Multi-stakeholderism: Anatomy of an Inchoate Global Institution

Mark Raymond and Laura DeNardis

MULTI-STAKEHOLDERISM:
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CIGI

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International Affairs

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ABOUT THE GLOBAL COMMISSION ON INTERNET GOVERNANCE

The Global Commission on Internet Governance was established in January 2014 to articulate and advance a strategic vision for the future of Internet governance. The two-year project conducts and supports independent research on Internet-related dimensions of global public policy, culminating in an official commission report that will articulate concrete policy recommendations for the future of Internet governance. These recommendations will address concerns about the stability, interoperability, security and resilience of the Internet ecosystem.

Launched by two independent global think tanks, the Centre for International Governance Innovation (CIGI) and Chatham House, the Global Commission on Internet Governance will help educate the wider public on the most effective ways to promote Internet access, while simultaneously championing the principles of freedom of expression and the free flow of ideas over the Internet.

The Global Commission on Internet Governance will focus on four key themes:

- enhancing governance legitimacy — including regulatory approaches and standards;

- stimulating economic innovation and growth — including critical Internet resources, infrastructure and competition policy;

- ensuring human rights online — including establishing the principle of technological neutrality for human rights, privacy and free expression; and

- avoiding systemic risk — including establishing norms regarding state conduct, cybercrime cooperation and non-proliferation, confidence-building measures and disarmament issues.

The goal of the Global Commission on Internet Governance is two-fold. First, it will encourage globally inclusive public discussions on the future of Internet governance. Second, through its comprehensive policy-oriented report, and the subsequent promotion of this final report, the Global Commission on Internet Governance will communicate its findings with senior stakeholders at key Internet governance events.

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ACRONYMS

DNS	Domain Name System
GAC	Governmental Advisory Committee
GAVI	Global Alliance for Vaccines and Immunization
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HTML	Hypertext Markup Language
IANA	Internet Assigned Numbers Authority
ICANN	Internet Corporation of Assigned Names and Numbers
IETF	Internet Engineering Task Force
IGF	Internet Governance Forum
IGOs	intergovernmental organizations
IOSCO	International Organization of Securities Commission
IP	Internet Protocol
IPR	intellectual property rights
IR	international relations
ISO	International Organization for Standardization
ISP	Internet Service Provider
ITU	International Telecommunication Union
NGO	non-governmental organization
NTIA	National Telecommunications and Information Administration
OCED	Organisation for Economic Co-operation and Development
RFC	Request for Comments
RSB	Roundtable on Sustainable Biomaterials
TCP	Transmission Control Protocol
TLD	top-level domain
W3C	World Wide Web Consortium
WGIG	Working Group on Internet Governance
WSIS	World Summit on the Information Society
XML	Extensible Mark-up Language

EXECUTIVE SUMMARY

Building on John Gerard Ruggie's pioneering study of multilateralism, this paper presents an analogous study of multi-stakeholder governance, or multi-stakeholderism. Its central argument is that multi-stakeholderism is, as yet, a much less well-defined institutional form. Cases exhibit significant variation both in the combinations of actor classes entitled to participate and the nature of authority relations among those actors. The first section discusses multi-stakeholderism as an institutional form, and proposes a taxonomy of its types. This section also briefly addresses the implications of the analysis for international relations (IR) theory. The paper then conducts a comparative analysis of multi-stakeholderism, applying the taxonomy to five illustrative cases. It demonstrates the degree of inter-case variation, and the range of issue-areas across which the institutional form is employed and invoked by actors. Three cases are drawn from the increasingly contentious area of Internet governance, thus making a secondary contribution to this growing literature. The paper's most striking finding in this regard is that Internet governance often fails to live up to its multi-stakeholder rhetoric. Other cases include governance of securities regulation and the governance of corporate social responsibility. The paper concludes by examining the implications of arguing multi-stakeholderism is a less defined institutional form, and identifying areas for further research.

INTRODUCTION

In 1992, Ruggie published a seminal article on the institution of multilateralism in a special issue of the journal *International Organization* (Ruggie 1992). This article and others in the special issue were not the first IR work on multilateralism. However, Ruggie's article in particular catalyzed the emergence of a literature studying the phenomenon across a range of issue-areas,[1] and was enormously influential in the development of literatures on global governance and the structure of the international system (Ikenberry 2001; Reus-Smit 1997). In the ensuing decades, multilateral diplomacy has remained both an important object of scholarly inquiry and an enduring international institution.

At the same time, new practices and discourses have emerged in response to the efforts of a range of non-state actors to participate more fully in the enterprise of governing the globe, whether or not in multilateral processes (see Price 1998; Keck and Sikkink 1998; Weissbrodt and Kruger 2003; Glasius 2010). This paper argues that much of this activity can be understood by thinking in terms of a distinct, emerging and as-yet inchoate institution of multi-stakeholderism or multi-stakeholder governance. Influenced by Ruggie's work on multilateralism, the paper aims to conduct a parallel analysis of multi-stakeholderism. Existing studies of multi-stakeholderism tend to be issue-specific and concentrated in a small number of technical areas such as Internet governance (see Antonova 2008; Malcolm 2008). Further, the concept remains underdeveloped and susceptible to use in attempts to conceal or advance particular interests

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1 See, for example, Drezner (2000) on the efficacy of multilateral economic sanctions, and Wilkinson (2000) on multilateralism and international trade regulation.

or agendas. The framing of multi-stakeholderism in juxtaposition with multilateralism highlights multi-stakeholderism as a broader phenomenon and facilitates comparative study. It also suggests (and speaks to the nature of) potential change in the fundamental institutions of the international system, sheds light on the existence of complex authority relations in that system and connects the global governance literature to the literature on the international system.

Multi-stakeholderism is defined here as two or more classes of actors engaged in a common governance enterprise concerning issues they regard as public in nature, and characterized by polyarchic authority relations constituted by procedural rules. The concept of multi-stakeholderism is further disaggregated into a typology that distinguishes several forms on the basis of the varieties of actors involved and the nature of authority relations between them. This typology reflects the existence of considerable variation among particular instantiations of the generic institutional form. In this sense, it is suggested that the rules and practices structuring the institution remain in flux. It is for this reason that multi-stakeholderism is referred to as an inchoate global institution.

The taxonomy is then applied to a comparative analysis of several examples of institutional arrangements sometimes considered multi-stakeholder. The first three cases address an area of global governance broadly recognized as increasingly contentious, and frequently described as multi-stakeholder — global governance of the Internet. Accordingly, the paper makes important secondary contributions to the growing Internet governance literature. In this regard, it is emphasized both that multi-stakeholderism is not unique to Internet governance, and that not all Internet governance tasks and functions are accomplished via multi-stakeholder modalities. The fourth and fifth cases address global governance of securities trading by the International Organization of Securities Commissions (IOSCO) and governance of corporate social responsibility by the United Nations Global Compact. Presentation of the cases is followed by analysis of the variation in actor classes and authority relations, which are in important part the products of different sets of procedural rules that constitute, and therefore at least partially explain, particular instances of multi-stakeholder governance, and that also distinguish multi-stakeholder from non-multi-stakeholder governance (Wendt 1998).

The paper concludes by offering critiques of how multi-stakeholder models are applied both in theory and practice, and by raising questions for future research about the factors determining whether (and in what form) multi-stakeholderism is practised in a particular issue-area, the dynamics of multi-stakeholderism over time and the appropriate criteria for matching governance modalities to particular governance functions. The paper also highlights potential gains from increased attention in IR theory

to the study of procedural rules, which, it argues, can productively inform scholarship on institutional forms, and on the nature and extent of authority relations in the international system.

FORMS OF MULTI-STAKEHOLDER GOVERNANCE

In the most general terms, multi-stakeholderism entails two or more classes of actors engaged in a common governance enterprise concerning issues they regard as public in nature, and characterized by polyarchic authority relations constituted by procedural rules. Further, there are many possible types of multi-stakeholder governance, produced by variation on at least two dimensions: the types of actors involved; and the nature of authority relations between actors. This section develops the various elements of this definition and explicates a typology of forms of multi-stakeholderism.

In order to qualify as multi-stakeholder governance, at least two classes of actors must be involved. This condition is similar to what Ruggie called the nominal or thin definition of multilateralism proposed by Robert O. Keohane (1990, 731): "the practice of co-ordinating national policies in groups of three or more states, through ad hoc arrangements or by means of institutions." Ruggie argued, persuasively, that such a thin definition of multilateralism "misses the *qualitative* dimension of the phenomenon that makes it distinct" and that "the issue is not the number of parties so much…as it is the kind of relations that are instituted among them" (1992, 566). Nevertheless, starting with the thin definition is appropriate for the purposes of this paper because it leaves open the empirical question whether there is, in fact, a single distinctive kind of relation between actors typical of cases commonly described as multi-stakeholder.

Indeed, the available evidence shows that multi-stakeholder governance is (at least at present) a much less coherent institutional form than multilateralism. It is less coherent in the sense that the label multi-stakeholder is routinely applied both by participants and analysts to cases that exhibit significant variance in the nature of relations instituted among the actors. This variation is typically evident in the relevant procedural rules that constitute those relations. One response to this empirical finding would be to declare that multi-stakeholder governance is simply a buzzword rather than an identifiable institutional form. Such a response would amount to prematurely striking the tents. Actors seem eager both to talk about engaging in multi-stakeholderism and to engage in it — whether by speaking about it or in other ways. No doubt actors sometimes deploy the discourse of multi-stakeholderism for political purposes, but their decisions to do so themselves present an interesting puzzle: if the institutional form is ill-defined,

why do actors find invoking it useful, and how are they invoking it to suit their purposes? Variation in the forms exhibited by instances of multi-stakeholderism does not provide grounds for abandoning the concept. Rather, it warrants the conclusion that there are several types of multi-stakeholderism. Adopting this stance enables further research on the development of this institutional form, and on the development of institutional forms in the international system more generally.

This paper also departs from the literature on multilateralism by defining multi-stakeholder governance as involving two or more classes of actors, rather than three or more (state) parties. Lexically, the prefix "multi" can be used to refer to groups of two or more, or to groups of three or more. Because there is no need to distinguish multi-stakeholder governance from bi-stakeholder governance, since there is not an existing literature on the latter, multi-stakeholderism is defined more broadly here. The primary aim in this regard is to cast the analytical net as widely as possible, so as to maximize the applicability of this paper's framework to empirical cases. For instance, members of various non-governmental organization (NGO) and civil society communities that routinely engage with firms might well understand these efforts to be examples of multi-stakeholder governance and do not want to foreclose that possibility by fiat. However, defining multi-stakeholder governance to include any case involving two or more classes of actors is a tentative analytic choice that may require revision in light of evidence from further research.

