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The Role of Analogy in the Institutionalization of Sustainability Reporting

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We study institutional entrepreneurship in an emergent field by analyzing the case of the Global Reporting Initiative (GRI) and its efforts to purposefully institutionalize the practice of sustainability reporting. We suggest that analogies affect institutionalization processes through two mechanisms. In the early stages of institutionalization, analogy operates primarily as a normative mechanism, and adoption is driven mainly by an instrumental logic. This emphasis on similarity to existing institutions stresses conformity and promotes legitimacy. Yet analogies can also have a cognitive effect on institutional design, especially once initial acceptance from the environment has been secured, by directing attention toward incongruences between the emergent institution and its analogical source. Institutional entrepreneurship can spur innovation and departure from existing institutions by highlighting limitations of the analogical source and providing a compelling value-rational argument that underscores the worth of the new institution. This theoretical contribution helps explain how analogies to existing institutional practices can both provide legitimacy to novel institutions and constitute the basis for a creative process of institutional design.

Key words: institutional theory; institutionalization; analogies; sustainability reporting
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Institutional entrepreneurship is a delicate balancing act between two conflicting tasks. On the one hand, institutional entrepreneurs must disguise the radical nature of their enterprise to engage supporters and evade the wrath of incumbents. On the other hand, they cannot adhere too closely to existing practices, for by doing so, they will not be able to further any meaningful change (Aldrich and Fiol 1994). Institutional entrepreneurs need to become skilled cultural operatives, fashioning stories to attract resources. In this work it is essential to "balance the need for legitimacy by abiding by societal norms about what is appropriate with efforts to create unique identities that may differentiate and lend competitive advantage" (Lounsbury and Glynn 2001, p. 559). Previous research has amply documented how adroit institutional entrepreneurs craft their project to fit the conditions of the field (Maguire et al. 2004), often employing discursive strategies (Green 2004, Phillips et al. 2004, Suddaby and Greenwood 2005), including the use of analogies to existing institutionalized practices (Hargadon and Douglas 2001, Leblebici et al. 1991). These studies imply that institutional entrepreneurship is more likely to succeed when the entrepreneur is cognizant of field-level politics and is skilled enough to craft a compelling message advocating for change.

The role of analogy in argumentation for promoting proto-institutions (Lawrence et al. 2002)—be it to uphold or overturn (e.g., Reay and Hinings 2005, Townley 2002) existing logics—is relatively well studied. However, the role of analogy in shaping institutional design has not been explored in depth. Tropes such as simile, analogy, and metaphor can help gather political support and legitimacy, but they also lead to analytical closure (Oswick et al. 2002). Remaining within the confines of a clearly defined analogy cannot lead to evolution to profoundly different institutions (Hoffman and Ventresca 1999). Furthermore, the analogy cannot be discarded at later stages (Ocasio and Joseph 2005) when deeper institutional change is being advocated, as cognitive lock-in has already limited external constituents' receptivity to alternative scenarios. How, then, do analogies shape the construction and evolution of proto-institutions?

In this article we address the role of analogies in institutional change by presenting a longitudinal case study of the Global Reporting Initiative (GRI) and its strategies to promote and institutionalize sustainability reporting practices. GRI, a nonprofit organization headquartered in Amsterdam, was established in 1997 to develop a rigorous international standard for the reporting of economic, environmental, and social performance. GRI has developed Sustainability Reporting Guidelines that have very quickly become, over the course of a few years, the de facto standard for meaningful, progressive "triple bottom-line" (financial, environmental, social) reporting.

Our analysis shows that GRI first emphasized the similarity between sustainability reporting and financial reporting in order to gain legitimacy; over time, however, it reduced the extent to which it employed the analogy, emphasizing not just similarity, but also dissimilarity and incongruence with financial reporting. We find that analogies operate at two levels: normative and cognitive. At the normative level, evident especially in the early stages of institutionalization, the analogy to financial reporting fostered legitimacy through conformity. At the cognitive level, the analogy encouraged creativity and innovation in institutional design by probing inconsistencies between the foundational ideals and concepts of financial reporting and those of sustainability reporting.

The Emergence of Institutions and the Role of Analogies

Institutionalization of novel practices in an emerging field is a complex affair (Greenwood et al. 2002). Proto-institutions acquire legitimacy only when they are recognized as proper social objects, becoming taken for granted (Berger and Luckman 1967, Haveman et al. 2007) and therefore normatively appropriate (Meyer and Rowan 1977). Institutional entrepreneurs must shepherd their fledgling proto-institutions through this process, where vested interests, power disparities, and social norms all converge to impede change (Battilana et al. 2009).

This feat is challenging in mature, established fields, in which actors, roles, values, and interests are relatively clear and well understood (e.g., Greenwood et al. 2002). It is even more difficult in emerging institutional fields, where field boundaries, membership, and structure are still in flux (Aldrich and Fiol 1994, Maguire et al. 2004). Even in emerging fields, though, institutionalization does not operate in a vacuum; the institutional landscape is filled with "parts" that institutional entrepreneurs can recombine to develop novel institutions (Lounsbury 2007, Schneiberg 2007, Stark 1996). Social actors with conflicting interests all draw on these features in the institutional landscape to further their agendas. The paradigmatic view of institutionalization asserts that novel practices diffuse first among users who "technically" need to adopt them and then later through contagion, once they have become "institutionalized" (Baron et al. 1986, Tolbert and Zucker 1983). This view has been criticized both theoretically and empirically, and a more compelling theoretical approach has been built on the understanding that many institutional entrepreneurs operate in environments subject to multiple, competing institutional logics (Friedland and Alford 1991), conflicting rationalities (Townley 2002), and practice variation (Lounsbury 2001, 2007).

In these settings, language and discourse are key components in the institutional entrepreneur's arsenal to guide the institutionalization process. At the most basic level, entrepreneurs must produce texts that are accessible, understandable, and persuasive (Green 2004, Phillips et al. 2004, Suddaby and Greenwood 2005). Rhetorical strategies are also likely to be used extensively, to enhance persuasion and influence by appealing to logic, ethics, and emotion (Green 2004, Suddaby and Greenwood 2005). These rhetorical strategies can leverage different rationalities for adoption, providing would-be adopters with a "vocabulary of motives" (Mills 1940). Conceptually, these motives for social action can be classified into four types: instrumentally rational (calculatingly utilitarian), value rational (pursuing ultimate goals such as duty, honor, and religious calling), affective (emotional), and traditional (habituated) (Weber 1922). In many cases, calls for social action frame the need to act by emphasizing one or more of these motives.

Indeed, astute use of language enables entrepreneurs to combine and recombine different extant institutional logics and motives into a desired form. In some cases, language in an entrepreneurial setting will emphasize congruence of the innovative practice with the dominant culture and discourse of the organizational field (Campbell 1998). Institutional entrepreneurs can also leverage the dominance of the existing discourse in a sort of linguistic jujitsu (Alinsky 1971, Meyerson 2003) or reframing process (Creed et al. 2000), wherein the logics of dominant discourse is utilized to expose the shortcomings of existing institutions. In other instances, interdiscursivity (Phillips et al. 2004) enables institutional entrepreneurs to use appropriate legitimacy and meaning from other discourses. These borrowed institutional logics and practices from other, occasionally vastly dissimilar fields can be very powerful, for example, when market logics are applied to settings where they had previously been absent (Oakes et al. 1998, Reay and Hinings 2005, Colyvas 2007). Regardless of whether institutional entrepreneurs borrow and leverage dominant discourses that are well established within the field or discourses ostensibly unrelated to the practice they are trying to diffuse (Rao 1998), comparison and analogy are prevalent mechanisms in discursive strategies that institutional entrepreneurs use.

The idea that analogies might play a critical role in institutionalization was first suggested by Mary Douglas (1986). In the early stage of the institutionalization process, she argues, social actors develop conventions to solve problems of coordination and collective action. Conventions are justified on instrumental grounds, and actors do not take them for granted. How do conventions become institutions? Douglas' answer was that the source of legitimacy is the existence of an analogy that transposes the convention to the domain of the natural order. This "naturalizing analogy" is essential, she argues, to obscure the social nature of institutions:

> Before it can perform its entropy-reducing work, the incipient institution needs some stabilizing principle to

> stop its premature demise. That stabilizing principle is the naturalization of social classifications. There needs to be an analogy by which the formal structure of a crucial set of social relations is found in the physical world, or in the supernatural world, or in eternity, anywhere, so long as it is not seen as a socially contrived arrangement. (Douglas 1986, p. 48)

Naturalizing analogies map a novel institution to the natural order of things, be it to physical (or metaphysical) reality or dominant taken-for-granted social practices. Naturalizing analogies are therefore crucial in processes of institutionalization, because they transform social practices into taken-for-granted objects (Berger and Luckman 1967), providing legitimacy to fledgling novel institutions.

Douglas' insight has not received much attention, except for two notable studies. Davis et al. (1994) argued that the deinstitutionalization of the multidivisional form was helped by the emergence of a novel analogy for the firm: the nexus of contracts (Jensen and Meckling 1976). More recently, Haveman et al. (2007) studied how thrift organizers in the Progressive Movement in California reshaped their industry by using the impartial and bureaucratic city manager form of municipal government as "a naturalizing analogy" (Haveman et al. 2007, p. 136). Collectively, these studies suggest that institutionalization (and deinstitutionalization) are facilitated by analogical processes that associate novel institutions with existing institutions well established in other domains of human activity.

