonymity. To keep up with current events, the article relies on authoritative newspaper articles.

### **Hydro-hegemony and counter-hegemony**

In their article on hydro-hegemony, Zeitoun and Warner (2006) (and later Zeitoun and Allan 2008; Zeitoun et al. 2011) systematize the role of power in transboundary water relations by identifying strategies a hegemonic country can devise in order to realize its policy goals. However, while advancing the power-based analysis of transboundary water politics, the hydro-hegemony framework leaves the state as a black box, with imprecise analysis of how power works and taking preferences for granted. The absence of actors in the hydro-hegemony framework is a central weakness. Indeed, Lopes (2012) pointed to the limitations of the framework embedded as it is in a Westphalian sovereignty paradigm.

Cascão's work on counter hydro-hegemony remedies some of these weaknesses (Cascão, 2008; Nicol & Cascão, 2011). Yet, this framework, while better populated with actors and not treating geographic positions as deterministic, also treats the central government as a unitary entity able to devise grand strategies for basin politics. The state remains black-boxed.

In order to understand transboundary water politics more fully, an understanding of national development plans, their rationale and the actors developing them is necessary. The shape of these development plans is influenced by government elites preferring the support of certain sectors, such as agriculture or hydropower, to achieve national development. Where these national development plans target the use of national stretches of a transboundary basin, they have the potential to affect directly the relationships between riparian governments (Hensengerth, Dombrowski, & Scheumann, 2012). Indeed, as Suhardiman, Giordano, and Molle (2012, pp. 573–574) point out, the

focus on state interaction and national interests does not explain how states' decision making at transboundary levels stems from, or reflects (bureaucratic) power interplay at the national level [...] accurate and realist reflection of what actually represents a country's national interests, even if considered only at the formal government level, must also take into account complex domestic bureaucratic landscapes.

In addition, hydropower politics in an international river basin is not a domestic issue. Particularly economically less developed countries such as Laos do not have the capacity to fund and build dams themselves. They depend on external funding and globally operating construction companies. This further transnationalizes the hydropower project. As a consequence, the ability of domestic elites to realize their development policies becomes contingent on the transnational networks in which they are embedded. This raises the issue of who has authority over the decision-making process and where the locus of authority rests. The next section examines the nature of authority in a transnational policy context.

### **Authority in a transnational policy context**

The rise of new donor countries and with it rising foreign investment of private and state-owned companies in the hydropower sector, particularly from Brazil, China and India, has changed the dynamics of dam construction. No longer are Northern donors and firms the dominant funders and builders, but private and state-owned banks and construction

companies from emerging economies. In the Lower Mekong Basin, this development is evident with the rising influence of financiers and project developers from Thailand, China, Vietnam and the wider region, including Malaysia (Middleton, Garcia, & Foran, 2009).

In addition, the growing number of domestic and regional non-governmental organizations (NGOs) with their links to globally operating NGOs, international donors, and river basin organizations produce overlapping and competing sets of actors (e.g. Atzl, 2014). This embeds national decision-making authority in complex transnational networks.

As new actors emerge, governing an issue area becomes more complex. The development of complex transnational networks within which international development policies are formulated and implemented has led Robinson (2002) to call for the deterritorialization of the concept of development. Indeed, the configuration of actors in transnational networks implies a diffusion of authority away from the state. As a result, globalization is often assumed to weaken states in a process from government to governance (Rhodes, 1996). To capture the changing nature of authority, Rosenau (2003) has coined the term ‘spheres of authority’ to “deterritorialize the concept of authority” (Rosenau, 2007, p. 89). Spheres of authority describe the crisis of authority as a state is weakened in its capacity to “move toward its goals” (Rosenau, 2003, pp. 71–72), as “[i]nformal and non-institutional forms of authority (spheres) may emerge at least to supplement, if not replace, the long-established formal and institutionalized structures of authority” (p. 294). Some spheres may become partners of states, other do not. Some are partially based on territoriality, others are fully transnational. Spheres of authority include issue regimes, professional organizations, transnational advocacy groups, “business subscribers to codes of conduct”, terrorist networks and other “diverse collectives that have become sources of decisional authority” (p. 295). Compliance by adherents of a sphere of authority to directives issued by its leadership is key for a sphere of authority to forward its goals (Rosenau, 2007).

The rise of private actors and non-state forms of authority has produced a voluminous literature exploring issues of legitimacy and authority (Higgott, Underhill, & Bieler, 2000; Koppell, 2010; Sassen, 2006) and the extent and limits of private governance in relation to the state (Hallström, 2004; Levy & Newell, 2005). While some observe a weakening of the state (Jessop, 2002; Rhodes, 1994; Strange, 1996), others argued that state support remains crucial for private governance to be effective (Van Harten, 2005). Furthermore, private actors can enhance the legitimacy of governments and inter-governmental organizations (Graz & Hartmann, 2012; Graz & Nölke, 2008).

Largely overlooked in these debates is that states can also develop coping strategies to utilize globalization. The case of Laos, as will be shown, is an example of how phenomena of globalization, such as the proliferation of multinational corporations, can be utilized to augment power. Indeed, state actors remain central and can actively steer the composition of networks. This is akin to arguments that the ‘government to governance’ paradigm is too simple and perhaps misleading (Hysing, 2009; Koch, 2013). As Sending and Neumann (2006) pointed out, the emergence of NGOs and other non-state actors does not necessarily imply a transfer of power, but the emergence of a changed logic of government.

Yet, as states can utilize processes of globalization to further their own interests, the capacity of governments to do so becomes reliant on external actors. The proliferation of non-state actors and the emergence of mixed forms of authority – state, non-state, formal and informal – makes it necessary to assess who has authority in these networks

to help separate consequential from non-consequential action. Latham, Kassimir, and Callaghy (2001, p. 9) emphasized that “the right to pronounce and act – to be authoritative – is [...] inseparable from order-making, however contingent or provisional”. This view of order is not necessarily connected to the nation-state but is a product of interactions in territories, from “local, translocal, and national to the regional and transnational” level (p. 7).

To examine who has authority in transnational networks and, therefore, in Latham et al.’s terms who is involved in order-making, we can look at Risse (2006) and Katsikas (2010). Katsikas argued that private authority should be defined as ‘in authority’ rather than ‘an authority’ as the authority of private actors can only be observed when their involvement has legal implications. He argued that these two categories of authority are not properly distinguished in global governance, leading to an ‘exaggeration’ of the influence of private organizations. This is identical to Risse (2006) who argued that transnational governance can only be spoken of when private actors – firms and NGOs – are not merely involved as lobbying or influence-seeking organizations, but when they are directly involved in “rule-setting, rule-implementation, and service providing activities” (p. 181).

Yet, while the distinction is useful for analytical purposes, both forms of authority are interlinked. In transnational networks, to be *an* authority is important to legitimize claims, whereas to be *in* authority is important to resolve procedural issues. Therefore, in the creation of transnational networks, agents seen as *an* authority are important for legitimacy claims, while agents *in* authority have procedural power over other actors. *An* authority and *in* authority are therefore both crucial to the successful establishment and maintenance of authority over an issue area, that is, for the purpose of maintaining control of the policy-making process.