This paper specifies four classes of actors: states, formal intergovernmental organizations (IGOs), firms and civil society actors. None of these four classes is beyond criticism or without complication.[2] It might be desirable, for instance, to disaggregate the state and include at least some of its component parts in our framework separately. Independent regulatory agencies (such as the American Securities and Exchange Commission) might be identified as an actor class on the basis that they often participate in transgovernmental networks with important roles in global governance (see Slaughter 2004). It might also be important to distinguish between various kinds of firms: for example, publicly traded versus privately held, purely domestic or transnational corporations, or manufacturing firms versus service providers. Similarly, the civil society actor class might also be criticized for including NGOs, social movements, civil society networks and even individuals acting in their private capacities.[3] Kenneth W. Abbott and Duncan Snidal (2009b) opt to use NGOs as a category in their elaboration of the "governance triangle." They also opt against including IGOs as a category of

actor, instead characterizing them as "important vehicles through which states manage competition and advance common interests" (ibid.). They justify this choice on the grounds that: IGOs "must ensure their organizational survival" and therefore "may be unwilling to take strong stands against their members, even if doing so is part of their fundamental raison d'être"; and that they "can also develop organizational pathologies that divert them from their missions" (ibid.).[4]

While there may be good reasons to disaggregate the state, firm and civil society actor classes, we have opted not to do so here to avoid further complication in the typology of multi-stakeholder governance forms developed below. Further research could expand these categories in order to assess whether the analytical leverage gained outweighs the loss of parsimony. However, IGOs should be included as a separate actor category and there are four reasons this choice is appropriate. First, there are circumstances under which it is reasonable to expect that agents will possess significant autonomy from principals.[5] Second, even if IGOs are in many cases constrained by the wishes of their member-states, it does not necessarily follow that they should be omitted as a class of actor. After all, some members of each of the other three actor classes can plausibly be understood to face similar constraints. States, and especially democracies, can be understood as agents of their citizens; firms as agents of their owners or shareholders; and NGOs as agents of their members. Third, any concerns such as Abbott and Snidal's about the possibility of organizational pathology is similarly present in states, firms and civil society actors. Fourth, many IGOs have degrees of the "essential capacities" that Abbott and Snidal (2009b, 46) associate with actors engaged in regulatory standard-setting processes: independence, representativeness, expertise and operational capacity. Therefore, IGOs are included as a distinct actor class in this typology; however, we leave open the empirical question of the extent to which IGOs are actual participants in particular instances of multi-stakeholder governance. Based on four classes of actors, and the limiting condition that multi-stakeholder governance must involve at least two of the four classes, there are 11 possible combinations of actor types: a single combination of all four classes, four combinations of three classes and six combinations of two classes.

In order to qualify as multi-stakeholder governance, a case must also involve governance. This raises additional definitional complications. With respect to global governance, Thomas G. Weiss and Rorden Wilkinson (2014, 207) have argued that "imprecision has robbed the

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2   We owe several of the following possibilities to the excellent suggestions of the anonymous reviewers.

3   There is now a voluminous literature on such non-state actors in world politics. One important example is Keck and Sikkink (1998).

4   On the application of principal-agent theory to IR, see Hawkins et al. (2006).

5   For a discussion of such circumstances in the context of international institutions and governance, see Abbott and Snidal (2000).

term of conceptual rigor." While they do not advance a definition, they identify the need for further research in four areas: historicizing the notion of global governance; identifying and explaining "structures of global authority"; investigating "the myriad ways that power is exercised within such a system"; and improving the discipline's ability to "account for changes in and of the system" by focusing on "the causes, consequences, and drivers of change" (ibid.). James N. Rosenau deliberately advanced a capacious definition, which conceived global governance "to include systems of rule at all levels of human activity — from the family to the international organization — in which the pursuit of goals through the exercise of control has transnational repercussions" (1995, 13-14). He refined this conception slightly in arguing that governance "encompasses the activities of governments, but it also includes the many other channels through which 'commands' flow in the forms of goals framed, directives issued, and policies pursued" (ibid.). The research agenda advanced by Weiss and Wilkinson, and the conception of governance provided by Rosenau, are both extremely useful in thinking about (global) governance. They are less helpful for deciding what does and does not count as governance. For the purposes of this paper's analysis, we adopt a definition recently developed by David A. Welch in collaboration with students in a graduate seminar; they define governance as "the coordinated, polycentric management of issues purposefully directed toward particular outcomes" (2013, 257). The strengths of this definition for the purposes of examining the phenomenon of multi-stakeholder governance are its agnosticism with respect to precisely how issues are handled and to the identity of the actors handling them, and its recognition that governance is polycentric in nature.

While Welch's crowdsourced definition is useful, two issues require further comment. First, governance (like government) is concerned with managing issues understood by the actors involved to be of shared concern, or part of the public sphere. Thus, we exclude from our conception of multi-stakeholder governance any arrangements concerned primarily with actors' private conduct. However, in so doing, the boundaries of the public sphere are socially constructed rather than natural and fixed. Therefore, the relevant standards for determining whether a particular matter is public or private (and thus legitimately a potential matter of governance or not) are those of the actors rather than of the analyst. Actors contest such boundaries, and the content of their shared agendas; the Internet governance cases examined below demonstrate a great deal of this kind of contention. In noting the public nature of governance, however, it is crucial to remember that this does not entail restriction of participation exclusively to public actors. Private and civil society actors expend a great deal of effort to influence the management of public issues, for a variety of reasons having to do with both their interests and values.

Furthermore, relevant procedural rules increasingly accord them the ability, and in some cases even the right, to do so. These procedural innovations are crucial to the emergence of multi-stakeholderism as an institutional form.[6]

Second, the Welch definition treats governance as inherently polycentric — a quality seemingly similar to multi-stakeholderism; however, the two are not identical, as a particular instance of governance may not include multiple actor types. The original articulation of polycentric governance was provided by Vincent Ostrom, Charles M. Tiebout and Robert Warren (1961, 831-32), who wrote that polycentricity "connotes many centers of decision making that are formally independent of one another." They noted further that "whether they actually function independently, or instead constitute an interdependent system of relations, is an empirical question in particular cases" (ibid.; see also Ostrom 2010). Rather than being a rare or special condition, polycentricity thus defined is in fact incredibly common. Most importantly here, it does not require the involvement of multiple classes of actors. Thus, a diplomatic arrangement between states qualifies as polycentric but not multi-stakeholder. So, too, does the creation of an industry association of firms. In contrast, it is difficult to conceive of multi-stakeholder governance that is not polycentric. Such polycentrism can take at least two forms. The first involves an arrangement wherein multiple actor types participate in the operation of a dominant organization responsible for governing a particular issue, or what Tim Büthe and Walter Mattli have called a focal institution (2011, 5, 18–20). The Internet Corporation for Assigned Names and Numbers (ICANN) is such an example with respect to the administration of the Internet's Domain Name System (DNS). The second type of polycentrism consistent with our notion of multi-stakeholderism more closely resembles a regime complex. A regime complex involves multiple issue-specific regimes with overlapping membership and subject matter, as well as "problematic interactions" between the individual regimes (Orsini, Morin and Young 2013, 29). To qualify as a case of multi-stakeholder governance, a regime complex would need to include at least two classes of actors. Joseph S. Nye Jr. (2014) has argued for shifting analytical focus from the narrow Internet governance regime to a broader cyber regime complex that includes all four classes of actors identified here. The coexistence of both kinds of polycentrism within one issue-area illustrates the diversity of particular cases of the general class of multi-stakeholderism, in line with our argument.

These types of polycentrism illustrate the importance of Ruggie's focus on the nature of relations among actors in constituting particular institutional forms. We proceed along the same analytical lines, but reach a different

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6 On the notion of a global public sphere and on emerging shifts in its nature, see Ruggie (2004).

conclusion about the degree of coherence in the generic institutional form of multi-stakeholderism than Ruggie reached with respect to multilateralism. To the extent possible, we identify conceptual boundaries for the kinds of relations among actors consistent with multi-stakeholderism as an institutional form. Governance arrangements can vary according to the nature of the authority relations among actors. This manner of variation is appropriately absent from Ruggie's discussion of multilateralism as an institutional form because the intersubjective understandings and social practices that constitute it limit participation to states and enshrine participation on the basis of formal sovereign equality. These features are inherent to Ruggie's thick definition of multilateralism as "an institutional form which coordinates relations among three or more states on the basis of 'generalized' principles of conduct — that is, principles which specify appropriate conduct for a class of actions, without regard to the particularistic interests of the parties or the strategic exigencies that may exist in any specific occurrence" (1992, 571). Christian Reus-Smit (1999, 9) characterizes modern international legal multilateralism in a similar fashion, as comprising "the principle that social rules should be authored by those subject to them" and "the precept that rules should be equally applicable to all subjects, in all like cases." Both the class of actor and the nature of authority relations in this institutional form are fixed, rendering a typology of the kind we construct unnecessary to the analysis of multilateralism.

Instances of multi-stakeholder governance are far less uniform and consistent. This is due in large part to significant variation in the nature of authority relations among actors. There are four ideal-typical possibilities: hierarchy, heterogeneous polyarchy, homogeneous polyarchy and anarchy. Hierarchy entails relations of superordination and subordination, where one is entitled to command and others have a duty to obey. Polyarchy entails situations where authority is distributed among a number of actors (see Dahl 1956; 1972).[7] This kind of distribution can be done in a heterogeneous manner in which distinct actors (or classes of actors) possess different formal powers (such as the division of authority between branches of government). It can also be done in a homogeneous manner, where actors have similar formal powers (such as individual voters in a democracy where each citizen receives an equal vote). As these examples make clear, actual systems of governance may blend elements of these ideal types. The fourth possibility is anarchy, a situation in which no authority relations exist. Of these four, only the two forms of polyarchy are consistent with multi-stakeholderism as an institutional form.

Although anarchy has been at the foundation of IR theory as an academic discipline (see Waltz 1979; Bull 2002), we discard the possibility of anarchic relations between actors (or classes of actors) engaged in a common governance enterprise on the basis of recent scholarship showing the presence of varying kinds and degrees of authority in international history,[8] and on the basis that IR theory has erred in typically attributing authority solely to actors (Hurd 1999; Raymond 2015). Authority is also a potential property of rules. In order for a common governance enterprise to exist, it is necessary that actors mutually accept the authority of a set of rules, however limited, that establishes the scope of the common governance enterprise, the kinds of actors entitled to participate in governance and the terms of that participation — including the way disputes about the application of general rules to particular cases will be handled. Many of these rules are procedural in nature. Even if actors are equally empowered by these rules to participate in the alteration, operation and termination of the governance arrangement in question, it is still accurate to describe the situation as containing authority relations; it is merely a special case where authority is shared equally and symmetrically. Equally shared authority should not be mistaken for the absence of authority. This mistake has unfortunately been all too common in a discipline defined by a binary juxtaposition of hierarchy and anarchy. A weak version of this claim about the ubiquity of authority relations, not hierarchy, in governance arrangements would be constrained to the empirical domain with which this paper is concerned — the institutional form of multi-stakeholderism — and would suggest only that anarchy drops out of the multi-stakeholder governance typology developed here.

A strong version of this claim about authority relations has wide-ranging implications for IR theory. A full exploration of these implications is beyond the scope of this paper, but there are a few provisional remarks to be made. First, the category error of treating authority as a binary property attributable only to actors and not also to rules has obscured a great deal of authority in the international system. If authority relations are instead understood in terms of the four categories identified here, it suggests that IR theory has miscoded the international state system as an instance of anarchy. Since international law and diplomacy as fundamental institutions of international society are themselves authoritative rule-sets and since they, at least in their modern variants, also empower state actors to make and alter international rules on a formally equal basis, there is a case for understanding the contemporary

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7   For a review of Dahl's scholarship in broader context, see Krouse (1982).

8   See, for example, Sharman (2013); Keene (2007); and Hobson and Sharman (2005).

state system as a case of homogeneous polyarchy.[9] But this, too, is a simplification. As John M. Hobson and Jason C. Sharman (2005) have pointed out, the main actors in the international system over most of its history have been empires; thus, the system has historically contained elements of hierarchy in that imperial states and their colonies were differentially empowered in the operation, alteration and interpretation of international rules. This is only a single example of a fundamentally important point. A great deal more thinking and research are required to better understand authority relations in the international system. Accordingly, this paper proceeds on the basis of the more limited claim that potential instances of anarchy fall outside of the institutional form of multi-stakeholderism.

While authority relations clearly exist in the international system, highly hierarchical social relations are not consistent with multi-stakeholderism as an institutional form (Hobson and Sharman 2005; Hurd 1999; Keene 2007; Keene 2013; Lake 2007; Lake 2009; Sharman 2013). Ideal-typical hierarchy leaves little room for agency on the part of the subordinate actor in core governance tasks including rule making, interpretation and application. In such cases, the subordinate actor is a clear rule-taker. Accordingly, highly subordinate actors are not meaningful participants in governance; rather, they are the governed. For this reason, hierarchy is omitted from the kinds of relations among actors consistent with multi-stakeholderism.

