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4. Transitioning sustainability: performing ‘governing by standards’

Allison Loconto and Marc Barbier

4.1 INTRODUCTION

Sustainability is a multi-faceted and highly contested topic in many sectors. As a discourse, it simultaneously brings together competing regimes of knowledge around how sustainability should be defined and practiced. The articulation of the present and the anticipated future varies across sectors, meaning that a vast array of phenomena and complex situations need to be considered, studied, and compared. In the industrial agriculture sector, cutting-edge biological, chemical and mechanical technologies maintain a monopoly, although tenuous, on the current agri-food system. However, socio-technical regimes are in flux and the appearance of stability to the outside eye actually consists of significant work to reinforce the dominance of the current knowledge regime and to limit alternatives to niche innovations or novelties. This is particularly the case when landscape pressures introduce new imperatives that all social actors should work towards, such as sustainability (Levin et al., 2012). Temporally, we stand within this transition to sustainability. In this current space the vision of sustainability remains a fluid and contested concept and the knowledge needed to govern both the transition and the future is uncertain (cf. Elzen et al., 2011; Levin et al., 2012; Barbier, 2010).

Due to this uncertainty, we witness competing or co-existing socio-technical systems in agriculture. From our vantage point we can observe, in real time, how each group is constructing the knowledge base and socio-technical infrastructure necessary for transitioning to wide-spread adoption of their version of sustainable agriculture. On the one hand, there is the push by multinational agribusinesses like Monsanto and Syngenta to promote the intensification of agricultural research and experimentation into genetic engineering (GE) and innovations in synthetic inputs as a means to make industrial agriculture more sustainable

(cf. Lyson, 2002). Here, scientific knowledge production, and thus the organization of the socio-technical system, is mainly driven by biotechnology based on molecular biology (Vanloqueren and Baret, 2009). On the other hand, alternative approaches to sustainable agriculture, often in response to the dominant socio-technical regime, emerge in niches (Elzen et al., 2012). However, these ‘niche emergences’ remain as static configurations that cannot hide the messiness of the prevailing situation. This situation is characterized by increasing ‘landscape pressures’ for sustainability alongside only modest changes in practices initiated largely by a rather fragmented group of social innovation pioneers (Barbier and Elzen, 2012). A number of these system innovations are based on the scientific principles of agro-ecology (Altieri, 1987; Kloppenburg, 1991) and the organization of the expansion of food production within global food provisioning systems built on the management science of process standards and audits using third-party certification (for example, Bain et al., 2005; Higgins et al., 2008; Mutersbaugh, 2005). Paradoxically, this expansion of sustainable niches within the global agri-food system is made possible by new global rules, regulations and institutions implemented by the World Trade Organization (WTO) and by the growing influence of oligopolistic food retailers (Busch and Bain, 2004). In this paper we explore this second pathway to sustainability, bearing in mind how sustainability standards are attached to system innovations at the level of the farm.

On this path, sustainability is achieved through the creation, implementation and evaluation of sustainability standards (Loconto and Fouilleux, 2014). The reliance upon standards as a means to regulate agri-food systems suggests that a socio-technical regime based on the concept of ‘certified sustainability’ is emerging. However, the observation of a regime of ‘certified sustainability’ does not tell us much about how this socio-technical change is occurring. Therefore, in Chapter 4 we ask *how this regime is constructed and how standards are used to govern the transition to sustainability*.

Given the path-dependent nature of programs for sustainable agriculture (for example, Lowe and Murdoch, 2003), it is important to be more precise about the sources of lock-in (cf. Vanloqueren and Baret, 2009) and the types of knowledge being mobilized in this transition. A clarification of techniques and knowledge can help to ‘peel the layers’ of contemporary agri-food system transitions. In so doing we can identify actors, techniques and knowledge that are important for directing this transition towards sustainable agriculture from a market regulation point of view. We use the case of the Assurance Code developed by the ISEAL Alliance (the global association for social and environmental standards)

to illustrate how this organization, which is an organization comprised of the leading social and environmental standards development organizations (SDOs), is framing the knowledge and infrastructure needed to govern the transition toward a regime of ‘certified sustainability’. We draw upon participatory observation in the Assurance Code technical and steering committees between 2010 and 2012. Since ISEAL conducted their internal meetings according to the Chatham House Rule,¹ we do not use direct quotations from these observations but rather quotations from interviews (nine) conducted outside of the meetings and publicly available documents (for example, meeting minutes, public consultations, and community news).

Chapter 4 proceeds as follows. First, we present our conceptual framework that discusses socio-technical transitions and introduces the role of standards as a means of governing a transition. Following Borrás and Edler (2014), we focus on the opportunity structures and capable agents that are part of this transition and show how we intend to explore how changes towards sustainability might be governed by standardization processes. Second, we tie these questions to the analytical technique that we use in this paper to explore this potential role of standards. We do this by exploring the ways in which knowledge is framed in the construction of instruments of governance. Third, we present our empirical data and analyse the negotiations that took place during the writing of ISEAL’s Assurance Code, which is a meta-standard for SDOs. We shed light on the relationship between credibility and legitimacy, the embodiment of skills in auditors, and the attempts to establish sampling protocols in order to tame risk. Fourth, we reflect upon what this meta-standard means for governing the transition to sustainability. We conclude by relating this case study to questions about the governance of change in socio-technical and innovation systems, which is the purpose of this volume.

