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REVIEW ARTICLE

Analysing institutional change in environmental governance: exploring the concept of 'institutional work'

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Institutional work focuses on the role of actors in creating, maintaining, or disrupting institutional structures. The concept has its origin in organisational studies. In this paper, we rethink and redefine institutional work to make it fit for use in the multi-actor and multi-level context of environmental governance. We survey key approaches to institutional change in the literature, and argue that institutional work should have a central place within this theorising. Drawing on the insights from this literature, we argue that studying institutional work should involve a look at both the actions taken by actors, as well as the resulting effects. We identify a critical need for attention to the fundamentally political character of institutional work, the cumulative effects of action taken by multiple actors, and communicative and discursive dimensions. Overall, the concept of institutional work opens up new possibilities for unpacking the longstanding challenge of understanding institutional change in environmental governance.

Keywords: environmental policy; politics; structure-agency; path-dependence; sustainability transformation

1. Introduction

The difficulty of bringing about institutional change is at the heart of a vast range of environmental governance problems, particularly in an increasingly complex, connected, and rapidly changing world.

Despite considerable study of the meanings and effects of institutions (e.g. North 1990, 2005; DiMaggio and Powell 1983; Hall and Taylor 1996), understanding and explaining institutional change remains a challenge (Heikkila and Gerlak 2005; March and Olsen 2010; Hall 2010; Fligstein and McAdam 2012; Van Assche, Beunen, and Duineveld 2014b). A key emerging focus in institutional change scholarship is the interplay between actors and institutional structures (Mahoney and Thelen 2010; Lawrence, Suddaby, and Leca 2009; Bettini, Brown, and De Haan 2015). This special issue aims to explore new ways of conceptualising this interplay and the way in which it drives institutional change in various policy domains, including water governance, climate change adaptation, and urban planning. It does so by exploring the concept of institutional structures (Lawrence, Suddaby, and Leca. 2009). These actions can take many forms and include, for example, discussing and drafting policies, the enforcement of laws, and negotiations about the meaning of particular institutions.

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13

meaning of institutions. The concept of institutional work has its origin in organisation studies and has so far been mostly used in that context.

In the environmental governance domain, institutions have long been recognised as central to understanding and addressing environmental problems (e.g. Ostrom 1990; Rhodes 1995; Ostrom 2005; Young et al. 2008), although scholars have approached questions about institutions in diverse ways. For example, in recent decades, influential arguments have been built about the role of institutions in managing common pool resources (e.g. Ostrom 1990, 2005) and designing multi-level and transnational institutional regimes in global environmental governance (e.g. Young et al. 2008; Mitchell 2006). At the same time, a variety of 'institutionalisms' have been identified, including rational-choice, historical, and sociological institutionalisms (Hall and Taylor 1996; Hall 2010), and more recently discursive (Schmidt 2008) and critical institutionalism (Cleaver and De Koning 2015). These institutionalisms reflect different conceptual emphases in understanding the nature of institutions, and have been pursued by scholars across a variety of disciplines including political science, political economy, sociology, and anthropology. Insights from these research communities have been picked up to varying degrees within the domain of environmental governance, but on the whole, there is tremendous need and untapped potential to draw on these wider traditions of institutional scholarship within environmental governance.

Most approaches share a perspective of institutions as the formal and informal rules and norms that guide human and organisational behaviour and that provide a degree of stability and predictability in social interactions. Although institutions are often analysed as fixed structures that help to explain behaviour and outcomes, it is increasingly becoming clear that institutional change and institutional stability depend on sustained human endeavour and effort (Van Assche, Beunen, and Duineveld 2014b; Greif 2014; Ostrom 2014; Fligstein and McAdam 2012; Mahoney and Thelen 2010; Lawrence, Suddaby, and Leca 2009). The meaning and relevance of institutions can be maintained, altered, contested, or even fundamentally rejected and replaced through the ongoing actions and interactions of actors within a governance system. In other words, the evolution of institutional structures is itself dependent on human behaviour and agency. This insight compels new approaches to studying institutional change that go beyond either structural or actor-oriented perspectives alone and instead place a central focus on the dynamic interplay between actors and institutional structures.

This paper explores the concept of 'institutional work' which offers a compelling lens for studying the interplay between actors and institutional structures in environmental governance. We find that the concept of institutional work offers promising opportunities to push forward thinking on institutional change, although there are significant challenges in applying it within multi-actor and multi-level environmental governance contexts. We engage with these challenges and think through how to make the concept of institutional work applicable for studying environmental governance, which opens up exciting new avenues for future study. The paper is structured as follows: Section 2 surveys prominent approaches to institutional change in the literature and emerging commonalities among them; Section 3 explores the concept of institutional work and distinguishes it from a variety of related concepts in environmental governance; Section 4 identifies key challenges and opportunities of studying institutional work in environmental governance; Section 5 redefines institutional work for an environmental governance context, and discusses key areas for future scholarly attention. We conclude by distilling key lessons and tensions involved in pursuing institutional work as a research agenda. Overall, we argue that institutional work should have a central place within theorising on institutional change, and that doing so opens up new possibilities for tackling the longstanding and fundamental challenge of understanding institutional change in environmental governance.

2. Perspectives on institutional change in the literature

This section surveys prominent approaches to institutional change in the literature, both long-standing as well as new theories, and identifies emerging commonalities among them. This reveals that the interplay between actors and institutional structures is becoming a core topic of scholarly interest.

2.1. Approaches to institutional change

Approaches to studying institutional dynamics and change have broadly tended to focus on either stability and inertia, or radical change in response to exogenous shocks (following Thelen 2004; Streeck and Thelen 2005; Mahoney and Thelen 2010).

A focus on institutional stability often hinges on issues of path-dependence, reproduction, and inertia. For example, institutional inertia is often identified as a barrier to desirable pathways of change in environmental governance (e.g. Munck af Rosenschöld, Rozema, and Frye-Levine 2014; Barnett et al. 2015). Path dependence has been theorised to be caused by a 'dynamic of increasing returns' whereby positive feedback processes reinforce a particular path of institutional activity and rewards, which become increasingly difficult to change over time (Pierson 2000). Pierson argues that the political costs of change increase over time due to the challenges of building collective action for an alternative, the interdependence of multiple elements in an institutional 'web', the incumbent political authority that can reinforce asymmetric power relations, and the 'intrinsic complexity and opacity' of political systems (Pierson 2000, 257). This highlights the crucial importance of temporality (e.g. sequencing of events, critical junctures) (Pierson 2004). Mahoney (2000, 517) identifies multiple possible explanations for why institutional reproduction, and thus stability, occurs, namely: for utilitarian reasons (due to rational cost-benefit assessment), for functional reasons (due to serving a useful societal function), for power reasons (due to support from elite actors), or for legitimation reasons (due to being perceived as morally just). In this context, Mahoney (2000) identifies different hypotheses about what might be required for institutional change to occur: competition and learning (utilitarian view), exogenous shocks (functional view), altering power relations (power view), or changing values and beliefs (legitimation view).

