

Aarti Gupta and [Michael Mason](#)

A transparency turn in global environmental governance

Book section

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I

Transparency in Broader Context

Aarti Gupta and Michael Mason

A Transparency Turn in Global Environmental Governance

1

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“Publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants.”

Louis Dembitz Brandeis, 1913¹

A century after ~~this the epigraph’s enduring insight~~ Justice Louis Brandeis uttered these prescient words, we live, seemingly, in an era of transparency. Transparency is equated most often with openness and reduced secrecy, ~~and is considered to be the opposite of secrecy, to be secured~~ garnered through greater availability and increased flows of information (Florini 1998; see also Fenster 2010). Whether to enhance global security, secure human rights, discipline borderless business, or hold to account faceless bureaucrats, transparency is increasingly seen as part of the solution to a complex and diverse array of economic, political, and ethical challenges in our increasingly

interconnected world (Finel and Lord 2000; Fung et al. 2007; Soederberg 2001).

Aided and abetted by the rapid diffusion of information-communication technologies, transparency is implicated in many of the most high-profile controversies of our times. These range from the much-publicized 2010 WikiLeaks disclosures of US diplomatic cables and wartime activities, to design of “robust” international monitoring, reporting and verification systems for global climate mitigation, to calls for transparency to combat opaque business practices implicated in the global financial crisis. In each of these cases, the benefits sought through transparency include empowering the weak and holding accountable the powerful, by reducing informational asymmetries between authority holders and affected actors (e.g., Grigorescu 2007; Roberts 2004; Stasavage 2003). Transparency is also implicated in the pursuit of substantive regulatory outcomes, such as environmental improvements, stabilized markets, reduced corruption, or enhanced human security (e.g., Weil et al. 2006; Stephan 2002).

Yet can and does transparency live up to its many promises? A growing number of transparency analysts have revealed not only the promise, but also the pathologies and limitations associated with the growing uptake of transparency by public and private actors across a range of policy areas (Bannister and Connolly 2011; Fung et al. 2007; Hood and Heald 2006; Lord 2006). For example, a requirement under a domestic freedom of information

act to disclose minutes of government proceedings may result in minutes not being formally recorded, thereby increasing secrecy and hindering accountability (Roberts 2006). Debates about the consequences of the wide-ranging WikiLeaks disclosures support the uneasy conclusion that ever-greater openness may not only breed greater secrecy but also have other undesirable impacts, such as exacerbating conflict or mistrust (see also Birchall 2011). In the same vein, opposition to aggressive US governmental investigation of media leaks in 2013 was grounded in the belief that secrecy (in this case, maintaining anonymity of journalistic sources) is sometimes a prerequisite for the very disclosure that can hold the powerful to account.

The relationship between transparency and more accountable, legitimate, and effective governance is thus far from straightforward. The ideal(s) of transparency may be contested or may not be attained in practice. Our objective in this ~~volume~~book is to scrutinize these ideals and their rendering in practice across a diverse set of global governance initiatives. We focus, in particular, on the global *environmental* domain, as a paradigmatic case of transparency being embraced as an unmitigated good. In doing so, our point of departure is that transparency is becoming a central component of global environmental discourse and practice. Our aim in this ~~volume~~book is ~~thus~~ to identify the configuration of factors fueling such a posited “transparency turn” in global environmental governance, as well as its breadth and quality, and potential transformative effects.

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We proceed as follows: ~~in the next section,~~ we first address definitional issues and specify our focus in this ~~volumebook~~ on “governance by disclosure” as symptomatic of a transparency turn in the global environmental realm. ~~In the next sectionsection 2, w~~We then draw on various theoretical traditions in (global) environmental politics scholarship to outline a distinctive ~~theoretical~~ approach—critical transparency studies—that informs the analyses in this ~~volumebook~~. ~~The finalnext sectionSection 3~~ draws on this perspective to outline an analytical framework to assess the *uptake*, *institutionalization*, and *effects* of transparency in global environmental governance. We identify a set of overarching questions and hypotheses with which the empirical chapters engage. We conclude with an overview of contributions and a summary of key findings.

Conceptualizing Transparency as Governance by Disclosure

In a most general sense, transparency is associated with openness, communication, the opposite of secrecy, and information flows. Yet there are few widely accepted definitions of the term, and it is often conflated in scholarly writings with related notions such as accountability or publicity (on the latter, see Gilbert 2007). Scholarly reactions to this definitional diversity range from lamenting the lack of a shared definition (e.g., Etzioni 2010; Seidman ~~2010~~2011); to unpacking the normative and political underpinnings

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of specific understandings of transparency (e.g., Birchall 2011), to developing typologies and taxonomies of the concept as a way to clarify its scope and meaning (e.g., Heald 2006; Mitchell 2011).

Our point of departure in this ~~volume~~book is that different ~~understandings~~framings of transparency by different actors in diverse contexts itself merits critical scrutiny and explanation, rather than being a conceptual flaw or practical failure to be remedied (see also Langley 2001). Etymologically, transparency connotes *rendering visible* or seeing through (Michener and Bersch 2011). An association of transparency with visibility leaves aside, however, its relational and normative dimensions, such as *what* is to be made visible, by whom, and for whom; the desired *quality and/or quantity* of transparency; and the (governance) *effects* expected to flow from it. Our aim in this ~~volume~~book is to further understanding of such relational and normative aspects of transparency, including how such aspects are differently framed and institutionalized in specific instances, and with what consequences for the processes and outcomes of global environmental governance.

It is important to note at the outset that our study of transparency is both broader and narrower in scope than specific lay usages of the term might suggest. First, transparency tends to be associated, in common parlance, with *governments disclosing information to interested publics*. We go beyond this narrow understanding of (the scope of) transparency in this ~~volume~~book. In

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line with the changing dynamics of multilevel and multi-actor global governance, our point of departure is that transparency is being deployed in a much broader context than that of states being transparent to their domestic publics or even, in a global context, to other states. Our focus here is rather on the *multiple instigators, architects, and recipients* of transparency in global governance, going beyond states to include corporations, civil society groups, international organizations, consumers, and citizens (see also Langley 2001). As Michener and Bersch (2011, 5) have observed, both the demand and supply of transparency is now “multidirectional.”

At the same time, given our interest in *governance*, we focus here on a specific manifestation of a transparency turn in global politics: the reliance on targeted *disclosure of information* as a means by which to evaluate and steer behavior, that is, as a means by which to govern. We refer to this phenomenon as “*governance by disclosure*” (Gupta 2008) by which we understand *public and private governance initiatives that employ targeted disclosure of information as a way to evaluate and/or steer the behavior of selected actors*. We view the proliferation of governance by disclosure initiatives in the global environmental domain as clearly reflective of a transparency turn in this realm. Our focus on governance by disclosure permits a manageable delimitation of the scope of this study, even as it ~~allows for~~enables a systematic comparison of the uptake and effects of transparency across a range of public and private environmental governance initiatives.

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We select the global environmental policy domain for two reasons.

The first is that ~~a wide array of~~multiple state and non-state actors ~~are~~ isare now increasingly embracing transparency as a necessary feature of decision-making and regulatory action to address global environmental challenges. Diverse actors champion transparency as a means to enhance efficiency, accountability, ~~or~~ and effectiveness of global environmental governance, a phenomenon that we believe deserves a comprehensive theoretical and empirical examination. The normative rationales underpinning a multidirectional embrace of transparency in this realm are also diverse. Thus, private actors may promote transparency as a voluntary means by which to further corporate sustainability goals, and perhaps thereby to avoid mandatory regulation. ~~In~~ By contrast, public actors and civil society may promote transparency as a way to correct perceived democratic deficits in environmental decision-making, or ensure informed choice in risk and sustainability governance. These multiple (and often opposing) rationales for transparency thus may include extending the reach of the state in order to enhance effectiveness of state-led policy, or scaling back the state in advocating for voluntary private governance. Similarly, transparency may be deployed to further a morally grounded 'right to know' know in order to hold government or private actors accountable, or as a means to facilitate individual lifestyle choices and market-based solutions to sustainability (Langley 2001; Mason 2008b).

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Notwithstanding the diverse architects of transparency and the diverse rationales to embrace it, a common underlying presumption underpinning “governance by disclosure” is that transparency matters; yet, a systematic analysis of how, under what conditions, and for whom remains to be done.

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Despite the increasing importance of transparency in global environmental governance, the concept remains surprisingly little scrutinized in this field (but see Langley 2001 and Mitchell 1998 for important exceptions). This is in contrast to, for example, international financial and economic relations, global security, human rights, ~~or and~~ diplomacy, ~~where in which~~ transparency studies have a longer and more established trajectory (e.g., Graham 2002; Grigorescu 2007; Lord 2006; Roberts 2004; Stasavage 2003).

This lack of attention to transparency is the second reason we select the global environmental realm as our focus. Even as transparency, as such, has received less attention here, closely related concepts such as information and (scientific) knowledge *have* long enjoyed pride of place in scholarly analyses in global environmental politics from diverse theoretical perspectives (e.g., Gupta 2006; Haas 1989; Litfin 1994; Mitchell et al. 2006). Transparency is intimately related to these fields of inquiry, but appears to have fallen between the cracks of their core analytical concerns. This holds as well for analyses of legitimate and democratic global environmental governance that routinely evoke the link to transparency (e.g., Bernstein 2001; Dryzek 1999; Keohane

2006). ~~This, yet this~~ link, however, remains more stated than scrutinized (but see Dingwerth 2007).

The recently launched international research program on “Earth System Governance” emphasizes as well a need to examine such posited relationships. Earth system governance is defined in this global research program as “the interrelated~~...~~... system of formal and informal rules, rule-making mechanisms and actor-networks at all levels of human society (from local to global) that are set up to steer societies towards preventing, mitigating and adapting to ~~...~~... environmental change and earth system transformation” (Biermann et al. 2010, p. 279). Accountability (including its relationship to transparency) is identified here as one of the five core analytical challenges of earth system governance research, and one that has been relatively less studied (Biermann and Gupta 2011; Mason 2008a).

We address transparency in global environmental governance in this ~~volumebook~~ by ~~bringing together three conceptual overview articles and ten in-depth empirical analyses of analyzing both~~ state-led and private disclosure initiatives ~~in the global environmental realm~~. The rationale to include ~~both~~ public and privately fueled disclosure is to reflect on the multidirectional nature and consequences of the transparency turn in ~~this the global environmental~~ realm. The environmental issues covered include climate change, deforestation, marine pollution, ~~access to, and benefit sharing from sustainable use of~~ genetic resources, technological and chemical risk

~~reduction, safe trade in genetically modified organisms,~~ sustainable natural resource extraction, ~~safe trade in hazardous chemicals, reducing reduced~~ environmental harm from foreign direct investment, and ~~improving improved~~ corporate sustainability performance. Such a wide-ranging and comparative analysis of diverse disclosure-based governance in the global environmental realm has not yet been undertaken, making this the first ~~volumebook~~ to do so.

~~Prior to outlining an analytical framework for this comparative assessment, we first advance below in the following section~~ We turn next to the critical transparency studies perspective that informs our analysis of governance by disclosure in this ~~volumebook~~.

