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Sustainability Reporting in the Netherlands: A Case of Institutionalisation, Commensuration and Justification

by

Koen van Bommel

Thesis submitted for the degree of

Doctor of Philosophy

University of Warwick, Warwick Business School

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List of abbreviations

A4S: Accounting for Sustainability

CEFIC: European Chemical Industry Council

CFGS: Conflict-Free Gold Standard

CSR: Corporate Social Responsibility

DJSI: Dow Jones Sustainability Index

EMAS: Eco-Management and Audit Scheme

EMS: Environmental Management System

FSC: Forest Stewardship Council

GRI: Global Reporting Initiative

IIRC: International Integrated Reporting Council

KPI: Key Performance Indicator

MNC: Multinational Corporation

MSC: Marine Stewardship Council

NGO: Non-governmental Organisation

SEAR: Social and Environmental Accounting Research

SER: Sociaal-Economische Raad (Social and Economic Council)

SOW: Sociology of Worth

TBL: Triple Bottom Line

UNCED: United Nations Conference on Environment and Development

UNEP: United National Environment Programme

VBDO: Vereniging van Beleggers voor Duurzame Ontwikkeling (Dutch Association of Investors for Sustainable Development)

WBCSD: World Business Council for Sustainable Development

WBS: Warwick Business School

Acknowledgements

My interest in both organisation theory and sustainability started a long time ago. In my first period at Warwick Business School (WBS) I followed the MA Organisation Studies programme and became increasingly intrigued by the world of organisations. In the two subsequent years as a sustainability consultant at KPMG I was able to apply my knowledge in a practical setting and gain insight into the business and society interface. It was in this consultancy period that I became aware of the content, scale, sense and nonsense of sustainability reporting which eventually brought me back to Warwick for a second spell, this time as a doctoral student. This dissertation is the final outcome of my engagement with sustainability reporting and theories of organisation.

Although the usual disclaimer applies as all remaining mistakes are mine, I am indebted to a great many of people without whose help this dissertation would never have materialised. First, thanks to my numerous colleagues at Warwick. Both the frequent discussions as well as relaxing coffee breaks proved to be beneficial. I also would like to acknowledge the financial support received during my study. The Economic Social Research Council provided funding to cover my fees and Warwick Business School provided a WBS Scholarship and WBS Bursary that allowed me to cover my maintenance and eventually complete this work. The generous financial support of the CMS Bursary of (what was at that point) the Industrial Relations and Organisational Behaviour department at WBS provided funding to present my work at conferences and travel to the USA for a research visit to the department of Management and Organisations at Kellogg School Management, Northwestern University. I would like to thank all Kellogg faculty, staff and doctoral students for generously hosting me as a pre-doctoral fellow for a term in 2011 and for allowing me to participate in their doctoral seminars.

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Summary

In this dissertation I offer explanations for how sustainability reporting has developed from a peripheral practice into a more widely accepted and adopted one. I qualitatively analyse the history of sustainability reporting over the last 25 years by focusing on the Dutch sustainability reporting field. I draw on a combination of 94 semi-structured interviews and a collection of secondary data sources. Overall I question the organisation-centric, static, a-historical and instrumental accounts that explain sustainability reporting based on a business case, managing legitimacy or stakeholder expectations. Instead, I draw on, and contribute to, various literatures (most notably institutional entrepreneurship, the garbage can model, commensuration and sociology of worth) to explain the more dynamic and historical aspects of sustainability reporting as a complex practice developing in a pluralistic institutional environment.

First, I find that sustainability reporting's institutionalisation was a muddled process in which serendipity played an important role in enabling collective action of distributed actors. I contribute to the institutional entrepreneurship literature by questioning the role of the heroic individual institutional entrepreneur endowed with a great deal of strategic agency. Instead, I draw on insights from the garbage can model and nuance these assumptions by stipulating the enabling role of historical contingencies and the collective processes involved in enacting these.

Second, my study adds to our understanding of the dynamics of commensuration. I find that commensuration transformed sustainability reporting from a values-based to a value-based practice while it also changed from environmental to triple bottom line to integrated reporting. I chart various dimensions of commensuration and explain the process driving the development of these dimensions. In particular, shifts in the dominant dimensions of commensuration over time can be explained by emerging pathologies that drive the development of the succeeding phase. These pathologies emerge because of instances of means-ends disconnection, professional insulation and cultural contestation.

Third, I analyse integrated reporting and focus on the possibility of, and impediments to, reconciling its multiple logics of valuation, or orders of worth, in order to forge a legitimate compromise. I find that a successful compromise based on finding a common interest, avoiding clarification and maintaining ambiguity is problematic to attain as integrated reporting risks being captured by investors and accountants privileging a market/industrial worth at the expense of a civic/green worth. This leads to a local private arrangement rather than a durable legitimate compromise. This contributes to unpacking the process through which a complex new accounting practice in a pluralistic environment gains legitimacy.

In addition to these respective contributions, more generally I show how sustainability reporting is neither just a corporate smokescreen nor a panacea for corporate sustainability. It is a practice that is a consequence of its modern rational environment, yet at the same time constitutive of this very institutional environment as it helps to further elaborate and institutionalise sustainability (reporting) as an economy entity. Fully realising and acting upon the implications of this pivotal role of an accounting practice such as sustainability reporting may help policy makers and practitioners move towards a more sustainable world.

Declaration and Inclusion of Material from a Prior Thesis

I declare that this thesis is my own work and has not been submitted for a degree at another university.

Versions of Chapter Three have been presented at the 2013 EGOS Colloquium in Montreal and the 2013 Academy of Management Annual Meeting in Orlando. An abridged version has been included in the Best Paper Proceedings of the 2013 Academy of Management Annual Meeting Proceedings.

Versions of Chapter Four have been presented at the 2013 EGOS Colloquium in Montreal and submitted to the Accounting, Auditing and Accountability Journal (current status: revise & resubmit).

Chapter 1 - Introduction

Sustainability and sustainability reporting

Preoccupation with sustainability has become one of the emblematic features of current times. Broadly defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987: 8) the profusion of sustainability discourses and practices has been difficult to miss. Over the last decade we have witnessed the Nobel Peace Prize being awarded to Al Gore and the International Panel on Climate Change, an Oscar being won by a documentary on climate change, the emergence of hybrid and electric cars, sweatshop scandals and debates, the anticipation, participation and disillusionment around the Copenhagen Climate Conference and even the “neutral and objective” world of academia has become subject to sustainability controversy after allegations of manipulation of scientific research on climate change: the “climategate” scandal. In addition, carbon taxes and cap-and-trade schemes are fiercely debated, social responsible investment products and indices have popped up around the world, and markets for fair trade and organic food and goods have grown. Make a walk through your local supermarket or shopping mall and it will result in a bombardment of labels, logos and claims that declare a wide variety of products to be good for fish (MSC), forests (FSC), gold miners (CFGS) or more generally simply ecological, fair trade, organic or simply “pure and honest”, as a Dutch supermarket in the Netherlands has decided to label products to avoid label confusion and fatigue. This list is far from exhaustive but shows the wide range of spheres in which sustainability aspects can be observed today.

Coinciding with this interest in sustainability, and situated in an age of globalisation and neo-liberalisation, is the general trend of the rise of corporate influence and power and with that increasing scrutiny on corporate impact on the social, economic and ecological state of the planet (e.g. Korten, 2001; Palazzo & Scherer, 2006; Unerman, Bebbington, &

O'Dwyer, 2007). By now corporations comprise almost half of the 100 largest economic entities and the revenues of Shell, Walmart and ExxonMobil are on par with the GDP of countries such as Argentina, Austria, and Belgium (Keys, Malnight, & Stoklund, 2013). As a backlash against this increasing power and impact of corporations a general interest in corporate social responsibility (CSR) has emerged (e.g. Matten & Crane, 2005; Matten & Moon, 2008; Scherer & Palazzo, 2007; Visser, Matten, Pohl, & Tolhurst, 2010; Visser, 2011). One aspect of this corporate answer to sustainability has been demands for stronger and better accountability and transparency of firms (e.g. Gray, 2010; Korten, 1999). Arguably one of the most visible consequences of this has been the inclusion of ESG (environmental, social, governance) or sustainability information in corporate disclosure (Cooper & Owen, 2007; Gray, 1992, 2002; Mathews, 1997; Owen, 2008). Labelled sustainability reporting throughout this dissertation it can be defined as "reporting which covers the environmental and social aspects of an organisation's performance as well as the economic aspects" (Hubbard, 2009: 3). The latest G4 guidelines of the Global Reporting Initiative (GRI, 2013: 3), the de facto standard for reporting, describe its essence as follows:

> "Sustainability reporting helps organizations to set goals, measure performance, and manage change in order to make their operations more sustainable. A sustainability report conveys disclosures on an organization's impacts – be they positive or negative – on the environment, society and the economy. In doing so, sustainability reporting makes abstract issues tangible and concrete, thereby assisting in understanding and managing the effects of sustainability developments on the organization's activities and strategy".

A peripheral practice just over 15 years ago, by 2012 over 6000 firms, particularly larger ones, disclose a broad set of non-financial information in reports, according to the reports directory of CorporateRegister.com (2013). Of the largest 250 companies in the world 95%

published a sustainability report in 2011, compared to, for instance, only 35% in 1999 (KPMG, 2011a). Governments (e.g. Sweden, Denmark, France, UK) and stock exchanges (e.g. South Africa, Singapore, Malaysia) increasingly demand this type of disclosure and in 2013 the European Commission[1] adopted a proposal for a directive asking larger firms to disclose environmental and social information in their annual reports, thereby further solidifying the acceptance of this form of non-financial disclosure and its importance for the firm.

This brief overview shows that sustainability reporting aims to bring together multiple aspects (e.g. financial, social, environment) and concerns of various interested parties, making it overall a complex phenomenon. As this dissertation will show, it has taken root in a pluralistic political, social and cultural environment. Explaining the rise of reporting by focusing on the potential financial benefits has proved popular, but has had limited purchase thus far (e.g. Brown, Guidry, & Patten, 2010; Freedman & Jaggi, 1988; Murray, Sinclair, Power, & Gray, 2006; Richardson, Welker, & Hutchinson, 1999). The question thus arises how the development of sustainability reporting can be more persuasively explained? Put more generally, with this research project I aim to offer an explanation of how sustainability reporting has developed from a peripheral practice into a widely accepted and adopted one. Below I take stock of theoretical interpretations of sustainability reporting to date. I also explain how and why my research has been inspired by insights from the institutional literature and thereby put in context the three papers that form the core of this dissertation and briefly sketch their main contributions. I also explain why my analysis of the rise of sustainability reporting is not just insightful for empirical and practical reasons, but also contributes to our theoretical understanding of sustainability reporting and, moreover, organisation studies more broadly.

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[1]See http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0207:FIN:EN:PDF Accessed at 09-08-2013

Perspectives on sustainability reporting

Reasons for disclosing sustainability information have developed over time and have been diverse, as will be discussed in subsequent chapters. For instance, they range from broader ethical concerns to specific economic and reputational benefits and from complying with external pressure to a wish for innovation and employee motivation (see e.g. Bebbington, Higgins, & Frame, 2009; Buhr, 2007; KPMG, 2011a; Parker, 2005). On a more theoretical level, extant studies have offered various perspectives to explain the development of sustainability reporting, most notably legitimacy theory, stakeholder theory and, of most interest for this particular study, institutional theory.

Legitimacy theory and sustainability reporting

Legitimacy theory has been one of the dominant theoretical approaches in accounting for sustainability reporting (e.g. Aerts & Cormier, 2009; Cho & Patten, 2007; Deegan, Rankin, & Tobin, 2002; Deegan, 2002; Milne & Patten, 2002; O'Donovan, 2002; O'Dwyer, 2002; Patten, 2002). Sustainability reporting here is "...understood to be motivated by a desire to demonstrate corporate conformity with societal expectations" (Owen, 2008: 247). The aim is to gain legitimacy in the sense of "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995: 574). Legitimacy theorists argue that firms have a 'social contract' with the broader society and that they seek to achieve 'fit' between their value system and that of society (Deegan, 2002, 2007). When firms realise they need to gain, repair or maintain legitimacy they "typically rely upon targeted disclosures" (Deegan, 2007: 128) and purposeful manipulation of the strategic resource legitimacy (Deegan, 2002; Lindblom, 1994; Suchman, 1995), which is where it departs from more institutionally inspired analyses (Smith, Haniffa, & Fairbrass, 2011; Suchman, 1995). Reporting plays a strategic role here since "information is a major element that can be employed by the organisation to manage (or manipulate) the stakeholder in order to gain their support and approval" (Gray, Bebbington, & Adams, 1996: 45) and establish legitimacy or license to operate.

For instance, Cho and Patten (2007) suggest that firms with poor environmental performance or those operating in environmentally sensitive industries are more likely to disclose sustainability information as a legitimizing tool. Similarly, Deegan et al. (2002) found that in the wake of unfavourable media attention firms are more likely to disclose (positive) sustainability information for legitimating purposes. O'Dwyer (2002) in his study of voluntary corporate social disclosures in the Irish context also found evidence that this was purposefully done for legitimacy reasons. At the same time, however, he noticed scepticism among his interviewees towards reporting's actual value to indeed lead to legitimacy as it only heightens further societal demands. Oftentimes the firms researched continued disclosing sustainability information nonetheless, opening up space for alternative theoretical explanations. In general, most of these studies have been better at describing reasons for reporting than explaining the practice (O'Dwyer, 2002; Parker, 2005). Moreover, extant work finds it difficult to account for the influence of a plurality of demands and values present in society as well as the more dynamic and temporal aspects of sustainability reporting's development as it evolves as a result of the interactions between various parties (Deegan, 2007; Smith et al., 2011).

Stakeholder theory and sustainability reporting

A second, related, theoretical perspective has been stakeholder theory (e.g. Cooper & Owen, 2007; Deegan & Blomquist, 2006; Neu, Warsame, & Pedwell, 1998; Orij, 2010; Roberts, 1992). These studies build on Freeman's (1984) general work on stakeholder management and Ullmann's (1985) article on relating the stakeholder perspective to CSR and disclosure. Of principal importance here is that sustainability reporting is treated as either an ethical accountability instrument or an instrumental strategic management tool with which to respond to demands of a broad set of groups, organisations and other interested parties (i.e. stakeholders). Decisions concerning the 'what and how' of sustainability disclosure are argued to be made based on an assessment of the stakeholder demands that influence and/or are influenced by the firm, with typically reporting tailored at those stakeholders with particularly powerful or salient positions (Mitchell, Agle, & Wood, 1997). For example, Roberts (1992) found support for the role of stakeholders as a determinant of firm disclosure of social responsibility activities. He argued that the disclosure was positively related to the relative power of stakeholders, to sound economic performance and to a positive strategic inclination towards social responsibility. Similarly, Neu et al. (1998) found evidence in their study of 33 Canadian public companies over a 10-year period that when faced with multiple stakeholder demands firms were more likely to increase disclosure in response to powerful financial stakeholders and government regulators than to less powerful or important environmentalists. Van der Laan Smith et al. (2005) used in their comparative study between Norwegian/Danish and US companies a stakeholder framework to show how differences in the perceived importance of social issues and the acceptance of a larger role of stakeholders affected the extent and quality of corporate social disclosure.

Compared to legitimacy theory, stakeholder theory thus explicitly considers the multiplicity of demands on firms that form a determinant of disclosure and increase complexity. Both are critiqued, however, for being too concerned with business-interests and organisation-centric management of stakeholders (see e.g. Gray, Dey, Owen, Evans, & Zadek, 1997; Smith et al., 2011). More fundamentally, however, the organisation-centric position of both of these theoretical perspectives makes them susceptible to overstate the strategic agency of organizations (Smith et al., 2011). By presenting legitimacy as a resource to be manipulated they risk downplaying the structural influence of the institutional macro-context (Deegan, 2002; Parker, 2005). Most of these studies have furthermore relied on a "static and a-historical model" (Seo & Creed, 2002: 431), ill-equipped to explain the more dynamic aspects of the development of sustainability reporting, the mechanisms underpinning this trajectory and the inherent difficulties and complexities involved in the interactions between various stakeholders and firms (e.g. Owen, 2008; Smith et al., 2011). As a result, an account of the history of sustainability reporting and its gradual trajectory has been largely missing thus far (Parker, 2005). These more historical process dynamics, however, are important "to understand how consensus is built around the meaning of sustainability and how concepts or practices associated with sustainability are developed and diffused among organizations" (Jennings & Zandbergen, 1995: 1015). In order to better understand and explain how sustainability reporting as a phenomenon has progressed from a peripheral practice to one that has become increasingly commonplace, more sociologically inclined insights from organisation theory can be of help. Following Davis and Marquis (2005: 337), it can be particularly insightful to draw on institutional insights and use a more contextual portrayal of actors in an attempt "to use organizational mechanisms to explain social phenomena". This can aid an analysis of how settlements around new practices at the interface between business and society (e.g. sustainability reporting) emerge and develop. This makes it possible to go beyond the more voluntaristic and functionalist explanations to date and pay more attention to, for instance, the "historical and political determinants of whether and in what forms corporations take on social responsibilities" (Brammer, Jackson, & Matten, 2012: 3).

Institutional theory and sustainability reporting

As the institutional family lives in a rather big tent by now, a brief overview of some strands avoids conceptual confusion (for an extensive overview, see e.g. Scott, 2008). In short, within economics there exists a more rational and functional strand that focuses on the importance of institutions as coordination mechanisms for managing uncertainty and transaction costs (Williamson, 1975, 1985, 1995) and solving collective action problems (Moe, 1990). There also is an institutional branch in political science where the focus is more on how historically developed macro-level institutions influence political and economic decision making (Morgan, Campbell, Crouch, Pedersen, & Whitley, 2010; Steinmo & Thelen, 1992). Institutions here are often seen as formal organizations and governance systems, and the rules or conventions promulgated by formal organization, and how these tend to differ among countries due to path dependencies that cause a lock-in effect where decisions made and institutions build in the past are still influencing the possibilities of the future.

Of interest for this study, as well as in the limited number of extant studies on sustainability reporting (e.g. Bebbington et al., 2009; Brown, de Jong, & Lessidrenska, 2009; Etzion & Ferraro, 2010; Larrinaga-González, 2007), is the more sociological branch of organisational institutionalism. Before turning attention to institutionally inspired reporting studies I briefly sketch the main idea of this line of inquiry more generally. Institutional accounts emphasise the influence of broader social structures and thereby question accounts primarily based on rational actor models and instrumental rationality (Scott, 2008). Institutions are social constructions and as such discursively and subjectively created and reproduced shared patterns of meaning that stabilise over time and offer legitimate scripts for action (Berger & Luckmann, 1966; Jepperson, 1991; Meyer & Rowan, 1977; Scott, 2008; Zucker, 1977). For instance, by now a corporate focus on sustainability "has become a strongly institutionalized feature of the contemporary corporate landscape in advanced industrial economies. The idea that corporations should engage in some form of responsible behaviour has become a legitimate expectation" (Brammer et al., 2012: 10). Institutions are understood to "… consist of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behaviour. Institutions are transported by various carriers – culture, structures, and routines – and they operate at multiple levels of jurisdiction" (Scott, 1995: 33). A central tenet of institutional thinking is that legitimacy is gained by adaptation to a socially constructed external institutional environment rather than only tailoring actions, structures and practices to technical requirements (see e.g. Boxenbaum & Jonsson, 2008). It is at the broader field level that analysis typically takes place and where actors construct their "collective rationality" (Scott, 2008: 217). Fields are understood here as recognised areas of institutional life (DiMaggio & Powell, 1983) where "…. participants interact more frequently and fatefully with one another than with actors outside the field" (Scott, 1995: 6).

To be sure, sociological institutionalism comes in many shapes and colours as well. Old institutionalism with its more agentic focus on individual organizations, treated as a dependent variable, and interest in power, interests and conflicts (e.g. Selznick, 1949, 1957; Stinchcombe, 1968), is typically distinguished from new-institutionalism (e.g. DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Powell & DiMaggio, 1991). The latter has a more structural focus where the organization becomes the independent variable and conformity and homogeneity at the field level through isomorphic processes that lead to legitimacy take control. More recent institutional studies have to an extent tried to overcome this dichotomy between old and new and look at issues such as institutional change, coping with institutional logics and complexity and institutional entrepreneurship and work (Greenwood & Hinings, 1996; Greenwood, Oliver, Suddaby, & Sahlin, 2008; Hirsch & Lounsbury, 1997; Lounsbury, 1997). In effect, institutionalists increasingly assert that behaviour is both enabled and constrained by the taken-for-granted patterns of shared meaning and "rationalized myths" (Meyer & Rowan, 1977) that reach an almost inevitable rule-like status (Greenwood & Suddaby, 2006; Scott, 2008). That is, organizations on the one hand succumb to isomorphism and conform ceremonially and symbolically to institutional pressures to legitimate their actions. Yet, on the other hand it has become clear that human beings are not caught in a web of institutions without any sense of agency (DiMaggio, 1988; Lawrence & Suddaby, 2006; Oliver, 1991, 1992). Rather, they interact with their institutional environment and therefore can (re)construct this context and at the same time being embedded (Seo & Creed, 2002) or nested (Holm, 1995) in it.

These more structural and agentic institutional aspects also surface in work on sustainability reporting, although present studies on sustainability accounting and reporting have left the institutional perspective largely unexplored. Existing work has typically been exploratory (e.g. Adams & Larrinaga-Gonzalez, 2007; Larrinaga-González, 2007) and most notably focused on the Global Reporting Initiative (e.g. Brown, de Jong, & Lessidrenska, 2009; Brown, de Jong, & Levy, 2009; Etzion & Ferraro, 2010; Levy, Brown, & De Jong, 2010) rather than on sustainability reporting more broadly. One line of work has focused on the more structural aspects of institutional theory, in particular on the institutional pressures on organisations towards isomorphism as an explanation for the rise of sustainability reporting. For instance, Bebbington et al. (2009: 615) analysed the influence of cultural-cognitive, normative and coercive isomorphic pressures on how sustainability reporting was shaped in six New Zealand firms. They found that for firms pursuing a sustainability agenda "… a number of different institutions interact with various organizational conditions to shape SDR [sustainable development reporting] as an "appropriate" "normal" activity or "the right thing to do". Larrinaga-Gonzalez (2007) similarly argued that regulative, normative and cognitive institutional pressures lead to convergence of sustainability reporting among firms. Although the influence of the institutional context is made apparent, the researchers are less informative about exactly how reporting is shaped as "normal", a limitation that is further fuelled by their ahistorical focus on organisations rather than the field.

An alternative branch of institutional research on sustainability reporting has relied more on insights from the institutional entrepreneurship literature (e.g. Brown, de Jong, & Lessidrenska, 2009; Brown, de Jong, & Levy, 2009; Etzion & Ferraro, 2010; Levy et al., 2010). These studies focus on the work of strategic change agents rather than on isomorphic forces leading to conformity and stability. For instance, Brown et al. (2009) studied the institutionalisation of the guidelines of the Global Reporting Initiative (GRI) and showed how through a combination of discursive, material (resource-based) and charismatic (being part of history) tactics GRI managed to institutionalise. These results were largely echoed by Levy et al. (2010) and extended by emphasising field level power relations. Etzion and Ferraro (2010) looked at analogies as a mechanism guiding the institutionalization of sustainability reporting. They found that in the early stages of institutionalization GRI employed an analogy to financial reporting that fostered legitimacy primarily on normative grounds. In a second phase the analogy was employed by highlighting differences with financial reporting rather than similarities, thereby spurring innovation and entrepreneurship. Although these studies have shown how aspects of sustainability reporting have developed, they can be (familiarly) criticised for overplaying the strategic and rational intentions of the institutional entrepreneur at the expense of unintended consequences and the embeddedness of actors in their institutional context.

I have thus far taken stock of various streams of research on sustainability reporting, and zoomed in on the institutional perspective. Applying institutional insights to sustainability reporting research has been done only scarcely, whereas "... institutional theory's refutation of exclusively rational economic motives of organizational behaviour may serve as a useful bridge to less instrumentally reasoned and more socially justified bases for studying societal-level harm" (Greenwood, Oliver, Sahlin, et al. 2008: 25). It also permits going beyond explanations of sustainability reporting based on business cases and other more functionalist and instrumental accounts, instead allowing for a more historically sensitive and dynamic analysis of the phenomenon. Considering the discussed multifaceted nature of sustainability reporting, in particular recent advancements on pluralistic and complex institutional environments and the position of organisations, ideas, structures, practices within these may be insightful (e.g. Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Thornton, Ocasio, & Lounsbury, 2012).