A focus on radical institutional change centres on issues of rapid, volatile change typically in response to exogenous shocks or pressures. For example, the important role of crisis events (e.g. environmental, social, economic, and political) in triggering institutional change is frequently observed in the environmental governance literature (Head 2014; Douglass 2016). The environmental governance literature often calls for major institutional change (e.g. reform, innovation, transformation) in order to address many urgent environmental governance problems, such as water (e.g. Ioris 2009; Rockström *et al.* 2014), climate change (WBGU 2011; O'Brien and Selboe 2015), or urban development (Kresl 2015) challenges. Theoretically, such perspective aligns with the longstanding approach of punctuated equilibrium (Baumgartner and Jones 1993), where "periods of stability may be linked by periods of rapid change during which the institutional framework is challenged... [implying that] incremental changes are less important than the dramatic alterations in the mobilization of bias during these critical

periods" (Baumgartner and Jones 1993, 12). This approach emphasises the role of new ideas gaining popularity and diffusing through and between political systems, which over time comes to underpin new policy agendas creating pressure for change (Baumgartner and Jones 1993, 16).

Both of these perspectives (i.e. stability vs. radical change) are frequently linked by invoking the other as a part of their own explanation. For example, path-dependency points to 'critical junctures' where periods of relatively stable incrementalism break course and branch in a different direction, whereas radical change emphasises periods of rapid change interspersed by longer periods of relative stability¹. On the other hand, radical change points to periods of rapid change interspersed by longer periods of relative stability, which are not really equilibrium but instead periods of more calm incrementalism. This forms the backdrop on which positive feedback and cascades around new ideas develop – slowly at first, but eventually leading to 'change [that] comes quickly and dramatically' (Baumgartner and Jones 1993, 16–17). The role of exogenous shocks or pressures in driving institutional change is clear. However, whether this is the only, or even the most common or important, explanatory factor for understanding institutional change has been questioned (Rhodes 1995; Thelen 2004; Streeck and Thelen 2005; Mahoney and Thelen 2010; Van Assche, Beunen, and Duineveld 2014a; Termeer, Dewulf, and Biesbroek 2016).

Mahoney and Thelen (2010) instead argue that it is necessary to look beyond either stability or radical change, and focus on a 'middle ground' approach that recognises more gradual and ongoing forms of institutional change. Their model focuses on endogenously driven change driven by ongoing political-distributional struggles between actors seeking to influence the meaning, interpretation, and enforcement of institutional rules, which are inherently indeterminate and contestable. They argue that institutional rules are rarely unambiguous and, indeed, this ambiguity affords space for flexibility and jockeying by actors that can give rise to gradual change over time as the meanings of rules are reinterpreted, re-cast under new circumstances, or otherwise contested. Even though this approach focuses on 'gradual' change, it also points out that gradual change may nevertheless lead to broader transformative change over time (Streeck and Thelen 2005). This idea is reflected in the variety of hypothesised mechanisms of institutional change (displacement, layering, conversion, drift) which are proposed to constitute the macroscale outcomes of micro-scale interactions between change agents and institutional rules (Mahoney and Thelen 2010). Displacement refers to the wholesale introduction of a new institutional structure (which is possible but uncommon), whereas layering refers to a potentially more common mechanism whereby new structures are introduced on top of existing ones. Making such 'layered' institutional configurations operate in practice is likely to involve interpretation and judgment by actors because of inherent contradictions and contextual imperatives, such as reflected in local variations in the implementation of EU environmental legislation (Beunen and Duineveld 2010).

Interestingly, similar ideas are also emerging within sociology. Fligstein and McAdam (2012) develop an approach for understanding sociological change, drawing on organisational studies and social movements theory, which resonates with the aforementioned theory on gradual institutional change. Fligstein and McAdam's approach hypothesises that sociological change (and order) arise from interactional dynamics within and between "strategic action fields", which are described as "a constructed meso level social order in which actors (who can be individual or collective) are attuned to and interact with one another on the basis of shared ... understandings about the purposes of the field, relationships to others in the field ..., and the rules

governing legitimate action in the field" (Fligstein and McAdam 2012, 9). In other words, strategic action fields are social orders involving constellations of actors who interact with each other based on broadly similar understandings of the world (e.g. sectors, organisational fields, networks, policy systems, or policy domains) (Fligstein and McAdam 2012, 9). Sociological change comes about through 'challengers' engaging in strategic collective action to jockey with incumbents for change, particularly relying on the 'social skill' of particular actors (e.g. to manipulate both material and existential concerns) in the shadow of exogenous shocks that create destabilising openings (e.g. uncertainty, crisis). Thus, macro patterns of social order and change are linked to meso level dynamics of strategic (political) collective action, which are in turn underpinned by micro level dynamics of actors operating with social skill to influence the interests, meanings, and identities of others.

2.2. Emerging commonalities

Based on these perspectives, a range of commonalities emerging within institutional change scholarship are observed. The primary commonality is a focus on institutional (or sociological) change as the dependent variable of analysis. Other key commonalities are:

- an interest in explaining institutional change based on the interaction of structural and agency factors;
- placing political contestation about institutional rules and their meanings at the centre of analysis;
- highlighting the importance of purposive or strategic forms of action taken by individuals and coalitions to seek to influence or resist change;
- an interest in linking micro dynamics with macro patterns of change; and
- an interest in explaining temporal patterns of change and stability over time within a single explanatory framework.

Overall, this reflects attention towards finding approaches that sit between various longstanding dichotomies, such as stability vs. radical change (i.e. appreciating gradual forms of change); emergent vs. intentional change (i.e. intentionality plays an important role, but things rarely work out the way they were planned); and endogenous vs. exogenous drivers of change (i.e. both are important and interact and in many situations the distinction is not clear as problem boundaries are ambiguous, overlapping and dynamic). Together, this highlights a critical need to focus more closely on better understanding the dynamic interplay between actors and institutional structures influencing institutional change. As Fligstein and McAdam (2012, 6) point out, to date "there is very little elaboration of ... how actors enact structure in the first place and the role they play in sustaining or changing these structures over time".

3. The concept of institutional work

This section explores the concept of institutional work in the context of environmental governance, and distinguishes it from a variety of existing concepts (i.e. institutional design, entrepreneurship, and bricolage). This reveals that the concept of institutional work offers distinctly new insights and possibilities, but also that it requires further development to be applicable within multi-actor, multi-level environmental governance.