### **The limited territoriality of hydropower politics and the problem of scales**

In order to resolve the contradiction between the centrality of national decision-making and the rise of non-state authority, we can turn to Bulkeley’s (2005) notion that an understanding of environmental governance requires a negotiation between horizontal and vertical, or scalar and networked forms of governance. Bulkeley argues that scale should not simply be seen as vertically arranged hierarchies ranging in decreasing succession from the global to the local. Instead, a reconceptualization of scale should include “relations of status, authority and importance” (p. 886). As a consequence, “hierarchies of scale do not necessarily need to be ordered in spatially extensive terms from the global to the local, but can take different forms depending on the social relations in question” (p. 886). We should thus be mindful of the fact that environmental governance processes “do not take place within a pre-given scalar structure, but are rather constitutive of the construction of particular scalar fixes and particular environmental outcomes” (p. 890).

The key here is – to borrow from Bulkeley – that the river basin is scaled and rescaled in relation to hydropower politics. This means that the river basin loses its connotation as a pre-given scalar unit that can be delineated by using territorial or ecological boundaries (Warner, Wester, & Bolding, 2008). Instead, the basin becomes a unit whose boundaries are fluid and dependent on the issue in question. Taking account of this problem, Magee coined the term ‘powershed’ to argue that the watershed is an insufficient analytical unit as companies from outside the dam locality are involved in construction and as the energy is shipped to urban centres outside the watershed, thus involving political–economy

processes that go beyond a narrowly defined watershed (Magee, 2006; McNally, Magee, & Wolf, 2009). This calls for transcending the ecological and political limits of the river basin.

The international river basin thus emerges as a complex space as globally operating agents become involved in its governance. Consequently, hydro-hegemony and counter-hegemony need to be reconceptualized as being exercised by actors embedded in transnational spheres of authority, whereby authority needs to be delineated along the lines of *in* and *an* authority in order to evaluate who in these spheres exercises authority in an issue area that is populated by competing spheres.

The next section examines this with regard to Laos's policies for the development of the Mekong mainstream dams, with particular emphasis on the Xayaburi Dam.

### **Laos, the transnationalization of counter-hegemony and the making of the Xayaburi Dam**

The conflict between Thailand, Laos, Cambodia and Vietnam and the role of the MRC have been discussed extensively in the literature and, therefore, will only be sketched here briefly. All four countries have an interest in hydropower development and have powerful hydropower bureaucracies that influence energy policy-making (Benedikter, 2014; Hensengerth, 2015). In Thailand political support is more fractured. The energy utility EGAT and the Ministry of Energy are amongst the key supporters. However, since the failure of the Pak Mun Dam and due to a vigorous anti-hydropower civil society, hydropower is only supported for construction outside Thailand for the purpose of importation (Matthews, 2012). The contention between the countries is therefore not about hydropower per se. Vietnam's opposition to upstream dams is motivated by the potential threat to the Mekong Delta, while the key concern of hydropower proponents in the Cambodian energy bureaucracy is that upstream dams will thwart Cambodia's own plans to build two downstream dams, Stung Treng and Sambor (Hensengerth, 2009; Hirsch & Jensen, 2006).

The key agency in the Lao hydropower decision process is the Ministry of Energy and Mines. Within it, the Department of Energy Policy and Planning is tasked with developing national energy policy and plans, including hydropower (Asian Development Bank (ADB), 2013). Centred on the Ministry of Energy and Mines, the pro-hydropower discourse is strongly influenced by ideas of hydropower as a cornerstone for national economic development. As Vilaysone Sourigna of the Department of Energy Promotion and Development emphasized,<sup>1</sup> the government is interested in affordable and sustainable electricity for economic growth and poverty alleviation (Sourigna, 2011). To achieve this, the government pursues "twin goals of meeting domestic demand and realizing the [...] electricity export potential. Investment in hydropower and other renewable energy sources will be a priority" (ADB, 2013, p. 13). Given that much of Laos is situated within the Mekong watershed and that its geography makes it an ideal candidate for hydropower generation, hydropower has become the most important source of electricity identified by the government. The technically viable capacity lies at 20,000 megawatts (MW), of which by 2011 only 2570 MW were exploited (ADB, 2013). Xayaburi alone should add 1285 MW.

The regional body that is supposed to coordinate this development is the MRC, based on the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (the Mekong Agreement). The Mekong Agreement (articles 1–3, 5 and 7) requires the four signatory states to cooperate in the development of the basin, protect basin ecology, observe norms of reasonable and equitable utilization, and not

cause significant harm to downstream countries through their water use. As a part of this the signatory states are required to notify each other of their water-use plans and to seek consultation and agreement. While some projects only require notification, mainstream projects also require consultation and agreement. These rules are spelled out in the Procedures for Notification, Prior Consultation and Agreement (PNPCA). Mainstream hydropower dams also have to comply with the MRC's 2009 Preliminary Design Guidance for Proposed Mainstream Dams in the Lower Mekong Basin. Yet, the MRC has no territorial rights in member countries. While the Mekong Agreement is legally binding, it lacks enforcement mechanisms (Backer, 2007; Ratner, 2003; Wyatt & Baird, 2007).

Laos, Thailand and Vietnam are represented in the MRC through their Ministries of Natural Resources and Environment. The Cambodian representative is the Minister for Water Resources and Meteorology. All four countries are therefore represented through their water resources bodies, but these occupy weak positions vis-à-vis the energy ministries in all four governments (interview 19092011). Yet, despite the official function of the Lao Ministry of Natural Resources and Environment, in recent years Laos has become increasingly represented by the Ministry of Energy and Mines. As a result, the highest Lao official representing the Lao government in the MRC's Joint Committee and Council was Deputy Minister of Energy and Mines Viraphonh Viravong (personal communication with a former MRC advisor, 12 August 2014). Institutionally, the MRC is therefore in a weak position not only with regards to implementing the Mekong Agreement but also energy policy development is removed from the reach of the MRC. In the Lao case, the attempt by the MRC to nurture water resources institutions is actively thwarted as the Ministry of Energy and Mines has asserted its authority to directly liaise with the MRC.

Suhardiman et al. (2012, p. 575) call this "discrepancy between regional and national decision-making landscapes [...] the] scalar disconnect in transboundary water governance of the Mekong". Bureaucratic competition and policy fragmentation at the national level directly challenge the MRC's attempt to translate the IWRM principle from the regional planning level into domestic policy (Suhardiman et al., 2012).

This has consequences for the nexus where cooperation is not seen as positive-sum but as zero-sum. In Laos environmental protection and economic development are seen as mutually exclusive. Proponents of energy production and of environmental and social protection are therefore unable to cooperate, making it impossible to produce positive trade-offs between sectors, which the MRC has been designed to achieve. This had consequences for the planning process of the Xayaburi Dam, as the next section will show.