However, in these and other studies (Hargadon and Douglas 2001, Leblebici et al. 1991), it is assumed that there is a proto-institution in search of adopters, and that analogy mainly facilitates the *diffusion* process. Avoiding the problem of invention is not unusual in organization theory and more generally in social science. Padgett and McLean (2006) concur that most of the literature on innovation is primarily focused on innovation diffusion rather than invention, with the latter usually assumed to be the result of random variation or the brainchild of isolated genius. To overcome the dichotomy between the invention of new practices and their diffusion, some institutional theorists reject the implicit view of passive adopters detachedly accepting fully formed innovations and treating them as unalterable. Rather, the emergence of new practices is understood to be the result of mindful *bricolage*—an active process of recombining institutional and organizational templates and building blocks (Stark 1996, Thelen 2004, Schneiberg 2007). These social processes of translation (Czarniawska-Joerges and Sevón 1996, Djelic 1998, Boxenbaum and Battilana 2005) entail creative problem solving, within which analogies can shape not only diffusion processes but also the form of the novel institution itself.

If we allow that analogies can influence the creative process of institutional design, then their role in problem solving must be explored in greater depth. Whereas sociologists and organization theorists have focused their attention on analogies as a normative mechanism (providing legitimacy by stressing similarities), cognitive scientists have studied how analogies shape problem solving and creative thinking. Their work can help us better understand how analogies might play a role not only in the diffusion of fledgling new institutions, but also in their design.

The Role of Analogies

Analogies, similes, and metaphors are figures of speech that assert similarities between two domains. These tropes are not just rhetorical devices but essential components of human cognition (Holland et al. 1989, Gentner and Holoyak 1997, Lakoff and Johnson 2003). Cognitive psychologists suggest that *similes* stress literal similarities based on similarities in attributes ("Milk is like water"—both are liquid substances), whereas *analogies* leverage similarities in relationships between the domains rather than in attributes ("Heat is like water"—heat flows like water). *Metaphors* can encompass the whole range of similarities in attributes and relationships (Gentner 1989, Tsoukas 1993), albeit implicitly rather than explicitly and not based on direct comparison ("boiling mad"). Although precise definitions and formulations have been widely debated, the underlying insight is that "analogical reasoning" (Oswick et al. 2002, p. 294) helps us solve problems by providing inferences based on some similarity between the target domain in which the problem is embedded and a source domain with which we are familiar.

In organization theory, these ideas have generated a debate on the role of metaphors and analogical thinking in the process of generating novel ideas on organization and organizing (Cornelissen 2005, Gavetti et al. 2005, Morgan 1980, Oswick et al. 2002, Tsoukas 1993, Weick 1989). An important insight from this debate is the suggestion that an emphasis on similarities between domains engendered by analogies and metaphors might be "intuitively conservative and, thus, cognitively prescriptive rather than liberating" (Oswick et al. 2002, p. 298). In his seminal contribution on the role of metaphors in guiding our theoretical imagination, Morgan (1980) noted that metaphors are often most informative when the likeness "breaks down," when multiple metaphors are used to liberate imagination. Clearly, analogical thinking can stress similarities across domains, but it can also shed light on dissimilarities. These dissimilarities can help us generate knowledge: "Divergent forms of analogical reasoning permit the coexistence of multiple perspectives and may help to create new theory" (Oswick et al. 2002, p. 301).

This ambivalent role of analogies in triggering creativity has also been noted in the product design literature. Dahl and Moreau (2002) empirically tested how analogy influences originality in a series of experiments with professional designers and design students who were asked to design a product that would solve the problem of eating in a car while driving. Designers who relied more heavily on multiple source domains for analogies developed more original designs. In contrast, when designers where shown an external example—specifically, a sketch of a "drive-in window food tray"—they created less original designs because the example narrowed their cognitive search, leading them to access a smaller proportion of far analogies (analogies to distant domains) than designers who were not shown any example. This phenomenon, which cognitive scientists have called "unconscious plagiarism" (Marsh et al. 1999), supports the idea that analogical reasoning is not necessarily an enabler of creative thinking, but can represent a constraint in problem solving.

In an organizational context, then, analogies with existing dominant institutions can help legitimize institutional entrepreneurship, but they might also limit the range of alternatives that institutional designers consider, because their cognitive search (Simon 1947, Ocasio 1997) will immediately be directed toward one source domain—the dominant institution. Whereas analogies seem to be capable of providing normative support to fledgling institutions, their cognitive effect might inhibit institutional development and thus stunt their novelty. In this paper we address this conundrum by taking a longitudinal perspective, showing how analogical work shapes institutionalization processes and can actually promote divergence from existing dominant institutions.

Data and Methodology

Our analysis of the GRI and its institutional entrepreneurial strategies is based on a narrative case history, combined with a textual analysis of key GRI documents. For the case history, we rely on a diverse array of archived materials from the mid-1990s through to the present. This material includes formal GRI documents, in particular, four (prerelease and formal) versions of the Sustainability Guidelines, the organization's keystone product. We also analyze 13 additional official GRI documents that supplement the foundational Guidelines: nine industry-specific Sector Supplements and four Technical Protocols/Reporting Resources. Additionally, we reviewed some 80 GRI strategy and positioning papers; public relations materials; best practice surveys; draft versions of the Guidelines and supplementary documents made available for public comment, as well as the comments they elicited; and copies of presentations used at public events such as conferences and seminars. Finally, we analyzed the GRI website throughout its various incarnations since 1999, using http://www.archive.org.

We also extended our focus beyond GRI and its proprietary texts by studying, in similar fashion, other organizations and initiatives in the sustainability reporting space. Thus, our analysis incorporates more than 70 secondary sources addressing sustainability reporting, including academic articles; specialized and general media publications; and reviews of sustainability reporting methods, practices, and trends published by sustainability organizations, consultancy firms, and governmental bodies. Finally, we scanned dozens of sustainability reports, from the year 2000 to the present, published by companies that utilize the GRI Guidelines for report preparation.

Beyond this rich source of written texts, we also participated in several events leading up to the launch of the current version of the GRI Guidelines, the G3: attendance at the three-day G3 launch event in Amsterdam in 2006, a sneak-peek prelaunch event, and other sustainability-related conferences where integration between GRI and other initiatives was discussed. We also conducted nine exploratory and confirmatory interviews with individuals in various positions in GRI and in the sustainability reporting field. These interviews were conducted face to face at workplaces and conferences, as well as by telephone.

Although a narrative analysis forms the foundation of our research, our main findings emerged from rigorous textual analysis of all three versions of the Sustainability Reporting Guidelines, using coding techniques from discourse analysis (Phillips and Hardy 2002) and frame analysis (Creed et al. 2000). Specifically, we used Atlas.ti coding software to identify recurrent themes in the texts. Our basic coding unit was a text segment, which we defined as a statement that was meaningful and that expressed a basic yet complete idea (see, for example, Fiss and Hirsch 2005). Aggregation of recurrent idea elements (Gamson and Modigliani 1989) expressed through the text segments yielded themes, or discursive strategies, used by the authors of the texts. These idea elements and themes, together with the case history, shaped the emergent theory at the core of this paper. After a first round of exploratory coding, which helped us acquire an indepth understanding of the framing of sustainability reporting and its evolution over time, we focused on the codes pertaining to an explicit comparison with financial accounting and identified three different facets of this analogy: equivalence, contrast, and modification. Then we tracked the occurrences of these facets throughout all versions of the guidelines to determine whether there was temporal variation in GRI's analogical work. We also focused on text segments intended to motivate potential users to adopt the guidelines and tracked the evolution of these rationales over time as well.

Analogical Work in the GRI

Sustainability Reporting Before the Advent of GRI

Corporate attitudes to reporting of social and environmental impacts have waxed and waned over the past decades, and there was little consistency in the topics organizations choose to include in their reports (Gray et al. 1995). In the late 1970s, nearly 90% of the Fortune 500 published socially oriented information in their annual reports, but the average space devoted to the topic was a mere half page, and the main concerns were employment and product-related information (Mathews 1997). By the 1980s, however, corporate interest in social reporting stagnated, and the focus of nonfinancial reporting began shifting to environmental issues (Gray et al. 1995, Mathews 1997). Companies started publishing separate environmental reports in 1989 (Kolk 2004), and this trend intensified in the 1990s, particularly in Europe and North America (Mathews 1997, Wheeler and Elkington 2001). In 1993, about 70 companies published environmental reports (Elkington et al. 2006); by 1996, this number had jumped to 300–400 (Wheeler and Elkington 2001).

Concurrent with the diffusion of environmental reporting, dozens of organizations—prosustainability business groups, nongovernmental organizations, industry associations, accountants, consultants, government—from many of the world's developed economies began, in the mid-1990s, to develop and publish guidelines for reporting (Lober et al. 1997, Skillius and Wennberg 1998). Players in this emergent field produced an array of guidelines ranging from vague and conceptual to specific and detailed. Many of the guidelines were put forth as part and parcel of broader initiatives to integrate sustainability in firms (examples include the International Chamber of Commerce's Business Charter for Sustainable Development, the United Nations Global Compact, and the Multinational Enterprise Guidelines of the Organisation for Economic Co-ordination and Development). Communication guidelines were also developed as a component of environmental management systems such as ISO 14000 and the European Eco-Management and Audit Scheme (EMAS) framework. Everyone, it seemed, was attempting to create a standard.

