

**MEANS VERSUS ENDS IN OPAQUE INSTITUTIONAL FIELDS:  
TRADING OFF COMPLIANCE AND ACHIEVEMENT IN  
SUSTAINABILITY STANDARD ADOPTION<sup>1</sup>**

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## **ABSTRACT**

The long-standing discussion on decoupling has recently moved from adopters not implementing the agreed-upon policies towards compliant adopters not achieving the goals intended by institutional entrepreneurs. This ‘means-ends decoupling’ prevails especially in highly opaque fields, where practices, causality, and performance are hard to understand and chart. This paper conceptualizes the conditions under which the adoption of institutions in relatively opaque fields leads to the achievement of the envisaged goals. Voluntary sustainability standards governing socio-environmental issues illustrate these arguments. I argue that the lack of field transparency drives institutional entrepreneurs to create and maintain concrete and uniform rules, apply strong incentives, and disseminate ‘best practices’ to ensure substantive adopter compliance. However, such rigid institutions are ill-equipped to deal with the causal complexity and practice multiplicity underlying opacity while they smother adopter agency. The ensuing tension between substantive compliance and goal achievement leads to an inherent trade-off: institutional entrepreneurs who remedy the policy-practice decoupling may enhance the disparity between means and ends, and vice versa. While sustainability standards and other institutions in highly opaque fields can, therefore, not fully achieve the envisaged goals, the trade-off can be reduced through systemically designed institutions that promote goal internalization and contain niche institutions.

*Key words: adoption, complexity, compliance, decoupling, goal achievement, institution, opacity, self-regulation, socio-environmental governance, sustainability standard, voluntary standard*

## INTRODUCTION

After studying the decoupling of policies and practices for decades, institutional scholars have recently addressed inconsistencies between practices and outcomes. The seminal contribution by Meyer and Rowan (1977) on the prevalence of externally induced rule adoption that does not match the internal needs of organizations, often leading to isomorphic structures (DiMaggio & Powell, 1983), has inspired numerous scholars to study the conditions and extent of deviations between actual practices and official policies in different types of organizations (for overviews, see Bromley & Powell, 2012; Boxenbaum & Jonsson, 2008). While a close understanding of the mismatch between policies and practices is important from both an organizational and a societal perspective, the overwhelming scholarly attention to this type of decoupling has obscured our understanding of another, potentially even more important kind of decoupling, the one between practices and outcomes. As Bromley and Powell (2012) powerfully argue, organizations that actually comply with their formal policies may not, or barely, achieve the very objectives that developers and implementers of these policies envisage. While coupling policies and practices, compliant organizations may not achieve the intended results because the adopted policies are inappropriate. This ‘means-ends decoupling’ prevails especially in highly opaque – as opposed to transparent – fields. Opacity exists when observers have difficulty identifying the characteristics of prevailing practices, establishing causal relationships between policies and outcomes, and measuring the exact results of policy implementation (Briscoe & Murphy, 2012; Jiang & Bansal, 2003; Bromley & Powell, 2012).

One burgeoning field in which means may be decoupled from ends is socio-environmental governance. Different societal actors (companies, non-governmental organizations (NGOs), and/or governments) in this field design and implement regulation to obtain favorable socio-environmental outcomes (Delmas & Young, 2009; Espinosa &

Walker, 2011). These actors function as institutional entrepreneurs: resourceful individuals or groups who purposefully create new or change existing institutions (Hardy & Maguire, 2008; Battilana, Leca, & Boxenbaum, 2009). Institutional entrepreneurs are interested actors who use their social and political skills to make others accept novel or different institutional practices, using tactics such as framing issues, creating incentives, and building bridges (Garud, Jain, & Kumaraswamy, 2002; Fligstein, 1997; Maguire, Hardy, & Lawrence, 2004). Voluntary standards are governance mechanisms that have recently taken off to achieve a positive impact of corporate actions on social actors and/or the natural environment (Auld, Balboa, Bernstein, & Cashore, 2009). These standards are often developed and maintained by private actors (i.e., firms and NGOs) and have been massively adopted by firms in a variety of sectors (Vogel, 2008; Tamm Hallström & Boström, 2010), ranging from ecolabeled lumber (Bartley, 2007; Zietsma & McKnight, 2009), wine (Delmas & Grant, forthcoming), and sea fish (Visseren-Hamakers, Arts, & Glasbergen, 2007; Oosterveer & Spaargaren, 2011) to fair-trade coffee (Reinecke, Manning, & Von Hagen, 2012), flowers (Riisgaard, 2009; Prado, 2013), and clothing (O'Rourke, 2007). Sustainability standards are voluntary, predefined rules and methods to systematically assess and communicate the social and environmental behavior and/or performance of firms (Gilbert, Rasche, & Waddock, 2011). In particular, they flag to customers and other stakeholders that producers or traders who adopt sustainability standards show a higher socio-environmental performance than their uncertified counterparts (King & Toffel, 2009). The field of socio-environmental governance is highly opaque, because the relation between corporate activities and socio-environmental outcomes is hard to fully understand, causally attribute, and precisely measure (Jiang & Bansal, 2003; Sharma, 2000). This opacity may explain why scholarly evidence on the socio-environmental outcomes of sustainability standards has remained inconclusive: some scholars have reported a positive impact (e.g., Potoski & Prakash, 2005; Dasgupta, Hettige, & Wheeler, 2000), whereas others

have found only a modest (Gulbrandsen, 2010) or even no or a negative correlation (e.g., Christmann & Taylor, 2012; King, Lenox, & Terlaak, 2005). Sustainability standards are salient to theorize on institutions whose means may be decoupled from their ends, because they are societally important, embedded in highly opaque fields, formally prescribe adopter behavior, and specify intended goals. Therefore, I will use these standards to illustrate the conceptual arguments on institutional goal achievement in more opaque fields.

The paper's central *research question* is: under what conditions does the adoption of institutions in relatively opaque fields lead to the achievement of the goals set by their developers? I will explore this question in the context of voluntary sustainability standards and draw on the institutional literature. This strand offers a sharp analytical lens to explain the opportunities and constraints that durable collective agreements offer to field actors, consisting of a diversity of individuals and organizations that interact relatively frequently with one another in specific issue areas (Scott, 2001; Wooten & Hoffman, 2008). Sustainability standards are institutions: they constitute rules of the game serving to define social practices, assign roles, and guide interactions (Young, 1994). These standards are relatively lasting arrangements that enable and restrict a variety of corporate and civic actors at different stages of the supply chain (Timmermans & Epstein, 2010), thereby lending themselves to the use of an institutional perspective. Previous institutional work on sustainability standard adoption has shed light on issues of symbolic adoption (Delmas & Montes-Sancho, 2010; Christmann & Taylor, 2006) and standard enforcement (King, Prado, & Rivera, 2012; Aravind & Christmann, 2011). I will draw on these insights but also develop novel arguments around an important dimension of standard adoption that has received only scant attention in the extant literature.

Building on and extending the insights by Bromley and Powell (2012), I will argue that high field opacity renders the optimal design and implementation of institutions such as

sustainability standards impossible. On the one hand, the risk of non-compliance (i.e., purely symbolic adoption) is high in relatively opaque fields due to the causal complexity of focal issues, the diversity of adopted practices, and the difficulty to observe opportunistic adopters. This enhances the need for concrete and uniform rules, strong incentives, and transfer of ‘best practices’ to ensure substantive compliance by adopters. On the other hand, complexity and diversity call for holistic and context-contingent approaches, which are at odds with the nature of compliance-oriented institutions. While the antipodal nature of the breeding grounds of compliance and achievement leads to the impossibility to design and uphold optimal institutions in highly opaque fields, the trade-off can be reduced by designing key rules with a systemic mindset, stimulating adopters to internalize an institution’s goals, and developing ‘niche institutions’ to accommodate context specificity.

The paper contributes to the institutional literature by identifying and explaining the tension that exists in relatively opaque fields between compliance with an institution’s rules (‘the letter’) and achievement of the goals for which those rules were defined (‘the spirit’) as well as offering remedies to mitigate this tension. The conceptual insight that solving the problem of symbolic adoption can aggravate the problem of not achieving the intended goals (i.e., means oppose ends) is novel to the institutional literature. The paper also contributes to the literature on social and environmental governance by conceptualizing the conditions under which voluntary sustainability standards induce corporate adopters with divergent motivations and resources to (partially) achieve the socio-environmental goals of a standard. Thirdly, the paper has practical relevance for designers and adopters of sustainability standards and other institutions in highly opaque fields by teasing out the conditions under which their standards are more conducive to achieving the very goals they are meant to serve. The paper now continues by describing the evolution, rationales, types, and process of creating and adopting sustainability standards. Next, I recap the discussion in the institutional literature about

symbolic versus substantive adoption, including remedies to symbolic adoption. I then introduce the compliance-achievement trade-off, arguing when and why substantive adoption does not equate with goal achievement and suggesting how the tension between both can be reduced. Finally, I discuss the implications of this trade-off for future conceptual and empirical work on sustainability standards and other institutions in relatively opaque fields.

## **SUSTAINABILITY STANDARDS CHARACTERIZED**

Within three decades, voluntary sustainability standards have developed from inexistent to hundreds of standards in a wide variety of sectors, increasingly attaining both high absolute volumes and significant market shares. For example, the Marine Stewardship Council label for marine fish has a worldwide market share of seven per cent (Oosterveer & Spaargaren, 2011), and certified products even dominate in certain national markets – with shares of around 50 per cent for sustainably logged wood and fair-trade bananas in the United Kingdom (McNicol, 2006; Archer & Fritsch, 2010). Certain standards are firm-specific, while others are eligible for all companies in one sector or even stretch out across industries (Gilbert et al., 2011). Furthermore, they can be developed by one type of (corporate or civic) actors (Zietsma & McKnight, 2009) or multiple (private and/or public) stakeholders (Tamm Hallström & Boström, 2010). They can refer to process improvements, such as ISO 14000 (Prakash & Potoski, 2006) and ISO 26000 (Helms, Oliver, & Webb, 2012), or specify absolute performance requirements, like the Forest Stewardship Council (McNicol, 2006) and the Marine Stewardship Council (Oosterveer & Spaargaren, 2011).

An essential function of voluntary sustainability standards is their signaling that the socio-environmental outcomes related to certified products or processes – and which are typically not observable to prospective customers and other stakeholders – are more positive

than those of their uncertified counterparts (King & Toffel, 2009).<sup>2</sup> This signaling function is critical, because the production of goods or services creates socio-environmental effects that are not embodied in the products, thereby precluding external stakeholders from properly assessing products and firms (Terlaak, 2007). For example, it is unclear whether the production and trade of fruits and vegetables in supermarkets involved environmental pollution and labor exploitation or occurred under ‘responsible’ conditions. Sustainability standards signal that the products or firms carrying labels have a relatively positive socio-environmental performance.<sup>3</sup> The voluntary nature of participation creates a distinction between adopters and non-adopters. The former are in a different category, whose collective identity of ‘responsibility’ confers legitimacy or other benefits (Navis & Glynn, 2010).