However, it does not follow from the exclusion of ideal-typical hierarchy that authority is irrelevant to multi-stakeholderism. The four kinds of authority relations identified here are ideal-types; therefore, the framework departs from the IR literature on anarchy and hierarchy in treating authority relations as variegated rather than binary. David A. Lake (2007, 56) has suggested treating hierarchy as a continuous variable. While this treatment is an advance over traditional binary understandings of the relationship between anarchy and hierarchy, we prefer to think in terms of distinct types of authority relations. This move is crucial to our introduction of homogeneous and heterogeneous polyarchy, and to understanding multi-stakeholderism as an institutional form. Variation among different kinds of authority relations is not purely a matter of there being more or less of exactly the same kind of thing. Rather, individual instances of authority relations "are defined by shared rules and understandings that constitute them" (Raymond 2015). It follows that there can be substantial within-category variation among instances of both heterogeneous and even homogeneous polyarchy. That is, two different governance arrangements

might be roughly equally heterogeneous in the way they distribute authority among participating actors, and yet exhibit important institutional differences.[10] If authority is thought of as only, or even primarily, varying in quantity rather than kind, this variation is rendered invisible. We believe this more granular understanding of authority relations serves as a correction both to the literature on anarchy and also to the emerging literature on hierarchy. However, more importantly here, this understanding highlights the connection between variation in procedural rules and variation in types of authority relations.

Combining the 11 possible combinations of actor types with the two categories of authority relations consistent with multi-stakeholderism yields 22 possible forms of multi-stakeholder governance (indicated by the check marks in Table 1).[11] This typology serves three purposes. First, it is a mechanism for identifying and classifying key features of actual cases. Second, it will also be useful in identifying (and ideally explaining) clusters and gaps in the distribution of actual governance institutions and processes; we do not expect that the actual universe of cases will be equally distributed among these possible forms. Third, with further research on the effectiveness of various governance modalities for specific kinds of issue-areas and governance functions, the typology presented here could assist in improving governance effectiveness by more appropriately matching governance functions with particular governance processes, mechanisms and institutions.[12] With this typology in mind, the following sections examine several cases of multi-stakeholder governance that vary based on the types of actors involved and the nature of authority relations between actors.

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9   What is coded as "anarchy" in IR theory might also be understood, in similar terms, as what Ostrom, Tiebout and Warren (1961) define as polycentricity — namely, "many centers of decision making that are formally independent of one another." Since they wrote about governance of metropolitan areas, it is clear they did not understand these actors as operating in a context entirely devoid of authority relations.

10 One such example is the contrast between ancient Greek city-states and the contemporary international system given in Reus-Smit (1997). While he described these cases as different anarchies, if we are right about the authoritative nature of rules and institutions in constituting actors, these cases can be reconceived as (non-multi-stakeholder) homogeneous polyarchies.

11 Because only a single actor class is involved in multilateralism, it obviously does not appear in our typology. However, for purposes of comparing the institutional form of multilateralism with the institutional form of multi-stakeholderism, it is useful to note that the authority relations between state actors participating in multilateralism correspond closely to the category of homogeneous polyarchy in the table.

12 Expectations for such improvements should remain modest, however, given path dependency and the general inefficiency of institutional change. For arguments along these lines, see March and Olsen (1998) and Wendt (2001).

Table 1: Types of Multi-stakeholder Governance

Stakeholder Types	Nature of Authority Relations			
	Hierarchy	Polyarchy		Anarchy
		Heterogeneous	Homogeneous	
States, IGOs, Firms, NGOs		✓	✓	
States, IGOs, Firms		✓	✓	
IGOs, Firms, NGOs		✓	✓	
States, IGOs, NGOs		✓	✓	
States, Firms, NGOs		✓	✓	
States, IGOs		✓	✓	
States, Firms		✓	✓	
States, NGOs		✓	✓	
IGOs, Firms		✓	✓	
IGOs, NGOs		✓	✓	
Firms, NGOs		✓	✓	

Source: Authors.

A COMPARATIVE STUDY OF MULTI-STAKEHOLDER GOVERNANCE AS A CLASS OF PHENOMENA

As a small but representative selection of cases of multi-stakeholder governance, this section examines the administration of Internet names and numbers by ICANN, standard setting by the Internet Engineering Task Force (IETF), international telecommunications regulation by the United Nations International Telecommunication Union (ITU), aspects of global financial governance by IOSCO and emerging governance of corporate social responsibility by the United Nations Global Compact.

A significant motivation for conceptually examining multi-stakeholderism emanates from prevailing global controversies over how the Internet is controlled, and uncritical and unexplained assertions that the Internet is, or should be, governed in a multi-stakeholder arrangement. As such, we were compelled in our own cases to include ICANN — the institution around which the majority of global deliberation on Internet governance revolves — and the ITU — an organization historically proposed as an alternative for taking over key functions of Internet governance, including some narrow tasks performed by the US government. In contrast to the turbulent global negotiations over the roles of ICANN and the ITU, the IETF has had a relatively uncontroversial, long and well-regarded history in Internet governance and is thus included for comparison. The fourth and fifth cases are included to complement the Internet governance issue-area and were selected because they are themselves described

as multi-stakeholder. The inclusion of cases outside of Internet governance serves as a check on the prevailing discourses suggesting that multi-stakeholderism is unique to this issue-area — but it is not. Collectively, the cases exhibit variation in terms of the combination of actor classes, the issues involved and the forms of multi-stakeholderism employed. The final section of the paper alludes to several other potential cases not examined in detail here. These and other cases offer opportunities for further research extending the framework developed herein.

DISAGGREGATING MULTI-STAKEHOLDER INTERNET GOVERNANCE

An examination of cases of multi-stakeholder governance reasonably begins with governance of the Internet, both because it is an area so often considered as multi-stakeholder and also because of the rising importance of Internet coordination and oversight to economic, political and social life. Questions about the Internet's security and stability have emerged as a crucial international political concern on par with more long-standing global problems such as environmental protection, human rights, and basic infrastructural systems of finance, telecommunications, water and energy. These shared global issues transcend national borders and sovereignty. No state acting alone can address these issues *in toto*; yet local actions within

national borders can have significant network externalities that reach across the globe.[13]

While Internet governance includes important instances of multi-stakeholder governance, and while preserving that model is a primary goal for the broader Internet community as well as for many governments, it is important to note that Internet governance is not a monolithic enterprise. Rather, it involves layers of distinct coordinating and administrative tasks that cumulatively keep the Internet operational. Many of these functions are accomplished in non-multi-stakeholder ways. Before turning to particular cases of Internet governance, therefore, there must be a more nuanced and disaggregated understanding of the broader landscape.

For the majority of its history, the Internet has been governed in a piecemeal fashion by a variety of standard-setting and other technical bodies, and by private companies performing key roles as network operators and information intermediaries. It is thus an excellent example of the power of epistemic communities to shape governance.[14] This legacy has generated two predominant characteristics of Internet governance arrangements. First, with a few notable exceptions, states have been either generally uninvolved or involved only as participants without superordinate decision-making authority.[15] Second, decision making for Internet governance has typically been driven by technical and market considerations. In terms of institutionalist IR scholarship, coordination problems have been more common than cooperation problems.[16] These features, and especially the general lack of an authoritative role for states, have led both scholars and practitioners to conclude that the Internet is an example of multi-stakeholder governance (see Cerf, Ryan and Senges 2014).

The computing devices and content to which end-users are exposed constitute only the surface of a massive underlying infrastructure of networks, services and institutions that keep the Internet operational. Most of this material and virtual architecture is comprised of private information intermediaries such as network operators, exchange points, search engines, hosting services, e-commerce platforms and social media providers. Despite the privatized and somewhat autonomous nature of these network components, global coordination is necessary

to keep the overall Internet operational. Global technical standardization ensures interoperability; cyber-security governance maintains stability and authentication; and centralized coordination ensures that each Internet name and number is globally unique. These and other tasks necessary to keep the Internet operational, as well as the substantive public policy issues that arise around these functions, are collectively referred to as "global Internet governance."

Internet governance has sometimes been viewed by policy makers and scholars as a monolithic system. Hence, policy deliberations and scholarship examining multi-stakeholderism have analogously sought a uniform definition of what counts as participatory and diverse governance. Various definitions also reflect historically specific power struggles and stakeholder interests. The definition of Internet governance emerging from the aftermath of the 2003 World Summit on the Information Society (WSIS) in Geneva, Switzerland serves as an example of such homogeneity and politicization. Kofi Annan, former Secretary-General of the United Nations, established a Working Group on Internet Governance (WGIG) as a response to open issues over control of the Internet left unresolved at the WSIS.[17] The WGIG — which included 40 participants from government, the private sector and civil society — was charged with developing a definition of Internet governance: "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" (WGIG 2005).

The context from which this arose was politically charged and historically specific. There was mounting political concern over the unique and enduring role of the US Department of Commerce in contracting with ICANN to perform the global administration of Internet names and numbers. The states represented in the WSIS/WGIG process were primarily concerned with what they perceived as unilateral American control of the Internet. The ITU, the United Nations' specialized agency for information and communication technologies, was also increasingly stressing its intergovernmental legitimacy as a rationale for attempting to take a greater role in both the administration of names and numbers and the governance of Internet standards, to counter the prevailing administrative role of ICANN and the predominance of private-industry contributions in various standard-setting entities, including the IETF. Within this context, the WGIG definition conveyed some strong normative positions. The definition assigned an Internet governance role to "Governments," commensurate with global interest in

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13 While these issues are comparable in scale and significance, the Internet is not itself a commons. Given its non-rivalrous and excludable nature, it is more accurately thought of as a set of nested club goods. See Raymond (2013b).

14 On epistemic communities, see Haas (1992).

15 This feature encapsulates part of what has been referred to as networked governance. See Mueller, Schmidt and Kuerbis (2013).

16 On the different implications of these styles of games, see Martin and Simmons (1998) and also Krasner (1991).

17 For background about the WSIS process, see Stauffacher and Kleinwächter (2005).

greater multilateral administration and potentially a unique role for intergovernmental entities such as the United Nations in Internet oversight.

The composition of the WGIG did not represent key constituencies with a stake in the outcome of the definition or those with responsibility for Internet governance in practice. The UN group did not significantly include the input of large Internet users (for example, corporations relying on the Internet for financial and business transactions and basic operations); private sector companies involved in provisioning Internet products or providing infrastructure; or any representatives from the leading standard-setting and administrative entities operationally responsible for the security and stability of the Internet. The United States chose not to participate in the working group. Of the 40 members, the majority of participants were high-level governmental officials involved in national technology policy. Many of these officials represented countries — Saudi Arabia, Pakistan, Cuba, China, Egypt, Tunisia, Russia and Iran — with notoriously repressive Internet policies (WGIG 2005).

Thus, the formulation of an international definition of multi-stakeholderism was arguably not a multi-stakeholder effort. Also sometimes lost is that the convocation of the United Nations' Internet Governance Forum (IGF) — first held in Athens, Greece, in 2006 — was a compromise emanating from an impasse over UN and governmental calls for a diminishment of US coordination of certain Internet administrative functions and American resistance to these recommendations. The IGF was formed to create an international space for multi-stakeholder dialogue about Internet policy. These multi-stakeholder gatherings have been distinct from the actual *practice* of Internet governance; rather, they are *deliberations* about Internet policy. International gatherings, as "talk shops," potentially have agenda-setting and framing functions but, at least thus far, realistically have limited influence over policy making in practice (Dutton, Palfrey and Peltu 2007).

This distinction between Internet governance *discourse* and *praxis* highlights a prevailing feature of scholarship on multi-stakeholderism. Many examinations interrogate the question of who can contribute to discussions about Internet governance, particularly in the WSIS/WGIG/IGF context, rather than who can contribute to the actual *practice* of Internet governance (see Malcolm 2008; Epstein 2013). Although this question about multi-stakeholder dialogue is valuable *sui generis*, it does not directly address the question of how Internet coordination does or should occur in practice.