3.1. Exploring the concept of institutional work

The concept of 'institutional work' represents a promising analytical focus for studying the dynamic interplay between actors and institutional structures influencing institutional change. The concept was coined by Lawrence and Suddaby (2006, 215) who defined institutional work as "the purposive action of individuals and organisations aimed at creating, maintaining and disrupting institutions", and subsequently explicated in depth in a later volume (Lawrence, Suddaby, and Leca 2009). These authors aim to connect, bridge, and extend scholarship on institutional entrepreneurship, institutional change, and deinstitutionalisation. They propose a typology of multiple kinds of institutional work and the behaviours that individuals may take to purposefully maintain, create, or disrupt institutional frameworks (Lawrence, Suddaby, and Leca 2009, 48).

There are a number of reasons that require us to rethink the concept of institutional work. First of all, it might be difficult, and in some situations impossible, to fully grasp an actor's real intentions, and thus to distinguish purposive actions from other actions and communications that affect institutional structures. Furthermore, actions and institutional effects can be linked in various ways. Actors are likely to have their own ideas about who played which role in the processes of institutional change. Success has many knights, but failure is usually someone else's fault. Success might be over-claimed by arguing in hindsight that change processes followed a backwards-constructed plan that may not have necessarily been the case. Furthermore, narratives of success and failure can trigger self-reinforcing processes that strengthen the performativity of these narratives; a process that can respectively stabilise or disrupt institutional structures (Van Assche, Beunen, and Duineveld 2012).

Second, institutional structures are also influenced by a range of non-purposive actions taken by disparate actors. There may be a tremendous amount of non-conscious behaviour within institutional structures that does not fit within the description of intentional 'maintaining' forms of institutional work. In many situations, institutions are self-reinforcing simply because actors do not feel the need to continually reconsider underlying assumptions over and over again in each new decision-making situation, but rather take these for granted. Through these processes, actors are non-consciously, but very effectively, upholding institutional structures (Greif 2014). These behavioural regularities that create and maintain institutions are often described with the term habitus (Bourdieu 1977). This refers to the logic that structures certain practices through a durable set of dispositions that condition the way people see, think, and act (Hillier 2002a; Howe and Langdon 2002). The concept of habitus relates to a certain notion of informal institutions in which these are understood as norms of behaviour, or codes of conduct that shape people's behaviour. Although habitus is often used to explain the durability of institutional structures, it does not imply that things do not change. The logic of a practice evolves and the meaning of institutions can shift gradually over time without any actor purposively influencing this process (Ellickson 1991). Institutional change can thus only partly be explained by purposive institutional revisions undertaken by particular actors. Institutional structures change even without planned and purposive actions, and may be influenced by a wide range of exogenous and endogenous factors and processes. These include discursive dynamics, actors, structural forces, and events that are both 'internal' and 'external' to a particular institutional context. Mahoney and Thelen (2010), for example, draw attention to the importance of the degree of ambiguity and scope for interpretation/contestation and the extent to which change can be blocked by certain actors.

Third, in the domain of environmental governance, the need to account for various factors influencing institutional change and their context-specific interplay becomes especially clear. Institutional work in the context of environmental governance compared to institutional work within a single organisation implies dealing with more different organisational logics, much heavier politics, a broader range of scales to consider, a much broader range of actors to recognise, and engaging with much more unpredictable circumstances and dynamics, much more unpredictable consequences (Mahoney and Thelen 2010; Van Assche, Beunen, and Duineveld 2014a; De Koning 2014). It might be more difficult overall because there are no clear boundaries about the scope of action and who are the decision-makers to influence, which means a need to be much more strategic and have a very broad political and contextual awareness. The evolution of institutional structures may be influenced by internal dynamics, by the interplay between different policy sectors (e.g. between water, energy, food, climate change), as well as by shifts in broader institutional regimes related to global trade, financial, and communication systems (Young et al. 2008; Allan 2005). The literature on environmental governance highlights diverse drivers of institutional change, including ideas and discourses (Hajer 1995; Healey 1999; Dryzek 2013; Larsson 2015; Leipold and Winkel 2016), elite activity (Dryzek and Dunleavy 2009), trust (De Vries et al. 2015), and power dynamics (Van Assche, Duineveld, and Beunen 2014). However, these factors are yet to be incorporated into thinking on institutional work.

Finally, it is fundamental to acknowledge that institutional change always takes places in a particular context, marked by specific configurations of actors, institutions, and powerknowledge dynamics. Institutional work and its eventual outcomes cannot be isolated from this context. Institutional work may be critical to understanding institutional change, but it should not be seen as a singular explanatory factor that can be easily distinguished from a plethora of other drivers and dynamics shaping environmental governance.

3.2. Distinguishing institutional work from other related concepts

The various approaches to studying institutional change surveyed in Section 2 give regard to the role of actors in ways that resonate with the concept of institutional work. For example, in terms of path dependency, Pierson (2000) emphasises that due to asymmetric power relations, privileged actors can use their political authority to reinforce their higher status thus resisting change. Under punctuated equilibrium theory, Baumgartner and Jones (1993) emphasise the importance of policy entrepreneurs and competition for ideas. Under gradual institutional change, Mahoney and Thelen (2010) emphasise strategies that can be employed by change agents to push for particular interpretations of ambiguous institutional rules. Under social fields theory, Fligstein and McAdam (2012) give strong emphasis to processes termed 'social skill' which they define as "the capacity for intersubjective thought and action that shapes the provision of meaning, interests, and identity in the service of collective ends" (Fligstein and McAdam 2012, 4). An explicit focus on institutional work helps to bring these kinds of processes to the forefront of analysis. More broadly, a variety of related – but partial – concepts have been discussed in the environmental governance literature, including institutional design, institutional entrepreneurship, and bricolage.

Institutional design refers to attempts to shape institutional structures, based on understanding about how certain characteristics of institutions produce certain desirable effects. In other words, "deliberately creating and changing institutions, and affecting institutions, institutional structures and practices is institutional design" (Alexander 2005, 211). Ostrom's work to identify design principles for successful local collective action to

manage common pool resources has been particularly influential (e.g. Ostrom 1990, 2005). Importantly, Ostrom emphasises that there are no panaceas because different situations are complex and vary tremendously (Ostrom 2007). Nonetheless, general principles believed to underpin successful collective action drawn from practical observation are taken as a set of design principles, and have been applied to large-scale environmental governance problems, such as river basin management (e.g. Huntjens *et al.* 2012). Institutional design has also been considered at an international level regarding the establishment of global environmental agreements (Mitchell 2006).