### **Prelude: the Lao–Thai connection and the Xayaburi PNPCA process**

While planning for Xayaburi reaches back to the 1950s–60s, realization of the plans started only in May 2007 when the Lao government and Thai construction company CH. Karnchang signed a memorandum of understanding to study the feasibility of the Xayaburi Dam. Following this, CH. Karnchang commissioned Thai firm TEAM Consulting to conduct an environmental impact assessment (EIA) and a social impact assessment (SIA), and TEAM Consulting and Swiss firm Colenco (now owned by Sweden's ÅF Group) to conduct the feasibility study. In 2008, CH. Karnchang and the Lao government signed a project development agreement. In February and August 2010, TEAM Consulting finalized both the EIA and the SIA. In March 2010, TEAM Consulting and Colenco finalized the feasibility study. On 29 October 2010, the Lao government and



Xayaburi Power Co. signed the concession agreement (Government of Laos, 2011; International Rivers, 2011a; TEAM Consulting, 2010; TEAM Consulting and Colenco, 2010; WWF, 2011).

In June 2010, Xayaburi Power Co. was incorporated as project owner with the following shareholders: CH. Karnchang (30%), Electricité du Laos (30%), Natee Synergy (a subsidiary of PTT, 25%), Electricity Generating Co. Ltd (EGCO, 12%), and Bangkok Expressway and P.T. Construction & Irrigation owning the remaining 13% (Pöyry, 2011; *The Nation*, 2012b). In July 2010, the Lao government and the Electricity Generating Authority of Thailand (EGAT) signed a memorandum of understanding for a power purchase agreement (International Rivers, 2011a). In September 2010, CH. Karnchang signed the engineering, procurement and construction contract (WWF, 2011).

In the same month the Lao National Mekong Committee submitted the project documents to the MRC Secretariat. This for the first time initiated the MRC's PNPCA process. The first PNPCA meeting was held by the MRC's Joint Committee in Vientiane in October 2010. During the following six months, the standard duration of the PNPCA, the four governments were unable to reach a compromise. Six months later, in April 2011 during the Joint Committee meeting that was to conclude the PNPCA process, the countries decided to leave the final decision on Xayaburi to the MRC Council meeting in December 2011 (ICEM, 2010; MRC, 2011a). During the council meeting, the ministers of the four member countries were again unable to reach a compromise, and a decision was made to commission a study, for which the Japanese government was the first government to pledge financial support (International Rivers, 2011b; *Phnom Penh Post*, 2012a).

At the same time, however, Laos's Deputy Minister for Energy and Mines Viraphonh Viravong argued that the PNPCA process itself was completed with the Joint Committee meeting in April 2011, and that the PNPCA only requires consultation but not agreement (*Bangkok Post*, 2012b; Government of Laos, 2011). With respect to the envisaged council study, International Rivers argued that Laos "refused to comment on the study's draft concept note" (Trandem, 2012).

### **Dynamics of network creation: hegemonic or counter-hegemonic?**

While the Lao government built its network with Thai companies, the MRC Secretariat with the approval of member countries commissioned Australia's ICEM in May 2009 to conduct a strategic environmental assessment (SEA) of the entire planned mainstream dam cascade (ICEM, 2010). In September 2010, ICEM submitted the SEA to the MRC Secretariat, recommending to conduct further studies for a period of 10 years before starting to construct mainstream dams (ICEM, 2010). According to a senior MRC employee, the SEA is an independent study that carries no legal obligations for member countries to follow it (interview 14092011a). According to an interviewee, the Lao government agreed to the SEA in the belief that it would be a technical process (interview 26092011). Instead, the SEA rapidly politicized the problem and left the Lao government overwhelmed by the force of opposition (interview 08092011).

While Cambodia and Vietnam expected that Laos follows the advice of the SEA, Laos did not approve of the recommendations of the study. Cambodia and Vietnam argued for further studies particularly of the transboundary environmental and social impact which they argued the TEAM Consulting EIA had neglected (Cambodia National Mekong Committee, 2011; Vietnam National Mekong Committee, 2011). The argument was based to the results of the SEA and the MRC Secretariat's *Prior Consultation Project*

*Review Report* (the MRC's 'technical review' in the context of the Xayaburi PNPDA) of the Xayaburi project, which found that the Xayaburi design violates the MRC's Preliminary Design Guidance for Mekong Mainstream Dams as well as international best practice (MRC, 2011a). During a meeting in Phnom Penh between the prime ministers of Vietnam and Cambodia, both premiers expressed concern about the effects Xayaburi would have on fisheries and agriculture (International Rivers, 2011c).

To press their interests, Cambodia and Vietnam continued to build pressure. Sin Niny, permanent Vice-Chairman of Cambodia's National Mekong Committee, threatened to "file a complaint to an international court" should Laos continue unilaterally to pursue the project (Radio Free Asia, 2012b). Te Navuth, Secretary-General of Cambodia's National Mekong Committee, took a more moderate position saying that Cambodia would "send an official to Laos" to ensure that construction does not proceed, and commenting that Laos had been unresponsive to Cambodian interventions (*Phnom Penh Post*, 2012b). Lim Kean Hor, Cambodia's Minister for Water Resources, sent an official protest note to his Lao counterpart, Noulinh Sinbandhit, demanding that construction of the dam be suspended until an EIA is completed (Radio Free Asia, 2012d).

Vietnam's National Mekong Committee meanwhile engaged with international donors. It produced terms of reference for a study on downstream impacts of mainstream hydropower dams, with the costs of US\$6.3 million to be provided by the Vietnamese government, and submitted the terms of reference to Laos, Cambodia and Thailand for comment and to the Ministry of Natural Resources and Environment for approval. The study, scheduled for conclusion in June 2015, was also tabled at a roundtable meeting on Mekong Delta integrated water resources management with development partners convened by the National Mekong Committee in Hanoi (Viet Nam News, 2012c).

Donors also involved themselves as a group and independently. For example, following the meeting between the MRC Council and the MRC's Donor Consultative Group in December 2011, the group published a joint statement supporting the findings of the SEA and the council decision for further study. Development partners also proposed a review of the implementation of the PNPDA provisions (MRC, 2011c). The fact that the MRC donors published a joint statement indicates a strong process of coordination behind the scenes, showing the importance donors attach to the issue (personal communication with a former MRC advisor, 12 August 2014). As far as individual reactions by donors are concerned, the US State Department, for instance, pointed to the need of coordinating river development through the MRC (US Department of State, 2012), and then US Secretary of State Hillary Clinton raised the issue during her visit to Vietnam, Cambodia and Laos in July 2012 (BBC, 2012c).