Sustainability standards are most likely to proliferate in (developing) countries and (transnational) sectors where other governance forms – in particular, collective action, legislation, and donation – have fallen short. Social movements, which have improved the wages and working conditions of many workers in developed countries (Schneiberg & Lounsbury, 2008), may be unable to form a countervailing power against influential, footloose (foreign) investors (Van Tulder & Van der Zwart, 2006), especially in developing countries (Graham & Woods, 2007). Alternatively, government intervention has led to social emancipation (e.g., through legislation around minimum wages and affirmative action) and to

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<sup>2</sup> Signaling a positive impact does not necessarily imply that the actual socio-environmental performance of sustainability standards is higher. Scholars have argued that these standards may legitimize unethical business practices (Howard, Nash, & Ehrenfeld, 2000), lead to adverse selection of poor performers (Delmas & Montes-Sancho, 2010; Terlaak, 2007), and be dominated by powerful actors (Glasbergen, 2012; Bitzer, Francken, & Glasbergen, 2008).

<sup>3</sup> Codes of conduct resemble sustainability standards, since both seek to specify and implement socially and environmentally benign business practices. Codes, however, do not involve labels communicating such practices (Van Tulder & Van der Zwart, 2006).



environmental protection (with instruments such as environmental permits and levies on industrial waste releases) in many industrialized countries (Braithwaite & Drahos, 2000), but may lead to poor legislation and policies in (developing) countries struck by widespread corruption, lack of enforcement capacity, and low policy priority to socio-environmental protection (Kaufmann, Kraay, & Mastruzzi, 2007; López, 2007). Finally, while negative socio-environmental outcomes may be addressed through the institution of philanthropy (List, 2011), with citizens, companies, and governments donating money or contributing in kind to offset low incomes or halt negative health effects (Visser, 2008; Berger, Cunningham, & Drumwright, 2004), prospective donors may abstain from charity when opining that donations only abate symptoms and not their root causes (Easterly, 2006). In the absence of well-functioning alternative institutional arrangements, a governance void exists that renders the development of sustainability standards particularly relevant. It should be stressed, though, that these standards are not mere substitutes of other institutions; in fact, their performance is higher when complemented by alternative arrangements, such as legislation (Lee, 2009; Gulbrandsen, 2010; Vogel, 2008; Amengual, 2010; Kim, 2013).

The very presence of governance voids does not imply that sustainability standards will emerge and flourish. Since these standards are voluntary, prospective developers or adopters only embrace standards when perceiving them as sufficiently salient (Ocasio, 1997) to be developed or adopted. Three types of motivation induce NGOs and firms to embrace sustainability standards: instrumental, relational, and moral drivers (cf. Aguilera, Rupp, Williams, & Ganapathi, 2007; Bansal & Roth, 2000). Instrumentally motivated actors seek to advance their material self-interests. Firms may consider sustainability standards a means to enhance their competitiveness through differentiation (with more ‘equitable’ and ‘clean’ products) and to raise their profitability through a price premium (Henson, Masakure, & Cranfield, 2011; Bartley, 2007; King et al., 2012). NGOs may require corporate donations in

return for their endorsement and advice (Yaziji & Doh, 2009; Berger et al., 2004). Relationally driven actors aim to obtain legitimacy or recognition. Firms scrutinized by social and environmental ‘watchdogs’ (Campbell, 2007; Teegen, Doh, & Vachani, 2004) may create or adopt sustainability standards to show they are ‘responsible’ corporate citizens (cf. Okhmatovskiy & David, 2012; Sine, David, & Mitsuhashi, 2007). NGOs, also increasingly under societal scrutiny (Burger & Owens, 2010; Lyon, 2010), may try to enhance their legitimacy by (co)developing sustainability standards. Finally, morally induced actors seek to create or join ‘ethically correct’ institutions (Reinecke et al., 2012; Bansal & Roth, 2000). The personal influence of top managers or the wider corporate identity may drive firms to pursue ‘higher-order’ values (Aguilera et al., 2007; Bansal, 2003). Normative convictions typically motivate NGOs to change societal norms and values (Yaziji & Doh, 2009; Lyon, 2010).

NGOs and firms sufficiently motivated to (jointly) develop sustainability standards establish rules, incentives, and support structures to stimulate that adopters achieve the defined goals.<sup>4</sup> Standard developers focus on the most salient socio-environmental issues, because the voluntary nature of these institutions gives them the discretion to do so, the number of potentially relevant issues is large, their resources are constrained, and an objective basis for assessing criteria lacks (cf. Ocasio, 1997). NGOs and firms may have shared interests but are also likely to privilege different aspects (Helms et al., 2012; Bartley, 2007). They manage to get their preferred substance and form accepted in accordance with their bargaining power (Glasbergen, 2012; Tamm Hallström & Boström, 2010; Reinecke et al., 2012). Once developed, sustainability standards need to be widely adopted by incumbent

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<sup>4</sup> Multi-stakeholder standards involving NGOs and firms are very common for the reasons outlined above. Sustainability standards may also be single-stakeholder (i.e., developed by only corporate or civic actors), or consist of partnerships by firms, governments, and NGOs (Gilbert et al., 2011; Tamm Hallström & Boström, 2010). In all cases, the same arguments hold to the extent that these standards are voluntary in nature.

firms to leverage their impact. Since adoption is a voluntary decision that involves certification and adaptation costs, incumbents will only proceed to adoption when they expect the associated benefits to outweigh these costs (Schuler & Christmann, 2011). While adopters commit themselves to adhering to the goals and rules of the selected standards, firms may be tempted to reap the benefits without bearing the costs of adoption (King et al., 2012; Graffin & Ward, 2010). When firms adopt sustainability standards only symbolically, institutional entrepreneurs do not achieve their envisaged goals. Therefore, sustainability standards need to be designed and implemented in such a way that adopters will substantively comply with standard requirements (Campbell, 2007; King et al., 2012; Baron & Lyon, 2012), a topic to which I now turn.

## **COUPLING ADOPTION AND COMPLIANCE**

### **Compliance Barriers**

Actors operating in highly opaque (i.e., non-transparent) fields face difficulties to fully understand the nature of field practices, to causally relate actor behavior and field outcomes, and to correctly measure the exact field impact of actor behavior (Jiang & Bansal, 2003; Briscoe & Murphy, 2012). Ipso facto, it is hard to chart whether adopters of institutions such as sustainability standards substantively comply in relatively opaque fields. I now argue that the presence of complex causal patterns and the concurrence of heterogeneous practices underlie the difficulty to causally relate behavior and outcomes, while the invisibility of actor behavior entails measurement challenges. Opacity thus leads to uncertainty and ambiguity among field actors. An important consequence is that three major compliance barriers exist in more opaque fields: the lack of attention, the lack of motivation, and the lack of knowledge.<sup>5</sup>

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<sup>5</sup> These barriers are directly related to field opacity, although adopters may also face other barriers, such as the lack of material resources.

**Causal complexity.** The presence of a multitude of heterogeneous actors and factors that are interconnected in multiple, non-linear ways leads to complexity (Levy & Lichtenstein, 2012; Espinosa & Walker, 2011). Different types of uncertainty are the result of this complexity. Cognitively bounded actors encounter difficulties to adequately understand complex fields, leading not only to state uncertainty or ignorance about the exact nature of a field but also to effect uncertainty or ignorance about cause-effect relations (Milliken, 1987). The existence of numerous, heterogeneous, direct and indirect effects leads to “causal indeterminacy” (Orton & Weick, 1990), which undermines the ability of field actors to be cognizant of all relevant causes and to disentangle causes and consequences (Lindblom, 1959; Davis, Eisenhardt, & Bingham, 2009). Causal complexity is further enhanced when outcomes feed back into their causes, thus blurring the distinction between causes and consequences (Sterman, 2000; Levy & Lichtenstein, 2012). Relatedly, adopters may face response uncertainty: the inability to assess the impact of their behavior (Milliken, 1987). These types of uncertainty may induce adopters to be unaware of, and thus not to pay due attention to, critical drivers of compliant behavior (Ocasio, 1997). Adopters who learn experientially by discovering through trial-and-error experimentation and organizational search (Levit & March, 1988; Baum, Li, & Usher, 2000) may not comply because the large number of relevant factors and interactions renders the discovery of feasible solutions highly challenging. The uncertainty that stems from causal complexity thus leads to a lack of attention and knowledge, which thwarts the ability of cognitively bounded adopters to comply through experiential learning.

**Practice multiplicity.** The difficulty to engage in compliant behavior is further compounded when adopters observe practice diversity among other adopters. Institutional fields may host a multitude of divergent practices, especially when actors are spread across different geographic regions, cultural contexts, socio-political systems, and economic situations. Cognitively bounded actors experience difficulties to make sense of practice multiplicity or the

concurrency of many heterogeneous routines (Santos & Eisenhardt, 2009; Young, 2012). The higher the number of divergent practices encountered in a field, the more difficult it is for adopters to exhaustively understand and compare the merits and limitations of different practices. Ambiguity may be the result, especially when different practices are incompatible (Greenwood et al., 2011; Pache & Santos, 2010), making adopters wonder which of the many coexisting practices lead(s) to compliant behavior. Adopters who learn vicariously by observing and (selectively) imitating other actors (Terlaak & Gong, 2008; Baum et al., 2000) may thus fail to comply because they choose to copy the ‘wrong’ practices. The ambiguity resulting from the concurrence of multiple heterogeneous practices thus entails a lack of attention and knowledge, leading vicariously learning adopters not to comply because they ignore relevant solutions and imitate counterproductive practices.<sup>6</sup>

**Behavioral invisibility.** The inability to readily observe and assess the behavior of actors is another driver of opacity (Jiang & Bansal, 2003). Behavioral invisibility is more common when actors operate in remote places (O’Rourke, 2007), are relatively low-profile (Spar & La Mure, 2003), or are otherwise shielded from external control (Howard et al., 2000). For example, the socio-environmental consequences of corporate behavior are typically not embodied in physical product characteristics, hence rendering them invisible for external stakeholders (King & Toffel, 2009). Consequently, actors may ‘fly under the radar’ and merely pretend to substantively comply. When adopters have a self-interest not to comply (e.g., to avoid costly adaptations to their production methods), behavioral invisibility enables them to disguise their non-compliance and to avoid sanctions such as loss of legitimacy (Aravind & Christmann, 2011). Behavioral invisibility thus undermines compliance to the extent that instrumentally and relationally driven adopters lack the motivation to comply. To

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<sup>6</sup> Causal complexity and practice multiplicity share the outcome that adopters lack the attention and knowledge to comply, albeit the former is mainly driven by uncertainty and the latter more by ambiguity.

recap, institutional entrepreneurs who want to ensure adopter compliance need to overcome the attention, knowledge, and motivation barriers that prevail in relatively opaque fields.

### **Compliance Inducements**

While institutional entrepreneurs may need to induce adopters to comply in any type of institutional field, the necessity to do so is high in relatively opaque fields given the significance of the attention, motivation, and knowledge challenges. Therefore, institutional entrepreneurs in more opaque fields have to design and apply clear rules, strong incentives, and capacity building to ensure adopter compliance.