Institutional work differs in two key ways from the work on institutional design. First, it shifts the focus from the outcomes of intentional change (which are very difficult to control) to the efforts to bring about intentional change, which more closely align to actual activities taken by human actors (Lawrence, Suddaby, and Leca 2009). Second, it gives central regard to the ambiguous, political, contested, and dynamic nature of efforts to bring about institutional change, whereas institutional design arguably glosses over, or entirely ignores, these very real struggles. This allows recognition of a wider range of motivations for action (beyond instrumental ones), and makes no assumptions about the ends to which actors are working (e.g. motivations may or may not be for the common good, and may or may not be aligned).

Institutional entrepreneurship focuses on the role of change agents who actively seek to develop and change institutional structures (Heikkila and Gerlak 2005; Winkel and Leipold 2016). The label 'entrepreneur' or leader is used for individual and collective actors. Policy entrepreneurs are distinguished from other actors by their risk-taking behaviour and their involvement throughout the process of policy change (Huitema and Meijerink 2010; Brouwer and Biermann 2011). Policy entrepreneurs can be found at all levels of government, including politicians as well as civil-servants, and also outside government. Studies have shown that these policy entrepreneurs can use a wide range of strategies to gain attention and support for particular issues and possible solutions, for the creation of coalitions in which ideas and policies can be developed and implemented, and in influencing the time and place where decisions are made. However, a focus on entrepreneurship alone risks overlooking interplay with other actors, the conditions under which they are able to deploy particular strategies, and the factors that influence the effect of these actions on the institutional order.

Institutional bricolage is another concept explored in both management studies (Garud, Kumaraswamy, and Karnøe 2010) and development literature (Cleaver 2002) for understanding how actors utilise institutional diversity by interpreting, assembling, and re-combining different rules and norms to achieve purposive ends. It recognises the structural constraint of existing institutions, but leaves space for the active role of actors in shaping their institutional context (Garud, Kumaraswamy, and Karnøe 2010). Therewith, it also brings attention to the dynamic interplay between actors and institutional structures. Like institutional work, bricolage can refer to purposive and nonpurposive actions through which actors assemble or reshape the institutional order (Cleaver and De Koning 2015). The active combining of different institutional elements is a form of institutional work that deserves particular attention in the domain of environmental governance, because actors regularly need to deal within a wide diversity of policies and institutional structures. These actors, for example, need to deal with different procedural requests, norms, and expectations in their day-to-day policy-making and administration processes (e.g. Thiel and Egerton 2011; Rozema 2015). Bricolage points out that formal institutions often evolve from informal ones, and that the working of particular institutions should always be understood in their interplay with wider

institutional configurations (Eggertsson 2005; Roy 2009; Van Assche, Beunen, and Duineveld 2014b). In this sense, bricolage relates to Mahoney and Thelen's ideas about how gradual institutional change emerges as the net effect on ongoing micro-interactions in the context of fuzzy and malleable institutional rules.

4. Challenges and opportunities for studying institutional work in environmental governance

So far we have discussed key approaches for analysing institutional change and explored the concept of institutional work and its relationship to various other approaches in the environmental governance literature. This section now identifies specific challenges and opportunities associated with studying institutional work in environmental governance. Challenges include appreciating the political nature of institutional work, giving regard to institutional work related to both substantive issues as well as deeper 'rules of the game', and accounting for the embeddedness of institutional work within its broader political economic context. Opportunities include deeper insights into the causes of both flexibility and rigidity in institutional structures, and new practical avenues for studying and supporting sustainability transformations in society, which together contribute to understanding institutional change processes at micro, meso, and macro levels.

4.1. Challenges

Studying institutional work in a multi-actor, multi-level environmental governance context demands that attention be given to the political and power-laden nature of institutional change (Stone 2002). Institutional work in environmental governance is political, because institutional change involves competing interests and has collectively-binding effects. Actors are likely to have differing perspectives on problems and possible solutions, and on the way in which decisions should be made. The plurality of often competing perspectives is what Chantal Mouffe has called the 'political', something which she distinguishes from 'politics' to show that 'political' is an inextricable part of the world, while 'politics' refers to way in which societies deal with the different understandings of the world (Mouffe 2005). This notion of the competing perspectives, understandings, and beliefs has attracted a fair share of attention in the literature about environmental governance (Bevir 2004; González and Healey 2005; Van Assche, Duineveld, and Beunen 2014; Voß and Freeman 2016). This literature elaborates on the relationship between power and knowledge and explores the ways in which configurations of power/knowledge shape policies and practices concerning the environment (Flyvbjerg 1998; Hillier 2002b; Smith and Stirling 2010; Winkel 2012; Van Assche, Duineveld, and Beunen 2014). It is an aspect that has so far been largely overlooked in the literature on institutional change (Larsson 2015).

Institutional work in environmental governance is likely to involve competition between different interests, expectations and proposed solutions; and maybe even contestation over venues and approaches to decision-making. This implies a need for attention to institutional work not only about particular substantive issues, but also relating to the 'rules of the game', or what Ostrom (2005) describes as 'constitutional rules'. As Pierson (2000, 257) states: "legally binding rules are not just a foundation for political activity ... They are instead the very essence of politics". The political character of institutional work becomes visible in the competition between different sets of ideas, perspectives, and types of knowledge. Some of these can become stabilised in institutional structures, while others are marginalised, subjugated, or ignored (Hajer 1995; Scott 1998;

North 2005; Van Assche, Beunen, and Duineveld 2014a). Institutional structures can temporarily stabilise the dominance of certain ideas, perspectives, ideologies, or types of knowledge. Yet all of these are likely to evolve over time, thereby creating tensions between dominant perspectives in society and those that are embedded in the institutional structure; a tension that is one of the driving forces of institutional change. A focus on institutional work can help in answering the question to what extent actors are able to adapt institutional structures to new ideas (Bettini, Brown, and De Haan 2015).

To this political complexity we can add that institutional work regarding any particular institutional structure is likely to be linked to dynamics and changes in other parts of a governance landscape. Institutional structures evolve in historically, geographically, and politically situated ways, through all kinds of synergetic encounters, contradictions, conflicts, and active struggles (González and Healey 2005, 2056). Institutional changes in a particular part of a governance system (e.g. local governance) may be influenced by exogenous factors separated horizontally (e.g. diffusion of ideas from other local governance contexts), vertically (e.g. structures, mandates, and interests at national or international levels), and temporally (e.g. past decisions affect decision-making possibilities in the present). Different governance paths can unfold in parallel, become coupled in many different ways, and co-evolve (Van Assche, Beunen, and Duineveld 2014a). Therefore, institutional work needs to be viewed as taking place in a particular context (time, place, scale), that is itself embedded within broader dynamic governance and political economic contexts.