As pressure mounted, the Lao government began to shore up its credibility. It commissioned Finnish-Swiss consulting firm Pöyry to assess whether Laos had fulfilled its consultation obligations under the 1995 Mekong Agreement, the PNPDA and the Preliminary Design Guidance for Proposed Mainstream Dams in the Lower Mekong Basin (Pöyry, 2011). In the compliance study Pöyry pointed out that improvements must be made with regards to a sediment flush and fish-passing facilities. Yet, it concluded that Xayaburi "has principally been designed in accordance with the applicable MRC Design Guidelines" (Pöyry, 2011, p. 14). Necessary improvements could be carried out during construction (Pöyry, 2011).

Responding to this, Vietnam's National Mekong Committee requested the MRC to review the compliance study. The MRC argued that with Pöyry's recommended improvements, Xayaburi would be "more or less compliant" regarding sediments, water quality, aquatic system health and environmental flows; "almost fully compliant" concerning

navigation, but only “partly compliant” regarding fish-passing facilities, fisheries ecology and dam safety (MRC, 2011b). The MRC took particular issue with Pöyry’s suggestion that fishery studies could be conducted during construction and argued that baseline data collection and analysis and adaptation of fish bypasses should be “initiated at least two years before dam construction starts” (MRC, 2011b, p. ii). Hans Guttman, Chief Executive Officer (CEO) of the MRC, admitted that the MRC had no access to the dam site and had only seen photographs (BBC, 2012a).

As a reaction, the Lao Department of Electricity<sup>2</sup> in the Ministry of Energy and Mines contracted French firm Compagnie Nationale du Rhône (CNR) to peer review the Pöyry study, with CNR confirming Pöyry’s findings (Compagnie Nationale du Rhône, 2012a).<sup>3</sup> Following this, Deputy Managing Director of Xayaburi Power Co., Rewat Suwanakitti, said that the dam would be redesigned to allow sediment flush and fish migration, and that a new design was currently being tested at the Asian Institute of Technology in Bangkok (*Vientiane Times*, 2012d). The government also unveiled a scale model to test the sediment flush (*Vientiane Times*, 2012e).

The Lao government thus drew on the technical expertise of multinational companies from Western Europe and specialized regional academic institutions. Addressing the international press, Deputy Minister of Energy and Mines, Viraphonh Viravong, gave an interview with Aljazeera reiterating that Xayaburi would be built “in full compliance with the experts’ recommendations” (*Vientiane Times*, 2012d).

In a further move to publicize the benign character of the dam, Laos’s Foreign Minister Thongloun Sisoulith announced that “concerned parties” would be permitted to visit the dam site (Reuters, 2012a). The visit took place in Luang Prabang on 16 July 2012 and included MRC Secretariat technical personnel, representatives from MRC member countries, development partners including the ADB and the World Bank, and journalists including some from the BBC. Pöyry and Compagnie Nationale du Rhône presented their proposals to redesign Xayaburi (*DPA/The Nation*, 2012; *Vientiane Times*, 2012b).

### **The role of civil society actors**

Meanwhile, civil society opposition started to gain pace as NGOs voiced criticism, held demonstrations and threatened lawsuits to pressure CH. Karnchang and the involved banks to withdraw from their commitments. NGOs included Save the Mekong, the Cambodian NGO Mekong Conservation, the Bangkok-based NGO Towards Ecological Recovery and Regional Alliance (TERRA), a Cambodian group of 200 local villagers led by Buddhist monks, and the Network of Thai People in Eight Mekong Provinces (Radio Free Asia, 2012b, 2012c, 2012f; *Phnom Penh Post*, 2012b; Thul, 2012; *Bangkok Post*, 2012a). In the light of the inability of opposing actors to exert pressure on Laos, the Chiang Khong Mekong Conservation Group argued that the only option for local residents may be sit-ins and other means of obstruction such as a blockade of the Lao–Thai friendship bridges (*The Economist*, 2012). International Rivers drew on academic expertise by publishing four comments of Western academics on the Xayaburi EIA, criticizing it as poor (International Rivers, 2011d).<sup>4</sup>

On the occasion of the Mekong2Rio conference, an international conference on transboundary water management in Phuket, Thailand, attended by executives of 14 international river systems and hosted by the MRC, the Network of Thai People in Eight Mekong Provinces held a protest at the conference venue. The group was allowed a brief meeting with MRC CEO Hans Guttman. A spokesman of the group said that if Laos were allowed to go ahead with the dam without the envisaged council study, the

group would blockade the First Thai–Lao Friendship Bridge (Radio Free Asia, 2012d; Wangkiat, 2012).

In a further escalation, 15 civil society groups from seven countries lodged a complaint with the Finnish government arguing that Pöyry had violated responsible business standards and Organisation for Economic Co-operation and Development (OECD) guidelines on sustainable development, environmental protection and human rights (Radio Free Asia, 2012i).

On 5 November 2012, the Network of Thai People in Eight Mekong Provinces and the Network of Community Organization Council in Seven Northeastern Provinces held a flotilla protest in Nong Khai during the Asia–Europe Meeting (ASEM) in Vientiane (*OoskaNews*, 2012b). Both organizations also issued a statement to ASEM leaders warning of an emerging cross-border crisis in the Mekong Basin (Network of Thai People in Eight Mekong Provinces and Network of Community Organization Council in Seven Northeastern Provinces, 2012). On the same day, the Lao government announced that construction would officially begin on 7 November 2012 (BBC, 2012b). The groundbreaking ceremony was held accordingly, coinciding with ASEM (*Bangkok Post*, 2012b).

### **Discussion: authority, scales and the creation of hydro-hegemony**

The government of Laos has a dominant interest in hydropower development. This is evident in the influence on policy-making of the hydropower bureaucracy in the Ministry of Energy and Mines. As a consequence, Laos's government engages in a discourse of hydropower for economic development. To protect its interests, Laos struck alliances with the Thai private sector to plan, fund and build Xayaburi. This pitted the Lao government's tightly controlled pro-Xayaburi network against a number of opposing groups: downstream Cambodia and Vietnam, NGOs, and Northern donors. All groups conducted separate activities and used as focal point the MRC in its capacity as regional coordinating body.

Without direct access to the Xayaburi decision-making process, Cambodia and Vietnam attempted to exert pressure on Laos through bilateral diplomatic channels and via the MRC. The NGOs conducted sit-ins and demonstrations, lobbied the MRC Secretariat, filed complaints with MRC donors (Finland) and threatened lawsuits. Northern donors coordinated behind the scenes and published statements in support of the SEA. All these groups seized on the SEA as an authoritative study but did not coordinate their activities. NGOs pursue fundamental environmental norms, emphasizing the social and environmental impacts on local populations and ecology. Conversely, the governments of Cambodia and Vietnam are strong supporters of hydropower, with Vietnam supporting hydropower on tributaries only given the effects of mainstream hydropower on the Mekong Delta. Opposition to Xayaburi is thus highly fragmented and without central leadership. While the NGO network could be styled as a sphere of authority, it has no authority over decision-making.