The complexities of the institutionalisation of sustainability reporting

Not only is sustainability reporting multifaceted due to its moral or value-laden nature (e.g. combining profitability with being a good corporate and "doing the right thing") and its attempt to balance social, environmental and economic concerns of a range of constituencies. Two further aspects that make it a good example of a pluralistic practice in an institutionally complex environment are its embeddedness in a more general discourse of rationalisation and, not unrelatedly, potential confusion over or decoupling of the exact means and ends of reporting.

One of the most influential pressures in sustainability reporting's institutional environment has arguably been an ongoing emphasis on rationalisation (Miller & Power, 2013), which is understood here as "... the cultural accounting of society and its environments in terms of articulated, unified, integrated, universalized, and causally and logically structured schemes" (Meyer & Jepperson, 2000: 102). This tendency towards rationalisation has influenced organisations as they felt institutional pressures towards accountability, assessment, and transparency (Bromley & Powell, 2012). As a result of this general rationalisation in (at least Western) society, "… a wider range of organizations face multiple and competing institutional pressures to expand their formal structures in new ways … The operating environment for organizations becomes more *fragmented* as the numbers and types of uncoordinated actors on whom organizations depend for material resources and legitimacy increase" (Bromley & Powell, 2012: 488, emphasis added). Prior studies suggest that this fragmentation, i.e. the presence of multiple and oftentimes uncoordinated actors, of the institutional environment increases institutional complexity as multiple demands need to be considered to gain legitimacy (Greenwood et al., 2011; Pache & Santos, 2010).

A second aspect adding to sustainability reporting's complex nature follows from this rationalisation and the call for accountability, assessment and transparency. One of the consequences of these institutional pressures is that firms in their disclosures are "… expected to display an increasingly wide array of the proper characteristics of members of society, particularly in such spheres as the environment and equality that may be far removed from (or even contradictory to) the core goal of production" (Bromley & Powell, 2012: 485). Following the distinction made by Rose and Miller (1992) between programs and technologies, sustainability reporting becomes a technology (or *means*) towards a program (more aspirational *goal* or *end*). The problem is that the exact program or goal of sustainability is largely unclear, if not disputed (see e.g. Gray, 2006). The chapters below will make clear that some stakeholders claim that reporting serves to improve firm valuation. An alternative claim is that actually corporate accountability and transparency more broadly is what really matters. A third perspective holds that reporting is important because it functions as a stick for behavioural change towards a more sustainable world. For now it is important to note that "goals are expressions of the core system of values and references of organizational constituencies and are, as such, not easily challenged or negotiable" (Pache & Santos, 2010: 460). Not only can this lead to a decoupling of the means and ends of sustainability reporting (Bromley & Powell, 2012), also disagreements on goals are particularly challenging to resolve, adding to institutional complexity (Pache & Santos, 2010: 460). For instance, Purdy and Gray (2009) examined the development of state offices of dispute resolution in 32 US states. In this case one group argued that these offices should serve a democratic goal by including disputants in the decision process whereas others assigned a conflicting bureaucratic goal to the offices of handling more routine cases as efficiently as possible. The authors addressed the tensions arising from the presence of opposing institutional referents and the complexities it adds to institutionalisation.

Taken together, a picture emerges of a multifaceted practice that has developed in a pluralistic institutional environment resulting in increased complexity. Notwithstanding that, reporting has grown steadily and established itself firmly in the corporate landscape. I will return to the above more explicitly in the conclusion chapter of this dissertation, for now it mainly serves to contextualise the environment in which sustainability reporting has developed and will loosely run as a connecting theme throughout the three empirical chapters. I have thus situated this study more broadly in the institutional literature and its current emphasis on complexity and pluralism.

The three studies conducted for this particular dissertation can all be seen in this larger context and examine aspects of how such complexities are dealt with at the field level. One study focuses on the general historical trajectory of sustainability reporting's institutionalisation, a second on the important mechanism of commensuration underlying reporting's institutionalisation and coping with complexity and a third study zooms in on attempts to reconcile the inherent complexity of integrated reporting in forging a legitimate compromise. Whereas the first study is set quite explicitly as institutional, the second and third have with their respective focus on commensuration (an institutional mechanism) and orders of worth (an alternative to the popular institutional logics) a more implicit institutional flavour. All three studies go beyond rational actor explanations though. They all share an interest in the importance of context and external institutional influences and pay specific attention to the consequences for sustainability reporting of pluralism and complexity.

Contributions of empirical chapters

In the following chapters I will analyse this rise of sustainability reporting in more detail. I focus on the Dutch context, one of the early adopters and frontrunners regarding this practice. To be sure, each chapter can be read as an individual study with its specific research questions, theoretical framework, methodological concerns and contributions. To allow for additional detail, the studies are somewhat extended compared to the conventional journal format though[2].Whereas the studies discussed in Chapter Two, Three, and Four of this dissertation each have their specific 'heart and soul', what binds them loosely is in addition to their focus on sustainability reporting also an understanding and appreciation of the complex nature of sustainability reporting and its embeddedness in a pluralistic (institutional) environment that imposes multiple demands. In the fifth and final chapter of this dissertation I briefly summarise the three core chapters and also examine how they together can make us better understand sustainability reporting as an accounting practice that is a product of its environment and at the same time constitutive of it.

In Chapter Two, I speak to the institutional literature explicitly and provide an alternative interpretation of sustainability reporting's institutionalisation process. With sustainability reporting being a multifaceted practice linked to typically vague problems in a relatively emerging, uncertain and fragmented field, I draw on the lexicon of the garbage can model and its focus on decision making in organised anarchies. Rather than treating the institutionalisation as a fairly smooth and linear process driven by a heroic institutional entrepreneur, I stipulate its collective and distributed nature and the importance of

[2]To be sure, these chapters have all been single authored up to this point. At a later stage, however, some may appear in a revised format as co-authored articles in journals or books.

chancelike events and historical contingencies. My analysis thus highlights the overall messiness of sustainability reporting's institutionalisation. I depict the process as a collective form of institutional entrepreneurship where various actors are involved in the enactment of contingencies that open up spaces for action and eventually change as problems, solutions, and participants are momentarily matched. Overall, this chapter does not negate the role of human agency and purpose in processes of institutionalisation and change, but rather relaxes some of its assumptions and offers a lens that specifically makes room for the role of serendipity, timing, collectiveness and context and thereby adds a touch of realism and nuance to currently popular depictions of institutionalisation and change processes.

In Chapter Three I explore how commensuration as a specific mechanism has played a role in sustainability reporting's development. Although not framed explicitly as institutional (but see Espeland & Stevens, 1998; Stinchcombe, 2002), I show that the increasing commensuration of sustainability reporting exemplifies not only its rationalisation, but is also a way to manage the complexity and uncertainty around the practice. In particular I examine how a sequence of cognitive, technical and value dimensions of commensuration over time have constituted sustainability reporting's evolution from a values-based practice towards a value-based one. I further argue that the transition between these dimensions can be explained by emerging pathologies that are underpinned by instances of means-ends disconnection, professional insulation and cultural contestation. Taken together, the chapter improves our understanding of commensuration as a social process. At the same time the chapter shows that commensuration simplifies reporting and makes it more tangible and concrete which supports the development of sustainability reporting but simultaneously impoverishes the practice by advocating those values that can be made commensurate at the expense of other, yet not less important, aspects.

In Chapter Four I zoom in even more on the pluralism of sustainability reporting by focusing on the various rationalities around integrated reporting, the latest form of sustainability reporting that aims to combine and merge financial and sustainability reporting. Drawing on the sociology of worth perspective popularised by the French pragmatist school (e.g. Boltanski & Thévenot, 1999, 2006), I show the multiplicity of logics of valuation that exist around integrated reporting. Moreover, I analyse the possibility of, and impediments to, reconciling these multiple rationales in a legitimate compromise. I analyse three mechanisms required for a legitimate compromise, namely finding a common interest, avoiding clarification and maintaining ambiguity. I argue that integrated reporting is typically denounced for privileging the concerns of the market at the expense of seriously advancing social and environmental justice. This complicates reaching a durable and shared compromise on the meaning and purpose of integrated reporting and rather indicates the presence of a limited private arrangement.

Implications for sustainability reporting

Whereas the specific contributions of the respective papers included in this dissertation form the heart of the work's significance, more generally gaining insight into how sustainability reporting has developed over the last 25-odd years has theoretical, empirical and practical relevance as well.

First, with this research I add to our understanding of sustainability reporting as an accounting practice. Thus far, most studies have offered an undersocialised view of sustainability reporting, with a prevalence of considering instrumental technical demands rather than acknowledging the importance of cultural, normative, cognitive or regulative influences as well. Although the studies that are included in this dissertation resemble related lines of inquiry rather than an unitary conceptual paradigm (Powell & Bromley, forthcoming), they do all hint at the role of "historical struggles over prevailing understandings and rules of the game" (Brammer et al., 2012: 9). Moreover, a more historical and dynamic analysis of sustainability reporting shows the constitutive nature of this accounting practice in the sense that it helps to further rationalise business and society relations and ultimately aids to an environment in which "economization of organizational life becomes elaborated and institutionalized" (Miller & Power, 2013: 558). In addition, my studies hint at how sustainability reporting's rationalised and pluralistic institutional environment can give impetus to a decoupling of the means and ends of reporting, which of course has more practical concerns attached to it as well. Taken together, a more comprehensive picture of sustainability reporting emerges that highlights both its reactive functional elements and constitutive power.

Second, this dissertation makes an empirical contribution to the sustainability accounting and reporting literature as it provides a rich historical account of sustainability reporting. These studies have been surprisingly absent to date, as observed by various scholars commenting on the general lack of in particular more in-depth qualitative work in the sustainability reporting field (e.g. Gray, 2002; Owen, 2008; Parker, 2005). My study is a good example though of "direct researcher engagement in the field, via qualitative research and inductive theorising" (Parker, 2005: 856) that improves our understanding of how sustainability reporting came to be (e.g. possibly a less purposeful and more collective and random project than assumed), the driving forces behind its development (e.g. commensuration, its consequences and the actors involved) and also the challenges ahead in further developing the practice (e.g. integrated reporting and its impediments and potential). Overall, this account thus allows for a deeper and more dynamic understanding of sustainability reporting and how it has developed compared to theoretical literature based studies or accounts based on surveys and content analyses.

Finally, a better understanding of the rise of sustainability reporting presents a practical contribution too. Corporate sustainability initiatives such as reporting tend to attract a degree of criticism, even cynicism at times, when it comes to their sincerity and ultimate relevance. For instance, Boiral's (2007: 127) study on the corporate adoption of the ISO 14001-standard, and his claim that adoption often was "ceremonial behavior intended to superficially show that the certified organizations conformed to the standard" is a good example here. Accusations of sustainability reporting being a corporate smokescreen to hide unsustainability rather than a genuine effort towards accountability, transparency and a more sustainable world are thus easily made. Having paid attention to the plurality of different purposes, voices and opinions on sustainability reporting throughout all chapters of this dissertation, it can offer useful guidance on how to recognise and subsequently manage the tensions at the interface between business and society. Whereas the next chapter will stipulate the role of serendipity, this does not exclude practitioners from making the most of emerging opportunities, perhaps simply even slightly less cramped and controlled. Moreover, for a broadly accepted and meaningful form of reporting to continue, its increasing rationalisation and commensuration in combination with its complex nature highlights the importance of a more communicative approach that takes into account a multi-stakeholder view. Finally, in particular the justification framework of the fourth chapter stipulates the importance of a slightly ambiguous common interest and thereby alludes to compromise enhancing strategies.

Taken as a whole, in this dissertation I thus illustrate how sustainability reporting has developed into a legitimate practice by examining its development over the last 25 years in the Netherlands. The studies conducted here specifically aim to advance our historical understanding of how the complex and multifaceted practice of sustainability reporting has blossomed in its pluralistic institutional environment. I scrutinise institutionalisation and change processes more generally by highlighting how historical contingencies fortuitously bring for a moment order in the chaotic universe of problems, solutions and participants and thus create opportunities for change. Furthermore, my studies explore more specific mechanisms of coping with reporting's muddle. I first propose that commensuration further rationalises reporting's development and institutionalisation. Second, the conflicting rationales of valuation around integrated reporting require the forging of a legitimate compromise for which a sufficiently ambiguous common interest between actors has to be found.

Chapter 2 - Chance or genius?: A garbage can exploration of the institutionalisation of sustainability reporting in the Netherlands

"To study the laws of history we must completely change the subject of our observation, must leave aside kings, ministers, and generals, and study the common, infinitesimally small elements by which the masses are moved. No one can say in how far it is possible for man to advance in this way towards an understanding of the laws of history; but it is evident that only along that path does the possibility of discovering the laws of history lie"

(Excerpt from Tolstoy's "War and Peace", 2001: 653)

"Sometimes there's a man, I won't say a hero, because what's a hero? But sometimes there's a man. ... Sometimes there's a man who, well, he's the man for his time and place, he fits right in there"

('The Stranger' in 'The Big Lebowski')

Introduction

Since the early 1990s, sustainability reporting, or "reporting which covers the environmental and social aspects of an organisation's performance as well as the economic aspects" (Hubbard, 2009: 3), has grown steadily, particularly among larger firms. From being marginal in the late 1980's (Kolk, 2004a), by 2012 over 6000 firms disclose a broad set of non-financial information in reports, according to the reports directory of CorporateRegister.com (2013), and 95% of the world's largest 250 companies published a sustainability report in 2011 (KPMG, 2011a). In 2013 the European Commission adopted a proposal for a directive asking larger firms to disclose environmental and social information in their annual reports, thereby further solidifying the acceptance of this form of non-financial disclosure and its importance for the firm. This growth has been achieved despite sustainability reporting's inherently complex nature keeping in mind the plurality of voices behind the economic, social and environmental aspects that it aims to bring together. I ask how sustainability reporting's development can be explained and draw on insights from institutional theory and the garbage can model.

This rise of reporting has led some scholars to regard sustainability reporting as a case of institutionalisation (Brown, de Jong, & Lessidrenska, 2009; Etzion & Ferraro, 2010; Kolk, 2010; Larrinaga-González, 2007), i.e. it has become an increasingly normalised and taken-for-granted form of social behaviour upon which organisations routinely act (Barley, 2008; Hoffman, 1999; Jepperson, 1991). For some time, researchers have gone beyond their initial focus on isomorphism and the homogenising effects of reproductive institutional pressures (e.g. DiMaggio & Powell, 1983, 1991; Meyer & Rowan, 1977). Instead, they have started to puzzle over how institutions arise and change by focusing on the role of agency and actorhood (e.g. Battilana, Leca, & Boxenbaum, 2009; Dacin, Goodstein, & Scott, 2002; DiMaggio, 1988; Garud, Hardy, & Maguire, 2007; Lounsbury & Crumley, 2007; Maguire, Hardy, & Lawrence, 2004), epitomised more than anything by the stream of studies on institutional entrepreneurship (Battilana et al., 2009; Garud et al., 2007; Hardy & Maguire, 2008; Maguire et al., 2004).

This literature typically focuses on "the activities of actors who have an interest in particular institutional arrangements and who leverage resources to create new institutions or to transform existing ones" (Maguire et al., 2004: 657). This works, for instance, through creating a persuasive vision for change, assembling cultural, cognitive and material resources as well as mobilising allies and opportunities for change (see e.g. Battilana et al., 2009; Garud et al., 2007; Garud, Jain, & Kumaraswamy, 2002; Pacheco, York, Dean, & Sarasvathy, 2010). These studies typically explain sustainability reporting's institutionalisation by combining the interrelated assumptions that 1) a limited number of coordinated individual and organizational actors (institutional entrepreneurs) are 2) endowed with concentrated (strategic) agency and 3) typically aim to create or change institutions with an almost heroic foresight and purpose, thereby making institutional processes look a rather mechanistic, linear and almost teleological affair (see e.g. Blackler & Regan, 2006; Delbridge & Edwards, 2008).

These assumptions may indeed hold as long as issues are not too complex and take place in fields that are not highly fragmented and at least moderately institutionalised (see e.g. Dorado, 2005). Sustainability practices (e.g. sustainability reporting), however, are salient examples where this is not the case (Whiteman, Walker, & Perego, 2013). That is, these typically more multifaceted practices linked to complex social problems in relatively emerging, uncertain and heterogeneous fields where cause-effect relations remain unclear become more problematic to explain (Dorado, 2005; Greenwood et al., 2011), as current accounts offer too simplified a picture (Czarniawska, 2009; Dorado, 2005; Wijen & Ansari, 2007). Some recent work has therefore started to problematise the assumption of concentrated agency of single actors and how it undermines the collective work undertaken by distributed actors (see e.g. Czarniawska, 2009; Delbridge & Edwards, 2008; Dorado, 2005; Wijen & Ansari, 2007). This work focuses on the "process of overcoming collective inaction and achieving sustained collaboration among numerous dispersed actors to create new institutions or transform existing ones" (Wijen & Ansari, 2007: 1079). Despite relaxing the assumptions of the intentionally strategic individual entrepreneur, most studies still maintain an unrealistic "heroic", teleological and visionary flavour though that warrants further problematisation (see e.g. Aldrich, 2011; Czarniawska, 2009; Lounsbury & Crumley, 2007).

Cziarniawska (2009: 438) in this respect coined the analogy of portraying institutions as 'anthills' instead. This signifies not just institutional collectivity, complexity and multiplicity, but moreover refers to the observation that an "anthill is not a building erected according to a plan; it is a practice of long standing, taken for granted by the ants ... and can be built only in specific places where specific materials are available, and at specific times". In short, historical contingencies, or the oftentimes arbitrary but forgotten, neglected or silenced historical events that have a constraining effect on institutional trajectories, are flagged up. She interestingly hints at the potential of the garbage can model (Cohen, March, & Olsen, 1972; March & Olsen, 1976) as a lens that "purposefully dramatized" these more serendipitous aspects. This model views "organizational life as highly contextual, driven primarily by timing and coincidence" (Olsen, 2001: 193). It has at its core a concern for behaviour in a complex and uncertain environment (i.e. sustainability reporting) with an unstructured, loosely-coupled and serendipitous interplay between problems, solutions, decision makers and decision moments that comprise social order or institutions. In effect, the importance of an alternative interpretation along these lines rests in its potential that it allows for a compromise between "simple renderings of history that are inconsistent with reality and complex renderings that are inconsistent with human capacities for comprehension" (March & Olsen, 1998: 969).

In this study I empirically analyse the historical trajectory of sustainability reporting in the Netherlands and its gradual institutionalisation. Interpreting institutional processes through the lens of the garbage can model first offers an increased sense of realism to many simplified, intentionalised and post-hoc rationalised institutional accounts (Czarniawska, 2009; March & Olsen, 1998). Moreover, it is particularly apt for analysing more complex, fragmented and thus uncertain institutional processes. As the institutional environment in today's global organisational landscape is increasingly characterised by complexity and pluralism (e.g. Bromley & Powell, 2012; Greenwood et al., 2011), combining institutional theory and the garbage can model can help to explain how institutionalisation and change function in such circumstances. Based on 94 interviews and secondary data sources I qualitatively explore how against a background of historical contingencies a plurality of dispersed actors muddled through in the institutionalisation of sustainability reporting. I find that in the 1980's first the environment becomes a management issue with disclosure largely internal and not publicly available. In the wake of the 1992 Earth Summit and Shell's Brent Spar incident the importance of sustainability disclosure gets increasingly recognised and expected, and reporting slowly develops. Whereas regulation at the turn of the century fails to succeed, in the wake of accounting scandals and the GRI Guidelines investors and consultants get behind reporting as well which starts to get traction. In the second half of the decade guidelines professionalise and various rankings and benchmarks pop up that further popularise reporting as it becomes more concrete and eventually broadly accepted and expected.

Overall I present an alternative interpretation of a more familiar institutional story. It should be noted here though that the aims of this study are both exploratory and modest. That is, rather than developing a full alternative model of institutional change and a radical overturning of institutional entrepreneurship, I primarily seek to flex some of the assumptions that underpin much of the literature by using insights from the garbage can model rather than applying it as a blueprint. I aim to show that in addition to the purposive work that certainly takes place, institutional processes contain many similarities with more uncertain and ambiguous garbage can processes which help us to better understand institutionalisation and change in a less teleological and more realistic light.

With this study I make the following two broad contributions. First, I build on existing work on the process of institutional entrepreneurship and change (e.g. Battilana et al., 2009; Greenwood, Suddaby, & Hinings, 2002). In particular by relying on the garbage can model I consider the importance of historical contingencies as possible enabling factors of institutional change. I thereby also relax the dominant assumptions of intentionality and purpose (see Aldrich, 2011; Blackler & Regan, 2006; Czarniawska, 2009) and question the portrayal of institutional entrepreneurship as a teleological deterministic process. Second, I empirically extend the few existing accounts of the role of distributed agency in institutional change (e.g. Delbridge & Edwards, 2008; Dorado, 2005; Lounsbury & Crumley, 2007; Quack, 2007; Wijen & Ansari, 2007), thereby challenging the dominant notion of the heroic individual institutional entrepreneur. More precisely, the garbage can lexicon of problems, solutions and participants floating in a system and temporarily fixed around choices helps to explain how collective institutional action takes shape. It highlights, again, the importance of oftentimes serendipitous events and shows how actors muddle through, sometimes more and at other times less strategically and intentionally and together assemble a meaningful collage that matches chancelike events with the needs of the moment.

The outline of this paper is as follows. First, I will discuss aspects of the literature on the role of agency in institutional change and in particular extant work on institutional entrepreneurship and more collective forms of this through distributed agency. I subsequently examine the oftentimes purposive and structured depiction of institutionalisation and change and the relative absence of its inevitable serendipitous and historically contingent facets. I consider how insights from the garbage can model can add to our understanding of institutional change. Next, I will discuss my empirical case and methods of data collection and analysis used. After presenting my findings I will discuss their implications for the institutional literature and propose interesting areas for future research.

Theoretical framework

Institutional entrepreneurship: an uncertain, historical and collective process

Institutionalisation and change has received much attention over the last two decades (see e.g. Dacin et al., 2002; Garud et al., 2007; Greenwood, Oliver, Sahlin, et al., 2008). It was a response against the structural turn of the earlier new institutionalism (e.g. DiMaggio & Powell, 1983, 1991; Meyer & Rowan, 1977) with its focus on isomorphism and diffusion through, predominantly, mimetic pressures (Mizruchi & Fein, 1999). That is, rather than actors being caught in an all-capturing web of institutions without any sense of agency (DiMaggio, 1988; Lawrence & Suddaby, 2006; Oliver, 1991, 1992), they at the same time actively interact with their institutional context and therefore can (re)construct this context while being embedded (Seo & Creed, 2002) or nested (Holm, 1995) in it. This so-called "paradox of embedded agency" (Seo & Creed, 2002: 228) has received much scholarly interest (Battilana, 2006; Greenwood & Suddaby, 2006). Extant work has put a lot of focus on the work of the actors involved in institutional change, most notably institutional entrepreneurs as legitimising change agents, and on understanding the general process of institutionalisation and change.

To be sure, much of this research has focused on the institutional field level (e.g. Anand & Watson, 2004; Garud et al., 2002; Greenwood et al., 2002; Greenwood & Suddaby, 2006; Munir & Phillips, 2005; Munir, 2005; Wooten & Hoffman, 2008). A field is here understood as the arena where combined organisations, actors and institutions constitute a recognised area of institutional life and create a common system of meaning (DiMaggio & Powell, 1983: 148). The Dutch sustainability reporting field sees actors as diverse as investors and accountants to environmental and human rights activists, and deals with a relatively new, fuzzy and multi-interpretable concept (sustainability), allowing a multitude of ideas entering the field, also from abroad.

Institutional theorists have developed convincing accounts of the role of institutional entrepreneurs in changing and developing institutions. We know that institutional entrepreneurs operate in mature (Beckert, 1999; Greenwood et al., 2002) and emerging fields (Garud et al., 2002; Maguire et al., 2004). We also know they engage in framing (Rao, 1998; Zilber, 2002), utilise political tactics (Levy & Scully, 2007), mobilise resources (Misangyi, Weaver, & Elms, 2008), identify opportunities (Dorado, 2005), theorise new ideas (Greenwood et al., 2002), and occupy legitimate and strategic subject positions (Maguire et al., 2004). As noted by Lounsbury and Crumley (2007: 993), however, "the notion of 'institutional entrepreneur' too often invokes 'hero' imagery and deflects attention away from the wider array of actors and activities" and thus does not allow us to understand completely the collective dimensions of institutional change as it "…results from spatially dispersed, heterogeneous activity by actors with varying kinds and levels of resources". One consequence of this is that studies run the risk of oversimplifying and overlooking the dynamics, messiness and complexities of institutional change (Delbridge & Edwards, 2008) as well as its dependence on historical contingencies (Czarniawska, 2009).