Within the actual practice of Internet governance, the phrase multi-stakeholderism is too often employed uniformly and uncritically. It is a misnomer to speak of *the* multi-stakeholder model for Internet governance. A question

such as "Who should control the Internet: the United States, the United Nations or some other entity?" is incongruous because it inherently assumes that Internet governance is a singular system, and also completely discounts the highly privatized nature of Internet administration. There is no unitary system that oversees and coordinates the Internet. Some tasks are carried out by private industry operating as part of markets, some tasks are overseen by relatively new institutions such as ICANN, and some administrative jurisdiction resides with sovereign states or multilateral governmental coordination.

Explanations of the various tasks of Internet governance and associated taxonomies abound (see DeNardis 2014; Mathiason 2008; Mueller 2010; Bygrave and Bing 2009; Brousseau, Marzouki and Méadel 2012). One way to understand the Internet governance ecosystem is to divide its main functions into six areas: control of critical Internet resources; setting Internet standards; access and interconnection coordination; cyber-security governance; the policy role of information intermediaries; and architecture-based intellectual property rights (IPR) enforcement.

Critical Internet resources are the globally unique virtual identifiers — including domain names, Internet Protocol (IP) addresses and Autonomous System Numbers — necessary for the day-to-day operation of the Internet, as well as the DNS, a distributed set of servers that translates domain names into associated IP addresses for routing information to its destination. Internet standards are the common rules, or protocols, that computing devices follow to ensure global interoperability (for example, Transmission Control Protocol [TCP]/IP and Voice over Internet Protocol). Access and interconnection coordination addresses how various networks conjoin to collectively form the global Internet and the regulation of access, such as net neutrality rules. Cyber-security governance encompasses the challenge of securing the essential shared infrastructures of Internet governance, including routing, authentication systems and the DNS, as well as responding to Internet security problems such as worms and Distributed Denial of Service attacks. The policy role of private information intermediaries (such as Google and Facebook) includes functions such as the formulation of subscriber privacy rules or responding to government censorship and lawful intercept requests. Architecture-based IPR enforcement addresses the turn to infrastructure for copyright enforcement as well as IPR embedded within Internet governance infrastructure, such as the adjudication of domain name trademark disputes.

Table 2 disaggregates Internet governance into these six functional areas and then further into 43 specific tasks of administrative responsibility. The table also lists the primary, although often not exclusive, institutional actor historically responsible for executing each task. For example, under the functional area of Internet

Table 2: Disaggregated Internet Governance Taxonomy

Functional Area	Tasks	Primary Institutional Actor
Control of critical Internet resources	Central oversight of names and numbers	ICANN, Internet Assigned Numbers Authority (IANA), US Department of Commerce
	Technical design of IP addresses	IETF
	New top-level domain (TLD) approval	ICANN
	Domain name assignment	Internet registrars
	Authorization of root zone file changes	US Department of Commerce / National Telecommunications and Information Administration (NTIA)
	IP address distribution (allocation/ assignment)	IANA, regional Internet registries, local Internet registries, national Internet registries, Internet Service Providers (ISPs)
	Management of root zone file	IANA
	Autonomous system number distribution	IANA, regional Internet registries
	Operating Internet root servers	VeriSign, Cogent and others
	Resolving DNS queries (billions per day)	Registry operators (VeriSign and others)
Setting Internet standards	Protocol number assignment	IANA
	Designing core Internet standards	IETF
	Designing core Web standards	W3C
	Establishing other communication standards	ITU, Institute of Electrical and Electronics Engineers, MPEG, JPEG, International Organization for Standardization (ISO) and others
Access and interconnection coordination	Facilitating network interconnection	Internet exchange point operators
	Peering and transit agreements to interconnect	Private network operators, content networks and content delivery networks
	Setting standards for interconnection (such as Border Gateway Patrol)	IETF
	Network management (quality of service)	Private network operators
	Setting end-user access and usage policies	Private network operators
	Regulating access (such as net neutrality)	National governments / agencies
Cyber-security governance	Securing network infrastructure	ISPs, network operators and private end-user networks
	Designing encryption standards	Standard-setting organizations
	Cyber-security regulation / enforcement	National statutes / multilateral agreements
	Correcting software security vulnerabilities	Software companies
	Software patch management	Private end-users
	Securing routing, addressing and DNS	Network operators, IETF and registries
	Responding to security problems	Computer emergency response teams and computer security incident response teams
	Trust intermediaries authenticating websites	Certificate authorities

Functional Area	Tasks	Primary Institutional Actor
Information intermediation	Commercial transaction facilitation	E-commerce sites and financial intermediaries
	Mediating government content removal requests (discretionary censorship)	Search engines, social media companies and content aggregation sites
	App mediation (guidelines and enforcement)	Smartphone providers (such as Apple)
	Establishing privacy policies (via end-user agreements and contracts)	Social media, advertising intermediaries, email providers and network operators
	Responding to cyberbullying and defamation	Content intermediaries
	Regulating privacy, reputation and speech	Statutory and constitutional law
	Mediating government requests for personal data	Content intermediaries and network operators
Architecture-based IPR enforcement	Domain name trademark dispute resolution	ICANN's Uniform Domain-Name Dispute-Resolution Policy, registrars and accredited dispute resolution providers
	Removal of copyright infringing content	Content intermediaries
	Algorithmic enforcement (such as search rankings)	Search engine companies
	Blocking access to infringing users	Network operators and ISPs
	DNS IPR enforcement	Registries / registrars
	Regulating online IPR enforcement	National statutes and international treaties
	Standards-based patent policies	Standard-setting organizations
	Enacting trade secrecy in content intermediation	Search engines and reputation engines

Source: Authors.

standardization, one critical task is the establishment of standards for the web, such as Hypertext Markup Language (HTML) and Extensible Mark-up Language (XML), primarily carried out institutionally by the World Wide Web Consortium (W3C).

The table captures several features of how Internet governance actually works. Most obviously, Internet governance is not a singular enterprise; the coordination and administration of the Internet involves many layers of distinct tasks. Equally evident, the Internet does not just autonomously "work" but remains operational via considerable, and sometimes costly, administrative coordination. This reality sits uneasily with some parts of the Internet community that embrace what can be thought of as "cyber libertarianism"; this view is encapsulated in the conviction that "legal concepts of property, expression, identity, movement, and context do not apply [online]… they are all based on matter, and there is no matter here" (Barlow 1996). There is, of course, matter: buildings, power supplies, switches, fiber optic equipment, routers and undersea cables. Many scholarly approaches from law, economics and communication inherently focus on content, applications or usage, and do not reach into many of the material and virtual technological functions of Internet governance.

A disaggregated Internet governance taxonomy also helps illustrate a connection between functional technological governance areas and direct public policy formulation. For example, IPR enforcement approaches designed to block access to users who have repeatedly downloaded copyrighted material have accompanying implications for freedom of expression, access and due process (Dutton et al. 2011). Similarly, private industry mediation of government content removal requests, and the decision to comply with or reject these requests, establishes conditions of what counts as free expression in the digital public sphere (Balkin 2008). These connections between technical coordination and public policy and the reality of highly privatized governance raise questions about adequate conditions of accountability, transparency and oversight for non-governmental actors to make and carry out such public policy.

Even such an extensive taxonomy misses part of how Internet governance works. Contextual factors such as technological constraints, economic conditions and social and cultural forces all shape the nature of this governance. For example, civic (as well as corporate) engagement influenced the failure of the Stop Online Piracy Act and PROTECT IP Act in the US Congress in 2012.

Even with these limitations, there are rational reasons to disaggregate Internet governance as practised into specific functions. These functions are performed by different types of actors. They also involve a variety of distinct governance activities such as contracting, deliberating, legislating, standard setting, regulating, adjudicating and enforcing.

This disaggregation also demonstrates that existing Internet governance arrangements vary in the classes of actors involved, and not all clearly meet the first criterion of multi-stakeholder governance provided above. Several specific functions of Internet governance are not multi-stakeholder at all because they involve a single actor or single class of actor. Many Internet governance functions have traditionally been governed solely by firms. An example involves the private contractual arrangements among private network operators to conjoin their networks at bilateral interconnection points or shared Internet exchange points. Private Internet registries, such as VeriSign, oversee the operation of generic TLDs. Network operators carry out network management tasks and respond to security problems on their private networks. Media companies set privacy policies to which users must agree before using these services. These are clear instances of how some Internet governance in practice does not currently meet our first, minimal criterion for multi-stakeholder governance (or how policy makers and the media describe Internet governance). This privatization of oversight is a dominant feature of how Internet governance has evolved in practice.

Some functions are also relegated to the state, such as multilateral treaties about IPR enforcement. One contentious example is the authorization of changes to the Internet's root zone file[18] by an agency of the US Department of Commerce, the NTIA, although the United States announced in 2014 that it would transition this unique oversight to a global multi-stakeholder entity. International tension about how this transition would occur, as well as the privatized and contextually shaped nature of Internet governance and long-standing tensions between territorial state jurisdiction and non-territorial technological modes of communication, help explain the recent public attention to what counts as "multi-stakeholder governance" in each layer of Internet governance.

The key point here is that, contrary to popular narratives, much of Internet governance is not multi-stakeholder. However, the issue-area does include important cases of the institutional form. We examine three potential cases and find significant variation, including two very different forms of multi-stakeholderism and a third case (the ITU) that is ultimately classified as primarily hierarchical in terms of the relations among classes of actors.

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18 The root zone file (or root zone database) is the definitive list of IP addresses for servers for TLDs, including country code TLDs.

ICANN

Considerable Internet governance scholarship focuses on the governance functions over critical Internet resources enacted by ICANN and the form of multi-stakeholderism that has arisen in ICANN (see Antonova 2008; Mueller 2002). ICANN is a private, non-profit corporation (incorporated in California) that formed in 1998 under contract with the US government to administer the Internet's names (for example, cnn.com) and numbers (the globally unique binary addresses assigned to computing devices, similar to postal addresses, but virtual rather than physical). ICANN and its assigned numbers authority, IANA, carry out a number of distinct functions including: allocation of blocks of Internet numbers to regional Internet registries for further distribution; oversight of the Internet's root server system operations; the establishment of policies for introducing new TLDs to the root system; oversight of domain name assignment, albeit delegated to Internet registrars; assignment of unique protocol parameters; and management of the root zone file.

The technical design decision requiring globally unique names and numbers to use the Internet created an accompanying need to ensure that each name and number is globally unique. The combination of this requirement for centralized control, the fact that there is a finite pool of these resources and the criticality of these resources for the ability to use the Internet has over time shaped a certain form of multi-stakeholderism. In the Internet's early history, a single individual, Jon Postel, administered names and numbers. In the context of Internet growth and globalization, this coordination institutionally evolved and eventually came under the auspices of ICANN.[19]

While ICANN and its subsidiary organization IANA carry out highly technical administrative functions, these functions have significant global public policy implications.[20] For example, the expansion of TLDs (such as .xxx, .wine, .amazon, .gay) raises public interest issues related to IPR, free speech and stakeholder interest disputes between territorial states and global corporations. Because of the significant number of stakeholders with an interest in critical Internet resources, the coordinating functions ICANN performs are viewed as inherently multi-stakeholder.

In terms of actors, the organization has a CEO and a board, each of which have particular authorities within the organization. Board members are selected by various stakeholder organizations (such as the Address Supporting

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19 For an extensive description of ICANN functions and associated history, see Mueller (2002).

20 See DeNardis (2014, chapter 2) for a comprehensive list of the policy implications of Internet names and numbers.

Organization representing regional Internet registries) and an independent nominating committee made up of representatives from several supporting organizations and advisory committees.[21]

ICANN has three supporting organizations and four advisory committees.[22] While each of these entities is empowered by ICANN's procedural rules to do certain things, their formal roles differ. The GAC is especially noteworthy; it is unique among ICANN's component units in that when it issues formal advice to the ICANN Board, the board is required either to adopt the GAC's advice or to formally justify its refusal to do so in writing to the GAC. This provides the GAC (and thus its member governments) with a degree of authority over ICANN operations. GAC membership is open to national governments, but IGOs and treaty organizations often participate under observer status (such as the Organisation for Economic Co-operation and Development [OECD], the Council of Europe, the World Intellectual Property Organization, the ITU and others).