A Critical Transparency Studies Perspective

Multiple writings on transparency in ~~various the~~ social sciences ~~fields~~ yield a range of insights regarding the uptake and effectiveness of transparency-based governance. Transparency has been analyzed at some length in national-level (environmental) policy analyses, where it has received significantly more attention than in a global context. This body of work has extended the frontiers of transparency scholarship under the rubric of what it terms “regulation by revelation” as a third wave of domestic environmental rule-making since the late 1990s (Florini 1998). According to this literature, a third wave of disclosure-based regulation has been stimulated by the ineffectiveness and implementation gaps dogging the first (command-and-control) and second

(market-based) waves of national environmental policy-making (Fung et al., 2007; Graham 2002; Konar and Cohen 1997; Stephan 2002).

In one of the most extensive analyses, Fung and colleagues examine the conditions under which what they call “targeted transparency” (i.e., disclosure of specific types of information, in contrast to a more general right to know) can be effective. Through detailed comparative analyses of various national-level, and to lesser extent, global transparency policies, they find that effective transparency requires disclosed information to become embedded in the decision-making processes of ~~both~~ disclosers *and* recipients. This, they note, is difficult to obtain in practice, ensuring that transparency often falls short of meeting ~~its~~ desired aims (see also Weil et al., 2013).

These studies are important precursors to our analysis of “governance by disclosure” in a global environmental context. They have tended, however, to be more or less aligned with a dominant *liberal institutionalist* perspective on the role of information and power in global environmental governance scholarship. Such a perspective holds that openness, communication, reporting, and information exchange can aid in more effective global environmental governance; by correcting for information asymmetries between the powerful and those seeking to hold them to account; and/or by facilitating more evidence-based, rational decision-making (see, for example, Esty 2003; Mitchell 1998 ~~and~~, 2011).

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David Weil, Mary Graham and Archon Fung, 2013. Targeting Transparency. *Science* 340, 21 June, 1410-1411.

These are some of the most prominent transparency scholars currently and their article in *Science* attests to this; hence it helps situate our work (and how it is different from theirs') if we add this most recent *Science* reference here.

Analyses informed by this approach have ~~been very useful in highlighting~~ highlighted the promise, ~~but and~~ also the many dysfunctionalities of disclosure-based governance, which may impede its potential to empower, hold governors to account, or further specific regulatory aims. Such dysfunctionalities ~~can~~ include disclosure of incomplete or unreliable data; lack of comparability, comprehensibility, or accessibility of disclosed data; and a lack of capacity on the part of recipients to interpret and use disclosed data (Fung et al. 2007; Graham 2002; Weil et al. 2006). ~~While-Although~~ these are important insights into the hurdles ~~to the effective functioning of disclosure~~ facing governance by disclosure, ~~transparency analyses from a~~ liberal institutionalist perspective on transparency tends ~~ss~~ to attribute lack of effective disclosure to such inadequacies of institutional design or bureaucratic capacity, to ~~a~~ lack of attainability of “full disclosure” (Fung et al. 2007), or to ~~the fact that~~ transparency not having ~~has not~~ proceeded “far enough, fast enough” (e.g., Florini 2007).

~~In-By~~ contrast, our point of departure in this ~~volume~~ book is that transparency’s uptake and effects can ~~only~~ be understood only within the broader, often contested, normative, and political context within which disclosure is being deployed. We adopt a critical perspective on transparency ~~here~~ that analyzes disclosure as a site of political conflict, and hence transparency itself as fundamentally contested political terrain. We label this a *critical transparency studies* perspective, by which we mean approaches that

(#1) problematize transparency and governance by disclosure; (#2) account for the historicity and socio-political embedding of transparency and disclosure practices; and (#3) acknowledge the unavoidable normativity (value-laden structure) of transparency and disclosure. In developing this perspective, we draw on theoretical groundwork laid by constructivist and critical political economy approaches in global environmental politics scholarship.

Constructivist analyses of science, knowledge, and information have long highlighted the changing authority and accountability relationships around the generation and sharing of (scientific) information in governing environmental challenges. As such, this strand of scholarship is particularly relevant to studies of governance by disclosure. As writings in this vein suggest, current global environmental challenges, such as climate change or safe use of biotechnology, are characterized by fundamental normative conflicts and scientific uncertainties over what is valid knowledge and whose information counts. If so, agreeing on what is “more and better” information, that is, on the scope and quality of information, is inevitably a matter of political conflict (Jasanoff 2004; Liffin 1994; see also Gupta 2006 and 2008). As Fischer (2009, 185) notes, even environmental information presented as technical is shaped by the situational and social-political contexts of its production, dissemination, and reception. Furthermore, as science acquires ever-greater prominence as a source of authority in global environmental

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governance (Gupta et al. 2012), the imperative to *disclose* scientific data and knowledge-generation processes also increases. This implies that political conflicts over valid knowledge shape the contours of governance by disclosure as well.

Drawing on these insights, a critical transparency studies perspective holds that the effects of transparency in the global environmental realm will turn not so much on reducing information asymmetries in order to promote more rational outcomes, but rather on *whose* information counts and is accorded primacy in environmental decision-making and governance. It postulates, furthermore, that the very processes of negotiating the scope and practices of disclosure serves to selectively frame, and hence constitute, the object of governance (see, for e.g. example, Jasanoff 2004; Lövbrand 2011).

Critical political economy perspectives in global environmental scholarship (e.g., Clapp 2007; Clapp and Helleiner 2012; Levy and Newell 2005; Newell 2008a and 2008b) inform our thinking here as well. Such perspectives build on influential early analyses of the sources and location of power in international politics (Strange 1988, 1996) to more recent studies of the of (distinct and unequally distributed forms ~~of~~ of public and private power-authority and vulnerabilities ~~in-shaping~~ that shape global environmental governance (e.g., Fuchs 2005).

Such research emphasizes, for example, the current (unstable) dominance in global environmental governance of what Steven Bernstein

(2001) labels “liberal environmentalism”²²—an authoritative complex of norms that frames environmental governance challenges according to market liberal values and interests. The institutionalization of liberal environmentalism may ~~legitimate~~ legitimize governance practices and further ecological goals insofar as these do not challenge underlying structures of market or political power.

In line with this, a critical transparency perspective holds that transparency’s uptake and effects in global environmental governance need to be understood within this broader (unequal) political economic context, one in which private actors, furthermore, are likely to have a major role in shaping and deploying public modes of information disclosure. Insofar as liberal environmentalism has political and policy currency, transparency, if adopted, is likely to have minimal market-restricting effects, and may be skewed by state economic development or corporate interests.

Such a perspective allows that transparency may *reproduce* rather than disrupt socially and ecologically harmful concentrations of public and private power. It is of particular relevance to an analysis of transparency in a global context, characterized by North–South disparities in the power and capacity to demand disclosure, and to access and use disclosed information. It may help to explain, as well, a potential paradox of the transparency turn in global politics: that the desired quality and quantity of disclosed information (such as its breadth, comparability, comprehensibility, comprehensiveness, or accessibility) may follow from rather than *precipitate* changes in the broader

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normative and political context. Thus, greater levels of “actionable” transparency may ~~only~~ be obtainable only after broader democratic, participatory, and environmental gains have been secured in a given context, ~~rather than precipitating such gains~~ (Gupta ~~2010b~~2010a).

This leaves open a fundamental question: is transparency epiphenomenal? Even as transparency becomes ubiquitous in global environmental governance, its transformative potential remains uncertain and contingent. From a critical transparency studies perspective, we can identify a continuum of views—ranging from the more skeptical to the more pragmatic—on the transformative potential of transparency, each of which is present, to greater or lesser extent, in the contributions to this ~~volume~~book.

From a more skeptical perspective, there is little hope for transparency to transform entrenched structural imbalances of power or unequal life and livelihood options (for a similar view, in the case of global peace and security, see Lord 2006). Such a perspective would characterize transparency as, for example, a “red herring” of modern political culture (Brown 2002, 1). As Brown argues, one response to a perceived crisis of trust in dominant governance institutions is a demand for greater transparency to foster and hence greater trust in ~~both~~ public and private decision-making processes and outcomes. A widespread assumption is that transparency can build trust, yet transparency as an antidote to a crisis of trust is failing (~~but~~ see also O’Neill 2006). As –O’Neill argues, this is because disclosure is not embedded in “the

epistemic and ethical norms required for successful communicative acts” (O’Neill 2006, 81). ~~Brown argues, however, that this is unlikely because “...the causes of mistrust have nothing to do with how much or how little information is made available” (2002, 1).~~ ~~TT~~Transparency, ~~from this perspective, -from this perspective,~~ mirrors ~~insteads instead~~ the broader meta-normative and political economic conflicts that shape global governance, and hence can only acquire meaning and relevance in such a context (see, for ~~e.g-example~~, in this ~~volumebook~~, Mason, chapter 4; Gupta, chapter 6; [Gupta et al., chapter 8](#); and Knox-Hayes and Levy, chapter 9). ~~Its-Transparency’s~~ transformative potential, particularly if understood as structural change, thus remains severely attenuated.

A more pragmatic perspective emphasizes that, ~~while-although~~ transparency is no panacea, context-specific incremental gains in empowerment, accountability, and environmental improvements are feasible and attainable (see, for ~~e.g-example~~, in this ~~volumebook~~, Jansen and Dubois, chapter 5; Orsini et al., chapter 7; Dingwerth and Eichinger, chapter 10; and Auld and Gulbrandsen, chapter 12). In such a perspective, disclosure may be viewed as a default option or as “the only game in town,” given the difficulties of negotiating more far-reaching or costly regulatory options in contested ~~issue-~~areas (Haufler 2010). Even as a default option, however, it need not be lacking in empowerment or effectiveness potential (e.g., Van Alstine, chapter 11; and Ehresman and Stevis, chapter 13). Some scholars in this tradition

claim as well that transparency can deliver governance gains, but only under relatively demanding conditions that may not obviate the need for other regulatory tools (e.g., Etzioni 2010).

Going further, and most optimistic about transparency's transformative potential, are [critical](#) perspectives that [nonetheless](#) emphasize that transparency's engagement with the institutions and practices of power is more dialectical, that is, shaped by but also able to shape in turn the dominant norms and practices of global governance (e.g., Florini and Jairaj, this [volumebook](#), chapter 3; see also [Picciotto 2000](#)). In line with this, [Mol \(2006 and, 2008\)](#) observes, for example, that information provides a resource for political transformation, as a growing constitutive element of environmental governance—what he labels [informational governance](#) (see also Mol, this [volumebook](#), chapter 2).

The ~~above previousforegoing~~ discussion reveals that, even from ~~within~~ a broadly critical ~~transparency studies~~ perspective, ~~the prospects for, and nature of, transformative effects of~~ transparency's [transformative potential is](#) ~~are~~ differently [understood and](#) framed, and can range from structural to incremental change. What the transformative effects of transparency might consist of ~~remainsis~~, then, ~~an a context-specific~~ empirical question. ~~As we elaborate below in the following, we argue nonetheless that only by assessing a broad range of governance ends—normative, procedural, and substantive—can we capture the difference that transparency makes in particular contexts.~~

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We turn next to our analytical framework to study governance by disclosure, which runs through the cases in this book. In advancing this framework, we suggest that only by assessing a broad range of governance ends—normative, procedural, and substantive—can we capture the difference that transparency makes in particular contexts.