Through active enlargement of the pro-hydropower network by the Lao hydropower bureaucracy the Lao government augmented its *in* authority position as it insulated itself from funding and other forms of pressure. Furthermore, it brought into its network agents that it regarded as *an* authority, a move countered by the opposing groups. Where Laos engaged TEAM, thus linking up with an engineering consulting firm, the MRC engaged ICEM, an environmental consulting firm. Where civil society drew on scientific communities and the government of Vietnam launched a study with international donors, Laos

drew on the Asia Institute of Technology and Western European companies. Move followed countermove, leading to the production of competitive structures. For Laos, the changes made to the original design of Xayaburi appear to have been taken during this process as a concession to the wide criticism and in an attempt to legitimize the dam. However, crucially these changes were based on suggestions made by Pöyry and CNR, both strong supporters of the dam.

None of the anti-Xayaburi actors are *in* authority. This raises questions for the terminology of international development. In traditional terms, Northern donors and transnational NGOs are usually styled as members of a so-called hegemonic discourse, whether it concerns neoliberal economic policies or environmental sustainability. Conversely, developing and emerging countries would be members of a subordinate or counter-hegemonic discourse who defy Northern policies imposed on them chiefly through lending conditionalities (e.g. Kwauk, 2012). Yet, in the Xayaburi case, as well as in the global hydropower policy field, the Northern discourse loses its hegemonic character as funding and construction companies come predominantly from emerging economies. In the specific case of Laos, the government additionally contracted companies from Northern countries to add legitimacy, thus transcending the North–South divide.

Specifically, the divide is transcended by mixing scalar and networked forms of governance, whereby scales, following Bulkeley (2005), should not be exclusively viewed as vertically organized hierarchical spaces but as produced and reproduced by social relations. In the context of this article, scales are produced by establishing authority over decision-making processes for the Lower Mekong mainstream dams. New sources of development finance from the private sector and governments of emerging countries are altering developmental and discursive landscapes. This opens new opportunities for countries such as Laos that previously were highly dependent on Northern countries and aid organizations for development funding.

The emergence of viable alternatives for development finance influences the status of Laos as a potentially hydro-hegemonic country, and it is here where we need to be mindful of the nature of hydropower projects as transnational projects around which actor networks are configured that may produce new forms of authority.

The hydro-hegemony and counter hydro-hegemony literature has contributed substantial knowledge to the operation of hegemony, but has provided essentially state-based accounts, although Cascão's (2008) counter-hegemony approach has opened the literature to a range of other actors. This shows governmental elites devising coping strategies and actively using transnational and international actors to forward their development goals against both domestic and external opposition.

Yet, none of these accounts systematically addresses sources of authority in international politics and the issue of sectoral fragmentation caused by bureaucratic competition. In order to do so, we need to link actor strategies and the networks actors produce to an understanding of the sources of authority. Rosenau's spheres of authority concept is helpful here. However, it is helpful not as a description of diminishing state power but rather as a manifestation of states' coping strategies in globalization, akin to Sending and Neumann's (2006) 'changed logic of government'. Indeed, we see a re-aggregation of state power, or a reconstitution of state power, as elites form alliances with transnational actors.

At the same time, bureaucratic competition leads to a zero-sum vision of development, producing a negative notion of the water–energy nexus as a competitive structure. Therefore, in order to understand how these coping or re-aggregation strategies work we need to understand whether relevant actors are *in* authority and how they maintain that authority. These processes involve the creation of competing spheres, some of which are not *in*

authority. The evolution of competing spheres reflects bureaucratic and sectoral fragmentation at the domestic government level, avoiding an in-tandem management of interlinked resources and joint production of goods. An analysis of networks therefore needs to take into account an analysis of authority in order to understand better how hegemony is created and maintained, and potentially how it dissipates, although the article does not address this latter point.

### **Conclusions**

By considering the locus of authority in the creation of transnational development networks, we arrive at a more complex understanding of hegemonic and counter-hegemonic groups. With regard to basin politics, this means that hegemony can be exercised by actors configured in networks that exercise authority over an issue area.

For the purpose of Lower Mekong Basin development, these developments make Laos a hydro-hegemonic country as elites engage in power re-aggregation by forming networks with multinational corporations and financiers. Yet, this makes the capabilities of domestic elites to forward their goals dependent on the networks in which they are embedded. In this sense, power resources become transnationalized through the involvement of actors external to the state and also external to traditional notions of political and geographical basin boundaries. The basin as an analytical unit thus loses clarity of delineation. As a consequence, rather than assume the hegemony of big states, Laos shows that hegemony can come from a range of sources and can in fact be bought. This, however, makes its hegemonic status unstable should the assistant country (here Thailand) withdraw its support.

The new surge in dam construction across the developing and emerging world, led by financiers and construction companies of emerging countries, has changed logics and geographies of development. At the same time, bureaucratic fragmentation and the involvement of international and local NGOs in development has produced a development landscape of extreme complexity. Constellations of interest are complex and produce intricate webs of alliances between actors involved in pro- and anti-hydropower activities. These webs include firms, banks, government actors, NGOs, policy entrepreneurs and members of international organizations from across the North and the South, so that it becomes difficult to identify discourses and their origin as specifically North or South.

In order to be able to sort out who is in authority over development policies, it is necessary to open up the state and analyse actor constellations and the methods actors have designed to prevail in the policy process. This includes an appreciation of bureaucratic competition and the consequences for sectoral fragmentation and the impact on the nexus. It also includes the strategic choice by domestic actors to link up with transnational actors to augment their power position, which emphasizes the transnational character of hydropower projects. The spheres of authority domestic government actors create are therefore key in an analysis of hydro-hegemony.

### **Acknowledgements**

The author would like to thank Diana Suhardiman, Rachael Chapman, Waltina Scheumann and Susanne Schmeier for their comments made on previous drafts of this paper.

### **Funding**

The author expresses his gratitude to the British Academy, grant number SG111140, for funding this research.

## Notes

1. The Department of Energy Promotion and Development was dissolved during the reorganization of the Ministry of Energy and Mines in 2011 (ADB, 2013).
2. The Department of Electricity was dissolved during a reorganization of the Ministry of Energy and Mines in 2011 (ADB, 2013).
3. Later the Compagnie Nationale du Rhône distanced itself from its review study by pointing out that its recommendations “have been proposed at the conceptual level” only and require further development, and that its mandate did not include “the evaluation of fish migration nor other environmental issues” (Compagnie Nationale du Rhône, 2012b).
4. They were Philipp Hirsch of the Australian Mekong Resource Centre, University of Sydney; Zeb Hogan of the University of Reno; Guy Lanza of the University of Massachusetts, Amherst; and David Blake of the University of East Anglia, Norwich.