There has been international tension over the historic relationship between the US Department of Commerce, specifically the NTIA, and the control of a narrow but important set of Internet governance functions, including oversight of the Internet's root zone file that definitively tracks the list of names and IP addresses of all the authoritative servers for TLDs (such as .com, .edu., .uk). ICANN via IANA continues to administer the Internet's root on the basis of an agreement with the US government. The symbolic and practical implications of this American oversight have created pressure for greater internationalization of this narrow function and have more generally created tension in Internet governance debates.

In 2014, the Department of Commerce announced its intention to transition its historic oversight of Internet names and numbers, and specifically the IANA functions, to a "global multi-stakeholder community" (NTIA 2014). This announced transition, as well as a number of Internet governance controversies such as 2013 disclosures about the expansiveness of US National Security Agency surveillance, drew a great deal of public and media attention to the question of who controls the Internet and, by extension, considerable scrutiny over the structure and evolution of multi-stakeholder governance in ICANN.

ICANN is a clear example of Internet governance involving multiple types of stakeholders, including participants from corporations, civil society and governments. Further, ICANN can be classified as a heterogeneous polyarchy. Authority over distinct functions is distributed among various actors, with formal powers varying by actor. Even this relatively clear example of multi-stakeholder governance has been subject to criticisms ranging from insufficient civil society participation; insufficient government authority; too much government oversight; too much American authority; questions about legitimacy; and long-standing and ongoing concerns about its contractual relationship with the US government.

THE IETF AND INTERNET STANDARD SETTING

The IETF also has considerable coordinating influence over the Internet. It has developed many core Internet technical standards — such as the TCP/IP protocols — that serve as the rules enabling computing devices to exchange information over the Internet. Without these common specifications, devices made by one manufacturer would not be interoperable with other manufacturers' devices.

The IETF is one of many institutions that collectively create the blueprints enabling the Internet to have common addressing, compression standards, encryption standards, security standards, error detection and correction, formatting and other key engineering features. Another standards organization, the W3C, has established most core standards specific to the web (such as HTML and XML). While these organizations perform highly technical functions, they also enact public policy in a variety of ways. For example, the strength and features of encryption standards mediate between conflicting values of law enforcement and privacy. Web accessibility standards determine the extent of online accessibility for the disabled. Economically, common standards provide a level playing field for competition and have contributed greatly to the network effects and growth of the Internet.[23]

The IETF is in many ways more open, but less formally multi-stakeholder than ICANN. The organization does not have an official or defined membership. Anyone is permitted to participate in standards development, either via online mailing lists or in person at one of several yearly gatherings. Those participating do so in their individual capacities rather than on behalf of institutions but, in practice, are usually associated with an employer, especially large technology companies that inherently develop, implement and depend upon Internet standards in their products (IETF 2004). Others work for governments or, less frequently, for civil society institutions such as universities and NGOs. Despite the institutional norm of participants acting in their personal capacity, it is included here as a

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21 See ICANN By-laws Article VII, Section 2, available at www.icann.org/resources/pages/bylaws-2012-02-25-en#VII-1.

22 The supporting organizations are the Generic Names Supporting Organization, the Address Supporting Organization and the Country Code Names Supporting Organization. The advisory committees are the Governmental Advisory Committee (GAC), the Security and Stability Advisory Committee, the Root Server System Advisory Committee and the At-Large Advisory Committee.

23 On the policy implications of standards, see Palfrey and Gasser (2012).

type of multi-stakeholder governance because many of the IETF's participants do in fact have other institutional affiliations with governments, NGOs and, of course, with corporations. Whereas IETF members participate in their individual capacities despite often having institutional affiliations, membership in the W3C is typically held by organizations, including companies, NGOs and units of governments, such as the Australian Government Information Management Office; each member has one advisory committee representative.

While this type of participatory openness is inclusive, meaningful participation requires specialized technical knowledge, the ability to speak English, funds to travel to international gatherings, and cultural competence in the stylistic and procedural norms of the organization. To this extent, even a completely participatory multi-stakeholder organization can have barriers related to knowledge, language, money and culture.

The IETF is also unusually open and transparent regarding its deliberative process, informational documents and standards. The entire history of its meeting proceedings is available online, as are most mailing list archives. The IETF has published the actual standards and supporting materials in an archive known as the Request for Comments (RFC) series.[24]

The IETF and the W3C can most accurately be classified as homogeneous polyarchies. The IETF has no formal voting but makes decisions based on what has been called "rough consensus and running code" (a term derived from Clark 1992). Both the IETF and the W3C adopt proposed standards according to public commentary processes that are open to participation. Although particular individuals may wield greater or lesser influence in practice (typically according to technical expertise and/or reputation), this influence does not stem from procedural rules vesting authority in a particular office-holder.

THE ITU AND INTERNATIONAL TELECOMMUNICATIONS REGULATION

The ITU is a specialized UN agency with global coordinating responsibility for information and communication technology areas such as radio spectrum allocation, coordination of satellite orbital positions, telecommunications standards, and the promotion of information and communication infrastructure advancements in the developing world. Originally called the International Telegraph Union, the organization was founded in 1865 to arrange for global telegraph standards.

Because Internet data travels over a range of communication media, regulations set out by the ITU can influence most network operators. For example, it plays a facilitating role in the development of mobile communications networks that are increasingly important to Internet connectivity, especially in the developing world where wireless penetration is surpassing fixed broadband. The ITU also administers the International Telecommunications Regulation, a treaty comprising binding rules of international law.

As described earlier, there is also a long history of tensions between the US government's unique coordinating oversight of the Internet's names and numbers (that is, its contract with ICANN and oversight of root zone file changes) and international calls for moving this oversight function, as well as other areas of Internet governance, to the ITU. The impasse has become a historic legitimacy contest (see Bukovansky 2002). Many governments have requested a diminishment of the US Commerce Department's authority over the root, both symbolic and actual, and American interests have pushed back against the prospect of replacing this coordinating function with ITU oversight. For example, a 2012 US House of Representatives hearing addressed concerns about a possible takeover of multi-stakeholder Internet governance by the United Nations ITU.[25] The expressed position of the US government is to preserve the fundamental multi-stakeholder model of governance. The United Nations, the ITU and dominant multinational Internet companies have all espoused similar valorizations of multi-stakeholderism. These discourses around multi-stakeholderism reflect long-standing international tensions about administrative control of the Internet and they all fail to define what is acceptable multi-stakeholder governance for any particular function.

The ITU most centrally involves the representatives of governments (member states) but also includes international organizations, firms, NGOs and academic institutions that can pay an annual membership fee to become "sector members" and associates. Sector members, qua sector members, are not entitled to participate in altering either the Constitution and Convention of the ITU, or the treaties it oversees pertaining to radio communication or international telecommunications. These capacities are reserved to the ITU's 193 member states. Individual states may, and many routinely do, consult their sector members — even including them in treaty negotiation delegations — but such consultations are at the discretion of the state, which is equally free to consult interested parties that are not sector members. Sector members are able to participate more fully in the day-to-day standards-related work of the ITU. They receive access to the statistics and studies produced by the ITU in its information-gathering capacity, and they participate in its ongoing study groups. However, in a range of cases, study group recommendations must ultimately be approved by member states.

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24 All of the Internet RFCs are freely accessible on the IETF website, available at www.ietf.org.

25 See *International Proposals to Regulate the Internet* (2012).

While we recognize that aspects of the ITU standard-setting process may approximate heterogeneous polyarchy, we nevertheless categorize the ITU as primarily hierarchical and thus not a case of multi-stakeholderism.[26] It reserves important rule-making functions solely to one class of stakeholder. Further, while ITU sector membership is open to international organizations, firms and academic institutions, it is not open to individuals. This differentiates it from many, though not all, other instances of multi-stakeholderism.

IOSCO

IOSCO establishes and promotes adherence to global standards for securities. It claims to regulate 95 percent of the securities markets around the world with the core objectives of protecting investors; maintaining fair, efficient and transparent markets; and decreasing systemic risks in global securities markets (IOSCO 2010, 3). IOSCO is primarily an example of heterogeneous polyarchy, but it is also a somewhat ambiguous case that includes elements of homogeneous polyarchy.

IOSCO's 198 members include three actor classes: states, IGOs and collections of firms. The organization recognizes three classes of membership: ordinary, associate and affiliate members. The largest group, ordinary members, includes national securities commissions such as the Securities and Exchange Commission in the United States and the Financial Services Agency in Japan. Associate members are government agencies (other than principal securities regulators) or IGOs, such as the World Bank and International Monetary Fund, that have a relevant oversight function. Affiliate members include "self-regulatory organizations, stock exchanges, financial market infrastructures, investor protection funds and compensation funds, and other bodies with an appropriate interest in securities regulation."[27] These classes of membership instantiate heterogeneous polyarchy by differentially empowering actors to attend meetings, provide oral and written contributions to deliberations and to vote. In keeping with the expectations of IR theory, state actors are generally privileged in these matters; however, IOSCO's practice of awarding membership to specific securities regulation agencies complicates the typical treatment of the state as a unitary actor. This provides some basis to think that it might be analytically productive to disaggregate the state as a class of actor in multi-stakeholder governance, along the lines suggested by analysts who emphasize intergovernmental networks.

IOSCO is also notable in that self-regulatory organizations can become full voting members if they are the primary securities regulator for a particular jurisdiction. The potential inclusion of private, self-regulatory associations as voting members makes IOSCO a rare instance of multi-stakeholderism that contemplates formal procedural equality between state and private actors.[28] In such cases, the private actor would have a procedurally superordinate position to state agencies and IGOs in the associate member category as well as to other private actors in the affiliate member category. This complicates our treatment of polyarchy, in that authority relations do not break down neatly according to class of actor; a private ordinary member would have a formally equal position to some state agencies, a superordinate position with respect to others and would also have a superordinate position with respect to other private actors. This illustrates the growing complexity of authority relations in contemporary global governance and suggests that the typology presented here may eventually need to be extended in light of human creativity. Nevertheless, it remains generally reflective of current patterns of authority relations and represents an advance over previous binary treatments of authority in IR theory.

THE UNITED NATIONS GLOBAL COMPACT

The United Nations Global Compact is an initiative promoting corporate citizenship and socially responsible business practices in areas such as the promotion of human rights, environmental protection and the elimination of corruption. Launched by former UN Secretary-General Kofi Annan in 2000, it is a voluntary partnership between the United Nations and the private sector, with the involvement of hundreds of NGOs as equal partners. The core of the Global Compact is a set of principles drawn from international instruments including the Universal Declaration of Human Rights, the Fundamental Principles and Rights at Work and the Rio Declaration on Environment and Development. Participating firms are asked to "advocate the [Global Compact] in mission statements, annual reports, and similar public venues" to "raise the level of attention paid to, and the responsibility for, these concerns within firms" (Ruggie 2001, 371-72). They are also asked to contribute reports documenting their efforts to translate the core Global Compact principles into concrete action, as part of learning networks. Finally, they are asked to join UN "partnership projects to benefit developing countries" (ibid.).

An important caveat is that the principles of corporate citizenship adopted by the Global Compact do not have any binding authority, regulatory teeth or enforcement mechanism. Instead, it relies on market mechanisms, more

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26 This characterization is consistent with Büthe and Mattli (2011, 34). They classify the ITU as a non-market public institution.

