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Between coordination and regulation: Finding the governance in Internet governance

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Article

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Abstract

Following recent theoretical contributions, this article suggests a new approach to finding the governance in Internet governance. Studies on Internet governance rely on contradictory notions of governance. The common understanding of governance as some form of deliberate steering or regulation clashes with equally common definitions of Internet governance as distributed modes of ordering. Drawing on controversies in the broader field of governance and regulation studies, we propose to resolve this conceptual conundrum by grounding governance in mundane activities of coordination. We define governance as reflexive coordination – focusing on those ‘critical moments’, when routine activities become problematic and need to be revised, thus, when regular coordination itself requires coordination. Regulation, in turn, can be understood as targeted public or private interventions aiming to influence the behaviour of others. With this distinction between governance and regulation, we offer a conceptual framework for empirical studies of doing Internet governance.

Keywords

Coordination, economics of convention, governance, ICANN, Internet Governance Forum, intentionality, Internet governance, ordering, reflexive coordination, regulation

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Introduction

The term Internet governance has been around for almost two decades and is thus older than most of the organizations, processes, actors and issues it has come to designate. Since the term was coined in the mid 1990s, its meaning has considerably broadened. Whereas it previously centred on Internet Corporation for Assigned Names and Numbers (ICANN) and its policies, with the advent of the World Summit on Information Society (WSIS) and the creation of the Internet Governance Forum (IGF), the field has become much more diverse.

The increasing attention now paid to the conceptual foundations of Internet governance research may be a critical step towards a better integration into the broader field of governance and regulation studies. So far, Internet policies have not featured prominently in empirical studies of transnational governance. This article sets out to explore some conceptual overlaps between Internet governance and governance research and thereby hopes to theoretically ground Internet governance research.

Whereas the general concept of governance is still disputed, the definition of Internet governance has never been controversial among Internet researchers. Following Rosenau and Czempiel's (1992) work on 'Governance without government', countless essays and edited volumes, particularly of European origin, have struggled to find an adequate definition. In this article, we will review some promising elements of this debate, introduce our own approach and discuss its potential relevance for the analysis of Internet governance.

In the next section, we briefly revisit the literature on Internet governance. The 'Revisiting concepts of governance and regulation' section outlines the controversies surrounding the concept. We present our own approach in the 'Governance as reflexive coordination' section. The 'Disentangling governance, regulation and coordination in Internet governance' section summarizes our ideas and relates them to the study of Internet governance.

Internet governance between steering and networked heterarchy

A conceptual history of Internet governance

The scholarly use of the term Internet governance started circa 1996 in the United States.¹ The Harvard Information Infrastructure Project, the predecessor of the Berkman Center, published two edited volumes (Kahin and Keller, 1997; Kahin and Nesson, 1997), which discussed various 'problems of Internet Governance'. These two volumes introduced the conceptual questions that shaped the founding years of Internet governance research and defined their scope. Empirically, the attention centred on the transformation of the domain name system (DNS) and the emerging trademark conflicts over rights to domain names. With the founding of ICANN in 1998, there was a shift in Internet governance research towards institutional aspects, including the policy processes and actor constellations of this new body (Froomkin, 2000; Mueller, 2002).

Conceptually, Internet governance research focused on the 'governability' (Kooiman et al., 2008) of the Internet; in other words, whether and to what extent the Internet lends itself to hierarchical political control and on what foundations any rule-making authority

could rest. As famously expressed in Barlow's (1996) Declaration of Independence of Cyberspace, the regulatory zeitgeist of the late 1990s rejected public command-and-control regulation and favoured market-based self-regulation. As Reidenberg (1997) put it, the global information infrastructure 'defies traditional regulatory theories and policy making practices' (p. 84). Internet governance was expected to evolve as bottom-up decentralized rule-making (Johnson and Post, 1997), a so-called 'peer production of governance' (Johnson et al. as late as 2004).

In this first phase, Internet governance research was strongly influenced by the idea that the network of networks was radically new and unique. The literature was therefore predominantly empirical and drew its insights from field observations and some undeclared participatory research. Strikingly, no author defined Internet governance. Gillet and Kapor (1997) equated governance with management, while others used the term to discuss various modes of rule-making, structures and practices. To some degree, these shortcomings of the founding days of Internet governance research are still noticeable today, as Van Eeten and Mueller's (2013) recent criticisms attest.

With the advent of the United Nations (UN) WSIS and the founding of the IGF in 2006, a second phase of Internet governance research began. WSIS drew new scholars to the field, but more importantly, it became the catalyst for the first definition of Internet governance. Paradoxically, it was the contested, highly political nature of Internet governance at WSIS – and not an academic dispute – that led governments to set up a Working Group on Internet Governance tasked with defining Internet governance. Since then, almost every academic article on the subject has built on it: 'Internet governance is the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures and programmes that shape the evolution and use of the Internet' (The Working Group on Internet Governance [WGIG], 2005).

The political context shaping the definition is evident in the actors listed and in the phrase 'in their respective roles', a verbatim, if contested, quote from the Geneva Declaration of Principles. Remarkably, it resembles Krasner's (1982: 186) state-centred definition of international regimes and excludes contracts and policies, although their impact on the development and use of the Internet is undeniable. The WGIG definition is a creature of its time; it is a multi-stakeholder artefact decoupled from academic research on the nature of transnational governance arrangements. Yet, building on the work done by WGIG, the last decade has seen a rise of research on the characteristics of Internet governance. In the following sections, we will present some insights regarding its scope, actors and modes of governance.