4.2. Opportunities

A focus on institutional work can deepen our understanding of the human efforts that underlie institutional change, as well as the different factors that influence these efforts. It brings attention to the various ways in which actors (can) navigate the flexibilities and rigidities of existing institutional structures in bringing about institutional change. In addition, the concept of institutional work also helps us recognise the importance of institutional maintenance. Institutional structures provide stability, predictability and reduce transaction costs (North 2005). Overhauling institutions can thus have very disruptive effects and the institutional revisions that many countries have actually realised in the past decades, e.g. regarding property regimes, marked-based policies, and deregulation, are often subject to critique (Verdery 2003; Easterly 2006; Klein 2008). In this respect, one can also think about all those critiques on the ways in which neo-liberal discourse has driven institutional change in a direction that is widely considered to increase social and environmental problems (Bakker 2005; Ferguson 2006; Castree 2008; Furlong 2010). Maintaining the existing institutional order may not always be undesirable and a focus on institutional work might provide further insights into the efforts that are needed to uphold institutional structures.

A particular opportunity from studying institutional work lies in contributing to the rapidly growing interest in sustainability transformations (e.g. WBGU 2011; ISSC/UNESCO 2013; Future Earth 2013). Current approaches to conceptualising sustainability transformations have been criticised as being weak in appreciating how actual processes of institutional change play out (Smith and Stirling 2010; Patterson *et al.* 2015). Sustainability transformations will arguably not go far without placing a central focus on the difficult political realities of institutional change, and a focus on institutional work opens up new possibilities for better understanding how processes of broad-scale sustainability transformation can actually be pursued.

Overall, we see potential contributions across three levels of study. At a micro level, an institutional work perspective provides new avenues for understanding the (politically-laden) dynamics of agency-structure interplay. At a meso level, it opens up opportunities for new insights on how to overcome institutional inertia, which contributes to addressing the longstanding challenge of institutional change in environmental governance (e.g. to enhance resilience and adaptability in a rapidly changing world). At a macro level, an institutional work lens can contribute urgently needed insights for understanding how to bring about sustainability transformations. However, it must be noted that a focus on institutional work alone is not sufficient for understanding institutional change. Institutional work must be placed within a broader recognition of the diverse factors that can influence institutional change.

5. Redefining institutional work

In this final section, we redefine institutional work to make it fit for purpose within environmental governance. We then draw attention to key areas for future scholarship, which also brings the concept of institutional work into alignment with critical issues at the forefront of broader theorising on institutional change, namely: giving strong attention to temporality, interaction between multiple actors and their cumulative effects, and accounting for communication and discursive dimensions.

5.1. Redefining institutional work for environmental governance

The original definition of Lawrence, Suddaby, and Leca (2009) focuses on intentionality as a key distinguishing feature; that is, the purposive actions taken by actors aimed at creating, maintaining, or disrupting institutions. This definition excludes all those actions that are non-purposive, but nevertheless contribute to creating, maintaining, or disrupting institutions. In particular, institutional maintenance largely depends on non-purposive actions. Additionally, institutional change can be driven by actions and behaviours that do not aim to change the institutional structure. We argue that these non-purposive actions which have institutional effects should also be considered as institutional work. Broadening the definition is also important because distinguishing purposive actions from other actions can be highly problematic, because intentions are difficult to observe and this also depends on the extent to which they are openly and honestly communicated (Section 3).

This leads to reconsidering what is included in the scope of this study of institutional work (Table 1). First, there is a continuum in the degree of intentionality of action (i.e.

	Aspects included in scope of study		
Definition	Purposive action	Non-purposive action	Effects on institutional structure
Original definition (Lawrence, Suddaby, and Leca 2009)	Yes	No	No
Proposed definition for environmental governance	Yes	Yes	Yes

Table 1. Defining the scope for studying institutional work in environmental governance.

structures (i.e. forms of institutional change) is included. The original conceptualisation of institutional work by Lawrence, Suddaby, and Leca (2009) focused on efforts made by actors, specifically because actual institutional change outcomes are caused by many factors and are difficult to assess. We entirely recognise and sympathise with this challenge. However, we argue that understanding institutional work needs to give regard to the actual effects produced i.e. actual changes in the institutional structure. Otherwise, the concept does not fulfil its purpose of actually considering the dynamic interplay between actors and institutional structures. Furthermore, in the context of environmental governance, we are concerned with understanding institutional work for the purpose of better understanding institutional change, rather than just for understanding the activities and strategies of actors in and of itself. Hence, we cannot help but be concerned about outcomes. Therefore, we argue that institutional work should involve both the actions taken by actors, as well as the resulting effects.

Institutional work is then defined as those actions through which actors attempt to, or in effect do, create, maintain, or disrupt institutional structures. This definition acknowledges that both actions and effects matter, that actions can be purposive or not, and that not all attempts do indeed affect the institutional structure. Furthermore, it may be useful to distinguish between actions that directly affect the institutional order, and those that have an indirect effect. An indirect effect could result from institutional work that increases or limits the possibilities for subsequent actions to have a direct impact on the institutional structure. An example of this would be agenda setting, which requires different kinds of action, possibly repeated over extended time periods, which does not necessarily lead to any obvious institutional change. However, over time this opens up new possibilities for more direct changes to institutional structures. The combination of these different kinds of actions can be readily labelled as institutional work. Paying attention to combinations of actions in this way closely aligns with literature on strategies employed by policy entrepreneurs, where such strategies can involve multiple kinds of linked actions. Importantly, viewing institutional work as a combination of actions also brings attention to the temporal dimension of institutional work, in which the order and sequence of actions may be critically important in explaining the effects achieved, and in which the effects of institutional work might only become visible over a longer period of time.

5.2. Key areas for future attention

Institutional change can occur over long or short timeframes, which means that institutional work needs to be understood as a moving picture rather than as a single snapshot (following Pierson 2004). Institutional effects rarely stem from a single action, but rather require a series of actions. Even institutional maintenance requires that the existing structure is enacted, re-affirmed and re-produced on a regular basis. Although most actors performing maintenance work do so largely non-consciously, it is the repetitive nature of these actions that uphold institutions. Pierson (2004) explored the temporal dimension of politics in detail. He points to order, sequencing and timing that all create connectivity between actions, and help to explain why certain forms of change happen at a particular time and place. Path dependency plays a central role in this thinking (Pierson 2000). Path dependency relates to thinking about institutional maintenance work (e.g. Pierson's 'dynamic of increasing returns' that rewards or incentivises behaviour along an existing pathway). However, it also relates to

institutional creation and disruption work, because by giving deep regard to understanding how decision-making in the present is conditioned by legacies from the past, it provides more sophisticated insight into explaining why certain changes are more likely to occur than others. This brings attention to the continuous interplay between rigidity and flexibility in governance and to the ways in which actors navigate contingencies and chance (Van Assche, Beunen, and Duineveld 2014a).