Analogizing for Legitimacy—GRI's Early History: 1997–2002

A central actor in the movement toward integrating environmental issues into corporate activity is an organization called CERES (Coalition for Environmentally Responsible Economies). CERES is a nonprofit nongovernmental organization based in Boston, Massachusetts, that consists of environmental organizations, socially responsible investment professionals, institutional investors, and labor and religious organizations. Established in 1989, CERES was founded to "coordinate an investment response to the environmental crisis from the private sector" (Hoffman 1996, p. 54). CERES initially focused on developing and disseminating a 10-point code of corporate environmental conduct—originally dubbed the Valdez Principles, and later the CERES principles—which included issues such as protection of the biosphere, waste management, and safe products and service. Like other environment-related initiatives, it contained a section on disclosure. Point 10, "Audits and Reports," called for "annual self-evaluation" and publication of "progress in implementing" the CERES principles (CERES 2006). Indeed, disclosure was considered by CERES to be of paramount importance, as a means of influencing investor decisions, based on environmental performance (Hoffman 1996). Yet by the late 1990s, CERES' leaders felt that nonfinancial reports produced by firms varied greatly in quality and relevance, in large part because they were molded by a bewildering array of guidelines and frameworks for benchmarking, reporting, and assessing that had been developed by different organizations in a variety of countries (Willis 2003). Moreover, adoption of corporate environmental reporting was proceeding at what CERES perceived to be a sluggish pace. Believing the field to be too fragmented, CERES decided to pursue action to reinvigorate it (Waddock and White 2007).

Sensing an opportunity to influence the way reporting would develop, in late 1997 CERES established the GRI, together with the United Nations Environment Programme (UNEP), as a multistakeholder, international project for developing guidelines for environmental reporting (GRI 2000). From the start, GRI insisted on representation from all nongovernmental sectors with a stake in sustainability reporting—companies; environmental, social, and consumer advocates; investors; labor; accountancy organizations; multilateral organizations; and research institutes—thus embodying the emergent field that it was attempting to steer. Initially, this broad base of stakeholders encountered difficulties in mutual engagement (Richards and Dickson 2007). Moreover, existing business-led initiatives challenged CERES's vision of environmental reporting (Waddock and White 2007). Others, however, supported the fledgling endeavor, among them scientists and accounting societies in Canada and the United Kingdom (White 1999). Eventually, GRI's emphasis on participative decision making, often facilitated by experts, allowed it to forge agreement among its stakeholders on a path for development.

In 1998, GRI decided to strive for a goal more ambitious than its original charter: to address not just environmental performance reporting, as had been initially planned, but also social and economic performance (Willis 2003)—in other words, "the whole enchilada" (SustainAbility 2002, p. 15). Concurrently, the

Table 1 Descriptive Summary of the Four Versions of GRI's Sustainability Reporting Guidelines

	1999	2000	2002	2006
General characterization	Exploratory	Incohesive, fragmented	Technical, rigorous, detailed	Conceptual, authoritative
Number of pages	45	64	104	46
Number of reporting organizations using GRI	—	∼20[b]	∼170	∼950
Number of competing frameworks	Dozens[a]	Dozens	5–10	Essentially none

[a]According to the GRI 1999 Guidelines themselves (p. 3).
[b]Pilot testing.

GRI established a steering committee and several working groups with participants from Europe, the Americas, and Asia, which developed and released a first cut of the Sustainability Reporting Guidelines (an "Exposure Draft") in March 1999 (GRI 1999). A pilot testing and comment period followed, and the first official version of the guidelines was released in June 2000 (GRI 2000). A subsequent round of discussions, drafts, and public comment took place in the following two years, at the end of which the second version of the guidelines was released, in September 2002 (GRI 2002). See Table 1 for a timeline describing the evolution of GRI's Guidelines.

In GRI's work to institutionalize sustainability reporting, two discursive strategies are apparent. The first strategy relates to the extensive use of the analogy with financial reporting. The second strategy centers on providing would-be adopters with a "vocabulary of motives" (Mills 1940, p. 906) that justify the adoption of sustainability reporting. We discuss both these strategies.

The Financial Reporting Analogy. Our interview data and analysis of primary documents reveal that throughout these formative years, GRI consistently emphasized the relatedness between sustainability reporting and financial reporting. This approach was endorsed by the majority of GRI stakeholders (White 1999) and was very prominent in the organization's communication strategy. Indeed, GRI asserted that "the rich tradition of financial reporting . . . has inspired GRI's evolution" (GRI 2002, p. 3). GRI's sustainability reporting principles, statements that highlighted the fundamental ideals and attributes of meaningful reporting, evolved directly from the principles of financial reporting developed by the International Accounting Standards Committee (IASC; now known as the International Accounting Standards Board [IASB]), the main international standard-setting organization for financial reporting. As a matter of fact, the IASC reporting principles were transposed nearly verbatim into GRI's 1999 Exposure Draft Reporting Guidelines (see Table 2) and modified only slightly (mainly semantically) for the 2000 guidelines.

Subsequently, in the second version of the Guidelines, released in 2002, the comparison between principles of financial and sustainability reporting were depicted graphically, in a diagram illustrating the 11 GRI reporting principles that form the "foundation" for performance measurement, providing a "reference point" for interpretation of reports (see Figure 1(b)). Figure 1(a) depicts the hierarchy of accounting qualities developed in 1980 by the Financial Accounting Standards Board (FASB) in a Statement of Financial Accounting Concepts.[1]

The visual similarity between the two diagrams is self-evident. Four of the GRI principles (Relevance, Timeliness, Neutrality, Comparability) are identical to four

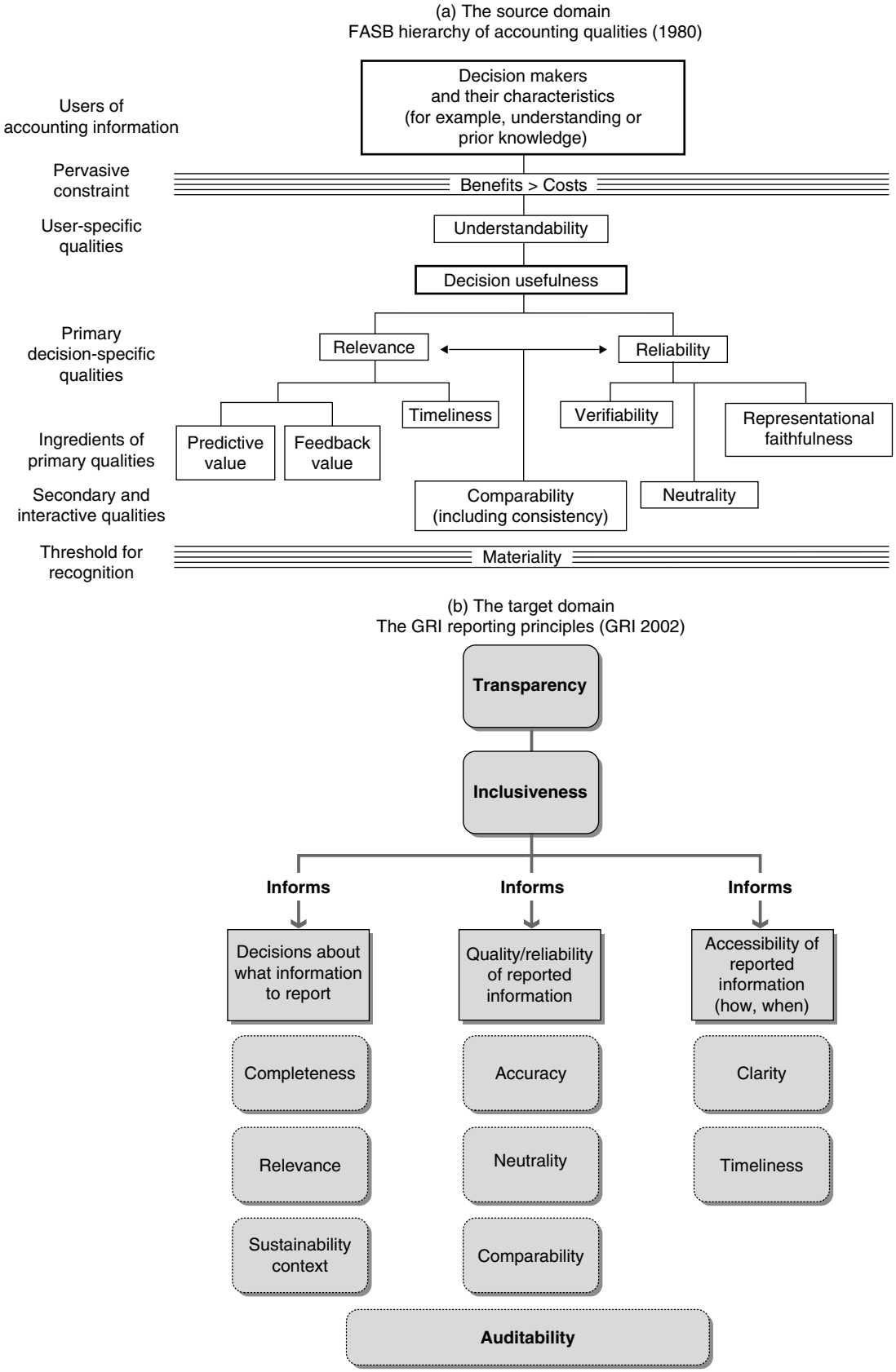
Table 2 Evolution of GRI's Sustainability Reporting Principles

1999	2000	2002[a]	2006

Qualitative characteristics
• Relevance
• Reliability
  ◦ Valid description
  ◦ Substance
  ◦ Neutrality
  ◦ Completeness
  ◦ Prudence
• Understandability
• Comparability
• Timeliness
• Verifiability
 	
Assumptions
• The entity assumption
• The accruals basis of accounting
• The going concern assumption
• The "precautionary principle"
• The materiality principle
	Underlying principles of GRI reporting
	• The reporting entity principle
	• The reporting scope principle
	• The reporting period principle
	• The going concern principle
	• The conservatism principle
	• The materiality principle
	
	Qualitative characteristics
	• Relevance
	• Reliability
	  ◦ Valid description
	  ◦ Substance
	  ◦ Neutrality
	  ◦ Completeness
	  ◦ Prudence
	• Clarity
	• Comparability
	• Timeliness
	• Verifiability
		• Transparency
		• Inclusiveness
		• Auditability
		• Completeness
		• Relevance
		• Sustainability context
		• Accuracy
		• Neutrality
		• Comparability
		• Clarity
		• Timeliness
			Principles for defining report content
			• Materiality
			• Stakeholder inclusiveness
			• Sustainability context
			• Completeness
			
			Principles for ensuring report quality
			• Balance
			• Comparability
			• Accuracy
			• Timeliness
			• Clarity
			• Reliability

[a] See Figure 1.