Governance by Disclosure: An Analytical Framework

We bring ~~the our~~ critical transparency studies perspective ~~previously outlined above~~ to bear on the central concerns of this ~~volume~~book, relating to the nature and implications of a multidirectional transparency turn in global environmental governance. We do so by outlining an analytical framework here that specifies a set of research questions and hypotheses relating to three aspects of governance by disclosure: its uptake, institutionalization, and effects. The empirical chapters then explore in-depth these three aspects.

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Uptake of Transparency: Drivers of Disclosure

In line with our aim to historicize and contextualize the role of transparency in global environmental governance, the first element of our analytical framework relates to explaining the *uptake of transparency* in a given issue-area. All empirical contributions thus analyze the question: why transparency now? In posing this question, we draw on the existing state of the art in

transparency studies to hypothesize about possible *drivers* of transparency's uptake in global governance.

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A growing body of literature suggests, first, that a rights-based democratic push for individual liberty, choice, and participation is driving a growing embrace of transparency in global politics (Florini 2008; Graham 2002; Gupta 2008; Mason 2008b). We label this a *democratization* driver, insofar as democratic forms of governance seem to require more open and inclusive forms of collective choice.

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A democratization driver of transparency is seen to underpin, for example, the spread of the “right-to-know” and freedom-of-information laws in multiple national contexts over the last quarter century since at least the 1980s (Florini 2007; see also Florini and Jairaj, this volumebook, chapter 3).

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This has now evolved, however, into a broader association of transparency with securing multidirectional accountability, and a more legitimate and democratic global polity (e.g., Bernstein 2005; Dingwerth 2005; Keohane 2003).

Those positing such relationships assume that disclosure of relevant information is often a necessary step in holding actors to account for their (in)-actions according to set environmental standards. A reasonable expectation is that, insofar as information is disclosed by those responsible for decisions that significantly affect the interests of others, such disclosure will facilitate individual and institutional answerability or even change. However, this

involves assumptions about the capacity and responsiveness of particular actors, ~~as well as~~ and the political systems within which they operate (Fox 2007~~);~~), including the assumption that democratic institutions foster greater accountability for environmental harm.

An empirical question for this ~~volume~~ book as a whole is thus the extent to which the democratic rationale for transparency is significant for the environmental governance initiatives studied, and if so, whether it is necessarily *liberal* democratic: we return to this in our conclusion. ~~While~~ Although there is a substantial literature on the relationship between democratic decision-making processes and ecological sustainability, much of it informed by theories of deliberative democracy (e.g., Baber and Bartlett 2005; Bäckstrand et al. 2010; Dryzek 2000; Dryzek and Stevenson 2011; ~~Paehlke 2003~~; Smith 2003), the relationship between democratization and the uptake of transparency remains much less examined.

Included in a democratizing imperative for disclosure is an increasing pressure to *democratize science and expertise* as well, which is of particular relevance to the global environmental realm. As we noted ~~above~~ previously, an ever-growing role for science is evident in global environmental governance, insofar as the framing of cause and effect of global environmental challenges ~~are~~ is increasingly influenced by expert bodies (Mitchell et al. 2006; Moore et al. 2011). As Ulrich Beck notes in *Risk Society*, it is a paradox of our times that the most politically and scientifically contested environmental and risk

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governance challenges, ~~where~~ ~~when~~ ~~those~~ ~~where~~ the authority of science is most likely to be questioned, are also ~~those~~ the issue-areas that most *need* scientific input (Beck 1992). This intensifies the need to subject scientific processes of knowledge generation to greater public scrutiny and engagement (see also Jasanoff 2003a ~~and~~, 2003b).

Much writing on ~~the science-policy interface~~ the need to democratize science in the environmental realm focuses, as a result, on the institutional and normative challenges of designing *participatory* ~~and inclusive~~ processes of knowledge generation and validation, ~~as a way to democratize science~~ (e.g., Leach et al. 2007; Lövbrand et al. ~~2010~~ 2011). Our ~~point of departure~~ interest here rather is in how that disclosure of knowledge-generation processes and expert data is ~~an equally important element implicated in~~ the push to democratize science. democratizing the science-policy interface.

In sum, as a first driver of disclosure, we hypothesize that a multifaceted democratization imperative (including calls to democratize science) is driving ~~transparency's~~ the uptake of transparency in global environmental governance.

Tensions arise, however, from the fact that efforts to improve the democratic quality of (global) environmental governance, by embracing information disclosure, often go hand-in-hand with a neoliberal privileging of market-based solutions to global sustainability challenges, and “light touch” regulation of the private sector (Moore et al. 2011; Bernstein 2001). This can,

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in turn, stimulate an uptake of market-based and voluntary transparency, often as a way to avoid more stringent, mandatory, or costly governance options (on this point, see also Haufler 2010).

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In line with this, we posit *marketization* to be a second driver of transparency's uptake in global environmental governance. In contrast to a democratization imperative for disclosure, a neoliberal market-driven uptake of transparency may seek to minimize the scope of (potentially market-restricting) disclosure, and exempt corporate actors from stringent disclosure (Florini 2008; Haufler 2010). Alternatively, however, disclosure of (certain types of) information might well be seen as essential to the establishment and functioning of *newly created markets* in environmental goods and services, such as those for carbon or genetic resources. In such cases, transparency might be promoted by powerful actors, such as corporations and policy elites, as desirable and necessary in order to create and facilitate markets, rather than being perceived as a regulatory burden that can restrict markets. a threat in its potential to restrict markets (in, for example, environmentally harmful products).

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An empirical question we address is thus whether (and what kind of) marketization imperative drives uptake of transparency in global environmental governance. In addressing this, we are also interested in whether a marketization rationale for disclosure facilitates, follows, or restricts markets.

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Our discussion ~~above~~ yields a general hypothesis (H1) that all empirical chapters engage with, in addressing “why transparency now” for their case: that *democratization and marketization are driving uptake of transparency in global environmental governance*. More broadly, the theoretical and empirical task we set ourselves, ~~both~~ individually and collectively, is to analyze how these drivers of disclosure may intersect with each other and the conditions under which one or the other may dominate.

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A logical next question is how specific drivers of disclosure shape the manner in which transparency is institutionalized and ~~how it~~ functions in practice. We turn next to this second element of our analytical framework.

Institutionalizing Transparency: Scope and Modalities

The second ~~element~~ component of our analytical framework—and second question addressed by all contributions—relates to how transparency is being *institutionalized* in a given issue-~~area~~. By institutionalization, we refer to specific configurations of the scope and modalities of disclosure in ~~a~~ given ~~ease~~ instances.

Comment [AG13]: Changed word here to avoid repeating “element” from preceding sentence.

Just to explain that I am striving to make only necessary changes at this stage, rather than randomly changing words that seem ok 😊

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One much-~~debated~~ aspect of institutionalization relates to the *quantity* of disclosed information ~~that is~~ provided. Much scholarly and policy attention in mainstream transparency studies has focused on the desirability of—and challenges facing—complete or “full” disclosure. In the policy realms of international finance, security, and diplomacy, an oft-posed question turns on

whether full disclosure is feasible and/or desirable. Most analyses conclude that complete disclosure in such areas is ~~both~~ unattainable and undesirable, given the merits of retaining varying degrees of secrecy, anonymity, or privacy in many instances (e.g., Birchall 2011; Lord 2006).

This raises, however, an intriguing question: is the (global) environmental realm distinct? The imperative to balance transparency with secrecy, privacy, and anonymity may not hold in this policy domain to the extent that it does in others, yet this eventuality has not been systematically analyzed. What specific features of global environmental governance challenges might either impede full disclosure, or make its pursuit more or less desirable? Impediments to full disclosure in this realm may relate, among others, to corporate confidentiality concerns or proprietary ownership of environmental information (see, for example, Orsini et al., this ~~volume~~book, chapter 7); or to scientific uncertainties and unknowabilities in governing complex (transboundary) environmental challenges. It may also relate to the *materiality* of the environmental resource in question, whereby the physical properties of, for example, carbon, genetic resources, oil, or forests—and their location in wider circuits of material production and consumption—will shape the scope of disclosure obtainable in a given context. An empirical ~~question~~ task for this ~~volume~~book is thus to examine the limits of full disclosure, and the merits and demerits of *partial transparency* in global environmental governance, given the geopolitical and material contexts for disclosure.

Turning from quantity to *quality* of disclosed information, much scholarly and policy attention has focused, as well, on desired attributes of disclosed information as central to the success of transparency-based governance. These attributes include disclosed information being (perceived as) accessible, comprehensible, comparable, accurate, or relevant (Dingwerth and Eichinger 2010), and whether it is standardized or non-standardized.

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Such attributes of disclosure may make transparency more or less actionable, ~~i.e. that is~~, usable by recipients to further their desired ends (e.g., Fung et al. 2007; Michener and Bersch 2011; see also Dingwerth and Eichinger, this ~~volumebook~~, chapter 10). Non-actionable transparency can result not only from the scope of disclosure being limited, but also from “drowning in disclosure” when too much (or “irrelevant”) information is provided (Gupta 2008, 4). An empirical ~~question-task~~ for the ~~volumebook~~ is ~~thus also thus to consider whether and why (or why not) the desired to analyze~~ attributes of ~~actionable~~ disclosure ~~are~~ obtained in practice.

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In ~~securing actionability of disclosure~~ institutionalizing disclosure, an increasingly important development in transparency politics is the rise of information *intermediaries or infrastructures* that seek to validate or increase the utility of disclosed information for specific stakeholders (Etzioni 2010; Fung et al. 2007, Graham 2002, Gupta 2008; Lord 2006). These include auditors and verifiers of disclosed information, or civil society groups seeking to render disclosed information more user-friendly (see also Langley 2001 for

an early and detailed discussion of this). Such new transparency “powerbrokers” may produce shifts in the loci of authority and expertise in environmental governance that ~~shape how disclosure will be institutionalized~~ are also important to examine.

In sum, this second ~~step-component~~ of our analytical framework calls for examining, individually and collectively, the scope, quantity, and attributes of disclosed information, and whether and how transparency’s intermediaries enhance the “actionability” of disclosure for diverse actors. ~~In line with our critical transparency studies perspective, we view the hurdles to securing actionable disclosure as going beyond inappropriate design of disclosure systems or bureaucratic incapacities to transparency’s embeddedness in broader political-economic and geopolitical contexts. In assessing these dynamics, we propose a second hypothesis (H2) to be examined by contributions to this book: that institutionalization of transparency decenters state-led regulation and opens up political space for new actors.~~

~~In assessing the institutionalization of transparency as previously outlined above, an overarching concern for this volumebook is whether transparency-based arrangements reconfigure public and private authority to govern specific environmental issue areas. Our analytical concern with shifting sites of authority in governance. This hypothesis~~ derives from a prominent view in transparency analyses that private actors and civil society are crucial agents in institutionalizing disclosure-based governance,

Comment [AG14]: Apologies for somewhat extensive moving around of text in the next few paragraphs... but these are important changes, so it would be great to have them.

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The reason for these edits is to improve the logic and flow of this part.

As it was before, the hypothesis came too late and was not clearly linked to the preceding discussion about scope and modalities of disclosure. These changes are meant to fix this problem.

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particularly in a neoliberal environmental context (e.g., Langley 2001; Mol 2006). As such, it permits detailed comparative analysis of whether transparency-based arrangements, including their scope and modalities, reconfigure public and private authority to govern specific environmental issue areas.