## References

- Asian Development Bank (ADB). (2013). *Lao people's democratic republic: Energy sector assessment, strategy, and road map. 2013 update*. Manila: ADB.
- Atzl, A. (2014). Transnational NGO networks campaign against the Ilisu Dam, Turkey. In W. Scheumann & O. Hensengerth, et al. (Eds.), *Evolution of dam policies: Evidence from the big hydropower states* (pp. 201–228). Berlin: Springer.
- Backer, E. (2007). The Mekong River Commission: Does it work, and how does the Mekong basin's geography influence its effectiveness? *Südostasien aktuell*, 4, 31–55.
- Bangkok Post*. (2012a, July 15). Mekong villagers take Egat to court to stop Xayaburi Deal. Retrieved from: <http://www.bangkokpost.com/news/local/302489/mekong-villagers-take-egat-to-court-to-stop-xayaburi-deal>
- Bangkok Post*. (2012b, November 7). Laos Officially Starts Work on Xayaburi Dam. Retrieved from: <http://www.bangkokpost.com/news/local/319884/laos-officially-starts-work-on-xayaburi-dam>
- BBC. (2012a, July 4). Laos' Work on the Mekong River Draws Criticism. Retrieved from: <http://www.bbc.co.uk/news/world-asia-18686438>
- BBC. (2012b, November 6) Laos Approves Xayaburi “Mega Dam”; on Mekong. Retrieved from: <http://www.bbc.co.uk/news/world-asia-20203072>
- BBC. (2012c, July 11). US Secretary of State Hillary Clinton on Historic Laos Visit. Retrieved from: <http://www.bbc.co.uk/news/world-asia-18792282>
- Beck, M. B., & Villarreal Walker, R. (2013). On water security, sustainability, and the water-food-energy-climate nexus. *Frontiers of Environmental Science & Engineering*, 7(5), 626–639. doi:10.1007/s11783-013-0548-6
- Benedikter, S. (2014). *The Vietnamese hydrocracy and the Mekong Delta: Water resources development from state socialism to bureaucratic capitalism*. Münster: LIT.
- Bulkeley, H. (2005). Reconfiguring environmental governance: Towards a politics of scales and networks. *Political Geography*, 24(8), 875–902. doi:10.1016/j.polgeo.2005.07.002
- Cambodia National Mekong Committee. (2011). *Mekong River Commission Procedures for Notification, Prior Consultation and Agreement. Reply to Prior Consultation*. Retrieved from: <http://www.mrcmekong.org/assets/Consultations/2010-Xayaburi/Cambodia-Reply-Form.pdf>
- Cascão, A. E. (2008). Ethiopia—Challenges to Egyptian hegemony in the Nile Basin. *Water Policy*, 10(S2), 13–28. doi:10.2166/wp.2008.206
- Compagnie Nationale du Rhône. (2012b, August 2). *Xayaburi Dam Project: Clarifications from the Compagnie Nationale du Rhône*. Press release. Retrieved from: [http://www.internationalrivers.org/files/attached-files/2012\\_08\\_02\\_press\\_release\\_cnr\\_xayaburi\\_dam\\_project.pdf](http://www.internationalrivers.org/files/attached-files/2012_08_02_press_release_cnr_xayaburi_dam_project.pdf)
- Compagnie Nationale du Rhône. (2012a). *Xayaburi hydroelectric project: Peer review of the compliance report made by Pöyry*. Lyon: Compagnie Nationale du Rhône.
- Daoudy, M. (2009). Asymmetric power: Negotiating water in the Euphrates and Tigris. *International Negotiation*, 14(2), 361–391. doi:10.1163/157180609X432860
- De Stefano, L., Edwards, P., De Silva, L., & Wolf, A. T. (2010). Tracking cooperation and conflict in international basins: Historic and recent trends. *Water Policy*, 12(6), 871–884. doi:10.2166/wp.2010.137
- Dinar, S. (2009). Power asymmetry and negotiations in international river basins. *International Negotiation*, 14(2), 329–360. doi:10.1163/157180609X432851

- DPA/The Nation. (2012, July 19). Xayaburi Dam Project Commits 100 Million Dollars to Redesign. Retrieved from: <http://www.nationmultimedia.com/breakingnews/Xayaburi-dam-project-commits-100-million-dollars-t-30186538.html>
- Giordano, M., Drieschova, A., Duncan, J., Sayama, Y., De Stefano, L., & Wolf, A. (2013, May). A review of the evolution and state of transboundary freshwater treaties. *International Environmental Agreements: Politics, Law, and Economics*. doi:10.1007/s10784-013-9211-8
- Government of Laos. (2011, June 8). *Letter to Xayaburi Power Company*.
- Graz, J.-C., & Hartmann, E. (2012). Transnational authority in the knowledge-based economy: Who sets the standards of ICT training and certification? *International Political Sociology*, 6(3), 294–314. doi:10.1111/j.1749-5687.2012.00165.x
- Graz, J.-C., & Nölke, A. (2008). Introduction: Beyond the fragmented debate on transnational private governance. In J.-C. Gran & A. Nölke (Eds.), *Transnational private governance and its limits*. London: Routledge.
- Hallström, K. (2004). *Organizing international standardization: ISO and IASC in quest of authority*. Cheltenham: Edward Elgar.
- Hensengerth, O. (2009). Transboundary river cooperation and the regional public good: The case of the Mekong River. *Contemporary Southeast Asia*, 31(2), 326–349. doi:10.1355/cs31-2f
- Hensengerth, O. (2015). Global norms in domestic politics: Environmental norm contestation in Cambodia's hydropower sector. *The Pacific Review*, 28(4), 505–528. doi:10.1080/09512748.2015.1012107
- Hensengerth, O., Dombrowski, I., & Scheumann, W. (2012). *Benefit-Sharing in Dam Projects on Shared Rivers* (Discussion Paper 6/2012). Bonn: German Development Institute.
- Higgott, R., Underhill, G., & Bieler, A. (Eds.). (2000). *Non-state actors and authority in the global system*. London: Routledge.
- Hirsch, P., & Jensen, K. (with Ben Boer, Naomi Carrard, Stephen FitzGerald and Rosemary Lyster). (2006). *National interests and transboundary water governance in the Mekong*. Sydney: Australian Mekong Resource Centre, the Danish International Development Assistance, The University of Sydney.
- Hussey, K., & Pittock, J. (2012). The energy–water nexus: Managing the links between energy and water for a sustainable future. *Ecology and Society*, 17(1), 31. doi:10.5751/ES-04641-170131
- Hysing, E. (2009). From government to governance? A comparison of environmental governing in Swedish forestry and transport. *Governance*, 22(4), 647–672. doi:10.1111/gove.2009.22.issue-4
- ICEM. (2010). *Strategic environmental assessment of hydropower on the Mekong mainstream: Summary of the final report*. Glen Iris: ICEM Australia.
- International Rivers. (2011d, April). Technical Review of the Xayaburi Environmental Impact Assessment. Retrieved from: <http://www.internationalrivers.org/resources/technical-review-of-the-xayaburi-environmental-impact-assesment-3930>
- International Rivers. (2011a). *The Xayaburi Dam: A looming threat to the Mekong River*. Berkeley: International Rivers.
- International Rivers. (2011b). Thai Utility Commits to Purchase Power from Xayaburi Dam. Press release, Retrieved from: <http://www.internationalrivers.org/resources/thai-utility-commits-to-purchase-power-from-xayaburi-dam-3692>
- International Rivers. (2011c). Laos Steamrolls Neighbors in Xayaburi Dam Process. press release, Retrieved from: <http://www.internationalrivers.org/resources/laos-steamrolls-neighbors-in-xayaburi-dam-process-3708>
- Jessop, B. (2002). *The future of the capitalist state*. London: Polity.
- Katsikas, D. (2010). Non-state authority and global governance. *Review of International Studies*, 36 (S1), 113–135. doi:10.1017/S0260210510000793
- Koch, P. (2013). Overestimating the shift from government to governance: Evidence from Swiss metropolitan areas. *Governance*, 26(3), 397–423. doi:10.1111/gove.2013.26.issue-3
- Koppell, J. (2010). *World rule: Accountability, legitimacy, and the design of global governance*. Chicago: University of Chicago Press.
- Kuenzer, C., Campbell, I., Roch, M., Leinenkugel, P., Tuan, V. Q., & Dech, S. (2013). Understanding the impact of hydropower developments in the context of upstream–Downstream relations in the Mekong River Basin. *Sustainability Science*, 8(4), 565–584. doi:10.1007/s11625-012-0195-z
- Kwauk, C. T. (2012). Obesity and the healthy living apparatus: Discursive strategies and the struggle for power. *Critical Discourse Studies*, 9(1), 39–57. doi:10.1080/17405904.2011.632139