A further critical point is that institutional work is carried out by multiple actors. Individuals play a crucial role, but cannot change the institutional order by themselves. Different actors play different roles, some actions are more important and more visible or appreciated, but in the end it is the sum of actions that matters. An interesting metaphor on this perspective comes from Barbara Czarniawska who compares institutions with anthills, stating: "The anthill is a part of an ecosystem, and can be built only in specific places where specific materials are available, and at specific times. It takes many ants to build it, and as individuals they are indispensable but not irreplaceable" (Czarniawska 2009, 438). With this metaphor, Czarniawska stresses that one should look beyond the efforts of individual change agents or entrepreneurs, thereby "not diminishing the heroism of ants, merely multiplying their number and character and stressing the connections" (Czarniawska 2009, 438). Rather than only looking at individual change agents, one has therefore to study the interplay between the many actors involved in institutional work.

Finally, it is crucial to mention that a large part of institutional work implies communication. Institutions reflect shared beliefs (North 2005; Ostrom 2005) and creating, maintaining, and disrupting institutions thus implies creating, maintaining, and disrupting these shared beliefs. Communications are the medium through which beliefs and ideas are created, shared, and sustained. Yet, to date, there has been very little attention paid to the social dynamics of communication in studying institutional work. Analysing institutional work thus implies studying which perspectives, ideas, beliefs are communicated by particular actors, how they are communicated, and how these communications follow from and impact shared beliefs. A large body of knowledge developed in post-structuralist thought might be useful in the endeavour (Larsson 2015; Leipold and Winkel 2016). Paying attention to discursive dynamics helps in unpacking the political dimension of institutional work and furthering our understanding of how power/knowledge dynamics drive processes of institutional change (Van Assche, Duineveld, and Beunen 2014).

6. Conclusions

Over the years, it has become clear that tackling many kinds of environmental governance problems is anything but easy, and a central reason for this is the challenge of bringing about institutional change. In this paper, we have explored the concept of institutional work as a useful approach for pushing forward thinking on institutional change, and opening up new avenues for study. We believe that institutional work could play a prominent role within the increasingly vibrant theorising on institutional change that is occurring within institutional scholarship. The concept of institutional work can not only incorporate, but also significantly extend, a variety of existing approaches to understanding interplay between agency and institutional structures. Importantly, it recognises the important role of institutional maintenance, which is regularly overlooked. However, under its original definition, institutional work does not take account of nonpurposive action (i.e. unconscious actions taken by actors, which nonetheless may have a significant effect), nor specifically consider actual effects on the institutional structure in question. We have argued that the scope of institutional work should be enlarged to take account of these aspects if the concept is to be useful in the context of environmental governance.

We have also become aware of limitations in our current explication of institutional work. A key issue is knowing and deciding when something is actually classified as institutional work and when not. Our re-definition of the concept to include non-purposive action is not unproblematic, because studying institutional work cannot include everything, but needs to be limited to those actions that are especially relevant to understanding institutional change in a given situation. As stated in Subsection 5.1, we see that there is a continuum in the degree of intentionality of action (varying from action that is purposive to non-purposive), although exactly how much non-purposive action is worth including is an open question. This question is linked to the challenges of capturing the true intentions of actors, and in accounting sufficiently for maintenance work that might be either purposive or non-purposive in nature.

A particularly important issue needing future attention is temporality. This includes the timing and sequencing of actions, how multiple actions link up over time, and how actions relate to the existing institutional order, because actions do not occur on a clean slate, but are conditioned by existing institutional order (Pierson 2000) and weighed down by the 'slow moving' nature of culture (Roland 2004). Furthermore, it is often difficult to disentangle process and outcome, which is another reason why it is important that the scope of institutional work be viewed as encompassing both actions and effects.

Even more broadly, an interesting tension between useful stability and productive questioning is raised when thinking about institutional work. The fundamental purpose of institutions in society is to provide a degree of stability and regularised character to social interactions, which is extremely important. Not every institution needs to be questioned all the time (e.g. constitutional laws, norms of democracy), and indeed, the taken-forgranted nature of much of institutional life provides a very useful degree of stability on top of which a more malleable layer of institutional life, involving institutional work, most often plays out. This is not to say that institutional work is not also possible at 'deeper' institutional levels, but it will surely be much less common. Therefore, in studying institutional work, it will be important to acknowledge both useful stability as well as the spaces for change in institutional structures.

Overall, we see that the concept of institutional work offers exciting new opportunities for pushing forward thinking on institutional change, which remains one of the most pertinent but challenging topics for improving environmental governance in a complex and rapidly changing world. By considering institutional work in the difficult context of environmental governance, we hope that this paper also contributes useful insights to broader institutional scholarship and its ongoing theorising about institutional change.

Disclosure statement

No potential conflict of interest was reported by the authors.

Note

1. However, Pierson (2004) is more nuanced in emphasising the importance of multiple kinds of temporal processes, including sequencing and conjunctures of events, slow-moving long-term processes, positive feedback processes, cumulative incremental changes, and threshold effects.