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Our analytical concern with shifting sites of authority in governance also stems from writings that emphasize a *changing role for the state* in newer modalities of (global environmental) governance (e.g., Eckersley 2004; Strange 1988 and, 1996; for a more recent assessment, see Campagnon Campagnon et al. 2012).

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~~In assessing the relevance of broader debates about public/private authority for governance by disclosure, we propose a second hypothesis (H2) here to be examined by contributions to this volumebook: that institutionalization of transparency de-centers state-led regulation and opens up political space for new actors.~~ For instance, institutionalized disclosure may *qualify* state sovereign authority; if it facilitates the generation and dissemination of streams of information beyond the legal and epistemic control of governments. This may result in a shift away from state-led regulation, even as it opens up political space for other actors (on this point, see also Mol, this volumebook, chapter 2).

~~With regard to the first part of the hypothesis relating to~~
In hypothesizing a potential-a de-centering of state-led regulation, we do not

consider “states” to be a homogenous category. Instead, we are interested in whose sovereign authority may be ~~impacted~~ affected through institutionalized disclosure. We assume that this will vary across developed versus developing countries or emerging economies versus so-called “failed states” (on the changing role of different types of states in global ~~(environmental)~~ governance, see ~~Campagnon~~ Compagnon et al. 2012).

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Taken as a whole, our aim in postulating this hypothesis is to assess the multidirectional nature of transparency’s demand and supply, and the evolving roles of state and non-state actors in institutionalizing disclosure.

The second half of H2, positing that institutionalized disclosure opens up political space for other (non-state) actors, stems, as we previously noted above, from the current multidirectional nature of transparency’s demand and supply, and new functions that non-state actors play as transparency intermediaries in institutionalizing disclosure (e.g., Langley 2001). This potential consequence of institutionalized disclosure merits comparative scrutiny as well.

With this, we We turn next to the third element of our analytical framework, the effectiveness of governance by disclosure.

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Effects of Transparency: Normative, Procedural, and Substantive

The third and final component of our analytical framework—and third question addressed by all contributions in this ~~volume~~book—relates to the *effects of transparency*. Transparency, as we noted at the outset, is associated with more accountable, democratic, and/or effective governance. Our third strand of inquiry focuses on whether governance by disclosure furthers these diverse aims. We are interested thus in assessing the *effectiveness* of governance by disclosure.

Assessing effectiveness of (global) environmental policies is a long-standing concern in scholarly research and political practice, with effectiveness most often conceptualized as reduced environmental harm (Mitchell 1998; Young 1999). A prominent typology here is the “output, outcome, impact” distinction in effectiveness research, which seeks to distinguish different aspects and stages of policy effectiveness, but retains a dominant ultimate concern with environmental improvements (EEA 2001).

Governance by disclosure, however, seeks to further a broader set of governance ends, requiring an analytical openness to a variety of effects. These go beyond environmental gains to include a right to know and enhanced accountability and inclusiveness of decision-making processes. Such broader effects are captured, at least partially, in another long-standing distinction in

effectiveness analysis; that between input and output legitimacy. Scharpf (1997) developed this distinction to assess the legitimacy and effectiveness of European decision-making processes and outcomes. By input legitimacy, he referred to legitimacy conferred on the rule-setting process by virtue of its procedural characteristics (such as how open and inclusive it is). By output legitimacy, he referred to legitimacy garnered through the (perceived) ability of governance processes and outcomes to effectively address the underlying environmental problem. Output legitimacy is thus akin to environmental effectiveness, yet with an important difference: it assesses *perceived* effectiveness among stakeholders rather than actual reductions in environmental harm or improvements in environmental quality. It thus circumvents a key causality challenge facing analyses of environmental effectiveness, that of ascertaining direct and indirect causal pathways between governance measures and environmental improvements (see also Dingwerth 2005 and 2007).

We build on these various conceptions of effectiveness in our analytical framework, but adapt them to capture the diversity of governance aims associated with transparency. Specifically, we propose a typology of three categories of effects expected from governance by disclosure: *normative*, *procedural*, and *substantive* effects. This typology builds on the different ways in which transparency is conceptualized in multidisciplinary writings, including as a norm, a procedural principle, and/or as a mechanism of

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governance. These diverse ways of conceptualizing transparency give rise, in our view, to an associated set of aims pursued by governance by disclosure.

These include a *normative* right to know of information recipients; *procedural* aims of holding the powerful to account; and/or securing enhanced choice or voice in environmental governance processes; and *substantive* aims of improving environmental performance or reducing harm.

Such a typology of effectiveness ~~permits~~ enables us to engage also with a long-standing debate in global environmental governance, ~~that~~ relating to synergies or trade-offs between *legitimacy* of global environmental governance processes, secured through enhanced participation or voice in decision-making, and *effectiveness* in delivering desired environmental improvements (e.g., Andresen and Hey 2005; Bäckstrand 2006; Bernstein 2005). Our assessment of procedural and substantive effects of disclosure ~~in this volume~~ book ~~permits~~ enables us to assess linkages or trade-offs between these governance ends. We elaborate further on our typology of effects ~~below~~ in the following section.

Normative effects

Underlying an embrace of transparency in governance is often the normative belief that those exposed to potential harm have a right to know about damaging environmental behaviors or products (Beierle 2004; ~~Rowen~~ Rowan-Robinson et al. 1996). Such a moral “right to know” is then a first-order

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This typology of effects builds on the discussion of transparency’s effectiveness in Gupta 2010b.

[This is to ensure that the missing reference Gupta 2010b is cited in the text at an appropriate location].

normative goal that governance by disclosure may seek to further. Analyzing whether this goal is being met requires analyzing, ~~among others~~for example, who is pushing for a right to know; ~~whether~~whether such a right is contested; ~~how~~how it is being institutionalized, and how it is functioning. Such an analysis can shed light on the *normative effectiveness* of governance by disclosure—~~i.e. that is~~, the consensual strength and currency of a right to know in a given governance realm and the extent to which this right is institutionalized and furthered.

In short, the question we collectively address relating to normative effects is *whether transparency informs* (and if so, whom, and under what conditions).

Procedural effects

Going beyond a right to know are a range of important procedural aims associated with transparency. In political theory and legal analysis, transparency is typically linked to *empowerment*, understood as enhanced prospects for more participatory, accountable, and legitimate global governance (e.g., ~~van den Burg 2004~~; Graham 2002; Keohane 2006; Pattberg and Enechi 2009; Rose-Ackermann and Halpaap 2002; Stasavage 2003; ~~van den Burg 2004~~). These desired effects of disclosure are closely linked to the democratization driver for uptake of transparency, discussed ~~earlier~~previously.

In assessing the *procedural effectiveness* of governance by disclosure, we explore here the assumed link between transparency and empowerment,

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and in so doing, further the research agenda on how empowerment is being conceptualized and realized (or not) in disclosure-based global governance. In order to do so, we assess, for example, links between *transparency and participation* in decision-making (e.g., Auld and Gulbrandsen, this ~~volumebook~~, chapter ~~11~~12); and *transparency and informed choice* (e.g., Jansen and Dubois, this ~~volumebook~~, chapter 5; Gupta, this ~~volumebook~~, chapter 6; and Orsini et al., this ~~volumebook~~, chapter 7).

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In addition, the posited relationship between *transparency and accountability* is also central to procedural effectiveness. In a global governance context, accountability mechanisms are necessarily distinct from electoral accountability or constitutional representation, mechanisms that serve this function in a national context (Keohane 2003~~and~~, 2006). Ensuring accountability of global environmental processes and outcomes, and of transnational private governance, is much more challenging (Biermann and Gupta 2011; ~~Kingsbury 2007~~; Mason 2008a). Transparency is, however, one of the most oft-evoked mechanisms of securing accountability, even as the specific nature and validity of this posited relationship has been ~~very~~relatively little studied (~~but~~ for ~~one of the few~~a comprehensive attempts, see Fox 2007).

Comment [NWK16]: The in-text citation "Kingsbury 2007" is not in the reference list. Please correct the citation, add the reference to the list, or delete the citation.

MM: Kingsbury 2007 deleted

In discussing the distinct nature of accountability in a global governance context, Keohane (2003, 141) for example distinguishes between internal and external accountability. In internal accountability, the “principal and agent are institutionally linked to each other” whereas in external

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MM: p. 141 added

accountability, those whose lives are ~~impacted-affected~~ and hence who would desire to hold to account, are not directly (or institutionally) linked to the one to be held to account. How might transparency play a role in furthering internal and external accountability? Is one prioritized over the other, and what scope and modalities of disclosure are suitable to each? We make a start in this ~~volume~~book in addressing such questions (see for ~~e.g.~~example, Auld and Gulbrandsen, chapter ~~4~~12; Dingwerth and Eichinger, chapter 10; and Knox-Hayes and Levy, chapter 9).

To sum up, the *procedural aims* of disclosure include enhancing participation or informed choice of recipients, or permitting them to hold disclosers accountable~~—~~; in a word, *empowering* recipients of disclosure. As such, the question we collectively address relating to procedural effects is *whether transparency empowers* (and if so, whom, and under what conditions).

Substantive effects

Finally, governance by disclosure aims ~~as well~~ for *substantive* regulatory effects, such as reduced emissions, risk mitigation, and environmental improvements (e.g., Fung et al. 2007; Gouldson 2004; Mitchell 1998; Stephan 2002). A key example is the much-analyzed United States Toxic Release Inventory, where an ultimate goal of disclosure is reduced emissions of toxic pollutants (e.g., Konar and Cohen 1997). In global environmental governance,

these substantive regulatory goals converge on the prevention or mitigation of significant transboundary environmental harm or harm to the global commons.

The link between transparency and environmental improvements remains, again, little examined and challenging to assess. This is related to long-acknowledged causality ~~challenges~~ hurdles inherent in such assessments. ~~A lack of attention to substantive effects~~ may also, ~~however,~~ result from a more dominant association of transparency with a *procedural turn* in global environmental governance, whereby its empowerment potential (and link to informed, accountable, participatory, and legitimate governance) ~~may~~ is often ~~be~~ privileged over its role in securing substantive environmental gains (e.g., Rose-Ackermann and Halpaap 2002; see also Gupta 2008). Yet the relationship between transparency and environmental improvements is ever more important to assess, insofar as disclosure might be relied ~~up~~ on, more so than previously, as an innovative means by which to secure (transboundary) environmental improvements in a neoliberal, marketized global governance context.

In line with this, the question we collectively address relating to substantive effects is *whether transparency improves environmental performance* (and if so, under what conditions).

In summary, in assessing effectiveness of governance by disclosure, we distinguish ~~between~~ among normative, procedural, and substantive effects, and assess whether transparency *informs*, *empowers*, and *improves*

environmental performance. In doing so, we advance a final hypothesis (H3) here ~~with regard to effects with regard to this third question, one~~ that derives from a dominant claim in the transparency literature (e.g., Fung et al. 2007): that ~~governance by disclosure transparency~~ *is likely to be effective when its contexts of application resonate with the goals and decision-making processes of both* ~~both~~ disclosers and recipients. However, in line with our critical transparency studies perspective—one alert to prevailing global configurations of political and economic power—we hypothesize that the dominance of liberal environmentalism in global environmental governance skews the effects of governance by disclosure. We propose ~~therefore~~ a *directional version of H3 as well*: that in liberal environmentalist contexts, disclosure will have minimal market-restricting effects. In comparatively assessing this hypothesis, we consider ~~as well~~ whether this is the likely outcome across ~~both~~ public and private governance by disclosure initiatives.