**Setting rules.** The causal complexity that reigns in relatively opaque fields is exemplified by socio-environmental governance. Social issues cover a diversity of aspects, ranging from ethnicity, social class, workplace democracy, and age to wages, working hours, safety, and work load (Carroll, 2008). Environmental issues encompass aspects as wide-ranging as (non-renewable and renewable) natural resource stocks, toxicity, biodiversity, desertification, and climate change (Rockström et al., 2009). The sheer number and multifaceted nature of these issues render a full understanding challenging for sustainability experts (Atkinson, Dietz, & Neumayer, 2007), leave alone for firms whose business is to do business. Cognitively bounded companies are more than likely not to be fully aware of, and thus not to pay due attention to, many of these socio-environmental issues (Donaldson & Dunfee, 1994), unless they are induced to consider them. Institutions such as performance-based sustainability standards that identify and specify relevant socio-environmental aspects will thus stimulate adopters to duly consider these issues.

Practice multiplicity and vague, elusive wording such as ‘promoting social equity and environmental protection’ fail to provide direction. They lead to ambiguity and ignorance among adopters, who may not pay due attention to relevant aspects or who may opt for

inappropriate practices (Okhmatovski & David, 2012). Therefore, the more explicit and detailed sustainability standards formulate the socio-environmental rules to be met, the more likely adopters are to follow those rules. Detailed codification offers clear guidance and limits the room for divergent interpretation, thereby reducing ambiguity and uncertainty (Terlaak, 2007). For example, socially relevant rules specified by Fairtrade International (2013a) for hired labor include “training opportunities, non discriminatory employment practices, no child labour, no forced labour, access to collective bargaining processes and freedom of association of the workforce, condition of employment exceeding legal minimum requirements, adequate occupational safety and health conditions and sufficient facilities for the workforce to manage the Fairtrade Premium.” Adopters of Fairtrade standards are thus sensitized towards offering training, promoting equal opportunities, banning child labor, avoiding forced labor, negotiating with worker representatives, etc. In sum, the concrete and unambiguous specification of universal (socio-environmental) rules remedies the attention problem and fosters (standard) compliance.

**Devising incentives.** The behavioral invisibility of opportunistic adopters undermines the effectiveness of institutions such as sustainability standards. Firms have a ‘natural interest’ to exploit human and natural resources (through low wages, pollution, etc.), because such practices may raise their (short-run) profits and are not (fully) observable to external stakeholders (King & Toffel, 2009), especially when goods are produced in remote locations and are traded internationally through multiple actors (Levy, 2008). To overcome this motivation barrier, institutions such as sustainability standards signal that labeled products and firms are a separate category (Navis & Glynn, 2010), associated with ‘responsible practices’ (King et al., 2005), such as paying ‘fair prices’ to smallholders and avoiding the use of pesticides. Standards turn disincentives into incentives, because they offer adopters material benefits such as price premiums and selective supply chains (Henson et al., 2011;

King et al., 2012), legitimacy in the eyes of their stakeholders (Yaziji & Doh, 2009; Sine et al., 2007), and the possibility to live up to their norms of ‘responsible corporate citizens’ (Aguilera et al., 2007; Bansal & Roth, 2000; Reinecke et al., 2012). These benefits are confined to ‘club members’ (Potoski & Prakash, 2005) meeting the criteria specified by the adopted standards. For instance, African fishers who had adopted the GlobalGAP label enjoyed significantly higher export revenues than their uncertified counterparts (Henson et al., 2011).

The more attractive institutions such as sustainability standards are, however, the more they run the risk of symbolic adoption. Socially and environmentally poor performers, especially those adopting under external pressure, may wish to reap a standard’s benefits without bearing the associated costs (Sandholtz, 2012; King et al., 2012). In highly opaque fields, plagued by low behavioral visibility, such adopters may pretend to comply yet implement only symbolically to avoid the costs of ‘upgrading’ their socially and environmentally relevant behavior (Delmas & Montes-Sancho, 2010; Christmann & Taylor, 2006). Therefore, compliance mechanisms such as stringent monitoring and social pressure need to be in place (Barrett, 2003; Dietz, Ostrom, & Stern, 2003), so that the rules established by institutional entrepreneurs are actually maintained (Lawrence, Suddaby, & Leca, 2009). Indeed, credible enforcement is a prerequisite for successful self-regulation (King et al., 2012; Barnett & King, 2008). Independent, third-party monitoring is instrumental in enforcing compliance, even though auditing processes often show flaws such as lack of expertise, predictability of inspections, and conflicts of interests (Aravind & Christmann, 2011; Boiral, 2012). Institutions such as sustainability standards that manage to overcome these auditing challenges are more likely to reveal non-compliance and can exert material sanctions, such as loss of the right to carry a sustainability label, when defection is detected (King et al., 2012; Baron & Lyon, 2012). For instance, the Fair Labor Association is more likely to unveil lack of



compliance because it practices unexpected field visits by external auditors (including local NGOs) to relatively large, high-risk apparel and footwear producers certified (O'Rourke, 2007). To recap, the existence of strong incentives (i.e., significant material, relational, and/or normative benefits of joining institutions in conjunction with the active enforcement of these institutions) addresses the motivation problem and leads adopters in highly opaque fields to substantively comply with the rules specified by their initiators.

**Building capacity.** A third challenge to ensuring substantive compliance in more opaque fields is the lack of relevant knowledge. The causal complexity and practice multiplicity of, for instance, socio-environmental governance may be such that corporate adopters simply ignore how to comply with the rules set by the initiators of sustainability standards. Especially small firms in developing countries, such as smallholders, may not have the technical and organizational capabilities to produce and trade in socially and environmentally 'responsible' ways (Perez-Aleman & Sandilands, 2008). Institutions that offer implementation options are, therefore, instrumental in clearing this compliance barrier. Many process-oriented sustainability standards offer adopters the possibility to 'build capacity' by transferring knowledge of 'best practices' (Perez-Aleman, 2011). For instance, the UTZ Certified standard offers technical advice to farmers to increase their productivity and upgrade the quality of their coffee beans (UTZ Certified, 2013; Bitzer et al., 2008).

Sustainability standards and other institutions in highly opaque fields that extensively transfer universal 'best practices' are more likely to elicit adopter compliance than those leaving the implementation mode up to the discretion of adopters (Terlaak, 2007). First, rolling out 'best practices' universally facilitates monitoring. Second, the practices advocated by standard developers are aligned with the rules of their institutions. Relatedly, standardized capacity building reduces practice multiplicity and induces adopters to think and act along the lines proposed by institutional entrepreneurs. Especially when combined with specific rules

and strong incentives, capacity building promotes substantive compliance with institutional requirements. For instance, Fairtrade International accredits only smallholders who have organized themselves through cooperatives to boost their bargaining power (Reinecke et al., 2012). Capacity building through the transfer of ‘best practices’ thus mitigates the knowledge problem and leads to compliant adopter behavior. Figure 1 shows that the causal complexity, practice multiplicity, and behavioral invisibility that drive field opacity create the need for devising and implementing concrete and uniform rules, strong incentives, and standardized capacity building to ensure adopter compliance. The ideas outlined above can be formalized as follows:

*Proposition 1: The higher the degree of field opacity, the less likely that institutions without concrete and uniform rules, strong incentives, and active transfer of ‘best practices’ will elicit substantive adopter compliance.*

**Insert Figure 1 about here**

## **THE COMPLIANCE-ACHIEVEMENT TRADE-OFF**

### **Rationale for the Trade-off**

The importance that institutional entrepreneurs attribute to substantive compliance is driven by the idea that compliant adopters contribute to the achievement of an institution’s (socio-environmental) goals. Building on recent work by Bromley and Powell (2012), I now argue that this idea may be mistaken because substantive compliance may *not* lead to the accomplishment of the envisaged goals and may even be counterproductive in highly opaque fields. Bromley and Powell distinguish between ‘policy-practice decoupling’ (i.e., the classical form of decoupling, where adopters do not substantively implement their formally embraced policies) and ‘means-ends decoupling’ (i.e., complying with formal policies but not

achieving their intended goals). They argue that the latter type of decoupling has been neglected despite its importance, especially in areas where an obscure relation exists between means and ends. I concur with this view and further develop it by advancing the idea that a trade-off exists when remedying both types of decoupling in highly opaque fields.<sup>7</sup> The main reasons are that causal complexity and practice multiplicity undermine the ability of compliance-oriented institutions to achieve the envisaged goals and that a strong compliance orientation constrains the agency of adopters.

**Causal complexity.** As argued above, relatively opaque fields are typically complex in nature: they drive and are driven by a multitude of actors and factors. Socio-environmental governance exemplifies this complexity, because focal issues are ‘caught in causal webs’, implying that they cannot be fully understood without simultaneously considering the numerous and heterogeneous actors and factors to which they are directly and indirectly related, often in non-linear ways (Levy & Lichtenstein, 2012; Atkinson et al., 2007; Carson, 1962). For instance, poverty is a ‘wicked problem’ (Rittel & Webber, 1973) that has numerous, interrelated causes and consequences, not only economic but also social, political, and historical ones, and poor people can be caught in poverty traps due to the concurrence of multiple forces (Easterly, 2006; Banerjee & Duflo, 2007). The same counts for environmental problems such as climate change, soil degradation, and biodiversity reduction (Millennium Ecosystem Assessment Board, 2005; Meadows, Randers, & Meadows, 2005). One implication is the systemic nature of more opaque fields: multiple factors need to be considered in conjunction to adequately understand and govern focal (socio-environmental) issues (Young, 2012; Bitzer et al., 2008; Adger, 2007). Focusing only on direct, bilateral

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<sup>7</sup> To be sure, I do not argue that there is a trade-off between both types of decoupling as such, but I do contend that an inverse relation exists between *remedying* policy-practice decoupling and *remedying* means-ends decoupling.

relations would thus lead to an incomplete, or even wrong, understanding and regulation of the issues at hand.

Causal complexity raises the need for clarity, which compliance-oriented institutions offer. However, the nature of such institutions hampers adopters to effectively respond to focal issues. Concrete and uniform rules stimulate compliance, because they stipulate desired behavior and facilitate monitoring (Bromley & Powell, 2012), thereby reducing adopter uncertainty and ambiguity (Terlaak, 2007; DiMaggio & Powell, 1983). Institutions such as sustainability standards that are conducive to compliance prescribe and incentivize adhering to clear rules. However, the narrow focus on such rules easily distracts attention from the wider context in which focal (socio-environmental) issues are embedded and may have a ‘waterbed effect’: the solution of one problem but the creation of another (Timmermans & Epstein, 2010; Dasgupta, 2000; Frey, Homberg, & Osterloh, 2013). For instance, many sustainability standards categorically ban child labor. This looks like a reasonable means to avoid the exploitation of a vulnerable group. However, this ban can have unintended side-effects, such as (further) impoverishment (Khan, Munir, & Willmott, 2007). As Fairtrade critics indicate: “Many small farmers mentioned that child labour prohibition enforcement carried a risk of reducing the families’ income and consequently the chances of the families’ children of going to school.” (FAIR, 2012: 16). Another illustration is the prescription of cooperatives as a means of workplace democracy and egalitarian income distribution. “[B]y insisting that small farmers join cooperatives, FAIRTRADE inadvertently aggravates existing problems of exploitation and abuse by traditional cocoa bosses...” (FAIR, 2012: 11). These outcomes are clearly at odds with Fairtrade’s mission to “connect disadvantaged producers and consumers, promote fairer trading conditions and empower producers to combat poverty, strengthen their position and take more control over their lives” (Fairtrade International, 2013b). Both examples illustrate that categorical bans on child labor and other organizational

forms than cooperatives are well-intended rules that may address only a part of the bigger problem and that may lead to ill-understood cause-consequence relations, thereby shifting or aggravating the very (socio-environmental) problems that institutions such as sustainability standards are meant to solve or alleviate.

