Going with the flow: river basins as the natural units for water management?

Jeroen Warner\textsuperscript{a}, Philippus Wester\textsuperscript{b} and Alex Bolding\textsuperscript{b}

\textsuperscript{a}Corresponding author. Disaster Studies Group, Department of Social Sciences, Wageningen University, Hollandseweg 1, 6708 KN Wageningen, The Netherlands. E-mail: jeroenwarner@gmail.com

\textsuperscript{b}Irrigation and Water Engineering group, Department of Environmental Sciences, Wageningen University, Droevendaalsesteeg 3, 6708 PB Wageningen, The Netherlands

Abstract

This article engages with the currently hegemonic status of a triad of water policy prescriptions: multi-stakeholder platforms, integrated water resources management, and river basin management. A more reflective approach that opens up the choices underlying these concepts, and their limits, is needed. The choice to manage water on the basis of river basins is a political choice, and thus river basins are as much political units as they are natural units. The article concludes that the delineation of river basin boundaries, the structuring of stakeholder representation, and the creation of institutional arrangements for river basin management are political processes that revolve around matters of choice, and hence require democratic debate.

Keywords: Hegemony; Integrated Water Resources Management; Multi-Stakeholder Platforms; River basin management; Sanctioned discourse; Stakeholders

Introduction

This article examines and questions three globally hegemonic trends in water governance: (1) multi-stakeholder platforms (MSPs) for (2) integrated water resources management (IWRM), conceived at (3) the river basin level. This ‘holy trinity’ finds acceptance and support both in top-down (donors, governments) and bottom-up (NGOs) directions as a way of democratizing water management, rationalizing water resource use, and managing conflict between water users in river basins. The recognition that the river basin, or watershed\textsuperscript{1}, is the natural unit for water management is longstanding and widespread (White, 1957; Teclaff, 1967; Newson, 1997), and the renewed emphasis on river basin

\textsuperscript{1} In this article the terms ‘river basin’ and ‘watershed’ are used interchangably.


© IWA Publishing 2008
management can be seen as a third wave of interest in the river basin concept. A first wave emerged in the late 19th century when the basin-wide planning of water development started, particularly in the Nile basin (Willcocks, 1901), the Indus basin and the Western USA (Teclaff, 1967, 1996; Molle, 2006). The idea of constructing numerous dams on a river for multiple purposes (navigation, power, irrigation, flood control) took hold and led to the formulation of water development plans for the entire river basin.

A second wave was inspired by the creation of the Tennessee Valley Authority (TVA) in 1933, a river basin authority created for the unified planning and full development of water resources on a river basin scale in order to achieve comprehensive regional socio-economic development (Lilienthal, 1944; White, 1957). The strong appeal of the TVA model to engineers, planners and diplomats (Ekbladh, 2002), and the political constellation after World War II, led to the global spread of river basin authorities, primarily to developing countries like India, Sri Lanka, Vietnam and Afghanistan. In the context of the Cold and Vietnam Wars, the TVA model, presented as hydraulic development as an alternative to social conflict, became what Arthur Schlesinger called ‘a weapon which, if properly employed, might outbid all the social ruthlessness of the Communists for the support of the people of Asia’ (Schlesinger, 1962, p. 233). While the TVA and its ‘clones’ in hindsight underachieved in terms of unified, bottom-up development (Scudder, 1989; Newson, 1997), they served as an enabling concept for building dams on a massive scale and entrenching authority in the hands of hydraulic bureaucracies.

Integrated river basin development started to lose momentum in industrialized countries in the early 1970s (Barrow, 1998), with the growing recognition of the associated social and environmental costs, but also with the decreasing availability of suitable dam sites. Priority shifted towards water quality and environmental sustainability, setting the stage for the third recycling of the river basin concept in the 1990s. This third wave is strongly inspired by the ecosystem approach, in which a river basin is seen as an ecosystems continuum and water as an integral part of ecosystems. In many ways this third wave is a reaction to the construction bias of the second wave of river basin management, but adherents of the ecosystem approach are adamant that ‘water resources should be managed on the basis of river or drainage basins in an integrated fashion, with a continued and deliberate effort to maintain and restore ecosystem functioning within both catchments and the coastal and marine ecosystems they are connected with’ (IUCN, 2000, p. 16). As pointed out by Teclaff (1996, p. 381) ‘this is remarkably like the valley authority approach to creating all-purpose basin units, but without the valley authority and with the addition of environmental and some sociological concerns’. In the early 1990s, the third wave was reflected in the Dublin Principles (ACC/ISGWR, 1992) and the formulation of IWRM approaches, and later formalized by the European Union in its Water Framework Directive (EU, 2000).

The need for participatory river basin organizations has become received wisdom, as evidenced by its endorsement in the World Water Vision process presented during the 2nd World Water Forum in 2000 and the inclusion of river basin management committees in the European Water Framework Directive.