Figure 1 GRI and FASB Reporting Principles as Analogical Source and Target Domains



FASB principles. Four other principles (Clarity, Auditability, Completeness, Accuracy) are materially similar to FASB principles (Understandability, Verifiability, Reliability, and Representational Faithfulness). Only three GRI principles are unique: Transparency, Inclusiveness, and Sustainability Context. Two of the three—Transparency and Inclusiveness—are described as overarching principles and "are woven into the fabric of all the other principles." The principle of inclusiveness relates to the importance of incorporating stakeholder views during report design. Transparency requires that readers be fully informed of the processes, procedures, and assumptions embodied in the reported information. Finally, the Sustainability Context principle calls for organizational performance to be placed in the larger context of ecological, social, or other limits or constraints. GRI maintained the conceptual and presentational similarity to financial accounting guidelines, yet at the same time introduced several novel and perhaps far-reaching principles into its standard.

Beyond the likeness between GRI's mission and reporting principles to those of financial reporting, additional aspects of the analogy were rendered throughout the guidelines. Coding the different versions of the GRI Guidelines, we found that analogies were used not just to stress similarities but also to provide contrast and to focus attention on the differences between sustainability reporting and financial accounting. In fact, we identified three facets of analogical reasoning that used financial reporting as a source domain and sustainability reporting as a target domain: equivalence, contrast, and modification (see Table 3). We describe each of these in turn.

Equivalence. In this mode of comparison, emphasis is placed on the similarity between sustainability reporting and financial reporting. The most fundamental aspect of equivalence is the GRI mission statement itself. Although varying semantically slightly over the years, the core idea of the mission has stayed constant since GRI's founding: "GRI's vision is that reporting on economic, environmental, and social performance by all organizations is as routine and comparable as financial reporting" (GRI 2006a). Beyond this, parallels are also drawn between certain specific attributes. For example,

> In the same way that annual financial reports typically contain interpretive material in the front end and financial statements in the back, so too should GRI-based reports strive for a clear distinction between the reporting organisation's interpretation of information and factual presentation. (GRI 2002, p. 29)

Other elements of the equivalence relationship focus on several recognizable attributes of financial reporting: rigor, disclosure, verifiability, credibility, regularity of publication, and presentation style.

Table 3 Evolution of the Financial Reporting Analogy in GRI's Sustainability Reporting Guidelines

	1999	2000	2002	2006
Prevalence[a]	25.6%[b] Without annex: 4.8%	4.9%	10.3%[b] Without annex: 4.6%	1.9%
Facet				
Equivalence	7	7	12	3
Contrast	—	3	12	—
Modification	3	5	5	3
Total	10	15	29	6

[a] Prevalence is calculated as the proportion of words used in all analogical statements referring to financial reporting to the total number of words in the document.

[b] In 1999 there was an annex devoted to the analogy entitled "General Reporting Principles." The 2002 Guidelines also contained an annex entitled "Linkages between Sustainability and Financial Reporting." These two annexes, though numbering several pages each, were coded as a single instance of the analogy.

Contrast. In certain instances, the Guidelines describe key differences between sustainability reporting and financial reporting. The use of contrast emphasizes attributes of financial reporting that GRI deems inappropriate for sustainability reporting. For example,

> In financial reporting, there is an unspoken assumption concerning the general level of background knowledge and experience of the assumed "primary" user group, namely, investors. No such "primary" user group exists for GRI at this juncture. In fact, it may never exist owing to the diversity of user groups that are consumers of economic, environmental, and social performance information. (GRI 2002, p. 30 [quotation marks in the original])

Use of contrast in the GRI Guidelines centers on several issues. The Guidelines state that precise quantitative material measures, although useful for financial reporting, are not, in the case of sustainability reporting, relevant in and of themselves; impacts must be considered within the natural and social context within which they occur. Financial reporting also assumes that the reader has prior knowledge of relevant professional terms, yet the Guidelines emphasize that this supposition cannot be carried over to sustainability reporting and that "simple words," "suitable graphics," and "carefully defined" terms be used in sustainability reports. Being more accessible, sustainability reports have a broader audience than financial reports. Finally, organizational boundaries relevant for financial reporting are not suitable for meaningful sustainability reporting, for example, in the context of supply chains and the use of outsourced labor. The use of contrast is not limited to the written guidelines: for example, at a major GRI event, an influential stakeholder suggested that financial reporting looks to the past, explicating matters that have passed, whereas sustainability reporting looks to the future.

Modification. A third way of relating sustainability reporting to financial reporting is through tweaking or extending some of the latter's attributes, making them more applicable to sustainability reporting. Rather than emphasizing the shortcomings of financial reporting, this form of comparison identifies areas of similarity, not equivalence. The similarity is used as a starting point for elaborating how certain aspects of financial reporting need to be adapted, but not rejected, to fit the precepts of sustainability reporting. In presenting the Reporting Guidelines at various venues, GRI executives repeatedly emphasized that financial reporting and sustainability reporting "serve parallel and essential functions that enrich each other" (GRI 2002, p. 17). For example,

> Financial indicators focus primarily on the profitability of an organization for the purpose of informing its management and shareholders. By contrast, economic indicators in the sustainability reporting context focus more on the manner in which an organization affects the stakeholders with whom it has direct and indirect economic interactions. Therefore, the focus of economic performance measurement is on how the economic status of the stakeholder changes as a consequence of the organization's activities, rather than on changes in the financial condition of the organization itself. In some cases, existing financial indicators can directly inform these assessments. However, in other cases, different measures may be necessary, including the recasting of traditional financial information to emphasise the impact on the stakeholder. In this context, shareholders are considered one among several stakeholder groups. (GRI 2002, p. 46)

Aspects of financial reporting that are addressed through the modification relationship include the principles of reporting; metrics used; benefits of sustainability reporting as a managerial control tool; and, again, the issue of reporting boundaries.

In sum, equivalence emphasizes strict parity, contrast emphasizes dissimilarities, and modification emphasizes adaptation. In GRI's formative years, from its inception until 2002, use of the analogy in the Guidelines expanded from version to version (see Table 3). At first, use of the analogy centered on equivalence, but in 2000 and especially 2002, emphasis shifted to modification and, notably, contrast.

Motivation for Reporting. In GRI's early history, and especially in the 2002 Guidelines, social ills and environmental degradation are framed predominantly in an instrumental fashion as issues that have an impact on businesses' economic performance. Sustainability reporting is described as a means of identifying potentially problematic issues before they develop into full-blown crises with deleterious financial consequences. For example,

> Attention to social indicators describing the diversity of a company's workforce may allow managers to identify discriminatory practices that could have led to costly litigation. (GRI 2002, p. 69)

Table 4 Evolution of Motivation for Reporting in GRI's Sustainability Reporting Guidelines

	1999	2000	2002	2006
Instrumental rational	4	2	17	10
Value rational	—	8	5	9

The 2002 Guidelines provide a list of issues driving the adoption of sustainability reporting, among them globalization, corporate governance, national policy and international conventions, accounting regulations, financial risk management, and management of intangible assets. In other sections, the Guidelines suggest that a better understanding of sustainability issues, obtainable through reporting, can yield benefits, such as uncovering opportunities for business growth. This instrumental framing is accentuated by the linguistic style of the Guidelines, which incorporates jargon and buzzwords frequently used in business communications. Best illustrated by example, some of these phrases are "today's high-speed, interconnected, '24-hour news' world," the " 'bricks and mortar' economy of the past," and "tightly linked global supply chains."

Value-rational motivations for environmental reporting, in contrast, are scarce in this period (except in the 2000 Guidelines—see Table 4) and in many instances provide supplementary justification for adopting reporting practices, rather than being justifiable in and of themselves. For example, the following passage starts from a value-rational, moral imperative and then transitions into an instrumental logic, by emphasizing the heightened awareness to the impacts of businesses on sustainability:

> The danger, it is argued, is that the failure of current governance structures to keep pace with changes in the global economy will lead to accelerating problems for humanity and for the biosphere. Disagreements over these matters have intensified in the press, in the halls of government, in the business community, and in a variety of international forums. Business, government, individual citizens, and civil society all share responsibility for managing impacts on humanity and the biosphere. However, it is business impacts that thus far have attracted most attention in governance and policy debates. (GRI 2002, p. 2)

This emphasis on instrumental-rational motivation for reporting was not arbitrary. Early criticism of GRI's "sales" strategy put forth by some stakeholders questions the decision to emphasize instrumental-rational rather than value-rational motivation for reporting, expressing concern that this approach was too timid:

> Some voices in the GRI process maintain that being explicit about what sustainability stands for may be too premature for this initiative. They claim that once the initiative is on its way, next GRI generations would eventually become more specific about the goal. In addition,

> they fear that being too explicit now may jeopardize the process. Others worry that declaring the goal would compromise the benefits of being pragmatic, independent, and not hamstrung by philosophy. (Hawken and Wackernagel 2000, p. 5)

This critique suggests that the initial decision to decouple the Guidelines from the broader, more politically sensitive agenda of sustainability was a conscious decision within GRI. Indeed, Bob Massie, former executive director of CERES, a key figure in GRI's early development and a leading proponent of the instrumental-rational approach, asserted in an interview that

> . . . you do not need to agree on the first principles. In fact, it is better to avoid having an explicit discussion of core values and the fundamental views on the social order. Instead, you focus on more instrumental ideas. This way people can agree on the actions at that level, they may even be willing to try to understand each other on the core level. (Bob Massie, CERES, cited in Brown et al. 2007, p. 21)

Other critics of GRI were concerned that utilization of financial reporting as a source domain was too constraining. Some questioned whether sustainability reports that—like their financial counterparts—were published only once per year and that did not provide channels for engagement with stakeholders would actually promote organizational change toward sustainability (Wheeler and Elkington 2001). Others were concerned that sustainability reporting, when pursued in a format similar to financial reporting, would lead organizations to provide large amounts of data of relatively little importance, obscuring the big picture of an organization's sustainability (SustainAbility 2002). Still others argued that adoption of GRI would lead firms to adhere to minimum standards and focus on compliance, rather than to strive for excellence (Norman and MacDonald 2004).