~~Flowing from the above is reasoning~~ Taken as a whole, an overarching concern ~~addressed by this volume~~ ~~book~~ in assessing transparency's effectiveness is the extent to which transparency is transformative (understood as the potential of governance by disclosure to inform, empower, and improve environmental quality). We leave as an empirical question ~~both~~ the existence and ~~the~~ degree of transformation (whether structural or incremental) obtainable ~~through pursuit of such ends~~ in specific governance contexts.

Figure 1.1 ~~below~~ presents an overview of our analytical framework on uptake, institutionalization, and effects of governance by disclosure.

[Insert Figure 1.1 about here]

We turn next to the diverse cases of governance by disclosure included in this ~~volumebook~~, and conclude with an overview of ~~volumebook~~ contributions.

Governance by Disclosure: The Cases

Informed by ~~the our~~ analytical framework ~~previously outlined above~~, the contributions to this ~~volumebook~~ explore the uptake, institutionalization, and effects of transparency in diverse issue- areas of global environmental governance. In selecting the governance by disclosure cases ~~analyzed in this volumebook included here~~, we ~~do did~~ not aim for comprehensiveness. ~~In selecting cases for inclusion, Instead~~, we have been guided by the need to capture: (a1) the *multidirectional* demand for governance by disclosure, including from public and private actors, and their associated modalities ~~of disclosure~~, such as mandatory versus voluntary disclosure; (b2) diverse *motivations* for disclosure, including a democratization and marketization imperative; and (e3) breadth and diversity in the environmental issues covered. We focus as a result on *five state-led mandatory and five private voluntary* disclosure initiatives, which vary in who is pushing for disclosure

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from whom and why. The environmental issues covered include ~~both~~ long-standing challenges (such as combating deforestation or reducing pesticide risks) and newer issues (such as equitable access to and benefit sharing from genetic resources, or forest carbon accounting for global climate governance).

The ~~five~~ state-led mandatory disclosure initiatives ~~included here in this book~~ cover some of the most prominent multilateral environmental treaties that emphasize transparency as central to their governance aims. These include, ~~first and foremost,~~ the 1998 ~~Aarhus~~ Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (henceforth Aarhus ~~c~~Convention) as a state-led multilateral treaty that has been characterized as an extensive experiment in “environmental democracy” in a regional and transnational context (Wates 2005).

Also included here are two multilateral treaties that rely on the governance mechanism of “prior informed consent” (PIC) to regulate transboundary flows of risk and harm, as quintessential examples of governance by disclosure. These include the [Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade](#) (henceforth Rotterdam Convention) ~~Rotterdam Convention on trade in hazardous chemicals and restricted pesticides~~; and the Cartagena Protocol on Biosafety regulating trade in genetically modified organisms, negotiated under the Convention on

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OK

Biological Diversity. In both, ~~the aim of~~ disclosure of information is a central means by which ~~is~~ to empower developing countries to exercise informed choice in making risk ~~mitigation decisions~~, ~~(with the potential that~~ such disclosure ~~about risk and harm~~ may have market-restricting effects).

Both these treaties build on the earlier Basel Convention on Control of Transboundary Movements of Hazardous Waste and Their Disposal (henceforth Basel Convention). This treaty ~~Trade in Hazardous Waste, which~~ first introduced ~~prior informed consent~~ PIC the mechanism of informed consent as the basis for governing transfers of hazardous wastes between developed and developing countries; before finally instituting a ban on such transfers (for detailed analyses of the Basel ~~e~~Convention ~~and its informed consent procedure~~, see Clapp 2001; Krueger 1998; O'Neill 2000). In including the Rotterdam and Cartagena treaties in this ~~volume~~ book, our aim is to extend the research agenda on disclosure-based ~~global~~ risk governance, through analyzing the pros and cons of relying on information disclosure (as opposed to a ban) as the chosen approach in governing global transfers of risky substances.

The final two cases of state-led disclosure ~~included here~~ cover newly emerging global environmental governance arrangements. Both are motivated, furthermore, and to greater degree than the previous three, by a *marketization* and *market-facilitation* imperative for disclosure. These include, first, the ~~prior informed consent~~ PIC and disclosure of origin negotiations within the

Convention on Biological Diversity's Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from ~~T~~their Utilization ([henceforth Nagoya Protocol](#)). The second ~~focuses on~~ [analyzes](#) the transparency-based ~~monitoring~~, measuring, reporting, and verification (~~MRV~~) systems underpinning one of the newest [forest carbon-related](#) climate mitigation mechanisms; ~~reducing emissions from deforestation and forest degradation in developing countries (so-called REDD+)~~, now being negotiated under the United Nations Framework Convention on Climate Change ([UNFCCC](#)). This mechanism is designated REDD+ ([reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries](#)):-

In ~~the latter four~~ [these](#) cases of state-led disclosure, there is ~~also~~ [also](#) important diversity in the categories of states demanding and receiving disclosure. In the case of the Rotterdam Convention and the Cartagena Protocol, those demanding transparency are mostly developing (importing) countries seeking information from industrialized (exporting) countries about risky substances in international trade; ~~;~~ in order to prevent or mitigate harm within their borders. Alternatively, in the case of forest carbon accounting for climate mitigation (REDD~~+~~), those demanding transparency are developed (donor) countries soliciting forest carbon-[related](#) disclosure from developing countries; ~~;~~ to permit performance-based compensation for environmental

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improvements ~~undertaken by these countries~~. The Nagoya Protocol, in contrast, has a fascinating double-edged state-to-state transparency requirement, whereby distinct types of disclosure are required from developing countries (as a way to facilitate access of developed countries to genetic resources); and from developed countries (as a way to facilitate sharing of benefits with developing countries).

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Taken as a whole, the five cases of state-led disclosure initiatives included in this ~~volume~~book allow assessment of diverse drivers of disclosure, along with variation in the categories of states pushing for and receiving disclosed information (both developed and developing); in both long-established and newly emerging global environmental issue-~~areas~~.

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Turning next to the five ~~private~~ (and mostly voluntary) disclosure initiatives included here, we again cover a diversity of issue-~~areas~~; ~~along with variation in who is~~ as well as variation in the actors pushing for and demanding disclosure ~~from whom~~. The first two cases analyze corporate transparency in global environmental governance; through in-depth analyses of the Global Reporting Initiative and the Carbon Disclosure Project. Both these entail (voluntary) disclosure about corporate sustainability performance from corporations to other interested actors (including other corporations, states, civil society, and citizens).

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The ~~additional other~~ cases ~~included here~~ are public-private disclosure arrangements, with civil society exercising leadership ~~in them~~ as well. These

include the non-state disclosure-based certification schemes of the Forest Stewardship Council and the Marine Stewardship Council, whereby the imperative driving disclosure is to secure accountability of disclosers, informed choice of recipients, and improved environmental performance. Also included here are two less-analyzed cases in environmental governance. The first is voluntary disclosure in natural resource extraction; through comparative assessment of the government-led Extractive Industry Transparency Initiative and the [NGO-led/civil society-led Publish What You Pay](#) initiative. The final case assesses disclosure by international organizations, with a focus on [disclosure relating to](#) the International Finance Corporation's [disclosure policies relating to](#) foreign direct investment projects in developing countries.

Table 1.1 provides for an overview of the ten empirical cases covered in this [volumebook](#), including who is required to reveal what information to whom.

[Insert **Table 1.1** about here]

Overview of Contributions

This [volumebook](#) is organized in four sections. Part [I-1](#) comprises two broad context-setting contributions that supplement this introductory chapter; in exploring the nature and dynamics of a transparency turn in global

environmental politics. Part ~~H~~2 contains the five cases of state-led mandatory governance by disclosure initiative~~;~~, and ~~Part-part~~ ~~III~~3 contains the five cases of private voluntary and international organization disclosure. Part ~~IV~~4 presents the concluding chapter, which distills comparative insights from the preceding contributions, and presents overall findings on transparency's uptake, institutionalization~~,~~ and effects in global environmental governance.

Launching our detailed examination, Arthur P. J. Mol discusses in chapter 2 the rise of what he terms “informational governance” in an era of globalization. He characterizes the transparency turn in global environmental governance as having entered a reflexive phase, in which secondary transparency ~~i.e., that is~~, additional layers of transparency provided by interpreters and intermediaries, becomes key to making primary disclosure actionable. ~~He elaborates on the multidirectional nature of transparency in the (global) environmental realm, and~~ In elaborating on the promise, pitfalls~~,~~ and perils of governance by transparency disclosure, Mol concludes that transparency has “lost its innocence” as an arbiter of democratic and environmental gains, a conceptual and empirical claim to which we return in the conclusion.

In ~~Chapter~~chapter 3, Ann Florini and Bharath Jairaj present a comparative analysis of diverse *national contexts* shaping uptake, institutionalization~~,~~ and effects of global transparency arrangements. Their starting assumption is that global transparency can ~~only~~ acquire meaning only

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in specific (national and local) contexts. The chapter documents the democratization impulse underpinning a global spread of right-to-know and freedom-of-information laws, and their institutionalization in the specific national contexts of the [United States](#), India, South Africa, Mexico, Indonesia, and China. Even as democratization is identified as a key imperative driving uptake of transparency, alternative drivers, such as marketization and privatization, are also evident in these contexts. The authors conclude that *local context matters* in institutionalizing and securing desired effects of governance by disclosure. These contributions from Mol, and Florini and Jairaj, provide additional context for the critical transparency perspective, [as well as](#) the analytical framework to assess governance by disclosure, outlined in this introduction.

~~Part II 2 contains in-depth analyses of~~ [As the first of the](#) state-led multilaterally negotiated disclosure [cases in part 2, -In Chapter chapter 4,](#) Michael Mason analyses, [in chapter 4,](#) the environmental rights, including the “right to environmental information,” laid down in the 1998 Aarhus Convention. In historicizing the adoption and functioning of Aarhus environmental rights in Europe, Mason demonstrates that an original democratization impulse underpinning environmental disclosure, in this case, intended to promote the spread of democracy in Eastern Europe, is being jeopardized by a concurrent market liberal push for open markets and privatization in the region. He shows that the private sector is largely excluded

from Aarhus disclosure obligations, ensuring that disclosure has few market-restricting effects in this case.

The critical stance of this chapter on the prospects of transparency to effect transformative change permeates the next four contributions as well. In ~~Chapter~~chapter 5, Kees Jansen and Milou Dubois analyze transparency in global pesticide governance; through a focus on the Rotterdam Convention ~~on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade~~and its informed consent procedure. The authors consider whether the embrace and institutionalization of ~~“prior informed consent”~~PIC has empowered developing countries to make informed choices about imports of risky chemicals. They show that, ~~while-although~~ disclosure has had certain empowering effects, this is so only if empowerment is narrowly understood as enhanced capacities to ~~take-make~~ decisions. Furthermore, the substantive impact of the Rotterdam Convention is limited by the fact that very few chemicals are currently subject to its PIC procedure, a result of the geopolitical and material contexts within which these decisions are made.