Although the World Commission on Water for the 21st Century emphasizes that there is no ‘silver bullet’ to solve the water crisis, it is quite adamant that river basins should be managed holistically and on a platform (‘water parliament’) basis and makes a strong move for closure by presenting one model for river basin management: ‘The experience of water user parliaments needs to be generalized so that all stakeholders have a voice in the decisionmaking. (…) It is equally imperative that decisionmaking be informed and scientifically and technically sound. Effective river basin management thus walks on two legs: parliaments, where users make policies and decide on the raising and spending of money, and excellent technical agencies, which provide the parliaments and users with the raw and processed information necessary for management’ (World Commission on Water for the 21st Century, 2000, pp. 27–29).
To make the transition to sustainable water management the currently dominant water policy discourse places a strong emphasis on ‘integration’, as evidenced by the hegemonic stature of IWRM. Although loosely defined and interpreted in many different ways in the past (Mitchell, 1990; White, 1998), a strong international consensus has been created since 2000 regarding the need for IWRM and what it should entail (cf. GWP, 2000). Discussions on IWRM frequently single out river basins as the ‘natural’ and therefore ‘logical’ unit for organizing water management (Newson, 1997), with Integrated River Basin Management (IRBM) proclaimed as IWRM at its broadest scale (Chenoweth et al., 2001). Pioneering countries in applying this approach are France (Buller, 1996; Betlem, 1998) and Spain (Bhat & Blomquist, 2004), while more recently Australia has joined the select list of countries reputed to have ‘successful’ river basin management (Chenoweth, 1999; Malano et al., 1999; Pigram, 2000). Several middle-income countries, such as Brazil (Lemos & Oliveira, 2004), Mexico (Wester et al., 2003) and South Africa (Waalewijn et al., 2005), are at the forefront of applying variations of this approach to river basin management. In many other countries efforts are also underway to define the river basin as the territorial unit for water governance, both in transboundary river basins and basins fully contained within one country, thereby cross-cutting existing administrative boundaries and political constituencies (Molle et al., 2007).

The precepts underlying this trend largely go unquestioned. Because river basins appear to bewell-bounded by what seem to be ‘natural’ boundaries, it would seem that they are removed from the arbitrariness and mutability of boundaries drawn by humans (Blomquist & Schlager, 2005). To others, water is so fundamental to life that we should live our lives in harmony with these natural boundaries (Franks, 2004). A previous paper (Wester & Warner, 2002) argued that by making recourse to Nature, the debate on river basin management is prematurely closed, as it rules out democratic deliberation on the desirable scales for water management. The present article expands the argument that river basins are not necessarily the ‘natural’ unit for water management, criticizes the a-political and technically informed notion of IWRM as it is commonly prescribed, and questions whether Multi-Stakeholder Platforms are necessarily the best institutional form for river basin management.

We do not take issue with the concepts themselves, but with their non-negotiable status. Hegemonic approaches to water management are not cast in stone, they are the outcomes of choices that could have been made differently. These choices are based on values and preferences, and as such are subject to political processes. MSPs are one mode of participation out of many possible modes, and the river basin level is one level among many possible levels for water management. In fact, the exact boundary of a river basin or watershed may be debatable. In Blomquist and Schlager’s terse phrase, ‘the definition of a watershed and the selection of boundaries are matters of choice. As soon as the matter of choice is present, there is a role for politics—which, among other things, is about who decides and how and with what effects’ (Blomquist & Schlager, 2005, pp. 104–105; emphasis in original). This suggests that the determination and definition of river basin boundaries is also a political process, and highlights that river basins are as much political units as they are natural units. Likewise, the choice for a certain mode of public involvement, such as in MSPs, and scale, such as river basins, has political consequences, which are easy to gloss over. By presenting these choices as natural, they acquire a supernatural, untouchable legitimacy. Current water policy, then, works to depoliticize important issues of scale and voice and may

---

3 Governance is broadly defined here as comprising the traditions, institutions and processes through which power is exercised, citizens are given voice, and decisions are made on public issues.
prematurely close very necessary debates on appropriate institutional arrangements for river basin management.

To open up space for counter-hegemonic ideas, this article questions the ‘naturalness’ of the precepts of participation for IWRM at the river basin level. In so doing, it seeks to reopen a closed area. Central to this endeavor is understanding how the closure of an issue comes about as part of a depoliticising process—a process that is itself political. We first sketch the concepts of regime and discourse, and show the pitfalls of depoliticization. We then question the common sense of the river basin scale as the appropriate scale for management and participation. We emphatically do not pass judgment on all river basin management institutions, some of which work quite well, while others do not. An evaluation of (the literature on) their performance is outside the scope of this article, and has been covered extensively in Delli Priscoli (1996), Newson (1997) and Molle et al. (2007). Rather, we advocate the rediscovery of the political in river basin management, through democratic deliberation on desirable institutional configurations for water management—one that does not make recourse to Nature to prematurely close debates. We place emphasis on choice based on a concern for democratic accountability—so that choices are made consciously and are supported by many, rather than tacitly perpetuated by a few.

The water regime: heading for closure

Critical discourse theorists (e.g. Fairclough, 1989) remind us that words create social facts. As Majone noted, this is even more important in policy-making circles: ‘As politicians know only too well but social scientists too often forget, public policy is made of language’ (Majone, 1989, p. 1). It is therefore interesting to take seriously the multiple uses of a word in different domains. The words ‘regulation’, ‘regime’ and ‘closure’ are in use both with respect to society management and river management. Just like the specter of anarchy instills the fear of societal breakdown, floods instill primordial fears, and each is easily presented as a security (survival) issue requiring special measures—regulation. The word ‘closure’ likewise has resonance in both water management (river basin closure) and policy analysis (especially in Science and Technology Studies)4, and in both disciplines, ‘closure’ is frequently portrayed as an autonomous process rather than the outcome and consequence of collective human decisions. Likewise, ‘scarcity’ is often presented as a technical limitation, ignoring the economic and political choices and physical resource capture as well as dietary preferences that contribute to local scarcities.