4.2 CERTIFIED SUSTAINABILITY: OPPORTUNITY STRUCTURES AND CAPABLE AGENTS

The multi-level perspectives (MLP) approach to technological innovation (Geels, 2010; Geels et al., 2008; Rip and Kemp, 1998; Geels, 2002) theorizes that it is the way niches, regimes and landscape processes interact that determines a specific transition among various pathways. This framework is helpful for conceptualizing shifts in socio-technical paradigms over long periods of time, particularly when one can examine data retrospectively, like the shift from sailing to steam ships (Geels,

2002). However, we find ourselves within the midst of a transition to sustainability where there are increasing pressures at a landscape level to change practices, and there is significant mobilization from the bottom-up to propose alternative means to govern and practice this transition (Grin, 2006; Elzen et al., 2012). This overwhelming uncertainty about what to do and how to do it suggests that we need a more nuanced understanding of how transitioning can be done so that we don't lose track of the value that sustainability is intended to bring. Grin et al. (2010) highlight two levels of analysis that are important for understanding transitions to sustainability: the relationship between market, state and civil society, and value systems that prioritize sustainability.

In the move from socially responsible consumption practices and claims (Antil, 1984) towards what we are calling 'certified sustainability', sustainability standards are one result of shifts in the relationships between market, state and civil society actors as they collaborate in multi-stakeholder initiatives and transnational alliances. Scholars have noted the increased use of accountability politics (Florini, 2000) where NGOs have focused their attention toward the corporate sector and international organizations, rather than the state, as both the source and the resolution of their concerns (Armstrong and Bernstein, 2008; Schurman, 2004). Accompanied by a significant withdrawal of the state in regulatory activities, it is clear that both civic activism and corporate strategy have contributed to the construction of governance structures by non-state actors (Cashore, 2002; Guay et al., 2004).

This reconfiguration of relationships between social actors opened opportunities for the emergence of agri-food niches that value sustainability differently than that of the dominant agricultural paradigm (Beus and Dunlap, 1990; Van Der Ploeg, 2010; Lyson and Welsh, 1993). Indeed, the ability to construct alternative ways to value agriculture is fundamental to current trends in agri-food activism (Wright and Midden-dorf, 2008), to the emergence of systems of private regulation in the agri-food system (Bartley, 2007), and to the ways of managing the local collective risks of agro-chemical based agriculture (Barbier, 2008). Specific tactics used by agri-food movements 'within and against the market' attempt to turn activists into 'citizen consumers' (Lockie, 2009). These include the rise of the fair trade movement and other social and environmental standards schemes (Raynolds et al., 2007), which provide the means by which 'citizen consumers' can consume the values of fair trade, social justice, organic and environmentalism, presumably produced by citizen producers (for example, Guthman, 2002; Evans, 2011).

In other words, what we describe above is a silent shift from the tactics of moral practices and discursive repertoires traditionally found in civic

activism (Tarrow, 2005), to hybrid fora (Callon and Rip, 1991) composed of civic actors who set the goals of activism, the values they want to promote and the ways to measure those values through the development of standards systems. These systems have implications for socially responsible investing (Guay et al., 2004) and organizational buying and accounting. Therefore, 'certified sustainability' might be characterized as a socio-technical regime that spans nations and sectors where civic activism is mixed with corporate strategies not only to identify the problems of sustainability, but also to propose the solution. Finally, certified sustainability describes a component of an emergent socio-technical regime where producers produce sustainability and consumers consume sustainability, both in parallel and in cooperation with the agro-industrial food provisioning system via large oligopolistic food retailers.

4.3 TRANSITIONING AS PERFORMANCE: INSTRUMENTS AND GOVERNANCE MECHANISMS

Fundamental to the transition towards this new regime is the social and organizational technology of standards, whose role in governing this transition is not explained by social movement theories alone. Transition management has emerged as an approach that attempts to resolve questions related to the governance of large-scale societal transformations (for example, Smith et al., 2005; Schot and Geels, 2008). This body of literature examines and reflects upon strategies by actors to understand how and why certain pathways are forged and become dominant. Yet transition management has also been criticized for glossing over politics, controversy and the practicalities of everyday practices that are necessarily part of the practice of managing transitions (Shove and Walker, 2007). The recent work on sustainability transitions note these shortcomings and propose that new research is conducted that can bridge these gaps (Grin et al., 2010). We argue that in order to understand both the management of pathways and the politics involved, we must recognize that these activities, like other forms of governance, are performative (cf. MacKenzie et al., 2007; Busch, 2007; Law, 2008; Loconto, 2010). That is, these activities must be put into action and what happens when they are enacted makes changes to the activities themselves. Therefore, to effectively perform the transition, actors must control the way that types of knowledge and corresponding activities are framed, and learn from it.

