



Society & Natural Resources

An International Journal

ISSN: 0894-1920 (Print) 1521-0723 (Online) Journal homepage: <http://www.tandfonline.com/loi/usnr20>

When Policy Hits Practice: Structure, Agency, and Power in South African Water Governance

Jan Janosch Förster, Linda Downsborough & Machaya Jeff Chomba

To cite this article: Jan Janosch Förster, Linda Downsborough & Machaya Jeff Chomba (2017): When Policy Hits Practice: Structure, Agency, and Power in South African Water Governance, *Society & Natural Resources*, DOI: [10.1080/08941920.2016.1268658](https://doi.org/10.1080/08941920.2016.1268658)

To link to this article: <http://dx.doi.org/10.1080/08941920.2016.1268658>



Published online: 19 Jan 2017.



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



Article views: 5



View related articles [↗](#)



View Crossmark data [↗](#)

When Policy Hits Practice: Structure, Agency, and Power in South African Water Governance

Jan Janosch Förster^a, Linda Downsborough^a, and Machaya Jeff Chomba^b

^aMonash University–Monash South Africa, Water Research Node, Roodepoort, Gauteng, South Africa; ^bSchool of Agricultural, Earth and Environmental Sciences, University of KwaZulu-Natal, Pietermaritzburg, South Africa

ABSTRACT

A new water governance framework with the aim of overcoming past racial inequalities in water access and addressing the critical challenges of water security in the country was developed by the post-Apartheid South African government in the years following 1994. The adoption of ideas of collaborative governance and institutional devolution associated with integrated water resources management (IWRM) are central to this framework. Using social theory, this study examines structural and agential dimensions of power manifested during the establishment process of a water user association in the Northwest Province of South Africa. Portraying that the establishment process of this new institution was flawed due to power asymmetries of interacting actors, this article unmasks supposedly collective decision-making processes in collaborative water governance. As the establishment of water user associations in South Africa is an ongoing political process, our findings have societal relevance for the country's future water policy implementation.

ARTICLE HISTORY

Received 31 August 2015
Accepted 13 November 2016

KEYWORDS

Collaborative governance; institutions; power; resources and capabilities; South Africa; water policy; water user association

Introduction

The racial policies of societal segregation of the white South African Apartheid regime (1948–1994), in which race, gender, and class were the dominant factors in South African society, mirrored water access in the country (van Koppen, Schreiner, and Fakir 2011). Accordingly, water access was highly unequal. Thus, at the heart of the new water policy framework of the post-Apartheid South African government lies the idea of redressing past inequalities of water access through a formal institutional mechanism of collaborative water governance on the local level—the water user association. In this article, however, we argue that the formal structure of policy and law including the idea of collaborative water governance in newly established institutions might be articulated on paper, but that existing agential capabilities on all levels of South African water governance in practice are not fit for the successful implementation of such policy.

South Africa, along with several other African nations (African Ministers' Council on Water [AMCOW] 2012), has embraced the ideas of integrated water resources management (IWRM), which promotes concepts of devolution of water management competencies to newly established institutions on regional and local levels and stakeholder

CONTACT Jan Janosch Förster  j.foerster@gmx.de  Monash University–Monash South Africa, Water Research Node, Ruimsig, Roodepoort, Gauteng 1725, South Africa.

© 2017 Taylor & Francis

participation in decision making (Braid and Goergens 2010). Water user associations (WUAs) were envisaged as institutional vehicles for collaborative water governance on a local level.¹ In the South African National Water Act of 1998 (NWA 1998; Department of Water Affairs [DWA] 1998) they are defined as “cooperative associations of individual water users who wish to undertake water related activities for their mutual benefit.” Through negotiated and deliberative processes within newly established WUAs the access to water for productive purposes was anticipated to be “radically transformed” (National Water Policy Review [NWPR]: DWS 2014).

However, IWRM has been criticized for delivering results that often fall short of promises and that water problems “continue unabated or even worsen” (Ingram 2013, xv). Lautze et al. (2011, 6), for example, point out that “IWRM is more prescriptive in nature, having largely pre-defined outcome goals,” whereas real-world societal action is coined by a multitude of social processes with rather uncertain outcomes. Institutional approaches to collaborative natural resource governance in many instances face the same inherent problems (Sabatier et al. 2005). They often do not lead to beneficial social outcomes like increased distributive justice. Decision making, sharing responsibilities, and creating accountability (Bloomquist and Schlager 2005), the embeddedness into larger and inflexible governance bureaucracies (Ananda and Proctor 2013), and also a lack of fit between the newly established institutions and the socioecological processes that they try to govern (Bixler 2014) are often highlighted when explaining the misfit between goals of a policy and the outcomes of its implementation in practice. Indeed, what has been internationally defined as “good outcomes” of IWRM-based policy of collaborative² governance through local water institutions, or simply as “good governance,” does not necessarily reflect outcomes generated in practice (Franks and Cleaver 2007; Lankford and Hepworth 2010).

Another factor underlying this misfit is power (Brisbois and de Loe 2015; May 2015). Power is among the most fundamental ideas in social sciences and social theory (Haugaard and Clegg 2009). Despite that, power analyses building on social theory are highly underrepresented in the field of water governance (Mollinga et al. 2010; Brisbois 2015). Although power has recently found its way back into mainstream academic discourses around water governance (Swyngedouw 2006), it had long been coated by a sweet icing of IWRM and its supporting lobbies and developmental agendas of mainly Western organizations and governments (Molle 2008; Cherlet and Venot 2013).

It is therefore essential to apply a theoretical lens that builds on social theory and incorporates issues of power to understand real-world hydro-social complexities of water governance. In this article, we consider water governance as the outcome of structural and agential factors within the various spectra of sociopolitical processes on the macro level of policy formulation and coordination, the meso level of institutional implementation, and the micro level of social dynamics around water (Saravanan 2010). As such, water governance is the coordination of societal action around water (Benz et al. 2007).