Recently some studies have therefore started to analyse cases characterised by collective or distributed forms of agency (see e.g. Delbridge & Edwards, 2008; Dorado, 2005; Quack, 2007; Reay & Hinings, 2005; Wijen & Ansari, 2007). For example, Wijen and Ansari (2007) studied the collective institutional entrepreneurship involved on a transnational level in global climate policy and thereby tried to explain cooperation in collective action domains. Combining institutional and regime theories, they identified mobilising bandwagons, manipulating power configurations, creating common ground, devising incentive structures, applying ethical guidelines and using implementation mechanisms as drivers employed by acts of convening. Delbridge and Edwards' (2008) analysis of the superyacht industry showed the various roles of a plurality of, oftentimes disconnected, actors involved and their embeddedness in a historical and social context. Whereas the skills of the institutional entrepreneur remain of importance, unexpected changes in regulation, advances in technologies, (un)intentional opportunity creation by actors and market changes were equally pivotal for institutional change to succeed. Although these accounts still often endow actors with considerable "... strategic intentions, foresight, and sophisticated social skills" (Aldrich, 2011: 2), Delbridge and Edwards (2008) do interestingly hint at the importance of more serendipitous historical processes.

These latter points thus start to question the tendency of intentionality and structured design that exists among institutional studies more generally. Studies typically portray institutionalisation and change as quite a linear and mechanistic process (Blackler & Regan, 2006) in which foresighted actors hitting their targets seem to be the rule rather than the exception (Aldrich, 2011). This also shows in work that has concentrated on modelling the process of how new institutions emerge and develop, or how existing ones continue to change (see e.g. Barley & Tolbert, 1997; Battilana et al., 2009; Greenwood et al., 2002; Hasselbladh & Kallinikos, 2000; Tolbert & Zucker, 1983, 1996). For instance, Greenwood and colleagues (2002) build on earlier work by Tolbert and Zucker (1996) and offer a stage-model where exogenous jolts destabilise the status quo and precipitate a period of deinstitutionalisation where institutional entrepreneurship becomes likely as new actors enter the scene or old ones rise to prominence. The technical innovation and experimentation of these actors could lead to pre-institutionalisation, after which the new practice needs to be both theorised as a justified solution to a specified organisational failing. Upon legitimate theorisation the practice could be further objectified and thereby diffused, ultimately leading to re-institutionalisation as a taken-for-granted practice.

By no means without merits, and arguably suitable for less complex and multifaceted fields, in many theoretical and empirical studies on institutional entrepreneurship and change "...little is said by these authors about the relevance of muddles, misunderstandings, false starts, conflicts and loose ends that are likely also to be attendant features of processes of institutional change" (Blackler & Regan, 2006: 1845). A similar observation has been made by March and Olsen (1998: 954) when they consider the possibility of treating institutional "history as inefficient, as following a meandering path affected by multiple equilibria and endogenous transformations of interests and resources" rather than "following a course that leads inexorably and relatively quickly to a unique equilibrium dictated by exogenously determined interests and resources". In short, typically neglected are the often more random, muddled and historically contingent aspects of change (see Blackler & Regan, 2006; Delbridge & Edwards, 2008; Lounsbury & Crumley, 2007), perhaps unsurprising considering the discussed efficient and visionary portrayal of institutional entrepreneurs.

In cases in which fields are homogeneous, little fragmented or more mature this may possibly not be very problematic. Current institutional accounts seem too simplified a depiction of reality though when confronted with situations in which actors are multiple, institutional change concerned with complex multi-dimensional social problems and institutionalisation still relatively low (Czarniawska, 2009; Dorado, 2005; Wijen & Ansari, 2007). Sustainability-related practices are generally good examples of the latter scenario (Whiteman et al., 2013). To explore the specifics of "decision-making processes in opportunity hazy [i.e. uncertain] environments" (Dorado, 2005: 402), such as sustainability reporting, a type of institutionalism that allows not just for a collective approach but that can also incorporate historical contingencies is potentially insightful. Despite the self-evidence that eventually defines institutions, "their mundane origins lie in an unexamined distant past" (Aldrich, 2011: 3). We still know relatively little, however, about these less purposeful and heroic but more mundane historical origins. That is, the more serendipitous nature of many events that affect an institutional trajectory and how they eventually guide the evolution of institutions with the help of collective actors and what may be called a mixture of 'chance and genius' is worth more attention (see e.g. Aldrich, 2011; Battilana et al., 2009; Czarniawska, 2009; Dorado, 2005; Wijen & Ansari, 2007).

To address these concerns, I follow Cziarniawska's (2009) suggestion that our understanding of institutionalisation and change can possibly be enhanced by applying insights derived from garbage can model situations (Cohen et al., 1972; March & Olsen, 1976). Exploring this model within an institutional perspective allows not just for a multiplication of actors, but stresses their connections. Moreover, it specifically raises the possibility of envisioning institutionalisation as a more complex, random and historically contingent process rather than the relatively neat models that typically characterise the studies above.

The garbage can model

The garbage can model (Cohen et al., 1972) was developed to explain decision-making in 'organised anarchy' or uncertain and ambiguous environments. These are situations characterised by problematic and ambiguous goals (e.g. What is sustainability reporting for?), unclear technologies (e.g. How are metrics in sustainability reporting measured?) and fluid participation of actors over time (e.g. Who is involved in the sustainability reporting field?). Rather than decisions being taken as part of a structured process in which generally purposive actors use their foresight, evaluations and rationality (i.e. concentrated agency by institutional entrepreneurs), more complex and uncertain decision situations are alternatively described as an interplay between fairly independent 'streams' of problems, solutions, decision makers, and choice opportunities (i.e. decision occasions). Choices resulting from these uncertain decision situations are dependent on the temporal flows of these various streams and further influenced by structural elements. In the garbage can model choices are not necessarily made by neatly attaching them to solutions and problems. Although this can be the case (resolution), yet is rarely so, typically decisions and choices are made before an actual problem is attached to them (oversight), or when a problem has actually seized to be linked to a choice and has become attached to a different choice, with the decision thus being made yet without resolving the problem (flight) (Cohen et al., 1972; March & Olsen, 1984).

Czarniawska (2009: 438) suggested a slight modification of this model for it to be utilised within an institutional framework by "equating garbage can with zeitgeist". With the garbage can treating structure as largely exogenous, I follow Czarniawswka's (2009) suggestion of paying more attention to the contextual and institutional elements, or 'spirit of the time' as influencing the institutional trajectory. Institutionalisation becomes a process in which it becomes possible to see "... collections of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be an answer, and decision makers looking for work" (Cohen et al., 1972: 1). Clear from the above, conceptualising institutionalisation and change along these lines allows for a more distributed notion of agency and collective forms of entrepreneurship that make possible an appreciation of the importance of historical contingencies. As "[d]ecisions are produced to a large extent by the temporal linkages of problems, solutions, choice opportunities, and decision makers" (Olsen, 2001: 193) this model lends itself well for a more longitudinal analysis of the institutionalisation of a practice over time. This will thus be the scope of this paper as it describes the temporal narrative of Dutch sustainability reporting. Ultimately, rather than viewing institutionalisation and change through institutional entrepreneurs as a linear and mechanistic process, the garbage can model potentially allows to examine it depending on

“... how that situation (and the participants in it) fit into a mosaic of simultaneous performances involving other individuals, other places, other concerns, and the phasing of other events. What happens is often the most fortuitous result of the intermeshing of loosely-coupled processes” (March & Olsen, 1976: 26). Decisions are thus often based on serendipitous timing where solutions and problems match a choice opportunity, or where decision makers are fortuitously attached to choice opportunities. The institutionalisation of sustainability reporting in this light is therefore not simply an efficient solution for a well-defined problem but a messier and more complex story. Below I will explore the institutionalisation of sustainability reporting and apply the garbage can model to this case.

Methods[3]

For this research I draw on a single case study of the rise of sustainability reporting in the Netherlands from the early 1990’s until the mid-00’s of the 21st century. To tell the narrative of reporting I rely on a qualitative field analytic approach (Lounsbury & Crumley, 2007; Lounsbury, Ventresca, & Hirsch, 2003; Scott, Ruef, Mendel, & Caronna, 2000) that helps to track changes over time in the evolution of the practice of sustainability reporting and the co-evolutionary dynamics of actors, problems, decisions and their operating context. I focus in particular on its development among larger enterprises and how they have approached sustainability reporting rather than the specific issue of SME reporting. The practice has evolved from peripheral and inconsequential, to one both common and generally expected (Appendix A) in my period of study. To be sure, this is not to say that sustainability reporting has by now fully institutionalised, yet it has become increasingly legitimate on both a pragmatic, normative and cognitive level.

[3] Some replication of the methods sections of Chapter 3 and Chapter 4 cannot be avoided here as the respective chapters share a lot of methodological aspects.

Case selection

I draw on the development of sustainability reporting in the Netherlands for a number of reasons. First, the Dutch sustainability reporting case can be characterised as a "complex social setting in which causal dynamics were not immediately apparent and the motivations of actors were obscure" (Greenwood & Suddaby, 2006: 31). As suggested in the theoretical section above, a focus on relatively lowly institutionalised, complex and uncertain field (Dorado, 2005) with multiple actors involved (Delbridge & Edwards, 2008; Garud & Karnøe, 2003) is most fitting for my study. A focus on sustainability reporting's gradual evolution until the mid-00's forms a good example of this. The sustainability reporting field (Etzion & Ferraro, 2010; Larrinaga-González, 2007) has emerged over time with firms, investors, government agencies, standard setters and civil society entering and leaving the field's porous boundaries. Sustainability reporting is thus appropriate to study institutionally and forms a good exemplary case in which various subject positions, events, activities and decision moments are "transparently observable" allowing for theoretical development (Eisenhardt, 1989: 537) and a better understanding of the historically contingent elements of collective entrepreneurship in complex and uncertain environments.

Second, sustainability related practices are, despite their global aspects, typically local in character (e.g. Adams & Kuasirikun, 2000; Jennings & Zandbergen, 1995; Kolk, 2005), focusing on a specific country is appropriate. The Netherlands has been one of the early adopters and frontrunners in reporting (KPMG, 2011a), making it possible to examine its evolution over a longer period of time as reporting gradually matured and institutionalised. As the history of reporting is well documented, access to data both in terms of primary interviews with actors of the past and present, as well as supporting secondary data was possible. This makes it possible to carefully scrutinise the history of sustainability reporting and strengthen the validity of the case analysis.

Data collection

In this study I combine interviews and a range of secondary sources such as newspaper articles and reports. This triangulation enhances trustworthiness (Lincoln & Guba, 1985), makes it easier to see the data in a historical context (Yin, 2009) while at the same time tells us about the experiences of the multiple actors involved and the context in which instances of decision-making took place (Bryman & Bell, 2007).

The first step of data collection was to have conversations with four key informants. These four people all had a minimum of ten years experience in various facets of the Dutch sustainability reporting field, as well as extensive knowledge of its international context. These conversations, in combination with a prior reading of the phenomenon under study, provided me with a good initial overview of the field's 'who, what, when, how'. Based on these initial conversations and reading, it became clear that the Dutch reporting field would be an interesting case to look into the matter of a more collective and contingent type of institutional change process. I thus commenced drawing up a first list of prospective interviewees, based on these prior talks, reading and conference attendance lists. After contacting the first wave of interviewees and subsequently conducting the interviews, a snowball sampling technique was applied based on further recommendations of interviewees (Bryman & Bell, 2007). This approach made it possible to efficiently concentrate on contacting field actors with desired characteristics fitting the framing of the study, more akin to theoretical sampling (Strauss & Corbin, 1998).

Table 1 Overview of interviewees

Actor group	Number of interviewees
Public sector	12
Civil society	24
Investment community	13
Reporting firms	25
Academics	6
Professional services firms	26

Table 2 Overview of data sources

Type of data	Detail of source	Amount of data	Data analysis
Interviews with field informants	Interviews with firms, civil society, investors/raters, consultants, accountants, policy officials, academics.	94 interviews with a total duration of approx. 100 hours	Transcribed interviews, analysed and coded the material. Through iterative analysis of data and literature the garbage can model surfaced and the data was analysed along its main tenets
Secondary material	Newspaper articles of Dutch press, consultancy reports, NGO studies, government legislation and reports; investor statements	3100 pages	Contextual reading and field familiarization. Background for interviews; enhanced credibility and further validation of interview data interpretations; identifying key events and developments.

From February 2011 until February 2012 94 anonymous interviews were conducted (see table 1). The interviews were semi-structured with a broad interview outline as background guidance (Appendix F). These interviews lasted typically between 1 and 1,5 hours, and the total hours of interview material was just over 100. All but seven interviews were digitally recorded and transcribed. For those interviews that were not recorded extensive notes were taken. Conducting these interviews allowed for an in-depth understanding of both past and present moments, and the circumstances of these moments, that were of importance for the development of sustainability reporting (Malhotra & Birks, 2003). In order to avoid the risk of retrospective bias (Eisenhardt & Graebner, 2007; Morris, 1981), particularly an issue for interviews that discussed the more distant history of reporting, extensive prior research (e.g. internet search, documents, information from previous interviewees) was undertaken. This was done in order to be able to ask specific questions, assist interviewees in structuring their thoughts and memories, and come up with counterfactuals to test their statements in case required. The interviews progressed until both empirical and theoretical saturation levels were reached. The interviews focused on the following main question areas: (a) understanding of sustainability reporting; (b) stakeholders involved in sustainability reporting; (c) important or critical moments in the development of sustainability reporting; (d) existence of conflicts or problems and ways to overcome them; (e) context in which aspects discussed under (c) and (d) took place.

Second, I used a diverse collection of secondary data sources (see table 2). Articles in main Dutch business and general newspapers, government reports, publications of professional service firms, reports and statements of NGO's and investors, academic publications and integrated reports of companies were consulted. The main purpose of this data was first for contextual reading and field familiarization. Subsequently, it was also used as preparatory reading for interviews and, together with the interview data, for setting up an event history database of important moments in the evolution of sustainability reporting. The secondary data enhanced credibility and further validated my interpretations of the primary interview data as it was used as a form of "checks and balances" against to test insights derived from interview material (Yin, 2009). Finally, of those documents considered particularly relevant for answering the research questions of this study, document summary forms were prepared and subsequently analysed together with the interview data, further enhancing triangulation, as explained below. Taken together, these various data sources accumulated into a data set from which robust conclusions could be drawn.

Data analysis

The data analysis process for this study consisted of several stages. The analysis was assisted by the use of NVivo software for qualitative data analysis. Not uncommon for more interpretative research based on rich qualitative data, I iteratively moved between the empirical material, generated concepts and prior theoretical constructs throughout the analysis (Locke, 2001).

In the first stage of my data analysis I tried to depict the evolution of sustainability reporting in the Netherlands. Rather than having a very specific research question in mind here, the aim of this phase was to get a better understanding of the 'who, what, when, where and how' of my particular case and an overarching concern for its institutionalisation. As is not uncommon in qualitative institutional studies, I analysed the empirical material and arranged it to construct a chronological database of salient events (see e.g. Ansari & Phillips, 2011; Maguire & Hardy, 2013). This overview (Appendix B) was used as the very broad basis of the description of the analysis below, as well as to gain insight into the complexity and multiplicity of the case and important events and changes of importance later in the analysis.

In the second stage, based on the multiple systematic readings of the empirical material and the construction of the database it soon became apparent that some of the assumptions of most studies on institutionalisation and change were in contradiction with my observations. Most fundamentally, rather than a single identifiable institutional entrepreneur my case suggested the presence of multiple 'entrepreneurs', or perhaps rather 'institutional ants' (Czarniawska, 2009). In addition, analysing the rise of reporting did not seem to resemble a fairly neat linear and mechanistic process either, but rather a more muddled and random affair. This made me assess the possibility that some institutional assumptions may rather be ill-fitted for everyday reality. It was upon this realisation of the problematisation of commonly held assumptions (Alvesson & Sandberg, 2011, 2013) that I consulted the literature again in search for an alternative explanation for the development of Dutch sustainability reporting. Here I considered the potential of the garbage can model. Thus, rather than having the garbage can model as a core concept from the outset it emerged from the empirical material during the analysis of the data.

In the third stage the initial inductive approach was replaced by what can best be described as a more abductive (Peirce, 1978) approach focused on answering my research question. That is, rather than swinging the pendulum radically toward a more hypothetical-deductive strategy I relied on a more middle-ground strategy of iteratively comparing the raw empirical material with the various dimensions identified by the garbage can model, as previously discussed in the theoretical section of this paper. The analysis of the data thus resulted in a tabular format (table 3) which will be narratively discussed in the findings section. In this stage I coded the empirical material by systematically looking for instances of choice opportunities, problems, solutions and participants. First, participants were examined by analysing transcripts and reports, indicating actors entering and leaving the field or their importance thriving and waning over time. In line with earlier work using this approach (e.g. Rommetveit, 1976: 143–48) I subsequently studied transcripts and documents to find out “what did the main groups of participants in each period perceive as problematic and what solutions were put forward in answer to these problems?” I then structured my analysis around carefully scrutinising important events and developments (and confirming these with interviewees) with the event history as the starting point, as inferred from the empirical material by cross-referencing insights derived from the interviews, documents and the developed database. What became choice opportunities were moments where routine reactions or reactions as a consequence of an external event were at play. Combining these elements formed the backbone of sustainability reporting’s institutional story over time.

The resulting story thus resembles a narrative strategy, which is useful for “descriptively representing process data in a systematic organized form” (Langley, 1999: 707). As the aim of my research “is to achieve understanding of organizational phenomena not through formal oppositions but by providing "vicarious experience" of a real setting in all its richness and complexity (Lincoln & Guba , 1985: 359)" (Langley, 1999: 695) I decided to employ this strategy, following for instance Czarniawska (2009) and Delbridge and Edwards (2008). A narrative strategy generally provides a very accurate account as it is deeply rooted in the data, yet possible at the expense of offering a simple and general theory (Langley, 1999).

Findings

As discussed in the theoretical section, my analysis is inspired by the assumptions and logic of the garbage can model. In my aim to show that reporting's institutional trajectory contains similarities with more uncertain and ambiguous garbage can processes I draw on both the institutional and garbage can literature in the narrative explanation of a selection of developments in sustainability reporting's institutionalisation below. The following story thus stipulates the historical contingencies in reporting's trajectory and does so by framing this in the lexicon of problems, solutions, participants and choice opportunities. First I present a short background of reporting.

Table 3 Summary of the sequence of events

Time period	**Participants**	**Problems**	**Solutions**	**Choice opportunities**
Environmental management systems (<1990)	Firms	Lack of trust	Showing care through management	Introduction EMS
	Civil society/NGO's	No access to firm data	Publicly available data	Reporting aspect of EMS
	Government	How to improve environmental monitoring and control?	Management system	Conducive climate for EMS
	Consultants	How to generate revenue?	New regulation and/or tools to consult on	Introduction EMS
Crisis and emerging(soft) law	NGO's	Firms unaccountable for degradation	Reporting legislation	Agenda 21 and Environmental Protection Act

(1990-2000)		environmental		
	Firms	State and NGO pressure; legitimacy and trust issues	Reluctant start with reporting	Threat of legislation and Brent Spar
	Government	Lack of transparency and compliance	Legislation on reporting	Environmental Protection Act
	Investors	Financial consequences of sustainability aspects	Transparency of firms on sustainability risks	Brent Spar
Politics, emerging guidelines and luck (2000-2004)	Firms	How and what to report?	Support for guidelines	SER report and GRI
	GRI	Vacuum of authoritative reporting guideline	Developing guidelines	Zeitgeist for reporting asking for direction
	Investors	Which sustainability aspects impact the firm financially?	Corporate transparency	Accounting scandals
	Consultancies	How to get more revenue?	Guidelines as a tool to consult on	Introduction GRI and SER report
	SER	What is CSR?	Publication of report	Request for report
Further mainstreaming of reporting (2004>)	Firms	How to show you are doing well on sustainability?	High position on rankings, awards etc.	Introduction of benchmarks, rankings, indices etc.
	Consultants	How to generate revenue?	Consulting on benchmarks etc (e.g. improving scores; new indicators)	Introduction of benchmarks, rankings, indices etc.
	Ministry of Economic Affair	How to improve transparency cheaply?	Transparency Benchmark	Political pressure

Prelude - Antecedents of reporting

As for some antecedents of Dutch sustainability reporting, its exact start is hard to define, as a "... search for true beginnings is likely to end in infinite regress. No useful idea has a sharp beginning, for each beginning has an antecedent. Garbage can ideas are like that" (Cohen, March, & Olsen, 2012: 20). DSM, a Dutch chemical giant, was arguably the first to publish an environmental report in 1987 (Van Tulder & Van der Zwart, 2003), but this did not happen overnight. A conducive environment generally emerged with seminal publications such as Rachel Carson's (1962) "Silent Spring", the Club of Rome's (1972) "Limits to Growth" and "Our Common Future" (1987) of the World Commission on Environment and Development (WCED). In addition, disclosing corporate information was not a novel concept in the Netherlands as already in 1974 the Dutch made a start with the development of the Emission Register, which subsequently formed an inspiration and foundation for later global initiatives such as the European Directive on Integrated Pollution Prevention and Control (IPPC) in 1996, the European Pollutant Emission Register (EPER) in 2000 and the Protocol on Pollutant Release and Transfer Registers (PRTR) in 2003. Initiatives such as the Emission Register were targeted at only a small group of heavy-polluting facilities (currently 350 in the Netherlands) that had to disclose highly technical data on over 350 pollutants' emissions to soil, water, air and waste to the government for monitoring and control purposes. Initially this information was not open to the public. Although the type of reporting demanded from these initiatives was thus quite different from what we would now consider to be sustainability reporting, it normalised for some firms the disclosure of non-financial information. It arguably sparked a concern for the environment and the influence of corporations on our natural world, preparing the ground for reporting. Below I explore the history of Dutch sustainability reporting as it unfolded after these initial developments.

Early days: the environment becomes a management issue (1980's)

In the Netherlands, and in line with the discussed broader trend of acknowledging environmental degradation as a problem requiring a solution, the emergence of environmental management systems (EMS) in the 1980's is particularly significant. An EMS is the "integrated system of organizational, administrative and policy measures, targeted at gaining an insight in, and control and limitation of the influence on the environment by the company's activities" (Tweede Kamer, 1989: 47, own translation). EMS were introduced as a solution to address the problem of how to better monitor, and potentially reduce, corporate impact on the environment (see e.g. Commissie Bedrijfsinterne milieuzorgsystemen, 1988; Hafkamp & Molenkamp, 1990; Van der Kolk, 1988), in particular through the enhanced enforcement of, and compliance with environmental regulation and legislation. The prominent role of the Dutch government as an active participant in this process (Evers, Mantz-Thijssen, & Van der Woerd, 1991; Tweede Kamer, 1989, 1993) happened in a period in which it "wished to be a leading, guiding and pioneering country and treated the topic very seriously" (Interview, consultant).

Various documents of the time, and recollections of people involved, show that the case for EMS was also promoted by other participants such as consultancies sensing a market opportunity (Van der Kolk, 1988), and, more reluctantly, by the main employer organization VNO-NCW as firms "recognize their responsibility with regard to the environment (VNO-NCW, 1987: 9). For reputational or business reasons some large multinational corporations (MNC) got more actively involved as well (Molenkamp, 1995; Schmidheiny, 1992). With this broader collective of participants, an instrument that had started primarily for policy monitoring and enforcement had as a side effect that it "caused the environment to be increasingly seen as a management-issue, rather than merely a technical concern, which was quite a revolutionary thought in that period" (Interview, consultant). A 'logical' yet largely unintended consequence of the EMS than turned out to be a broader reporting purpose:

> "When you are promoting an environmental management system at one point you will also start to wonder what you exactly want to do with it! Well, what do government agencies want to do with it? They want to have some instruments for better control and regulation. But very slowly the idea started to emerge that the public at large could also be informed better" (Interview, environmental lawyer).

Rather than a 'Eureka' moment or visionary leadership, this was "actually a very gradual process. At a certain point in time this general concern for environmental issues was matched with the idea that disclosure towards the outside world, society, and stakeholders was actually part of it. But that went very gradually, not really with sharp demarcating moments or people" (Interview, consultant). As a result, in the Netherlands reporting thus slowly emerged in the late 1980's when the first separate (environmental) reports started to come out, mainly as a consequence of the early Dutch acknowledgment of environmental management systems as a solution to the problem of regulation compliance and corporate non-sustainability. In the language of the garbage can model, first disclosure was primarily an internal solution to address a problem between firms and regulators, but once in place became somewhat coincidentally also targeted as a solution to the problem of enhancing transparency and accountability towards local communities, employees, NGO's and other interested parties (see e.g. Evers et al., 1991).

Setting things into motion: a crisis and emerging (soft) law (1990's)

The 1990's saw a gradual advancement of the acceptance of corporate (environmental) responsibility and disclosure on this. Rather than a logical outcome of visionary leadership, my analysis suggests this was mostly due to a mixture of a serendipitous event (Shell's Brent Spar) and the collective work of various actors.