**Practice multiplicity.** As explained earlier, practice multiplicity renders a full understanding and comparison of the merits and limitations of divergent practices more challenging. However, it is important to realize that practices may be divergent because the contexts in which they are embedded are dissimilar. Practices need to match the “requisite variety” (Ashby, 1956) of the (heterogeneous) contexts in which they are embedded. In other words, the effectiveness of practices is context-contingent (Donaldson, 2001). Socio-environmental governance is a case in point, because socio-environmental issues are statically and dynamically context-dependent, calling for tailored solutions (McElroy & Van Engelen, 2012). Causes of and solutions to social and environmental problems vary per geographic region, cultural setting, socio-political system, and economic situation (Ostrom, 2012; Adger, 2007). This is related to local differences in soil structure, atmospheric conditions, actor preferences, social relations, and economic development. Irrigation needs and possibilities are different in subtropical areas than in arid regions with poor soil quality (Von Weizsäcker et al., 2009). Certain producers and workers may prefer to accumulate material wealth, whereas others may prioritize a safe and democratic work environment. Large power differences are common and productive in certain cultures but not in others (Hofstede, 2001). And demand and supply characteristics are different in subsistence economies, where producers seek to be self-sufficient with modest resources, than in emerging markets, where firms are more munificent and globally oriented (Perez-Aleman, 2011; Perez-Aleman & Sandilands, 2008). Furthermore, biophysical and social systems may evolve, implying that today’s (local) solutions to (context-specific) problems may be outdated tomorrow, calling for the

development of “adaptive capacity” (Young, 2012: 87). According to Dietz et al. (2003: 1909), “[f]ixed rules are likely to fail because they place too much confidence in the current state of knowledge, whereas systems that guard against the low probability, high consequence possibilities and allow for change may be suboptimal in the short run but prove wiser in the long run.” For instance, standards with fixed quotas for fish stocks may be counterproductive because fish populations frequently migrate.

Many institutions such as sustainability standards promote substantive compliance through uniform rules, incentives, and practices to reduce ambiguity among adopters and to block escape routes that (prospective) low performers may envision by proposing deviant practices (Gilbert et al., 2011). However, such uniform institutions are at odds with the (static and dynamic) context contingency of the focal (socio-environmental) issues (Meyer & Rowan, 1977). An illustration is Fairtrade’s categorical ban on child labor, referred to above, which may only be feasible for producers with medium incomes, who can ‘afford’ to exempt their children from working (Khan et al., 2007). Also, it should be observed that the involvement of children in economic activities may be regarded differently in (certain) African cultures than in Western countries. According to a Cameroonian farmer, “[child labor] is considered as part of the household chores children do to help their parents. I do not consider this child abuse” (FAIR, 2012: 16). As these examples show, compliance-oriented institutions such as sustainability standards which apply universal rules, incentives, and practices, irrespective of the specific geographic, cultural, socio-political, and economic conditions that adopters face, will easily fail to achieve their envisaged objectives.

**Constrained agency.** Causal complexity and context contingency both call for flexible solutions to achieve the envisaged goals. While the existence of numerous, interrelated ties among and between actors and factors hampers a comprehensive understanding and assessment of complex systems, the upside is that these multiple connections offer the

opportunity to design and implement multiple solutions. In other words, different means can be used to achieve the same ends. Applying this principle of equifinality (Meyer, Tsui, & Hinings, 1993; Fiss, 2011) to the field of socio-environmental governance implies that firms can use different combinations of productive factors and methods to achieve corporate sustainability (Starik & Rands, 1995) or “resilient” socio-environmental systems (Adger, 2007). Context contingency requires flexibility, because solutions need to be tailored to the variety of relevant contexts (Ashby, 1956). Different combinations of geographic, cultural, socio-political, and economic variables lead to a large number of possible contexts. The diversity of contexts which adopters face thus calls for the application of multiple solutions. As Gilbert et al. (2011: 38) argue: “What counts as appropriate behavior in the light of *universal* standards can differ from context to context.”

The problem with many compliance-oriented institutions such as sustainability standards is their heavy bias towards exploitation: they circumscribe, incentivize, and monitor rules and practices in very specific and unambiguous ways, leaving little room for interpretation (Gilbert et al., 2011; Terlaak, 2007). Exploitation crowds out exploration (Benner & Tushman, 2002), so these ‘iron-cast’ rules, incentives, and practices suffocate the creativity of adopters seeking to achieve an institution’s goals (Alvesson & Spicer, 2012). For instance, firms may come up with, but not be allowed to implement, creative solutions unimagined by institutional entrepreneurs that would achieve the goals of institutions such as sustainability standards better than the ‘best practices’ prescribed by their initiators (Terlaak, 2007; cf. Ostrom, 2012 and Colvin & Boswell, 2007). Likewise, adopters with an intimate understanding of feasible solutions tailored to local (socio-environmental) challenges may be kept from implementing them when standardized solutions are imposed (Perez-Aleman & Sandilands, 2008). Compliance-oriented institutions in highly opaque fields that apply uniform rules, incentives, and practices may thus “hit the target and miss the point” (Frey et

al., 2013: 957). These institutions may thwart the achievement of the intended goals because they do not stimulate, or even forbid, creative adopter solutions contributing to goal achievement. The arguments developed in this section can be recapped as follows:

*Proposition 2: The higher the degree of field opacity, the less likely that the adoption of institutions which are highly compliance-oriented leads to the achievement of the goals formulated by their initiators.*

### **Reducing the Trade-off**

The discussion above has demonstrated that institutional entrepreneurs in more opaque fields face a real dilemma. If they are to avoid purely symbolic adoption by opportunistic firms wishing to reap the benefits without bearing the costs or by well-intended adopters ignoring how to comply, these institutions must have specific and uniform adoption requirements: a clear reward structure, the strict enforcement of measurable rules, and the transfer of universal ‘best practices’. Institutions designed and implemented in this way offer the direction, motivation, and support to warrant compliant behavior by their adopters. While compliance-oriented institutions reduce some field opacity, especially by making adopter behavior more visible, their rigidity easily leads to overshooting the envisaged marks due to the causal complexity and context contingency of focal issues as well as the discouragement of creative solutions by adopters. Goal achievement in highly opaque fields calls for flexibility in the application of a standard’s rules, incentives, and practice transfer, since complex problems call for a more integrative judgment of relevant criteria while divergent contexts require the application of tailored and evolving solutions. Institutional entrepreneurs in relatively opaque fields thus face a trade-off: privileging rigidity to ensure substantive compliance may compromise the achievement of the intended goals, while favoring flexibility to warrant goal attainment may enhance the risk of symbolic adoption. In other words, institutions in more



opaque fields are threatened by two types of decoupling (policy-practice and means-ends) and remedying one kind of decoupling may undermine the ability to address the other one. How can this trade-off between compliance and achievement be solved, or at least reduced? The antipodal nature of the breeding grounds of compliance and achievement leads to the impossibility to design and uphold optimal institutions in highly opaque fields. However, the trade-off can be reduced by designing key rules with a systemic mindset, encouraging adopters to internalize an institution's goals, and developing 'niche institutions' to accommodate context specificity.

**Fostering a systemic mindset.** Institutional entrepreneurs can reduce the causal-complexity-driven trade-off between compliance and achievement by prescribing and incentivizing only rules and practices that do not have side-effects which significantly undermine a standard's own goals. While the focus on specific, highly visible or otherwise salient issues is understandable against the backdrop of pleasing constituencies (Kerr, 1975), a systemic mindset is instrumental in coming to grips with the lateral and multi-level complexity that reigns in relatively opaque fields such as socio-environmental governance (Levy & Lichtenstein, 2012; Starik & Rands, 1995; Van Marrewijk & Werre, 2003). A systemic mindset is an attitude of comprehensively considering how specific actions affect other actors and factors that are interrelated across space and/or time (Espinosa & Walker, 2011; Sterman, 2000). Holistic thinking (i.e., considering aggregate, direct and indirect implications of specific actions) and reflexivity (i.e., anticipating expected outcomes of envisaged actions) are key principles of a systemic mindset that preclude, or at least limit, undesired outcomes that result from partial solutions (Young, 2012; Meadows et al., 2005; Bitzer et al., 2008).

Holistic thinking can be practiced by charting interconnections among and between actors and factors around a particular (socio-environmental) issue in a specific setting (such as a geographic region) and running simulations or crafting scenarios that capture the direct and

indirect effects of envisaged rules, incentives, and practices (Young, 2012). These techniques enable a systematic comparison of different policy options, including an assessment of their opportunity costs (i.e., the foregone benefits for policy adopters). They might reveal, for example, that a sustainability standard that limits working hours and tasks to be carried out by children in combination with the employer's obligation to offer a minimum amount and quality of schooling is a better solution in a region struck by abject poverty than a categorical ban of child labor. These tools might also demonstrate that certification and monitoring costs should be deliberately kept at a minimum to avoid that standards inadvertently exclude small, resource-poor producers (Ponte, 2008).<sup>8</sup> Running simulations and constructing scenarios also provide insights into distinguishing between minor (positive or negative) effects from intended policy measures and those which would lead to crossing thresholds and tipping actions towards highly favorable or undesired outcomes (Young, 2012). The compliance-achievement trade-off that stems from causal complexity can thus be reduced when institutional entrepreneurs comprehensively chart the effects of intended policy measures and attune the latter to the overall impact of both direct and indirect consequences.

**Stimulating internalization.** Entrepreneurs who stimulate adopters to internalize the goals of focal institutions can mitigate the tension that results from behavioral invisibility. As argued above, actors may adopt institutions for both external reasons (such as economic opportunities and societal legitimacy) and internal motives (in particular, normative conviction). Externally induced adopters, such as smallholders who have to adopt multiple sustainability standards to enter or pursue business transactions with different customers (Reinecke et al., 2012), are the ones most likely to either decouple policies and practices or to blindly follow the rules, because they consider institutions such as sustainability standards mere means to their own

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<sup>8</sup> Recent advances in information technology enable stringent monitoring (e.g., through visual, 'real-time' control of standard adopters via satellites and webcams) at modest costs.

economic or relational ends (Sandholtz, 2012). The divergence between the objectives of a principal (here, the institutional entrepreneur) and those of an agent (i.e., the institutional adopter) drives undesired agent behavior (Dalton, Hitt, Certo, & Dalton, 2007).