The scope of Internet governance

In their sweeping critique of the Internet governance literature, Van Eeten and Mueller (2013) observe that most contributions focus on institutions that are explicitly involved in the 'discussion of the global governance of the Internet' (p. 721). Thus, governance is thought to be enacted by 'formal organizations with explicitly institutionalized rules and procedures' (Van Eeten and Mueller, 2013: 727). The problem with this focus is that relevant governing practices and policies taking place outside of these bodies are easily

overlooked. Epstein (2011: 4) therefore suggests looking at the boundaries of Internet governance as a matter of ongoing negotiation. DeNardis (2012) and Braman (2012) stress the role of protocol and infrastructure design as a manifestation of power and political values. While expanding the scope of Internet governance to include non-obvious ordering modes seems reasonable, this creates a new problem: the fuzzier the boundaries of Internet governance, the more difficult it becomes to determine what is actually inside and outside of its scope. We will return to this problem below.

Actors and modes of Internet governance

As the WSIS definition points out, Internet governance involves many actors. Likewise, Bygrave (2009) notes that governance ‘embraces more than government’ (p. 2) and links the variety of actors to plural modes of governance. While Bygrave (2009) understands governance as ‘government plus’, Mueller (2010), portrays it as something ‘weaker than government’ (p. 8) that ‘denotes the coordination and regulation of interdependent actors in the absence of an overarching political authority’. Although ‘some steering and shaping function’ still exists, it is ‘less hierarchical and authoritative’. ‘Real-world governance of the Internet’, Mueller (2010) concludes, ‘is decentralized and emergent; it comes from the interactions of tens of thousands of network operators and service providers – and sometimes users themselves – who are connected through the Internet protocols’ (p. 9). This broad understanding of governance implies that governance may be just a side effect of actions with non-governance-related aims that is, simply communicating over the Internet.

Interestingly, the acknowledged plurality of actors is used to support opposing conclusions on the means of governance. Bygrave focuses on binding laws enhanced by other means, whereas Mueller observes an overall loss of regulatory authority. Feick and Werle (2010) offer a plausible reading of these contradictory views, describing Internet governance as ‘patchworks of partly complementary, partly competing regulatory elements in the form of legal rules and ordinances, mandatory and voluntary technical standards and protocols, international and national contracts and agreements, and informal codes of conduct and “netiquette”’ (p. 525).

However, if we understand Internet governance as patchworks of regulation without any overarching rationality and authoritative control, what does this mean for the concept of governance itself? More precisely, how can governance be equated with regulation – as many, if not most, authors in this research field do² – if the very conditions for purposeful, targeted regulation and steering are absent or at least uncertain? Regulation, understood as ‘forms of deliberative collective action in matters of public interest’ (Mayntz, 2009: 121), minimally assumes a subject capable of deliberation about the public interest, intentional rule-making and rule implementation (Black, 2008: 139).

To better understand Internet governance, the discrepancy between governance as deliberate, targeted regulation and as heterogeneous, more or less interdependent processes and practices needs to be resolved. The question is how governance should be defined under the conditions of distributed collective action, overlapping authorities and competing rationalities and goals.

Some hints towards an answer can be found in Brousseau et al.'s (2012) notion of 'heterarchic governance' or a 'networked heterarchy' (p. 16), which is characterized by the absence of a hierarchy and a unified legitimate order. Starting from the observation that fragmentation and a lack of central control do not imply anarchy or the absence of rules, Brousseau et al. (2012) suggest looking at Internet governance as 'multiple orders' (pp. 16–17), which create a need for internal coordination. The networked heterarchy consists of public and private organizations, which interconnect through various forms of 'mutual recognition and mutual legitimation'. Quoting Jessop (2003), the authors describe this type of coordination as a 'continuing dialogue and resource-sharing to develop mutually beneficial joint projects, and to manage the contradictions and dilemmas inevitably involved in such situations' (Brousseau et al., 2012: 17).³ Understanding Internet governance as coordinating multiple orders implies a different rationality than is usually associated with regulation. In fact, one of the striking features of heterarchic governance arrangements is the procedural orientation and clear emphasis on dialogue, legitimacy and 'negotiated consent as its criterion of success' (Brousseau et al., 2012: 17). The annual global IGF, whose mandate focuses on dialogue and facilitation and explicitly excludes any formal outcomes, epitomizes these features.

As we aim to show, the concept of reflexive governance or coordinating coordination offers a promising solution to the riddle of how distributed structures and processes practice regulation.

Revisiting concepts of governance and regulation

Introduction to governance as a concept

The concept of governance reflects a broad understanding of ordering processes transcending the actions of governments (Rosenau and Czempiel, 1992). State-centric models of command-and-control have been deemed outdated and incapable of accounting for the complex interactions between the state and society (Jessop, 2003; Mayntz, 2003). The governance perspective has highlighted pluricentric regimes and rationalities, cooperation and competition, new sites and tools of ordering. The state is no longer understood as the 'control centre of society' (Mayntz, 2003: 29), but as one actor among others. As a result, the boundaries between rule-makers and rule-takers are becoming blurry. Not only soft laws, such as informal agreements, memorandum of understandings, codes of conducts, but also technical standards and other forms of expertise have become prominent in the governance literature (Feick and Werle, 2010: 525).

The concept of governance is analytically valuable, because it comprehensively understands ordering processes and de-essentialises the role of public authority. It represents a significant shift in the analysis of rule-making with a focus on 'structured interaction' (Colebatch, 2006), interaction of various regulatory structures (Bora and Munte, 2012), cooperation and negotiation (Levi-Faur, 2013), coordination (Schuppert, 2008), conversation and discursive manifestation (Flyverbom and Bislev, 2008).

Yet, this reconceptualisation has come at a price. Governance is a 'notoriously slippery' (Pierre and Peters, 2000: 7) term that is difficult to operationalize, giving few clues about the specific structures, processes and actors that replace the concept of command

and control. Critics point out that governance is an ahistorical concept that lacks a theoretical core and moreover fails to distinguish between empirical findings and its conceptual or ideological components. Moreover, the concept lacks clear boundaries; many authors do not specify which forms of coordination qualify as governance and which do not. Some observers, therefore, dismiss the concept as an 'empty signifier' or under-specified fad (Kohler-Koch and Rittberger, 2006; Offe, 2008).