In ~~Chapter~~chapter 6, Aarti Gupta also analyses the uptake and institutionalization of ~~prior-informed-consent~~PIC as a disclosure-based risk governance mechanism, this time within the Cartagena Protocol on Biosafety regulating safe trade and use of genetically modified organisms (GMOs). The chapter ~~analyses-analyzes~~ whether the scope and practices of disclosure

relating to transgenic crops in agricultural trade further a right to know and ~~choose~~choice of developing countries to permit or restrict such trade. Through analyzing the limited disclosure obligations imposed on GMO exporting (industrialized) countries by the protocol, Gupta shows that disclosure follows rather than shapes market developments in this case, with caveat emptor (let the buyer beware) prevailing in practice. As a result, it fails to empower the poorest countries most reliant on globally induced disclosure [in this case](#).

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In ~~Chapter~~chapter 7, Amandine Orsini, Sebastian Oberthür, and Justyna Pożarowska analyze one of the newest disclosure-based global governance arrangements: the Nagoya ~~protocool~~Protocol on access to and benefit sharing (ABS) from genetic resources. The chapter documents the double-sided transparency requirements (for access ~~to~~ versus benefit sharing) now being negotiated within this protocol. The authors show that the institutionalization of disclosure for *accessing* genetic resources (required from developing, provider countries) is much further advanced in the Nagoya ~~P~~protocol than that for *benefit sharing* (required from industrialized countries and powerful market actors). This outcome results, they argue, from the institutionalization of a marketized, decentralized, and bilateral contract-based approach to governance by disclosure in this case.

As the final contribution to ~~Part-part II2~~, ~~Chapter~~chapter 8 focuses on the politics of measuring, reporting, and verification ([MRV](#)) systems underpinning ~~a~~the REDD+ climate mitigation mechanism now being

negotiated within the UNFCCC: which calls for compensating developing countries for reducing carbon emissions from forest-related activities ~~(so-called REDD+)~~. The authors, Aarti Gupta, Marjanneke J. Vijge, Esther Turnhout, and Till Pistorius, analyze the scope and practices of REDD+ MRV systems, including what these systems seek to make transparent, how, and to what end. This chapter pinpoints the role of transparency as a means to assess and reward environmental performance, in a broader context wherein forest carbon has become a valorizable (global) commodity. In so doing, it questions who is held to account, and who is empowered, by expert-led, carbon-focused REDD+ MRV systems.

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Taken as a whole, these empirical cases of state-led disclosure examine transparency's uptake, institutionalization, and diverse effects. In so doing, they shed light, collectively, on how state and non-state authority might be reconfigured in such multilateral regimes of transparency, including by considering how private actors might shape such public (mandatory) disclosure regimes, whether by engaging with or remaining absent from them.

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Part ~~III~~ 3 then shifts attention to voluntary corporate, and civil society-led, as well as ~~and~~ international organization disclosure, ~~organized mostly in voluntary governance arrangements~~. In ~~Chapter~~ chapter 9, Janelle Knox-Hayes and David Levy analyze the rise of corporate disclosure in global environmental governance, through a focus on two prominent non-financial reporting systems: the Global Reporting Initiative (GRI) and the Carbon

Disclosure Project (CDP). The chapter argues that two competing institutional logics underpin the embrace and spread of non-financial disclosure: a logic of civil regulation, promoted by civil society actors and intended to secure greater corporate accountability, versus a functionalist corporate logic of sustainability management that highlights the instrumental benefits of disclosure to company managers, investors, and auditors. The chapter reveals how the growing ascendancy of a corporate instrumental logic shapes the quality and modalities of carbon and corporate sustainability disclosure.

In ~~Chapter~~ chapter 10, Klaus Dingwerth and Margot Eichinger focus, as well, on the Global Reporting Initiative. They scrutinize the rhetoric, policies, and disclosure practices in the GRI, with a specific focus, however, on the role of intermediaries in making GRI information actionable. The authors show that the GRI's normatively demanding rhetoric on transparency does not permeate the organization's policies and practices. Moreover, disclosed information does not permit comparison across corporate reporting entities. They argue, as a result, that transparency is "tamed" in this case, insofar as it fails to facilitate holding disclosers to account. However, commercial organizations and "for-benefit" groups are now using GRI data to produce corporate sustainability ratings. The authors analyze the enhanced prospects for empowerment vis-à-vis other effects deriving from the "marketization of transparency" generated by the activities of these intermediaries.

Following these cases of corporate voluntary non-financial disclosure, the next three chapters in ~~Part-part~~ III-3 explore other sources and modalities of non-state disclosure. In chapter 11, James Van Alstine focuses on the dynamics of transparency in the extractive industry sector and in global energy governance. He examines the Extractive Industry~~ies~~ Transparency Initiative (EITI) and Publish What You Pay ~~Campaign-campaign~~ (PWYP), both of which target private actors investing in resource~~-~~rich developing countries to reveal payments to host governments to exploit oil, gas, and mineral resources. Using the specific case of Ghana, Van Alstine highlights the hybrid (mandatory~~-~~voluntary) character and rescaling of sovereignty and authority that shape transparency's effects in this case. These effects are mediated, he argues, by the challenges to disclosure posed by the unique material qualities of oil as compared to other extractive resources.

In ~~Chapter-chapter~~ 12, Graeme Auld and Lars H. Gulbrandsen analyze the central role of transparency in the non-state-led certification movement. Certification embodies the idea that information disclosure can be a tool for nongovernmental organizations (NGOs), investors, governments, and consumers to support high sustainability performers. Auld and Gulbrandsen assess this claim by comparing the uptake and effects of transparency in the rule~~-~~making and auditing processes of the Marine Stewardship Council (MSC) and Forest Stewardship Council (FSC). The authors show that the MSC uses transparency instrumentally, whereas the FSC treats it more as an

end in itself. The chapter thus identifies key differences in how transparency contributes to the (perceived) accountability and legitimacy of these two prominent certification programs.

In the final empirical case, Timothy Ehresman and Dimitris Stevis examine, in ~~Chapter~~chapter 13, how the International Finance Corporation (IFC) deploys disclosure as a way to mitigate negative impacts of foreign direct investment projects in developing countries. Their particular concern is to scrutinize the link between transparency and environmental justice. The authors find that IFC disclosure has only modestly served the cause of distributive justice (~~an original aim of disclosure here~~), but hold out the hope that this effect can be strengthened.

Taken as a whole, these empirical cases ~~also~~ examine transparency's uptake, institutionalization, and diverse effects in private and public-private disclosure initiatives. In so doing, they collectively ~~also~~ shed light on how state and non-state authority is being reconfigured by such voluntary regimes of transparency, including by assessing how the "shadow of hierarchy" might shape the functioning and effects of private voluntary disclosure, ~~in these cases.~~

In the concluding ~~Chapter~~chapter 14, we distil comparative insights ~~deriving~~ from the chapters relating to the core elements of our analytical framework: ~~Why~~why transparency now? How is transparency being institutionalized? What ~~what~~ effects (normative, procedural, and substantive)

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~~does it have~~is it having? In addressing these questions, we also assess whether the contributions here validate or modify the hypotheses relating to ~~the~~ democratization and marketization ~~as~~ drivers of disclosure; ~~if~~ and how disclosure-based governance decenters state-led regulation and opens up political space for other actors; ~~and~~ the conditions under which transparency may be transformative.

Taken as a whole, the ~~volume~~book's findings reaffirm that transparency is here to stay, with information disclosure becoming widely embraced and institutionalized in diverse ways in multilateral and transnational governance of environmental harm and sustainability performance. At the same time, our ~~analyses~~analysis also suggests ~~that~~ claims about the “rise and rise” (Raab 2008, 600) of transparency need to be tempered by acknowledgment of competing trends that restrict ~~both the uptake and the~~ scope of actionable disclosure.

This ~~volume~~book thus documents the many ways in which the transparency turn in global environmental governance is evident; but partial. It also highlights *how* the broader (contested) normative context shapes ~~both~~ the embrace of transparency by various actors; and its uneven institutionalization across diverse areas of global environmental governance. Transparency's effects, we show here, manifest themselves and acquire meaning in very specific constellations of power, practice, ~~and~~ authority relationships. ~~While~~ ~~Although~~ this may be transparency's undoing as a broadly transformative

force in governance, it does keep alive the hope for emancipatory politics in specific instances. Our ~~volume~~book makes a start in exploring whether, and under what conditions, such ~~a politics may obtain~~emancipatory effects may be realized.

Comment [S22]: AU: Obtain what?

AG: hope edit makes it clearer.

Notes

1. As noted in an article in *Harper's Weekly*, December 20, 1913, by US Supreme Court Justice Louis D. Brandeis (1856–1941). A century hence, this remains one of the most famous quotes about the importance of transparency in public life.

Comment [AG23]: Please add a second note here, with text as suggested on page 32.

Text of the note to be added:

This typology of effects builds on the discussion of transparency's effectiveness in Gupta 2010b.

References

<jrn>Andresen, Steinar, and Ellen Hey. 2005. Effectiveness and Legitimacy of International Environmental Institutions. *International Environmental Agreement: Politics, Law and Economics* 5: 211–226.</jrn>

<bok>Baber, Walter F., and Robert V. Bartlett. 2005. *Deliberative Environmental Politics: Democracy and Ecological Rationality*. Cambridge, MA: MIT Press.</bok>

- <jrn>Bäckstrand, Karin. 2006. Multi-stakeholder Partnerships for Sustainable Development: Rethinking Legitimacy, Accountability and Effectiveness. *European Environment* 16 (5): 290–306.</jrn>
- <bok>Bäckstrand, Karin, Jamil Khan, Annika Kronsell, and Eva Lövbrand. 2010. *Environmental Politics and Deliberative Democracy: Examining the Promise of New Modes of Governance*. Cheltenham, UK: Edward Elgar.</bok>
- <jrn>Bannister, Frank, and Regina Connolly. 2011. The Trouble with Transparency: A Critical View of Openness in e-Government. *Policy and Internet* 3 (1): 158–187.</jrn>
- <bok>Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. London: Sage.</bok>
- <jrn>Beierle, Thomas C. 2004. The Benefits and Costs of Disclosing Information about Risks: What ~~De~~ ~~W~~ ~~we~~ ~~K~~ know about Right-to-Know? *Risk Analysis* 24 (2): 335–346.</jrn>
- <bok>Bernstein, Steven. 2001. *The Compromise of Liberal Environmentalism*. New York: Columbia University Press.</bok>
- <jrn>Bernstein, Steven. 2005. Legitimacy in Global Environmental Governance. *Journal of International Law and International Relations* 1 (1–2): 139–166.</jrn>

<jrn>Biermann, Frank, Michelle M. Betsill, Joyeeta Gupta, Norichika Kanie, Louis Lebel, Diane Liverman, Heike Schroeder, Bernd Siebenhüner, and Ruben Zondervan. 2010. Earth System Governance—A Research Framework. *International Environmental Agreement: Politics, Law and Economics* 10 (4): 277–288.</jrn>

<jrn>Biermann, Frank, and Aarti Gupta. 2011. Accountability and Legitimacy in Earth System Governance: A Research Framework. *Ecological Economics* 70 (11): 1856–1864.</jrn>

<jrn>Birchall, Clare. 2011. Introduction to “Secrecy and Transparency”²: The Politics of Opacity and Openness. *Theory, Culture & Society* 28 (7–8): 7–25.</jrn>

<conf>Brown, Nik. 2002. *Transparency—the Very Idea*. Paper presented at the Royal Society for the Arts seminar on Transparency in Public and Corporate Life, London, United Kingdom, Sept-ember 19.</conf>

<bok>Clapp, Jennifer. 2001. *Toxic Exports: The Transfer of Hazardous Waste from Rich to Poor Countries*. New YorkIthaca: Cornell University Press.</bok>

<jrn>Clapp, Jennifer. 2007. Illegal GMO Releases and Corporate Responsibility: Questioning the Effectiveness of Voluntary Measures. *Ecological Economics* 66 (2–3): 348–358.</jrn>

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Comment [S24]: AU: What city?