This agency problem can be addressed by applying rigorous selection procedures for prospective adopters and by making socialization part and parcel of the ‘adoption package’ (Frey et al., 2013; Kerr, 1975). Carefully examining whether applicants endorse the institution’s goals, regularly training adopters about these goals, and encouraging adopters to share their experiences with other adopters are measures conducive to goal internalization (Gottschalg & Zollo, 2007; Nonaka, 1994). For instance, several sustainability standards use farmers clubs as effective tools for peer learning and social bonding.<sup>9</sup> While it would be naïve to think that purely instrumental adopters will turn into intrinsic believers, socialization programs enhance the probability that adopters will progressively internalize the aims and act in accordance with both the letter and the spirit of the focal institution (Kerr, 1975).<sup>10</sup> Goal internalization has the additional advantage of enabling rule simplicity, because fewer and less specific rules are required to elicit adopter compliance.<sup>11</sup> A related benefit is that adopters can be given more discretion to roll out innovative practices that are unforeseen by an

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<sup>9</sup> Author communication with the global sustainable sourcing director of a large company co-developing and adopting multiple sustainability standards.

<sup>10</sup> Bromley & Powell (2012) and Boxenbaum & Jonsson (2008) argue that symbolic adoption tends to evolve into substantive adoption, supporting the view that regular exposure to an institution’s goals progressively leads to goal internalization. For instance, Boxenbaum and Jonsson (2008: 88) report that “[d]ecoupling also became infrequent when the ethics code was already integrated into daily activities through ethics code training programmes.”

<sup>11</sup> Scholars have stressed the importance of designing simple rules to effectively operate in complex and dynamic contexts (Davis et al., 2009; Eisenhardt & Bhatia, 2002; Brown & Eisenhardt, 1997).

institution but in line with its goals, thereby going beyond expectations (Sandholtz, 2012; Colvin & Boswell, 2007). Institutional entrepreneurs who encourage adopters to internalize an institution's goals can thus mitigate the trade-off resulting from behavioral invisibility by externally motivated adopters.

**Creating niche institutions.** Entrepreneurs can better manage the tension that results from context-diversity-driven practice multiplicity by having a 'master institution' with certain 'hypernorms' (Donaldson & Dunfee, 1994) or universal rules with core principles (such as a systematic management approach and warranting worker safety for sustainability standards) for all adopters, supplemented by (evolving) 'niche institutions' that are tailored to specific contextual variables such as geographic environments, social groups, and economic systems (Timmermans & Epstein, 2010).<sup>12</sup> Institutional entrepreneurs should both define 'untouchable' principles that apply for all adopters and specify the conditions under which contexts are sufficiently different to develop new or adjust existing niche institutions (Young, 2012). One example of large context variety is the case of small, data-deficient fisheries in developing countries, calling for a different niche sustainability standard than the large, data-munificent cooperatives that the Marine Stewardship Council presently certifies (Ponte, 2008). Some standards, such as GlobalGAP ('good agricultural practices'), offer customized niche standards that reflect the divergent contexts in which adopters operate (GlobalGAP, 2013).<sup>13</sup>

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<sup>12</sup> This idea resonates with Donaldson & Dunfee's (1994) combination of 'macrosocial contracts' with basic norms for all and 'microsocial contracts' that are adapted to relevant contexts.

<sup>13</sup> In a related vein, the True Sustainability Index (Center for Sustainable Organizations, 2013) exemplifies the idea of evaluating corporate socio-environmental performance against the backdrop of the (social and biophysical) contexts in which firms operate.

Niche institutions cover middle ground between individualized agreements and universal institutions, diverse enough to differentiate between heterogeneous contexts but convergent enough to cover settings with considerable common ground (Timmermans & Epstein, 2010). They strike a balance between adaptation requirements (to accommodate context idiosyncracies) and uniformity imperatives (to offer clarity to adopters and manageability to institutional entrepreneurs). Niche institutions may emerge from participatory approaches (Dasgupta, 2000) and field experiments that lead to the discovery of locally feasible solutions. For instance, Conservation International and Starbuck’s CAFE sustainability standard was based on field experiments in targeted developing countries, which led to the discovery of locally fruitful agricultural practices – a result which a standard “imposed from the top, or that focuses on immediate outcomes based on advanced country conditions” would not have generated (Perez-Aleman & Sandilands, 2008: 40). Institutional entrepreneurs who combine master and niche institutions can thus mitigate the trade-off that ensues from practice multiplicity in response to context diversity. The three options to reduce the compliance-achievement trade-off discussed in this section can be restated as follows:

*Proposition 3: In relatively opaque fields, institutions which encourage their adopters to develop a systemic mindset and internalize goals and which contain niche institutions reduce the existing trade-off between enforcing compliance and achieving goals.*

## **TOWARDS A CLOSER UNDERSTANDING OF MEANS-ENDS RELATIONS**

### **Discussion**

The number of institutions seeking to regulate relatively opaque fields has mushroomed over the past few decades to reduce the uncertainty and ambiguity inhering in such fields (Bromley & Powell, 2012). This paper has sought to tease out the conditions under which the adoption of institutions in more opaque fields leads to the achievement of the envisaged goals.

Voluntary sustainability standards, addressing specific socio-environmental issues, exemplify such institutions. Previous institutional work on sustainability standards has identified a number of contingencies that account for the failure or imperfect achievement of standards' goals, including the lack of specific rules (Okhmatovskiy & David, 2012) and the deficiency of standard enforcement mechanisms (King et al., 2012). As a result, adopters have the opportunity to decouple official policies from actual practices (Hirsch & Bermiss, 2009; Sandholtz, 2012) and merely engage in symbolic adoption (Delmas & Montes-Sancho, 2010; Christmann & Taylor, 2006; Zajac & Westphal, 1995), thereby paying only lip service or confining their efforts to highly visible yet materially insignificant actions (Kerr, 1975).

These 'policy-practice decoupling' arguments are, indeed, important accounts of why many institutions in highly opaque fields do not, or only partially, lead to the results intended by their initiators. However, the extant literature has largely ignored another, potentially more significant, account. Building on recent work by Bromley and Powell (2012), who propose 'means-ends decoupling' as an alternative explanation of why policy adopters in more opaque fields fail to achieve the envisaged goals, I have argued that causal complexity and practice multiplicity obscure the impact of an institution's design and implementation parameters. In such settings, institutional theory would benefit from 'importing' insights offered by complexity theory (Levy & Lichtenstein, 2012; Young, 2012) to acknowledge systemic, often non-linear interrelations among and between relevant actors and factors at different levels. These insights enable the development of viable institutions, whose in-built adaptive capacity to co-evolve with their contexts renders such institutions more responsive and robust (Espinosa & Walker, 2011). Otherwise, institutions seeking to fix the policy-practice compliance gap by formulating specific and uniform rules, devising strong incentives, and transferring universal 'best practices' may create or widen the 'means-ends gap'. Compliance-oriented institutions not only fail to sufficiently account for causal complexity and practice

multiplicity but also smother innovative practices by adopters. Therefore, the harder institutional entrepreneurs such as standard setters try to make adopters comply with their requirements, the more their institutions may fail to achieve the envisaged goals. In other words, a trade-off exists between the rigidity required to enforce compliance and the flexibility needed to achieve goals. Options to mitigate this trade-off include adopting a systemic mindset when devising institutions, stimulating adopters to internalize a standard's goals, and supplementing universal core principles and arrangements with dedicated niche institutions.

A limitation of the paper is its confinement to fields that are relatively opaque. The trade-off between compliance and achievement is less likely to occur in more transparent fields, where relevant interrelations are easier to identify and measure, thus hardly facing problems of causal complexity, practice multiplicity, and behavioral invisibility. Field transparency reduces the need for institutional entrepreneurs to specify rules, incentives, and practices, while substantive compliance and goal achievement can be better aligned. For instance, athletic competition is a relatively transparent field, in which limited rules suffice and stringent anti-doping tests need not undermine the achievement of the 'fair play' goal. Another limitation is the paper's focus on one specific dimension of the adoption of institutions. Other relevant factors that account for the conditions and extent of goal achievement were not, or only marginally, considered, including: the number of adopters (Schuler & Christmann, 2011); the diffusion process (Fiss & Zajac, 2004; Lawrence, Winn, & Jennings, 2001; Weber, Davis, & Lounsbury, 2009); the stage of adoption (Kennedy & Fiss, 2009; Ansari, Fiss, & Zajac, 2010); the degree of interest alignment within adopting firms (Crilly, Zollo, & Hansen, 2012; Pache & Santos, 2010; Gottschalg & Zollo, 2007); the extent of information asymmetry between firms and their stakeholders (Crilly et al., 2012); the nature of (global) supply chains (Levy, 2008; O'Rourke, 2007); the role of reinforcing

institutions such as legislation (Gulbrandsen, 2010; Lee, 2009; Vogel, 2008; Amengual, 2010; Kim, 2013); the influence of competing or complementary standards (Reinecke et al., 2012); the role of the media and confrontational NGOs (Yaziji & Doh, 2009); and the involvement of consumers (Schuler & Christmann, 2011). While recognizing the importance of these factors, the paper was deliberately focused to highlight the role of one major, understudied dimension of adoption that significantly impairs the performance of institutions in relatively opaque fields.

### **Contributions**

Early institutional work (Meyer & Rowan, 1977) has shown that organizational adopters of institutions often do not achieve the goals envisaged by their developers. Especially when adoption is induced under external pressure, organizations may decouple their practices from their policies, in which case they “symbolically endorse practices prescribed by one logic while actually implementing practices promoted by another logic” (Pache & Santos, 2013: 974). This symbolic support typically consists of formally adopting the same practices as similar organizations (DiMaggio & Powell, 1983). I have argued that adopters may not achieve the intended goals for a very different reason. In essence, adopters may not attain their goals *despite* substantive compliance. I have built on Bromley and Powell’s (2012) idea that substantively adopted practices may not be effective means to achieve the envisaged goals, especially when the relation between both is more opaque. The present paper goes beyond their insights by developing the novel argument of a negative relationship, rather than the absence of a connection: a *trade-off* exists when addressing both types of decoupling in highly opaque fields. While opacity enhances the need for developing and maintaining ‘strong’ (i.e., compliance-oriented) institutions, the latter are ill-equipped to cope with the challenges encountered in more opaque fields. The current paper has conceptualized why and



how remedying policy-practice decoupling often leads to the creation or exacerbation of means-ends decoupling, and vice versa.