Internationally, the earlier work of the Brundtland Commission was of influence in the build-up to the 1992 UN Conference on Environment and Development (UNCED) in Rio de Janeiro, i.e. the "Earth Summit". In its resulting plan of action (Agenda 21), one of the recommendations was for companies "to report annually on their environmental records, as well as on their use of energy and natural resources" (Agenda 21, 1992, art. 30.10). This, of course, created further momentum for disclosure in the Netherlands as it "affirmed existing sentiments" (Interview, consultant). It contributed to the growing acceptance of the existence of environmental problems and the idea that corporations carry responsibility for this and thus have a role to play in prevention and improvements.

In particular for (environmental) NGO's this "led to a desire for legislation on disclosure" (Interview, NGO). They saw it as a solution to combat the problem of both environmental destruction and the corporate silence on their role in this. In the Netherlands, and beyond, corporations tend to have a general aversion against government intervention and regulation though: "firms are almost by default suspicious of regulation and legislation. It is their first reflex" (Interview, civil servant). Agreement on a solution could thus not be agreed upon through legislation. Notwithstanding their opposition against regulation on disclosure, some action seemed required though. That is, firms increasingly saw themselves beleaguered by the Dutch government, which had in 1993 introduced the Environmental Protection Act that heightened the profile of the environment further. Moreover, at the same time NGO's demanded better transparency "as they thought society needed to know this type of information, and also in order to gain better insight into these firms and confront them with their behaviour and consequences" (Interview, civil society). Reporting became by various participants thus pushed as a matching problem/solution combination, yet it ultimately took some ‘lucky timing’ in the form of a corporate wake-up call to get reporting really moving.

Instrumental here is in particular one event, namely Shell’s Brent Spar oil platform. Considered “a critical incident that keeps on being referred to” (Interview, academic), it is often regarded as having spurred Dutch reporting, in particular as an eye-opener for corporates. In short, Shell had decided to sink an old oil platform in the North Sea which caused considerable protests by NGO’s and the general public (see e.g. Zyglidopoulos, 2002). Informants often mentioned the case as a wake-up call for the business community in which “... everything came together because it made clear what the impact of these issues could be on reputation and legitimacy” (Interview, consultant). Whereas for NGO’s and the government perhaps not much changed (as it was more a confirmation of the need to improve environmental performance and disclosure), for companies, and by extension also investors, it did make a difference. First driven by NGO’s (in particular Greenpeace) and later also by consumers as well as politicians, it eventually showed “... that half of the motorists drive to a different gas station. The share price falls. So you can see that such an event has an impact. It really awakens, like ‘ah, we are moving into a different type of world’. With that understanding come different norms of behavior, different actions. And reporting and transparency were among them” (Interview, consultant).

In the lexicon of the garbage can, this incident shows the serendipitous coming together of problems, solutions and participants. That is, the solution of environmental management and disclosure was by some actors (e.g. government, NGO) already tied to a problem (lack of corporate environmental compliance and accountability). However, reporting now also started to become a new solution to a problem of lack of trust in and legitimacy of corporates and, to a lesser extent, a valuation problem of investors (responsible investing was in its infancy still and according to investor informants “for the dark green investor with sandals and woollen socks!”) as they recognised the potential financial impact of environmental scandals. Somewhat fortuitously the acceptability of sustainability reporting became thus more broadly shared by a range of participants who started for various reasons to see merits in the practice.

One particularly noteworthy outcome of this emerging “ping-pong game” (Interview, NGO) between firms, NGO’s and government was the eventual introduction in the Netherlands of a revised Environmental Protection Act[4]. It stated that starting from 1999 around 300 companies (heavy polluters) were required not only to report to the government on a variety of environmental management indicators (Government Report), but also had to publish a Public Report. The legislation as a solution did not match the problem at hand very well though, as suggested by the garbage can model (March & Olsen, 1984). Whereas evaluation research (KPMG, 2001, 2002a, 2003) shows that firms indeed started to engage in some form of reporting, the quality of reports varied greatly as specifications on structure, content and format were ill-defined (KPMG, 2003). In the end, the costs outweighed the benefits according to most participants and in 2005 the law was amended and only a Government Report on emissions of pollutants remained[5]. In garbage can terminology, the problem of corporate accountability and sustainability was not anymore attached to the choice (opting for legislation) as more suitable choices started to present themselves (e.g. GRI, see below). Still, rather than treating the legislative path as an outright failure “you have the voluntary stream that you see in the reporting landscape and the Public Report that was obligatory. The latter has pushed the former though I think.

[4]Wet Milieubeheer, Staatsblad 1997, nr. 170. See Chapter 12, accessed on 14-06-2012 at: http://wetten.overheid.nl/BWBR0003245/Hoofdstuk12/geldigheidsdatum_15-06-2012
Wet van 10 April 1997, Staatsblad 1997, nr. 170 & Besluit Milieuverslaglegging of 17 November 1998, Staatsblad1998, nr. 655
[5]Staatsblad 2005, nr 317 and Tweede Kamer, vergaderjaar 2004-2005, 29972, nr 1-5

Without the Public Report, the whole development of sustainability reporting in the Netherlands would not have progressed much" (Interview, sustainability lawyer).

The wheels start turning: politics, emerging guidelines and some luck (2000-2004)

Regulation thus turned out not to be the road to corporate sustainability. Nevertheless, the number of reports would increase over the next years, and arguably their quality and professionalism as well. Once again though, a 'masterplan' behind this seems not to be present. My analysis of the empirical material rather suggests that a timely overlap of initiatives of a range of actors created a supportive environment for sustainability reporting that set things in motion.

A significant factor that raised awareness was the work of the Social and Economic Council of the Netherlands (SER). This influential governmental advisory body consisting of employers, unions and experts published its influential report *De winst van waarden* (The profit of values) in 2000. With its emphasis on long-term value creation by integrating social, environmental and economic aspects in the triple bottom line (Elkington, 1997) "it was treated by many companies as some sort of bible!" (Interview, civil servant). One of the recommendations of the report was to ask the *Raad voor de Jaarverslaggeving* (Council for Annual Reporting) for guidance on a possible voluntary reporting framework for Dutch companies to rely on, which it published in 2003 through a revision of the Annual Reporting Guideline 400 (RJ-400) and accompanying practical Guide to Sustainability Reporting.

Despite the best of efforts, these guidelines never really took hold and "unfortunately have quite a sad history in the Netherlands as companies should actually pay more attention to them" (Interview, investor). Not only did they lack legal power (Lambooy & Hordijk, 2012), the general emphasis on voluntary reporting and the individual responsibility of companies being a central aspect of both the work of the government, SER and the Council did not generate enough force either. Still, whereas promoting reporting by regulative or semi-regulative measures did not lead to staggering growth, these initiatives did further create an environment or 'zeitgeist' in which sustainability reporting had a place. As a former CEO put it, "slowly but surely it became more than just a fad and something that was shared as being important on a very broad level". Whereas plenty of interested participants thus started to see the potential value and importance of sustainability reporting, the new problem that emerged was exactly how to do it as in particular firms "were looking for certainty, something to hold on to in terms of reporting" (Interview, CSR manager). As it turned out, across the Atlantic a solution was being developed that would exactly target this problem.

It was with the birth of the Global Reporting Initiative (GRI) that a dominant international reporting standard emerged that would provide more structure and clarity on what sustainability reporting actually was. Prior to the GRI, multiple (inter)national standards were being developed, but none took hold as much as the multi-stakeholder focused GRI. Much has been written about the GRI already (see e.g. Brown, de Jong, & Lessidrenska, 2009; Etzion & Ferraro, 2010; Levy et al., 2010) and this is not the place to go into its particular institutional trajectory, but once again it seems to have presented itself as a fitting and timely solution to the recognised problems described above. In the Netherlands, one of the reasons these guidelines gained popularity and recognition already in an early stage was not only because of the general conducive environment and spirit of the time, but also because the first version was immediately translated into Dutch. This was instigated by a consultancy and the Dutch Association of Investors for Sustainable Development (VBDO), which was founded in 1995 to advance sustainability among listed companies. The relocation of GRI's headquarters from Boston to Amsterdam in 2002 did not hurt either, of course, yet was also the result of a Dutch public and private sector lobby and bid.

Naturally, for consultants the GRI meant the possibility of new business as the GRI “reflects the main streaming of the issue. It says that, A) there's recognition that these are issues that need to be worked on, and B) that there's money to be made in it” (Interview, consultant). For the VBDO the emergence of the GRI was a solution worthy of support to tackle the sustainability problem. As its founder recalled: “We thought that the GRI was very welcome. It was even better that it was not our own invention so that we could refer to it as a development elsewhere that stipulated the importance of sustainability. So we embraced the GRI and at annual meetings appealed to firms to disclose more on sustainability reporting and do so by using the GRI guidelines.” GRI thus not only presented itself as a suitable solution to answer a specific problem, at the same time it resonated with several participants looking for work (Cohen et al., 1972) and confirmed their reasons to exist (e.g. consultants, VBDO). After all, in case of the consultants, they “would love to regulate the whole accountability and transparency idea on firms. Many of them are not familiar with these things, so it would generate good business for consultants”, and GRI offered a welcome respite here.

Still, more was needed for reporting to take off. Helpfully, firms started to take matters more seriously too and recognised the potential value of reporting. One informant, a sustainability manager, recalled that “... suddenly the shareholders enter the picture, in the Netherlands also the VBDO. They start asking questions to companies on what their sustainability strategy and performance is. What you see is that this set something in motion” (Interview, sustainability manager). More luckily, the timing of these guidelines for sustainability reporting was also good. Not only were firms “looking for something to hold on to" (Interview, rating agency) in terms of reporting, but they gained further momentum as the "… corporate accounting scandals at the start of the millennium have been very helpful here as suddenly extra-financial or non-financial information became interesting and seen as a reflection of a behavioural component" (Interview, investor). So in sum, the growth of reporting in this period is a "consequence of the entire network around it. NGO's, VBDO, sustainable investors, developments in society, simply the increase of transparency being regarded as something important" (Interview, consultant). In a way, the idea that there is value in reporting slowly started to land among a broader range of, also powerful, actors. For instance, with investors entering the arena as a powerful decision maker/participant who start to acknowledge lack of sustainability information as a problem, the solution of reporting gains thus additional momentum as it sticks itself to a new issue of firm valuation.

Shifting up the gears: solidifying and mainstreaming reporting (2004<)

A further boost to Dutch sustainability reporting was the introduction of the Transparency Benchmark in 2004. The benchmark compares the degree of transparency that firms show in their disclosure of sustainability information. The benchmark was initially developed by a Dutch consultancy firm, but caught the attention of the Ministry of Economic Affairs as it seemed a suitable instrument for a problem it was facing. As one civil servant of the time recalled:

> "Our ministry did not want legislation on reporting, something the social-democrats were pushing for. But we had to offer an alternative at some point as we could not withstand the pressure anymore. We were blamed for saying we stimulated and facilitated reporting but had too little to show for it. In order to prevent legislation or regulation we decided to introduce the benchmark as it is self-stimulating for firms!"

This rather fortuitous co-existence of the benchmark developed by the consultancy, the political pressure to boost reporting and the need for the Ministry of Economic Affairs to come with an alternative thus resulted in the adoption of the Transparency Benchmark by the Ministry. A further hurdle turned out to be the employer associations when “they asked whether this was all really necessary? We had the luck that the Minister was of the opinion that this was indeed necessary. So that was our luck, together with NGO’s that were at least not against it, and so it worked out with relatively broad support” (Interview, civil servant).

Initially many firms (in particular lowly ranked ones) were sceptical of the Transparency Benchmark and wanted to opt out (which was not possible as they were included by default), but soon “after they had first complained, the next year they asked how they could climb and whether we could help them!” The Transparency Benchmark also came with an award (The Crystal) for the best reporting firm, but moreover resonated with firms as “we all want to have a stage on which we can be applauded and praised. Where we can distinguish ourselves” (Interview, sustainability manager). For consultants this turned out to be a profitable affair as well since they noticed that the Transparency Benchmark could be a solution for them in their quest for market growth. That is: “they saw it as a new market and because they actively approached clients they have further boosted the instrument and reporting, of course” (Interview, civil society).

This short account of the Transparency Benchmark shows, once again, that rather than a powerful institutional entrepreneur working on a grand scheme, this instrument was both collectively developed and with a relatively random matching of participants with problems and desired solutions. It was created by a consultancy to generate business, unexpectedly caught the interest of a governmental agency in need of a solution to a political problem and was considered robust enough by NGO’s as well as flexible and non-threatening enough by employer associations to support, or at least not oppose it. In turn, upon its success firms felt the need to do well on this ranking and consultants saw an opportunity for growth in it, further stimulating its growth. Once more, in a garbage can style of reasoning, the simultaneous coming together of participants with political problems and others with useful solutions led to the decision of developing the Transparency Benchmark as an instrument to promote sustainability reporting. In effect, the machine was set in motion.

Alongside the Transparency Benchmark, other international rankings and sustainability indices (e.g. Dow Jones Sustainability Index, FTSE4Good) helped, of course, to further normalise disclosure of sustainability information. The same applies to the publication of new generations of the GRI Guidelines in 2002 and 2006 and the 2010 ISO 26000 standard. In addition, the Dutch Frijns Code on corporate governance for listed companies was introduced in 2009 and stipulated that the material aspects of CSR for the operations of the business needed to be disclosed in the annual report. Together these developments created a conducive zeitgeist for sustainability reporting to further develop, grow and institutionalise (see Appendix A, also KPMG, 2005, 2008, 2011a). As one informant put it, “What you see is that the whole idea of sustainability as a license to produce and the need to report on this has been accepted and taken as a given. There is no discussion on that anymore among the larger enterprises, it is simply now a necessity” and “in effect by now an entire sustainability reporting industry has emerged” (Interview, investment specialist).

Discussion

I have explored the institutionalisation of sustainability reporting in the Netherlands by combining insights from garbage can decision making and institutional theory. In particular I have offered an account of the rise of sustainability reporting that questions the assumptions of individual institutional entrepreneurs who engage in their work with foresight and purpose. Below I first sketch more generally 'garbage can institutionalism' (figure 1). Subsequently I discuss in more detail the role of historical contingencies that open up opportunities for change and how a multiplicity of actors muddle through in an attempt to 'take advantage' of the opening for institutional change that these serendipitous moments offer.

Institutional change and the garbage can model

I started this chapter with a discussion of extant work on institutionalisation and change, most notably a selection of studies using the institutional entrepreneurship framework. The concept of agency has been of great interest to these institutional scholars (e.g. Battilana, 2006; Delbridge & Edwards, 2007; Weik, 2011). A particular aspect of interest has been the enabling conditions for institutional entrepreneurs to engage in change. There have been prevalent accounts that focus on the social position of individual and organizational actors (Battilana et al., 2009; Battilana, 2006; Dorado, 2005) and field-level conditions such as the degree of heterogeneity and institutionalisation (Dorado, 2005; Pache & Santos, 2010). Rather than denying the importance of these factors, garbage can thinking supplements thinking on possible mediating mechanisms as it highlights the at times suggested (Aldrich, 1999; Czarniawska, 2009) but rarely explored possibility of historical contingencies as a serendipitous enabler of agency rather than a force that completely negates it.

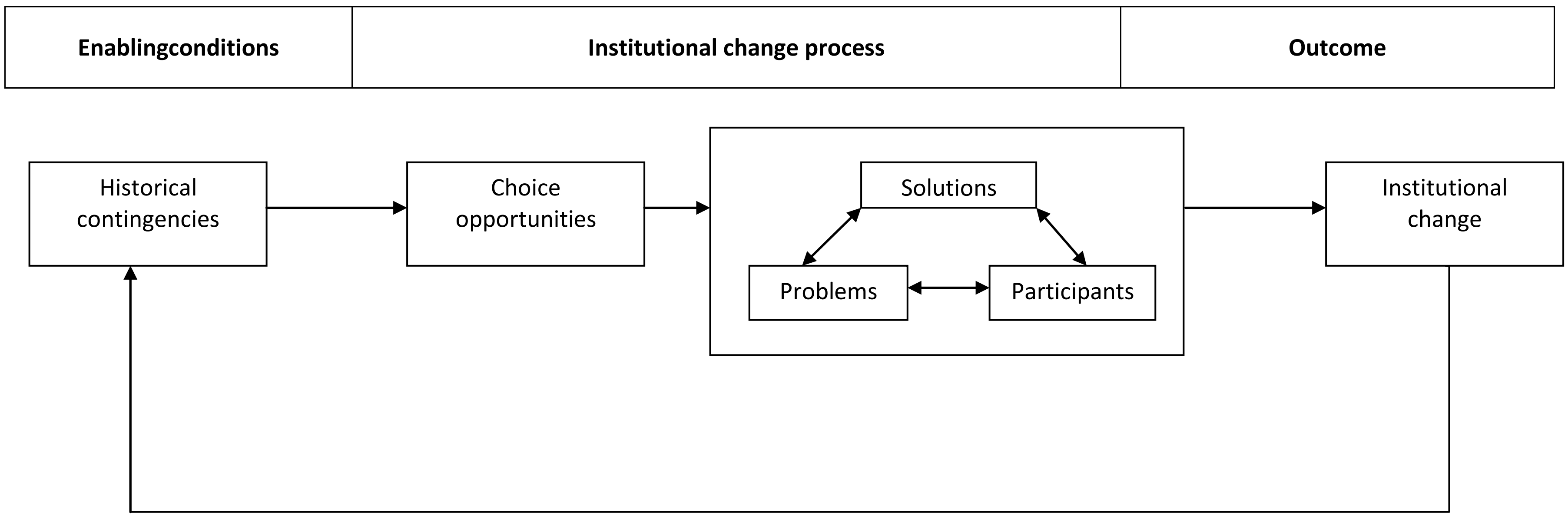
Historical contingencies in this line of thought are thus not to be understood as instances of meaningless randomness which turn institutional processes beyond actors' control. Rather, over the course of history larger, and oftentimes also smaller events take place that can be seen as "unanticipated conjectures of powerful forces" (Padgett, 2013: 474). Whereas they may seem infinitely small, as institutional actors shape and change institutions "by a complicated ecology of local events and locally adaptive actions" (March & Olsen, 1998:

968) they turn out to be much greater in their consequences. In effect, these contingencies are not unlike the exogenous jolts that can open up space for action and precipitate institutional change (see e.g. Fligstein, 2001; Meyer, Brooks, & Goes, 1990), although this study shows their continuous occurrence throughout the process.

Moreover, these contingencies (e.g. Shell's Brent Spar) provided impetus for new issues or choice opportunities and a related constellation of people, problems and solutions. This emerging space for action (Fligstein & McAdam, 2011) thus helps to alter and shape something akin an opportunity structure (McAdam, 1982; Tilly, 1978). Still, unlike typical accounts using the opportunity structure concept, a fundamental difference with the garbage can model is that I offer an account of agency that is based on temporality rather than consequences (Lomi & Harrison, 2012).

With historical contingencies as an enabling factor and evolving choice opportunities, next is the emergence of (collective) action, which works according to my analysis through the conducive and timely configuration of the various components of the garbage can. My account of institutionalism and the garbage can highlights the boundedly rational actor and aims to strike a balance by stipulating a type of "change driven by attempts of deliberate design, adaptation, and "organic" and co-evolving historical processes" (Cohen et al., 2012: 28).Both individual as well as more collective accounts of institutional entrepreneurship have typically assigned actors(s) with a great deal of intentionality and active change management, whereas my analysis stipulates the work of various actors whose actions oftentimes more resemble a kind of muddling through with what is offered to them in terms of problems/solutions at some point in time.

Figure 1 Garbage can institutionalism



While this muddling is often rationalised away, it represents more than just handling random chance. Following De Rond and Thietart (2005: 17), it ultimately requires the "ability to 'see bridges where others saw holes'. To see bridges, or 'matching pairs', is to creatively recombine events based on the appearance of a meaningful rather than causal link". Rather than the result of careful design, it resembles the ability to construct a meaningful collage by combining elements, not unlike institutional bricolage (see e.g. Garud & Karnøe, 2003; Phillips & Tracey, 2007) which typically involves a plurality of actors.

Finally, this collective and possible somewhat messy response to serendipitous events causes a change in the institutional environment and at the same time can help to further cement, in this case, sustainability reporting as a legitimate practice. That is, as my analysis above shows, with each response to an event, the outline and agenda of the institutional arena altered, leading to the possibility of new large or small events that would set in motion a renewed balance between problems, solutions and participants around choices deemed important at that point in time. To be sure though, it can be assumed that some cases lend themselves better to be analysed using a garbage can perspective than others. As discussed earlier in this paper, it was originally developed to analyse decision making in 'organised anarchies' with problematic and ambiguous goals, unclear technologies and fluid participation of actors over time. Put in more institutional terms, it thus resonates with cases characterised by a high degree of pluralism and complexity (Greenwood et al., 2011). Relatively mature and highly institutionalised and non-fragmented fields may indeed allow for a large degree of strategic intentionality as institutional rules, roles and positions have crystallised (Dorado, 2005). New and multifaceted practices emerging in highly fragmented fields (Pache & Santos, 2010) or in lowly institutionalised ones with a multitude of actors and typically higher levels of uncertainty (Dorado, 2005; Garud et al., 2002; Maguire et al., 2004) do not allow for as much intent and foresight though. It is in particular here that the added value of the garbage can lies. In the remainder of this discussion I discuss two important aspects of my alternative interpretation of an example of institutionalisation and change, namely the importance of historical contingencies and collectivity.

Historical contingencies

The oftentimes more serendipitous meandering of history has remained undervalued (see Czarniawska, 2009) by extant institutional studies focusing on the strategies of institutional entrepreneurs and the stages of institutional change processes (e.g. Battilana et al., 2009; Greenwood et al., 2002). The "undercurrent of purpose, order and necessity" (De Rond & Thietart, 2007: 540) visible in most extant work is, in garbage can style, linked to the modern Western cultural context in which this research is situated (Cohen et al., 2012).Looking at Dutch sustainability reporting though, it was partly set in motion exactly because of these more serendipitous moments of timing and a general conducive zeitgeist of first environmentalism in the 1980s that saw the simultaneous linkage around environmental systems. With the subsequent age of accountability and transparency of (corporate) life an extension of this could handily form the basis of a solution to newly emerging problems. Initial regulation was agreed upon among government, firms and NGO's as a satisfactory solution, yet it ultimately failed as problems and solutions diverted. The Brent Spar ignited corporate interest in reporting though and showed the value of sustainability to firms, bringing the arrival of the solution of reporting to the problem of accountability, trust and transparency. Later, the wish of the Dutch government for a more active policy towards corporate transparency was rather coincidentally met by the Transparency Benchmark that was developed independently of the wishes of the government by a consultancy firm for commercial purposes. In short, these findings suggest things often happen because of a certain temporal constellation of people, their problems and solutions at hand at a particular moment in time.

This account of Dutch reporting stipulates the role of more serendipitous historical contingencies that emerge over the course of time. Rather than representing a neat purposeful process these "... complications tend to convert history into a meander. Rules and institutions become locally stable. Historical branches tend to be irreversible. The direction taken at any particular branch sometimes seems almost chancelike and subject to minor intentions, but the specific direction taken can be decisive in its effect on subsequent history (March & Olsen, 1998: 955). By highlighting the importance of historical contingencies in institutionalisation and change the interrelated role of timing, context and zeitgeist is flagged up as "the system of temporal coincidences at the core of the GCM may be viewed as one way of bringing back the causal role of context in our understanding of organized action" (Lomi & Harrison, 2012: 14).

To be sure, I do not refer to meaningless randomness here, but rather highlight the importance of timing, context or zeitgeist to better understand institutionalisation and change. In fact, when interviewing one of GRI's founders himself (typically heralded with institutional entrepreneur status), he hinted at his more modest role as he argued "I think sustainability reporting, the concept has been a beneficiary of movements and pressures that are driving business or signalling business that transparency is not an option any longer, it's really an expectation and you must respond to it". It follows more closely Rorty's (1989: 37) notion of contingencies and his analysis of the progress of thoughts, actions, practices etc. and their purposefulness and intentionality:

> "The difference between genius and fantasy is not the difference between impresses which lock on to something universal, some antecedent reality out there in the world or deep within the self, and those which do not. Rather, it is the difference between idiosyncrasies which just happen to catch on with other people

> - happen because of the contingencies of some historical situation, some particular need which a given community happens to have at a given time. To sum up, poetic, artistic, philosophical, scientific, or political progress results from the accidental coincidence of a private obsession with a public need".

Overall, this account thus represents "… a view that is more temporally contingent and less powerfully intentional, but often comes closer to matching the realities of organizational life" (Cohen et al., 2012: 22). Still, people need to find a response to these events and eventually these very same people are the ones involved in the institutional process of sustainability reporting as well. I argue this is a collective process where problem, solutions and participants are momentarily combined and matched to a choice relevant at that moment in time.