Governance as regulation

A common way of defining governance is to equate it with regulation. Generally speaking, regulation is understood as those operations that intend to influence a given state in a regulatory field. Black (2001) defines regulation as a 'process involving the sustained and focused attempt to alter the behaviour of others according to identified purposes with the intention of producing a broadly identified outcome' (p. 142). Regulation may involve the provision of norms, infrastructure or other resources and is carried out by both state and non-state actors (Baldwin et al., 2012: 105ff; Levi-Faur, 2011: 7ff). Whatever form it takes, a crucial feature is that its impact is considered predictable. A regulatory perspective thus links ordering processes with explicit objectives and measures. Based on goals and resources, regulatory actors evaluate their options to intervene in a specific field and choose actions deemed effective to produce a desirable outcome. In sum, regulation is characterized by intentional and goal-directed interventions into a policy domain.

Many authors now argue that governance is best understood as *regulation* (Feick and Werle, 2010: 525; Grande, 2012: 580). Rosenau and Czempiel (1992) lay the foundations for this understanding by defining governance as 'order plus intentionality' (p. 5). For example, Risse (2011) defines governance as 'institutionalized modes of social coordination to produce and implement collectively binding rules [and] collective goods' (p. 9). Thus, although speaking of 'coordination' seems to allude to a broader understanding, this definition ties governance processes to pre-defined goals and intentional activities (for similar arguments, see Mayntz, 2009: 122; H  ritier and Lehmkuhl, 2008: 1) – hence, to regulation as defined before.

A related notion of governance shifts the focus to the meta-level of regulation. Kooiman's (1999) concept of 'second-order governance' and the literature on 'regulatory governance' (cf. Levi-Faur, 2011, for an overview) address the design and evaluation of regulatory structures, in other words, the regulation of regulation.

Thus, equating governance with regulation in the field of Internet governance echoes a common understanding in the broader governance and regulation literature. Governance gains a clear outline by focusing on intentional interventions directed towards solving public policy problems and enhancing the common good. Yet, we argue that using governance and regulation synonymously strips it of some analytical potential. Without doubt, regulation is a strongly relevant perspective on ordering processes, but it is not the only one. It comes with its own limitations.

The limitations of governance as regulation

One limitation of equating governance with regulation is that it can only account for a limited set of ordering processes. Looking through the lens of regulation obscures a wide

range of phenomena, including many of the aspects of Internet governance. If regulation only covers the processes that aim to achieve specific (policy) goals, the rules and institutions that emerge as side effects of actors pursuing non-regulatory goals (such as traffic management by Internet service providers) are difficult to consider from a regulatory perspective. However, such emergent orders are manifold in digital contexts. In fact, as Van Eeten and Mueller (2013) argue, much of the Internet's ordering takes place unintentionally. For this reason, understanding governance as regulation may unduly limit the scope of analysis. Many processes and structures would simply not qualify as Internet governance.

The second limitation of a regulatory perspective on governance is that it tends to interpret existing rules and institutions as functional outcomes of problem-solving activities (Grande, 2012: 582; Mayntz, 2003). However, in many cases, this explanation would not pass empirical inspection. What may gradually become accepted as a solution to a given problem often evolves as an unexpected and unintended side effect of complex coordination processes. Important regulatory structures, such as national tax systems, European data protection or ICANN's multi-stakeholder arrangements are not easily explained in functional terms, or as the outcomes of intentional design.

These shortcomings are highly relevant for the field of Internet governance. In their critique, Van Eeten and Mueller (2013) call for a more comprehensive understanding of governance that encompasses 'environments with low institutionalization, large numbers of actors and massively distributed authority and decision making power' (pp. 722, 731). The authors suggest an approach based on transaction cost economics, thereby extending governance well beyond regulation. At the same time, however, they argue that definitions of governance regularly centre on the 'notion of steering', a definition that 'suits [their] purposes as well' (Van Eeten and Mueller, 2013: 721). Similarly, regarding the IGF, the authors use a definition of governance that is focused on intentional rule-making: since the IGF does not produce formal outcomes, in their view it does not constitute Internet governance (Van Eeten and Mueller, 2013: 728).

These inconsistencies in the literature raise the question of how to define governance to capture the processes and structures that are regarded as influential for the development of the Internet? While broad definitions that include all forms of social coordination risk being too vague to be useful as an analytical concept, efforts to narrow it down to intentional forms of regulation are likely to lose the analytical benefit. This is the central conceptual dilemma that governance research currently faces. The next section will suggest a way to deal with this problem that is particularly relevant for the study of Internet governance.

Governance as reflexive coordination

Our approach on governance proposes a fundamental shift in perspective: instead of gradually extending a regulatory perspective beyond nation-states, public decision-making and formal policy instruments, we suggest studying Internet governance as a continuous heterogeneous process of ordering without a clear beginning and endpoint. We achieve this change of perspective by grounding governance in coordination. This will allow us to account for the emergent orders prevalent in rule-making in digital contexts and to include the practices of Internet users, providers and other stakeholders *as* Internet governance.

This implies a shift in theoretical orientation. We suggest connecting governance and regulation research with broader social theory. Approaches based on structuration theory and sociological neo-institutionalisms are particularly useful for investigating the plurality of ordering mechanisms. Specifically, we draw on the French school of economics of conventions (EC) and actor–network theory (ANT), as this literature helps us to spell out the co-construction of established practices and orders in Internet governance.