Just like the word ‘river regime’ seeks to describe the patterned behaviour of a stream, the structuring context (defined as the ‘institutions possessing norms, decision rules, and procedures which facilitate a convergence of expectations’: Krasner, 1983) in which political actors operate may be termed the ‘regime’ governing an issue-area, which in turn is nested in other regimes, labeled ‘the social order’ (Rosenau, 1992). Regime theory emerged as a way of understanding cooperation and structure in International Relations, as an alternative to the dominant ‘Realist’ paradigm, which saw the world as conflicting and anarchic. But when we talk about anarchy, we are in fact talking about the lack of a

4 ‘Closure, in the analysis of technology development, means that the interpretative flexibility of an artefact diminishes. Consensus among the different relevant social groups about the dominant meaning of an artefact emerges and the “pluralism of artefacts” decreases’ (Bijker, 1990, p. 95).
supra-national government and regulation, not about the absence of power. ‘Governance’ may mean ‘rule without (clear) rulers’, but it does not go without written and unwritten rules.

As international water conflict, previously regarded ‘low politics’, appeared as a ‘high politics’ concern on the global security agenda after the end of the Cold War (Bulloch & Darwish, 1993; Gleick, 1993; are well-known examples), political scientists started applying regime theory to the regulation of conflict over shared water bodies (e.g. Kibaroglu, 2001; Jägerskog, 2003). Another strand of analysis focused on the quality of international environmental resources—e.g. the regulation of water bodies such as the Mediterranean (Haas, 1989) and the river Rhine (Dieperink, 1997). The focus on rules, norms and procedures however does not tell us much about human agency—who makes and implements these rules, norms and procedures? We are partial to the following definition of a water management regime, reminiscent of Lasswell’s (1936) definition of politics, as it highlights choice:

A society’s management and use of a natural resource, both the means used to extract a resource like water from the natural environment to the ends towards which its exploitation is directed, is (…) structured under a set of legal statutes, social norms, cultural practices and political institutions. Given the ability of modern technology to control nature, these rules, values, habits, laws, regulations, public policies, authorities and bureaucratic agencies, now largely determine our relationship with a natural resource. A water management regime, then, includes the knowledge, organizations and human choices which determine who gets water and when, from where and for what purpose and price, and how it can and should be used. (Waller, 1994, p. 16)

Although human choices determine who gets what, institutionalized hegemonic discourse can also prevent choices. To clarify this, the next section will introduce a three-tier classification of conflict, legitimation and hegemonic power.

From regimes to discourse: who gets to say what

To understand how the ‘trinity’ of MSPs, IWRM and river basin management could take off so successfully, we need to consider how concepts become hegemonic. Sustainability, development, participation, integrated water resources management, and integrated river basin management are all concepts that sound intuitively attractive and desirable—they sound like Good Things—as they connote desirable collective goals such as equity, voice, self-realization and a healthy environment. However, they can also be facile in that using such concepts papers over the inherent conflict that each of the concepts carries with it. Thus, ‘consensus-building’ sounds much more painless than ‘managing conflict between disputants’, which describes the same thing from the vantage point of negotiation literature (e.g. Ramirez, 1999). The former starts from an imputed commonality of interest and desire to cooperate peacefully while the latter starts from inherently contrasting interests and the difficulty, if not impossibility, of avoiding structural clashes as a result of them. River interdependence brings cooperation and conflict, often at the same time. As people are both rational, self-regarding individualists and social beings with a sense of community, each approach represents one side of the coin. It is interesting to ponder why international aid institutions much prefer to emphasize the harmonious definition and ignore the discord. The concept of (de)politicization provides a major clue.
To be ‘political’ means to be potentially changeable; i.e. not something natural, God-given, but something which has the potential to be influenced by agency. (...) to include something as a factor of power in one’s calculus, means to ‘politicise’ it. (...) In turn, depoliticisation happens when by common acceptance no power was involved. (Guzzini, 2005, p. 511)

Politicization of an issue questions the status quo, presents alternatives, and involves conflict; it is often a drawn-out process. Politics is messy—it side-tracks, interferes and reopens debates long presumed closed, making business as usual problematic. As a plethora of choice and debate can be frustrating for decision-makers, it is attractive for those in charge to present an outcome as unavoidable, that is, to posit a point of no return. Famously, Margaret Thatcher was fond of seeking to depoliticize an issue by claiming that ‘There Is No Alternative’ (TINA) (Norpoth, 1992). This very powerful speech form could be called a ‘move for closure’ of the political issue.