This is where standardizing projects come into play as a setting for performing standards.

Standards are values, rules, norms and conventions for action, but they also assemble the script of this moral dimension into a network of material objects (Akrich, 1992) such as checklists, testing samples and labels (cf. Loconto and Busch, 2010; Grewal, 2008). They are the measures against which performances are judged, the organizing infrastructures that determine which performances are possible, and the devices that standardize those practices (Busch, 2011). Standards are created by dedicated organizations or by less formal collectives and are defined by how they are enacted, tested and verified within and outside of these collectives. As such, they are socio-technical devices that entangle a variety of actors into networks so to reproduce standardized meanings and practices over time (Rip, 2010; Callon et al., 2002). Indeed, it is through the compounding effects of entanglement where scholars have found a role for standards by creating path-dependency for innovations (for example, Allen and Sriram, 2000; Egyedi and Spirco, 2011). This occurs as the standardization of practices is reenacted by multiple actors over time, thus reinforcing the meaning of the standard and governing its future enactments. Put simply, standards are enacted and performative but also purposefully transformative.

Standards therefore provide a means through which actors can control the transition towards sustainability (Hatanaka et al., 2012). They do this through a regime of governance comprising: (1) actors who set standards; (2) those who certify and (3) those who verify their compliance, and attest to (accredit) the capacity of the certifier to verify compliance (Loconto and Busch, 2010; Hatanaka et al., 2012). These three core competencies have been described as a ‘tripartite standards regime’ (TSR) of governance and their construction constitutes a techno-economic network, or infrastructure, for the exchange of goods and services in a market economy (cf. Callon, 1991). The TSR describes a complex and dynamic system of market-based oversight, which relies upon the tools of standards and audit, and is believed to ensure the objectivity, honesty and credibility of actors at all levels (Loconto and Busch, 2010; Power, 1997). The increased importance of the TSR in society is referred to elsewhere as the phenomenon of ‘governing by standards’ (Loconto and Fouilleux, 2014; Ponte et al., 2011; Thévenot, 2009). ‘Governing by standards’ refers to the use of standards to regulate agri-food systems and by so doing creates a specific interpretation of sustainability in agribusiness. As a result, we have a decent understanding of how standards are used. What we still don’t know is why some

techniques are promoted over others and what this means for the shape and direction of the transition.

We propose that by focusing on how matters of concern are framed in the development of standards, we can see the politics and practicalities of transitioning to sustainability and in the end describe the regime of knowledge that justifies ‘certified sustainability’. Our analytical framework draws upon Callon’s (1998) notion of framing, as opposed to other approaches (cf. Benford and Snow, 2000; Gamsom and Modigliani, 1989), because it focuses on how the framing of a controversial situation is an attempt by actors involved in the negotiations to make the problem calculable by limiting the number overflows (that is, what the frame fails to explain). This process of making things calculable is often contested as it entails changing them through the process of measurement (cf. Crease, 2011) and thus becomes political, i.e., making things calculable makes things political using measurement techniques and figures. This approach takes the materiality and the calculability of the situation into account and allows us to focus on the knowledge regimes that are being drawn upon in the framing process. We use Callon’s (1998) interpretation of ‘hot’ and ‘cold’ negotiations in the framing process. Hot negotiations are destabilized situations where there is no clear normative and factual basis established and all aspects of the matter of concern are open for debate. Here, the facts and the values that inform decision-making are indistinguishable. Cold negotiations are more stabilized debates where the facts are clearer and the values are kept separate. The frames are made explicit and actors can easily calculate a solution to the matter of concern.

4.4 MODELS OF ASSURANCE – THE CASE OF THE ISEAL ALLIANCE

The ISEAL Alliance is a membership-based organization officially registered as a non-profit organization in the UK in 2002, but created by four SDOs in the late 1990s. The founding SDOs were the Forest Stewardship Council (FSC), the International Forum of Organic Agriculture Movements (IFOAM), Fairtrade International (FLO) and the Marine Stewardship Council (MSC). As of 2013, there were thirteen full members, six associate members, and forty-six subscribers. The purpose of ISEAL is to increase communication and collaboration among SDOs and to increase the influence of sustainability standards in society (ISEAL, 2013). The ISEAL Alliance is considered to be an important, and legitimate, actor in sustainability politics (Bernstein, 2011; Dingwerth and Pattberg, 2009).

ISEAL acts as an institutional entrepreneur who institutionalizes meta-standards for sustainability and develops internal and external legitimation strategies that establish ISEAL as the key regulator for 'certified sustainability' (Loconto and Fouilleux, 2014). These meta-standards are called 'credibility tools' and consist of codes of good practice for standards-setting, assessing impacts and providing assurance. They contribute to framing the political and moral dimensions of what has to be inscribed in the standard. Taken together, they 'provide end users and other interested parties with confidence in the effectiveness of the standards system as a whole'. (ISEAL, 2012c, p. 3)

The Assurance Code, launched in 2012, is fundamental to the transition to sustainability as it formally establishes the necessity of setting up a TSR by each of its members. The purpose of the Assurance Code is to 'encourage conformity by clients and instil public confidence in the results of assurance, thereby increasing the use of the standard'. (ISEAL, 2012c, p. 3) Specifically, the Assurance Code sets the limits of how certification and accreditation should be conducted for sustainability standards and furthermore defines how these activities are linked to the other ISEAL codes. The 'essential values that encourage conformity and instil trust in an assurance system' (p. 7) are: consistency, rigour, competency, impartiality, transparency and accessibility. These values also provide the intent behind the requirements and are used to determine if a conformity assessment system is credible.