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References

- Alexander, E.R. 2005. "Institutional Transformation and Planning: From Institutionalization Theory to Institutional Design." *Planning Theory* 4: 209–223.
- Allan, J.A. 2005. "Water in the Environment/Socio-Economic Development Discourse: Sustainability, Changing Management Paradigms and Policy Responses in a Global System." *Government and Opposition* 40: 181–199.
- Bakker, K. 2005. "Neoliberalizing Nature? Market Environmentalism in Water Supply in England and Wales." Annals of the Association of American Geographers 95: 542–565.
- Barnett, J., L., Evans, C. Gross, A.S. Kiem, R.T. Kingsford, J.P. Palutikof, C.M. Pickering, and S.G. Smithers. 2015. "From Barriers to Limits to Climate Change Adaptation: Path Dependency and the Speed of Change." *Ecology and Society* 20 (3): 5. http://dx.doi.org/10.5751/ES-07698-200305
- Baumgartner, F.R., and B.D. Jones. 1993. *Agendas and Instability in American Politics*. Chicago, IL: University of Chicago Press.
- Bettini, Y., R.R. Brown, and F.J. De Haan. 2015. "Exploring Institutional Adaptive Capacity in Practice: Examining Water Governance Adaptation in Australia." *Ecology and Society* 20 (1): 47. http://dx.doi.org/10.5751/ES-07291-200147
- Beunen, R., and M. Duineveld. 2010. "Divergence and Convergence in Policy Meanings of European Environmental Policies: The Case of the Birds and Habitats Directives." *International Planning Studies* 15: 321–333.
- Bevir, M. 2004. "Governance and Interpretation: What are the Implications of Postfoundationalism?" *Public Administration* 82: 605–625
- Bourdieu, P. 1977. Outline of a Theory of Practice. Cambridge: Cambridge University Press.
- Brouwer, S., and F. Biermann. 2011. "Towards Adaptive Management: Examining the Strategies of Policy Entrepreneurs in Dutch Water Management." *Ecology and Society* 16 (4): 5. http://dx. doi.org/10.5751/ES-04315-160405
- Castree, N. 2008. "Neoliberalising Nature: The Logics of Deregulation and Reregulation." *Environment and Planning A* 40: 131–152.
- Cleaver, F. 2002. "Reinventing Institutions: Bricolage and the Social Embeddedness of Natural Resource Management." *The European Journal of Development Research* 14: 11–30.
- Cleaver, F., and J. De Koning. 2015. "Furthering Critical Institutionalism." *International Journal of the Commons* 9 (1): 1–18.
- Czarniawska, B. 2009. "Emerging Institutions: Pyramids or Anthills?" Organization Studies 30: 423-441.
- De Koning, J. 2014. "Unpredictable Outcomes in Forestry: Governance Institutions in Practice." Society and Natural Resources 27: 358–371.
- De Vries, J.R., N. Aarts, A.M. Lokhorst, R. Beunen, and J.O. Munnink. 2015. "Trust Related Dynamics in Contested Land Use: A Longitudinal Study Towards Trust and Distrust in Intergroup Conflicts in the Baviaanskloof, South Africa." *Forest Policy and Economics* 50: 302–310.
- Dimaggio, P., and W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48: 147–160.
- Douglass, M. 2016. "The Urban Transition of Disaster Governance in Asia." In *Disaster Governance in Urbanising Asia*, edited by A.M Miller and M. Douglass, 13-43. Singapore: Springer.
- Dryzek, J.S. 2013. *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford University Press.
- Dryzek, J., and P. Dunleavy. 2009. *Theories of the Democratic State*. New York: Palgrave Macmillan.
- Easterly, W. 2006. The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done so Much Ill and so Little Good. Oxford: Oxford University Press.
- Eggertsson, T. 2005. *Imperfect Institutions: Possibilities and Limits of Reform*. Ann Arbor, MI: University of Michigan Press.

- Ellickson, R. 1991. Order Without Law. How Neighbors Settle Disputes. Cambridge, MA: Harvard University Press.
- Ferguson, J. 2006. *Global Shadows: Africa in the Neoliberal World Order*. Durham, NC: Duke niversity Press.
- Fligstein, N., and D.Mcadam. 2012. A Theory of Fields. Oxford: Oxford University Press.
- Flyvbjerg, B. 1998. Rationality and Power: Democracy in Practice. Chicago, IL: University of Chicago Press.
- Furlong, K. 2010. "Neoliberal Water Management: Trends, Limitations, Reformulations." Environment and Society 1: 46–75.
- Future Earth. 2013. *Future Earth Initial Design*. Report of the Transition Team. Paris: International Council for Science.
- Garud, R., A. Kumaraswamy, and P. Karnøe. 2010. "Path Dependence or Path Creation?" *Journal* of Management Studies 47: 760–774.
- González, S., and P. Healey. 2005. "A Sociological Institutionalist Approach to the Study of Innovation in Governance Capacity." *Urban Studies* 42: 2055–2069.
- Greif, A. 2014. "Do Institutions Evolve?" Journal of Bioeconomics 16: 53-60.
- Hajer, M.A. 1995. The Politics of Environmental Discourse: Ecological Modernization and the Policy Process. Oxford: Oxford University Press.
- Hall, P.A. 2010. "Historical Institutionalism in Rationalist and Sociological Perspective." In *Explaining Institutional Change: Ambiguity, Agency, and Power*, edited by J. Mahoney and K. Thelen, 204–223. New York: Cambridge University Press.
- Hall, P.A., and R.C. Taylor. 1996. "Political Science and the Three New Institutionalisms." *Political Studies* 44: 936–957.
- Head, B.W. 2014. "Managing Urban Water Crises: Adaptive Policy Responses to Drought and Flood in Southeast Queensland, Australia." *Ecology and Society* 19 (2): 33. http://dx.doi.org/ 10.5751/ES-06414-190233
- Healey, P. 1999. "Sites, Jobs and Portfolios: Economic Development Discourses in the Planning System." Urban Studies 36 (1): 27–42.
- Heikkila, T., and A.K. Gerlak. 2005. "The Formation of Large–Scale Collaborative Resource Management Institutions: Clarifying the Roles of Stakeholders, Science, and Institutions." *Policy Studies Journal* 33: 583–612.
- Hillier, J. 2002a. "Mind the Gap." In *Habitus: A Sense of Place*, edited by J. Hillier and E. Rooksby, 143–172. Aldershot: Ashgate.
- Hillier, J. 2002b. Shadows of Power: An Allegory of Prudence in Land-Use Planning. New York: Routledge.
- Howe, J., and C. Langdon. 2002. "Towards a Reflexive Planning Theory." *Planning Theory* 1 (3): 209–225.
- Huitema, D., and S. Meijerink. 2010. "Realizing Water Transitions: The Role of Policy Entrepreneurs in Water Policy Change." *Ecology and Society* 15 (2): 26. http://www.ecolo gyandsociety.org/vol15/iss2/art26/
- Huntjens, P., L. Lebel, C. Pahl-Wostl, J. Camkin, R. Schulze, and N. Kranz. 2012. "Institutional Design Propositions for the Governance of Adaptation to Climate Change in the Water Sector." *Global Environmental Change* 22: 67–81.
- Ioris, A.A. 2009. "Water Reforms in Brazil: Opportunities and Constraints." Journal of Environmental Planning and Management 52: 813–832.
- ISSC/UNESCO. 2013. World Social Science Report 2013: Changing Global Environments. Paris: OECD Publishing and UNESCO Publishing.
- Klein, N. 2008. The Shock Doctrine: The Rise of Disaster Capitalism. New York: Picador.
- Kresl, P.K. 2015. *Cities and Partnerships for Sustainable Urban Development*. Cheltenham: Edward Elgar Publishing.
- Larsson, O.L. 2015. "Using Post-Structuralism to Explore the Full Impact of Ideas on Politics." Critical Review 27: 174–197.
- Lawrence, T.B., and R. Suddaby. 2006. "Institutions and Institutional Work." In *The SAGE Handbook of Organization Studies*, edited by S.R. Clegg, C. Hardy, T.B. Lawrence, and W.R. Nord, 15–254. London: Sage.
- Lawrence, T.B., R. Suddaby, and B. Leca. 2009. Institutional Work: Actors and Agency in Institutional Studies of Organizations. Cambridge: Cambridge University Press.