If an issue is uncontroversial, it is not political; if there is nothing to choose from, and thus no degree of freedom, there is no politics. Depoliticization frequently works by bringing Nature into the debate (also termed naturalization) (cf. Latour, 1987), for example by claiming that river basins are the ‘natural’ units for water management. This leads to what Latour calls the ‘blackboxing’ of an issue, that is, the obscuring of who did what to make things the way they are. Barthes (1993) is onto the same phenomenon when he coins the phrase ‘mythology’ to describe the process of reinventing history as the natural course of events, in so doing ordering what was ambiguous. Such a ‘myth’ is an attractive option for those who seek to neutralize opposition, which might present persuasive alternatives to the preferred approach.

This process not only offloads responsibility and potential blame, it is also a powerful and attractive legitimizing tool. A judicious choice of depoliticized policy buzzwords releases donor funds for water projects and justifies academic research and publications. While competing discourses may initially make themselves heard on the scene, they are drowned out or subsumed by a hegemonic discourse. Consciously or subconsciously, a discursive alliance forms (Hajer, 1995), welding together compatible discourses and rejecting non-compatible discourse. This brings ‘closure’ to the ways we understand society, its organization and the way power is distributed, excluding competing understandings. Scientific discourse has the particular characteristic of describing the world in an ‘out-there’ fashion, as objective truths, without agency, subjectivity and uncertainty (Potter, 1996). Thus, when the experts make a claim, it has much more authority than when other enunciators make competing claims, unless the latter are successful in politicizing that claim. Thus, discourse works to privilege and institutionalize expert knowledge, while overt or covert forms of indoctrination helps diverge and divulge it (Bierschenk, 1988).

As Foucault has shown, a power/knowledge paradigm is so ‘natural’ that it is possible to be for or against an issue, that is, one is tied to a certain paradigm in which both x and non-x are acceptable speech figures, but not y and z (cf. Haugaard, 1997). Opposing the ‘sanctioned discourse’⁵ can mean being deviant, anti-social, and risks expulsion from polite society. Translated into water project terms, both arguments for and against something (dams, privatization) are now part of legitimate speech, but not arguments that start from completely different precepts, a different paradigm—say, the traditional knowledge that comes from treating water like a spirit (Pacari, 1998).

---

⁵ Defined by Feitelson (1999) as ‘a normative delimitation separating the types of discourse perceived to be politically acceptable from those that are deemed politically unacceptable at a specific point in time’.
There is an intimate link between sanctioned discourse and conflicts, at three different levels. In terms of resource conflict, *first-order* conflict has as its object the resource distribution itself—who gets how much of the pie—money, water or land. *Second-order* conflict centers on the terms of allocation and distribution, that is, on the regime of (land and water) rights, rules, procedures and decision-making processes, in other words, on the terms of the ‘contract’ between regime partners. Finally, a *third* level of conflict concerns the systemic level—the systemic power biases that allow some to make the rules, and to call the name of the game, overtly or covertly.

A similar classification can be devised for the legitimacy of projects, actors and social orders (see Table 1). A proposed intervention project may be deemed ‘unacceptable’ by some stakeholder (first-order acceptability). In this case, the enunciator becomes a veto actor in an open power contest (*Lukes’* (2005) first face of power). Similar to the above reasoning on conflict, the methods and procedures by which they have been decided may also be under scrutiny (second-order acceptability). The associated second-order question is: who decides the definition of ‘acceptable’? This actor (group) sets the rules and the criteria for the game—that is, *Lukes’* (2005) second face of power: the power over policy agendas. In *Bachrach & Baratz’s* (1970) terms, which issues (or ways of framing them) are on the non-agenda, i.e. may be raised in society, but not acted on in the political domain?

On top of the two levels of acceptability outlined above, a third level can be identified: acceptable discourse: Who decides what we can talk about? Which questions can be asked, and which are beyond the pale? Certain discourses can be systematically blocked out from the policy debate, so that the normalized or hegemonic discourse, reflecting the dominant (Kuhnian) paradigm is reinforced until an act of politicization, a shock or a crisis can bring out and be the focus of underlying, competing (conflicting) truth regimes. This normalizing power is the third face of power.

Not only is knowledge power, the exercise of power is inextricably bound up with the production of knowledge and discourse. These are so ingrained in society that, say, an Indian low-caste woman is unlikely to ask herself questions about the way society is organized to her disadvantage—it is ‘the way it is’, it is ‘natural’. In terms of our present concern, the upshot is that those who do not use the hegemonic language are ‘beyond the pale of accepted argument’ (*Keeley*, 1990). Someone may have to speak for them, rephrasing their argument, and people may have to learn to talk like experts and decision-makers to make themselves heard.

### Just how ‘natural’ are river basins?

#### Boundaries and scale

The focus on river basins has a centennial history, but has now truly gained pre-eminence as the territoriality for water management (*Buller*, 1996) due to the confluence of three types of science,

<table>
<thead>
<tr>
<th>Conflict over</th>
<th>Legitimacy</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd order</td>
<td>Social Order</td>
<td>Regime of truth</td>
</tr>
<tr>
<td>2nd order</td>
<td>Rules of the Game (regime)</td>
<td>Procedures and standards</td>
</tr>
<tr>
<td>1st order</td>
<td>The Outcome of the Game</td>
<td>Acceptability of outcome</td>
</tr>
</tbody>
</table>

Table 1. Three levels of conflict, power and legitimacy.
namely hydrology, geography and ecology. For hydrologists, river basins are indeed the natural units for studying water flows on and in the earth. Geographers such as the Frenchman Philippe Buache (1700–1773) were the first to develop the concept of river basins as an ordering principle to study the lay of the land and have remained fascinated with them ever since (Melville, 2000). The current concern for ecosystem management rests on the foundations of ecology, a science with a great interest in the delineation of natural systems. However, on closer inspection it turns out that on the ground it is not quite that easy to determine where nature has drawn the river basin’s boundaries (Griffen, 1999; Mostert et al., 1999; Newson, 1997). Watersheds are not static. Unregulated rivers that are reasonably close to each other may capture each other’s tributaries. In practice, drawing the boundaries of ecosystems has proven difficult and hence river basins and watersheds are being used more frequently as ecosystem boundary proxies (Barham, 2001).