Given the importance of how this standard governs other standards, we focus on three core negotiations that took place during the standard-setting process. These are credibility, auditor competency and sampling. In our discussion we explore how each concept was stabilized based on specific ways of knowing.

4.4.1 Auditor Competence: A Cold Negotiation

The first negotiation revolved around framing auditor competence. This is characterized as a cold negotiation since ISEAL members identified auditor competence as the most important aspect of assurance that could be addressed in part by new requirements or guidance before starting the standard setting process (ISEAL, 2011a). Moreover, within the debates the facts (auditor incompetency renders non-credible audits) and values (good auditors embody the values of the standard) were quickly identified, agreed upon and calculated.

Providing proof by identifying who is responsible for overflows and who is affected by them is important for making them calculable. For example, auditor competence was explained as follows: 'Auditing is

always an issue. We train two auditors; one is good and one isn't – why?' (ISEAL, 2011b) There was debate within the technical and steering committees on this topic, and the responsibility for ensuring that auditors are competent was shifted from certification bodies to SDOs to the auditors themselves in a rather continuous cycle. The certification bodies are responsible for hiring those auditors who have the proper qualifications. Auditors have the responsibility of not only obtaining proper qualifications, but of having the right personality traits and being able to use their auditing expertise to evaluate the situation at hand. ISEAL members promote the use of the ISO 17024 standard, which has an extensive list of ideal auditor traits and characteristics. Moreover, the SDOs are responsible for ensuring that both the certification bodies and the auditors are trained on the particularities of their standards and understand the intent of the standard. This last issue was an interesting point of debate as the first public draft of the Assurance Code had the following training requirement: 'Scheme-owners shall ensure that auditors are trained according to the requirements of their positions. NOTE – Extra effort should be expended to ensure auditors are trained to audit to the intent of the scheme.' (ISEAL 2011c, p. 18)

This requirement recommends that auditors should audit to the intent of the standard, rather than the criteria of the standard. This requires an auditor to have a specific type of knowledge about the standards system that cannot be learned by studying the standard. It is an embodied, subjective knowledge gained only through experience. Only three out of the 815 comments received during the first public consultation addressed this point and only one of them questioned the (desire) ability of auditing to the intent of the standard. The debate during the technical committee meeting in January 2012 proceeded as follows:

The only thing that the auditor can do is audit to the criteria in the standard, they cannot audit on intent.

The reason for having this was based on the idea that the standards are not well written and it is not clear what is needed. The auditors have the same interpretation of the content – that is what is important. The criterion says one thing, but the auditor needs to be able to understand it.

If there is that much confusion about what the standards say then this is being in non-compliance with the ISEAL standards-setting code!

This clause, this set of conditions being applied and this intent of the scheme – and you need to have common interpretations in order to be able to audit effectively.

Intent and interpretation are two different things – you are going one step higher, up one level higher. Interpretation is not a problem, but there will always be a level of interpretation (they are trying for less, but it will always be there).

Most of this goes back to the standards code. We can say – you must provide good guidance – this is in the standards code.

What we are saying specifically here is that we want auditors to understand the intent (training on the intent) not to audit according to the intent.

The intent here was to try to address the criticisms that audits had turned into check-box exercise.

...

Who is measuring the intent? The scheme owner is supposed to assess the impact according to the impacts code. All three are supposed to be linked together more.

...

Oversight section should be linked to the impacts code and standards setting code – creating feedback loops.

This framing negotiation illustrates that in this case, the overflows are easily identified and the frame is quickly drawn by agreement on a specific type of experiential knowledge that auditors should have ‘embodied’. Auditors should be trained, they should have tangible and tacit knowledge of the areas that they work in, and they should embody the ethical concerns of the SDO. The calculation of auditor competency became an exercise in defining a good auditor, with a focus on the framing of skills and human conduct. The transfer of knowledge from an objective form to a subjective form allows closer ties to be made between the components of the TSR infrastructure. For example, if an auditor needs to interpret the intent of the standard because they don’t understand it, then the standard should be made more comprehensible. In this way ISEAL reflexively reinforces the linkages between the three components of a TSR (standard-setting, certification and accreditation). This reinforces the network by creating feedback loops and encouraging reflexivity about the way that the standards and actors should work together to create a seamless web of governance. It is this type of reinforced responsibilities that illustrates how knowledge and governance are woven together to aid a socio-technical transition.