While applying my arguments to the field of socio-environmental governance, these relations are also likely to hold in other highly opaque institutional fields, where goal achievement is hard to measure and to causally relate to means deployed and where context variety calls for divergent practices. Other relatively opaque fields include health care (Nigam & Ocasio, 2010), management consultancy (David, Sine, & Haveman, 2013), global geopolitics (Levy, 2008), climate change mitigation (Ansari, Wijen, & Gray, 2013), financial stability (Fligstein & Goldstein, 2010), traffic security (Braithwaite & Drahos, 2000), public service (Frey et al., 2013), and academia. In these fields, the concrete, uniform rules (standard operating procedures, blueprints, examinations, etc.), strong incentives (such as financial benefits, legitimacy, and fines), and ‘best practice’ dissemination (through formal training, internet sites, conferences, etc.) are widely used to induce field participants to comply substantively, even though the rigorous implementation of such behavior-homogenizing institutions, often at a global scale (Meyer, Boli, Thomas, & Ramirez, 1997), may not lead to the achievement of the intended goals. For example, are accredited universities the ones offering superior teaching and research or do they know better how to please accreditation bodies (Trank & Washington, 2009; Bromley & Powell, 2012)? Are students scoring high grades for exams brighter than their counterparts with more modest grades or are they the ones who best know how to ‘play the examination game’ without necessarily being better prepared for their professional futures (Boiral, 2012; Kerr, 1975)? And do frequently cited articles published in top-ranked academic journals reveal more rigorous and relevant research (Baum, 2011; Starbuck, 2005; Gans & Shepherd, 1994)? Since the paper’s insights apply to a variety of relatively opaque institutional fields, a first contribution is to the institutional literature by identifying and explaining the tension between compliance with an institution’s

rules ('the letter') and achievement of the goals for which those rules were defined ('the spirit') as well as offering partial remedies. The present paper has established a conceptual framework for studying the importance of this trade-off in a variety of institutional fields that are characterized by high opacity. Empirical work could establish the extent to which and the (additional) conditions under which the theorized trade-off exists in different opaque fields.<sup>14</sup>

Much research into sustainability standards has focused on ways to deter opportunistic adoption by legitimacy or market seekers (e.g., King et al., 2012; Delmas & Montes-Sancho, 2010; Christmann & Taylor, 2006), advocating stringent, selective standards that may solve the compliance problem but inadvertently overshoot the standard's marks. The present paper recognizes both problems and argues that the latter problem needs more attention to adequately address socio-environmental challenges. The ideas presented resonate with earlier calls to balance rigidity and flexibility in (sustainability) standards (Timmermans & Epstein, 2010; Gilbert et al., 2011) and extend insights into socio-environmental governance by articulating the reasons why and ways in which such a (delicate) balance can be achieved. Therefore, a second contribution is to the socio-environmental governance literature by specifying conditions under which sustainability standards are more likely to reasonably achieve their goals. Future studies could test whether the ideas presented hold for different socio-environmental institutions.

Inspired by the maxim 'nothing as practical as a good theory' and responding to recent calls for more practically relevant theory around important contemporary societal topics

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<sup>14</sup> Field studies could draw on: system dynamic modeling (Sterman, 2000; Repenning, 2002) to capture direct and indirect, linear and non-linear relations; game scenarios to chart the effect of incentive structures and other actors (Boschetti, 2011; Barrett, 2003); configurational approaches to account for factor combinations and context dependence (Fiss, 2011; Ragin, 1987); and qualitative approaches to provide in-depth insights into the motivation and behavior of heterogeneous actors (Creswell, 2013; Yin, 2009).

(Suddaby, 2012; Corley & Gioia, 2011), I have sought to advance conceptual ideas that can benefit practitioners by deconstructing why institutional entrepreneurs in relatively opaque fields face inherent tensions when trying to achieve both adopter compliance and goal achievement and by indicating how entrepreneurs can reduce some of these tensions. I applied these conceptual insights to one practically relevant field, socio-environmental governance, although the insights can be applied to a variety of institutional fields struck by high opacity. While the upsurge of corporate compliance officers (O'Rourke, 2007) over the past decade is a logical corporate response to societal pressure to address socio-environmental underperformance (Gilbert et al., 2011), this paper has shown that such compliance efforts often fail to bear their fruits, especially when ignoring the complexity and specificities of socio-environmental issues and enforcing docile adopter behavior. A third contribution is thus to practitioners by presenting a conceptual diagnosis of a major practical problem. The real-life examples and concrete guidance offered (such as simulating to practice systemic thinking, setting up adopter clubs to encourage internalization, and developing niche institutions to reflect variety) can be useful for policy-makers in firms, NGOs, and governmental bodies who need to conceive and implement effective and manageable solutions in relatively opaque fields.

## **Conclusion**

While it is a truism to say that complex, wicked problems do not have easy solutions, it is remarkable that scholars and practitioners have paid so little attention to the means-ends gap, which arguably undermines the performance of institutions in highly opaque fields. In particular, the focus on eliciting substantive compliance has distracted our attention from ensuring that the envisaged goals be achieved. Enforcing compliance can even undermine goal achievement. Institutional entrepreneurs seeking to govern more opaque fields thus face a real dilemma. Opacity creates a need for concrete and uniform rules, strong incentives, and

'best practice' dissemination to ensure substantive compliance by adopters, but the rigidity of compliance-oriented institutions inadvertently erodes their capacity to address the complexity and diversity challenges inhering in such fields. By contrast, institutions privileging outcomes may suffer from mere symbolic adoption by cognitively bounded and extrinsically motivated adopters.

In conclusion, there are no conditions under which the adoption of institutions in highly opaque fields can lead to the full achievement of the intended goals because of an inherent trade-off between remedying 'policy-practice decoupling' and addressing 'means-ends decoupling,' although institutional entrepreneurs can reduce this compliance-achievement trade-off. Systemically designed institutions that promote goal internalization and duly consider context contingencies offer the potential to strike a balance between rigidity and flexibility, thereby laying a solid foundation for the adoption of institutions that are reasonably impactful in terms of achieving the goals envisaged by the entrepreneurs championing them. The institution of sustainability standards in the field of socio-environmental governance has illustrated the arguments developed, although the paper's conceptual insights are likely to hold in a variety of other highly opaque fields. In this respect, academics can seize two opportunities. The first concerns self-reflection on the assessment and regulation of teaching and research performance. The second consists of conducting further (empirical) research on the nexus between substantive compliance and goal achievement, whose outcomes enable other practitioners in relatively opaque fields to develop practices that are reasonably effective in addressing both types of challenges. The desire to warrant substantive compliance amidst opacity has led many institutional entrepreneurs to increasingly invert Machiavelli's adage that the ends justify the means. Time for a balanced reorientation.

## REFERENCES

- Adger, N. 2007. Ecological and social resilience. In G. Atkinson, S. Dietz, & E. Neumayer (Eds.), *Handbook of sustainable development*. Cheltenham: Edward Elgar.
- Aguilera, R., Rupp, D., Williams, C., & Ganapathi, J. 2007. Putting the s back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Review*, 32(3): 836-863.
- Alvesson, M., & Spicer, A. 2012. A stupidity-based theory of organizations. *Journal of Management Studies*, 49(7): 1194-1220.
- Amengual, M. 2010. Complementary labor regulation: The uncoordinated combination of state and private regulators in the Dominican Republic. *World Development*, 38(3): 405-414.
- Ansari, S., Fiss, P., & Zajac, E. 2010. Made to fit: How practices vary as they diffuse. *Academy of Management Review*, 35(1): 67-92.
- Ansari, S., Wijen, F., & Gray, B. 2013. Constructing a climate change logic: An institutional perspective on the “tragedy of the commons.” *Organization Science*, 24(4): 1014-1040.
- Aravind, D., & Christmann, P. 2011. Decoupling of standard implementation from certification: Does quality of ISO 14001 implementation affect facilities’ environmental performance? *Business Ethics Quarterly*, 21(1): 73-102.
- Archer, C., & Fritsch, S. 2010. Global fair trade: Humanizing globalization and reintroducing the normative to international political economy. *Review of International Political Economy*, 17(1): 103-128.
- Ashby, R. 1956. *An Introduction to cybernetics*. London: Chapman and Hall.
- Atkinson, G., Dietz, S., & Neumayer, E. 2007. Introduction. In G. Atkinson, S. Dietz, & E. Neumayer (Eds.), *Handbook of sustainable development*. Cheltenham: Edward Elgar.

- Auld, G., Balboa, C., Bernstein, S., & Cashore, B. 2009. The emergence of non-state market-driven (NSMD) global environmental governance: A cross-sectoral assessment. In M. Delmas & O. Young (Eds.), *Governance for the environment: New perspectives*. Cambridge: Cambridge University Press.
- Banerjee, A., & Duflo, E. 2007. The economic lives of the poor. *Journal of Economic Perspectives*, 21(1): 141-167.
- Bansal, P. 2003. From issues to actions: The importance of individual concerns and organizational values in responding to natural environmental issues. *Organization Science*, 14(5): 510-527.
- Bansal, P., & Roth, K. 2000. Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*, 43(4): 717-736.
- Barnett, M., & King, A. 2008. Good fences make good neighbors: A longitudinal analysis of an industry self-regulatory institution. *Academy of Management Journal*, 51(6): 1150-1170.
- Baron, D., & Lyon, T. 2012. Environmental governance. In P. Bansal & A. Hoffman (Eds.), *The Oxford handbook of business and the natural environment*. Oxford: Oxford University Press.
- Barrett, S. 2003. *Environment & statecraft: The strategy of environmental treaty-making*. Oxford: Oxford University Press.
- Bartley, T. 2007. Institutional emergence in an era of globalization: The rise of transnational private regulation of labor and environmental conditions. *American Journal of Sociology*, 113(2): 297-351.
- Battilana, J., Leca, B., & Boxenbaum, E. 2009. How actors change institutions: Towards a theory of institutional entrepreneurship. *Academy of Management Annals*, 3(1): 65-107.

- Baum, J. 2011. Skew(ered). OMT Distinguished Scholar presentation. Academy of Management Conference. <http://omtweb.org/announcements/omt-news/368-2011-distinguished-scholar-presentation>.
- Baum, J., Li, S. X., & Usher, J. 2000. Making the next move: How experiential and vicarious learning shape the locations of chains' acquisitions. *Administrative Science Quarterly*, 45(4): 766-801.
- Benner, M., & Tushman, M. 2002. Process management and technological innovation: A longitudinal study of the photograph and paint industries, *Administrative Science Quarterly*, 47(4): 676-706.
- Berger, I., Cunningham, P., & Drumwright, E. 2004. Social alliances: Company/nonprofit collaboration. *California Management Review*, 47(1): 58-90.
- Bitzer, V., Francken, M., & Glasbergen, P. 2008. Intersectoral partnerships for a sustainable coffee chain: Really addressing sustainability or just picking (coffee) cherries? *Global Environmental Change*, 18(2): 271-284.
- Boiral, O. 2012. ISO certificates as organizational degrees? Beyond the rational myths of the certification process. *Organization Studies*, 33(5-6): 633-654.
- Boschetti, F. 2011. Rationality, complexity and self-organization. *Emergence: Complexity and Organization*, 13(1-2): 133-145.
- Boxenbaum, E., & Jonsson, S. 2008. Isomorphism, diffusion and decoupling. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (eds.), *The Sage handbook of organizational institutionalism*. Los Angeles: Sage.
- Braithwaite, J., & Drahos, P. 2000. *Global business regulation*. Cambridge: Cambridge University Press.