Mostert et al. (1999) pointed out that river basins are open systems with sometimes ill-defined boundaries as rivers may have a shared delta, their boundaries often do not correspond with aquifer limits and in flatland and extremely dry areas are either vague or man-made. In addition, river basins interact with the atmosphere and their receiving waters such as seas. Griffen (1999) also highlights that nature does not always do a good job of drawing the boundaries of river basins: as much as one third of the land mass of the United States (excluding Alaska and Hawaii) possesses physical characteristics that make watershed delineation problematic. He also points out that ‘another problem with using a watershed as the appropriate spatial unit is that the use of watersheds erroneously assumes that all biotic and abiotic factors are similarly organized. Air, wildlife, and other natural resource issues are effectively transboundary and may not be well served by using watersheds as an organizing principle’ (Griffen, 1999, p. 509).

The choice of map makers and basin administrators may seem arbitrary or ill-informed, but (critical) political geographers like Blake & Schofield (1987) remind us that throughout history, maps and boundaries as territorial and administrative delimitation have been political, serving strategies of resource capture and the inclusion and exclusion of certain actors. This is even more conspicuous when there is a discrepancy between the actual watershed and the ‘watershed council’: we may come across watershed fora that may actually not cover the watershed the way a geographer would have expected. For example, for the Kat River in South Africa, Simpunge (2006) shows that the Kat Forum consists of only Upper and Middle Kat farmers—but not the white irrigators in the Lower Kat. Likewise, an example from Argentina (Moreyra & Wegerich, 2006) is illustrative of boundaries and political exclusion. This Argentinean case study shows that the definition of the Trahunco arroyo (artery) in San Martin de los Andes, Patagonia, conveniently left out important groups. Moreyra & Wegerich (2006) notice that the boundaries of the Multi-Stakeholder Platform established by the local authority seem to have been drawn such that the most vocal indigenous people’s representatives (Mapuche), who complained about pollution, can not participate—they were simply bracketed out. We have to keep our eyes peeled for such incongruencies.

**Distance and accountability: the democratic gap**

While the former observations have concerned establishing boundaries for existing systems, many river systems are also subject to intense engineering, rerouting water within the basin. Another trend is the interlinking of river basins, and inter-basin transfers, which can significantly widen the ‘boundaries’
of the river systems. Both Spain and India have plans to integrate their rivers so that a national grid develops where water can be transferred between basins according to need—or whim.

In The Netherlands, such interlinkage is already in place for the purpose of flood discharge. In the unusually hot summer of 2003, the interlinked system was put to a hitherto untested use: recharging dry areas to safeguard the stability of the dikes and counter sea water intrusion. The decision to reverse the channel flow was taken by engineers from different bodies. One only needs to magnify Dutch relations to the size of India to picture the democratic gap here. Although this gap has always existed to some degree—our point here is that upscaling river basin management does not change much about it.

Of even greater consequence are the workings of the International Political Economy. As Allan (2001) has pointed out, countries where water is felt to be scarce may rely on imports (and food aid) from temperate-zone countries where water is less scarce, thus leading to an international reallocation of water. This has local consequences. While Allan praises the fact that this mechanism takes place outside the purview of parliamentary politics, it is questionable from a perspective of democratic accountability that such major mechanisms—the result of conscious choices—go unchecked.

Further, making water the organizing principle for spatial planning ignores the political reality that water disputes are usually a flashpoint for conflict over a much wider range of issues (see, for example, Warner (2004) on the Euphrates-Tigris conflict). Warner (2006) also found that water platforms usually start discussing a wide range of issues—land tenure, forestry, economic development, health—that come at a different scale to the water issue. ‘Water resource management’ is a label that is too often narrowed down to evidence-based, water-focused objectives, which facilitates project accountability for donors, policymakers and water practitioners alike but can bracket out the numerous non-water issues (Hoekstra, 2005 gives a ballpark figure of 80%) that may be integral to the problem. In practice, the themes are more fluid than the project or platform can accommodate.

This brings us to the nexus between integrated water management and stakeholder participation, which is not an immediately obvious one, as holistic management and participation pull in opposite directions (Green & Warner, 1999). While the complexity of integrated management invites centralization and technocracy (Iyer, 2004), participation suggests subsidiarity, small-scale operations and engaging people to think creatively about issues their lives are intimately linked with. Thus, in any basin of some size, river basin management would entail a layered system of participation, necessarily increasing the complexity of the arrangement (Wester et al., 2003). We should therefore think about the scale at which platforms for participation might operate successfully.