4.4.2 Sampling: A Hot Negotiation

Sampling in social and environmental audits inspired hot negotiations during the framing process because the compromise that the standard setters reached did not stabilize the facts or values at stake. Specifically, they did not agree that auditing only a sample of producers rather than the entire population was a good practice for social and environmental standards (*the values*), nor did they agree on how to select the sample (*the facts*).

ISEAL members propose introducing sampling techniques in order to reduce the certification costs, which is a constant complaint of producers. One way to do this is to audit a selected sample of farmers at different intervals of time, rather than every single farmer, every year as is currently the practice. ISEAL members have also requested guidance on or harmonization of sampling techniques, as there is currently no standard in the sector. The most commonly used formula for sampling in group certification is a derivation of the square root formula,² originally developed by the United States Department of Agriculture (USDA) to sample individual products from large lots in order to identify defects. While some members are perfectly content to continue using this formula, others have been pushing in two directions for more rigorous methods. One direction is towards statistical sampling, while the other is towards judgmental sampling.

These two sampling techniques are important to ISEAL's framing activities because they each seek to contain specific overflows in order to lock-in the type of knowledge that they seek to produce. As noted above, the current culture of auditing relies on many forms of non-probability sampling techniques – mostly exercises in stratification that rely upon the competency of auditors to efficiently judge the context that they are auditing. In the background report commissioned by ISEAL, judgmental sampling was declared to be an appropriate method for the following types of auditing activities:

- Investigating specific areas of concern – for example focusing on a limited number of standard clauses rather than all standard clauses.
- Sampling within an audit where the process has been validated, and the client is low risk so a decision on whether a full audit is needed or not can be made.
- Reviewing activities of particular interest or concern to determine whether more extensive testing is needed. For example a short unannounced audit of limited scope to see if the client conforms to requirements – and if not a full audit to be held.

- Closing non conformities during a verification audit. (Taruna Group Limited and R. Bradley, 2011, p. 40)

However, discussions showed that there is more of an appreciation for judgmental sampling as the main tool for calculation in social and environmental audits. This was justified based on the complexities (often geographical, cultural, political and economic) that require local knowledge of the situation. Therefore, the argument put forward by this group was that: ‘we should not try to integrate the academic statistical sampling approach – the square root method was helpful, it built a base-line, [we should be] careful about seeking perfection.’ (ISEAL, 2011d, p. 4) This argument painted statistical sampling within the light of an academic exercise that works only in statisticians’ models and theories. This is very much an isomorphism of what is at stake in evidence-based policy and in the development of regulatory science for safety agencies (Demortain, 2008).

Despite this recognition, based on committee members’ own experiences with audits, a very clear desire for the statistical credibility that is part of probability sampling was mentioned often. This stems from their lack of confidence in the credibility of the square-root method to produce representative samples. A famous critique of the square root formula was quoted in the ISEAL background report:

Determination of sample size as the square root of the lot size may create a sense of false security. Lot size alone is shown to provide an incomplete basis for determining sample size, whether by ‘square root’ sampling or percentage sampling. Sampling plans based on quantitative statements of the risks involved are recommended. (Keith Borland, 1950, p. 373)

This critique is part of further discussions of risk-based sampling and the way in which discourses of risk and risk assessment have also been brought into the frame.

Analysis of the presence of risk-based sampling currently coded into member standards showed that the more ‘sophisticated’ standards provide different options for sampling based on different situations that the CB will encounter: Individual vs. Group vs. Supply Chain. There are different types of operations within groups and different risks for different entities. Moreover, most of the risk analysis that is being conducted is really centred around trying to figure out who and/or what should be checked – rather than other risks posed by compliance with standards (for example, environmental risks, social risks, business risks).

This experience with risk-based sampling was originally only part of the need for consistent guidance on sampling, but during the committee

meetings this morphed into using risk management as an organizing framework for the entire standard. In this scenario the standard would be a decision matrix that could help members to determine which model of assurance was fit for their purpose. However, risk was then demoted again solely to the requirement that members conduct a risk assessment of their assurance system (ISEAL, 2011c). This dynamic reflects a degree of uncertainty where the tools of risk assessment are concerned (for example, HACCP or ISO 31000, 31010)³, based both on the nature of the problem and the existing knowledge of the same. While most in the room felt comfortable using risk to assess who should be audited, they did not feel comfortable using risk to assess the credibility or appropriateness of the governance models they constructed. This reflects the ‘heat’ of these negotiations as certain aspects of risk and sampling are considered settled and need only consistency and guidance, while others challenge the basic certainty of the facts and values. For example, many ISEAL members have invested heavily in consumer-facing labels, which claim that all farmers in their system have been confirmed to be in compliance with the standards and their values. In these circumstances, sampling techniques should not be debated because their existence in the system would defy the claims that are being made.

In the end, the Code recommended that each member develop a transparent sampling plan. Little guidance specific to social and environmental standards is included in the standard; rather the technical terminology was adapted from an accounting standard for audit sampling.⁴ This also means that a judgment on consistency was not provided. By leaving the frame open ISEAL accommodated both expert (statistical) and experiential (judgmental) knowledge. However, this was very much a political compromise, taken in the interest of furthering their efforts to establish an interdependent system of certification, accreditation and standards setting and evaluation.