- Latham, R., Kassimir, R., & Callaghy, T. (2001). Introduction: Transboundary formations, intervention, order, and authority. In T. Callaghy, R. Kassimir, & R. Latham (Eds.), *Intervention and transnationalism in Africa: Global-local networks of power* (pp. 1–20). Cambridge: Cambridge University Press.
- Levy, D., & Newell, P. (Eds.). (2005). *The business of global environmental governance*. Cambridge: MIT Press.
- Liebman, A. (2005). Trickle-down hegemony? China's "Peaceful Rise" and dam building on the Mekong. *Contemporary Southeast Asia*, 27(2), 281–304. doi:10.1355/CS27-2F
- Lopes, P. D. (2012). Governing Iberian rivers: From bilateral management to common basin governance? *International Environmental Agreements: Politics, Law, and Economics*, 12(3), 251–268. doi:10.1007/s10784-012-9175-0
- Magee, D. (2006). Powershed politics: Yunnan hydropower under great western development. *The China Quarterly*, 185, 23–41. doi:10.1017/S0305741006000038
- Matthews, N. (2012). Water grabbing in the Mekong Basin: An analysis of the winners and losers of Thailand's hydropower development in Lao PDR. *Water Alternatives*, 5(2), 392–411.
- McNally, A., Magee, D., & Wolf, A. T. (2009). Hydropower and sustainability: Resilience and vulnerability in China's powersheds. *Journal of Environmental Management*, 90(S3), S286–S293.
- Middleton, C., Garcia, J., & Foran, T. (2009). Old and new hydropower players in the Mekong Region: Agendas and strategies. In F. Molle, T. Foran, & M. Kähkönen (Eds.), *Contested waterscapes in the Mekong region: Hydropower, livelihoods and governance* (pp. 23–54). London: Earthscan.
- MRC. (2011c, December 9). *Joint Development Partner Statement: Donor Consultative Group - 18th MRC Council Meeting, Joint Meeting with the MRC Donor Consultative Group*. MRC press release, Retrieved from: <http://www.mrcmekong.org/news-and-events/speeches/joint-development-partner-statement-donor-consultative-group-18th-mrc-council-meeting-joint-meeting-with-the-mrc-donor-consultative-group/>
- MRC. (2011a). *Procedures for Notification, Prior Consultation and Agreement (PNPCA), proposed Xayaburi dam project – Mekong river, prior consultation project review report*. Vientiane: MRC.
- MRC. (2011b). *Observations and comments on the Pöyry report on the Xayaburi hydropower project*. Vientiane: MRC.
- Network of Thai People in Eight Mekong Provinces and Network of Community Organization Council in Seven Northeastern Provinces. (2012). *Statement to Leaders of Asia and Europe on the Occasion of the 9th ASEM Summit*. Retrieved from: [http://www.internationalrivers.org/files/attached-files/xayaburi\\_petition\\_at\\_asem\\_5\\_nov\\_2012\\_english.pdf](http://www.internationalrivers.org/files/attached-files/xayaburi_petition_at_asem_5_nov_2012_english.pdf)
- Nicol, A., & Cascão, A. E. (2011). Against the flow – New power dynamics and upstream mobilisation in the Nile Basin. *Review of African Political Economy*, 38(128), 317–325. doi:10.1080/03056244.2011.582767
- OoskaNews. (2012b, November 5). Thai Activists Set to Protest Xayaburi Dam at Asia-Europe Summit. Retrieved from: [http://www.ooskanews.com/daily-water-briefing/thai-activists-set-protest-xayaburi-dam-asia-europe-summit\\_25105](http://www.ooskanews.com/daily-water-briefing/thai-activists-set-protest-xayaburi-dam-asia-europe-summit_25105)
- Pearse-Smith, S. (2012). "Water War"; in the Mekong Basin? *Asia Pacific Viewpoint*, 53(2), 147–162.
- Phnom Penh Post. (2012a, March 1). Thais Accused of Dam Deceit. Retrieved from: <http://www.eco-business.com/news/thais-accused-of-dam-deceit/>
- Phnom Penh Post. (2012b, April 23). Xayaburi Study Locks in Funding. Retrieved from: <http://www.eco-business.com/news/xayaburi-study-locks-in-funding/>
- Pöyry. (2011). *Compliance report, government of Laos, main report: Xayaburi hydroelectric power project run-of-river plan*. Zürich: Pöyry.
- Radio Free Asia. (2012b, April 19). Cambodia Warns Laos over Mekong Dam. Retrieved from: <http://www.rfa.org/english/news/cambodia/dam-04192012143244.html>
- Radio Free Asia. (2012c, April 24). Anti-Dam Protests Target Builder, Lender. Retrieved from: <http://www.rfa.org/english/news/laos/protests-04242012161824.html>
- Radio Free Asia. (2012d, May 1). Cambodia Lodges Dam Protest with Laos. Retrieved from: <http://www.rfa.org/english/news/laos/xayaburi-05012012190456.html>
- Radio Free Asia. (2012f, May 16). Xayaburi Dam Redesign Mulled. Retrieved from: <http://www.rfa.org/english/news/laos/xayaburi-05162012180613.html>