27 See IOSCO fact sheet at www.iosco.org/about/pdf/IOSCO-Fact-Sheet.pdf.

28 For information on IOSCO membership rules, see www.iosco.org/about/index.cfm?section=membership. On private international law-making in IOSCO, see Bradley (2005).

direct forms of public pressure by civil society groups and on the force of legitimate international norms to generate pressure for compliance. But, like the example of voluntary technical standards above, it can be loosely categorized as an example of "governance" to the extent that it can contribute to norm setting and can influence and constrain private action in a number of public interest areas. Ruggie (2014, 10-11) has argued that the Global Compact is an interorganizational network, and that it constitutes an example of "new governance" wherein international organizations take what Abbott and Snidal have called a facilitative orchestration role (2009a, 558–75). Accordingly, it is also consistent with the working definition of governance we adopted above: "the coordinated, polycentric management of issues purposefully directed toward particular outcomes" (Welch 2013, 257).

The Global Compact involves IGOs, states, firms and NGOs. While it primarily entails firms committing to principles of corporate social responsibility, it also entails important roles for states, international organizations and civil society. States established the Global Compact via a UN General Assembly Resolution and provided voluntary funding, as well as diplomatic support (Ruggie 2004, 514). Firms' commitments are supplemented by the work of more than 100 local networks that conduct "learning exchanges, information sharing, working groups" and "partnerships and dialogues that tackle issues specific to local contexts" (UN Global Compact Office 2012, 6). The United Nations reports that these networks include "continued engagement by a diverse group of stakeholders, including academic institutions, business enterprises, NGOs and government entities" (ibid.). The Global Compact Board is "a multi-stakeholder advisory body that meets annually…to provide ongoing strategic and policy advice for the initiative as a whole and make recommendations to the Global Compact Office, participants and other stakeholders."[29] It "is comprised of four constituency groups — business, civil society, labour and the United Nations — with differentiated roles and responsibilities apart from their overall advisory function."[30] Thus, the Global Compact has explicitly adopted the language of multi-stakeholder governance, and it has instantiated the concept in a heterogeneously polyarchic way, with differentiation of roles and responsibilities. While expressions of authority relations recede as a result of the relatively egalitarian distribution of authority among participants in the Global Compact, again it is important to recognize that the equal distribution of authority is not the same as its absence. The principles underlying the Global Compact and the more specific rules that outline conduct expected from participants are authoritative to the degree that participants accept them as legitimate. These rules

differentially empower and constrain various actors; for example, constraining firms to meet their commitments, and constraining the United Nations, states and civil society groups from branding compliant firms as bad actors, while empowering them to criticize participating actors found to violate their commitments, as well as actors that refuse to participate.

VARIATION IN MULTI-STAKEHOLDER FORMS: AUTHORITY RELATIONS AND PROCEDURAL RULES

Claims about multi-stakeholder governance clearly permeate several areas of global concern such as environmental protection, human rights, Internet governance and finance. For scholars and practitioners of Internet governance, the issue-area in which this concept is most fully and consistently articulated, this paper is valuable in that it calls into question the article of faith that the Internet is governed in a unique, multi-stakeholder manner increasingly threatened by the encroachment of sovereign states. Multi-stakeholder governance is identifiable in other issue-areas such as financial governance and corporate social responsibility. Equally, some important Internet governance functions are performed in ways that are clearly not instances of multi-stakeholderism, such as the policy-making role of information intermediaries in establishing practices for dealing with public interest areas, such as cyberbullying, or establishing policies that directly determine the extent of user privacy online. Perhaps the most striking conclusion of our work for the study and practice of Internet governance is to call into question the extent to which Internet governance actually lives up to the talk about multi-stakeholderism. Across a number of crucial governance functions, the reality is perhaps closer to industry self-regulation than to genuine multi-stakeholder governance.

Of the five selected cases of institutions and initiatives that do involve multi-stakeholder coordination, there is variation in both types of actors and the authority relations among these actors. Table 3 summarizes this variation by classifying each case example into the schema of 22 forms of multi-stakeholder governance indicated in Table 1's taxonomy.

ICANN and the IETF both involve multiple types of stakeholders and both adopt authority relations distributed across these actors. In the case of ICANN, these authority relations are heterogeneous in the sense that formal powers vary by actor. Participation rights and decision-making powers in the IETF (and W3C) are more homogenously distributed among participants. The ITU, in contrast, is primarily hierarchical. Even though many classes of actors can weigh in as sector members, only member states are permitted to vote on international telecommunication

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29 See www.unglobalcompact.org/AboutTheGC/stages_of_development. html.

30 Ibid.

regulations or on the organization's constitutive instrument, and member states must also approve some recommendations emerging from multi-stakeholder study groups. In the area of financial regulation, IOSCO is primarily an example of heterogeneous polyarchy (albeit with elements of homogenous polyarchy) with influence distributed among states, IGOs and firms in their capacity as participants in industry self-regulatory collectives. The UN Global Compact differentiates roles heterogeneously among all four actor classes — states, IGOs, firms and NGOs — but does so in the least hierarchical fashion among the three cases of heterogeneous polyarchy examined.

The five cases examined in this paper provide a small window into the variation in types of multi-stakeholder governance, but they do not exhaust the list of cases. In order to facilitate future scholarly work along these lines, we briefly survey additional instances of multi-stakeholderism that have been speculatively positioned in Table 3 using parentheses. We also discuss gaps in the empirical illustration of the typology. Finally, we turn to the implications of the findings of our cases.

First, while we have treated two specific Internet governance cases in this paper as individual instances of multi-stakeholderism, another possibility would be to treat the entirety of what practitioners routinely call "the Internet governance ecosystem" as a single, macro-level case of multi-stakeholderism. We opted not to take this approach, in order to point out meaningful variation in the way multi-stakeholderism is instantiated within this issue-area, and also to point out that much of Internet governance (including one of our cases) is decidedly not multi-stakeholder. We prefer Nye's approach drawing on the regime complex literature, but feel it important to point out this alternate perspective.

Büthe and Mattli (2011) characterize the ISO, the International Electrotechnical Commission and the International Accounting Standards Board as private, non-market standard-setting bodies. However, this characterization overlooks the degree to which these bodies include a variety of types of actors. For example, the ISO is an international network comprising national standards bodies. Some of these bodies are government agencies or arms-length quasi-governmental entities, while others are

Table 3: Classification of Cases

Stakeholder Types	Nature of Authority Relations			
	Hierarchy	Polyarchy		Anarchy
		Heterogeneous	Homogeneous	
States, IGOs, Firms, NGOs	ITU	ICANN, Global Compact, (Global Fund to Fight AIDS, Tuberculosis and Malaria [Global Fund]), (Global Alliance for Vaccines and Immunization [GAVI])	(Roundtable on Sustainable Biomaterials [RSB])	
States, IGOs, Firms		IOSCO		
IGOs, Firms, NGOs				
States, IGOs, NGOs				
States, Firms, NGOs			IETF, W3C	
States, IGOs				
States, Firms			(International Accounting Standards Board), (ISO), (International Electrotechnical Commission)	
States, NGOs				
IGOs, Firms				
IGOs, NGOs				
Firms, NGOs				

Source: Authors.

non-profit entities, often with close ties to manufacturing firms. While the ISO and the International Electrotechnical Commission are instances of multi-stakeholderism, Büthe and Mattli's characterization of their activities as "centrally coordinated global networks comprising hundreds of technical committees," as well as their finding that these organizations are fundamentally political, is accurate (ibid., 5). Given the restriction of membership in these bodies to national standards bodies and the formally horizontal procedures for standard setting within them, we tentatively classify these three organizations as cases of homogeneous polyarchy including states and firms. Furthermore, Büthe and Mattli's focus on the politics of global rule making is compatible with the approach taken here.

Kenneth W. Abbott and David Gartner (2012, 4) find that "recent global health institutions have embraced a multi-stakeholder model in which [NGOs], the private sector, private foundations, and other constituencies within civil society — including populations directly affected by health threats — participate directly in governance structures, deliberation, and decision-making." They identify the Global Fund and GAVI as prominent examples. Both are broadly multi-stakeholder, including all four of the classes of actors we identify. Both also have complex governance structures that distribute roles and responsibilities differentially (see GAVI Alliance 2015; Global Fund 2014). Accordingly, we suggest they are best seen as instances of heterogeneous polyarchy.

Finally, the RSB is an instance of relatively homogeneous polyarchy including states, IGOs, firms and civil society actors.[31] Members of the RSB are divided by actor class into seven "chambers": three comprised of firms; three comprised of various kinds of civil society organizations; and one combining government, IGOs and academics. Each chamber has equal weight in constituting the RSB's main governing body, the Assembly of Delegates. The assembly votes on modifications to the organization's core standards and appoints the RSB Board to run daily operations (RSB 2015). While voting shares are not equally allotted to different actor classes, the RSB does not distinguish classes of membership or endow different actor classes with distinctive powers and responsibilities.

One important cluster of cases not addressed here cuts across a wide variety of issue-areas: those involving states and IGOs. These are among the most familiar cases to students of IR, and can be reasonably expected to number among the most common types in practice, but they are not typically thought of as cases of multi-stakeholder governance. Recent scholarship has studied these relationships in terms of principal-agent theory (see Hawkins et al. 2006).[32] However, insofar as these agents exhibit de facto independence from their principals, it may be more productive to approach some such cases as instances of multi-stakeholder governance. Doing so places additional emphasis on the agency of at least some IGOs, and might permit more complete understanding of those that are highly autonomous in at least some areas of their work. Candidates for such treatment would include the European Union, as well as dispute resolution procedures in the World Trade Organization. At a minimum, there are parallels between multi-stakeholder governance and highly delegated principal-agent relationships that should be explored in greater depth; it may be that these relationships are best thought of in terms of a spectrum.

Shifting from examination of state-IGO relations in terms of principals delegating to agents, to an understanding of these relations in terms of multi-stakeholder governance also seems promising in light of the increasing role of civil society actors. Major IGOs increasingly face demands from civil society groups of various kinds, including NGOs and indigenous peoples' movements, as well as from firms. These non-state actors cannot formally delegate to IGOs by virtue of the structure of their constitutive instruments, but they increasingly factor into the decisions IGOs make about how to implement programs and fulfill their missions. This influence is difficult to explain as a function of the power resources possessed by these non-state actors, especially relative to those possessed by states. A better explanation might be that IGO secretariats increasingly accept as appropriate the notion that such non-state actors' concerns should be taken into account. Put another way, the secretariats increasingly accept that these non-state actors are entitled to participate as stakeholders in governance, albeit not typically in precisely the same ways as other classes of actors. Developing conceptual tools that more easily accommodate such emerging patterns may prove useful.

The range of cases involving states and firms is also not well covered by the empirical illustrations of this paper. These include various kinds of regulatory mechanisms where private firms, and associations of firms, play governance roles with varying degrees of oversight from and interaction with state agencies (see Haufler 2001), as well as the standard-setting cases covered by Büthe and Mattli (2001). While such privatization of governance has occurred in a range of industry sectors, it has perhaps been most consequential in the global financial system, where it arguably compromised the effectiveness and legitimacy of the system and involved a high degree of regulatory capture (see Underhill and Zhang 2008; Baker 2010; Helleiner, Pagliari and Zimmerman 2010).

31 We thank an anonymous reviewer for alerting us to the existence of the RSB.

32 This conception of the relationship between states and international organizations is similar to the notion of delegation elaborated in Abbott et al. (2000).

Taken together, the cases suggest that even using a limited set of examples, there is clearly variation among different instances of multi-stakeholder governance. Much of this variation is produced by the procedural rules constituting particular governance institutions, mechanisms and processes. These rules govern eligibility for various kinds of membership and the distribution of various decision-making capacities among members (including voting rules). They also establish standards for evaluating and responding to proposals, interpretations and arguments presented by other actors (Raymond 2011). They therefore simultaneously empower and constrain actors, to the point of determining whether and how they are entitled to participate in a particular governance process.