4.4.3 Credibility: A Hot Negotiation

The final framing process that we examine links the politics of expert and experiential knowledge that were hinted at above. It is through the framing of credibility that we see the governance implications of establishing a TSR for social and environmental standards systems.

ISEAL members, the secretariat and other interested stakeholders are keen to frame ‘credibility’. Their notion of credibility refers to the credibility of social and environmental standards as a means to deliver a more sustainable future. This vision of credibility also includes the credibility of the systems that SDOs put into place to ensure that the

standards are credible. ISEAL (2010) claims that ‘standards systems that are effective and accessible can bring about globally significant social, environmental, and economic impacts’ (p. 1). ISEAL has thus proposed, for debate and public consultation, *Credibility Principles* that constitute the foundation of standards systems that are credible (ISEAL, 2010). Thirteen principles were defined and the following principles were identified as underlying the Assurance Code: Transparency, Multi-stakeholder, Impartiality and Independence of Verification, Consistency of Verification Results, Accessibility, Complaints and Appeals and Interoperability. These principles were the starting points for the development of the Assurance Code, but initial surveys and dialogue at the ISEAL meetings established specific matters of concern about conformity assessment⁵ that needed to be framed in light of credibility: (1) specificity of social and environmental standards and (2) balancing accessibility and growth of members’ systems (ISEAL, 2012d).

The first concern is the inadequacy of traditional auditing approaches and third-party certification systems for the reality of social and environmental standards. The main point of agreement among all ISEAL members is that the ‘traditional’ auditing practices developed in the financial sector and represented by the ‘credible’ International Organization for Standardization (ISO) standards 17065, 17067, 17011, 17021, and 17024⁶ are not sufficient for building credibility in ‘certified sustainability’. ISEAL argues that these practices consist mostly of following document trails and are not only inadequate to achieve credibility in standards practices, but they are also inappropriate for capturing the values of social justice and environmental conservation. The second concern is that, as ISEAL and its members push forward their goal of mainstreaming standards throughout the agri-food system, there is a need to balance their desire for creating standards that are accessible to all and standards that are rigorous enough to maintain legitimacy in the market. According to ISEAL, the solution to these problems is found in the adequate framing of credible assurance.

ISEAL identified challenges that their members faced with the ISO approach as related to the sector-based auditor skills (for example interviewing techniques) or unique practices (for example group certification) and the insufficiency of the ISO definitions of effectiveness in terms of impartiality and replicability (Mallet, 2009). In other words, ISEAL had been relying heavily on the ISO standards and the calculations that they allow for the practice of their members’ standards, but ISEAL considered its own systems to be unique and wanted to make special concessions for the local contexts where their members’ standards are used. ISEAL argued that these specific circumstances, such as

working with thousands of smallholders (many of whom are illiterate) and working in geographically dispersed and remote areas, meant that their certifiers and accreditors needed to develop separate protocols to deal with the many non-conformities to the ISO system. For example, Derkx (2011) noted that ISEAL's accreditation members performed poorly when subjected to ISO-based accreditation audits. ISEAL argued that this was not because of incompetence, but because of the realities of where these organizations work.

This is illustrative of the reality that entangled into the ISO network are not only the standards, but also certification and accreditation bodies, checklists, calibration of auditors, formulae, sampling techniques and other intermediary objects, which have been building a consistent enactment of the ISO network over time and through space. ISEAL's members are not fully integrated into this network and in fact set out to develop their own network specific to social and environmental standards. They use ISO compliance as a means for learning as much as possible. Thus, the two questions posed throughout the technical committee meeting in January 2012 (namely 'why is this issue specific for social and environmental standards?' and 'has it been done better somewhere else?') permitted the Assurance Code committees to begin a framing process that allowed credibility to become calculable.

The proposition of 'redefining a credible guarantee' (Mallet, 2009, p. 7) was taken up within the Assurance Code. This is based on the notion that a standard should be 'fit for purpose', which is based on expertise developed in quality management where the term refers to meeting the customer's requirements, needs or desires (Harvey and Green, 1993) and is based on Juran's (1951) original and rather classical notion of 'fit for use' in product development and quality management. In this sense, ISEAL is trying to understand what level of guarantee is required to be credible for each audience when there are different end uses of social and environmental standards (for example, self-assessment, peer evaluation – participatory guarantee systems, supply chain audits, NGO/Trade Union audits, certification, accreditation) (Mallet, 2009). The question that inspired hot debates in the meetings was 'what assurance models or combinations achieve that guarantee?'