Collectivity

Emphasising context and contingencies by extension problematises the hero-centric accounts present in many institutional entrepreneurship studies. Highlighting the importance of what I have labelled here historical contingencies is not to say that actors do not matter. On the contrary, a wide range of research has highlighted the active strategic agency that institutional entrepreneurs have and use (Battilana et al., 2009; Hardy & Maguire, 2008; Pacheco et al., 2010). Rather, based on my findings I suggest that relaxing some of the dominant assumptions may be useful, in this case in support of a more collective form of institutional entrepreneurship.

My interpretation of Dutch sustainability reporting highlights that a single institutional entrepreneur was not driving the process. Rather, the framework of the garbage can applied to my case suggests the collective nature of the process. After all, analysing sustainability reporting longitudinally and with an emphasis on the interplay between problems, solutions and participants makes clear the multiplicity and diversity of the process. For example, whereas at first mostly the Dutch government and civil society pushed for reporting, it gradually became a topic of more active interest among firms in the wake of the Brent Spar incident and the persistence of the accountability and transparency discourse. The Dutch government proved then largely unsuccessful in further pushing through reporting via legislative means, but actors such as the SER and Council of Annual Reporting did manage to give further impetus. Still, the work of the GRI was instrumental for reporting's rise, yet GRI's visibility in the Netherlands was enhanced by supporting work of consultants and the socially responsible investment community (e.g. VBDO). The government made a soft-law comeback in the institutional process through its work on the Transparency Benchmark. This short overview still does not do justice to the multiplicity of actors involved and singling out the work of any one actor as being of institutional entrepreneurial status would seem to negate the role of the other.

The collective aspects of institutionalisation and change get thus stipulated by a garbage can inspired analysis. Research attention has so far been focused primarily on the work of a small number of institutional entrepreneurs (Battilana et al., 2009; Pacheco et al., 2010; Wijen & Ansari, 2007) and in the case of sustainability reporting primarily on the GRI as an institutional entrepreneur (Brown, de Jong, & Lessidrenska, 2009; Etzion & Ferraro, 2010). My analysis thus indicates the continuous in- and outflow of a multitude of, oftentimes unconnected, institutional change agents (participants), problems and solutions. Dutch reporting rather resembles what Dorado (2005: 400) calls institutional partaking, or "institutional change as the autonomous actions of countless agents converging over time. Partakers act as a collective and no single individual or organization can be identified as responsible for the change". Perhaps somewhat less 'sexy' than the more common heroic account of institutional entrepreneurs, my findings are more in line with other studies that show the collective nature of institutional entrepreneurship (Czarniawska, 2009; Delbridge & Edwards, 2008; Lounsbury & Crumley, 2007; Wijen & Ansari, 2007) and, relatedly, those that question the neat and linear progression through stages (Blackler & Regan, 2006; Delbridge & Edwards, 2008). In effect, Dutch sustainability reporting more resembles a situation of incrementalism or 'muddling through' (Lindblom, 1959, 1979). In particular the complexity of sustainability reporting and what it is exactly for and about (i.e. what are its problems and solutions and who are concerned), and the related blurred relationship between means and ends (Lindblom, 1959: 83), or between solutions for a problem in this case, makes way for the continuous incremental steps of various actors in reporting's institutionalisation.

Conclusion

In this study I have analysed the institutional trajectory of Dutch sustainability reporting using the lexicon of the garbage can model and its emphasis on the independent existence, and occasional simultaneity, of a multiplicity of participants, problems, and solutions around choices. Exploring this model within an institutional perspective suggests the importance of so-called historical contingencies and collective institutional entrepreneurship. That is, it raises the possibility of envisioning institutionalisation as a more complex and historically contingent process that highlights the importance of serendipity, timing and context rather than the relatively neat and teleological models of institutionalisation and change that prevail in most studies. This enabling role of chancelike contingencies opens up space for institutional work of a plurality of actors. Whereas I do not deny the importance of strategic and intentional actors, I reduce their importance and add to the mix the influence of the oftentimes uncoordinated activities of a wide range of actors who make the most of 'the hand they are dealt with'.

Taken together, this study does not claim to be "... remarkable and provides no extraordinary magic of interpretation, but it may not be entirely foolish" (March & Olsen, 1998: 958). I have offered an account that relaxed dominant assumptions prevalent in many institutional studies (i.e. agentic individual institutional entrepreneurs who operate with a great deal of foresight and intent) and thereby aimed to enlarge rather than replace extant institutional interpretations. This on the one hand adds some welcome nuance and realism and thus further strengthens this line of work. Moreover, it may expand our understanding of institutionalisation and change, in particular in the case of multifaceted practices linked to complex social problems in relatively emerging, uncertain and heterogeneous fields where cause-effect relations remain unclear.

A first contribution of this study is that it has challenged the assumption of intentionality and purpose present in many institution entrepreneurship studies (Czarniawska, 2009). This has made them look overly linear and mechanistic (Blackler & Regan, 2006). By drawing on the garbage can model I have highlighted the importance of historical contingencies for processes of institutionalisation and change (see e.g. Aldrich, 2011; Czarniawska, 2009) arguing they are not teleological deterministic processes. As we are hard wired to connect means and ends and assign purpose to events, sometimes justly so, integrating the assumptions of the garbage can more explicitly in institutional accounts asks us "to give up a tidy world in which problems imply solutions over which participants exercise choice, and to replace it with a world in which participants, problems, choices, and solutions each have the capacity to connect to any of the others" (Cohen et al., 2012: 22). This study has made a start with that by stipulating the importance of historical contingencies and suggesting their role as a possible enabling factor of institutional change.

A second, related, contribution is that my analysis offers an empirical account of more collective distributed agency (e.g. Delbridge & Edwards, 2008; Dorado, 2005; Wijen & Ansari, 2007) that challenges the individualised portrayal of agentic institutional actors. The garbage can lexicon provides an insightful framework for analysis as it highlights the collective aspects and how boundedly rational as well as temporally and contextually constrained actors muddle through the institutional trajectory. I have specified the considerable complexities of an institutional process over the course of more than two decades and shown the multiplicity of actors involved and the related changes in choice moments involving various problems and solutions. The garbage can thus provides a potentially insightful instrument in unpacking the various aspects that can help to explain the collective action involved in many complex institutional processes over time and how this process combines unintended actions with more strategic work in the wake of changes in the constellation of the field.

To be sure though, by borrowing from the garbage can lens in my interpretation of Dutch sustainability reporting I do not mean to claim that institutionalisation and change necessarily resemble only a garbage can process. Rather, this lens makes it possible to analyse a phenomenon from a different angle and thus functions as a sensitizing tool that allows you to see things differently and highlight often neglected aspects, in this case in particular historical contingencies and collectivity.

This research provides several opportunities for future research. First studies could usefully investigate the relation between institutional theory and the potential of integrating garbage can thinking into existing models in more detail. Studies could look at enabling factors. For instance, it could be helpful to compare the potential of the garbage can in various fields. For example, mature vs. emerging fields, heterogeneous vs. homogenous fields or lowly institutionalised vs. highly institutionalised ones. As briefly discussed, it could be expected that depending on the nature of the field integrating garbage can thinking into institutional analyses holds more or less promise. Similarly, the nature of what gets institutionalised may also affect the appropriateness of using a garbage can inspired analysis. Practices that are more or rather less complex or differences in degrees of contestation may be interesting facets. Second, an interesting avenue for further research could be to compare the usefulness of the garbage can for different phases of institutionalisation. That is, can we expect to see differences when comparing creating new institutions, maintaining existing ones or destructing old ones. Third, both institutional studies as well as garbage can theorising are relatively silent about issues of power and politics. Institutional processes include power inequalities and political considerations though and neither do garbage can processes happen in a power vacuum. Appreciating and further unpacking the power dimensions of both processes may provide interesting research opportunities. This could in particular be helpful in peeling down the interplay between institutional actors and how problems and solutions get defined and/or chosen and thus exactly how the interplay between problems, solutions, choices and actors takes shape.

Overall, deciding upon what counts as intentionality and purpose and what is mere randomness or a serendipitous contingencies remains difficult at times, in particular with the benefit of hindsight. Still, the inherent indeterminacy of sustainability reporting could be something worthwhile considering for practitioners and policy makers alike as they attempt to further advance the practice. It seems fair to assume that institutionalisation and change remain at least to some extent mounted on the horns of timing and chance no matter how hard institutional actors, entrepreneurs and for that matter scholars try to claim the contrary. Whereas on the one hand this sensitising and reflective implication of my study can be worthwhile for practitioners by itself, conceptualising reporting along these lines may ironically serve a more strategic purpose as well. That is, recognising serendipity and the interplay between problem, solutions, participants and choices can be a versatile opening towards flexibly 'managing' sustainability reporting. By thinking through possible scenarios one can, within limits of realistic cognition, imagine to construct a diverse tool-box of possible problem-solution combinations, anticipate scenarios and the rise and fall of various participants. This could benefit policy makers as well as other people involved in developing reporting further. Whether this entails bringing the individual strategic agent back in through the backdoor remains an issue. Yet, to put this in perspective it is helpful to come full circle and once again turn to Tolstoy's War and Peace (Tolstoy, 1957: 1342) as the author, despite his overall ambivalent stance on determinism and free will, ponders:

> "Why did things happen thus, and not otherwise? Because they did so happen. Chance created the situation; genius made use of it, says history. But what is chance? What is genius? The words chance and genius do not denote anything that actually exists, and therefore they cannot be defined. These two words merely indicate a certain degree of comprehension of the phenomena. I do not know why a certain event occurs; I suppose that I cannot know: therefore I do not try to know, and I talk about chance. I see a force producing effects beyond the scope of ordinary human agencies; I do not understand why this occurs, and I cry genius."

Chapter 3 - From Values to Value: Sustainability Reporting and the Dynamics of Commensuration[6]

[6] This study has previously been presented at the 2013 EGOS colloquium in Montreal and 2013 Academy of Management Annual Meeting in Orlando. An abridged version has been included in the Best Paper Proceedings of the 2013 Academy of Management Annual Meeting Proceedings.

‘’Not everything that can be counted counts,

and not everything that counts can be counted.’’

(Albert Einstein)

Introduction

Sustainability reporting is defined as “reporting which covers the environmental and social aspects of an organisation’s performance as well as the economic aspects” (Hubbard, 2009: 3). A peripheral practice just over 10 years ago, by 2012 over 6000 firms disclosed a broad set of non-financial information in reports, according to the reports directory of CorporateRegister.com (2013). Of the largest 250 companies in the world 95% published a sustainability report in 2011, compared to only 35% in 1999 (KPMG, 2011a). Governments (e.g. Sweden, Denmark, France, UK) and stock exchanges (e.g. South Africa, Singapore, Malaysia) increasingly demand this type of disclosure and the financial community has taken up an active interest in sustainability reporting as well. For instance, the UN-backed Principles for Responsible Investment (PRI) have by 2012 over 1000 signatories, worth US$ 30 trillion in assets under management and the multi-stakeholder International Integrated Reporting Council (IIRC) has been established to develop a new integrated reporting framework, combining financial and non-financial disclosure (IIRC, 2011). What at first emerged as a normatively inspired safeguard against the unaccountability and non-transparency of powerful firms in an age of globalisation and neo-liberalisation (e.g. Gray, Owen, & Maunders, 1988; Gray, 1992) has evolved into a practice that is linked to a ‘business case’ (Buhr, 2007; Gray, 2006, 2010; Spence, 2007; Wheeler & Elkington, 2001). That is, sustainability aspects are believed to contribute to shareholder value and the aim is therefore “... to connect them to the consideration of economic and financial matters” (Hopwood, 2009: 438).

An emerging puzzle that warrants unravelling is how to explain reporting's development from a peripheral values-based practice aimed at showing corporate citizenship into a more mainstream and strategic value-based practice that helps to provide a true and fair view of a firm. Understanding this is not just of theoretical importance. It is also interesting from a practical perspective as in its consequences this financial rationalisation potentially dilutes corporate sustainability rather than enhances it (see e.g. Gray, 2006, 2010). One strand of extant research has relied on insights from legitimacy theory and argues that sustainability reporting is a purposeful and strategic tool for firms to gain legitimacy by creating 'fit' between their own value system and that of (stakeholders in) society (e.g. Aerts & Cormier, 2009; Cho & Patten, 2007; Cooper & Owen, 2007; Deegan & Blomquist, 2006; Deegan, 2002; Neu et al., 1998; Patten, 1992). Institutional scholars have taken issue with the inherent rationalism and organisation-centrism of this viewpoint though (e.g. Owen, 2008; Smith et al., 2011), yet share an emphasis on legitimacy. They hint at the importance of various institutional pressures towards conformity as an explanation for sustainability reporting's trajectory though (e.g. Adams & Larrinaga-Gonzalez, 2007; Bebbington et al., 2009; Laine, 2009; Larrinaga-González, 2007), thereby possible swinging the pendulum too strongly towards structural isomorphism.

Whereas these studies offer an account of *what* has changed at specific points in time based on compliance with external factors, they remain largely silent on exactly *how* sustainability reporting's evolution from values to value has evolved. Recent institutional studies have therefore started to look more at explanatory mechanisms (Davis & Marquis, 2005) such as strategic framing and resource utilisation (Brown, de Jong, & Lessidrenska, 2009) and the employment of analogies to financial reporting (Etzion & Ferraro, 2010). An interesting but so far largely neglected mechanism in this respect (but see e.g. Berger, 1994; Kolk, Levy, & Pinkse, 2008; Lohmann, 2009) is commensuration. Commensuration can help explain sustainability reporting's trajectory as its focus on the construction and consequences of accountability technologies of measurement, standardisation and comparability makes it very apt for an explanation that discusses the social and dynamic processes typically assumed or ignored by most studies relying on strategic fit or isomorphic pressures. I thus aim to gain insight into the rationalisation and objectification of sustainability reporting by treating sustainability reporting as a project of commensuration.

Commensuration, viewed as "the process whereby different qualities are measured with a single standard or unit" (Samiolo, 2012: 383) transforms qualities into quantities and differences into sameness (Espeland & Stevens, 1998). Scholars have argued that the purpose and appeal of commensuration rest in its potential to recreate social worlds (Espeland & Sauder, 2007), its considerable disciplinary power (Sauder & Espeland, 2009), and the erasure of uncertainty by obfuscating tensions between the metric and the underlying empirical reality (Quinn, 2008). We also know that successful commensuration can be difficult as it requires a mutual understanding of a common interest among actors (Huault & Rainelli-Weiss, 2011), overcoming moral, political and cultural obstacles (Carruthers & Stinchcombe, 1999; Porter, 1995; Quinn, 2008; Zelizer, 2005) and agreement on the representation of the object and subject of commensuration (Samiolo, 2012). Extant studies have also shown that in addition to being a technical exercise, commensuration is a social and political process that requires considerable investment by various, often powerful, actors (Desrosieres, 1998; Espeland & Stevens, 1998; Huault & Rainelli-Weiss, 2011; Kolk et al., 2008). Previous work further suggests that commensuration contains a technical, cognitive and value dimension (Kolk et al., 2008; Levin & Espeland, 2002). In short, although we know about the potentially more and less desirable consequences of commensuration, the plurality of people and difficulties involved and its various dimensions, the dynamics between these elements have remained far less clear.

Thus, there remains a relative dearth of research that opens the 'black box' of commensuration and analyses how various dimensions of commensuration "build on and interact with one another" (Levin & Espeland, 2002: 138). Considering its transformative power in affecting the meaning of sustainability reporting, commensuration warrants more careful scrutiny though (see e.g. Davis & Marquis, 2005; Espeland & Stevens, 1998; Levin & Espeland, 2002; Samiolo, 2012), both in order to understand the process itself as well as its consequences for sustainability reporting. Stated more generally, "appreciating how these dimensions [of commensuration] build on and reinforce each other is key for grasping the significance of commensuration" (Levin & Espeland, 2002: 127), a call echoed more recently by Samiolo (2012: 399) when she calls for "a more systematic investigation of different modes of commensuration". In this study I therefore aim to gain insight into the different dimensions of commensuration. Moreover, I explain the process driving the development of these dimensions and thus enhance our understanding of commensuration in general. At the same time empirically analysing sustainability reporting and its increasing emphasis on standards, guidelines, indicators and valorisation as a project of commensuration also offers insights into the pathologies, limitations as well as the potential (see e.g. Kolk et al., 2008) of this mechanism for a meaningful form of corporate disclosure to emerge.

Drawing on a qualitative study of the history of sustainability reporting in the Netherlands, which has been one of the frontrunners in adopting this practice (KPMG, 2011a; PwC, 2012), I aim to gain a theoretical and empirical understanding of the dynamics of commensuration. I analyse how various dimensions of commensuration have shaped and guided sustainability reporting. I will use a form of historical narrative analysis (Ansari & Phillips, 2011; Leblebici, Salancik, Copay, & King, 1991) to map the sequences of events (Greenwood & Suddaby, 2006) that took place as sustainability reporting commensurated.

Drawing on 94 semi-structured interviews and secondary data, I use Levin and Espeland's (2002) dimensions of technical commensuration (accuracy of measurement), cognitive commensuration (create meaning and matching categories for metrics) and value commensuration (including a metric with a pricing, monetary or other valuation component) to identify different types of commensuration at work. I longitudinally identify three phases: cognitive commensuration marks the first period of environmental reporting; technical commensuration takes over as reporting expands into triple bottom line reporting and finally value commensuration marks the latest phase towards integrated reporting. I argue that the shifts in commensuration dimensions are driven by the rise and fall of various pathologies, which can be explained by means-ends disconnection, professional insulation and cultural contestation.

This argument offers two theoretical contributions as well as a practical one. First, I extend existing studies of commensuration that aim to better understand the mechanisms that shape this powerful process (e.g. Espeland & Stevens, 1998; Samiolo, 2012). In particular, I provide a rich and longitudinal empirical account of a commensuration project that analyses its technical, value and cognitive dimension. Specifically, I suggest that their respective dominance over time can be explained by analysing the pathologies that accompany each dimension, which in turn are caused by a mixture of the people involved in the commensuration process and their aims through means-ends disconnection, professional insulation and cultural contestation. Second, I shed light on the temporal aspects of commensuration, until now mostly an implicit assumption rather than a more explicit focus (e.g. Kolk et al., 2008; Levin & Espeland, 2002). In particular, I contend that technical, value and cognitive commensuration appear in a specific order and, moreover, that cognitive commensuration can function both as a precondition for and a result of the other two dimensions. This sheds further light on the specifics of the commensuration process. Finally, and more practically, a better understanding of the commensuration of sustainability reporting speaks to those interested in the practice as such (see e.g. Gray, 2002, 2006; Owen, 2008). My analysis shows how reporting has transformed itself into a more mainstream and 'financialised' practice and helps to better understand the 'cogs and wheels' of reporting. In particular, it highlights both the virtues (e.g. growth) and vices (e.g. ignoring some sustainability aspects) of commensuration and thus the potentiality and limitations for meaningful sustainability reporting to occur. It thereby offers a pragmatic middle ground between critical and managerial approaches (Burritt & Schaltegger, 2010).

The paper is organised as follows. First, I discuss the literature on commensuration and explain its three main dimensions. Second, I will examine my data collection and analysis methods, and provide more details on the case of sustainability reporting in the Netherlands. Third, in my findings I will present a narrative account of the main phases of sustainability reporting and the various forms of commensuration that can be identified throughout this process. Fourth, I will explain why the dominant dimensions of commensuration shifted and discuss the implications of my findings for the commensuration and sustainability literature. Finally, I address implications for practice and possible areas for future research.

Theoretical background

The concept of commensuration

The concept of commensuration has been used to analyse a whole range of phenomena including academic rankings (Sauder & Espeland, 2009), cost-benefit analyses (Lohmann, 2009; Porter, 1995; Samiolo, 2012), the creation of new markets such as those for weather derivatives (Huault & Rainelli-Weiss, 2011) and secondary life insurance (Quinn, 2008), the emergence of carbon disclosure (Kolk et al., 2008) and carbon accounting and markets (Lohmann, 2009; MacKenzie, 2009). Commensuration is a way to reduce and simplify disparate information into numbers that can easily be compared and this transformation allows people to quickly grasp, represent, and compare differences" (Espeland & Stevens, 1998: 316). To be sure, although commensuration can be seen as an aspect of the broader literature on standardisation (see e.g. Brunsson, Rasche, & Seidl, 2012), it is unique in that it specifically seeks to provide a common metric (Espeland & Stevens, 1998). Commensurating sustainability reporting may not always lead to this ultimate consequence of complete quantification on a common metric (see e.g. Kolk et al., 2008). Still, the case of sustainability reporting shows with its development of rankings, standards, valorisation, comparability and sustainability key performance indicators that many practices of commensuration are employed.

Commensuration is an apt mechanism to study the emergence and objectification of practices constituting modern capitalism (e.g. Huault & Rainelli-Weiss, 2011; Levin & Espeland, 2002; Quinn, 2008; Zelizer, 2005). As it reduces the relevance of context, puts a value on and makes calculable and comparable what used to be incomparable, and thus underpins the development of rationality and impersonality, it helps to constitute capitalism (Espeland & Stevens, 1998; Weber, 1981). For instance, the commensuration of greenhouse gases and eventually transforming them into tradable emission rights, thereby trying to internalise the externalities of carbon emissions, has as its aim to construct a carbon market and commodify the emission of carbon, as shown by Lohmann (2009) and Mackenzie (2009). Commensuration is thus a typical aspect of modernity and is part of more general trend of a growing importance and influence of markets, comparability, transparency and accountability in a society where measurability and reality increasingly coalesce (see e.g. Meyer, Boli, & Thomas, 1994; Porter, 1995; Power, 1997). In that sense it fits well with sustainability reporting's trajectory. Commensuration as a social process demands careful scrutiny though, as it is susceptible to at times adverse consequences. Furthermore, it requires active work of various people who aim to achieve something with this commensurative work.

First, it may often go unnoticed but in particular when relationships are forged between objects that are not immediately comparable (for example the social, environmental and economic aspects of corporate behaviour), considerable investment is required (e.g. Desrosieres, 1998; Huault & Rainelli-Weiss, 2011). Commensuration is thus not a mere technical and neutral exercise but "requires much work and effort to accomplish, since it integrates disparate value systems, reconfigures them, establishes new interpretive frameworks (Espeland & Stevens, 1998; Stevens & Espeland, 2005) and, somehow, changes the world" (Huault & Rainelli-Weiss, 2011: 1397). Simply put, commensuration involves a plurality of actors, yet successful execution tends to be enhanced by powerful ones. For example, Carruthers & Stinchcombe (1999) show the importance of the government agency Fannie Mae (the Federal National Mortgage Association) in standardising and homogenising individual home mortgages to establish liquidity in a secondary mortgage market and effectively achieve a form of value commensuration. Kolk et al. (2008) discuss in their study on carbon reporting and accounting the role of standard setters and civil society to bring commensuration into motion, yet suggest that to come to more definitive and binding metrics powerful actors such as the state and investors are in fact required. In their study on how procurers commodify management knowledge together with consultants and managers, O'Mahoney et al. (2013: 229) conclude that commensuration is "both a reflection of, and a medium for, powerful agents" and a "mechanism for the exercise of power of specific groups".

The reasons of these actors to engage in commmensurative work may vary as it is a transformative mechanism that has the potential to affect both objects and subjects (e.g. Espeland & Stevens, 1998; Samiolo, 2012). For example, Owen-Smith (2005) shows how academic Technology Licensing Offices rely on commensuration to match new and messy licensing cases with existing metrics to translate new cases and thus simplify the decision-making and management. Commensuration limits and systematises the amount and complexity of information to process and thereby produces and facilitates control because it “renders complex, heterogeneous relations more legible and more available for scrutiny” (Levin & Espeland, 2002: 125). Espeland and Sauder’s (2007) case study of law school rankings discusses the subjectification and reactive power of rankings (a form of commensuration) by explaining how these have influenced behaviour in law schools to “recreate social worlds”. They also describe how commensuration simplifies information, shapes attention by unifying as well as distinguishing objects and invites reflection on the relation between the metric and what it is supposed to represent.