Thus, the nature of authority relations between actors in a given social context is a product of these procedural rules. Classifying a particular governance institution or organization as hierarchic or (homogeneously or heterogeneously) polyarchic is a matter of inductively identifying procedural rules. Further, two institutions or organizations that fall into the same broad classificatory category may also employ slightly different procedural rules that share family resemblances; and the same institution or organization may undergo change in its procedural rules over time, which may or may not require that it be reclassified in the schema proposed above. Finally, this means that if an attempt were made to make an institution more or less multi-stakeholder in nature, or if an attempt were made to change the form of multi-stakeholderism employed in a particular organization, the procedural rules would need to be changed. These changes must be such that different classes or combinations of classes of actors would be relatively enabled and constrained in exercising control over the institution or organization in question.

An understanding of the connections between procedural rules, authority relations and variations in forms of multi-stakeholder governance is important at least in part because in the absence of mutually agreed-upon procedural rules for rule making, interpretation and application, the creation of new governance mechanisms is unlikely. Discussions and negotiations are likely to founder on procedural grounds. Disagreement over procedural rules complicates not only the creation of new governance mechanisms, but also the operation of existing ones. This is because the social reproduction of these rules, institutions and processes occurs through the continued application of general rules to particular cases, which in turn depends on mutually accepted procedures for rule making, interpretation and application. Legitimate procedural rule-sets are therefore crucial to the continued operation of the extensive system of global governance that characterizes contemporary world politics. The increasing demands for increased participation (and new forms of participation) being articulated by emerging powers and by non-state actors are inconsistent both with each other and with pre-existing international rule-making procedures. Accordingly, the potential for increased friction is considerable and likely to grow.[33]

Such disagreements on legitimate procedures for rule making are evident in the Internet governance issue-area; at least five partially overlapping sets of procedural rules are identifiable. The first might usefully be called an OECD view, since it is held primarily by its member states. It consists of commitment to the rule of law (domestically and internationally), even to the point of considering a conditional view of sovereignty, along with acceptance of multilateral cooperation among states and the relatively routine consultation of stakeholders. This consultation of stakeholders has begun, primarily over the past 20 years, to take the form of increased reliance on industry self-regulation not only in the Internet field, but also in financial governance of various kinds and other areas involving technical standard setting. Within the information governance area broadly conceived, this procedural approach to rule making is evident in the 1988 International Telecommunications Regulation treaty and in the World Intellectual Property Organization.

The second set of procedural rules can be summarized as the Shanghai Cooperation Organisation view. It emphasizes great power privilege in the operation of the international system and entails a strong, rather than conditional, interpretation of sovereignty. It is based on hierarchical state-society relations and limited or nonexistent stakeholder consultation. This view is held primarily by China and Russia, but bears some similarities to the procedural views of the remaining BRICS countries (Brazil, India and South Africa). Because this approach to rule making is held by states that have lacked dominant influence both over the Internet and over world politics since the Internet's commercialization, institutionalized examples of such procedures are difficult to identify within the Internet governance issue-area. These views, however, inform the opposition of these states to legacy mechanisms of Internet governance given their connections to the United States; they also inform suspicion of, and opposition to, the multi-stakeholder model.

The third set of procedural rules is held by the primarily postcolonial members of the Group of 77. While this is the most diverse of the five sets of procedural rules, some commonalities can be identified. First, like the Shanghai Cooperation Organisation view, the Group of 77 view of procedural legitimacy emphasizes a robust conception of sovereignty. This insistence on sovereignty stems in part from the challenges faced by weak states emerging from colonization (Jackson 1990). In addition, these states struggle to varying extents with issues of expertise and capacity; these inequalities have contributed to preferences

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33   For a similar argument in the context of contemporary international law, see Raymond (2013a).

that privilege existing multilateral institutions (those with which states have extensive experience) over innovative forms of international and multi-stakeholder cooperation. The preference among many developing world states for a broader ITU role in Internet governance is an example of this preference for existing multilateral institutions with voting rules based on sovereign equality.

The first three sets of procedural rules are endemic to international relations, but the fourth and fifth are not. The epistemic community of technologists has a distinct view of how to legitimately make and interpret rules, which is perhaps best exemplified by the IETF's RFC process, in which "the basic ground rules were that anyone could say anything and that nothing was official" (see Reynolds and Postel 1987). The IETF (2004) mission statement continues to reflect this ethos, with its affirmation of the organization's commitment to "rough consensus and running code." Although individual bodies have their own processes, the Internet technical community tends to adopt horizontal, distributed and voluntary rule-making procedures reflective of its members' values.

Fifth, and finally, corporate stakeholders that have driven the development of the commercial Internet also have distinct views on rule making and interpretation. These views are rooted in voting by corporate boards subject to shareholder accountability, hierarchical chains of accountability within the firm and external relationships based on private contracts. Although some technology companies make conscious efforts to embody the spirit of the technical community, norms of corporate governance also affect their behaviour; this is especially true of companies that pursue public stock offerings. ICANN's contractual model of delegating to regional Internet registries and to generic TLD registries is one example of Internet governance done on the basis of corporate procedural rules; interconnection between network operators is another.

The increasing importance of the Internet to everyday life has begun to generate new entrants into the governance process. Corporate actors were the first non-technical players, but the current trend is increased interest on the part of both industrial and non-industrial states. The Internet's growing integration with a range of public and private activities is also creating new interests and making additional social values salient for existing governance participants. Resolving the attendant conflicts and trade-offs is complicated by the diversity of views on appropriate procedures for making, interpreting and applying rules. Without a procedural *modus vivendi*, it is unlikely that distributional questions will be effectively addressed.[34]

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34 IR theory has, with a small number of exceptions, taken insufficient notice of the empirical importance of justice considerations (whether procedural or distributive) in explaining outcomes. On these questions, see Welch (1993) and Albin (2001).

CONCLUSION

This paper attempts to provide a more nuanced study of multi-stakeholder governance as a class of phenomena across multiple issue-areas, albeit with particular attention to Internet governance issues. Multi-stakeholderism is not a single approach to governance, and multi-stakeholder forms of multi-stakeholder governance are not unique to, or even always applicable to, how the Internet is run.

Multi-stakeholderism is sometimes viewed as a value in itself rather than a possible set of approaches for meeting more salient public interest objectives such as human rights, Internet security and performance, or financial stability. The more appropriate approach to responsible and efficacious governance requires determining what types of administration are optimal in any *particular* functional and political context. For example, in the area of Internet governance, some policy-making tasks may appropriately be relegated to the private sector, some to the purview of traditional sovereign state governance or international treaty negotiations, and some more appropriately as multi-stakeholder. Determining which mode of governance is appropriate for various global administrative functions may require conceptual and theoretical tools that have not yet been developed. The study of multi-stakeholderism as an institutional form presented here provides a foundation on which they can be built.

The practical value of this approach is evident in the case of Internet governance. Our argument highlights a set of more prescriptive questions that are impossible without nuanced conceptions of Internet governance and of multi-stakeholderism such as the ones presented here. One such question is whether there is a need for more multi-stakeholderism in particular functional areas of Internet governance, or whether there are more effective and appropriate means of instantiating democratic values in areas of policy likely to engage important public values and interests. Another question made possible by a more sophisticated conceptual framework is whether particular governance functions are matched with appropriate forms of multi-stakeholder governance — or, more fundamentally, whether particular functions are better accomplished through means other than multi-stakeholderism. Finally, to what extent is the concept of multi-stakeholderism deployed as a proxy for broader political struggles, or as an impediment to the types of coordination necessary to promote conditions of responsible governance? For example, governments can advocate for top-down and formalized multi-stakeholderism to gain additional power in areas in which they have traditionally not had jurisdiction. Alternatively, companies and other actors with vested interests in current governance arrangements can deploy multi-stakeholderism in a manner either meant to exclude new entrants (whether public or private) with

incommensurate interests and values, or to preserve incumbent market advantage.

Definitively answering such questions requires a great deal of further research on the connections between issue characteristics and the properties of rule-sets and organizations, on the one hand, and the effectiveness and legitimacy of governance on the other hand. It is especially important to adopt a broad comparative strategy that looks for insights from other related areas. Given the global nature of the Internet, literature in IR and global governance offers promising sources. However, scholars in these fields remain in the early stages both of understanding issues of institutional performance and design,[35] and of studying forms of governance where the state is (at least under some conditions) merely one actor among many.

In addition, the comparative study of multi-stakeholder governance as a class of phenomena offers substantial benefits to scholars of IR and global governance. First, it provides additional cases in which to study the role of private actors in governance. Second, it offers the potential to extend understanding of what kinds of institutions perform most effectively and enjoy greater legitimacy in dealing with novel, complex, technical and transnational issues of increasing political salience. It does so by extending the types of institutions studied in the literatures on institutional effectiveness and design. Third, it furnishes additional evidence of the presence and complexity of authority relations in international politics. It demonstrates the existence of authority relations in world politics in which the state is either absent or embroiled in heterogeneously polyarchic relations with non-state actors of various kinds. At a more general level, the comparative study of multi-stakeholder governance demonstrates the inadequacy of conceiving authority as binary and of understanding authority as a property solely of actors and not also of rules.

Finally, the argument presented here is relevant both to scholars of Internet governance and IR because it demonstrates the importance of procedural rules. Specifically, it clearly connects them to the study both of institutional forms and of authority in world politics. Such rules are critical to producing variation in institutional and organizational forms, both among and within the types elaborated in this paper, as well as between multi-stakeholder and non-multi-stakeholder forms of governance. As such, procedural rules are also of vital practical importance; institutions and organizations that depend on illegitimate procedures are unlikely to enjoy broad acceptance and thus effectiveness. Further, the fact that major actors in Internet governance endorse diverse views of procedural legitimacy helps explain the rising tension in this issue-area and also suggests that actors should attempt to forge a procedural *modus vivendi* prior to attempting to resolve substantive issues.

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35 For one notable effort, see Koremenos, Lipson and Snidal (2001). See also the other articles in this special issue of *International Organization*, including the critical piece by Wendt (2001).

WORKS CITED

Abbott, Kenneth W. and David Gartner. 2012. "Reimagining Participation in International Institutions." *Journal of International Law and International Relations* 8: 1–35.

Abbott, Kenneth W. and Duncan Snidal. 2000. "Hard and Soft Law in International Governance." *International Organization* 54 (3): 421–56.

———. 2009a. "Strengthening International Regulation Through Transnational New Governance: Overcoming the Orchestration Deficit." *Vanderbilt Journal of Transnational Law* 42: 501–78.

———. 2009b. "The Governance Triangle: Regulatory Standards Institutions and the Shadow of the State." In *The Politics of Global Regulation*, edited by Walter Mattli and Ngaire Woods. Princeton, NJ: Princeton University Press.

Abbott, Kenneth W., Robert O. Keohane, Andrew Moravcsik, Anne-Marie Slaughter and Duncan Snidal. 2000. "The Concept of Legalization." *International Organization* 54 (3): 401–19.

Albin, Cecilia. 2001. *Justice and Fairness in International Negotiation*. Cambridge, MA: Cambridge University Press.

Antonova, Slavka. 2008. *Powerscape of Internet Governance — How was Global Multistakeholderism Invented in ICANN?* Saarbrücken, Germany: VDM Verlag.

Baker, Andrew. 2010. "Restraining Regulatory Capture? Anglo-America, Crisis Politics and Trajectories of Change in Global Financial Governance." *International Affairs* 86 (3): 647–63.

Balkin, Jack M. 2008. "The Future of Free Expression in a Digital Age." *Pepperdine Law Review* 36. http://ssrn.com/abstract=1335055.

Barlow, John Perry. 1996. "A Declaration of the Independence of Cyberspace." Davos Switzerland, February 8. https://projects.eff.org/~barlow/Declaration-Final.html.

Bradley, Caroline. 2005. "Private International Law-Making for the Financial Markets." *Fordham International Law Journal* 29 (1): 127–80.

Brousseau, Eric, Meryem Marzouki and Cécile Méadel, eds. 2012. *Governance, Regulation, and Powers on the Internet*. Cambridge, MA: Cambridge University Press.