We propose that the scale should reflect local realities rather than naturalistic dogmas. This is important in that the discipline of Public Administration tends to be more concerned with the governability of larger territories than with the feedback loop constituted by democratic participation processes. In the case of the Netherlands, river basin management means upscaling of the millennial water management boards. People locally identify with these smaller units where they have gained confidence and trust in each other and in each other’s tacit know-how. Scaling up to a sizeable river brings a different level of distance between the parts and the whole. People like to have personal knowledge of their representatives. At river basin level, the representatives are as far removed from the life-worlds of locals, and therefore as distant, as members of parliament. It is therefore much harder to keep local stakeholders interested and committed to the process.

From a populist perspective, upscaling to the river basin level disrupts these established relations and may alienate those who work the land from those who make the decisions from ivory towers. The establishment of new organizations while ignoring how things were done before is likely to lead to
traumatic power play. A new organization is a resource for the organizationally literate who can use the resources an organization brings to their advantage. The River Basin Organization will then be seen as yet another layer of bureaucracy, ‘one of them’ rather than ‘one of us’. This calls the systemic legitimacy of the mode of resource management into question. Thus, as decision-making moves to the river basin level, serious thought needs to be given to how hard-won democratic rights in conventional social and political domains are assured in the river basin domain. As pointed out by Barham:

While watershed-level “rules” may be desirable in terms of holistic environmental planning, the simple fact is that we do not have established social and political institutions in place that can assure that deliberations over these new rules will be broadly democratic. Without such institutions (...) we may witness a gradual reassembling of authority on a watershed basis that leaves behind democratic access to information and the possibility of open public debate. (Barham, 2001, p. 189)

This observation becomes even more disturbing when we realize how little mandate many participatory platforms actually have (Warner, 2007). ‘Devolution’ entails a reconfiguration of domains of bureaucratic power and responsibilities, and consequently of changing forms of accountability and state control, while the ‘shadow of hierarchy’ remains (Jessop, 1998). Water bureaucracies have been particularly resourceful in maintaining their command-and-control orientation under the guise of apparently drastic institutional reforms (McCool, 1994; Rap et al., 2004). This requires careful study of bureaucratic domains, organizing practices (Law, 1994), and new ways of engineering consent and control at a distance (Rose & Miller, 1992).

Involving civil society in resource management makes management more unpredictable, and may involve a clear ‘no’ to planned interventions that have considerable sunk costs. This is one reason why governments are often wary of vesting real powers in these bodies. Another is that the platform may take on an anti-centralist color or institute a meaningful form of local democratic governance that was previously non-existent. Their politicized nature can be perceived as threatening to the regime (the power constellation, rules and roles governing the issue-area) in which they arise, which may then threaten to ‘disarm’ or disband them, as a citizen platform in the city of Ica, Peru found when it expressed criticism of President Alberto Fujimori’s dictatorial style (Warner & Ore, 2006). In Zimbabwe, meetings of newly instituted (sub-)catchment councils were actively suppressed by the ruling political party during the run-up to the 2000 Parliamentary and 2002 Presidential elections (Manzungu & Kujinga, 2002). Consequently, in several ways, MSPs run the risk of only being allowed pride of place as depoliticised, toothless institutions (Warner, 2006).

Integrated water resources management

Equally, the choice for IWRM is often presented as a ‘natural’ or ‘unavoidable’ choice in situations of increased competition over scarce water resources. The complexity of a water system promotes a panoptic, centralized expert view rather than a decentralized, laymen’s debate. IWRM, it is hoped, will allow for a rational distribution of water resources amongst the different contending users, undisturbed by political haggling. Thus, IWRM seeks to rationalize water use by applying optimization models that are based on contradicting rationalities, such as those promoting economic development, environmental sustainability, and social equity. IWRM involves a trade-off between these different rationalities by
means of a process called commensuration: the weighing of different values and norms according to one common yard stick. This trade-off typically takes place on the basis of proven expertise and knowledge claims amongst state agents rather than on the basis of an open bargaining process between interested stakeholders.

The decision-making process surrounding the construction of the Orme dam in Arizona, USA, provides a famous example of such bulldozing of local values and norms. When Indians refused to vacate their ancestral lands, about to be submerged by the dam reservoir, on the grounds that they could not risk the wrath of their ancestral spirits, engineers from the Bureau of Reclamation pushing for the dam could only conceive of the Indian’s objections in terms of a bargaining strategy to raise the latter’s compensation claim. The fact that ancestral spirits were not commensurable with money, whatever the price, was not well appreciated by the Bureau’s engineers (Espeland, 1998). This is not to attack the Bureau for supposed incompetence or short-sightedness, but rather to highlight the possibility that the problem was misread. Had the conflict been recognized as a disparity over values rather than facts, it might have been recognized as what Hoppe (1983) has termed an ‘intractable political problem’ rather than the ‘tractable technical problem’ an expert-driven view tends to promote.