WUAs are the local “linchpin” of South Africa’s water governance framework; empirical studies exploring their implementation and operation are rare (Meissner et al. 2013). Within the limited amount of international and South African literature that exists, a common finding is that both still prove to be a huge challenge (Schreiner 2013). Orne-Gliemann (2008, 9), for example, found that limited recognition of local diversities and a misplaced focus on institutional design rather than on social realities has led to a lack

of “sustainability, participation and institutional autonomy.” Faysse and Gumbo (2004) similarly portray constraints to the participatory inclusion of small-scale water users, as well as access to information and different degrees of organization around water issues of traditional communities and commercial farmers as problematic in praxis. More recently, in a case study of a WUA establishment in the Thukela river basin in South Africa, Kemerink et al. (2013) found that immense challenges in terms of inclusion and representation exist. They identified degrees of experience and collective identities around water issues, as well as different normative mind sets of commercial farmers of European decent, and rather traditional communities and emerging farmers, as hindering factors towards effective WUA implementation (Kemerink et al. 2013). The studies just mentioned hold value for the future of South African WUAs in practice. However, they are theoretically and practically void of addressing the fundamental social dynamic underlying the challenges of collaborative water governance, namely, power.

This article contributes to an improved understanding of structural as well as agential factors of power in situations of collaborative water governance in South Africa. It does so by first introducing a theory frame³ (Rueschemeyer 2009) for exploring collaborative water governance that focuses on power, while drawing on social theories of structure and agency. Second, it applies this frame to an empirical case-based study of a WUA establishment in the Groot Marico catchment in South Africa.

The insights derived from the empirical evidence hold value beyond the South African context by demonstrating the role of structural and especially agential factors of power in the process of establishing new institutions of water governance. In order to improve the future implementation of WUAs in South Africa and worldwide, it is crucial to understand the role of power in that process and the factors that constitute such power. This article contributes to such improved understanding. Using social theory and theories of power we also provide a fresh theoretical perspective on water governance through WUAs, which, we hope, might spark scholarly discussions on formal institutional governance in the future.

Theory Frame: Structural and Agential Factors of Power

Social action is shaped by structural and agential factors within certain contexts (Giddens 1984; Barbalet 1987). Within this “symbiotic interplay of structure and agency” (Harvey 2009, 32), power relations play a central role (Haugaard and Clegg 2009). As power is central to contextual social interaction (Bressers and de Boer 2013), and social actions are (to a certain degree) shaped by societal structures, such as formal legal (and informal) rules (Diermeier and Krehbiel 2003), a theoretical perspective focusing on social theory of structural and agential factors of power is essential for understanding collaborative water governance among heterogeneous actors (Swyngedouw 2006; Cleaver 2012).

There are several ways in which the operation of power can be thought of: for example, a rather linear understanding of power as domination or “power-over,” in which instance, according to Dahl (1957), A forces B to do what B would not otherwise do; or power understood as “A affects B in a manner contrary to B’s interests” (Lukes 1979, 27). These are certainly expressions of power, but are not the only possible manifestations of it. In this article we focus on power as “power-to” (Morris 2006). This refers to a perspective of power as capacity for action (power-to), which stems from the use of resources and capabilities available to a person or group (Morris 2006).

Adopting such a perspective enables us to effectively analyze differences in the resource and capability endowments among actors and how powerful agents use such power to influence the establishment process of a WUA to their advantage.

Structure and Power

We adopt Giddens's (1984) notion that rules, as societal structures, are best understood as "procedures of action, aspects of praxis" (Giddens 1984, 21). This implies that rules have the potential to guide social action, including the control of power relations among agents or actors by other agents enforcing such rules (Saar 2010). However, we also acknowledge that legal rules and guidelines can be a source of power. This is what Barbalet (1987, 1) calls "structural resources" and is evidenced by the notion that powerful agents might be able to "play the game" of supposedly collaborative water governance more skillfully, because they have sound knowledge of how to use the rules of the "game" to their advantage (Saravanan 2010).

However, rules are viewed by Giddens (1984) as both constitutional and regulative. Subsequently, rules in this article not only describe codified laws that constitute, for example, what kind of legal entity a WUA is and what its mandated functions are, but, more importantly, address regulative rules for establishing a WUA in the first place. As such, these regulative rules are the codes of conduct for sociopolitical processes; in other words, they constitute procedural rules.

Agential Power

Drawing on social theory, we conceptualize agents as actors endowed with resources and capabilities to act in a certain way. In this sense, agency in this article does not refer "to the intentions people have in doing things, but to their capability of doing those things in the first place" (Giddens 1984, 15; see also Saar 2010). "Correspondingly, agency relates to action" and "action depends upon the capability of the individual to 'make a difference' to a pre-existing state of affairs or course of events" (Giddens 1984, 14). In other words, agency is related to power, and such power depends on the strategic deployment of a combination of resources and capabilities in a certain context.

We propose a resource as a materialized or socially derived something that actors can draw upon to achieve a desired outcome. These resources can be financial (money) and physical (e.g., a computer, means of transport) (Ribot and Peluso 2003; De Haan and Zoomers 2005). Another important physical resource in the South African context is land, because the access to land often still determines access to water. Furthermore, we suggest that social connectedness (degree of organization around issues of water amongst a group of actors) is a socially derived resource, because it enables actors in collaborative water governance to pool their resources strategically before and within negotiations around water access (see Saravanan 2010). Capability in this article describes a physical or cognitive ability to act (Franks and Cleaver 2007; Sen 2009). Knowledge is the central cognitive ability of individuals and groups in decision-making procedures around water, as the existence or nonexistence of knowledge may enable or constrain meaningful action like stakeholder collaboration (Goldin 2010).

Such an eclectic understanding of power is necessary, because "the operation of power takes place in many different ways" (Saar 2010, 9), and it is the "multiplicity of force

relations” (Foucault 1978, 9) that reduces the explanatory weight of any mono-causal concept of power. To conceptually cater for this notion, we suggest that power is highly contextual and that to “exercise power is to create conditions or control circumstances in which others are implicated” (Barbalet 1987, 31). Influencing the context in which other actors act is thus a form of power (Bressers and De Boer 2013).