The Assurance Code proposed four models of assurance based on the use of first, second and third party assurance. The third party assurance model refers to an ISO 17065 or 17022 compliant model, while the second model is a combination of second and third party assurance. The third model is a combination of first and third party and the fourth model a combination of first and second. A model based solely on first party assurance was not included because 'they are not deemed to offer

sufficient credibility' (ISEAL, 2011c, p. 29), thus arriving at agreement on at least one fact. However, these models received a reasonable number of comments (41 out of 815) during the public consultation period. Some of these comments questioned the desirability of ISEAL to make this value judgment; others questioned the validity of all the different types of models, and numerous comments pushed ISEAL to judge the value of credibility that each model can provide. For example:

If ISEAL is making it explicit that different approaches can legitimately provide different levels of assurance, then this should be spelled out (as above) and justified. I agree it is true, and it's a good insight. If people's lives depend on something, you would rightly demand a high level of assurance about it, even if it's quite expensive and excludes some groups from entering the market...it also implies that systems using lower levels of assurance should be up front that this is what they are doing. Also that ISEAL should be prepared to say that certain types (which ones?) of assurance systems can indeed provide a higher 'level' of assurance. (ISEAL, 2012a, p. 30)

The state of the debate was summarized as follows in the January Assurance Code Newsletter:

Our objective for the Assurance Code is to encourage innovation whilst ensuring the credibility of those who comply with the Code. Clearly a line needs to be drawn that excludes unacceptable (not credible) practices but where that line should be drawn remains elusive. If we enshrine traditional practice we risk stifling innovation, but if we leave the door open for innovation we risk authorising assurance systems that are not credible. (ISEAL, 2012b)

We see that this negotiation remains hot and in a state of uncertainty. ISEAL members question the framing process of certified sustainability. They fear that such standardization will potentially close down diversity and innovation, as the ISO model has through the widespread adoption of third-party certification. They also fear that if they do not take a stand on limiting the diversity, their own legitimacy as an organization that defines credibility in standards is at risk.

Therefore, the final code contains the four models of assurance, which are labelled A through D so to avoid ranking them. In the online community, ISEAL members still debate these four models and question whether or not some of these models (particularly C and D) should be considered credible. The problem remains unresolved for ISEAL, in that they consistently look to the ISO 17065 system of conformity assessment (which requires third-party certification) as the gold standard of credibility for certification schemes, but are struggling within their network to

frame credibility in such a way that they can legitimately stand on their own without relying upon ISO's claim to credibility.

These debates raise interesting questions about the governance of socio-technical systems. Legitimacy is typically a concern of politics and actors who seek to govern, yet ISEAL debates credibility and not legitimacy. In the scientific tradition, credibility ought to be a goal with a non-calculable ethical purpose, yet ISEAL tries to frame this and make it calculably ethical. In other words, ISEAL is caught in a double-bind. It hopes to be creative with their own compliance systems by accommodating the many difficulties and sometimes paradoxical aspects of consolidating certified sustainability, but ISEAL and its members are simultaneously concerned about the legitimacy or credibility of these actions by those who are not part of the system. As a result, the rationalization process of certified sustainability contains, rather explicitly, a framework of mistrust; since the calculability of credibility acknowledges – even through statistical evidence-based methods – the existence of non-appropriate actors, auditors or even members. This suggests the importance of how knowledge is used to govern socio-technical systems. We suggest that expert knowledge and its vocabulary are used by standard setters for political ends, despite their desire to promote values that are better achieved through experiential or subjective knowledge.

4.5 GOVERNING GOVERNANCE

In the previous sections we presented and analysed three framing exercises during the construction of the ISEAL Alliance Assurance Code. We found that the framing of the knowledge needed for certified sustainability opens up new issues like the relationship between credibility and legitimacy, the embodiment of skills in auditors or the call for evidence-based systems in order to tame risk. In this section, we reflect upon what this means for governing the transition to sustainability.

First, a large part of the actions that are involved in a transition to sustainability are not only attempts to expand the scope of certified sustainability, but also to prove that their approach is indeed credible and thus legitimate (Loconto and Fouilleux, 2014). Through our analysis, we see that ISEAL relies upon the framing of credibility as a way to differentiate between their interpretation of conventional tools (for example, ISO standards, risk assessment and sampling methods) and the interpretation of others. ISEAL is attempting to recreate the ISO system, which is a well-established TSR with very clear, independent roles for

certifiers, accreditors and standards-setters. However, ISEAL's version is intended to be innovative with multiple ways to achieve the intent, or values, of the standard. Through the framing of knowledge during technical debates, ISEAL puts forward a vision of conformity assessment that is based on the idea of appropriateness, 'fit for purpose' rather than an ideal type of credible guarantee. This illustrates ISEAL's pragmatic and strategic objectives of expanding their influence and the influence of their members' standards. By making values such as credibility, competency and risk calculable, ISEAL enables strategic thinking and management of its 'scaling up' activities. Indeed, this is what transitioning looks like. Socio-technical change is simply constructed through activities, at times pragmatic and at other times strategic, that continue a forward movement from a niche towards a new socio-technical regime.

Second, what this case shows is that the 'hot' situation of sustainability is being cooled through the framing of certified sustainability. This cooling is also opening up new issues like shifting a paradox outsourced from the mobilization of the ISO system to the embodiment of skills in auditors and the need for evidence-based risk management. In fact, while ISEAL is introducing a significant amount of flexibility into what can be considered credible based on a mix of expert and experiential knowledge, it is simultaneously reinforcing the core source of its knowledge, which is found in the ideas of total quality management. These ideas remain the core organizing concepts of ISO. Therefore, in practice, ISEAL is reinforcing the importance of ISO standards and the need for a global system of oversight that provides a consistent and transparent set of checks and balances. This is finally institutionalized within the social and environmental standards movement through the adoption of the Assurance Code.