AG: London, added to reference. Also changed “paper presented” to “Keynote Address”

Comment [S25]: AU: Or should this be Ithaca?

AG: it should be Ithaca, changed in reference

<jrn>Clapp, Jennifer, and Eric Helleiner. 2012. International Political Economy and the Environment: Back to the Basics? *International Affairs* 88 (3): 485–501.</jrn>

<edb>Compagnon, Daniel, Sander Chan, and Aysem Mert. 2012. The Changing Role of the State. In *Global Environmental Governance Reconsidered*, ed. Frank Biermann and Philipp Pattberg, 237–263. Cambridge, MA: MIT Press.</edb>

<jrn>Dingwerth, Klaus. 2005. The Democratic Legitimacy of Public-Private Rule-Making: What Can We Learn from the World Commission on Dams? *Global Governance* 11 (1): 65–83.</jrn>

<bok>Dingwerth, Klaus. 2007. *The New Transnationalism: Transnational Governance and Democratic Legitimacy*. Basingstoke, UK: Palgrave.</bok>

<jrn>Dingwerth, Klaus, and Margot Eichinger. 2010. Tamed Transparency: How Information Disclosure Under the Global Reporting Initiative Fails to Empower. *Global Environmental Politics* 10 (3): 74–96.</jrn>

<jrn>Dryzek, John S. 1999. Transnational Democracy. *Journal of Political Philosophy* 7 (1): 30–51.</jrn>

<bok>Dryzek, John S. 2000. *Deliberative Democracy and Beyond: Liberals, Critics, Contestations*. Oxford: Oxford University Press.</bok>

Comment [NWK26]: Reference "Dryzek, 2000" is not cited in the text. Please add an in-text citation or delete the reference.

<jrn>Dryzek, John S., and Hadley Stevenson. 2011. Democracy and Global Earth System Governance. *Ecological Economics* 70 (11): 1865–1874.</jrn>

Comment [NWK27]: Reference "Dryzek, Stevenson, 2011" is not cited in the text. Please add an in-text citation or delete the reference.

AG: DONE, both missing Dryzek references added to the text (on page 22)

<bok>Eckersley, Robyn. 2004. *The Green State: Rethinking Democracy and Sovereignty*. Cambridge, MA: MIT Press.</bok>

<other>EEA (European Environmental Agency). 2001. *Reporting on Environmental Measures: Are We Being Effective?* Environmental Issue Report No. 25, Copenhagen: European Environmental Agency.</other>

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<eref>Esty, Daniel. 2003. *Environmental Protection in the Information Age*. Yale Law School Research Paper Series, paper no. 58. Available at: <http://papers.ssrn.com/abstract=429580>.</eref>

Comment [NWK28]: The URL <http://papers.ssrn.com/abstract=429580> has been redirected to http://papers.ssrn.com/sol3/papers.cfm?abstract_id=429580. Please verify the URL.

AG: verified redirected URL, it works

<jrn>Etzioni, Amitai. 2010. Is Transparency the Best Disinfectant? *Journal of Political Philosophy* 18 (4): 389–404.</jrn>

<jrn>Fenster, Mark. 2010. Seeing the State: Transparency as Metaphor. *Administrative Law Review* 62 (3): 617–672.</jrn>

<edb>Finel, Bernard I., and Kristin M. Lord, eds. 2000. *Power and Conflict in the Age of Transparency*. New York: Palgrave.</edb>

<bok>Fischer, Frank. 2009. *Democracy and Expertise*. Oxford: Oxford University Press.</bok>

<jrn>Florini, Ann. 1998. The End of Secrecy. *Foreign Policy* 111: 50–63.</jrn>

<edb>Florini, Ann, ed. 2007. *The Right to Know: Transparency for an Open World*. New York, NY: Columbia University Press.</edb>

<jrn>Florini, Ann. 2008. Making Transparency Work. *Global Environmental Politics* 8 (2): 14–16.</jrn>

<jrn>Fox, Jonathan. 2007. The Uncertain Relationship Between Transparency and Accountability. *Development in Practice* 17 (4/5): 663–671.</jrn>

<jrn>Fuchs, Doris. 2005. Commanding Heights? The Strength and Fragility of Business Power in Global Politics. *Millennium Journal of International Studies* 33 (3): 771–801.</jrn>

<bok>Fung, Archon, Mary Graham, and David Weil. 2007. *Full Disclosure: The Perils and Promise of Transparency*. Cambridge, UK: Cambridge University Press.</bok>

<jrn>Gilbert, Jeremy. 2007. Public Secrets: “Being-with” in an Era of Perpetual Disclosure. *Cultural Studies* 21 (1): 22–44.</jrn>

<jrn>Gouldson, Andy. 2004. Risk, Regulation and the Right to Know: Exploring the Impacts of Access to Information on the Governance of Environmental Risk. *Sustainable Development* 12: 136–149.</jrn>

<bok>Graham, Mary. 2002. *Democracy by Disclosure: The Rise of Technopopulism*. Washington, DC: Brookings Institution Press.</bok>

<jrn>Grigorescu, Alexandru. 2007. Transparency of Intergovernmental Organizations: The Roles of Member States, International Bureaucracies and Nongovernmental Organizations. *International Studies Quarterly* 51: 625–648.</jrn>

<edb>Gupta, Aarti. 2006. Problem Framing in Assessment Processes: The Case of Biosafety. In *Global Environmental Assessments: Information and Influence*, ed. Ronald B. Mitchell, William C. Clark, David Cash, and Nancy M. Dickson, 57–86. Cambridge, MA: MIT Press.</edb>

<jrn>Gupta, Aarti. 2008. Transparency under Scrutiny: Information Disclosure in Global Environmental Governance. *Global Environmental Politics* 8 (2): 1–7.</jrn>

<jrn>Gupta, Aarti. 2010a. Transparency as Contested Political Terrain: Who Knows What about the Global GMO Trade and Why Does It Matter? *Global Environmental Politics* 10 (3): 32–52.</jrn>

<jrn>Gupta, Aarti. 2010a. Transparency to What End? Governing by Disclosure Through the Biosafety Clearing House. *Environment and Planning. C, Government & Policy* 28 (1): 128–144.</jrn>

Comment [NWK29]: Reference "Gupta, 2010a" is not cited in the text. Please add an in-text citation or delete the reference.

AG: I have deleted this reference.

The alphabetical numbering of remaining Gupta 2010 references adjusted, both in reference list and in the text.

<jrn>Gupta, Aarti. 2010b. Transparency in Global Environmental Governance: A Coming of Age? *Global Environmental Politics* 10 (3): 1–9.</jrn>

<jrn>Gupta, Aarti. 2010b. Transparency to What End? Governing by Disclosure through the Biosafety Clearing-House. *Environment and Planning. C, Government & Policy* 28 (1): 128–144.</jrn>

<jrn>Gupta, Aarti. 2010c. Transparency to What End? Governing by Disclosure through the Biosafety Clearing House. *Environment and Planning. C, Government & Policy* 28 (1): 128–144.</jrn>

<jrn>Gupta, Aarti. 2010c. Transparency as Contested Political Terrain: Who Knows What About the Global GMO Trade and Why Does it Matter? *Global Environmental Politics* 10 (3): 32–52.</jrn>

<edb>Gupta, Aarti, Steinar Andresen, Bernd Siebenhuener, and Frank Biermann. 2012. Science Networks. In *Global Environmental Governance Reconsidered*, ed. Frank Biermann and Philipp Pattberg, 69–93. Cambridge, MA: MIT Press.</edb>

<jrn>Haas, Peter M. 1989. Do Regimes Matter? Epistemic Communities and Mediterranean Pollution Control. *International Organization* 43 (3): 377–403.</jrn>

Comment [AG30]: This is now renamed Gupta 2010b and a citation has been added to the Notes, with an endnote to be inserted on page 32.

Comment [NWK31]: Reference "Gupta, 2010c" is not cited in the text. Please add an in-text citation or delete the reference.

Done, see my comment above.

<jrn>Haufler, Virginia. 2010. Disclosure as Governance: The Extractive Industries Transparency Initiative and Resource Management in the Developing World. *Global Environmental Politics* 10 (3): 53–73.</jrn>

<edb>Heald, David. 2006. Varieties of Transparency. In *Transparency: The Key to Better Governance?* ed. Christopher Hood and David Heald, 25–43. Oxford: Oxford University Press.</edb>

<edb>Hood, Christopher, and David Heald, eds. 2006. *Transparency: The Key to Better Governance?* Oxford: Oxford University Press.</edb>

<jrn>Jasanoff, Sheila. 2003a. (No?) Accounting for Expertise. *Science & Public Policy* 30 (3): 157–162.</jrn>

<jrn>Jasanoff, Sheila. 2003b. Technologies of Humility: Citizen Participation in Governing Science. *Minerva* 41: 223–244.</jrn>

<jrn>~~Jasanoff, Sheila. 2003b. (No?) Accounting for Expertise. *Science & Public Policy* 30 (3): 157–162.</jrn>~~

<edb>Jasanoff, Sheila, ed. 2004. *States of Knowledge: The Co-Production of Science and Social Order*. London: Routledge.</edb>

<edb>Keohane, Robert O. 2003. Global Governance and Democratic Accountability. In *Taming Globalization: Frontiers of Governance*,

- ed. David Held and Mathias Koenig-Archbugi, 130–159. Cambridge, UK: Polity Press.</edb>
- <jrn>Keohane, Robert O. 2006. Accountability in World Politics. *Scandinavian Political Studies* 29 (2): 75–87.</jrn>
- <jrn>Konar, Shameer, and Mark A. Cohen. 1997. Information as Regulation: The Effect of Community Right to Know Laws on Toxic Emissions. *Journal of Environmental Economics and Management* 32: 109–124.</jrn>
- <jrn>Krueger, Jonathan. 1998. Prior Informed Consent and the Basel Convention: The Hazards of What Isn't Known. *Journal of Environment & Development* 7 (2): 115–137.</jrn>
- <jrn>Langley, Paul. 2001. Transparency in the Making of Global Environmental Governance. *Global Society* 15 (1): 73–92.</jrn>
- <edb>Leach, Melissa, Ian Scoones, and Brian Wynne, eds. 2007. *Science and Citizens: Globalization and the Challenges of Engagement*. London: Zed Books.</edb>
- <bok>Levy, David, and Peter Newell. 2005. *The Business of Global Environmental Governance*. Cambridge, MA: MIT Press.</bok>

<bok>Litfin, Karen T. 1994. *Ozone Discourses, Science and Politics in Global Environmental Cooperation*. New York: Columbia University Press.</bok>

<edb>Litfin, Karen T., ed. 1998. *The Greening Sovereignty in World Politics*. Cambridge, MA: MIT Press.</edb>

Comment [NWK32]: Reference "Litfin, 1998" is not cited in the text. Please add an in-text citation or delete the reference.