Methods

A systematic document analysis (Gough, Oliver, and Thomas 2012) was conducted on the National Water Act 1998 (NWA) and the National Water Resource Strategy 2 (NWRS 2) as the overarching guidelines, setting out the constitutional and procedural rules for the establishment of WUAs in South Africa. Our article thus builds on methods of textual and thematic analysis (du Plooy-Cilliers, Davis, and Bezuidenhout 2014). Field research was carried out between January and April 2011 with additional site visits in 2015. Data was collected through semistructured and focus-group interviews with 48 participants living in the area of the proposed WUA. These data were enriched by personal observations based on field notes and transect walks with key participants in the study area. As such, data were gathered and analyzed, drawing on methods common in sociology and social anthropology within a qualitative case-based research approach (Ragin 2008).

Interview participants were chosen using purposive sampling and snowball sampling (Babbie 2014) and traversed macro, meso, and micro levels of water governance. These included four local commercial farmers (CF) of European descent, four emerging farmers (EF), and 18 participants from the local community (LC) and research participants from civil society organizations, like South African Universities, agricultural development projects, commercial farmers associations, and community-led agricultural development projects.

We present the findings of this research under the headings of macro, meso, and micro levels of water governance. The micro-level findings are presented in the form of a short narrative and afterward are analytically reflected upon. We support our initial argument that in South Africa sound structures for water governance exist, but that a huge lack of agency on all levels of water governance hinders successful implementation, with empirical findings from the ground. As such, the following background to the study area is already interlaced with empirical evidence.

Background to the Study Area

The case study is located in a subcatchment of the Crocodile (West)–Marico river system in the Northwest Province of South Africa. The area experiences mean annual rainfall of 400–800 mm and has one of the lowest conversion rates of rainfall to surface water in the world—only 8% (Middleton and Bailey 2009). The Crocodile (West)–Marico Water Management Area (WMA)⁴ contributes 22% of the national gross domestic product (GDP), but accounts for merely 4% of the overall water availability (Muller et al. 2009), illustrating the great importance of distributive governance arrangements for water resources. The legacy of Apartheid (van Koppen, Schreiner, and Fakir 2011) is still clearly visible. Twenty-one years after the end of Apartheid, land claim struggles between commercial farmers and traditional communities are still ongoing (Interview, LC 2011,

2015). Large white-owned commercial irrigation farms of between 30 and 200 ha are located in between and around poor black communities of sometimes 3,000–5,000 inhabitants. The only source of water (besides limited groundwater abstractions) for productive purposes for commercial farmers and emerging farmers is the Marico–Bosveld Dam with a storage capacity of 27 million m³, which is fed mainly by runoff from the Groot Marico River and rainwater. A distribution infrastructure of open canals built in the 1950s transports this water to the commercial irrigation farms. This system is operated by the Department of Water and Sanitation local office next to the dam; however, it does not extend to traditional communities in the study area.

There, people of the Bahurudshe tribe face a daily struggle to access water for productive purposes; they currently use the water supplied to them by the local municipality for drinking purposes to also water their subsistence food gardens and cattle (Interview, LC 2015). Most water entitlements from the Apartheid period to commercial farmers of European decent are still valid by law. This is called existing lawful use and relates to the amount of productive water used in between the period of 1996–1998. As per National Water Act 1998 these water abstractions⁵ are still lawful today and do not require a new license until specifically requested by DWS or a CMA. In the study area, water for productive purposes from the Marico–Bosveld dam is related to property and is allocated per hectare of irrigated land.

Subsequently, water allocations for productive purposes are still tied to land ownership despite the intentions of the NWA 1998 to separate the two and end the system of riparian rights, which advantaged the white minority of commercial irrigation farmers. That in turn means that without the acquisition of land,⁶ black rural communities (or emerging farmers) are practically not able get access to water from the Marico–Bosveld dam for productive purposes, despite their repeatedly expressed intentions to increase their food security through small-scale subsistence agriculture (Interview, LC 2011, 2015). However, the authority to govern and ultimately distribute the dam water would have been mandated to the proposed WUA once established.⁷ As such, the access to the WUA means access to the collaborative decision-making procedures about the largest source of productive water in the study area.

Employing the theory frame of structural and agential power as proposed in the preceding fits this context. Using the empirical evidence accumulated during this research, we portray that the establishment process of the WUA was flawed due to power asymmetries of interacting agents and actors. A WUA established in such manner would have created an institution defeating the purpose of establishing it in the first place—collaboration of different water users to undertake water management for their mutual benefit.

Macro Level

Structure consists of constitutional and procedural (regulative) rules. As they pertain to WUAs, the two central pieces⁸ of such structure in South Africa are the NWA 1998 (DWA 1998) and the National Water Resource Strategy 2 (NWRS 2) (DWA 2013; see also Pegram et al. 2006). The NWA is the primary piece of legislation of South African water governance; it is a formal macro-level structure of constitutive rules. The NWA makes provisions for the establishment of institutions for water governance, including catchment management agencies and WUAs, whereas the NWRS 2 is described as “a manual of

how to do things according to the Act” (Interview, DWS 2015). As such, the NWRS 2 provides the procedural rules for implementing the NWA in the country. While the authors recognize the significance of the constitutive rules, the procedural rules in the form of the WUA establishment guidelines (DWAF 2007) are more important for this research. It should also be noted that the study area currently does not have a functioning catchment management agency and this article reports on the attempts to establish a WUA. For the procedural rules of establishment meetings, critical excerpts from these guidelines include the importance of information sharing; knowledge building; representativeness; local inputs; and auditing within a debate to “foster a spirit of joint and participative decision-making,” especially in terms of water for agricultural purposes (Department of Water Affairs and Forestry [DWAF] 2007, 8). For achieving effective outcomes “facilitators must explain the Act, its aims and their role and function as a WUA.” Facilitators furthermore “must ensure that all interest groups are represented and that one group does not dominate” (DWAF 2007, 8).