All told, in the first phase of GRI's work, from its founding to 2002, the likeness between sustainability reporting and financial reporting was emphasized, substantially constraining the form and scope of the incipient institution. Rationales for reporting were oriented toward providing a compelling business case for the practice, rather than highlighting a broader contribution to society and its long-term interests. Instrumental-rational motivations were emphasized and value-rational ones veiled.

Refashioning the Analogy: GRI from 2002 to the Present

After the release of the 2002 Guidelines, adoption of the standard continued to accelerate. By 2004, the Guidelines were considered the de facto standard for sustainability reporting and were heralded as "the only game in town" (AccountAbility 2004, p. 20) by the financial press (*Economist* 2004), by academic researchers (Labelle et al. 2006, Milne et al. 2005), and by sustainability consultants (KPMG and UNEP 2006, SustainAbility 2002). A KPMG survey of the top 250 companies in the Fortune Global 500, and of the top 100 companies in 16 countries, revealed that 40% of reporting companies claimed they used the GRI to determine report content (KPMG 2005). Of the remainder, 21% cited stakeholder consultation processes, 13% cited national standards and regulation, and 3% cited business principles. Less than 1% cited an alternative, AA1000. In late 2007, the Swedish government announced that, starting in 2009, all 55 state-owned companies in Sweden must file annual sustainability reports based on the GRI Guidelines (Swedish Government Offices 2007). By 2008, 77% of the top 250 companies in the Fortune Global 500 used the GRI Guidelines for sustainability reporting (KPMG 2008).

Since 2002, GRI has pursued partnerships with other organizations in the sustainability space, such as the United Nations Global Compact, a leading voluntary initiative to promote corporate social responsibility; developed and marketed learning services for sustainability reporting, including accreditation and certification; taken part in the development of software platforms for sustainability; provided online portals with best practice resources for reporting; and even initiated a "matchmaker" program linking reporting organizations with MBA programs. These activities indicate that GRI, unlike its financial reporting counterparts the FASB and IASB, is expanding beyond its core activity of producing a reporting standard and is actively engaged in promoting and facilitating its use. With this expanded mission, GRI requires additional resources, a significant portion of which is provided by corporate philanthropy, a practice perceived by many as problematic and potentially distorting (Brown et al. 2007).

However, GRI's main activity since 2002 was the development of the subsequent version of the guidelines: G3 (GRI 2006b). Released in October 2006, the launch of the latest version of the Guidelines entailed a three-year effort. This process began with a Structured Feedback Process, involving the collection of comments and ideas from hundreds of stakeholders. Several GRI working groups then developed a draft version, which was released for public comment. The guidelines were subsequently revised and authorized by the various GRI governance bodies and launched in a gala event in Amsterdam, keynoted by luminaries such as Al Gore and the Prince of Orange, heir to the Dutch throne.

Similar to GRI's early years, the same two discursive strategies for institutionalizing sustainability reporting are apparent: the financial reporting analogy and the

motivation for adoption. However, in this stage, analogies were used more to emphasize differences and incongruence, and the rationale for adoption shifted from instrumentally rational to value rational.

The Financial Reporting Analogy. The G3 Guidelines, released in October 2006, are strikingly different from the 2002 Guidelines. At less than half the length of the previous version, the G3 Guidelines are denser and perhaps not as easily navigable by those who are not sustainability professionals. Details on the minutiae of reporting have been expunged, and readers are advised to obtain specifics from auxiliary documents, also developed by GRI. The number of metrics users are asked to specifically report on was reduced, from 97 to 79, in response to calls to simplify reports and make them more concise. In part at least, this trend toward minimization can be attributed to a GRI board member's desire to "strip out the superfluous" and prevent the guidelines from becoming as complex as financial reporting standards, which he believes are unintelligible for accountants and users alike.

Furthermore, explicit reference to the financial reporting analogy has, in the G3 Guidelines, decreased markedly. The GRI's mission statement, aspiring to raise the bar of sustainability reporting to a level like that of financial reporting, has remained virtually unchanged, but other elements of the analogy were muted or restated. The financial reporting analogy is actually alluded to in the 2006 Guidelines a mere six times (see Table 3). This is consistent with the reality that sustainability reporting is already a well-known and well-articulated convention. As such, with sustainability reporting approaching taken-for-grantedness, excessive explanation and justification—whether by means of analogy or other forms of suasion—is superfluous and potentially discordant. As opposed to an emphasis on similarity, however, analogy that stresses modification remains viable, because it can serve to highlight subtleties of sustainability reporting that differ from those of financial reporting.

The analogy with financial reporting is also maintained, albeit somewhat implicitly, with the growing importance attached to foundational reporting principles for sustainability. A significantly greater proportion of text in the G3 Guidelines is devoted to the role of reporting principles and their importance for determining report content and presentation, as opposed to previous versions' emphasis on practical instructions for report preparation. One informant described this as a shift from "Doing things right," before 2002, to "Doing the right things" in the G3 Guidelines. The G3 Guidelines not only define and explain the reporting principles, but also provide users a series of tests intended to help reporting companies think more creatively about their reports. Notably, the reporting principles themselves have continued to evolve and shift farther away from their origins in financial reporting, especially as pertains to principles for determining report content (see Table 2). Shifting from practical to conceptual guidance through a focus on principles, while highlighting differences from the analogical source through an emphasis on modification, the analogy, starting in 2002, is gradually employed less as a legitimating discursive strategy and more as a cognitive mechanism, facilitating the process of creative institutional design.

Motivation for Reporting. An additional development in the G3 guidelines is clarification of the three main audiences for sustainability reports and their different needs. The three main audiences identified by GRI in 2006 are reporting organizations themselves, civil society, and investors. Indeed, key GRI stakeholders openly declare that it is crucial to empower civil society members to make full use the information provided in reports. Accordingly, the G3 text itself shows a marked increase in the number of allusions to value-rational issues, in deference to the needs of civil society report readers, even though the instrumental-rational themes are retained, in tune with the needs of organizations and the financial community. GRI is also less averse to explicitly revealing value-instrumental beliefs. For example, a GRI founder and former CEO, speaking at the G3 launch event in 2006, asserted that GRI does not need to elucidate a business case for all aspects of reporting, such as reporting on human rights, because corporate transparency is a "quasi-right" to which civil society is entitled. In line with this reasoning, entire sections in the 2002 Guidelines, which focused on economic drivers and instrumental benefits of sustainability reporting, have been deleted from the G3 Guidelines.

Summarizing our findings, we find that increasing uptake of GRI's sustainability reporting guidelines co-occurred with a decrease in the use of the financial reporting analogy, especially the use of analogical equivalence. At the same time, GRI shifted from a purely instrumentally rational logic for adoption to one that incorporates value-rational themes. Furthermore, over time, GRI placed greater emphasis on reporting principles and less on providing specific templates and metrics to be used in reports. Together these shifts in strategy encourage users to experiment and participate in designing the institution of sustainability reporting. Thus, institutionalization of sustainability reporting occurs not solely as a result of entrepreneurial dictates obediently fulfilled by passive adopters. Rather, the boundary between designers and users is porous, and novel designs emerge from use (Garud et al. 2008, von Hippel 1986). In this scenario, adopters are not passive, and their experimentation, guided and promoted by the institutional entrepreneur, is an essential component in the institutionalization process.

An illustration of user participation in experimentation and innovation involves the concept of materiality. Materiality, in both financial and sustainability reports, guides reporters to focus on particularly salient aspects of performance that are most relevant for report readers. In the 1999 GRI Draft Guidelines, materiality of sustainability reports is mentioned only twice, in passing. In the first official Guidelines, in 2000, a one-page section is devoted to elaboration of "the materiality principle," and in 2002, materiality is incorporated into the Transparency, Completeness, and Timeliness principles. Around this time, organizations assessing and rating sustainability reports lamented that corporate reporters were ignoring materiality and "carpet-bombing" (SustainAbility 2002, 2004) readers with data, thus making it difficult for stakeholders to identify and understand the central sustainability challenges facing the reporting organization. Heeding these concerns, around 2004, Ford, BT, BP, and other companies began, with support from consultancies like SustainAbility and AccountAbility, to scrutinize "materiality" in the context of sustainability. As its departure point, this work took the definition of materiality in the world of financial accounting:[2]