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<bok>Lord, Kristin M. 2006. *The Perils and Promise of Global Transparency: Why the Information Revolution May Not Lead to Security, Democracy, or Peace*. New York/Albany, NY: SUNY Press.</bok>

<jrn>Löwbrand, Eva. 2011. Co-producing European Climate Science and Policy: A Cautionary Note on the Funding and Making of Useful Knowledge. *Science & Public Policy* 38 (3): 225–236.</jrn>

<jrn>Löwbrand, Eva, Roger Pielke, and Silke Beck. 2011. A Democracy Paradox in Studies of Science and Technology. *Science, Technology & Human Values* 36 (4): 474–496.</jrn>

Comment [NWK33]: Reference "Löwbrand, Pielke, Beck, 2011" is not cited in the text. Please add an in-text citation or delete the reference.

AU: Is this the 2010 source cited in the text? If so, make date the same here and there.

AG: Citation in text corrected, it should be 2011 instead of 2010 in the text.

<jrn>Mason, Michael. 2008a. The Governance of Transnational Harm: Addressing New Modes of Accountability/Responsibility. *Global Environmental Politics* 8 (3): 8–24.</jrn>

<jrn>Mason, Michael. 2008b. Transparency for Whom? Information Disclosure and Power in Global Environmental Governance. *Global Environmental Politics* 8 (2): 8–13.</jrn>

<jrn>Mason, Michael. 2010. Information Disclosure and Environmental Rights: The Aarhus Convention. *Global Environmental Politics* 10 (3): 10–31.</jrn>

Comment [NWK34]: Reference "Mason, 2010" is not cited in the text. Please add an in-text citation or delete the reference.

AG: reference deleted

<eref>Michener, Greg, and Katherine Bersch. 2011. *Conceptualizing the Quality of Transparency*. Paper prepared for the Global Conference on Transparency, Rutgers University, Newark, NJ, May 17–20, 2011. Available at: http://gregmichener.com/Conceptualizing_the_Quality_of_Transparency--Michener_and_Bersch_for_Global_Conference_on_Transparency.pdf.</eref>

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<jrn>Mitchell, Ronald B. 1998. Sources of Transparency: Information Systems in International Regimes. *International Studies Quarterly* 42: 109–130.</jrn>

<jrn>Mitchell, Ronald B. 2011. Transparency for Governance: The Mechanisms and Effectiveness of Disclosure-Based and Education-Based Transparency Policies. *Ecological Economics* 70 (11): 1882–1890.</jrn>

<edb>Mitchell, Ronald B., William C. Clark, David Cash, and Nancy M. Dickson, eds. 2006. *Global Environmental Assessments: Information and Influence*. Cambridge, MA: MIT Press.</edb>

<jrn>Mol, Arthur P. J. 2006. Environmental Governance in the Information Age: The Emergence of Informational Governance. *Environment and Planning. C, Government & Policy* 24 (4): 497–514.</jrn>

<bok>Mol, Arthur P. J. 2008. *Environmental Reform in the Information Age: The Contours of Informational Governance*. Cambridge, UK: Cambridge University Press.</bok>

<jrn>Moore, Kelly, Daniel Lee Kleinman, David Hess, and Scott Frickel. 2011. Science and Neoliberal Globalization: A Political Sociological Approach. *Theory and Society* 40 (5): 505–532.</jrn>

<edb>Newell, Peter. 2008a. The Marketization of Environmental Governance: Manifestations and Implications. In *The Crisis of Global Environmental Governance: Towards a New Political Economy of Sustainability*, ed. Jacob Park, Ken Conca, and Matthias Finger. 77–95. London: Routledge.</edb>

<jrn>Newell, Peter. 2008ab. The Political Economy of Global Environmental Governance. *Review of International Studies* 34 (3): 507–529.</jrn>

<edb>Newell, Peter. 2008b. The Marketization of Environmental Governance: Manifestations and Implications. In *The Crisis of Global Environmental Governance: Towards a New Political Economy of Sustainability*, ed. Jacob Park, Ken Conca, and Matthias Finger, 77–95. London, New York: Routledge.</edb>

<bok>O'Neill, Kate. 2000. *Waste Trading among Rich Nations: Building a New Theory of Environmental Regulation*. Cambridge, MA: MIT Press.</bok>

<edb>O'Neill, Onora. 2006. Transparency and the Ethics of Communication. In *Transparency: The Key to Better Governance?* ed. Christopher Hood and David Heald, 75–90. Oxford: Oxford University Press.</edb>

<jrn>Pattberg, Philipp, and Okechukwu Enechi. 2009. The Business of Transnational Climate Governance: Legitimate, Accountable, and Transparent? *St. Antony's Antony's International Review* 5 (1): 76–98.</jrn>

Picciotto S, 2000, Democratizing the New Global Public Sphere. Working Paper, Lancaster University. Available at <http://www.lancaster.ac.uk/staff/lwasp/demglobpub.pdf>

<jrn>Raab, Charles. 2008. Review: *Transparency: The Key to Better Governance?* ed. Christopher Hood, Christopher, and David Heald.

Comment [AG35]: The Picciotto missing reference added here. Apologies for inaccurate formatting...

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- ~~eds. 2006.~~ Oxford: Oxford University Press, 2006. *Public Administration* 86 (2): 591–618.</jrn>
- <jrn>Roberts, Alasdair. 2004. A Partial Revolution: The Diplomatic Ethos and Transparency in Intergovernmental Organizations. *Public Administration Review* 64 (4): 410–424.</jrn>
- <edb>Roberts, Alasdair. 2006. Dashed Expectations: Governmental Adaptation to Transparency Rules. In *Transparency: The Key to Better Governance?* ed. Christopher Hood and David Heald, 107–125. Oxford: Oxford University Press.</edb>
- <conf>Rose-Ackermann, Susan, and Achim A. Halpaap. 2002. Democratic Environmental Governance and the Aarhus Convention: The Political Economy of Procedural Environmental Rights. In *Research in Law and Economics—2001*, edited by Timothy Swanson and Richard Zerbe, 27–64. Amsterdam: Elsevier.</conf>
- <jrn>Rowan-Robinson, Jeremy, Andrea Ross, William Walton, and Julie Rothnie. 1996. Public Access to Environmental Information: A Means to What End? *Journal of European Law* 8 (1): 19–42.</jrn>
- <jrn>Scharpf, Fritz W. 1997. Economic Integration, Democracy and the Welfare State. *Journal of European Public Policy* 4: 18–36.</jrn>

<eref>Seidman, Guy I. 2011. *Lawyers Are from Mars, Political Scientists Are from Venus: Who Gets Transparency Right?* Paper prepared for the Global Conference on Transparency Research, Rutgers University, New Jersey, May 17–20. Available at: http://andromeda.rutgers.edu/~ncsds/spaa/images/stories/documents/Transparency_Research_Conference/Papers/Seidman_Guy.pdf.</eref>

<bok>Smith, Graham. 2003. *Deliberative Democracy and the Environment*. London: Routledge.</bok>

<jrn>Soederberg, Susanne. 2001. Grafting Stability onto Globalization? Deconstructing the IMF's Recent Bid for Transparency. *Third World Quarterly* 22 (5): 849–864.</jrn>

<jrn>Stasavage, David. 2003. Transparency, Democratic Accountability and the Economic Consequences of Monetary Institutions. *American Journal of Political Science* 47 (3): 389–402.</jrn>

<jrn>Stephan, Mark. 2002. Environmental Information Disclosure Programmes: They Work But Why? *Social Science Quarterly* 83 (1): 190–205.</jrn>

<bok>Strange, Susan. 1988. *States and Markets*. London: Pinter.</bok>

Comment [NWK36]: Reference "Seidman, 2011" is not cited in the text. Please add an in-text citation or delete the reference.
AU: Is this the 2010 source cited in the text? If so, change date here and there for consistency.

AG: The correct date is 2011. Left here as is, corrected in in-text citation (from 2010 to 2011)

Comment [AG37]: It seems that this URL is not working anymore, I cannot find this paper online.

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<bok>Strange, Susan. 1996. *The Retreat of the State: The Diffusion of Power in the World Economy*. Cambridge, UK: Cambridge University Press.</bok>

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<jrn>van den Burg, Sander. 2004. Informing or Empowering? Disclosure in the United States and the Netherlands. *Local Environment* 9 (4): 367–381.</jrn>

<jrn>Wates, Jeremy. 2005. The Aarhus Convention: A Driving Force for Environmental Democracy. ~~JEEPL~~ *Journal for European Environmental & Planning Law* 1: 2–10.</jrn>

<jrn>Weil, David, Archon Fung, Mary Graham, and Elena Fagotto. 2006. The Effectiveness of Regulatory Disclosure Policies. *Journal of Policy Analysis and Management* 25 (1): 155–181.</jrn>

<edb>Young, Oran, ed. 1999. *The Effectiveness of International Environmental Regimes: Causal Connections and Behavioral Mechanisms*. Cambridge, MA: MIT Press.</edb>

Table 1.1

Governance by Disclosure in Global Environmental Politics

Disclosure from whom to	Disclosure about what:	
	Mandatory	Voluntary
	Environmental processes and decisions	
	Environmental performance	
	Environmental quality	

whom:	
State to <u>Publics</u>	Aarhus Convention (disclosure of environmental data, regulatory processes, decisions)
State to <u>State</u>	Rotterdam Convention (disclosure of risk assessments, regulatory decisions for pesticides in trade, export notifications) Cartagena Protocol (disclosure of risk assessments, regulatory decisions for transgenic crops in trade, intent to trade) Nagoya Protocol (disclosure of access requirements; disclosure of origin of genetic resources for benefit sharing [still being negotiated]) REDD+ under climate regime (disclosure of actions to reduce forest carbon emissions; disclosure of carbon sequestered in forests; disclosure of safeguard information systems in place)
Corporations to <u>Corporations</u> <u>corporations</u> (and <u>Consumers</u> <u>consumers</u> and <u>Publics</u>	Carbon Disclosure Project (disclosure of carbon emissions, performance, management plans) Global Reporting Initiative (disclosure of corporate sustainability performance, management plans) Forest Stewardship Council (disclosure of certification processes and decisions,

		sustainability assessments)	
		Marine Stewardship Council	Formatted: Font: Bold
		(disclosure of certification processes and decisions, sustainability assessments)	
Corporations		Extractive Industry	
to States <u>states</u>		Transparency Initiative	
(and		(disclosure of revenue payments / and contracts)	
Publics <u>publics</u>)		Publish What You Pay	Formatted: Font: Bold
		(disclosure of revenue payments / and contracts)	
			Formatted: Font: Bold
International	International Finance		
Organizations	Corporation (disclosure of		
<u>organizations</u>	environmental impacts of foreign		
to States <u>states</u>	direct investment in developing		
(and	countries)		
Publics <u>publics</u>)			

Figure 1.1

Governance by Disclosure: An Analytical Framework

Comment [DMC38]: AU: See separate file for figures.

AG: okay