The DWS, whose core functions are water-sector policy, support, and regulation, as well as coordination and oversight of WUAs, faces huge agential challenges in terms of financial resources and human capabilities to perform various tasks of implementing its own water policy (Interview, DWS 2015; see also Schreiner 2013). Interviews with the DWS in Pretoria (2015) corroborated these findings: “No, we do not have the capacity to do what would be required by the Act.”

Meso Level

The regional office of the DWS is supposed to function as the regional authority of water management in the area (in the absence of a regional CMA structure) and was mandated with the establishment of WUAs in the broader study area (Interview, regional office 2011). However, during the interviews it became clear that the regional office of DWS in Mafikeng was understaffed and did not appear to have the capacity for the challenging task of building capabilities like knowledge that may enable meaningful collaboration amongst stakeholders (Goldin 2010). “Human resources and finances are the biggest challenges” and “for additional staff members we do not have the budget” (Interview, regional office 2011). At the time of conducting this research, there were only two staff members in the regional office responsible for WUA implementation in the whole Northwest Province (Interview, regional office 2011), home to approximately 3.6 million people on 104,882 km² of land (Statistics South Africa 2014). A senior South African researcher (2011) told us during interviews that government actors from all levels of South African water governance are at a point “where they just cannot implement their own Act.”

Micro Level

Giddens (1984) reminds us that the relationship between structure and agency is one of mutual influence. Structure and “structural resources” we have asserted as the rules and guidelines to be followed in the WUA establishment process. Furthermore, we have conceptualized agency as the ability to utilize resources and capabilities in order to access and influence the WUA establishment, but also with the resources and capabilities of agents facilitating the establishment process according to the guidelines set out by the DWS. As

such, this section of the article is concerned with the interplay of structural and agential factors of power in the final meeting of the WUA establishment process. The lead author attended the final establishment meeting of the WUA in 2011 (but meetings have taken place prior to this one) in the study area and documented the following narrative. It is important to note at this stage that the establishment of this WUA to date has not been successful.

Besides 20 commercial irrigation farmers of European decent, two officials from the national DWS, and two officials from the regional office who were supposed to facilitate the meeting, only three small-scale emerging farmers were present and no representatives of the local, rural communities attended. During field interviews members of local communities and other local emerging farmers expressed their interest in becoming members of the new WUA, but they did not attend this meeting as they had no knowledge of it (Interviews, EFs, LC 2011, 2015). The invitations were sent out via e-mail 1 day prior to the meeting by the operator of the local irrigation scheme of the DWS (Interview, CFs 2011). People from local communities and emerging farmers might have an e-mail address, but they do not have the technological means to access their e-mail accounts regularly; in fact, most of them did not know how to use such technology or could not read or write (Interviews, LC, EFs 2011, 2015).

The meeting took place at a venue on a hillside overlooking the area, but out of reach of any major taxi route. Local taxis are a vital mode of transport in South Africa, as the country has no public transport system; most of the emerging farmers and members of local communities have no other means of transport. One of the commercial farmers indicated that “the meeting was held there, because we said so” (Interview, CF 2015). This created a situation in which emerging farmers and members of the local community living in the area of proposed WUA responsibility were not present and thus could not engage in major decisions regarding their representation on the decision-making board of the WUA that was voted for in this final meeting. Additionally, they could not engage in the process of discussing the WUA’s proposed constitution.

The meeting was held in English, and the topics discussed included the hydrological and legal boundaries of WUA and some other legal and technical details. The language used had a legal character concerning statues and paragraphs of the constitution that was supposed to be debated in the meeting. During the meeting the three emerging farmers openly voiced their concerns of not being able to follow of “what is going on here” (Interview, EF 2011) due to their limited understanding of the English language. This caused the facilitators from the national DWS to conduct a half-hour knowledge-building session in the mother tongue of the members after the meeting. Therefore, decisions that would affect these emerging farmers’ livelihoods were explained to them only after the meeting occurred. The spokesman of the commercial farmers dominated the course of events by systematically going through the points on his agenda. However, the constitution of the WUA, as a set of self-imposed constitutive and procedural rules, was never part of the voting agenda and was not debated. A commercial farmer told us: “We farmers started the process. We had elections amongst the farmers. When it started we had the farmers union—Buure vereniging [Boer association]—and among other committees, we also have a water committee. And out of that water committee all the farmers selected other farmers as members of the WUA” (Interview, CF 2015).

The three emerging farmers present had no part in writing this constitution, although their names appeared in the final document (Interviews, CFs, EFs 2015). In turn, this

constitution would provide the procedural rules for the operation of the WUA. Moreover, when it came to the elections of the management committee that would take all major decisions regarding water management in the future, it became obvious that commercial farmers had already agreed on positions of president, vice-president, and treasurer up front and were now using their majority vote in attendance to instate them. The meeting was closed by the DWS official with an agreement that the DWS would present the constitution to be signed off by the Minister of Water Affairs for potential gazetting and report back to the spokesperson of the commercial farmers.

This specific scenario is illustrative of asymmetry in “power-to” despite proper structural and regulatory measures being potentially available. Collaboration and engagement are hampered because of huge differences in the endowment with resources and capabilities to meaningfully engage and influence the “course of events” during and the circumstances of that meeting. The power asymmetries and their consequences are discussed in the following.

Asymmetrical Agential Power

Government Facilitators

The WUA establishment guidelines clearly state a process in which facilitators are required to set an agenda that has been collaboratively compiled and explains all structural and legal procedures. During the meeting just described, the DWS officials did not lead the process by an agenda that was set up with the input of all actors involved. The facilitators did not read the Act and did not explain what the purpose of a WUA was, as set out in the establishment guides of DWS (DWAF 2007). Accordingly, no opportunity for “local input” was provided, and no “audit” by the DWS was undertaken.