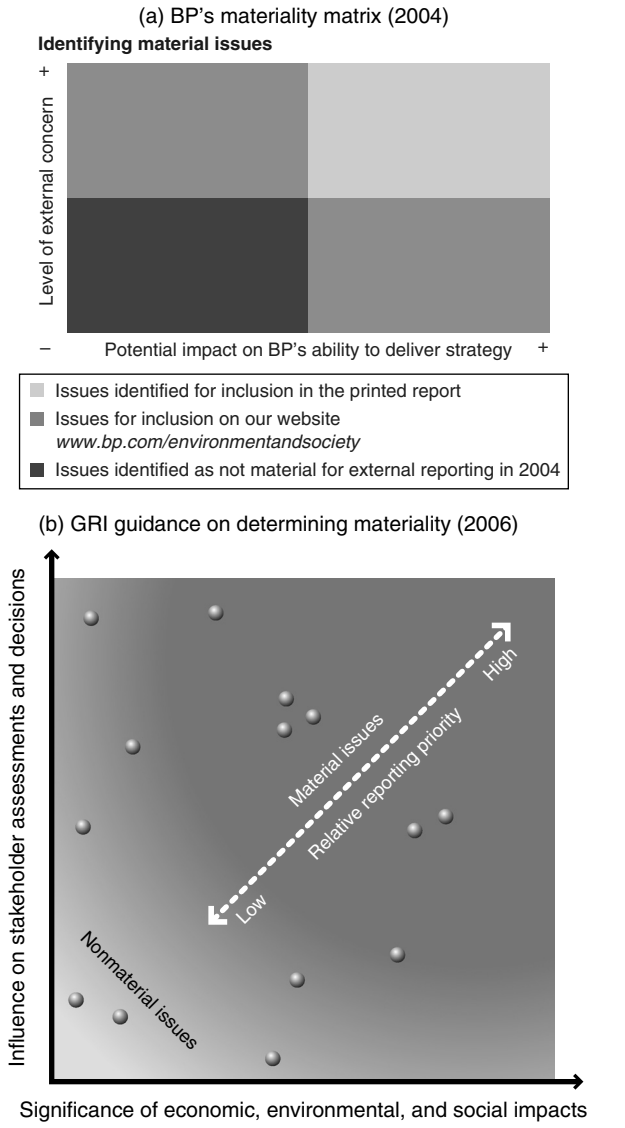
> Materiality may be a familiar concept in the field of financial reporting, but it plays a different role in the newer field of sustainability reporting . . . . For the purposes of this sustainability report, we consider material information to be that which is of greatest interest to, and which has the potential to affect the perception of, those stakeholders who wish to make informed decisions and judgments about the Company's commitment to environmental, social and economic progress. (Ford Motor Company 2005, p. 9)

This recontextualization of materiality led reporting companies to develop and experiment with "materiality matrixes"—managerial tools for assessing an issue's materiality to sustainability (AccountAbility 2006). One early example—BP's materiality matrix from 2004—is shown in Figure 2(a). Materiality matrices allow reporters to plot the level of concern a company's actions have for external constituents on one dimension and the intensity of impact on the reporting company itself on another, thus enabling them to evaluate which of their activities are most material in a sustainability context. Subsequent to the pioneering work of these companies in developing and using this new tool, GRI, in its G3 (2006) Guidelines, strongly emphasized the issue of materiality, dedicating a two-page section to definition, explanation, and possible methodology for assessing materiality, conceptually identical to materiality matrices (see Figure 2(b)). Following the release of the G3 Guidelines in 2006, materiality matrices were adopted by additional companies that had not previously used them.

Similar experimentation is occurring in the domains of integration between financial and sustainability reporting, boundaries, verification methodologies, reporting by small and medium enterprises, and reporting channels beyond annual reports. Our analysis of primary sources as well statements by GRI's CEO Ernst Ligteringen suggest that this pattern of innovation recurs consistently: GRI identifies an issue or principle as important for sustainability reporting, whereupon reporting companies experiment in developing appropriate reporting measures to address the issue, and GRI integrates promising developments into subsequent guidelines or supplementary documentation. According to Allen White, cofounder and former CEO of the GRI,

> The challenge of GRI and, I would argue, similar initiatives in innovative global governance, is to mobilise people with seemingly disparate interests around a public good. The key challenge is to adhere to a policy of inclusiveness and to find a place for each and every person who seeks to, or should, contribute. This is the path to both

Figure 2 GRI-Inspired Cycles of Innovation



Source. (a) BP (2004), (b) GRI (2006).

> legitimacy as well as innovation. It is the power of the collective mind of diverse individuals that was, and remains, the soul of GRI. (Waddock and White 2007, p. 41)

Indeed, GRI's structure, the community of practice it has cultivated, and the processes it has developed for integrating insights from its stakeholders are all apparently aligned with the dual aim of encouraging creativity and enhancing legitimacy.

Conclusion

This study was motivated by a desire to more fully understand the role of analogy in discursive strategies promoting institutional change. In pursuit of this goal, we have analyzed the emergence and evolution of GRI's work to institutionalize sustainability reporting through the development of standards. We have shown how analogies shaped the institutionalization process through both normative and cognitive pathways. Previous research on discursive strategies has emphasized the role of analogies in engendering legitimacy through an emphasis on similarity between source and target domains. Yet from a cognitive standpoint, an analogy's success in explicating unfamiliar concepts through similarity is precisely the impediment that tends to limit search, innovation, and experimentation. We have demonstrated, however, that analogies are more versatile than mere embodiments of similarity. Analogies, we contend, can foster—rather than inhibit—cognitive processing among adopters, promoting reflection and reconceptualization by highlighting differences and not just similarities between analogical source and target. Indeed, if analogies operate as attention-focusing devices, facilitating yet constraining search and problem solving, we argue that effective analogical work must emphasize modification and contrast between source and target domains, and not just equivalence or similarity.

Summarizing our findings, we have shown that initially, the GRI guidelines were a convention, justified on instrumental grounds. It was suggested that firms would be better off if they accounted for their social and environmental—not just financial—performance. This framing, however, was likely to lead to a superficial, or perhaps even ritualistic, adoption of the new convention, because it stressed merely transposing source logics (financial reporting) to a target domain (sustainability reporting). This naturalizing analogy with financial reporting, a taken-for-granted practice in the business world, could obscure, albeit for a limited amount of time, the social fabrication of the proto-institution, limit the uncertainty surrounding its adoption, and provide a bridge to a wider audience in order to receive political support. Yet although from a normative point of view stressing similarities through the financial reporting analogy paid off in terms of legitimacy, from a cognitive point of view this approach would not stimulate innovative recombination of available templates and could not lead to the emergence of a novel institution.

As GRI matured and its guidelines attained greater acceptance, the organization adjusted the extent to which the analogy directed attention to dissimilarities as opposed to similarities. Specifically, statements underscoring the equivalence of sustainability reporting to financial reporting were attenuated, whereas modification and contrast were emphasized. Although comparison to the initial benchmarked institution was maintained, the analogy to financial reporting spurred creativity and encouraged innovation beyond the passive adoption of generic templates. This design phase was fuelled by a value-rational logic exhorting adopters to carefully examine the ramifications of sustainability reporting and develop meaningful responses to the challenges that sustainability reporting unleashed. Innovations developed by adopters were integrated into future guidelines in a virtuous cycle of institutional design.

Generalizing from the GRI case, we can put forth a model of the temporal evolution of discursive strategies that addresses both design *and* diffusion, based on the proposition that analogical work can advance institutionalization processes in stages. Initial framing of analogies that stresses similarities and obscures differences can reduce uncertainty for would-be adopters, providing initial traction. Gradual shifts to framing that builds on, modifies, and even identifies contrasts between the incipient institution and its analogical precursor reduces the hazard of undesirably replicating the foundational logics of the institution used as the analogical source. Receptivity to value-rational argumentation that extols the desirability of new logics and urges innovation will be greater in later stages of the institutionalization process. Over time, this combination of cognitive unshackling, value-rational exhortation, and encouragement of bottom-up experimentation can lead to the development of an institution substantially different from its analogical source.

This model of institutionalization differs markedly from the quintessential depiction of institutionalization, wherein innovations are initially adopted for technical reasons and later for symbolic ones (Baron et al. 1986, Tolbert and Zucker 1983). When multiple competing logics are present, the temporal shift from technical to symbolic rationality might not play out as canonically prescribed (Lounsbury 2007). As the GRI case exemplifies, innovations may be adopted symbolically early in the cycle and then pursued substantively, at least by some adopters, in later stages (Feldman and March 1981). Indeed, in a setting similar to ours—the evolution of corporate sustainability strategies—Bansal (2005) found that institutional pressures were especially salient in early phases of sustainability strategy formulation because of heightened public awareness of environmental degradation. However, the ambiguity associated

with the meaning, measurement, and impact of "sustainable development" led to adoption of symbolic responses to these pressures. In contrast, in later stages, some companies moved from symbolic to substantive adoption, identifying and pursuing economic rewards accruing from progressive sustainability strategies.

Future research can attempt to discern whether this unconventional trajectory of institutionalization, wherein passive responses lead over time to active ones (Suchman 1995), is unique to sustainable development and sustainability reporting or if it may also occur in other settings. This trajectory may occur where an early response to institutional pressures does not impinge on an organization's technical core (Thompson 1967), can be pursued generically and superficially, or in general is inexpensive to implement. Indeed, additional research is needed to understand more fully the "receiving" side of the diffusion process. Using diffusion research (Strang and Soule 1998) as a starting point, researchers can carefully assess how shifts in rationales for adoption influence adoption patterns and identify, at various points in the institutionalization process, whether such adoption is primarily substantive or symbolic.

An additional implication of our model is that in early stages of the institutionalization process, a top-down, centralized approach can allow the entrepreneur to concentrate resources and focus on acceptance and legitimation. Subsequently, a more inclusive structure, encouraging bottom-up innovation pursued by a wide array of field members, may be necessary to facilitate institutional development. Perhaps, like CERES and GRI, a successful institutional entrepreneur must relinquish centralized control over its institution—steering and guiding the institution as it develops, but not imposing a definitive design (O'Mahony and Ferraro 2007, Garud et al. 2008). Future research can attempt to assess whether inclusiveness is an essential component of institution building and examine whether the locus of innovation shifts, over time, from the entrepreneur to practice adopters. Researchers can also try to identify precisely which types of adopting organizations will be recalcitrant adopters and which will be proactive actors that eagerly participate in the institutional design process.