Despite the best of efforts and intentions, it is a difficult and at times controversial process as commensuration helps to establish what is considered of value and importance but at the same time it also marks what is considered irrelevant and gets silenced. Whereas a premise of commensuration is that it “... presupposes that widely disparate or even idiosyncratic values can be expressed in standardized ways and that these expressions do not alter meanings relevant to decisions” (Espeland & Stevens, 1998: 324), in reality not all values can easily be made commensurate. For example, certain symbolic, sacred or intrinsic forms of value are sometimes regarded as unique and incommensurable, as “commensuration issues can be defined as stemming from the uneasy encounter of seemingly irreconcilable moral or cognitive worldviews” (Huault & Rainelli-Weiss, 2011: 1413). An example is the market for human genetic material (i.e. eggs and sperm), where a value is put on the fundamental building blocks of a human life which goes beyond the limits of commensuration for some (Almeling, 2011), or the creation of a secondary market for life insurance in the face of considerable moral ambivalence (Quinn, 2008). In addition to conflicts between these different modes of valuation, difficulties of commensuration also become visible when it involves threats to identity. For example, Samiolo (2012: 399) argues that an agreement on the cost-benefit analysis for the Venice flood protection could not be reached since Venice and its lagoon were considered unique and a model in itself that "opposed an abstract space of calculation to a specific place which could only be described and calculated locally".

In summary, although we know that a plurality of actors with different objectives are involved in commensuration processes resulting in a range of outcomes, the *dynamics* of commensuration have remained less clear. What is more, prior studies have identified three, at least analytically, distinct dimensions of commensuration: technical, cognitive and value commensuration (e.g. Kolk et al., 2008; Levin & Espeland, 2002). Whereas commensuration has received considerable attention in the academic literature, systematic analyses of these different dimensions of commensuration are relatively scant yet important to better understand and appreciate "its social and theoretical significance" (Espeland & Stevens, 1998: 315).

Dimensions of commensuration

Technical commensuration is particularly concerned with "measuring or classifying specific characteristics or practices more accurately (Levin & Espeland, 2002: 126). On the one hand this has a mechanical aspect. For instance, Levin and Espeland (2002) mention how in athletics the refinements in measuring the speed of sprinters, (finishing) times, electronic starting guns all are technical contributions that ultimately ease the commensuration of the performance of athletes in past, present and future races. In their respective studies on carbon disclosure Kolk et al. (2008) and MacKenzie (2009) discuss the technicalities of commensurating different greenhouse gases. In particular, they discuss the technical work involved in establishing the global warming potential (GWP) for the various greenhouse gases, thereby translating very different gases into a common unit of CO_2 equivalents. They show that in addition to the need for proper physical equipment and technologies to set up accurate measurements, also a social factor comes into play to reach consensus. That is, in the example of Mackenzie (2009: 443–447), it was not only crucial to rely on measurement devices and complex natural science to establish a GWP for HFC-23 (a refrigerant) to translate it into CO_2. What is more, this technical commensuration also included a long process of negotiating and coming to a mutual understanding of a “correct” method of measurement and thus a final GWP.

The second dimension of *value commensuration* typically, but not necessarily, involves a pricing or monetary component. For instance, this is achieved through attempts to quantify or even monetise key performance indicators from the sustainability spectrum but also by combining disparate elements and (e)valuating firms through rankings and ratings. The aim is to ease valuations by integrating different values in a common metric. For instance, prices have been attached to a tonne of CO_2eq (MacKenzie, 2009), air pollution (Levin & Espeland, 2002), and weather risks (Huault & Rainelli-Weiss, 2011), but also non-monetary scales such as academic rankings are an instrument of quality evaluation (Sauder & Espeland, 2009). Value commensuration attempts to adjudicate between conflicting values and to reconcile and appease their differences by constructing an overarching metric. It is arguably the most visible aspect of commensuration and can be situated as a sub-process of the broader literature on (e)valuation(see e.g. Lamont, 2012) in its effort to create equivalence among what are often radically different meaning systems and types of value (see e.g. Fourcade, 2011 on money and nature). Value commensuration frequently marks an instance where conflict and contestation over incommensurability can be rife since this dimension makes it possible to emphasise variations in magnitude based on some dimensions while obscuring others.

Finally, *cognitive commensuration* is a “more tacit cultural accomplishment, it involves reclassifying the world in terms of categories that align more closely with the new metrics” (Levin & Espeland, 2002: 126). This dimension of commensuration shapes how we understand and assign meaning to the world and categorise it, as well as the logics underpinning this. Developing a common understanding or discourse of the general accountability and responsibilities of firms and determining the elements belonging to its sustainability realm are examples. To better understand this dimension the concept of framing can be useful, as suggested by Lohmann (2009: 503) in his study on environmental accounting. He argues that it “focuses on what produces and sustains the objects and agents” and “it sees objects constantly being made and remade, and boundaries as fluid or poorly defined”. Previous studies have typically seen cognitive commensuration as a consequence of the new metrics. For example, drawing on the work of Sombart (1953), Levin and Espeland (2002: 126) use the example of double-entry bookkeeping that gave rise and meaning to the entity capital. In parallel this led to an understanding of investments as a balance between debt and credit which “obscures the social dimensions and idiosyncratic characteristics of economic exchange”. Commensuration thus determines what we see and value and how we understand the world. What has been less recognised is that rather than follow, cognitive elements may also be necessary to ignite other dimensions of commensuration. For example, Huault & Rainelli-Weiss (2011) analyse in their study the failed attempt to develop a European weather derivatives market. The authors contend that industrial firms and weather derivates market promoters could not construct a shared problem and fitting solution that would serve the common interest and in this absence technical and value commensuration remained problematic.

To my knowledge only two studies have explicitly addressed these commensuration dimensions. Kolk et al. (2008) studied whether commensuration had sufficiently progressed to come to meaningful greenhouse gas reporting through the work of the Carbon Disclosure Project (CDP) and Levin and Espeland (2002) looked at the creation of a futures market for air pollution. The latter study suggests that, as air pollution changed “from a social problem to a technical problem” (Levin & Espeland, 2002: 138), technical commensuration preceded value and subsequently cognitive commensuration. However, they both explain little about the explanatory mechanisms between dimensions. This further highlights the need to analyse the dynamics of commensuration in more detail as its transformative power and “ability to legitimize and institutionalize new epistemic forms” (O’Mahoney et al., 2013: 228) makes it important to better understand how commensuration does this and, moreover, how the various dimensions of commensuration interact with and follow on each other and the explanatory mechanisms behind this. An analysis of this process explicates sustainability reporting’s transformation from a values-based practice towards a value-based.

Methods[7]

Site selection

To understand the commensuration of sustainability reporting I focus my analysis on the organisational field that has formed around sustainably reporting (see e.g. Context, 2007; Etzion & Ferraro, 2010; Kolk, 2010; Larrinaga-González, 2007; Levy et al., 2010).

[7] Some replication of the methods sections of Chapter 2 and Chapter 4 cannot be avoided here as the respective chapters share a lot of methodological aspects.

Organizational fields are defined as "… those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products" (DiMaggio & Powell, 1983: 148). Fields are relational spaces around issues (Hoffman, 1999) where "problems of organizing are debated" (Wooten & Hoffman, 2008: 143) and solutions to problems contested, negotiated and translated (Davis & Marquis, 2005; Jennings & Zandbergen, 1995; Zilber, 2006). For reporting, in addition to firms actors of interest are also NGO's (Kolk, 2004a, 2004b), the government (Lambooy, 2010; UNEP & KPMG, 2006), professional services firms (Levy et al., 2010), institutional investors and standard setters such as the GRI which is located in Amsterdam.

I focus my research on sustainability reporting in the Netherlands, keeping in mind its embeddedness in a wider environment. The Netherlands has been one of the frontrunners in reporting (KPMG, 2011a) and the "complex social setting in which causal dynamics were not immediately apparent and the motivations of actors were obscure" (Greenwood & Suddaby, 2006: 31) make the sustainability reporting field a salient case. In addition, following Jennings and Zandbergen (1995) I focus on a specific country since fields of sustainable practices are often local in character (see also Adams & Kuasirikun, 2000; Kolk, 2005). After a short-lived first wave of interest in primarily social aspects of corporations in the 1970's (Dierkes & Antal, 1986) reporting picked up momentum in the late 1980's when the first separate reports came out. By 2011, 82% of the Dutch largest 100 companies published sustainability reports (KPMG, 2011a). Overall, the number of published reports in the Netherlands has grown steadily over time (Appendix A).

Case significance

Sustainability reporting is a salient case study and a good example of commensuration. At its core, reporting is concerned with providing an account of the state of affairs in the organisation. The inclusion of sustainability aspects in what used to be only financial accounts makes it important to turn these allegedly unrelated aspects in an understandable and comparable format. Putting social and environmental aspects into indicators, ratings, rankings and hard bottom-line financial figures makes reporting a salient commensuration project with various spheres claiming (in)commensurability (Espeland & Stevens, 1998). A financial/economic rationale is here typically set against a social/environmental one and these different conceptions of what is important lead to a moment in which the question of what is (of) value comes to the fore. Overall, this transparency allows for good theoretical development and offers an exemplary case as subject positions are often contested and "transparently observable" (Eisenhardt, 1989: 537; Yin, 2009).

Data collection

I use various sources of data. Triangulating the data sources enhances trustworthiness (Lincoln & Guba, 1985) and makes it possible to gather information about actors' experiences, practices and reasoning as well as see the data in a historical context (Yin, 2009). Data collection was managed as follows.

First, to get familiar with the field, test the appropriateness of the case and determine prospective interviewees I closely read various documents and archival records (table 5). In order to get a broad impression of the field and to determine useful interviewees four key contacts were interviewed at first. These four contacts all had a minimum of ten years of diverse experiences in the sustainability (reporting) field. I also looked at attendance lists of past conferences on sustainability reporting. These steps resulted in a first list of prospective interviewees which were contacted. After this, a snowball sampling technique was applied based on recommendations of interviewees (Bryman & Bell, 2007). This approach made it possible to efficiently concentrate on contacting field actors with desired characteristics fitting the framing of the study, more akin to theoretical sampling (Strauss &

Corbin, 1998). Most prospective interviewees had multiple years of experience. In order to get a rounded overview of the various subject positions present in the field and to prevent selection bias I aimed to select interviewees from various disciplines and positions in the field. The potential problem of non-representativeness was minimised by actively keeping track of the category of actors interviewed (Malhotra & Birks, 2003). For instance, when at one point it became clear that the NGO's were relatively ill-represented, potential interviewees were identified by actively checking conference attendance lists, making enquiries and searching publications, guaranteeing a range of different actor-positions were represented.

The first interview round took place between February and September 2011. At this point preliminary analysis was conducted and remaining empirical blank spots identified. A second wave of interviews between November 2011 and February 2012 was aimed at filling these blank spots. This process was continued until after 94 interviews a saturation point had been reached (both theoretically and empirically). Table 4 provides an overview of the background of my interviewees (total number of interviewees exceeds 94 because some people are equally involved in various spheres, or have been in the past). Interviews allow for an account of current and historical events that provides information on actions, motives, strategies and their explanations (Malhotra & Birks, 2003). Interviews were semi-structured (see Appendix F for broad outline of topics) and in total just over 100 hours in length. Interviews were tape recorded, with the exception of seven where extensive notes were taken, and transcribed. These seven interviews were included in the open coding but not in the subsequent rounds of coding. In particular for interviews that discussed the more distant history of reporting I did extensive prior research (based on internet search, documents, information from previous interviewees). This was done in order to ask specific questions, assist interviewees in structuring their thoughts and memories, come up with counterfactuals in case required to test their statements and ultimately limit the risk of retrospective bias (Eisenhardt & Graebner, 2007; Morris, 1981).

Table 4 Overview of interviewees

Actor group	Number of interviewees
Public sector	12
Civil society	24
Investment community	13
Reporting firms	25
Academics	6
Professional services firms	26

Table 5 Overview of data sources

Type of data	Detail of source	Amount of data	Data analysis
Interviews with field informants	Interviews with firms, civil society, investors/raters, consultants, accountants, policy officials, academics.	94 interviews (approx. 100 hours)	Transcribed interviews, analysed and coded the material. Through iterative analysis of data and literature the main phases, themes and commensuration work emerged
Archival and documentary material	Newspaper articles of Dutch press, consultancy reports, NGO studies, government legislation and reports; investor statements	3100 pages	Contextual reading and field familiarization. Setting up event history database; background for interviews; enhanced credibility and further validation of interview data interpretations; document summary forms.
Conferences and workshops	Dutch Annual Seminar CSR Reporting 2012; Seminar Integrated Reporting: 'Measuring is knowing'; Roundtable Sustainable KPI's	30 pages	Notes from discussions, informal meetings and presentations reviewed. Helped to understand the commensuration practices and gain better practitioner perspective on commensuration and discuss proposed theoretical constructs and relations.

In addition to interviews various other data sources were consulted (see table 5). First, consulting various archival records and documents is a beneficial addition to interviews (Yin, 2009). Articles in main Dutch business and general newspapers, government reports, legislation on sustainability reporting, publications of professional service firms, reports and statements of NGO's and investors, academic publications and sustainability reports of companies were consulted. These data sources provided contextual reading and familiarization with the field, but also a form of "checks and balances" for the emerging dimensions and categories based on the coding of the interviews. I also created document summary forms (Ansari & Phillips, 2011) that could later be used for coding alongside interview transcripts. Finally, several workshops and conferences were attended. These field events were attended by various stakeholders. Although conference notes were not coded as such, in addition to gaining further insights into the reporting field and commensuration practices, through presentations and informal meetings emerging themes and constructs could be tested and further refined with people in the field.

Data analysis

I rely on a historical narrative analysis, an approach taken in previous studies (Ansari & Phillips, 2011; Etzion & Ferraro, 2010; Leblebici et al., 1991; Scott et al., 2000) that "presents an account of the linkages among events as a process leading to the outcome one seeks to explain" (Roth, 1988: 1). I combine this approach with a temporal bracketing strategy that works well to analyse my eclectic process data and show "how actions of one period lead to changes in the context that will affect action in subsequent periods" (Langley, 1999: 703). To achieve my research aim I first used an inductive approach. I started my analysis by asking the very general question of 'what happened?' to get a broad impression of the evolution of the sustainability reporting field over time. More specifically, I first coded the interview transcripts and document summary forms very broadly using the qualitative data analysis software NVivo 9. This exploratory coding round was guided by a concern for the who, when, why, what and how of sustainability reporting. Through this more exploratory open coding (Strauss & Corbin, 1998) I coded events, actors and the activities they engaged in, intentions or justifications for reporting, audiences and the like. This expansive first coding round was only minimally driven by theory and largely inductive. It took place as the interviews were being conducted, marking a continuous iterative process between interviews, data analysis and emerging theoretical constructs. It resulted in a large number (200+) of a diverse range of 1st order concepts (Gioia, Corley, & Hamilton, 2013).

Second, I reread all document forms and interview transcripts, analysed assigned codes, but now specifically with the more focused question in mind of trying to trace how reporting emerged and subsequently gained momentum and spread. Recurrent references to the need for, criticism of and moves towards standardisation, comparability, quantification, monetisation and financialisation were noticeable. Practices such as rankings, ratings, benchmarks, and performance indicators came up frequently as well. This interest in developing metrics out of various, often qualitative, unlikes and the relative disdain towards qualitative information in favour of measurable and objective quantitative data warranted a more theoretical explanation, even more so because as reporting's development progressed this tendency seemed to get stronger. At this point in the data analysis, when a stronger theoretical grounding was called for, I followed Gioia and colleagues (Gioia et al., 2013: 23) when they argue that "upon consulting the literature, the research process might be viewed as transitioning from ''inductive'' to a form of ''abductive'' research, in that data and existing theory are now considered in tandem (Alvesson & Kärreman, 2007)".

Third, I consulted the commensuration literature since it appeared from the various codes that commensuration was potentially a process that was at play here. The data was thus again analysed and (re)coded, this time zooming in on commensuration aspects. By consulting the data and informants I identified what could be considered main commensuration examples and these were classified along the dimensions of value, cognitive and technical commensuration. I note that when classifying commensuration at times the same practice can encompass multiple dimensions of commensuration. For example, a ranking can be at first primarily a cognitive tool that shapes the meaning of what entails sustainability reporting, yet in a more mature stage becomes more a value judgment of reporting quality. Ultimately categorisation depended on the specific context and the main function in the respective phase of reporting. I then tracked the occurrences of these commensuration dimensions throughout the history of reporting to see whether there was temporal variation. My analysis suggested that the various types of commensuration developed differently over time with a dominance of first cognitive and later technical and value commensuration, respectively (see also table 6 and Appendix C).

To understand and explain these shifts further I also tracked the evolution of various contextual factors by analysing the interview transcripts and document summaries. In essence, this analysis led me again to consider the 'who, what, when, why and how', but this time in relation to the commensuration of sustainability reporting. In short, a story emerged in which the commensuration took place against a background of shifts in type of reports, rationales for reporting, actors involved as well as outcomes and pathologies of reporting. Three temporal phases were thus distinguished, each with its dominant commensuration dimensions and contextual factors and outcomes. An overview of these three phases and their specific characteristics was iteratively discussed and validated throughout the interviews (see also table 6 and Appendix D).

Overall, attention thus shifted gradually from the raw empirical data and the voice of the informants to the theoretical grounding of the story that started to develop based on the codes and related categories identified. Starting with a broad 1st order analysis, a more condensed set of 2nd order categories followed, more akin to the idea of axial coding (Strauss & Corbin, 1998) or the work of Gioia and colleagues (Corley & Gioia, 2004; Gioia et al., 2013). This process was repeated until the point of theoretical saturation was reached

(Glaser & Strauss, 1967). Below I discuss and explain the three phases of sustainability reporting and the role of commensuration in more detail.

Findings

My analysis is structured around three main phases of reporting[8]. Throughout these phases a change in dominating commensuration dimensions can be seen. First cognitive commensuration was most prominent, later technical and value commensuration, respectively, grew in importance. Below I provide a summary of these three commensuration phases of sustainability reporting and sketch out the circumstances in which the shifts took place. Derived from the data, in the discussion section I argue that these phases can be explained by focusing on the importance of pathologies that ignite shifts in commensuration, supported by a change in the purpose of reporting's commensuration and the people involved. Table 6 offers a short summary and Appendix C and D offer additional details and supporting evidence.

Table 6 Summary of three phases of sustainability reporting

Reporting phase	**Environmental Reporting (<2000)**	**Triple bottom line Reporting (2000-2007)**	**Integrated reporting (2007<)**
Commensuration dimension	Cognitive	Technical	Value
Pathology	Reporting vague practice for 'values-driven tree-huggers'	Reporting as a mindless tick-the-box exercise	Reporting impoverished because of ignoring incommensurables
Purpose	Creating awareness; putting reporting on the map; moral framing and an add-on to business-as-usual	Business case (efficiency, risk & reputation)	Strategic value creation (growth, innovation, comp. advantage); valuation
People	Civil society; state	Standard setters and consultants	Investors and accountants

[8] The periods for these three phases should not be treated as abrupt and absolute demarcations, but rather as transition periods in which one dominant phase with its set of aspects gets taken over by a new one.

Phase 1 (<2000): Cognitive commensuration and environmental reporting

The key development in this early stage of reporting was to indicate the moral failing of the firm and the need for it to act responsibly and show accountability. In particular NGO's and the Dutch government put a moral appeal on firms and through cognitive commensuration tried to establish a meaning system in which business, sustainability, corporate responsibility and transparency started to become related concepts. The practice ran into its own limits though as it was considered too vague and for 'values-driven tree-huggers', thereby limiting its appeal but at the same time giving impetus for change.

Cognitive commensuration: combining business, sustainability and transparency

From the late 1980s onwards Dutch firms started to introduce environmental management systems (Evers et al., 1991; VNO-NCW, 1987) and the first Dutch Environmental Policy Plan was published in 1989. Internationally, the World Commission on Environment and Development (WCED) published its influential report 'Our Common Future' (i.e. 'Brundtland Report') on solutions to global environmental problems in 1987. In Rio de Janeiro the UN Conference on Environment and Development (UNCED), i.e. the "Earth Summit", took place in 1992. Its plan of action, Agenda 21, contained a recommendation urging firms "to report annually on their environmental records, as well as on their use of energy and natural resources" (Agenda 21, 1992, art. 30.10). By no means all firms were convinced of the need to be transparent and accountable though, as one informant recalls some firms being of the opinion that "We should not start doing this! We put too much responsibility upon ourselves. It is up to the government to prescribe with legislation and policies, we will execute it and that's it". Nevertheless, in this period a discourse of conducting business responsibly and showing accountability through the disclosure of, mainly environmental, information to the general public started to emerge.

It remained largely unclear what this disclosure was supposed to look like though. This was perhaps unsurprising since, in the words of a former CEO of a Dutch multinational corporation (MNC), “people were not used to disclose information that had no, or a very limited, financial component. They found that soft and irrelevant”. One consultant active in this period recalled that “everybody was trying to find out: what do we have to report on and how, and can we actually report? ... Real missionary work”. Whereas some progress started to be made in developing indicators and reporting guidelines (examples of technical commensuration), cognitive commensuration played a more important role. Before serious progress could be made with indicators, rankings, benchmarks and the like, it was required to understand why this was required and what it was exactly for. That is, on a cultural-cognitive level the categories in which people understood the world needed to be reclassified and concepts previously considered disparate needed to be linked. This meant raising often controversial issues such as what firms are exactly responsible for and the sense and nonsense of accountability and transparency. In sum, it involved paving the ground for reporting and make sure that on that more abstract foundation later concrete measures could be built. In particular NGO’s and to an extent also the Dutch government, through regulation, were driving forces behind this.

In concrete terms, in times of rising corporate power, with the position of corporations in society changing and the number of high-profile environmental and social scandals mounting (e.g. Shell, Nike, Chiquita, ABN Amro), NGOs started to demand corporate openness, transparency and accountability as “you saw firms first being attacked by NGO’s, they had to disclose more and more information” (Interview, SRI investor). This openness allowed NGO’s to “use the information themselves but [they] could also use it more within the society, like saying ‘look at those firms, these things are very unclear yet very important topics for them'" (Interview, consultant). Environmental reporting thus became "a beneficiary of movements and pressures that are driving business or signalling business that transparency is not an option any longer, it's really an expectation and you must respond to it" (Interview, NGO). From a commensuration perspective, this activism helped to constitute on a more cognitive and cultural level a logic that combined previously disparate elements such as the current state of the environment and the influence of firms in this, and the future of the planet and the role and responsibility of firms towards this. Moreover, connections started to be made between these aspects and the actual consequences of non-accountability in terms of, for instance, reputation. The impactful Brent Spar case and boycott of Shell is a particularly relevant example.

In the spirit of this zeitgeist, there also was "a push from the government, regulation on reporting, that had a very concrete push effect" (Interview, accountant). The clearest example is the Dutch Environmental Protection Act[9] that stated that starting from 1999 around 300 companies (heavy polluters) were required not only to report to the government and regulators on a variety of environmental aspects (technically already well defined), but also had to publish a Public Report. This initiative was the result of intense negotiations between employer associations, (environmental) NGOs and the Dutch government. The exact format, structure and content of the public report remained relatively unspecified though. This was precisely because consensus on the meaning of a report did not exist and most parties did not want the developing field of reporting to be stifled by political dictates. Too much specificity through technical commensuration by means of, for instance, indicators went against the opinion that a report was "context-dependent in the eyes of stakeholders. The idea was that it was firm-specific, made-to-

[9]Wet Milieubeheer, Staatsblad 1997, nr. 170. See Chapter 12, accessed on 14-06-2012 at:
http://wetten.overheid.nl/BWBR0003245/Hoofdstuk12/geldigheidsdatum_15-06-2012
Wet van 10 April 1997, Staatsblad 1997, nr. 170 & Besluit Milieuverslaglegging of 17 November 1998, Staatsblad1998, nr. 655

measure work" (Interview, standardisation agency). Thus, again, rather than trying to develop a clear-cut reporting framework through technical commensuration, the legislation was a relatively flexible cognitive stick that was meant to make firms reconsider and better understand their position in society, their responsibilities towards it as well as the possible implications of linkages with its environment. Thus, the legislation aimed to change the cultural-cognitive frame by combining these previously disparate elements.

The limits of cognitive commensuration

Although this new 'reality' resonated with some firms, it came with its limitations (or pathological aspects as will be discussed below), as its appeal remained limited. Reports were often vague, focused on the environment and had a strong moral undertone. That is, in the words of a partner of one of the Big Four[10] firms: "When I started working on sustainability it was more like: you need to do good. You have to do business decently and ethically. You have to show that in your management and also report on it". A consequence was that many reports were easily accused of being superficial, selective in their content and a form of 'greenwashing'. Firms taking up reporting saw it often as an opportunity to finally tell some good news and "... what you saw in these earlier reports is a lot of those 'hurray' stories" (Interview, sustainability journalist). Furthermore, the appeal of morally inspired reporting was problematic as "your idealism is different than mine and different than that of a manager. So when you talk about idealism that is a really difficult starting point" (Interview, consultant).