- Briscoe, F., & Murphy, C. 2012. Sleight of hand? Practice opacity, third-party responses, and the interorganizational diffusion of controversial practices. *Administrative Science Quarterly*, 57(4): 553-584.
- Bromley, P., & Powell, W. 2012. From smoke and mirrors to walking the talk: Decoupling in the temporary world. *Academy of Management Annals*, 6(1): 483-530.
- Brown, S., & Eisenhardt, K. 1997. The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 42(1): 1-34.
- Burger, R., & Owens, T. 2010. Promoting transparency in the NGO sector: Examining the availability and reliability of self-reported data. *World Development*, 38(9): 1263-1277.
- Campbell, J. 2007. Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3): 946-967.
- Carroll, A., 2008. A history of corporate social responsibility: Concepts and practices. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility*. Oxford: Oxford University Press.
- Carson, R. 1962. *Silent spring*. Boston: Houghton Mifflin.
- Center for Sustainable Organizations. 2013. The True Sustainability Index. [www.sustainableorganizations.org](http://www.sustainableorganizations.org).
- Christmann, P., & Taylor, G. 2006. Firm self-regulation through certifiable international standards: Determinants of symbolic versus substantive implementation. *Journal of International Business Studies*, 37(6): 863-878.
- Christmann, P., & Taylor, G. 2012. International business and the environment. In P. Bansal & A. Hoffman (Eds.), *The Oxford handbook of business and the natural environment*. Oxford: Oxford University Press.



- Colvin, A., & Boswell, W. 2007. The problem of action and interest alignment: Beyond job requirements and incentive compensation. *Human Resource Management Review*, 17(1): 38-51.
- Corley, K., & Gioia, D. 2011. Building theory about theory building: What constitutes a theoretical contribution? *Academy of Management Review*, 36(1): 12-32.
- Creswell, J. 2013. *Qualitative inquiry & research design: Choosing among five approaches*. Los Angeles: Sage.
- Crilly, D., Zollo, M., & Hansen, M. 2012. Faking it or muddling through: Understanding decoupling in response to stakeholder pressures. *Academy of Management Journal*, 55(6): 1429-1448.
- Dalton, D., Hitt, M., Certo, T., & Dalton, C. 2007. The fundamental agency problem and its mitigation: Independence, equity, and the market for corporate control. *Academy of Management Annals*, 1(1): 1-64.
- Dasgupta, N. 2000. Environmental enforcement and small industries in India: Reworking the problem in the poverty context. *World Development*, 28(5): 945-967.
- Dasgupta, S., Hettige, H., & Wheeler, D. 2000. What improves environmental compliance? Evidence from Mexican industry. *Journal of Environmental Economics and Management*, 39(1): 39-66.
- David, R., Sine, W., & Haveman, H. 2013. Seizing opportunity in emerging fields: How institutional entrepreneurs legitimated the professional form of management consulting. *Organization Science*, 24(2): 356-377.
- Davis, J., Eisenhardt, K., & Bingham, C. 2009. Optimal structure, market dynamism, and the strategy of simple rules. *Administrative Science Quarterly*, 54(3): 413-452.
- Delmas, M., & Grant, L. Forthcoming. Eco-labeling strategies and price-premium: The wine industry puzzle. *Business & Society*.

- Delmas, M., & Montes-Sancho, M. 2010. Voluntary agreements to improve environmental quality: Symbolic and substantive cooperation. *Strategic Management Journal*, 31(6): 576-601.
- Delmas, M., & Young, O. 2009. Introduction: New perspectives on governance for sustainable development. In M. Delmas & O. Young (Eds.), *Governance for the environment: New perspectives*. Cambridge: Cambridge University Press.
- Dietz, T., Ostrom, E., & Stern, P. 2003. The struggle to govern the commons. *Science*, 302 (12 December): 1907-1912).
- DiMaggio, P., & Powell, W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2): 147-160.
- Donaldson, L. 2001. *The contingency theory of organizations*. Thousand Oaks: Sage.
- Donaldson, T., & Dunfee, T. 1994. Toward a unified conception of business ethics: Integrative social contracts theory. *Academy of Management Review*, 19(2): 252-284.
- Easterly, W. 2006. *The white man's burden: Why the West's efforts to aid the rest have done so much ill and so little good*. Oxford: Oxford University Press.
- Eisenhardt, K., & Bhatia, M. 2002. Organizational complexity and computation. In J. Baum (Ed.), *The Blackwell companion to organizations*. Oxford: Blackwell.
- Espinosa, A., & Walker, J. 2011. *A complexity approach to sustainability: Theory and application*. London: Imperial College Press.
- FAIR. 2012. The FAIRTRADE chocolate rip-off: Transnational investigation. Forum of African Investigative Reporters. November. [www.fairreporters.org](http://www.fairreporters.org).
- Fairtrade International. 2013a. Aims of Fairtrade Standards: Common principles. <http://www.fairtrade.net>.
- Fairtrade International. 2013b. Our vision: Our mission. <http://www.fairtrade.net>.

- Fiss, P. 2011. Building better causal theories: A fuzzy set approach to typologies in organizational research. *Academy of Management Journal*, 54(2): 393-420.
- Fiss, P., & Zajac, E. 2004. The diffusion of ideas over contested terrain: The (non)adoption of a shareholder value orientation among German firms. *Administrative Science Quarterly*, 49(4): 501-534.
- Fligstein, N. 1997. Social skill and institutional theory. *The American Behavioral Scientist*, 40(4): 397-405.
- Fligstein, N., & Goldstein, A. 2010. The anatomy of the mortgage securitization crisis. *Research in the Sociology of Organizations*, 30(A): 29-70.
- Frey, B., Homberg, F., & Osterloh, M. 2013. Organizational control systems and pay-for-performance in the public service. *Organization Studies*, 34(7): 949-972.
- Gans, J., & Shepherd, G. 1994. How are the mighty fallen: Rejected classic articles by leading economists. *Journal of Economic Perspectives*, 8(1): 165-179.
- Garud, R., Jain, S., & Kumaraswamy, A. 2002. Institutional entrepreneurship in the sponsorship of common technology standards: The case of Sun Microsystems and Java. *Academy of Management Journal*, 45(1): 196-214.
- Gilbert, D.U., Rasche, A., & Waddock, S. 2011. Accountability in a global economy: The emergence of international accountability standards. *Business Ethics Quarterly*, 21(1): 23-44.
- Glasbergen, P. 2012. Partnerships for sustainable development in a globalised world: A reflection on market-oriented and policy-oriented partnerships. In F. Wijen, K. Zoeteman, J. Pieters, & P. van Seters (Eds.), *A handbook of globalisation and environmental policy, second edition: National government interventions in a global arena*. Cheltenham: Edward Elgar.
- GlobalGAP. 2013. What we do. <http://www.globalgap.org>.

- Gottschalg, O., & Zollo, M. 2007. Interest alignment and competitive advantage. *Academy of Management Review*, 32(2): 418-437.
- Graffin, S., & Ward, A. 2010. Certifications and reputation: Determining the standard of desirability amidst uncertainty. *Organization Science*, 21(2): 331-346.
- Graham, D., & Woods, N. 2007. Making corporate self-regulation effective in developing countries. In D. Brown & N. Woods (Eds.), *Making global self-regulation effective in developing countries*. Oxford: Oxford University Press.
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E., & Lounsbury, M. 2011. Institutional complexity and organizational responses. *Academy of Management Annals*, 5(1): 317-371.
- Gulbrandsen, L. 2010. *Transnational environmental governance: The emergence and effects of the certification of forests and fisheries*. Cheltenham: Edward Elgar.
- Hardy, C., & Maguire, S. 2008. Institutional entrepreneurship. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The Sage handbook of organizational institutionalism*. London: Sage.
- Helms, W., Oliver, C., & Webb, K. 2012. Antecedents of settlement on a new institutional practice: Negotiation of the ISO 26000 standard on social responsibility. *Academy of Management Journal*, 55(5): 1120-1145.
- Henson, S., Masakure, O., & Cranfield, J. 2011. Do fresh produce exporters in sub-Saharan Africa benefit from GlobalGAP certification? *World Development*, 39(3): 375-386.
- Hirsch, P., & Bermiss, S. 2009. Institutional “dirty” work: Preserving institutions through strategic decoupling. In T. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work*. Cambridge: Cambridge University Press.
- Hofstede, G. 2001. *Culture’s consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks: Sage.

- Howard, J., Nash, J., & Ehrenfeld, J. 2000. Standard or smokescreen? Implementation of a voluntary environmental code. *California Management Review*, 42(2): 63-82.
- Jiang, R. J., & Bansal, P. 2003. Seeing the need for 14001. *Journal of Management Studies*, 40(4): 1047-1067.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. 2007. *Governance matters IV: Worldwide governance indicators, 1996-2006*. <http://info.worldbank.org/governance/wgi2007/>. Washington, D.C.: World Bank.
- Kennedy, M., & Fiss, P. 2009. Institutionalization, framing, and diffusion: The logic of TQM adoption and implementation among U.S. hospitals. *Academy of Management Journal*, 52(5): 897-918.
- Kerr, S. 1975. On the folly of rewarding A, while hoping for B. *Academy of Management Journal*, 18(4): 769-783.
- Khan, F., Munir, K., & Willmott, H. 2007. A dark side of institutional entrepreneurship: Soccer balls, child labour and postcolonial impoverishment. *Organization Studies*, 28(7): 1055-1077.
- Kim, J. Y. 2013. The politics of code enforcement and implementation in Vietnam's apparel and footwear industries. *World Development*, 45: 286-295.
- King, A., Lenox, M., & Terlaak, A. 2005. The strategic use of decentralized institutions: Exploring certification with the ISO 14001 management standard. *Academy of Management Journal*, 48(6): 1091-1106.
- King, A., Prado, A., & Rivera, J. 2012. Industry self-regulation and environmental protection. In P. Bansal & A. Hoffman (Eds.), *The Oxford handbook of business and the natural environment*. Oxford: Oxford University Press.
- King, A., & Toffel, M. 2009. Self-regulatory institutions for solving environmental problems: Perspectives and contributions from the management literature. In M. Delmas & O.

- Young (Eds.), *Governance for the environment: New perspectives*. Cambridge: Cambridge University Press.
- Lawrence, T., Suddaby, R., & Leca, B. 2009. Introduction: Theorizing and studying institutional work. In T. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work: Actors and agency in institutional studies of organizations*. Cambridge: Cambridge University Press.
- Lawrence, T., Winn, M., & Jennings, D. 2001. The temporal dynamics of institutionalization. *Academy of Management Review*, 26(4): 624-644.
- Lee, B. 2009. The infrastructure of collective action and policy content diffusion in the organic food industry. *Academy of Management Journal*, 52(6): 1247-1269.
- Levitt, B., & March, J. 1988. Organizational learning. *Annual Review of Sociology*, 14: 319-340.
- Levy, D. 2008. Political contestation in global production networks. *Academy of Management Review*, 33(4): 943-963.
- Levy, D., & Lichtenstein, B. 2012. Approaching business and the environment with complexity theory. In P. Bansal & A. Hoffman (Eds.), *The Oxford handbook of business and the natural environment*. Oxford: Oxford University Press.
- Lindblom, C. 1959. The science of "muddling through". *Public Administration Review*, 9(Spring): 79-88.
- List, J. 2011. The market for charitable giving. *Journal of Economic Perspectives*, 25(2): 157-180.
- López, R. 2007. Structural change, poverty and natural resource degradation. In G. Atkinson, S. Dietz, & E. Neumayer (Eds.), *Handbook of sustainable development*. Cheltenham: Edward Elgar.