The “structural resources” that the DWS representatives could have used to steer the power dynamics of the meetings were not used. Moreover, the procedural rules stipulated in the WUA establishment guides and the NWRS 2 were largely ignored. The facilitators from the regional offices were not adequately trained for the purposes of creating collaborative platforms of shared decision making. Equal representativeness was never ensured before the meeting commenced; the demographics were highly skewed in favor of the commercial farmers.

During the meeting the DWS should also have facilitated a discussion of the WUA constitution. However, it became clear during the meeting that the commercial farmers had written the constitution without the participation of other stakeholders: “We took a constitution from another WUA and made some minor changes. ... Meetings in the last 5 years were held amongst us [commercial] farmers” (Interview, CFs 2015). Local rural communities or emerging farmers were not included in the WUA development process: “Honestly, what do they need more water for? We are running the show here” (Interview, CF 2011).

This shows how collaborative decision making was totally absent and how the lack of power of government facilitators to conduct the meeting according to the procedural rules allowed the establishment proceedings to be dominated by commercial farmers, and (historically) marginalized people who were initially targeted by the new water policy were notably absent. This presents the inverse of what was anticipated by policy, law, and WUA

establishment guidelines on paper, but was the reality of social dynamics in practice. This was also the reason for the DWS to not approve the previous three applications for a WUA establishment within the last 10 years (Interview, DWS 2015).

Commercial Farmers

The lack of government capacity to facilitate the WUA establishment meeting had a number of beneficial outcomes for commercial farmers, who had the power to influence the circumstances and the course of events of that meeting by influencing the venue chosen for the meeting, as well as setting the agenda while excluding emerging farmers and local communities into the meetings prior to the final meeting. This shows that commercial farmers were much better organized; they had a very high degree of historically grown, social connectedness with each other.

The historical context of the racist Apartheid era is a central factor in current water governance in South Africa. During the Apartheid era the white agro-farming businesses were protected and supported by a large regulatory apparatus within the government (du Toit 2004). This has led to the establishment of many other institutional support structures that continue to exist today. In the study area commercial farmers were organized into local farmers associations; into agricultural lobby organizations like Agri-Northwest as part of the national Agri-SA organization; and into the South African Association for Water User Associations (Interview, SAAFWUA 2015), a large lobby group with “73 members from WUAs and still existing Irrigation Boards representing a combined 1.2 million hectares in South Africa” (Interview, SAAFWUA 2015). Accordingly, the resources and capabilities of members of this white agricultural elite (education, knowledge, and the experience of being organized in formal institutions relevant to water management, as well as their degree of social connectedness to government actors) were thus not surprisingly more advanced than those of the historically exploited and marginalized emerging farmers or local communities (van Koppen, Schreiner, and Fakir 2011). Commercial farmers had significantly more power to “play the institutional game of water” to their advantage.

Confirming this, a senior representative from the DWS commented in 2015 on the power asymmetries between the DWS facilitators and commercial farmers in practice of water governance:

They will even tell the representatives of the Department something he doesn't know and then take out the Act and point to the paragraph and section. Some of them were even part of drafting the NWA by the time before 1994; they know this law better than we do. And they also know more about the local conditions than our Department officials, because we don't have enough officials to go to the ground. These guys know how to play the game.

Emerging Farmers and Local Communities

The three emerging farmers who participated in the meeting had no knowledge about the legal framework of the NWA or institutional structure of water governance of WUAs and CMAs, or about the procedural rules for the establishment of the WUA (Interview, EFs 2011). During their participation in the research project, it was only the first or second time that they had heard about a WUA to be established in the area: “No one came to speak to us, and so we did not know” (Interview, EFs 2011).

In addition, they mentioned that a lack of transport to physically reach the venue of the meetings and limited financial resources to pay for a local taxi were huge obstacles to attending and participating in the meetings even if they had known about it (Interview, EFs, LC 2011). “Access to technology and also equipment is also a problem. We don’t have the computers here that can help us to get information. We also don’t have transport” (Interviews, LC 2011, 2015).

Discussion

Policy travels a long institutional way until it hits reality (Mollinga 2010). The ambitious structures of South African water governance that were put in place by the post-Apartheid government have not found sufficient agential power in practice to successfully implement new collaborative institutions of water governance. Theoretically, situations of negotiated decision making over collaborative natural resource governance have also been labeled as collective action. Collective action theorists and related institutionalist approaches (see Olson 1965; North 1990; Ostrom 1993) tend to assume that “outcomes of collective action would benefit the group as a whole and that members of a group share a common understanding of desired outcomes” (Epstein et al. 2014, 112). Such thinking about institutions and actors most often ignores underlying power asymmetries among heterogeneous actors in institutions. Similarly, Rachel et al. (this issue, XX–XX) argue that rather than being a platform for building consensus, negotiations often “resemble strategic ‘policy games’ between powerful stakeholders.” In that light, our research confirms the findings of Kemerink et al. (2013), Faysse and Gumbo (2004), and Orne-Gliemann (2008) mentioned earlier in terms of problems of participation and inclusion and a lack of collaborative action (see also Berry n.d.). However, we draw different conclusions.

Theoretically, we have asserted that power depends on the strategic deployment of a combination of resources and capabilities to influence a “course of events” within certain circumstances. We have shown that commercial farmers possessed a greater degree of what Giddens (1984) describes as “defining properties” for action, and thus they held greater power to control the “circumstances” (Barbalet 1987) and influence the “course of events.” This was reinforced by the limited power of the government actors to facilitate the meeting according to the structure of procedural rules. As a result, the (maybe naïve) idea of redressing of past inequalities of water access through participatory and discursive means within WUAs “has not really happened” (Interview, DWS 2015).