Leipold, S., and G., Winkel. 2016. "Discursive Agency: (Re–)Conceptualizing Actors and Practices in the Analysis of Discursive Policymaking." *Policy Studies Journal*. doi: 10.1111/psj.12172

Mahoney, J. 2000. "Path Dependence in Historical Sociology." Theory and Society 29: 507-548.

- Mahoney, J., and K. Thelen, eds. 2010. *Explaining Institutional Change: Ambiguity, Agency, and Power*. New York: Cambridge University Press.
- March, J.G., and J.P. Olsen. 2010. *Rediscovering Institutions. The Organizational Basis of Politics*. New York: Simon and Schuster.
- Mitchell, R.B. 2006. "Problem Structure, Institutional Design, and the Relative Effectiveness of International Environmental Agreements." *Global Environmental Politics* 6: 72–89.
- Mouffe, C. 2005. The Return of the Political. London: Verso.
- Munck Af Rosenschöld, J., J.G. Rozema, and L.A. Frye–Levine. 2014. "Institutional Inertia and Climate Change: A Review of the New Institutionalist Literature." *Wiley Interdisciplinary Reviews* 5: 639–648.
- North, D. 1990. Institutions, Institutional Change and Economic Performance. Cambridge: Cambridge: Cambridge University Press.
- North, D.C. 2005. Understanding the Process of Economic Change. Princeton, NJ: Princeton University Press.
- O'Brien, K., and E. Selboe. 2015. *The Adaptive Challenge of Climate Change*. Cambridge: Cambridge University Press.
- Ostrom, E. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Ostrom, E. 2005. Understanding Institutional Diversity. Princeton, NJ: Princeton University Press.
- Ostrom, E. 2007. "A Diagnostic Approach for Going Beyond Panaceas." *Proceedings of the National Academy of Sciences* 104: 15181–15187.
- Ostrom, E. 2014. "Do Institutions for Collective Action Evolve?" *Journal of Bioeconomics* 16: 3–30.
- Patterson, J., K. Schulz, J. Vervoort, C. Adler, M. Hurlbert, S. Van Der Hel, A. Schmidt, A. Barau, P. Obani, and M. Sethi. 2015. "Transformations Towards Sustainability': Emerging Approaches, Critical Reflections and a Research Agenda." *Earth System Governance Working Paper* 34: 1–34.
- Pierson, P. 2000. "Increasing Returns, Path Dependence, and the Study of Politics." American Political Science Review 94: 251–267.
- Pierson, P. 2004. *Politics in Time: History, Institutions, and Social Analysis.* Princeton, NJ: Princeton University Press.
- Rhodes, R.A. 1995. "The Institutional Approach." In *Theory and Methods in Political Science*, edited by D. Marsh and G. Stoker, 42–45. Hampshire: Palgrave Macmillan.
- Rockström, J., M. Falkenmark, C. Folke, M. Lannerstad, J. Barron, E. Enfors, L. Gordon, J. Heinke, H. Hoff, and C. Pahl-Wostl. 2014. *Water Resilience for Human Prosperity*. Cambridge: Cambridge University Press.
- Roland, G. 2004. "Understanding Institutional Change: Fast-Moving and Slow-Moving Institutions." Studies in Comparative International Development 38: 109–131.
- Roy, A. 2009. "Why India Cannot Plan its Cities: Informality, Insurgence and the Idiom of Urbanization." *Planning Theory* 8: 76–87.
- Rozema, J.G. 2015. "The Influence of Institutional Design on Local Environmental Interest Representation in the National Polity." *Journal of Environmental Planning and Management* 58: 1731–1748.
- Schmidt, V.A. 2008. "Discursive Institutionalism: The Explanatory Power of Ideas and Discourse." *Political Science* 11: 303–326.
- Scott, J.C. 1998. Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven, CT: Yale University Press.
- Smith, A., and A. Stirling. 2010. "The Politics of Social-Ecological Resilience and Sustainable Socio-Technical Transitions." *Ecology and Society* 15 (1): 11. http://www.ecologyandsociety. org/vol15/iss1/art11/
- Stone, D. 2002. *Policy Paradox: The Art of Political Decision Making*. New York: WW Norton and Company.
- Streeck, W., and K. Thelen, eds. 2005. *Beyond Continuity: Institutional Change in Advanced Political Economies.* Oxford: Oxford University Press.

- Termeer, C.J., A. Dewulf, and G.R. Biesbroek. 2016. "Transformational Change: Governance Interventions for Climate Change Adaptation from a Continuous Change Perspective." Journal of Environmental Planning and Management. doi: 10.1080/09640568.2016.1168288
- Thelen, K. 2004. *How Institutions Evolve: The Political Economy of Skills in Germany, Britain, the United States, and Japan.* New York: Cambridge University Press.
- Thiel, A., and C. Egerton. 2011. "Re-Scaling of Resource Governance as Institutional Change: The Case of Water Governance in Portugal." *Journal of Environmental Planning and Management* 54: 383–402.
- Van Assche, K., R. Beunen, and M. Duineveld. 2012. "Performing Success and Failure in Governance: Dutch Planning Experiences." *Public Administration* 90: 567–581.
- Van Assche, K., R. Beunen, and M. Duineveld. 2014a. Evolutionary Governance Theory: An Introduction. Heidelberg: Springer.
- Van Assche, K., R. Beunen, and M. Duineveld. 2014b. "Formal/Informal Dialectics and the Self-Transformation of Spatial Planning Systems: An Exploration." Administration and Society 46: 654–683.
- Van Assche, K., M. Duineveld, and R. Beunen. 2014. "Power and Contingency in Planning." Environment and Planning A 46: 2385–2400.
- Verdery, K. 2003. *The Vanishing Hectare: Property and Value in Postsocialist Transylvania*. Ithaca, NY: Cornell University Press.
- Voß, J., and R. Freeman, eds. 2016. Knowing Governance: The Epistemic Construction of Political Order. Heidelberg: Springer.
- WBGU. 2011. World in Transition: A Social Contract for Sustainability. Berlin: German Advisory Council on Global Change.
- Winkel, G. 2012. "Foucault in the Forests A Review of the use of 'Foucauldian' Concepts in Forest Policy Analysis." Forest Policy and Economics 16: 81–92.
- Winkel, G., and S. Leipold. 2016. "Demolishing Dikes: Multiple Streams and Policy Discourse Analysis." *Policy Studies Journal* 44: 108–129.
- Young, O.R., L.A. King, H. Schroeder, V. Galaz, and T. Hahn. 2008. Institutions and Environmental Change: Principal Findings, Applications, and Research Frontiers. Cambridge, MA: MIT Press.