Grounding governance in coordination

The proposed shift anchors governance in mundane coordination activities.⁴ This bottom-up perspective focuses on the mutual adjustments we make in our daily social life, which are regarded as elementary building blocks of social order. Thus, instead of centring on laws, regulatory structures and enforcement measures, governance as coordination highlights the day-to-day practices that organize our social lives: why do we pass each other smoothly on the street, instead of bumping into each other (yet, sometimes we do)? Why do we share some photos online, but not others? What motivates peering coordinators to connect their networks to others? In all these instances, we mutually coordinate our activities: we articulate and sometimes adjust our understandings and expectations; we follow rules we have internalized and agreed to (or not).

Governance as coordination draws in many ways on ANT and EC. Both approaches refrain from taking social order for granted. Instead, they stress the need for continuous coordination and agreement (Boltanski and Thévenot, 2006 [1990]) and thus direct their attention to the practical accomplishment of social order. Rather than starting from a stable set of institutions and structures, both approaches assume a fundamental uncertainty underlying everyday situations and therefore focus on the conventions that help actors to master their encounters. In consequence, EC sharply revises the notion of social order: ‘#Society#, then, is not an encompassing social order but rather multiple agreements – as well as persistent disputes – of highly varying extensions, durability and substance’ (Wagner, 1994: 274).⁵

ANT similarly challenges the presumption of a given social order – but from a slightly different angle. While it also asserts the need to ‘re-assemble the social’ (Latour, 2005), ANT does this by focusing on heterogeneous elements and their linkages, which are assumed to constitute the social. What we consider an institutionalized practice, be it as mundane as sharing a picture or as professional as peering traffic with other networks, is a highly contingent result of interconnected people and things, claims and translations. ANT thus posits that the social is merely the ‘coming together of networks into a momentary, fragile form of order’ (Flyverbom, 2011: 5).

Grounding governance in coordination means studying ordering processes from the bottom-up rather than proceeding from regulatory structures, because, as John Law (1994) puts it, ‘There is no social order. Rather, there are endless attempts at ordering’ (p. 101). Drawing on EC and ANT, we emphasize the fragility of the shared norms and understandings that facilitate everyday coordination, their local variety and their often implicit nature. From this perspective, a social order results from distributed forms of coordination that vary, not only in terms of the number of people involved, their geographic or social reach, but also their stability.

This approach allows us to investigate Internet governance as diverse practices that go beyond the activities of organizations, such as ICANN or the Internet Engineering Task Force (IETF): it not only involves commercial and technological innovations driven by platform providers, the evolution of the Internet infrastructure, interconnection agreements between network providers, security measures implemented by Internet service providers but also the day-to-day regulation of user-generated-content on platforms such as Facebook, YouTube and Twitter.

Flyverbom (2010), for example, uses the notion of *ordering* to account for the diverse sets of ‘work, techniques and interactions through which the global information society (is) made governable’ (p. 426). DeNardis (2012) emphasizes Internet infrastructure as a means of governing and argues for an analytical framework that accounts for the embedded politics of technical architecture. Epstein (2013) highlights the ordering impact of institutions without rule-making competence (such as the IGF) by ‘revising what is considered legitimate or authoritative engagement in policy deliberation’⁶ (p. 148).

What these works share is that they do not portray Internet-related activities primarily as *objects* of governance (objects to be regulated), but as elements *constitutive* of it (means of coordination). Implicitly – and sometimes explicitly – such coordination activities articulate, reify or question the norms shaping Internet governance. The continuously emerging and dissolving order we call Internet governance is thus an effect generated by heterogeneous means.

From coordination to reflexive coordination

While conceptualizing governance as coordination offers instructive insights into the practical ways of ordering the global information and communication infrastructures, it obviously does not resolve the above-described dilemma. Understanding governance as coordination or ordering – without further specification – is too broad to be analytically and empirically helpful. Yet, a common understanding of what does *not* constitute Internet governance is still lacking. Practically, all activities relating to the provision of Internet infrastructure and related services, even their routine usage, would need to be considered Internet governance, since they all arise from – and constitute – the coordination between different actors.

We suggest addressing this dilemma by distinguishing between simple and reflexive coordination and delimiting governance to the latter (cf. Straßheim, 2009; see also Brousseau et al., 2012; Jessop, 2003). Coordination becomes reflexive when ordinary interactions break down or become problematic (more precisely: the specific mode of interaction in a given situation or context), and we see ourselves forced to discuss and negotiate the underlying norms, expectations and assumptions that guide our actions. Boltanski and Thévenot (1999) call these instances when coordination breaks down ‘critical moments’:

What is pertinent [...] is the reflexivity of this critical moment. [...] People, involved in ordinary relationships, who are doing things together – let us say, in politics, work, unionism – and who have to coordinate their actions, realize that something is going wrong; that they cannot get along anymore; that something has to change. (p. 360)

In such times, when routines stop working and actors recognize a mismatch in their understanding of the situation, a transition takes place from simple coordination to reflexive coordination. When studying governance processes, a focus on coordination problems generates particular insights, because the parties involved need to articulate assumptions, perceptions and norms that were previously implicit (Wagner, 1994: 272). The resulting negotiation process around the meaning and applicability of rules may remain local or affect the institutional setting in a broader way.

Let us again consider the mundane activities described above: passing each other on the street, posting photos to an online platform and peering traffic with other autonomous networks. These practices continuously articulate expectations and evaluations regarding the situations in question: questions of precedence and right of way, considerations of privacy and public visibility and trade-offs between secure communications and usability. It is only when we disagree with the sharing of photos online or when the peering between networks stops that these expectations, norms and evaluations become articulated objects of contestation. It is in the moments when relevant rules, norms and understandings become a subject of debate and reconsideration that we find reflexive coordination.