However, our findings suggest that in environments of asymmetrical agential power relations collaborative governance tends to be not very collaborative at all. The functionalist idea of just having to design the right kind of institution, with socially beneficial collaborative (or collective) action following, is thus often rightly criticized as overly simplistic and avoiding the conceptual shallows of power (Epstein et al. 2014). Similarly, Huang and Xu (this issue) highlight that power is a critical determinant of success of water governance arrangements. In our example, the emerging farmers and members of local communities possessed very limited power to access the meeting in the first place or to influence the circumstances or the course of events. Our results thus reveal that while policy and law are crucial for setting out structural factors of collaborative water governance, it is agential factors that largely determine its outcomes in practice. In particular, agential factors on the micro level should be thoroughly understood prior to the formulation and implementation

of any form of collaborative water governance. In the same light, it must also be noted that real-world social complexities and the seemingly simple solutions of IWRM are often at odds with each other (Halbe et al. 2013). Considering the inherent flaws in the facilitation of the final WUA establishment meeting and the vast power asymmetries among involved actors, it seems questionable whether a WUA established in such a manner would have fulfilled the ideas of redress of historical inequalities of water access anyway. In other words, if a water policy does not build on the specific contextual realities in practice, it is likely not to achieve its goals. Such policy is likely to crumble when it hits practice.

Concluding Remarks

For the future of South African water governance it is therefore imperative to strengthen agential powers on all levels of water governance. First and foremost this is crucial for those who were initially targeted by the new water policy—the historically (and today’s) marginalized people. From a structural perspective it is first imperative to pay greater attention to the enforcement of procedural rules by powerful agents and, second, to rethink the appropriateness of IWRM-based water policy approach with WUAs as vehicles for collaborative water governance in South Africa. A legal and practical separation of land ownership and water entitlements seems inevitable. However, without developing resources and capabilities of involved actors prior to the establishment of new institutions, enabling involved actors to meet on equal footing of power, collaborative processes of decision making over contested and scarce resources tend not to be collaborative at all. This is an enormous task for the DWS to overcome in light of the already existing agential deficits regarding financial resources and human capabilities. But at the same time it is the *conditio sine qua non* for improving the outcomes of supposedly transformative water governance in South Africa.

Acknowledgments

We are grateful to Dr. Bruce Missingham, Dr. Bimo Nkhata, Dr. Rose-Marie Bezuidenhout, Dr. James Patterson, Garth Barnes, and Dr. Charles Breen for their helpful comments on this article. We also thank the International Water Security Network, funded by Lloyd’s Register Foundation. We are furthermore grateful to *Society & Natural Resources* editors Peter Leigh Taylor and Dr. David Sonnenfeld and three anonymous reviewers for their invaluable comments and suggestions.

Notes

1. Catchment management agencies (CMAs) as river basin organizations were supposed to take up a similar role on regional, provincial level, but 18 years after the enactment of the NWA 1998 only two CMAs are fully operational in South Africa. CMAs and WUAs were supposed to manage water across provincial and local scale in a cooperative way (Department of Water and Sanitation [DWS] 2014).
2. We agree with Berry (n.d., 2) in considering collaboration as a “somewhat more active notion of participation in which individuals or groups (usually referred to as stakeholders) debate, consult, and make decisions associated with an endeavor.”
3. The idea of a “theory frame” refers to an analytical frame as analytical concept that emphasizes (among other criteria) the importance of past research for present theory, the fact that theory is clustered and is often presented in a nested set of frames, and that theory frames are context dependent (Rueschemeyer 2009).

4. This WMA is now merged with other areas to form the Limpopo–Northwest WMA. However, at the time of the research the area was called Crocodile (West)–Marico WMA.
5. The National Water Act 1998 of South Africa specifies existing lawful use (ELU) in Chapter 4, Section 22 and Chapter 4, Sections 32–35. A process called validation and verification with the aim of transferring ELU into new licenses adjusted in terms of the allocated volume in relation to the actual water use has been initiated. This has, however, been largely delayed due to existing human and financial capacity deficits (Mochotli 2010).
6. The de facto connection between land ownership and entitlements to productive water has been a contested issue in South Africa since 1994. Mochotli (2010) and Misibi and Dlamini (2011) provide useful insights into this matter, including the African National Congress (ANC) government's limited progress in its Water Allocation Reform (WAR).
7. This WUA would have constituted a new institution, as commercial farmers in the area have not been previously organized into so-called irrigation boards (see Department of Water Affairs and Forestry [DWAF] 2007).
8. The Constitution of the Republic of South Africa surely provides another central piece of legislation in terms of water governance and property of land and water, especially Section 25 of the Constitution. However, due to the limited publication-related latitude, it does not play a major role in this article.

References

- Ananda, J., and W. Proctor. 2013. Collaborative approaches to water management and planning: An institutional perspective. *Ecological Economics* 86:97–106. doi:10.1016/j.ecolecon.2012.10.018
- African Ministers' Council on Water. 2012. Status report on the application of integrated approaches to water resources management in Africa. <http://www.amcow-online.org/index.php?lang=en> (accessed May 4, 2015).
- Babbie, E. 2014. *The basics of social research*, 6th ed., international edition. Wadsworth, UK: Cengage Learning.
- Barbalet, J. M. 1987. Power, structural resources and agency. *Current Perspectives in Social Theory* 8:1–24.
- Benz, A., S. Lutz, U. Schimank, and G. Simonis ed. 2007. *Handbuch governance. theoretische grundlagen und empirische anwendungsfelder [Handbook governance: Theoretical foundations and empirical applications]*. Wiesbaden, Germany: Verlag für Sozialwissenschaften [Publishing House for the Social Sciences].
- Berry, K. A. n.d. Challenges to broadening participation: Definition, representation, and power relations. White paper for the AAG's Retreat on Catalyzing Research on Geographies of Broadening Participation, University of Nevada, Reno. <http://www.aag.org/galleries/project-programs-files/Berry.pdf> (accessed August 3, 2016).
- Bixler, R. P. 2014. From community forest management to polycentric governance: Assessing evidence from the bottom up. *Society & Natural Resources* 27 (2):155–69. doi:10.1080/08941920.2013.840021
- Blomquist, W., and E. Schlager. 2005. Political pitfalls of integrated watershed management. *Society & Natural Resources* 18 (2):101–117.
- Braid, S., and A. Goergens. 2010. Towards the development of IWRM implementation indicators in South Africa. Water Research Commission Report No 1839/10. http://www.wrc.org.za/Pages/DisplayItem.aspx?ItemID=9027&FromURL=%2fPages%2fKH_AdvancedSearch.aspx%3fdt%3d%26ms%3d%26d%3dTowards+the+development+of+IWRM+implementation+indicators+in+South+Africa%26start%3d1 (accessed January 10, 2017).
- Bressers, H., and C. De Boer. 2013. Contextual interaction theory for assessing water governance, policy and knowledge transfer. In *Water governance, policy and knowledge transfer*, ed. C. de Boer, J. Vinke-de Kruij, G. Özerol, and H. Bressers. New York, NY: Routledge.