- Radio Free Asia. (2012i, November 12). Laos Hires Firm under Probe. Retrieved from: <http://www.rfa.org/english/news/laos/probe-11122012182135.html>
- Ratner, B. D. (2003). The politics of regional governance in the Mekong River Basin. *Global Change, Peace & Security*, 15(1), 59–76. doi:10.1080/0951274032000044522
- Reuters. (2012a, July 13). Laos Confirms has Suspended Controversial Xayaburi Dam. Retrieved from: <http://www.reuters.com/article/2012/07/13/laos-dam-idUSL3E8ID2AN20120713>
- Rhodes, R. A. W. (1994). The hollowing out of the state: The changing nature of the public service in Britain. *Political Quarterly*, 65(2), 138–151. doi:10.1111/j.1467-923X.1994.tb00441.x
- Rhodes, R. A. W. (1996). The new governance: Governing without government. *Political Studies*, 44(4), 652–667. doi:10.1111/j.1467-9248.1996.tb01747.x
- Risse, T. (2006). Transnational governance and legitimacy. In A. Benz & Y. Papadopoulos (Eds.), *Governance and democracy: Comparing national, European and international experiences* (pp. 179–199). Abingdon: Routledge.
- Robinson, W. I. (2002). Remapping development in light of globalisation: From a territorial to a social cartography. *Third World Quarterly*, 23(6), 1047–1071. doi:10.1080/0143659022000036658
- Rosenau, J. (2003). *Distant proximities: Dynamics beyond globalization*. Princeton: Princeton University Press.
- Rosenau, J. N. (2007). Governing the ungovernable: The challenge of a global disaggregation of authority. *Regulation and Governance*, 1(1), 88–97. doi:10.1111/j.1748-5991.2007.00001.x
- Sassen, S. (2006). *Territory, authority, rights: From medieval to global assemblages*. Princeton: Princeton University Press.
- Scott, C. A., Pierce, S. A., Pasqualetti, M. J., Jones, A. L., Montz, B. E., & Hoover, J. H. (2011). Policy and institutional dimensions of the water–energy nexus. *Energy Policy*, 39(10), 6622–6630. doi:10.1016/j.enpol.2011.08.013
- Sending, O. J., & Neumann, I. B. (2006). Governance to governmentality: Analyzing NGOs, states, and power. *International Studies Quarterly*, 50(3), 651–672. doi:10.1111/j.1468-2478.2006.00418.x
- Siddiqi, A., & Anadon, L. D. (2011). The water-energy nexus in Middle East and Africa. *Energy Policy*, 39(6), 4529–4540.
- Sourigna, V. (2011, November 9–11). *Power sector policies and regulations, and future plans*. Presentation at the Eleventh Meeting of the GMS Regional Power Trade Coordination Committee (RPTCC-11), Ho Chi Minh City.
- Strange, S. (1996). *The retreat of the state*. Cambridge: Cambridge University Press.
- Suhardiman, D., Giordano, M., & Molle, F. (2012). Scalar disconnect: The logic of transboundary water governance in the Mekong. *Society & Natural Resources: An International Journal*, 25(6), 572–586. doi:10.1080/08941920.2011.604398
- TEAM Consulting. (2010). *Environmental impact assessment, Xayaburi Hydroelectric Power Project, Lao PDR*. Bangkok: TEAM Consulting.
- TEAM Consulting and Colenco. (2010). *Feasibility Study for Xayaburi Hydroelectric Power Project Lao PDR, Final Report* (Main Report). TEAM Consulting and Colenco.
- The Economist*. (2012, July 26). Lies, dams and statistics. Retrieved from: <http://www.economist.com/blogs/banyan/2012/07/mekong-river>
- The Nation*. (2012b, April 25). Ch Karnchang Eyes 10% Return from Laos Project. Retrieved from: <http://www.nationmultimedia.com/business/Ch-Karnchang-eyes-10-return-from-Laos-project-30180652.html>
- Thul, P. C. (2012, June 29). Cambodian villagers protest controversial Lao Dam. Reuters. Retrieved from: <http://www.reuters.com/article/2012/06/29/us-cambodia-laos-idUSBRE85S0FX20120629>
- Trandem, A. (2012, October 18). The Mekong River reaches critical point as the Xayaburi Dam Advances. International Rivers. Retrieved from: <http://www.internationalrivers.org/blogs/263/the-mekong-river-reaches-critical-point-as-the-xayaburi-dam-advances>
- US Department of State. (2012, November 5). Taken question: Laos approval of Xayaburi Dam. Retrieved from: <http://www.state.gov/r/pa/prs/ps/2012/11/200190.htm>
- Van Harten, G. V. (2005). Private authority and transnational governance: The contours of the international system of investor protection. *Review of International Political Economy*, 12(4), 600–623. doi:10.1080/09692290500240305
- Vientiane Times*. (2012b, July 17). Experts defend Xayaboury Dam. Retrieved from: <http://laovoices.com/experts-defend-xayaboury-dam/>
- Vientiane Times*. (2012d, September 6). Laos clarifies Xayaboury Dam development. Retrieved from: [http://vrn.org.vn/en/h/d/2012/09/456/Laos\\_clarifies\\_Xayaboury\\_dam\\_development/index.html](http://vrn.org.vn/en/h/d/2012/09/456/Laos_clarifies_Xayaboury_dam_development/index.html)

- Vientiane Times*. (2012e, October 9). Xayaboury Dam will have no transboundary impact: Project developers. Retrieved from: <http://laovoices.com/xayaboury-dam-will-have-no-transboundary-impact-project-developers/>
- Viet Nam News*. (2012c, December 6). Lower sediment levels major concern for delta. Retrieved from: <http://vietnamnews.vn/Miscellany/233713/lower-sediment-levels-major-concern-for-delta.html>
- Vietnam National Mekong Committee. (2011). *Mekong River commission procedures for notification, prior consultation and agreement. Reply to prior consultation*. Retrieved from: <http://www.mrcmekong.org/assets/Consultations/2010-Xayaburi/Viet-Nam-Reply-Form.pdf>
- Wangkiat, P. (2012, May 1). Anti-dam activists Picket Phuket meeting. *Phuket News*. Retrieved from: <http://www.thephuketnews.com/anti-dam-activists-picket-phuket-meeting-30281.php>
- Warner, J., Wester, P., & Bolding, A. (2008). Going with the flow: River basins as the natural units for water management? *Water Policy*, 10(S2), 121–138. doi:10.2166/wp.2008.210
- Wolf, A., Yoffe, S., & Giordano, M. (2003). International waters: Identifying basins at risk. *Water Policy*, 5(1), 29–60.
- WWF. (2011). *Critical review of the Pöyry compliance report about the Xayaburi dam and the MRC design guidance – Fish and fisheries aspects*. WWF.
- Wyatt, A. B., & Baird, I. G. (2007). Transboundary impact assessment in the Sesan River Basin: The case of the Yali Falls Dam. *International Journal of Water Resources Development*, 23(3), 427–442. doi:10.1080/07900620701400443
- Zeitoun, M., & Allan, J. A. (2008). Applying hegemony and power theory to transboundary water analysis. *Water Policy*, 10(S2), 3–12. doi:10.2166/wp.2008.203
- 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), 435–460. doi:10.2166/wp.2006.054