- Lyon, T. 2010. Introduction. In T. Lyon (Ed.), *Good cop/ bad cop: Environmental NGOs and their strategies toward business*. Washington, D.C.: RFF Press.
- Maguire, S., Hardy, C., & Lawrence, T. 2004. Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Academy of Management Journal*, 47(5): 657-679.
- McElroy, M., & Van Engelen, J. 2012. *Corporate sustainability management*. London: Earthscan.
- McNicol, J. 2006. Transnational certification programs as new regulatory forms: Lessons from the forestry sector. In M.L. Djelic & K. Sahlin-Andersson (Eds.), *Transnational governance: Institutional dynamics of regulation*. Cambridge: Cambridge University Press.
- Meadows, D., Randers, J., & Meadows, R. 2005. *Limits to growth: The 30-year update*. London: Earthscan.
- Meyer, A., Tsui, A., & Hinings, C. R. 1993. Configurational approaches to organizational analysis. *Academy of Management Journal*, 36(6): 1175-1195.
- Meyer, J., Boli, J., Thomas, G., & Ramirez, F. 1997. World society and the nation-state. *American Journal of Sociology*, 103(1): 144-181.
- Meyer, J., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2): 340-363.
- Millennium Ecosystem Assessment Board. 2005. *Ecosystems and human well-being: Synthesis*. Washington, D.C.: Island Press.
- Milliken, F. 1987. Three types of perceived uncertainty about the environment: State, effect, and response uncertainty. *Academy of Management Review*, 12(1): 133-143.

- Navis, C., & Glynn, M. A. 2010. How new market categories emerge: Temporal dynamics of legitimacy, identity, and entrepreneurship in satellite radio, 1990-2005. *Administrative Science Quarterly*, 55(3): 439-471.
- Nigam, A., & Ocasio, W. 2010. Event attention, environmental sensemaking, and change in institutional logics: An inductive analysis of the effects of public attention to Clinton's healthcare reform initiative. *Organization Science*, 21(4): 823-841.
- Nonaka, I. 1994. A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1): 14-37.
- Ocasio, W. 1997. Towards an attention-based view of the firm. *Strategic Management Journal*, 18(S): 187-206.
- Okhmatovskiy, I., & David, R. 2012. Setting your own standards: Corporate governance codes as a response to institutional pressure. *Organization Science*, 23(1): 155-176.
- Oosterveer, P., & Spaargaren, G. 2011. Organising consumer involvement in the greening of global food flows: The role of environmental NGOs in the case of marine fish. *Environmental Politics*, 20(1): 97-114.
- O'Rourke, D. 2007. Bringing in social actors: Accountability and regulation in the global textiles and apparel industry. In D. Brown & N. Woods (Eds.), *Making global self-regulation effective in developing countries*. Oxford: Oxford University Press.
- Orton, J., & Weick, K. 1990. Loosely coupled systems: A reconceptualization. *Academy of Management Review*, 15(2): 203-223.
- Ostrom, E. 2012. Polycentric systems: Multilevel governance involving a diversity of organizations. In E. Brousseau, T. Dedeurwaerdere, P. A. Juvet, & M. Willinger (Eds.), *Global environmental commons: Analytical and political challenges in building governance mechanisms*. Oxford: Oxford University Press.



- Pache, A. C., & Santos, F. 2010. When worlds collide: The internal dynamics of organizational responses to conflicting institutional demands. *Academy of Management Review*, 35(3): 455-476.
- Pache, A. C., & Santos, F. 2013. Inside the hybrid organization: Selective coupling as a response to competing institutional logics. *Academy of Management Journal*, 56(4): 972-1001.
- Perez-Aleman, P. 2011. Collective learning in global diffusion: Spreading quality standards in a developing country cluster. *Organization Science*, 22(1): 173-189.
- Perez-Aleman, P., & Sandilands, M. 2008. Building value at the top and bottom of the global supply chain. *California Management Review*, 51(1): 24-49.
- Ponte, S. 2008. Greener than thou: The political economy of fish ecolabeling and its local manifestations in South Africa. *World Development*, 36(1): 159-175.
- Potoski, M., & Prakash, A. 2005. Green clubs and voluntary governance: ISO 14001 and firms' regulatory compliance. *American Journal of Political Science*, 49(2): 235-248.
- Prado, A. 2013. Competition among self-regulatory institutions: Sustainability certifications in the cut-flower industry. *Business & Society*, 52(4): 686-707.
- Prakash, A., & Potoski, M. 2006. *The voluntary environmentalists: Green clubs, ISO 14001, and voluntary regulations*. Cambridge: Cambridge University Press.
- Ragin, C. 1987. *The comparative method: Moving beyond qualitative and quantitative strategies*. Berkeley: University of California Press.
- Reinecke, J., Manning, S., & Von Hagen, O. 2012. The emergence of a standards market: Multiplicity of sustainability standards in the global coffee industry. *Organization Studies*, 33(5-6): 655-679.
- Repenning, N. 2002. A simulation-based approach to understanding the dynamics of innovation implementation. *Organization Science*, 13(2): 109-127.

- Riisgaard, L. 2009. Global value chains, labor organization and private social standards: Lessons from East African cut flower industries. *World Development*, 37(2): 326-340.
- Rittel, H., & Webber, M. 1973. Dilemmas in a general theory of planning. *Policy Sciences*, 4(2): 155-169.
- Rockström, J. et al. 2009. A safe operating space for humanity. *Nature*, 461(24 September): 472-475.
- Sandholtz, K. 2012. Making standards stick: A theory of coupled vs. decoupled compliance. *Organization Studies*, 33(5-6): 655-679.
- Santos, F., & Eisenhardt, K. 2009. Constructing markets and shaping boundaries: Entrepreneurial power in nascent fields. *Academy of Management Journal*, 52(4): 643-671.
- Schneiberg, M., & Lounsbury, M. 2008. Social movements and institutional analysis. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (eds.), *The Sage handbook of organizational institutionalism*. Los Angeles: Sage.
- Schuler, D., & Christmann, P. 2011. The effectiveness of market-based social governance schemes: The case of fair trade coffee. *Business Ethics Quarterly*, 21(1): 133-156.
- Scott, R. 2001. *Institutions and organizations*, 2<sup>nd</sup> edition. Thousand Oaks: Sage.
- Sharma, S. 2000. Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. *Academy of Management Journal*, 43(4): 681-697.
- Sine, W., David, R., & Mitsuhashi, H. 2007. From plan to plant: Effects of certification on operational start-up in the emergent independent power sector. *Organization Science*, 18(4): 578-594.
- Spar, D., & La Mure, L. 2003. The power of activism: Assessing the impact of NGOs on global business. *California Management Review*, 45(3): 78-101.

- Starbuck, W. 2005. How much better are the most-prestigious journals? The statistics of academic publication. *Organization Science*, 16(2): 180-200.
- Starik, M., & Rands, G. 1995. Weaving an integrated web: Multilevel and multisystem perspectives of ecologically sustainable organizations. *Academy of Management Review*, 20(4): 908-935.
- Sterman, J. 2000. *Business dynamics: Systems thinking and modeling for a complex world*. Boston: McGraw-Hill.
- Suddaby, R. 2012. Editor's comments. *Academy of Management Review*, 37(1): 6-9.
- Tamm Hallström, K., & Boström, M. 2010. *Transnational multi-stakeholder standardization: Organizing fragile non-state authority*. Cheltenham: Edward Elgar.
- Teegen, H., Doh, J., & Vachani, S. 2004. The importance of nongovernmental organizations (NGOs) in global governance and value creation: An international business research agenda. *Journal of International Business Studies*, 35(6): 463-483.
- Terlaak, A. 2007. Order without law? The role of certified management standards in shaping socially desired firm behaviors. *Academy of Management Review*, 32(3): 968-985.
- Terlaak, A., & Gong, Y. 2008. Vicarious learning and inferential accuracy in adoption processes. *Academy of Management Review*, 33(4): 846-868.
- Timmermans, S., & Epstein, S. 2010. A world of standards but not a standard world: Toward a sociology of standards and standardization. *Annual Review of Sociology*, 36: 69-89.
- Trank, C.Q., & Washington, M. 2009. Maintaining an institution in a contested organizational field: The work of the AACSB and its constituents. In T. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work: Actors and agency in institutional studies of organizations*. Cambridge: Cambridge University Press.
- UTZ Certified. 2013. What is UTZ Certified: UTZ Certified. Better farming. Better future. <https://www.utzcertified.org>.

- Van Marrewijk, M., & Werre, M. 2003. Multiple levels of corporate sustainability. *Journal of Business Ethics*, 44(2-3): 107-119.
- Van Tulder, R., & Van der Zwart, A. 2006. *International business-society management: Linking corporate responsibility and globalization*. London: Routledge.
- Visser, W. 2008. Corporate social responsibility in developing countries. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility*. Oxford: Oxford University Press.
- Visseren-Hamakers, I., Arts, B., & Glasbergen, P. 2007. Partnership as governance mechanism in development cooperation: Intersectoral North-South partnerships for marine biodiversity. In P. Glasbergen, F. Biermann, & A. Mol (Eds.), *Partnerships, governance and sustainable development: Reflections on theory and practice*. Cheltenham: Edward Elgar.
- Vogel, D. 2008. Private global business regulation. *Annual Review of Political Science*, 11: 261-282.
- Von Weizsäcker, E., Hargroves, K., Smith, M., Desha, C., & Stasinopoulos, P. 2009. *Factor five: Transforming the global economy through 80% improvements in resource productivity*. London: Earthscan.
- Weber, K., Davis, G., & Lounsbury, M. 2009. Policy as myth and ceremony? The global spread of stock exchanges, 1980-2005. *Academy of Management Journal*, 52(6): 1319-1347.
- Wooten, M., & Hoffman, A. 2008. Organizational fields: Past, present and future. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (eds.), *The Sage handbook of organizational institutionalism*. Los Angeles: Sage.
- Yaziji, M., & Doh, J. 2009. *NGOs and corporations: Conflict and collaboration*. Cambridge: Cambridge University Press.

- Yin, R. 2009. *Case study research: Design and methods*. Fourth edition. Los Angeles: Sage.
- Young, O. 1994. *International governance: Protecting the environment in a stateless society*. Ithaca: Cornell University Press.
- Young, O. 2012. Navigating the sustainability transition: Governing complex and dynamic socio-ecological systems. In E. Brousseau, T. Dedeurwaerdere, P.-A. Juvet, & M. Willinger (Eds.), *Global environmental commons: Analytical and political challenges in building governance mechanisms*. Oxford: Oxford University Press.
- Zajac, E., & Westphal, J. 1995. Accounting for the explanations of CEO compensation: Substance and symbolism. *Administrative Science Quarterly*, 40(2): 283-308.
- Zietsma, C., & McKnight, B. 2009. Building the iron cage: Institutional creation work in the context of competing proto-institutions. In T. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work: Actors and agency in institutional studies of organizations*. Cambridge: Cambridge University Press.

**Figure 1: Institutional Adoption and Compliance-Achievement Trade-Offs in Opaque Fields**