- Brisbois, M. C. 2015. Natural resource industries and the state in collaborative approaches to water governance: A power-based analysis. PhD dissertation, University of Waterloo, Waterloo, ON, Canada.
- Brisbois, M. C., and R. de Loe. 2015. Power in collaborative approaches to governance for water: A systematic review. *Society & Natural Resources* 29 (7):775–90. doi:10.1080/08941920.2015.1080339
- Cherlet, J., and J. P. Venot. 2013. Structure and agency: Understanding water policy changes in West Africa. *Water Policy* 15:479–95. doi:10.2166/wp.2013.086
- Cleaver, F. 2012. *Development through bricolage. Rethinking institutions for natural resources governance*. New York, NY: Earthscan, Routledge.
- Dahl, R. 1957. The concept of power. *Behavioural Science* 2 (3):201–15.
- de Haan, L., and A. Zoomers. 2005. Exploring the frontiers of livelihoods research. *Development and Change* 36 (1):27–47. doi:10.1111/j.0012-155x.2005.00401.x
- du Toit, A. 2004. Forgotten by the highway: Globalisation, adverse incorporation and chronic poverty in a commercial farming district of South Africa. CPRC working paper 49, PLAAS chronic poverty and development policy series no. 4, Chronic Poverty Research Centre, University of Western Cape, Cape Town, South Africa.
- Department of Water Affairs. 1998. National water act 1998. <http://www.info.gov.za/view/DownloadFileAction?id=70693>, (accessed February 04, 2011).
- Department of Water Affairs. 2013. *National water resource strategy*, 2nd ed., June. <https://www.dwa.gov.za/documents/Other/Strategic%20Plan/NWRS2-Final-email-version.pdf> (accessed September 22, 2013).
- Department of Water Affairs, and Forestry. 2007. Guidelines for the establishment and operation of a developmental water user association. <https://www.dwaf.gov.za/IO/Docs/WUA/WUA%20Establishment%20Guide/ApprovedGuideonestablishmentoperationofAgriculturalWUAs.pdf> (accessed January 04, 2011).
- Department of Water, and Sanitation. 2014. National water policy review (NWPR 2013). Parliamentary Monitoring Group. <http://www.pmg.org.za/calls-for-comment/national-water-policy-review-nwpr> (accessed January 01, 2015).
- Diermeier, D., and K. Krehbiel. 2003. Institutionalism as a methodology. *Journal of Theoretical Politics* 15 (2):123–144. doi:10.1177/0951629803015002645
- du Plooy-Cilliers, F., C. Davis, and R.-M. Bezuidenhout. 2014. *Research matters*. Cape Town, South Africa: Juta.
- Epstein, G. 2014. Studying power within the social-ecological-systems framework. In *When policy meets reality*, ed. P. Mollinga, A. Bhat, and V. S. Saravanan, 111–35. Bonn, Germany: ZEF Development Studies.
- Faysse, N., and J. Gumbo. 2004. *The transformation of irrigation boards into water user associations in South Africa: Case studies of the Umlaas, Komati, Lomati and Hereford irrigation boards. Volume 2. Working Paper 73*. Colombo, Sri Lanka: International Water Management Institute.
- Foucault, M. 1978. *The history of sexuality, vol. 1: An introduction*. New York, NY: Vintage.
- Franks, T., and F. Cleaver. 2007. Water governance and poverty: A framework for analysis. *Progress in Development Studies* 7 (4):291–306. doi:10.1177/146499340700700402
- Giddens, A. 1984. *The constitution of society: Outline of the theory of structuration*. Los Angeles: University of California Press.
- Goldin, J. A. 2010. Water policy in South Africa: Trust and knowledge as obstacles to reform. *Review of Radical Political Economics* 42 (2):195–212. doi:10.1177/0486613410368496
- Gough, D., S. Oliver, and J. Thomas. 2012. *An introduction to systematic reviews*. London, UK: Sage
- Halbe, J., C. Pahl-Wostl, J. Sendzimir, and J. Adamowski. 2013. Towards adaptive and integrated management paradigms to meet the challenges of water governance. *Water Science & Technology* 67 (11):2651–60.
- Harvey, D. 2009. Complexity and case. In *The Sage handbook of case-based methods*, ed. D. Byrne and C. Ragin. Thousand Oaks, CA: Thousand Oaks.
- Haugaard, M., and S. Clegg. 2009. Introduction: Why power is the central concept of the social sciences. In *The Sage handbook of power*, ed. S. Clegg and M. Haugaard 1–24. Thousand Oaks, CA: Sage.