**Rediscovering the political in river basin management**

States, multilateral donors and emancipatory NGOs, not the most likely of bedfellows, like the sound of MSPs, IWRM and RBM for wildly different reasons. One attraction of participatory platforms is that it seems to provide for people’s politics without the politicization. However, we should not be surprised when water becomes politicized anyway. Because of the complexity of its uses, diversity of its users and dynamics of change and uncertainty (Kooiman, 1993), water management readily gives rise to ‘wicked’ or intractable problems. Wicked problems are clusters of interrelated problems, characterized by high levels of uncertainty and a diversity of competing values and decision stakes (Rittel & Webber, 1973). Crucially, wicked problems cannot be solved by any single organization acting alone and are intractable, since what constitutes a solution for one group of individuals entails the generation of a new problem for another. They thus easily enter the realm of politics, which, in one of its many definitions, is about the contest for the distribution of scarce resources (Lasswell, 1936; Heywood, 1994). When water becomes contested, it is a contest with unpredictable and unstable outcomes and diverging pathways to alternative futures (cf. Mehta, 2000; Mollinga, 2001). This makes it hard to control outcomes.

Multi-Stakeholder Platforms, which Röling (2002, p. 39) defines as ‘contrived situations in which a set of more or less interdependent stakeholders in some resource are identified, and, usually through representatives, invited to meet and interact in a forum for conflict resolution, negotiation, social learning and collective decision making towards concerted action’ are not a particularly new or revolutionary development (Warner, 2006). It is therefore interesting to see that, despite a growing sense of disillusionment with participation in the developmental literature (e.g. Cooke & Kothari, 2001), MSPs for river basin management are currently popular with a view to institution- and capacity building. They hold the promise of democratizing water management by giving voice to a multiplicity of interested actors, and are widely promoted as an alternative to public or private management of water resources. MSPs have become the flavor of the month in the water sector. Donors, states and NGOs promote multi-stakeholder processes, and even though they mostly have little or no mandate, or impact, MSP participants are enthusiastic about the social capital they can generate. A relevant question in many cases
is what problem specific basin MSPs purport to solve. It is not a question of there not being a problem—which would legitimize an ‘if ain’t broke, don’t fix it’ stance—but rather, a question of whether institutional tweaking changes anything about the problem. Preliminary evidence from the authors’ research suggest that at least some among them are not at all intended to solve anything, but rather to act as a talking shop or a mechanism for delaying decisions (Bolding, 2004; Waalewijn et al., 2005; Wester et al., 2003, 2007; Warner, 2006).

Meanwhile, the vogue for MSPs does affect the institutional landscape. Participatory platforms pose new challenges to existing regimes in the issue-area—the institutional set-up needs to adapt to the new kid on the block. MSPs emerge as new institutions in an established institutional environment, and often need to stake out a position in that field without compromising their representative function vis-à-vis their constituency (Warner, 2006). To understand this, we need to take a look what institutions actually do.

Institutions purport to reduce uncertainty and promote stability, and if necessary invent legitimizing accounts for their existence. They reduce the complexity of the real world by setting rules, assigning roles and allocating rights to the actors involved in them (North, 1990). Institutional change therefore changes (redistributes) all three of those. Rules and rights create boundaries (including that of the institution itself), ownership titles, permitted activities, and in- and outgroups, while roles structure the field.

In order to survive, institutions have to be adaptive and dynamic—they are embedded in social/material practices where they are reproduced, transformed and subverted through interactions and negotiations between actors. ‘The more conduct is institutionalized, the more predictable and thus the more controlled it becomes’ (Berger & Luckmann, 1966, p. 79–80). Institutions therefore require as well as provide the mechanisms for the normalization of society—in Foucauldian terms, discipline and obeisance. ‘Institutions constrain what will be taken seriously in a given context and define the conditions under which a statement will be taken seriously and treated with felicity’ (Haugaard, 1997, p. 101). This will filter out a number of alternatives a priori.

Unfortunately, the situation before the creation of new water institutions is often treated like a tabula rasa while in effect many roles (sanctioned or informal, established or highly flexible) and certainly the technologies for controlling water are already in place. Barham points to the risk that new institutions for river basin management may:

sap the effectiveness of existing democratic channels of communication in the interest of finding more efficient technical solutions to complex problems. Social organizations (boards, committees, etc.) created for watershed planning are imposed as it were from the outside, overlaying natural boundaries in a new way on top of existing social and political boundaries (…). To use a water metaphor, authority, funding, research, and new scientific approaches can all be poured from existing social and political “containers” into the watershed boundary. But we can’t be certain that processes of democratic deliberation that were associated with the older containers will be poured along with the rest or separated out and cast aside unless we give this careful and constant attention. (Barham, 2001, p. 190; emphasis in the original)

If done unreflectively, then, new institutions can institutionalize inequality. In river basins it is the norm that water management stakeholders have different levels and kinds of education, speak different languages, differ in access to politics, and hold different beliefs about how nature and society function (cf. Edmunds & Wollenberg, 2001; Kujinga & Manzungu, 2004; Waalewijn et al., 2005). If this is not taken into account when creating rules, roles and rights, the institutional outcome can easily privilege
those who are literate and have access to the legal system. One could add that MSPs in the water sector have a propensity to exclude potential, future, ‘stakeholders’, i.e. those who have been denied access to water on account of a lack of infrastructure to capture such water, and those water users that have access to water (informal smallholder furrow irrigators), but whose right to that water has never been legally recognized (Bolding, 2004). Normally, only existing, legally recognized, water users are included in MSPs as ‘stakeholders’, facilitating resource capture by the ‘powers that be’.