As a single case study, there is clearly a possibility that at least some of our findings are idiosyncratic. Undoubtedly, GRI's history is intertwined with increased public awareness of corporate social responsibility and a broad societal debate on sustainability and is thus quite clearly temporally situated in an opportune moment for institution building. The power structures and alignments of interests in this specific institutional setting, wherein an emergent field of corporations, activists, nongovernmental organizations, consultants, and others is collectively attempting to address a global societal issue, are unlikely to be identical in other contexts. Another limitation of the study is that our methodology does not directly address causality. We find that shifts in GRI's use of analogies and rationales for adoption correspond to shifts in reporting practices pursued by adopters, but we cannot assert that these developments are solely a consequence of GRI's analogical work. We believe, however, that the data do show that GRI did pursue its discursive strategies mindfully and consistently with other strategies for legitimation. Moreover, our interview data suggest that GRI was conscious of its analogical work and its expected effects and that the ascendance of its standard cannot be attributed solely to chance or to large-scale social forces.

Institutional theorists have depicted effective institutional entrepreneurship as a well-defined strategy, wherein legitimacy and change must be precisely counterbalanced (Aldrich and Fiol 1994, Lounsbury and Glynn 2001). However, institutions emerge and evolve gradually (Carruthers and Espeland 1991), and the precarious balance between legitimacy and innovation must constantly be recalibrated. Strategies effective at early stages of institutionalization are unlikely to be as effective in later stages. Skilled institutional entrepreneurs, we believe, must be adept in accurately assessing the evolution and progress of their institution and appropriately refining and reformulating their discursive strategies as development unfolds. Institutional entrepreneurship is thus dynamic, rather than static, and its discursive strategies must be nuanced and pliable, rather than simplistic and rigid. Effective texts will address both legitimacy and innovation. Analogies will both replicate the institutional fabric of society and seed its evolution.

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Endnotes

[1]Although not technically a component of GAAP (Generally Accepted Accounting Principles), the FASB Statements of Financial Accounting Concepts are basic principles which underlie GAAP (Anthony 2004).

[2]One informant at a large multinational company recounted the dismay of legal counsel wary of using the word "materiality" in a sustainability reporting context, advocating instead for adoption of a word or phrase unassociated with financial reporting.

References

AccountAbility. 2004. Strategic challenges for business in the use of corporate responsibility codes, standards, and frameworks. World Business Council for Sustainable Development. Accessed December 16, 2009, http://www.wbcsd.org/web/publications/accountability-codes.pdf.

AccountAbility. 2006. The materiality report: Aligning strategy, performance and reporting. Accessed December 16, 2009, http://www.accountability.org/uploadedFiles/publications/The%20Materiality%20Report.pdf.

Aldrich, H. E., C. M. Fiol. 1994. Fools rush in? The institutional context of industry creation. *Acad. Management Rev.* **19**(4) 645–670.

Alinsky, S. D. 1971. *Rules for Radicals: A Pragmatic Primer for Realistic Radicals*. Random House, New York.

Anthony, R. N. 2004. *Rethinking the Rules of Financial Accounting: Examining the Rules for Proper Reporting*. McGraw-Hill, New York.

Bansal, P. 2005. Evolving sustainably: A longitudinal study of corporate sustainable development. *Strategic Management J.* **26**(3) 197–218.

Baron, J. N., F. R. Dobbin, P. D. Jennings. 1986. War and peace: The evolution of modern personnel administration in U.S. industry. *Amer. J. Sociol.* **92**(2) 350–383.

Battilana, J., B. Leca, E. Boxenbaum. 2009. How actors change institutions: Towards a theory of institutional entrepreneurship. *Acad. Management Ann.* **3** 65–107.

Berger, P. L., T. Luckmann. 1967. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Anchor Books, Garden City, NY.

Boxenbaum, E., J. Battilana. 2005. Importation as innovation: Transposing managerial practices across fields. *Strategic Organ.* **3**(4) 355–383.

British Petroleum. 2004. Sustainability report. Accessed December 16, 2009, http://www.bp.com/liveassets/bp_internet/globalbp/STAGING/global_assets/downloads/S/Sustainability_Report_2004.pdf.

Brown, H. S., M. de Jong, T. Lessidrenska. 2007. The rise of the global reporting initiative (GRI) as a case of institutional entrepreneurship. Corporate Social Responsibility Initiative, Working Paper 36, Kennedy School of Government, Harvard University, Cambridge, MA.

Campbell, J. L. 1998. Institutional analysis and the role of ideas in political economy. *Theory Soc.* **27**(3) 377–409.

Carruthers, B. G., W. N. Espeland. 1991. Accounting for rationality: Double-entry bookkeeping and the rhetoric of economic rationality. *Amer. J. Sociol.* **97**(1) 31–69.

CERES. 2006. CERES Principles. Accessed July 22, 2006, http://www.ceres.org/coalitionandcompanies/principles.php.

Colyvas, J. A. 2007. Factory, hazard, and contamination: The use of metaphor in the commercialization of recombinant DNA. *Minerva* **45**(2) 143–159.

Cornelissen, J. P. 2005. Beyond compare: Metaphor in organization theory. *Acad. Management Rev.* **30**(4) 751–764.

Creed, W. E. D., J. A. Langstraat, M. A. Scully. 2000. A picture of the frame: Frame analysis as technique and as politics. *Organ. Res. Methods* **5**(1) 34–55.

Czarniawska-Joerges, B., G. Sevón. 1996. *Translating Organizational Change.* Walter de Gruyter, Berlin.

Dahl, D. W., P. Moreau. 2002. The influence and value of analogical thinking during new product ideation. *J. Marketing Res.* **39**(1) 47–60.

Davis, G. F., K. A. Diekmann, C. H. Tinsley. 1994. The decline and fall of the conglomerate firm in the 1980s: The deinstitutionalization of an organizational form. *Amer. Sociol. Rev.* **59**(4) 547–570.

Djelic, M.-L. 1998. *Exporting the American Model: The PostWar Transformation of European Business.* Oxford University Press, Oxford, UK.

Douglas, M. 1986. *How Institutions Think.* Syracuse University Press, Syracuse, NY.

Economist, The. 2004. Corporate storytelling: Non-financial accounting is now too serious to be left to amateurs. (November 4) 13–14.

Elkington, J., J. Emerson, S. Beloe. 2006. The value palette: A tool for full spectrum strategy. *California Management Rev.* **48**(2) 6–28.

Feldman, M. S., J. G. March. 1981. Information in organizations as signal and symbol. *Admin. Sci. Quart.* **26**(2) 171–186.

Fiss, P. C., P. M. Hirsch. 2005. The discourse of globalization: Framing and sensemaking of an emerging concept. *Amer. Sociol. Rev.* **70**(1) 29–52.

Ford Motor Company. 2005. Our route to sustainability: Connecting with society—Ford sustainability report 2004/2005. Accessed December 16, 2009, http:// www.ford.com/about-ford/investor-relations/company-reports/annual-reports/report-detail/sustain-2004-05.

Friedland, R., R. R. Alford. 1991. Bringing society back in: Symbols, practices, and institutional contradictions. W. W. Powell, P. J. DiMaggio, eds. *The New Institutionalism in Organizational Analysis.* University of Chicago Press, Chicago, 232–263.

Gamson, W. A., A. Modigliani. 1989. Media discourse and public opinion on nuclear power: A constructionist approach. *Amer. J. Sociol.* **95**(1) 1–37.

Garud, R., S. Jain, P. Tuertscher. 2008. Incomplete by design and designing for incompleteness. *Organ. Stud.* **29**(3) 351–371.

Gavetti, G., D. A. Levinthal, J. W. Rivkin. 2005. Strategy-making in novel and complex worlds: The power of analogy. *Strategic Management J.* **26**(8) 691–712.

Gentner, D. 1989. The mechanisms of analogical learning. S. Vosniadou, A. Ortony, eds. *Similarity and Analogical Reasoning.* Cambridge University Press, London, 199–241.

Gentner, D., K. J. Holyoak. 1997. Reasoning and learning by analogy: Introduction. *Amer. Psychologist* **52**(1) 32–34.

Gray, R., R. Kouhy, S. Lavers. 1995. Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing Accountability J.* **8**(2) 47–77.

Green, S. E., Jr. 2004. A rhetorical theory of diffusion. *Acad. Management Rev.* **29**(4) 653–669.

Greenwood, R., R. Suddaby, C. R. Hinings. 2002. Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Acad. Management J.* **45**(1) 58–80.

GRI. 1999. *Sustainability Reporting Guidelines: Exposure Draft for Public Comment and Pilot Testing*. CERES, Boston.

GRI. 2000. *Sustainability Reporting Guidelines*. Global Reporting Initiative, Boston.

GRI. 2002. *Sustainability Reporting Guidelines*. Global Reporting Initiative, Boston.

GRI. 2006a. The GRI—An overview. Accessed April 2, 2006, http://www.globalreporting.org/about/Overview.pdf.

GRI. 2006b. *Sustainability Reporting Guidelines*. Global Reporting Initiative, Amsterdam.

Hargadon, A. B., Y. Douglas. 2001. When innovations meet institutions: Edison and the design of the electric light. *Admin. Sci. Quart.* **46**(3) 476–501.

Haveman, H. A., H. Rao, S. Paruchuri. 2007. The winds of change: The progressive movement and the bureaucratization of thrift. *Amer. Sociol. Rev.* **72**(1) 117–142.