- Ingram, H. 2013. Doing better and delivering worse: Pathology of water experts. In *Water governance, policy and knowledge transfer*, ed. C. de Boer, J. Vinke-de Kruif, G. Özerol, and H. Bressers. New York, NY: Routledge.
- Kemerink, J. S., L. E. Méndez, R. Ahlers, P. Wester, and P. van der Zaag. 2013. The question of inclusion and representation in rural South Africa: Challenging the concept of water user associations as a vehicle for transformation. *Water Policy* 15 (2):243–57. doi:10.2166/wp.2012.127
- Lankford, B., and N. Hepworth. 2010. The cathedral and the bazaar: Monocentric and polycentric river basin management. *Water Alternatives* 3 (1):82–101.
- Lautze, J., S. de Silva, M. Giordano, and L. Sanford. 2011. Putting the cart before the horse: Water governance and IWRM. *Natural Resources Forum* 35:1–8. doi:10.1111/j.1477-8947.2010.01339.x
- Lukes, S. 1974. *Power: A radical view*. London, UK: Macmillan.
- May, C. K. 2015. Visibility and invisibility: Structural, differential and embedded power in collaborative governance of fisheries. *Society & Natural Resources* 29 (7):759–74. doi:10.1080/08941920.2015.1072257
- Meissner, R., N. Funke, S. Nienaber, and C. Ntombela. 2013. Status quo of research on South Africa's water resource management institutions. *Water SA* 15 (5):721–31.
- Middleton, B. J., and A. K. Bailey. 2009. Water resources of South Africa—2005 Study. WRC Report Number TT 380/08, Water Research Commission. http://www.wrc.org.za/Pages/KH_AdvancedSearch.aspx?k=Middleton&start=1&o=1&ww=1&as=1 (accessed January 1, 2009).
- Misibi, I. M., and P. Z. Dlamini. 2011. Water allocation reform in South Africa: History, processes and prospects for future implementation. Water Research Commission Report No. 1855/1/11, vi–xv. Pretoria, South Africa: Water Research Commission of South Africa.
- Mochotli, D. 2010. Emergency response plan for the eradication of water use authorisations applications backlog: LETSEMA. Presentation to the Portfolio Committee: Water & Environmental Affairs, Pretoria, South Africa, November 3, 2010. http://www.wrc.org.za/Pages/DisplayItem.aspx?ItemID=3760&FromURL=%2fPages%2fKH_AdvancedSearch.aspx%3fdt%3d%26ms%3d%26d%3dStrategic+review+of+current+and+emerging+governance+systems+related+to+water+in+the+environment+in+South+Africa%26start%3d1 (accessed January 2, 2017).
- Molle, F. 2008. Nirvana concepts, narratives and policy models: Insight from the water sector. *Water Alternatives* 1 (1):131–56.
- Mollinga, P. P., A. Bhat, and V. S. Saravanan. 2010. *When policy meets reality. Political dynamics and the practice of integration in water resources management reform*. ZEF Development Studies, vol. 13, Bonn, Germany: LIT (Center for Development Studies, ZEF).
- Morris, P. M. 2006. Steven Lukes on the concept of power. *Political Studies Review* 4 (2):124–35. doi:10.1111/j.1478-9299.2006.000104.x
- Muller, M., B. Schreiner, L. Smith, B. van Koppen, H. Sally, M. Aliber, B. Cousins, B. Tapela, M. van der Merwe-Botha, E. Karar, and K. Pietersen. 2009. Water security in South Africa. Development planning division, working paper series No. 12, Development Bank of Southern Africa DBSA, Midrand, South Africa, 5–39.
- North, D. 1990. *Institutions, institutional change and economic performance*. Cambridge, UK: Cambridge University Press.
- Olson, M. 1965. *The logic of collective action. Public goods and the theory of groups*. Cambridge, MA: Harvard University Press.
- Orne-Gliemann, M. 2008. Water user associations in South Africa: Balancing flexibility and clarity. <http://www.ceepa.co.za/index.php/63> (accessed February 3, 2011).
- Ostrom, E. 1993. Design principles in long-enduring irrigation institutions. *Water Resources Research* 29 (7):1907–19. doi:10.1029/92wr02991
- Pegram, G., G. Mazibuko, B. Hollingworth, and E. Anderson. 2006. Strategic Review of current and emerging governance systems related to water in the environment in South Africa. Water Research Commission (WRC) Report No. 1514/1/06.
- Ragin, C. C. 2008. *Redesigning social inquiry. Fuzzy sets and beyond*. Chicago, IL: University of Chicago Press.
- Ribot, J., and N. L. Peluso. 2003. A theory of access. *Rural Sociology* 68 (2):153–81.

- Rueschemeyer, D. 2009. *Usable theory. Analytic tools for social and political research*. Princeton, NJ: Princeton University Press.
- Saar, M. 2010. Power and critique. *Journal of Political Power* 3 (1):7–20.
- Sabatier, P. A., W. Focht, M. Lubell, Z. Trachtenberg, A. Vedlitz, and M. Matlock. 2005. *Swimming upstream: Collaborative approaches to watershed management*. Cambridge, MA: MIT Press.
- Saravanan, V. S. 2010. Movers, shakers and power brokers. Agents in negotiated water management in the Indian Himalayas. In *When policy meets reality. Political dynamics and the practice of integration in water resources management reform*, ed. P. P. Mollinga, A. Bhat, and V. S. Saravanan. ZEF Development Studies, vol. 13, 27–61. Bonn, Germany: LIT.
- Schreiner, B. 2013. Viewpoint—Why has the South African national water act been so difficult to implement? *Water Alternatives* 6 (2):239–45.
- Sen, A. 2009. *The idea of justice*. Cambridge, MA: Allan Lane and Harvard University Press.
- Statistics South Africa. 2014. StatsSA, Yearly archives. <http://www.statssa.gov.za/?m=2014> (accessed April 14, 2015).
- Swyngedouw, E. 2006. Power, water and money: Exploring the nexus. Background paper: UNDP, Human Development Report. <https://www.researchgate.net/publication/254419655> (accessed June 23, 2016).
- van Koppen, B., B. Schreiner, and S. Fakir. 2011. The political and economic context and changing water policy in South Africa post-1994. In *Transforming water management in South Africa. Designing and implementing a new policy framework*, ed. B. Schreiner and R. Hassan 1–17. Global Issues in Water Policy 2. Berlin, Germany: Springer.