Following Straßheim (2009), we suggest that acts of reflexive coordination are the nuclei of governance processes. Governance, we propose, should be defined as coordinating coordination or *reflexive coordination*, because it questions and potentially redefines the rules of the game. This definition is broad, because it covers many actors, practices and tools, but at the same time, it is specific, since it focuses on those interactions that refer to the *conditions* of ordinary coordination. Accordingly, simple coordination itself is not part of our definition of governance. Neither mundane forms of using the Internet nor regulatory routines, such as issuing take-down notices or delegating a new Top Level Domain, qualify as governance. However, unlike Van Eeten and Mueller (2013: 728), we ascribe governance functions to organizations, such as the IGF. While the IGF's lack of authority means it is not a regulator, it does contribute to the ordering of the Internet by constantly negotiating and reframing the range of issues regarded as relevant for its future. Targets and outcomes are typical criteria for regulation, but not necessary elements of our understanding of governance.

The key features of governance as reflexive coordination

Referring to ANT, we have stated that networks of heterogeneous elements, among them people, things and practices, (Flyverbom, 2010; see also Law, 1994) are relevant sources of governance. If, due to the popular use of smartphones in the streets, people increasingly bump into each other, critical moments may arise that question and change existing forms of coordination. Likewise, changes in the terms of service of social networks may lead to protest among people who enjoy sharing pictures online. Critical situations occur when different criteria of evaluation and performance come together and actors start redefining the situation in question. Routines are contested, adapted or displaced through practices of articulation and justification. Understanding governance as reflexive coordination elucidates the heterogeneity of sources and means that drive the emergence of ordering structures.

The outcome of reflexive coordination may remain at the level of informal rules, conventions and the 'way we do these things' (Scott, 2008: 58) or it takes the form of formal organizations and rule sets. Regarding the former, neo-institutional sociology has repeatedly highlighted that institutions (in the broad sense of shared expectations and norms) do not need to manifest themselves in explicit rules or organizations to be stable and effective. The more we take routines and norms for granted, the more effectively they guide our behaviour and coordinate our interactions (Zucker, 1977).

Regarding the latter, reflexive coordination may manifest itself in formal institution building. As Straßheim (2009) points out, Elinor Ostrom's (1990) work on governing the commons demonstrates that the real challenge in evading the tragedy of the commons consists in providing and maintaining an institutional order that guarantees sustainable interactions. Likewise, institutional change in ICANN has resulted from reflexive coordination. The planned transition of oversight functions from the US Government to ICANN, for instance, has led to a governance situation par excellence consisting in a comprehensive reconsideration of ICANN's accountability provisions.

Even if coordination problems trigger the formation of new regulatory structures, these new structures should neither be misread as functional solutions to these problems nor as simple products of intentional design. Processes of reflexive coordination, particularly those embedded in complex social structures, are likely to produce emergent outcomes that cannot be traced back to the intentions of a single actor or organization. If we think of the founding and evolution of ICANN, it is obvious that there were many possible solutions for the coordination problems posed by the DNS. Moreover, the current institutional structure of ICANN cannot be linked to one specific stakeholder group's interests or intentions.

The distinction between simple and complex coordination arrangements helps to explain the different impacts that intentions have on the outcome of governance processes: 'Intentions and orientations play a role in simple governance structures consisting of single coordination mechanisms; they lose relevance with the complexity of governance' (Grande, 2012: 582). Intentions do not lose all relevance; they just become less significant for explaining the outcome of a complex governance process. Enduring negotiation processes, such as those that characterize Internet governance, rules and institutions, is the result of distributed and emergent forms of ordering rather than the product of intentional reform. Again, emphasizing the emergent quality of governance processes does not mean that the actors involved do not act intentionally. Yet, there is likely to be more than one intention involved and not all of them pursuing the same goals, and furthermore, the outcomes and (side) effects of collective actions cannot be attributed to shared intentions.

A reflexive concept of governance underscores its processual nature. There are countless moments of coordination that constitute our social life and societal order, and governance arises from problematizing these daily practices. Hence, a reflexive notion of governance does not equate governance with deliberate interventions into a policy domain or the intentional creating of administrative structures. Conversely, regulatory actions are likely to become a governance issue, when they meet with resistance or miss their targets.

As Jessop (2003) notes, many policy processes do not result in the kind of success stories that motivate and justify regulatory action. In fact, Jessop (2003) regards failure as ‘the most likely outcome’ (p. 116) of governing activities. When policy objectives are often missed, the actors involved may aim to bring ‘about conditions for negotiated consent and self-reflexive learning’ (Jessop, 2003: 114). Governance conceptualized as coordinating coordination is able to shed light on the intricate chains of actions that gradually transform policy targets, perceptions of problems and regulatory tools. A case in point is the constant reform process that has shaped the regulation of the DNS. The rule-making authority of ICANN is accompanied by ongoing negotiations of its conditions, boundaries and legitimacy, which is a feature that seems to be characteristic for multi-stakeholder processes more generally, as Tamm Hallström and Boström (2010) note.

The process perspective on governance implies that policy objectives do not precede policy activities, but are formed and transformed throughout the coordination of coordination. Governance, therefore, may be conceived of as an enduring and meandering course of events without a clear starting and end point. The emphasis on open-ended processes also involves particular policy evaluation criteria. While regulatory actions are normally evaluated against predefined goals, governance processes do not lend themselves to explicitly pre-defined success criteria. Due to their dynamic character, success and failure of ongoing governance processes appear to be less clear-cut. As Grande (2012: 584) astutely observes, the assessment of governance arrangements ultimately depends on the acceptance of its consequences for the actors involved. Thus, both targets and evaluation criteria are defined as part of governance processes. The IGF is a vivid example of this phenomenon. Designed as a policy dialogue without any tangible outcomes, its performance has been somewhat difficult to assess. In practice, the success and failure of the IGF have been defined, in terms of the ‘smoothness’ of its annual meetings, as Epstein (2011) puts it, ‘As a front stage performance (Goffman) aimed at an idealized presentation of multi-stakeholder policy dialogue, explicit conflicts among the stakeholders are viewed as very problematic’ (p. 24). A major difference between the analytical lenses of regulation and governance is the differing emphasis on a process. From a reflexive coordination point of view, many parameters taken as given in regulation studies (policy targets and outcomes) are expected to be in flux.