Whereas this period of cognitive commensuration brought attention to reporting and helped to develop a different frame of thinking, the cognitive focus at the expense of more technical work also marked its limitations as "everybody talked about Agenda 21 of the Rio Earth Summit and about progress, but there was no set format that could measure success"

[10] Deloitte, Ernst & Young, KPMG and PwC

(Interview, NGO). A clear framework for reporting and consensus on which environmental aspects merited the attention of reporting did not exist, and with corporate accountability becoming increasingly accepted and expected through the cognitive work of NGO's and the government to bind previously disparate elements together, calls to bring reporting to a next level emerged. In sum, the idea that business, sustainability, transparency and accountability were perhaps all sides of the same coin started to emerge, yet how to concretely work that out in practice was still a different medal altogether. This change is well illustrated by one informant, a sustainability consultant, who recalled it as "Great that you report, but please report more professionally, report better and more complete, and do it more systematically". In effect, sustainability reporting started to transform around the turn of the century.

Phase 2 (2000-2007): technical commensuration and triple bottom line reporting

The key development in the second phase was the emphasis on technical commensuration through the development of guidelines, indicators and standards that provided the somewhat complex and messy sustainability reporting some 'hands and feet'. Supported by consultants and standard setters entering the (lucrative) market, sustainability reporting became defined as supporting the triple bottom line and based on a business case. However, over-reliance on indicators, standards and guidelines ran the risk though of becoming a mindless tick-the-box exercise, resulting in meaningless reports that were as burdensome to prepare for firms as they were to read for interested parties.

Technical commensuration: developing sustainability measurement

In contradistinction to the rationale of the first phase, one informant, a Big Four partner, captured the new spirit as "[s]ustainability is a topic that is important in the world. That's no ethics or morality. It is simply that if I don't pay attention now, I'll have a problem later on". Consultants became more active in the field as well and tried to further drive this discourse and professionalise reporting. One government official recalled that “at that point in time consultants got a boosting function. … They actively approached corporates with the idea: ‘should you not start doing something about sustainability’”. As consultants saw market potential with these newly reporting firms looking for guidance, according to some this “... reflects the mainstreaming of the issue. It says that there's recognition that these are issues that need to be worked on, and that there's money to be made in it” (Interview, NGO/consultant). The business community meanwhile “... was starting to understand the business value of sustainability as a matter of reputation, as a matter of brand, as a matter of attracting talent ... So they had a business mind, what's the business case?” (Interview, sustainability researcher). Corporate accounting scandals (e.g. Ahold, WorldOnline, Worldcom, Enron) at the start of the 21st century further added to the notion that “suddenly extra-financial or non-financial information became very interesting because it mirrors a behavioural component” (Interview, investor). As cognitive steps had thus been made, the business-case focused approach towards reporting saw firms desire something less fuzzy and they “were looking for certainty, something to hold on to in terms of reporting” (Interview, CSR manager). They wanted to remove uncertainty around reporting and make it more concrete and manageable. In short, aspects that technical commensuration could provide an answer to increased in importance.

Commensurative work was needed to respond to the call for more clarity and business case reporting. This became most visible through the development of various standards and guidelines. At first the notion of the triple bottom line (TBL) by (consultant) John Elkington (1997) emerged. His integrated and interconnected vision on people, planet, and profit principles tried to make reporting more manageable and concrete. This TBL concept caught on in the Netherlands as stakeholders involved in reporting “almost immediately started getting the signals from every side that actually there is much more needed than just environment, that this also has to cover social and even community, in addition to wider economic issues" (Interview, NGO). Of particular interest here is the extensive technical commensuration undertaken by the Global Reporting Initiative (GRI). Heavily influenced by Elkington's thinking (who was part of GRI working groups as well), with the start of this multi-stakeholder initiative in 1997 a dominant global standard started to emerge and the first version of the GRI Guidelines (now called G1) was released in 2000. The reasoning of the guidelines was "let's instead of having 50 different standards, let's all come together and try to create a global consensus among major stakeholders over what should be expected regarding environmental health and safety and social and economics" (Interview, GRI stakeholder). New versions followed in 2002, 2006 and 2013. These contained principles to determine your reporting content, quality, strategy and indicators as well as extensive guidance on the definitions and measurement of these indicators. The guidelines picked up momentum in the Netherlands (see table 7), as firms wondered "What do I have to report, how do I have to report? A little bit scared they were and they tried to follow the guidelines" (Interview, sustainability consultant). The move of the GRI to the Netherlands in 2002 gave it further impetus and visibility.

Table 7 Number of reports using GRI Guidelines in the Netherlands

Year	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11
# of GRI reports	3	7	5	7	15	24	26	30	40	51	66	96

Source: GRI Sustainability Disclosure Database

The work of the GRI had a strong technical dimension in its aim to develop a standardising framework with measurable indicators that were preferably concrete and increasingly also quantitatively measurable, rather than just qualitative descriptions. There was a strong notion that "CSR has to become formalised and was expected to be concrete, measurable, comparable and quantifiable" (Interview, government official), paving the way for technical commensuration. This was not self-evident and easy though. Whereas required according to most, in particular “the people in the social areas often were under the mistaken impression that what they thought should be written in there was what the company was going to write there, and they didn’t realise that unless you get pretty specific they’re going to write about anything and it’s going to be just mush again” (Interview, GRI stakeholder). The development of indicators was typically done in working groups comprised of specialists representing different constituencies. As one former GRI employee recalled, this was not always easy as “a lot of the times people got mixed up, what is the role of the reporting indicators that are meant to be disclosed, versus setting what is the standard for these indicators”, the latter being not the primary aim of the initiative.

Furthermore, whereas economic indicators were relatively easy to construct, for environmental and in particular social aspects things were less straightforward. Environmental indicators borrowed from more established institutions such as the International Standards Organization (ISO). After all, “if a company is doing an environmental management system and they're following various aspects of the ISO 14000 series, they're going to have results to report on. And so why don't we make it easy”, as a GRI employee involved argued. For example, during working group meetings “we debated so long about how do you number these indicators? How do you number them? Is it 1.1 or is it EC2 or … we would study the ISO system and see if there were something from there we could borrow“. Notwithstanding agreement that “especially on the social side we need to make it more comparable because it’s too soft and too mushy” (Interview, GRI stakeholder), the development of social aspects remains up to this day most controversial and more difficult than the environmental realm. As one sustainability manager recalled:

> “The problem was that the people in the social groups weren’t used to metrics, they didn’t have a comfort with metrics, they didn’t know how to design metrics, they didn’t know what metrics will do for you”.

Developing indicators that stakeholders could agree upon was thus a difficult task and also indicates a difference in cognitive commensuration achieved between stakeholders within the environmental and social realm.

Whereas the work of the GRI may have been most instrumental in advancing technical commensuration of sustainability reporting, it was further reinforced by the technical work of global sustainability indices and rankings such as the Dow Jones Sustainability Index (DJSI), the FTSE4Good Index, the Dutch Transparency Benchmark and the Council for Annual Reporting's publication of its Annual Reporting Guideline 400. Although these initiatives may have as their ultimate aim the 'objective' comparison of companies and (e)valuation of their performance (the realm of value commensuration), before they could robustly do so they also needed to develop their methodologies, indicators and criteria of comparison which required plenty of technical work. In fact, the technical work of these initiatives at times overlapped. As a former GRI employee recalled on its relation to DJSI, "we tried to make reporting as easy as possible by mapping where possible the indicators ... and we had a deal and we said 'hey look, can we get you to say … yes, we'll take your GRI report'". This reduced the burden on companies while advancing the respective initiatives and thus spreading a specific conception of what comprised a sustainability report.

The limits of technical commensuration

According to a sustainability manager, "under influence of GRI, and also the Transparency Benchmark in the Netherlands, reports became more professional and business-focused. They contained goals and targets, links were made with remuneration and bonuses for some firms. Reports became more factual, less cheering". On the other hand, a limitation of these developments is that they invited non-reflective reporting by blindly following guidelines or benchmark criteria. For example, "GRI has been a great help … when we made our first sustainability report it was very nice to have some point of reference. Back then it was simply tick-the-box of the indicators. GRI tries to improve comparability. However, what you see is that when you look at it with a little bit of common sense the information is actually not comparable!" (Interview, sustainability manager). Sustainability becomes a simplified technical tick-the-box exercise for companies rather than a dialogue about their values and impacts on society. The pitfall here is that "If you restrict yourself to reporting the standardised information, and I think that is cause for concern, at least for me, then you risk that you stop the thinking" (Interview, partner Big Four). Reporting gets too broad and "over time it gets stuck in its own complexity and you simply are forced to make choices, if only to keep the reports readable" (Interview, consultant). Moreover, reporting by ticking boxes and following rankings and benchmarks runs the risk of not anchoring it to the core of the business as "sustainability will only be really relevant when it is a strategic theme that is managed by the Board of Directors. And by default that means you will have to restrict the number of indicators" (Interview, sustainability manager/consultant). So in a way the technical commensuration propagated by standard setters and consultants started to become a victim of its own success and further changes were thus required.

Phase 3 (>2007): Value commensuration and integrated reporting

A key development in the final, and ongoing, phase is that integrated reporting rose in prominence as attempts were made to integrate the financial and non-financial aspects of the firm. In particular investors and accountants started pushing for a clearer link between sustainability aspects and firm value (creation). Value commensuration through the development of strategic (and often valorised) KPI's, ratings, indices and integrated reports became important. As a consequence of these developments, however, accusations emerged that sustainability reporting had become impoverished as it restricted its scope to the readily commensurable aspects and thereby ignores incommensurables.

Value commensuration: easing valuations by blending the financial and non-financial

The limits of the previous phase were further amplified by the financial crisis that "... helped propel what I see as the third phase, which is where there's a lot more interest in ESG integration" (Interview, sustainability investor). In short, firms recognise a newly emerging reality with the crisis and this helps to answer the question "Why do I have to be the best in sustainability? You want to be the best because you want to beat the market!" (Interview, consultant). The purpose of reporting becomes more strategic and focused on value-adding aspects, thereby trying to repair the described problems with box-ticking and transparency on aspects not linked with the core business. In effect, the purpose of reporting can be characterised as "forget about the accountability of companies. If you like, forget about the company's own business case; let's talk about the efficient allocation of capital. Do investors have access to the kind of information in the right kind of format for them to be able to make correct valuations of companies?" (Interview, civil servant). In effect, firm valuations thus increasingly rest upon a mixture of financial and non-financial (i.e. sustainability) aspects, with the latter therefore having to be made increasingly 'financial' to fit existing frameworks. This is arguably most prolifically done through integrated reporting, see below, as some firms and professionals start to think that "when you are serious about the topic you also say 'when we present our financial report and our strategy, than we also want to show what that means from a sustainability point of view'. You want to do that in one report" (Interview, consultant). Creating equivalence between these different value systems of the financial and sustainability aspects becomes paramount in this latest phase.

Not just the aim of reporting and commensuration changes, also different stakeholders become involved which in turn affects the commensuration dynamics. First, in the Netherlands "slowly but surely the interest of investors has grown, and also the understanding that sustainability is not something that exists in and for itself, but that it is a way to assess the value of the firm ... this has paved the way towards integrated reporting (Interview, partner Big Four)". Were the total managed socially responsible investment (SRI) assets of large Dutch institutional investors in 2005 €47 billion (4,7% of total AUM), by 2009 this had grown to €396 billion (33 % of total AUM) (Eurosif, 2006, 2010). Investors are powerful actors for firms so "now you see that the financial world is looking at it, and then it suddenly becomes a lot more serious" (Interview, sustainability consultant). A second, yet not unrelated, group gaining influence are accountants. One informant, a Big Four partner confessed that, not unlike investors, "accountants have noticed that sustainability reports get ever closer to the core operations of the firm and therefore become also relevant for them ... they are starting to realise that non-financial information involves more than just sustainability and that it is important for the valuation of the organisation". For example, Dutch Big Four accounting firms all publish so-called thought-leadership on integrated reporting and organise seminars and workshops on the matter (Deloitte, 2011; KPMG, 2011b, 2012; PwC, 2012). In addition, they are closely involved with the development of an integrated reporting framework, GRI G4 guidelines and perform verification duties on reports, up from 10% to 41% between 2002 and 2011 (KPMG, 2002b, 2011a).

With sustainability reporting becoming increasingly linked to firm valuation, and investors and accountants picking up a more active interest, value commensuration becomes paramount. For instance, integrated reporting and valorised key performance indicators (KPI's) linking sustainability dimensions and firm value gain importance. The earlier technical commensuration expands into actually linking these aspects more directly with monetising and firm valuations. A salient commensuration example here is the International Integrated Reporting Council (IIRC) that was set up in 2010. Although a global initiative, it resonates well in the Netherlands with Dutch companies being the main contributor to IIRC's pilot programme. In the Netherlands 26% of the 100 largest firms already published an integrated report in 2011, up from 3% in 2008 (KPMG, 2011a). An integrated report is a "concise communication about how an organization's strategy, governance, performance and prospects lead to the creation of value over the short, medium and long term" (IIRC, 2011: 3). The aim of this initiative is to "start reporting more around the area of sustainability, but doing it in a way that was far more strategic and business focused" (Interview, IIRC affiliate). Integrated reporting goes further than, for instance, the GRI Guidelines since it introduces elements of value and valuation more explicitly. It is not just about finding technically valid and reliable indicators anymore, although technical work is part of it, but moreover about putting prices or values on these indicators through metrics: "... there need to be better ways in which one can either valorise non-financial performance or have better ways of, if you can't valorise, to actually put non-financial elements of key investment cases or unchanged management strategy in the operations of organisations" (Interview, NGO). Financial and non-financial elements go together as elements that make up the overall value of the firm.

A further aspect of value commensuration is the search for KPI's and the continuing influence of ratings, rankings, indices and benchmarks that (e)valuate firms. Naturally, both these developments contain many technical elements, yet in this phase the underlying rationale and purpose largely rests on the idea of comparing and (e)valuating organisations based on a common metric rather than just developing technically sound indicators and methodologies. That is, typically organisations wish to answer the question of "How do we prove success? … But how do you do that comprehensively and really put that into our main financial matrix? … people love their balance sheets. They want to be able to say, 'Where's the risk? Where's the opportunity?" (Interview, rating agency). According to one NGO it is possible to "... continue to improve reporting by fine-tuning these KPI's [technical commensuration], that is one agenda, but for us the biggest agenda, while you have to improve these, it is the connection with financial aspects that counts [value commensuration]. That is going to reconcile within the company the financial and non-financial to picture the real economy of your enterprise". The investment and accounting community has contributed to the debate as well by publishing various documents aimed at establishing a firm's material key performance sustainability indicators (e.g. DVFA/EFFAS 2008, 2009; EABIS 2009; FEE 2011; IFAC 2012; UNCTAD/ISAR 2008). Instruments such as DJSI, FTSE4Good, and the Dutch Transparency Benchmark have moved beyond a mere technical exercise and become treated more as objective quality and value indicators. That is, where emphasis was first more on technical commensuration, by now they have arguably become more valid and reliable instruments of measurement and firm valuation. At the same time, this work has a cognitive effect as others use it to determine their future sustainability focus areas as it guides in assessing "... what is important, what is upcoming, what is something we have to do something with ... a topic does not come in the DJSI without a reason" (Interview, sustainability manager).

The limits of value commensuration

Whereas for some firms reporting has thus "... developed from a kind of tick-the-box exercise towards reporting that is more relevant for the corporate strategy" (Interview, investor), the drawbacks of emphasising value commensuration are already becoming clear as well. In particular the question of its limits and detriments becomes prominent.

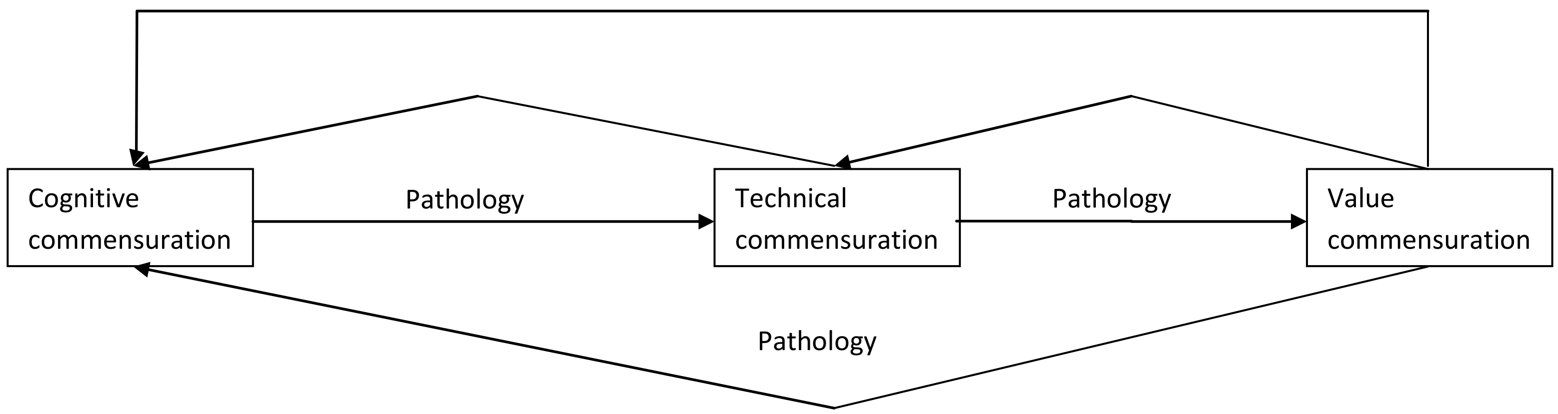
Fundamentally, there is a concern about what to do with more qualitative measures that are hard to quantify and put in comparable metrics (i.e. commensurate). This applies in particular to the social aspects of the sustainability agenda as "for social it is much more difficult since we do not have the price for a gram or kilo of stress or discrimination. In environmental you have that" (Interview, NGO). The push to 'commensurate the incommensurable' leads to tensions as some wonder "[h]ow can I add drip-irrigation to employee training and education? You cannot add such things. It is pointless to do so because ultimately you end up with a meaningless figure" (Interview, sustainability manager). Not only is the potential impoverishment of the sustainability idea through value commensuration a concern, a related issue is how to ensure that reports remain meaningful and not only consist of numbers but also offer a sufficient storyline and narrative on policies, strategies etc. Ultimately, as expressed by this rating analyst, "… the hard thing there is how do you interpret these things into bottom line meaningful statistics which are useful to financial analysts? But at the same time you don't lose the narrative and strategic reporting on sustainability from both stakeholder perspective and a business perspective".

Finally, in particular among stakeholders originally concerned with sustainability rather than finance and valuation, uneasiness emerges about the influence of accountants and investors and their impact on sustainability. For instance, a sentiment where stakeholders say "I don't consider the accounting industry authoritative in the social performance area, but they will say well, we're authoritative in accounting. Well, I'm not sure that's the same thing" (Interview, trade union) takes hold. One sustainability consultant comments that "the topic of sustainability is currently being hijacked by the accountants, KPMG-type of people, and the raters and ISO-folks. I do not believe in that system at all. However, I do understand where the desire comes from, clarity, measurability, thinking in absolute terms. There is a limit to that though". The above signifies an inherent tension of value commensuration in cases where different meaning systems, objectives and notions of what is of value are to be combined. In short, the problem of advancing value commensuration is, according to some at least, that commensuration has taken hold too strongly in the reporting landscape, with more emphasis on high positions in rankings, monetising KPI's and following guidelines, than thinking about the impact of the firm on a more sustainable world rather than the balance sheet.

Discussion

In this paper, I have analysed sustainability reporting's transition from 'values to value' as a commensuration project. I did so by studying the evolution of sustainability reporting in the Netherlands. In analysing this case my study further develops existing accounts of the commensuration process and how various dimensions of commensuration interact with and follow on each other and the explanatory mechanisms behind this. In particular, I suggest that over time different dimensions of commensuration become dominant. In the discussion that follows, I first introduce a model (figure 2) and explain it in general terms. Next, I argue that the changes in dimensions of commensuration (from cognitive, to technical to value) are primarily driven by emerging pathologies. These pathologies instigate the limits of each dimension of commensuration and the need for change which results in a recurring pattern of pathology emergence and resolution. This is further embodied by a change in the actors involved in reporting as well as its aim. I also examine the temporal and recursive aspects of commensuration. In the final part of the discussion I address the implications of my study for our understanding of sustainability reporting, both practically and theoretically.

Figure 2 Process model of commensuration



Commensuration as a project of rationalisation

On a general level this outline of sustainability reporting's trajectory resembles a rather Weberian story of society's rationalisation under capitalism. As discussed above and shown in figure 2, reporting started as a moral claim on firms to become more accountable towards the public at large and to be transparent about their environmental and subsequently social impact. Once this more cognitive linking of corporate behaviour and an emphasis on non-core sustainability aspects became increasingly common, reporting became more closely linked with the business case of the firm and CSR. With this, technical work was undertaken through the development of indicators, guidelines and so on, making sustainability reporting more tangible, concrete and measurable. Subsequently, this line was continued, and extended, by in particular the investment and accounting community who tried to capture non-financial sustainability aspects through value commensuration into their (financial) and quantifiable metrics, thereby narrowing the conception of sustainability reporting to a more strategic core.

In terms of rationalisation, commensuration has in particular propelled the economisation of sustainability and sustainability reporting, i.e. "... the processes and practices through which individuals, activities, and organizations are constituted as economic actors and entities" (Miller & Power, 2013: 560). This economising keeps firms on a continuing path towards rational economic profit making (Miller & Power, 2013; Weber, 1947). Commensuration can thus be seen here as driving the evolution of a new practice, such as sustainability reporting, through its economising power and thereby its contribution to the more general rationalisation of society. This function of commensuration has been recognised as instrumental by others (see e.g. Espeland & Stevens, 1998) as it "reinforces the hegemony of market values as the dominant mode of valuing, and threatens the legitimacy of other ways of valuing people and places" (Levin & Espeland, 2002: 138).

Whereas naturally interested parties (e.g. professions such as accountants, investors, and consultants) have had a helping, and beneficiary, hand in this, at the same time my analysis hints at the importance of (inter)national contextual factors such as incidents (e.g. Shell's Brent Spar), crises (e.g. accounting scandals, financial crisis) and the, admittedly vague, notion of 'zeitgeist' (anti-business, environmental awareness etc.) which has become in general conducive of accountability and auditability (see Power 1997; Miller and Power 2013).

Commensuration and its pathologies

An important aspect of the model is what happened at the borders between the identified phases and dimensions of commensuration and can thus help to explain its sequence and transitions. I suggest that commensuration is driven by and gives rise to *pathologies*. Prior work tells us about the multitude of people involved and tasks and goals of commensuration (e.g. Desrosieres, 1998; Espeland & Stevens, 1998) but has remained largely silent about their interaction with the commensuration process. I contend that these aspects together form important factors that help to explain the mechanisms behind pathologies, which I label as *means-ends disconnection, professional insulation* and *cultural contestation*.

First, viewing pathologies as a mechanism of change and development and a driving force behind commensuration sheds light on the interplay between its various dimensions. The meaning of pathology refers in this case to a deviation from a healthy, normal, or efficient condition. That is, following Barnett and Finnemore (1999, 2004) in their study on the international (bureaucratic) organizations, the forces that give them authority and power at the same time can be the source of "dysfunctional behavior. We term this particular type of dysfunction pathology" (Barnett & Finnemore, 1999: 716, emphasis in original). A similar understanding of the term can be found in Deutsch (1963) and Scott (2003). To draw on a metaphor, pathologies in this sense could be seen as a racing car going through a turn. While it needs sufficient speed to smoothly round the turn as fast as possible, too much speed will cause the car to drift and, unable to keep its line, ultimately spin off track. Whereas the dominant dimension of commensuration in each phase fuelled reporting's further development, within the strength of each dimension also its limits or weakness could be found. Below I suggest three mechanisms that are constitutive of the pathologies visible in the commensuration process: *disconnect of means and ends, professional insulation* and *cultural contestation.* Overall, these aspects indicate that "different constituencies representing different normative views will suggest different tasks and goals, resulting … in a clash of competing perspectives that generates pathological tendencies" (Barnett & Finnemore, 1999: 724).

In practice, in sustainability reporting's development pathologies surfaced as follows. At first cognitive commensuration helped to put reporting on the map by stipulating the moral failing of the firm and a reclassification of the way 'proper' business was defined, i.e. what was legitimate business in a moral sense. A meaning system in which sustainability, corporate responsibility and transparency started to play a role was created. However, pushing this dimension of commensuration too far resulted in accusations of vagueness and mere peripheral 'add-on' reporting without actual impact (i.e. pathology 1). Technical commensuration in the next phase at first served as a resolution to this pathology and indeed made reporting more concrete and manageable for firms. However, yet again pushing this dimension too far resulted in box-ticking and a form of reporting that became more about reporting on a wide range of indicators for the sake of reporting rather than reporting actually linking the firm and its social and environmental impact (i.e. pathology 2). As a new resolution, value commensuration meant to bring more focus and integrate the financial and non-financial by prioritising, strategising and ideally monetising sustainability aspects into financial metrics. Whereas resonant among many firms and certainly professions, once again a more pathological effect emerged as this caused concern over the consequences of the commensuration of the incommensurables and who and what sustainability reporting was ultimately for (i.e. pathology 3). What results after this remains to be seen as this is an ongoing process. A ping-pong game of emerging pathologies and temporal resolutions thus emerged and one of the questions that warrants answering is what caused these pathologies.