Hawken, P., M. Wackernagel. 2000. Satisfying lives for all within the means of nature: How a honed GRI could advance true sustainability. Mimeo, GRI/CERES, Boston. http://globalreporting.org/PilotFeedback/CommissionedFeedback/CommissionedFeedback.htm.

Hoffman, A. J. 1996. A strategic response to investor activism. *Sloan Management Rev.* **37**(2) 51–64.

Hoffman, A. J., M. J. Ventresca. 1999. The institutional framing of policy debates: Economics versus the environment. *Amer. Behavioral Scientist* **42**(8) 1368–1392.

Holland, J. H., K. J. Holyoak, R. E. Nisbett, P. R. Thagard. 1989. *Induction: Processes of Inference, Learning, and Discovery*. MIT Press, Cambridge, MA.

Jensen, M. C., W. H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *J. Financial Econom.* **3**(4) 305–360.

Kolk, A. 2004. A decade of sustainability reporting: Developments and significance. *Internat. J. Environment Sustainable Development* **3**(1) 51–64.

KPMG. 2005. KPMG international survey of corporate responsibility reporting 2005. KPMG, London. Accessed December 16, 2009, http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/International-corporate-responsibility-survey-2005.pdf.

KPMG. 2008. KPMG international survey of corporate responsibility reporting 2008. KPMG, London. Accessed December 16, 2009, http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/International-corporate-responsibility-survey-2008.pdf.

KPMG, UNEP. 2006. Carrots and sticks for starters: Current trends and approaches in voluntary and mandatory standards for sustainability reporting. KPMG and UNEP. Accessed December 16, 2009, http://www.kpmg.com/au/Portals/0/Carrots_and_Sticksfinal.pdf.

Labelle, R., A. Schatt, B. Sinclair-Desgagné. 2006. Corporate sustainability reporting. J. Allouche, ed. *Corporate Social Responsibility*, *Volume 1: Concepts, Accountability and Reporting.* Palgrave Macmillan, Hampshire, UK, 376.

Lakoff, G., M. Johnson. 2003. *Metaphors We Live By*. University of Chicago Press, Chicago.

Lawrence, T. B., C. Hardy, N. Phillips. 2002. Institutional effects of interorganizational collaboration: The emergence of proto-institutions. *Acad. Management J.* **45**(1) 281–290.

Leblebici, H., G. R. Salancik, A. Copay, T. King. 1991. Institutional change and the transformation of interorganizational fields: An organizational history of the U.S. radio broadcasting industry. *Admin. Sci. Quart.* **36** 333–363.

Lober, D. J., D. Bynum, E. Campbell, M. Jacques. 1997. The 100 plus corporate environmental report study: A survey of an evolving environmental management tool. *Bus. Strategy Environment* **6**(2) 57–73.

Lounsbury, M. 2001. Institutional sources of practice variation: Staffing college and university recycling programs. *Admin. Sci. Quart.* **46**(1) 29–56.

Lounsbury, M. 2007. A tale of two cities: Competing logics and practice variation in the professionalizing of mutual funds. *Acad. Management J.* **50**(2) 289–307.

Lounsbury, M., M. A. Glynn. 2001. Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. *Strategic Management J.* **22**(6–7) 545–564.

Maguire, S., C. Hardy, T. B. Lawrence. 2004. Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Acad. Management J.* **47**(5) 657–679.

Marsh, R. L., T. B. Ward, J. D. Landau. 1999. The inadvertent use of prior knowledge in a generative cognitive task. *Memory Cognition* **27**(1) 94–105.

Mathews, M. R. 1997. Twenty-five years of social and environmental accounting research: Is there a silver jubilee to celebrate? *Accounting, Auditing Accountability J.* **10**(4) 481–531.

Meyer, J. W., B. Rowan. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *Amer. J. Sociol.* **83**(2) 340–363.

Meyerson, D. E. 2003. *Tempered Radicals: How Everyday Leaders Inspire Change at Work.* Harvard Business School Press, Boston.

Milne, M. J., A. Ball, R. Gray. 2005. From soothing palliatives and towards ecological literacy: A critique of the triple bottom line. Accountancy and Business Law Working Papers, University of Otago, Dunedin, New Zealand.

Mills, C. W. 1940. Situated actions and vocabulary of motive. *Amer. Sociol. Rev.* **5**(6) 904–913.

Morgan, G. 1980. Paradigms, metaphors, and puzzle solving in organization theory. *Admin. Sci. Quart.* **25**(4) 605–622.

Norman, W., C. MacDonald. 2004. Getting to the bottom of "triple bottom line." *Bus. Ethics Quart.* **14**(2) 243–262.

Oakes, L. S., B. Townley, D. J. Cooper. 1998. Business planning as pedagogy: Language and control in a changing institutional field. *Admin. Sci. Quart.* **43**(2) 257–292.

Ocasio, W. 1997. Towards an attention-based view of the firm. *Strategic Management J.* **18**(Summer) 187–206.

Ocasio, W., J. Joseph. 2005. Cultural adaptation and institutional change: The evolution of vocabularies of corporate governance, 1972–2003. *Poetics* **33**(3–4) 163–178.

O'Mahony, S., F. Ferraro. 2007. The emergence of governance in an open source community. *Acad. Management J.* **50**(5) 1079–1106.

Oswick, C., T. Keenoy, D. Grant. 2002. Metaphor and analogical reasoning in organization theory: Beyond orthodoxy. *Acad. Management Rev.* **27**(2) 294–303.

Padgett, J. F., P. D. McLean. 2006. Organizational invention and elite transformation: The birth of partnership systems in Renaissance Florence. *Amer. J. Sociol.* **111**(5) 1463–1568.

Phillips, N., C. Hardy. 2002. *Discourse Analysis: Investigating Processes of Social Construction*. Sage, Thousand Oaks, CA.

Phillips, N., T. B. Lawrence, C. Hardy. 2004. Discourse and institutions. *Acad. Management Rev.* **29**(4) 635–652.

Rao, H. 1998. Caveat emptor: The construction of nonprofit consumer watchdog organizations. *Amer. J. Sociol.* **103**(4) 912–961.

Reay, T., C. R. Hinings. 2005. The recomposition of an organizational field: Health care in Alberta. *Organ. Stud.* **26**(3) 351–384.

Richards, T., D. Dickson. 2007. Guidelines by stakeholders, for stakeholders: Is it worth the effort? *J. Corporate Citizenship* **25**(Spring) 19–21.

Schneiberg, M. 2007. What's on the path? Path dependence, organizational diversity and the problem of institutional change in the U.S. economy, 1900–1950. *Socio-Econom. Rev.* **5**(1) 47–80.

Simon, H. A. 1947. *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organization.* Macmillan, New York.

Skillius, A., U. Wennberg. 1998. Continuity, credibility and comparability: Key challenges for corporate environmental performance measurement and communication. The International Institute for Industrial Environmental Economics at Lund University. Accessed December 16, 2009, http://www.eea.europa.eu/publications/ESS09.

Stark, D. 1996. Recombinant property in east European capitalism. *Amer. J. Sociol.* **101**(4) 993–1027.

Strang, D., S. A. Soule. 1998. Diffusion in organizations and social movements: From hybrid corn to poison pills. *Annual Rev. Sociol.* **24** 265–290.

Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. *Acad. Management Rev.* **20**(3) 571–610.

Suddaby, R., R. Greenwood. 2005. Rhetorical strategies of legitimacy. *Admin. Sci. Quart.* **50**(1) 35–67.

SustainAbility. 2002. Trust us: The global reporters 2002 survey of corporate sustainability reporting. SustainAbility Ltd. and the United Nations Environment Programme (UNEP). Accessed December 16, 2009, http://www.sustainability.com/aboutsustainability/article_previous.asp?id=131.

SustainAbility. 2004. Risk & opportunity: Best practice in non-financial reporting. SustainAbility Ltd. and the United Nations Environment Programme (UNEP). Accessed December 16, 2009, http://www.sustainability.com/aboutsustainability/article_previous.asp?id=128.

Swedish Government Offices. 2007. Clearer requirements for information about sustainability for state-owned companies. Accessed May 4, 2008, http://www.sweden.gov.se/sb/d/8194/a/93506.

Thelen, K. A. 2004. *How Institutions Evolve: The Political Economy of Skills in Germany, Britain, the United States, and Japan.* Cambridge University Press, Cambridge, UK.

Thompson, J. D. 1967. *Organizations in Action.* McGraw-Hill, New York.

Tolbert, P. S., L. G. Zucker. 1983. Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880–1935. *Admin. Sci. Quart.* **28**(1) 22–39.

Townley, B. 2002. The role of competing rationalities in institutional change. *Acad. Management J.* **45**(1) 163–179.

Tsoukas, H. 1993. Analogical reasoning and knowledge generation in organization theory. *Organ. Stud.* **14**(3) 323–346.

von Hippel, E. 1986. Lead users: A source of novel product concepts. *Management Sci.* **32**(7) 791–805.

Waddock, S., A. L. White. 2007. On CERES, the GRI and Corporation 20/20. *J. Corporate Citizenship* **26**(Summer) 38–42.

Weber, M. 1922. *Economy and Society*. University of California Press, Berkeley.

Weick, K. E. 1989. Theory construction as disciplined imagination. *Acad. Management Rev.* **14**(4) 516–531.

Wheeler, D., J. Elkington. 2001. The end of the corporate environmental report? Or the advent of cybernetic sustainability reporting and communication. *Bus. Strategy Environment* **10**(1) 1–14.

White, A. L. 1999. Sustainability and the accountable corporation: Society's rising expectations of business. *Environment* **41**(8) 30–43.

Willis, A. 2003. The role of the global reporting initiative's sustainability reporting guidelines in the social screening of investments. *J. Bus. Ethics* **43**(3) 233–237.