Disentangling governance, regulation and coordination in Internet governance

Building on these key features of governance, we can now more precisely disentangle the concepts of governance, regulation and coordination often synonymously used in Internet governance. While all these terms address processes and structures of ordering, they do so in different ways.

Coordination is the broadest of the three categories. It reflects the social nature of interactions: ‘Actors are not fully in control of the activities that can satisfy their interests, but find some of those activities partially or wholly under the control of others’ (Coleman, 1990: 29). For this reason, we need to observe each other and coordinate our actions; sometimes we try to influence the involved parties or enter into explicit negotiations.

Coordination thus includes all reciprocal interactions mediating mutual (successful or failed) adjustments (Straßheim, 2009: 466). Coordination encompasses mundane activities and processes that contribute to the emergence, affirmation or deinstitutionalization of shared norms, often without intending to. Typical forms of Internet-related coordination that produce ordering as a by-product include sharing photos online, thereby enacting assumptions about publicness and privacy. Likewise, network engineers' informal rules and routines may shape the topography and responsiveness of the Internet. Thus, the coordination perspective reveals the emergent ordering effects of practices and routines by Internet providers, platforms and users – without specifically aiming at collective rule-making or institution building.

Internet *governance*, as we argued, should not be equated with coordination, as it would yield a notion too broad to be analytically and empirically useful. If interpreted as coordination, all Internet-related activities would qualify as Internet governance. Our proposed concept of governance as *reflexive* coordination highlights critical moments when routine coordination fails, when the (implicit) expectations of the actors involved collide and contradictory interests or evaluations become visible. Coordination thus turns into governance, when a conflict about photo sharing arises. The involved parties then need to enter into a debate about the relevant rules, norms and understandings underpinning their practices. Similarly, in situations of conflict or outage, network engineers address and adjust their coordination practices, which have effects on the routing of Internet traffic (Meier-Hahn, 2015). Hence, Internet governance refers to addressing, questioning and renegotiating Internet-related coordination practices.

Regulation, in turn, constitutes a categorically different perspective on ordering the Internet. In our understanding, it is characterized by intentional and goal-directed interventions into a policy domain with the aim of influencing others' behaviour. Regulation may take the form of legislation, private self-regulation or multi-actor arrangements; in all cases, however, it links ordering processes with explicit objectives and measures. Regulatory actors, private or public, assess their options to intervene in a specific field and use the means they deem effective to achieve a desired outcome. Regulation research studies the implementation and impact of these interventions. This means that the sharing of photos online and the peering of Internet traffic are also matters of regulation covered by public law, terms of services and bilateral contracts.

To sum up, all three perspectives are valuable for investigating the development of the Internet. The distinction between coordination, governance and regulation is analytical, in the sense that all examples can be investigated through different conceptual lenses bringing different aspects of ordering to the fore. However, they can only unleash their analytical potential, if we clearly distinguish between them.

Conclusion

Recently, an important conversation on researching governance in Internet governance has begun (DeNardis, 2014; Van Eeten and Mueller, 2013; Ziewitz and Pentzold, 2014). This article has sought to contribute to this theoretical reflection by bringing together two related, but still disconnected strands of research – one on governance and another on Internet governance. As a brief literature review revealed, studies on Internet governance

rely on partly contradictory notions of governance. The common understanding of governance as some form of deliberate steering or regulation clashes with the equally common definition of Internet governance first suggested by WGIG (2005), which emphasizes its distributed and heterogeneous character. Understanding governance as regulation diminishes its analytical benefit, while equating it with social coordination raises the question of scope: what is not Internet governance, if we include all sorts of unintended side effects?

Our own response to this dilemma builds on governance and regulation research on one hand, and recent sociological approaches on the other. We consider governance as being grounded in social coordination. Following Straßheim (2009), we suggest limiting the concept to *reflexive* coordination: we find governance in those forms of coordination that address their very conditions. It occurs when routine ways of interacting become problematic and require adjustment, when public criticism flares up or when established procedures lose legitimacy. These ‘critical moments’ open temporary windows to the precarious conditions underpinning social coordination, which, more often than not, may be in need of adaption.

The approach to governance introduced here places a strong emphasis on processes (rather than structures). Its boundaries are enacted and constantly negotiated by the actors involved. While regulation connotes intentional procedures, including formally agreed resources, means and targets that can be met or missed, governance is concerned with the conditions under which such activities take place. Differentiating between governance and regulation resolves the contradiction between the different forms of political ordering found on the Internet, and it may prepare the ground for new analytical approaches.

Internet governance, understood as reflexive coordination, is a heuristic concept in its infant stages, and it requires further elaboration and empirical inspection. We think it can, and should, be enriched by other theoretical approaches, in order to find the governance in Internet governance. If our work contributes to a debate on the conceptual foundations of Internet governance, and thus prompts a ‘critical moment’ in this research field, we will have achieved our goal.

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Notes

1. Brousseau and Marzouki (2012: 371–372) mention a 1998 International Telecommunication Union (ITU) resolution as the first reference to Internet governance.
2. See Mueller et al. (2007), who define governance ‘in terms of intentional ordering’ (p. 244), Solum (2009), who equates governance with ‘the regulation of internet infrastructure [and content]’ (p. 50), and DeNardis (2012), who operationalizes governance ‘through technical design decisions, the policies of private industry, the decisions of new global institutions, and the policies of national governments’ (p. 722).
3. Jessop (2003) adopted the term ‘reflexive governance’ to designate the activities involved in managing the frictions, gaps and other problems, which occur in heterarchic environments.