Bukovansky, Mlada. 2002. *Legitimacy and Power Politics: The American and French Revolutions in International Political Culture*. Princeton, NJ: Princeton University Press.

Bull, Hedley. 2002. *The Anarchical Society: A Study of Order in World Politics*, 3rd ed. New York, NY: Columbia University Press.

Büthe, Tim and Walter Mattli. 2011. *The New Global Rulers: The Privatization of Regulation in the World Economy*. Princeton, NJ: Princeton University Press.

Bygrave, Lee A. and Jon Bing, eds. 2009. *Internet Governance: Infrastructure and Institutions*. Oxford, UK: Oxford University Press.

Cerf, Vint, Patrick Ryan and Max Senges. 2014. "Internet Governance is Our Shared Responsibility." *I/S: A Journal of Law and Policy* 10 (1): 1–41.

Clark, David. 1992. "A Cloudy Crystal Ball, Visions of the Future." In *Proceedings of the Twenty-Fourth Internet Engineering Task Force, Massachusetts Institute of Technology, NEARnet, Cambridge, July 13–17, 1992*. IETF, 539–44. www.ietf.org/proceedings/24.pdf.

Dahl, Robert A. 1956. *A Preface to Democratic Theory*. Chicago, IL: University of Chicago Press.

———. 1972. *Polyarchy: Participation and Opposition*. New Haven, CT: Yale University Press.

DeNardis, Laura. 2014. *The Global War for Internet Governance*. New Haven, CT: Yale University Press.

Drezner, Daniel W. 2000. "Bargaining, Enforcement, and Multilateral Sanctions: When is Cooperation Counterproductive?" *International Organization* 54 (1): 73–102.

Dutton, William H., Anna Dopatka, Michael Hills, Ginette Law and Victoria Nash. 2011. "Freedom of Connection-Freedom of Expression: The Changing Legal and Regulatory Ecology Shaping the Internet." Paris: UNESCO. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1654464.

Dutton, William H., John Palfrey and Malcolm Peltu. 2007. "Deciphering the Codes of Internet Governance: Understanding the Hard Issues at Stake." Oxford Internet Institute and e-Horizons Institute Forum Discussion Paper No. 8.

Epstein, Dmitry. 2013. "The Making of Institutions of Information Governance: The Case of the Internet Governance Forum." *Journal of Information Technology* 28: 137–49.

GAVI Alliance. 2015. "Governing GAVI." www.gavi.org/about/governance.

Glasius, Marlies. 2010. *Expertise in the cause of justice: Global civil society influence on the statute for an international criminal court*. Oxford, UK: Oxford University Press.

Global Fund. 2014. *Governance Handbook*. www.theglobalfund.org/en/board.

Haas, Peter M. 1992. "Introduction: Epistemic Communities and International Policy Coordination." *International Organization* 46 (1): 1–35.

Haufler, Virginia. 2001. *A Public Role for the Private Sector: Industry Self-Regulation in a Global Economy*. Washington, DC: Carnegie Endowment for International Peace.

Hawkins, Darren G., David A. Lake, Daniel L. Nielson and Michael J. Tierney, eds. 2006. *Delegation and Agency in International Organizations*. Cambridge, MA: Cambridge University Press.

Helleiner, Eric, Stefano Pagliari and Hubert Zimmermann, eds. 2010. *Global Finance in Crisis: The Politics of International Regulatory Change*. New York, NY: Routledge.

Hobson, John M. and Jason C. Sharman. 2005. "The Enduring Place of Hierarchy in World Politics: Tracing the Social Logics of Hierarchy and Political Change." *European Journal of International Relations* 11 (1): 63–98.

Hurd, Ian. 1999. "Legitimacy and Authority in International Politics." *International Organization* 53 (2): 379–408.

IETF 2004. "A Mission Statement for the IETF." RFC3935. www.ietf.org/rfc/rfc3935.txt.

Ikenberry, G. John. 2001. *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order after Major Wars*. Princeton, NJ: Princeton University Press.

International Proposals to Regulate the Internet: Hearing Before the Committee on Energy and Commerce, House of Representatives. 2012. 112th Congress. Washington, DC: United States Government Printing Office.

IOSCO. 2010. "Objectives and Principles of Securities Regulations." www.iosco.org/library/pubdocs/pdf/IOSCOPD323.pdf.

Jackson, Robert H. 1990. *Quasi-States: Sovereignty, International Relations and the Third World*. Cambridge, MA: Cambridge University Press.

Keck, Margaret E. and Kathryn Sikkink. 1998. *Activists Beyond Borders*. Ithaca, NY: Cornell University Press.

Keene, Edward. 2007. "A Case Study of the Construction of International Hierarchy: British Treaty-Making against the Slave Trade in the Early Nineteenth Century." *International Organization* 61 (2): 311–39.

———. 2013. "International Hierarchy and the Origins of the Modern Practice of Intervention." *Review of International Studies* 39 (5): 1077–90.

Keohane, Robert O. 1990. "Multilateralism: An Agenda for Research." *International Journal* 45 (4): 731–64.

Koremenos, Barbara, Charles Lipson and Duncan Snidal. 2001. "The Rational Design of International Institutions." *International Organization* 55 (4): 761–99.

Krasner, Stephen D. 1991. "Global Communications and National Power: Life on the Pareto Frontier." *World Politics* 43 (3): 336–66.

Krouse, Richard W. 1982. "Polyarchy and Participation: The Changing Democratic Theory of Robert Dahl." *Polity* 14 (3): 441–63.

Lake, David A. 2007. "Escape from the State of Nature: Authority and Hierarchy in World Politics." *International Security* 32 (1): 47–79.

———. 2009. "Regional Hierarchy: Authority and Local International Order." *Review of International Studies* 35 (S1): 35–58.

Malcolm, Jeremy. 2008. *Multi-Stakeholder Governance and the Internet Governance Forum*. Wembley, Australia: Terminus Press.

March, James G. and Johan P. Olsen. 1998. "The Institutional Dynamics of International Political Orders." *International Organization* 52 (4): 943–69.

Martin, Lisa L. and Beth A. Simmons. 1998. "Theories and Empirical Studies of International Institutions." *International Organization* 52 (4): 729–57.

Mathiason, John. 2008. *Internet Governance: The New Frontier of Global Institutions*. New York, NY: Routledge.

Mueller, Milton L. 2002. *Ruling the Root: Internet Governance and the Taming of Cyberspace*. Cambridge, MA: MIT Press.

———. 2010. *Networks and States: The Global Politics of Internet Governance*. Cambridge, MA: MIT Press.

Mueller, Milton L., Andreas Schmidt and Brenden Kuerbis. 2013. "Internet Security and Networked Governance in International Relations." *International Studies Review* 15 (1): 86–104.

NTIA. 2014. "NTIA Announces Intent to Transition Key Internet Domain Name Functions." Press release, March 14. www.ntia.doc.gov/press-release/2014/ntia-announces-intent-transition-key-internet-domain-name-functions.

Nye, Joseph S., Jr. 2014. *The Regime Complex for Managing Global Cyber Activities*. GCIG Paper Series Paper No. 1. Waterloo, ON: CIGI. www.cigionline.org/publications/regime-complex-managing-global-cyber-activities.

Orsini, Amandine, Jean-Frédéric Morin and Oran Young. 2013. "Regime Complexes: A Buzz, a Boom, or a Boost for Global Governance?" *Global Governance* 19 (1): 27–39.

Ostrom, Elinor. 2010. "Beyond Markets and States: Polycentric Governance of Complex Economic Systems." *The American Economic Review* 100 (3): 641–72.

Ostrom, Vincent, Charles M. Tiebout and Robert Warren. 1961. "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry." *American Political Science Review* 55 (4): 831–42.

Palfrey, John and Urs Gasser. 2012. *Interop: The Promise and Perils of Highly Interconnected Systems*. New York, NY: Basic Books.

Price, Richard. 1998. "Reversing the Gun Sights: Transnational Civil Society Targets Land Mines." *International Organization* 52 (3): 613–44.

Raymond, Mark. 2011. "Social Change in World Politics: Secondary Rules and Institutional Politics." Ph.D. dissertation, University of Toronto.

———. 2013a. "Renovating the Procedural Architecture of International Law." *Canadian Foreign Policy Journal* 19 (3): 268–87.

———. 2013b. "Puncturing the Myth of the Internet as a Commons." *Georgetown Journal of International Affairs* (December): 5–16.

———. 2015. "Locating Authority in the International System: Authoritative Rules and Post-Anarchy International Relations Theory." Paper presented at the International Studies Association Annual Conference, New Orleans, LA, February 21. web.isanet.org/Web/Conferences/New%20Orleans%202015/Archive/2a4f40c4-2b9b-4e24-acc6-2ee07be7bacd.pdf.

Reus-Smit, Christian. 1997. "The Constitutional Structure of International Society and the Nature of Fundamental Institutions." *International Organization* 52 (4): 555–89.

———. 1999. *The Moral Purpose of the State: Culture, Social Identity and Institutional Rationality in International Relations*. Princeton, NJ: Princeton University Press.

Reynolds, J. and J. Postel. 1987. "The Request for Comments Reference Guide." RFC1000. www.ietf.org/rfc/rfc1000.txt.

Rosenau, James N. 1995. "Governance in the Twenty-First Century." *Global Governance* 1 (1): 13–43.

RSB. 2015. "RSB Governance." http://rsb.org/about/governance/.

Ruggie, John Gerard. 1992. "Multilateralism: The Anatomy of an Institution." *International Organization* 46 (3): 561–98.

———. 2001. "global_governance.net: The Global Compact as Learning Network." *Global Governance* 7 (4): 371–78.

———. 2004. "Reconstituting the Global Public Domain — Issues, Actors, Practices." *European Journal of International Relations* 10 (4): 499–531.

———. 2014. "Global Governance and 'New Governance Theory': Lessons from Business and Human Rights." *Global Governance* 20 (1): 5–17.

Sharman, Jason C. 2013. "International Hierarchies and Contemporary Imperial Governance: A Tale of Three Kingdoms." *European Journal of International Relations* 19 (2): 189–207.

Slaughter, Anne-Marie. 2004. *A New World Order*. Princeton, NJ: Princeton University Press.

Stauffacher, Daniel and Wolfgang Kleinwächter. 2005. *The World Summit on the Information Society*. New York, NY: United Nations Information and Communication Technologies Task Force.

Underhill, Geoffrey R. D. and Xiaoke Zhang. 2008. "Setting the Rules: Private Power, Political Underpinnings, and Legitimacy in Global Monetary and Financial Governance." *International Affairs* 84 (3): 535–54.

UN Global Compact Office. 2012. *Global Compact Local Network Report 2012*. New York, NY: United Nations. http://unglobalcompact.org/docs/publications/LN_Report_2012.pdf.

Waltz, Kenneth N. 1979. *Theory of International Politics*. Boston, MA: McGraw-Hill.

Welch, David A. 1993. *Justice and the Genesis of War*. Cambridge, MA: Cambridge University Press.

———. 2013. "What is 'Governance,' Anyway?" *Canadian Foreign Policy Journal* 19 (3): 253–58.

Weiss, Thomas G. and Rorden Wilkinson. 2014. "Rethinking Global Governance: Complexity, Authority, Power, Change." *International Studies Quarterly* 58 (1): 207–15.

Weissbrodt, David and Maria Kruger. 2003. "Norms on the responsibilities of transnational corporations and other business enterprises with regard to human rights." *American Journal of International Law* 97 (4): 901–22.

Wendt, Alexander. 1998. "On Constitution and Causation in International Relations." *Review of International Studies* 24 (5): 101–18.

———. 2001. "Driving with the Rearview Mirror." *International Organization* 55 (4): 1019–49.

WGIG. 2005. *Report of the Working Group on Internet Governance*. Chateau de Bossey. June. www.wgig.org/docs/WGIGREPORT.pdf.

Wilkinson, Rorden. 2000. *Multilateralism and the World Trade Organization*. London, UK: Routledge.

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