In this light it is doubtful that integrated river basin management with stakeholder participation will lead to equitable, efficient and sustainable water management—they could just as easily facilitate a form of resource capture with a human face (Currie-Alder, 2005; Swatuk, 2005). Since river basins know no political boundaries (Kauffman, 2002), there are no social and political institutions in place that can assure that new river basin institutions will be broadly democratic. Some fear that this may lead to undemocratic, authoritarian and exclusionary processes of social control, reflecting existing bureaucratic expert cultures within the water sector (Adams, 1992; Swatuk, 2005), exercised to meet a perceived need to address environmental sustainability (Barham, 2001).

Emerging forums for river basin management frequently embody the organizational practices, priorities and forms of governance that prevail amongst powerholders. This clashes with the organizational practices and cultures of governance of those hitherto left out and now invited to participate, such as smallholder farmers, urban dwellers, and poor women. This majority of potential stakeholders lacks access to water, and the discursive and organizational means to participate meaningfully. In addition most potential stakeholders are unaware of the new institutional structures, in which government appointees or civil servants still have a strong presence, women are poorly represented, and considerable authoritative discretion is often (paradoxically) vested in line departments.

This is clearly brought out in the establishment of Catchment Management Agencies in South Africa, despite the government’s efforts to include all stakeholders (Wester et al., 2003; Waalewijn et al., 2005). The establishment of a para-statal Water Authority (ZINWA) and state dominated (sub) Catchment Councils in Zimbabwe after 1998 provides another case in point. State representatives and large scale commercial farmers initially dominated the proceedings, while the large majority of needy communal area dwellers were unaware of the water reforms. They at times contested the sudden need to pay for water which they believed belonged to God rather than to ZINWA but were generally ill equipped in terms of organizational and discursive skills to influence the deliberations within the (sub) Catchment Councils (Dube & Swatuk, 2002; Manzungu, 2002; Bolding, 2004). The further concentration of access to water in the hands of the powerful, and continuing undemocratic, expert-based control over water allocation and use under the guise of IWRM, is emerging as a very real danger of the establishment of new institutions for river basin management (Currie-Alder, 2005; Swatuk, 2005; Faysse, 2006).

Conclusions

We have argued that river basin boundaries and institutional arrangements are not natural but matters of choice and contestation. The preference for river basin management is an expression of three fundamental and interlinked choices: (1) the appropriate scale for water management, (2) who decides on the appropriate scale, and (3) how and in which forums these decisions are taken.

The closure of the discourse on river basin management is a political process that revolves around matters of choice and legitimation, but is obscured by naturalization processes that by
silencing agency, silences alternatives. Presented as the most appropriate scale for water management, not by human choice but mandated by ‘nature’, river basin management acquires an untouchable legitimacy. Depoliticising important issues of scale and voice may prematurely close very necessary debates on appropriate institutional arrangements for river basin management.

By showing how there is nothing ‘natural’ or ‘inevitable’ about taking river basins as the units for water management, we have attempted to ‘reopen’ the closed concept of river basin management and to engage critically with the way such concepts are selected and promoted. Interdisciplinary research focusing on the relationship between the over-exploitation of water, the production of dominant water discourses, processes of institutional change concerning river basin management and changing patterns of access to water, is needed to bring a greater understanding of such processes (cf. Bolding et al., 2000). Such research needs to be conceptually grounded in the notion that water can easily become a politically contestable resource and that water management institutions and policies are effects of political practices.

We are not suggesting that we prefer water not to be managed at river basin level, but rather that this choice is political and that river basins are thus as much political units as they are natural units. Reconceived as political units, river basins become territories of governance, immediately raising the question who will make decisions, and how. While there is much to commend in current developments towards IWRM and participation, we see little gain in the modernist dream of homogenized water management institutions. River basin management does not need a strong centralized organization, and river basins facing conflicting societal values and pressure on water resources will probably not be well managed by a single body. (Molle et al., 2007). A locally rooted diversity, where institutional beasts fit their habitats of geophysical, political and cultural realities, seems preferable.

Moving toward sustainable river basin management requires much more emphasis on developing, managing, and maintaining collaborative relationships for river basin governance, that build on existing organizations, customary practices, and administrative structures, rather than the current focus on the establishment of unitary river basin organizations. Where identity leads to collective action, it is more likely that culturally and environmentally sustainable practices will develop. The river basin scale may compromise the practicality of a water board established by interdependent polder dwellers, the culturally sensible scale of a geographically dispersed ayllu of related Bolivian indigenous groups or the politically sensible scale of the province as a management unit. The challenge then is to link and nest this diversity such that the sum is no less than its parts—a polycentric (Ostrom, 2001; Svendsen et al., 2005; Bruns, 2006) system of participatory governance in which the constituent parts are meaningful. Polycentricity brings a type of institutional redundancy with it that appears inefficient in the short term but generates robustness for the long run as it has more coping capacity when faced with uncertainties. Like other broad concepts, there is a danger of polycentric, adaptive water management becoming the next fad of the water management community. Our problem is not with buzzwords, but with the tendency for donors and practitioners to make them unassailable.

References


Iyer, R. M. (2004). If the United States of America were based on watersheds? Water Policy, 4(1), 57–68.