4. Equating governance with coordination is not a new idea. For example, Malpas and Wickham (1995) for a sociological approach; Williamson (1975) for institutional economics.
5. Social classifications and categories, once agreed to and collectively recognized with the help of artifacts, devices and technology, have been found to be an important source of coordination and sociotechnical order (cf. Bowker and Star, 1999; Law and Bijker, 1992).
6. Cf. Ziewitz and Pentzold (2014) and Musiani (2014) for an overview of recent science and technology studies (STS)-informed accounts of Internet governance.

References

- Baldwin R, Cave M and Lodge M (2012) *Understanding Regulation: Theory, Strategy, and Practice*. 2nd ed. New York: Oxford University Press.
- Barlow JP (1996) A Declaration of the independence of cyberspace. Available at: <https://projects.eff.org/~barlow/Declaration-Final.html> (accessed 20 September 2015).
- Black J (2001) Decentering regulation: understanding the role of regulation and self-regulation in a “post-regulatory” world. *Current Legal Problems* 54(1): 103–146.
- Black J (2008) Constructing and contesting legitimacy and accountability in polycentric regulatory regimes. *Regulation & Governance* 2(2): 137–164.
- Boltanski L and Thévenot L (1999) The sociology of critical capacity. *European Journal of Social Theory* 2(3): 359–377.
- Boltanski L and Thévenot L (2006 [1990]) *On Justification: Economies of Worth*. Princeton, NJ: Princeton University Press.
- Bora A and Münte P (2012) Mikrostrukturen der Governance und die Konstitution regulativer Staatlichkeit: umrisse eines Forschungsfeldes. In: Bora A and Münte P (eds) *Mikrostrukturen der Governance. Beiträge zur materialen Rekonstruktion von Erscheinungsformen neuer Staatlichkeit*. Baden-Baden: Nomos, pp. 7–27.
- Bowker GC and Star SL (1999) *Sorting things out: classification and its consequences*. Cambridge, MA: MIT Press.
- Braman S (2012) Privacy by design: networked computing, 1969–1979. *New Media & Society* 14(5): 798–814.
- Brousseau E and Marzouki M (2012) Internet governance: old issues, new framings, uncertain implications. In: Brousseau E, Marzouki M and Méadel C (eds) *Governance, Regulations and Powers on the Internet*. New York: Cambridge University Press, pp. 368–397.
- Brousseau E, Marzouki M and Méadel C (2012) Governance, networks and digital technologies: societal, political and organizational innovations. In: Brousseau E, Marzouki M and Méadel C (eds) *Governance, Regulations and Powers on the Internet*. New York: Cambridge University Press, pp. 3–36.
- Bygrave LA (2009) Introduction. In: Bygrave LA and Bing J (eds) *Internet Governance: Infrastructure and Institutions*. Oxford: Oxford University Press, pp. 1–7.
- Colebatch HK (2006) What work makes policy? *Policy Sciences* 39: 309–321.
- Coleman JS (1990) *Foundations of Social Theory*. Cambridge: Harvard University Press.
- DeNardis L (2012) Hidden levers of Internet control. *Information, Communication & Society* 15(5): 720–738.
- DeNardis L (2014) *The Global War for Internet Governance*. New Haven, CT: Yale University Press.
- Epstein D (2011) Manufacturing Internet policy language: the inner workings of the discourse construction at the Internet Governance Forum. In: Proceedings of the telecommunications policy research conference (TPRC 2011), Arlington, VA, 23–25 September. Available at: <http://ssrn.com/abstract=1989674> (accessed 20 September 2015).

- Epstein D (2013) The making of institutions of information governance: the case of the Internet Governance Forum. *Journal of Information Technology* 28(2): 137–149.
- Feick J and Werle R (2010) Regulation of cyberspace. In: Baldwin R, Cave M and Lodge M (eds) *The Oxford Handbook of Regulation*. Oxford: Oxford University Press, pp. 523–547.
- Flyverbom M (2010) Hybrid networks and the global politics of the digital revolution – a practice-oriented, relational and agnostic approach. *Global Networks* 10(3): 424–442.
- Flyverbom M (2011) *The Power of Networks: Organizing the Global Politics of the Internet*. Cheltenham: Edward Elgar Publishing.
- Flyverbom M and Bislev S (2008) Internet regulation – multi-stakeholder participation and authority. In: Hansen HK and Salskov-Iversen D (eds) *Critical Perspectives on Private Authority in Global Politics*. Basingstoke: Palgrave Macmillan, pp. 72–90.
- Froomkin AM (2000) Wrong turn in cyberspace: using ICANN to route around the APA and the constitution. *Duke Law Journal* 50(1): 17–184.
- Gillet SE and Kapor M (1997) The self-governing Internet: coordination by design. In: Kahin B and Keller JH (eds) *Coordinating the Internet*. Cambridge, MA: MIT Press, pp. 3–38.
- Grande E (2012) Governance-Forschung in der Governance-Falle? Eine kritische Bestandsaufnahme. *Politische Vierteljahresschrift* 53(4): 565–592.
- Héritier A and Lehmkuhl D (2008) The shadow of hierarchy and new modes of governance. *Journal of Public Policy* 28(1): 1–17.
- Jessop B (2003) Governance and meta-governance: on reflexivity, requisite variety and requisite irony. In: Bang HP (ed.) *Governance as Social and Political Communication*. Manchester; New York: Manchester University Press, pp. 101–116.
- Johnson DR and Post DG (1997) And how shall the Net be governed? A meditation on the relative virtues of decentralized, emergent law. In: Kahin B and Keller JH (eds) *Coordinating the Internet*. Cambridge, MA: MIT Press, pp. 62–91.
- Johnson DR, Crawford SP and Palfrey JG (2004) The accountable net: peer production of Internet governance. *Virginia Journal of Law and Technology* 9(9): 1–33.
- Kahin B and Keller JH (eds) (1997) *Coordinating the Internet*. Cambridge, MA: MIT Press.
- Kahin B and Nesson C (eds) (1997) *Borders in Cyberspace: Information Policy and the Global Information Infrastructure*. Cambridge, MA: MIT Press.
- Kohler-Koch B and Rittberger B (2006) Review article: the ‘governance turn’ in EU studies. *Journal of Common Market Studies* 44: 27–49.
- Kooiman J (1999) Social-political governance. *Public Management Review* 1(1): 67–92.
- Kooiman J, Bavinck M, Chuenpagdee R, et al. (2008) Interactive governance and governability: an introduction. *The Journal of Transdisciplinary Environmental Studies* 7(1): 1–11.
- Krasner SD (1982) Structural causes and regime consequences: regimes as intervening variables. *International Organization* 36(2): 185–205.
- Latour B (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Law J (1994) *Organizing Modernity: Social Action and Social Theory*. Oxford: Blackwell.
- Law J and Bijker WE (1992) Postscript: technology, stability, and social theory. In: Bijker WE and Law J (eds) *Shaping Technology/Building Society: Studies in Sociotechnical Change*. Cambridge, MA: MIT Press, pp. 290–308.
- Levi-Faur D (2011) Regulation and regulatory governance. In: Levi-Faur D (ed.) *Handbook on the Politics of Regulation*. Cheltenham: Edward Elgar Publishing, pp. 3–21.
- Levi-Faur D (2013) What is governance? In: *The Governance blog*. Available at: <http://governancejournal.net/2013/03/10/levi-faur-on-what-is-governance/> (accessed 20 September 2015).
- Malpas J and Wickham G (1995) Governance and failure: on the limits of sociology. *Journal of Sociology* 31(3): 37–50.