Third, ISEAL members are beginning to raise the question of who accredits the accreditors, which is currently being completed to a certain extent by ISEAL's peer-review process among members. Yet, they seem to be looking for a more legitimate authority. In fact, ISEAL's Accreditation Body members have been petitioning, to no avail, to join the International Accreditation Forum. Thus, the need to rely upon ISEAL's peer-review process as the highest authority in their TSR means that reflexivity and continuous improvement are fundamental parts of their system. For example, the position of ISEAL is that no member should be able to be fully compliant with ISEAL standards from the start, but should strive to be reflexive and improve their practices so that within one year they can become compliant. Thus, gaining credibility also means a *governmentality* of conduct (Foucault, 1991). The technology of gaining credibility is becoming an ethic that empowers auditors and

enables managerial perspectives based on a technology of the self (Styhre, 2001), since being an auditor or becoming a member represents a reflexive effort to achieve compliance to the standard. This activity of raising the bar for themselves is something that ISEAL argues is fundamental to the credibility of their standards and their vision of sustainability.

Finally, given the above two discussions, we see two layers emerging in the transition to certified sustainability. The first is the practice of governing by standards, which has been documented to a large extent by a number of scholars studying sustainability standards (Bartley, 2007; Bernstein, 2011; Ponte et al., 2011; Hatanaka, 2010). The second layer is the *governmentalization* by standards of the organization itself, which entails the construction of a TSR, which remains an understudied topic. This case study clearly shows that the three interrelated activities of standards-setting, certification and accreditation are increasingly becoming the dominant means by which the practice of governing by standards is governed.

The framework proposed by Borrás and Edler (2014) is useful here to explore the relationship between types of governance, the roles of the capable agents, the instruments of change and the questions of legitimacy that we identified in our analysis. The on-going construction of a TSR finds its legacy in many forms of initial struggles, initiatives taking place in niches and in interactions between NGOs and institutions with the aim of promoting the moral values of sustainability. It has also grown within the current socio-technical system of product and quality management standards institutionalized through the ISO. In up-scaling, niche-focused movements towards broader systems change that connects farmers to consumers, capable agents of change like the ISEAL Alliance, have gone in the direction of more institutional centered governance. Our characterization of how this transitioning process from niche to regime is realized in practices and discourses showed that it is fundamentally a process of *performation* of both the valuation of sustainability and of governing by standards. This shift also means an exposure of their institutional position to the larger economic context of framing, retailing and distributing certified sustainability that is 'black-boxed' within commodities. As shown in this case study, a rationalization process is at stake that also carries a possible paradox in terms of the values that ground the sustainability movement in self-organization and engagements. Through the construction of a TSR, NGOs have gone deeper into the management of their own enrolments, showing reflexivity and learning processes that are fundamental to their ability to govern by standards. Yet this shift also has major consequences for the internal organizational consistency of

those agents of change and their abilities to uphold the legitimacy of their vision for socio-technical change.

In summary, by focusing on how practices and knowledge contribute towards a transition to certified sustainability, this example of framing within the practices of setting a standard for assurance has shown us that centres of calculation (that is, certification, accreditation and standards development bodies) for certified sustainability are being connected in such a way to facilitate governance at a distance (Latour, 1987). However, establishing such a centre does not occur without struggles (Loconto and Fouilleux, 2014), since the overt political strategies of ISEAL as an institutional entrepreneur are apparent in both the hot and the cold negotiations. This governing at a distance is important for a continued performance of governing by standards and, we would argue, to transitioning niche agricultural practices to a techno-economic regime of certified sustainability. This regime is characterized not so much by a consistent value of sustainability as by the constant practices of standardization, certification and accreditation. Thus the construction of a TSR becomes a tool that is used to implement the multi-layered idea of ‘governance of governing by standards at a distance’.

NOTES

1. ‘When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.’ <http://www.chathamhouse.org/about-us/chathamhouse-rule>, accessed 10 March 2013.
2. The sample size is usually derived by taking the square root of the entire population plus one and dividing it by two.
3. HACCP stands for Hazards and Critical Control Points, which is a food safety standard that requires users to identify these. ISO 31000 contains the principles and guidelines of risk assessment and ISO 31010 contains risk assessment techniques.
4. International Standard on Auditing 530.
5. Conformity assessment is the term used by practitioners to refer to the systems of audit, certification and accreditation.
6. These standards are part of a suite of standards developed by the Committee on Conformity Assessment. ISO 17065 contains requirements for bodies certifying products, processes and services. ISO 17067 contain the fundamentals of product certification. ISO 17011 has general requirements for accreditation bodies accrediting conformity assessment bodies. ISO 17021 is contains requirements for bodies providing audit and certification of management systems, and ISO 17024 specifies requirements for a body certifying persons against specific requirements, including the development and maintenance of a certification scheme for personnel.

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