- Mayntz R (2003) New challenges to governance theory. In: Bang HP (ed.) *Governance as Social and Political Communication*. Manchester; New York: Manchester University Press, pp. 27–40.
- Mayntz R (2009) The changing governance of large technical infrastructure systems. In: Mayntz R (ed.) *Über Governance: Institutionen und Prozesse politischer Regelung*. Frankfurt: Campus Verlag, pp. 121–150.
- Meier-Hahn U (2015) *Internet Interconnection: Networking in Uncertain Terrain*. RIPE Labs. Available at: https://labs.ripe.net/Members/uta_meier_hahn/internet-interconnection-networking-in-uncertain-terrain (accessed 20 September 2015).
- Mueller M (2002) *Ruling the Root: Internet Governance and the Taming of Cyberspace*. Cambridge, MA: MIT Press.
- Mueller M (2010) *Networks and States: The Global Politics of Internet Governance*. Cambridge, MA: MIT Press.
- Mueller M, Mathiasen J and Klein H (2007) The internet and global governance: principles and norms for a new regime. *Global Governance* 13(2): 237–254.
- Musiani F (2014) Practice, plurality, performativity, and plumbing: internet governance research meets science and technology studies. *Science, Technology & Human Values* 40(2): 272–286.
- Offe C (2008) Governance – ‘Empty signifier’ oder sozialwissenschaftliches Forschungsprogramm? In: Zürn M and Schuppert GF (eds) *Governance in einer sich wandelnden Welt*. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 61–76.
- Ostrom E (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Pierre J and Peters BG (2000) *Governance, Politics and the State*. New York: St. Martin’s Press.
- Reidenberg JR (1997) Governing networks and rule-making in cyberspace. In: Kahin B and Nesson C (eds) *Borders in Cyberspace: Information Policy and the Global Information Infrastructure*. Cambridge: MIT Press, pp. 84–105.
- Risse T (2011) Governance in areas of limited statehood: introduction and overview. In: Risse T (ed.) *Governance without a state? Policies and politics in areas of limited statehood*. New York: Columbia University Press, pp. 1–38.
- Rosenau JN and Czempiel EO (eds) (1992) *Governance without Government: Order and Change in World Politics*. Cambridge: Cambridge University Press.
- Schuppert GF (2008) Governance – auf der Suche nach Konturen eines ‘anerkannt uneindeutigen Begriffs’. In: Schuppert GF and Zürn M (eds) *Governance in einer sich wandelnden Welt*. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 13–40.
- Scott WR (2008) *Institutions and Organizations: Ideas and Interests*. 3rd ed. Los Angeles, CA: SAGE.
- Solum LB (2009) Models of Internet governance. In: Bygrave LA and Bing J (eds) *Internet Governance: Infrastructure and Institutions*. Oxford: Oxford University Press, pp. 48–91.
- Straßheim H (2009) Governance als reflexive Koordination. In: Botzem S, Hofmann J, Quack S, et al. (eds) *Governance als Prozess. Koordinationsformen im Wandel*. Baden-Baden: Nomos, pp. 461–478.
- Tamm Hallström K and Boström M (2010) *Transnational Multi-Stakeholder Standardization: Organizing Fragile Non-State Authority*. Cheltenham: Edward Elgar Publishing.
- The Working Group on Internet Governance (WGIG) (2005) *Report of the Working Group on Internet Governance*. Chateau de Bossey. Available at: <http://www.wgig.org/docs/WGIGREPORT.pdf>
- Van Eeten MJ and Mueller M (2013) Where is the governance in Internet governance? *New Media & Society* 15(5): 720–736.
- Wagner P (1994) Dispute, uncertainty and institution in recent French debates. *The Journal of Political Philosophy* 1(3): 270–289.

- Williamson OE (1975) *Markets and Hierarchies*. New York: Free Press.
- Ziewitz M and Pentzold C (2014) In search of internet governance: performing order in digitally networked environments. *New Media & Society* 16(2): 306–322.
- Zucker LG (1977) The role of institutionalization in cultural persistence. *American Sociological Review* 42(5): 726–743.

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