A first explanation underpinning the pathologies of commensuration is that over time means and ends started to disconnect (see e.g. Barnett & Finnemore, 1999; Scott, 2003). For instance, too much focus on the expansion and following of reporting guidelines and standards in the second phase obfuscated the ends of sustainability reporting. At first reporting as a means was too detached from the core goals of the organization (end) as well as too vague to be linked with the end of sustainable business practices. Later the rules and procedures of sustainability reporting guidelines became ends in themselves rather than guidance for accountable and sustainable business, thereby contributing to an emerging pathology and giving impetus to change. In the subsequent phase the focus on seeking strategic and material links between financial and sustainability indicators risked becoming an end in itself as the wider idea(l) of sustainability slowly disappeared from the horizon. This resembles at times the process of goal displacement, which refers to the idea that "the very elements which conduce towards efficiency in general produce inefficiency in specific instances" (Merton, 1957: 200). Each reporting phase got 'stuck' in a mix-up between its aim and the means to reach it. As noted by Scott (2003: 335), however, it may not so much always be an issue of displacement of ends and means, but oftentimes the "...continued pursuit of means that have somehow become disconnected from, or are at odds with, the ends they were designed to serve" that shapes the pathological aspect. This resembles recent work on so-called means-ends decoupling which examines the implementation of "policies and evaluating practices that have a tenuous link to core goals" (Bromley & Powell, 2012: 496). In effect, the possibility arises of firms, operating in a discourse and zeitgeist of transparency and accountability, adopting sustainability reporting with the link between reporting and its effect on sustainability remaining opaque, yet "... when the link between means and ends is unclear, technical procedures of accounting ... can become ends in themselves, establishing an organization as responsible, rational and successful" (Bromley & Powell, 2012: 518). In itself this is not uncommon, and possibly not necessarily problematic or pathological, yet increasingly so when combined with a heterogeneous field and multiple vocal actors.

A second mechanism of interest in the commensuration of sustainability reporting is therefore professional insulation of interested stakeholders, which refers to the domination of particular normative orientations or worldviews (Barnett & Finnemore, 1999). In the case of Dutch sustainability reporting you see the inflow and outflow of different professions *between* phases, but the dominance of particular groups *within* a specific phase. In particular, at first NGO's and the Dutch government played a prominent role in reporting's development, which was followed in the two subsequent phases by standardising agencies/consultants and investors/accountants, respectively. These respective professions possess an inherent disposition towards the position of firms in society and the aim of sustainability reporting. For instance, without becoming too deterministic, it is not hard to imagine the differences in the wish of NGO's to hold firms accountable for their detrimental social and environmental effects by promoting broad transparency, whereas the logic of business requires clarity, a financial focus and manageability. In addition, the financial logic of investors and accountants emphasises quantified and materialised data. In other words, these stakeholders thus make sense of the world in different ways and refer to different logics (Friedland & Alford, 1991; Thornton et al., 2012; Thornton & Ocasio, 2008) or higher-level and commonly shared schemes of justification of what is considered to be worthy and good (Boltanski & Thévenot, 2006). With a complex practice in a heterogeneous and emerging field such a dominant and insulated perspective is bound to be temporary though as reporting's inherent complexity generates challenges and tensions that ask for reconciliation (e.g. Cloutier & Langley, 2013; Greenwood et al., 2011; Pache & Santos, 2010).

At some point the singularity of perspective thus reaches a limit and a situation of cultural contestation emerges. Throughout sustainability reporting's development, the respective dominance of particular normative views evolved with reporting first being branded as out of touch with business and 'too moral', subsequently as overly focused on 'business making it a check-list' and eventually as 'captured by accountants and investors in their quest to commensurate incommensurables'. In effect, as the limits of each phase of commensuration became apparent, at the borders frictions emerged that gave potential for agency and change (Dorado, 2005; Seo & Creed, 2002; Stark, 2009). Whereas by no means a commensuration war, these periods of friction and transition towards a new dimension of commensuration offered opportunities for new people to enter the sustainability reporting field (e.g. the need for clarity opened opportunities for consultants and standard setters). At the same time a reclassification of the purpose of sustainability reporting became possible that questioned what the commensuration should achieve (e.g. from showing accountability to building a strategic business case and finally to the link between sustainability and value creation). In short, the commensuration of sustainability reporting has seen a variety of stakeholders dominate the discourse. At some points in time conflicting worldviews of these stakeholders function both as the source of pathologies and attempts for resolutions (i.e. new stakeholders emerging with different tasks and goals for reporting).

Commensuration and its temporal sequence

The existing commensuration literature shows that technical, cognitive and value dimensions of commensuration can be found in empirical settings (see e.g. Kolk et al., 2008; Levin & Espeland, 2002). But how these dimensions follow on each other is not clear. In the case of Dutch sustainability reporting initially the focus was primarily on cognitive commensuration, which was subsequently followed by technical commensuration before in the third phase value commensuration rose to prominence. To be sure, this does not mean that only one dimension was present in each phase, as they can typically all be seen at any point in time (and even reinforce each other as shown by the feedback arrows in figure 2), but this should be seen as a matter of degree as to the dominating dimension in each phase.

Existing accounts of commensuration that have looked at the temporality of commensuration (see e.g. Kolk et al., 2008; Levin & Espeland, 2002) also suggest that in order to put a value on something it is first necessary to be able to measure and thereby standardise the object accurately, i.e. technical commensuration preceding value commensuration, an assertion supported by Carruthers and Stinchcombe (1999). My analysis supports this as technical commensuration preceded value commensuration as first indicators were developed and measurement methodologies and techniques agreed upon before they were integrated into financial metrics and ratings.

More surprisingly though, sustainability reporting in the Netherlands first went through a phase of cognitive commensuration prior to technical commensuration, which seems at odds with current theorisations of temporality. Generally, it is claimed that as a consequence of first technical and subsequently value work more tacit cognitive commensurative effects would arise, for instance a change in thinking about air pollution emerged as a consequences of the creation of a market for air pollution (Levin & Espeland, 2002). In the case of Dutch reporting before technical work could be fruitfully undertaken, a logic or meaning system in which business, sustainability, corporate responsibility and transparency started to become related concepts rather than unrelated ones had to materialise. Thus, on a cognitive level this required bringing together previously disparate elements, i.e. a reframing (Rao, 1998) of a prior logic before work on the 'nitty-gritty details' could commence. To be sure, this is not to say that value commensuration does not have cognitive consequences. On the contrary, as a consequence of value commensuration through valorised KPI's and integrated reports the meaning of sustainability changes as it slowly disappears as a separate term and gets absorbed by the mainstream business discourse ("CSR is there to die", as one informant eloquently put it). Value commensuration reinforces this newly developing logic or tacit cognitive understanding of sustainability (reporting).

Still, a possible explanation for the observed order is that different types of cognitive commensuration exist. That is, cognitive commensuration can function both as a *precondition* for technical commensuration as well as a *consequence* of existing metrics, thereby closing the circle of the commensuration process. Cognitive commensuration as a precondition allows the construction of a discourse which enables people to think about metrics in the first place, whereas cognitive commensuration as a consequence of prior technical and value commensuration further embeds or mainstreams these metrics. In line with other studies that analyse dealing with complex issues (such as sustainability), often in relatively uncertain and heterogeneous fields that impose conflicting demands, rather than developing a clear-cut instrumental solution the field first has to be reorganised and the problem addressed, closely akin a sensemaking approach (Weick, 1995). Stakeholders come together and make a start with developing solutions for complex social problems (Dorado, 2005). Once these fields become more institutionalised, focused strategic action by means of technical and value work then becomes easier (Beckert, 1999). Future studies could usefully further examine the enabling conditions of the various commensuration dimensions.

Conclusion

I have explored the commensuration of Dutch sustainability reporting and have thereby focused on the dynamics between the various dimensions of commensuration to open the 'black box' of commensuration. I have argued that in the beginning the moral failing of the firm was an important starting point and environmental reporting was seen as an instrument to combat this failing and promote corporate accountability. Through cognitive commensuration it were primarily NGO's and the Dutch government who tried to create a new reference point of what was of value for the firm. Still, reporting remained peripheral and typically considered as too vague and a practice for 'values-driven tree-huggers'. In response to this pathology, consultants sensed an opportunity and started to promote the 'business case'. At the same time standard setters tried to provide sustainability reporting with 'hands and feet' through concrete guidelines and indicators. This technical commensuration phase created order out of chaos and made the complex and difficult practice more manageable and easier to understand for a larger audience as interested actors got clearer points of reference. Reporting gained popularity, yet despite this success it ran the risk of becoming a mindless tick-the-box exercise due to its over-reliance on indicators, standards and guidelines. Following these became ends in themselves rather than means to an end. In the wake of this new pathology, in particular investors and accountants tried to refocus sustainability reporting to a more strategic core to really merge sustainability into the business and provide a clearer link between firm value and value creation and sustainability aspects. Value commensuration through the development of strategic KPI's, ratings and integrated reports and the importance of rankings and indices became important. As a consequence of these developments, accusations that sustainability reporting had become impoverished as it restricted its scope to the commensurable aspects and thereby ignored incommensurables emerged though.

In analysing the commensuration process of sustainability reporting in the Netherlands I offer two main contributions to the commensuration literature. First, I extend the work on different dimensions of commensuration. Previous accounts have looked at a mixture of intentions, consequences and actors (e.g. Espeland & Stevens, 1998; Huault & Rainelli-Weiss, 2011; O'Mahoney et al., 2013; Samiolo, 2012) but less at the interaction between these aspects. I have shown that commensuration operates through the interplay between cognitive, technical and value dimensions and that over time these dimensions rise and fall in dominance. I suggest the central role of pathologies as drivers of shifts in the dominance of the various dimensions of commensuration. Within the strength of each dimension lies also its potential downfall, and instances of cultural contestation, professional insulation and means-ends displacement can propel these pathologies.

Second, this study provides an account of the temporal aspect of commensuration and in particular provides insights into the order in which types of commensuration occur. Existing studies have most of the time, albeit more implicitly, assumed that technical commensuration precedes value commensuration and after that cognitive commensuration appears (Kolk et al., 2008; Levin & Espeland, 2002). Whereas my study supports the former conjecture, it adds to the latter that cognitive commensuration can both be a precursor of technical commensuration as well as a consequence of value commensuration. I have further suggested that the complexity of the practice and character of the field may play a role here.

Although my study's main contribution is to the commensuration literature, it also speaks to scholars and practitioners interested in sustainability reporting as such. Fundamentally, commensuration appears to be a double-edged sword that has given sustainability reporting impetus by simplifying it and making it more tangible and concrete, yet at the same time has arguably also impoverished reporting by advocating those values that can be made commensurate at the expense of other, yet no less important, aspects. That is, this study shows that "[m]easurement can help us see complicated things in ways that make it possible to intervene in them productively (consider measures of global warming); … measurement also can narrow our appraisal of value and relevance to what can be measured easily, at the expense of other ways of knowing (consider how education became years of schooling in American sociology)" (Espeland & Stevens, 2008: 432). Conceptualising commensuration as driven by as well as propelling pathologies helps to bring these limits of commensuration come to life. For instance, the described pathologies emerging from technical and value commensuration are good examples of where it remains open to debate to what extent these dimensions contribute to sustainability reporting's progress and where they rather signify an impoverishment of the content and impact of sustainability reporting. A concern for those studying and working in the reporting field is thus the possibility of ever-more refined sustainability indicators leading to an ever-less sustainable world. Apart from the theoretical relevance, an appreciation of the (side)-effects of commensuration on the course of sustainability reporting may thus make practitioners as well as policy makers more sensitive to its consequences for the state of reporting and, moreover, the state of the world we live in.

This study gives rise to several areas for future research that can contribute to our understanding of commensuration as a process and sustainability reporting as a practice. First, to further enrich our understanding of the various dimensions of commensuration, it could be worthwhile to combine this with finding out how various actors engage in commensurative work. This study has looked more closely at the various dimensions over time and explained the dynamics between them. To further extend this line of thought future research could examine exactly what kind of actions and practices actors engaged in while trying to resist or further advance the various dimensions of commensuration and overcome the emerging pathologies. In order to gain more insight into this 'how' question of commensuration, insights derived from the institutional work literature could be beneficial (e.g. Lawrence, Suddaby, & Leca, 2009, 2011; Lawrence & Suddaby, 2006). For instance, earlier studies on commensuration have discussed the possibility of framing (see e.g. Huault & Rainelli-Weiss, 2011; Lohmann, 2009) that may play an important role in particularly cognitive forms of commensuration.

Second, the role of pathologies warrants further research. This concept has thus far received relatively little attention among organisation and accounting scholars alike. For instance, whether sustainability reporting is particularly idiosyncratic in its trajectory of commensuration and importance of pathologies is something that future studies could usefully examine. It would be interesting to see whether pathologies play an important role in other fields of sustainability reporting (e.g. geographical) and, moreover, in the commensuration of practices other than sustainability reporting. If so, gaining further insights into the mechanisms behind pathologies and the influence of other drivers may be interesting questions for future research. In addition, as this study has looked more closely at the various dimensions over time and tried to explain the emergence of pathologies, looking more closely at how to resolve different pathologies could be valuable.

Third, as this study focused on the Dutch reporting landscape more geographically dispersed or comparative research could enhance our understanding of reporting. In particular, research focusing on countries or regions new to reporting or with less of a tradition of environmental and social advocacy, potentially also in a non-western setting, could be interesting. For instance, future studies could analyse how diffusion of reporting differs between counties, thereby tapping into the literature on practice variation in diffusion (see e.g. Ansari, Fiss, & Zajac, 2010; Fiss, Kennedy, & Davis, 2011; Westphal & Zajac, 1997) .

Finally, this study took technical, value and cognitive dimensions of commensuration as its starting point. Still, future research could look into the presence of different dimensions than technical, value and cognitive forms of commensuration. In addition, could we expect to see these dimensions work together or are there circumstances where they would be present in isolation? What are determinants of these various forms of commensuration to be either successful or unsuccessful? Do these dimensions typically appear in the temporal order found in this study? These are just a few of the questions that merit attention of researchers interested in the process of commensuration, be it in a sustainability setting or not.

Chapter 4 - Towards a Legitimate Compromise?: An Exploration of Integrated Reporting in the Netherlands[11]

[11]This chapter has previously been presented at a pre-Colloquium Development Workshop of the 2013 EGOS colloquium in Montreal and is currently under revision for the Accounting, Auditing & Accountability Journal

A good compromise, a good piece of legislation, is like a good sentence; or a good piece of music. Everybody can recognize it. They say, 'Huh. It works. It makes sense.'

(Barack Obama)

Compromise makes a good umbrella, but a poor roof.

(James Russell Lowell)

Introduction

By 2012, despite the absence of conclusive guidelines and frameworks, globally more than 400 companies have started to engage with a form of integrated reporting, according to Global Reporting Initiative's (GRI) Sustainability Disclosure Database. According to the International Integrated Reporting Council (IIRC) that was founded in 2010 to develop a globally accepted framework for integrated reporting, an integrated report is a "concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term" (IIRC, 2013: 8). The aim is to align financial and non-financial (sustainability) components more closely as to date the Annual Report and Sustainability Report have largely remained separate entities and processes, despite prior efforts of, for instance, the GRI to emphasise the strategic importance of sustainability aspects for the core business. In essence, integrated reporting is a pluralistic hybrid practice in which various conceptions of its value interact (Gray, 2006; Milne, Tregidga, & Walton, 2009) in an attempt to build a bridge between the logics of financial reporting and sustainability reporting to provide a 'true and fair' view of the value of a firm. Integrated reporting is thus a complex practice where different 'worlds' come together and have to be aligned in a compromise. In this study I analyse this pluralism of integrated reporting and focus on the possibility of, and impediments to, realising a legitimate compromise.

Integrated reporting has thus far not received much scholarly attention. Borrowing from related sustainability reporting and accounting studies and how their inherently equivocal subject of interest has gained legitimacy forms a good starting point. An agentic sender-based branch of work argues that firms actively seek strategic alignment with societal value systems (e.g. Aerts & Cormier, 2009; Cho & Patten, 2007; Deegan et al., 2002; Deegan, 2002; Milne & Patten, 2002; O'Donovan, 2002; O'Dwyer, 2002; Patten, 2002) or manage salient stakeholder demands (e.g. Cooper & Owen, 2007; Deegan & Blomquist, 2006; Neu et al., 1998; Roberts, 1992). A more structural compliance-focused strand holds that sustainability reporting has become accepted thanks to institutional isomorphism and conformity (Bebbington, Larrinaga-González, & Moneva-Abadía, 2008; Larrinaga-González, 2007) and more rhetoric alignment with legitimating institutions (Etzion & Ferraro, 2010; Laine, 2009) or ceremonious and decoupled endorsements of prevailing societal expectations (Cooper & Owen, 2007; O'Dwyer, 2002). Both these branches primarily focus on 'doing the right thing' and emphasise establishing (symbolic) fit with, often rather singular, stakeholder or societal demands. Furthermore, relations with legitimising audiences are hereby typically unidirectionally conceptualised, i.e. more as external evaluating judges than as actors in a process of communicative dialogue and co-achievement. Not without merits, applying these insights to integrated reporting has only limited purchase.

That is, fundamental to integrated reporting is that it seeks legitimacy in a situation where neither the practice itself nor the (institutional) environment is fixed and where numerous actors with multiple goals are present and contest over their interpretations of reporting's value. This follows, for instance, Palazzo and Scherer's work on CSR (see Palazzo & Scherer, 2006; Scherer & Palazzo, 2007, 2011) when they argue that contemporary society is essentially complex and pluralistic in which multiple demands are voiced by actors as diverse as firms, governments, NGO's, social movements, media and investors. These multiple logics of valuation need to be reconciled in search of a legitimate agreement or compromise as "these contests about value are highly consequential because they have implications for the shape of the field and of the evolution of technologies within it" (Kaplan & Murray, 2010: 108). Stabilising and legitimating integrated reporting goes beyond passive compliance and alignment with audience expectations but requires societal involvement in public discourses. It warrants the question of what this legitimating dialogue over the interpretation of what is valued and valuable for integrated reporting looks like. To uncover the dynamics involved in reconciling this complexity I will draw on the sociology of worth (SOW) framework (Cloutier & Langley, 2013; Gond & Leca, 2012; Patriotta, Gond, & Schultz, 2011; Ramirez, 2013)[12].

This framework, thus far largely unexplored in the social and environmental accounting and reporting (SEAR) field (but see e.g. Annisette & Richardson, 2011), is most notably popularised by the work of Boltanksi and Thévenot (1999, 2006). It not only presupposes the complexity and plurality that characterises integrated reporting, "... it also assumes that different actors coexist in a shared world, and it pays particular attention to the understanding of how those actors can reach an agreement, either within a specific logic or even if they share different logics" (Gond & Leca, 2012: 7–8). SOW offers a 'tool box' to analyse the settlement of these differences and legitimacy is gained in situations of uncertainty in which actors face the imperative to justify their actions by either voicing critique themselves or by responding to criticism. This process follows rules of acceptability that can be found in 'orders of worth'[13] which are all based on a notion of the common

[12]Different labels have been used, such as conventionalist theory (Denis, Langley, & Rouleau, 2007; Kaplan & Murray, 2010), economies of worth (Gond & Leca, 2012), justification theory (Patriotta, Gond, & Schultz, 2011), French pragmatist sociology (Cloutier & Langley, 2013; Jagd, 2011; Reinecke, 2010) and sociology of worth (Annisette & Richardson, 2011). For reasons of clarity and consistency I use sociology of worth.

[13]Worlds, economies of worth and orders of worth have been used alternately. For reasons of clarity and consistency I use orders of worth.

good. One of the typical ways to settle disputes is through a compromise of such orders of worth. We know that sustainability reporting, and by extension integrated reporting, is "implicated in numerous compromises in society as multiple orders of worth are juxtaposed", but we have developed few "insights into the limits and fragility" of this type of reporting (Annisette & Richardson, 2011: 243–5). The SOW framework is very suitable not just for analysing the different perspectives around integrated reporting. Moreover, it makes it possible to gain insight into the possibilities of, and impediments to, constructing a broadly legitimate compromise as multiple logics of valuation need to be reconciled.

Based on the above I aim to answer three main questions in this article. First, in order to better understand the complexity of integrated reporting I ask which rationalities or value articulations (i.e. orders of worth) can be identified. Second, I proceed by posing the question of how a legitimate compromise is attempted to be forged out of these multiple orders of worth and the difficulties involved in this. Third, I ask what the consequences are of integrated reporting's current attempts of compromise. Together, using the framework of SOW helps to enhance our understanding of integrated reporting and also sheds a better light compared to extant SEAR work on the process of gaining legitimacy by collectively reconciling pluralism around a complex practice. I aim to answer these questions by conducting an explorative qualitative case study on the configuration of integrated reporting in the Netherlands. I argue that integrated reporting contains elements of civic, green, market, and industrial orders of worth. My analysis further suggests that integrated reporting finds it difficult to settle as a durable legitimate compromise as it violates the principle mechanisms of finding a common interest, avoiding clarification and maintaining ambiguity. In particular, accountants and investors find themselves accused of capturing the dialogue and seek private interest rather than search for a common interest.

By making my argument I seek to offer two main contributions. First, I intend to progress our understanding of integrated reporting itself. Potentially an influential new accounting practice, my analysis shows the complexities of this novel practice, its potential benefits, yet also the difficulties and limitations it entails. In particular, my empirical analysis suggests that integrated reporting runs the risk of being denounced for privileging the powerful discourse of the market (through market/industrial worth) at the expense of seriously advancing social and environmental justice (civic/green worth). Integrated reporting risks resembling a private arrangement rather than a legitimate compromise. However, on a positive note, precisely because of this friction that arises from integrated reporting's complexity potential for creative solutions emerges as well. Second, following calls in the SEAR literature (e.g. Annisette & Richardson, 2011; Ramirez, 2013) I offer an empirical contribution that applies SOW to sustainability accounting research. The value of the SOW framework is that it provides a theoretical lexicon that helps to better understand accounting practices in pluralistic contexts in general (e.g. Guerreiro, Rodrigues, & Craig, 2012; Lander, Koene, & Linssen, 2013) and in particular helps to unpack the dynamic process through which complex new practices, such as integrated reporting, gain legitimacy as compromises are negotiated in a dialogue between orders of worth.

To make my argument, I will proceed as follows. I will first briefly discuss extant work on forms of non-financial reporting and its shortcomings. Next, I explain the main tenets of the sociology of worth perspective and discuss the core aspects of the different orders of worth and possible ways to settle clashes of worth. Then, I will discuss my research site and the data collection and analysis in more detail. In the findings section I will portray the orders of worth visible in the discourse on integrated reporting in the Netherlands, how social actors attempt to establish a workable compromise and the outcomes of this. In the discussion section I consider the implications of such a compromise for integrated reporting as well as the possible alternatives for situations of compromise. This should make clear the possibilities as well as limits of integrated reporting. Moreover, I will address the wider theoretical implications of my study for the literature on social and environmental accounting research. I finish with some implications for practitioners and suggestions for future research.

Theoretical background

Perspectives on reporting

Unlike integrated reporting that is still in its infancy, scholars have analysed social, environmental and sustainability reporting more extensively. The forging of agreements around this latter type of disclosure, defined as "reporting which covers the environmental and social aspects of an organisation's performance as well as the economic aspects" (Hubbard, 2009: 3) has been variously explained and can be of help in understanding integrated reporting (see also Chapter One).

Arguably most dominant have been studies using the twinned frameworks of legitimacy theory (e.g. Aerts & Cormier, 2009; Cho & Patten, 2007; Deegan et al., 2002; Deegan, 2002; Milne & Patten, 2002; O'Donovan, 2002; O'Dwyer, 2002; Patten, 2002) and stakeholder theory (e.g. Cooper & Owen, 2007; Deegan & Blomquist, 2006; Neu et al., 1998; Orij, 2010; Roberts, 1992). In both cases the primary concern is gaining legitimacy, or "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995: 574) through strategic alignment with societal values. Firms are thought to have a 'social contract' with broader society and strategically seek to achieve 'fit' between their value system and that of society (Deegan, 2002, 2007) or try to manage a mix of more or less salient stakeholder demands, resulting in legitimating reporting (as well as the firm).As these accounts are typically organisation-centric (Smith et al., 2011), for the field-level construction of integrated reporting this work would overstate the strategic agency of organisations as legitimating compliance with values is typically expressed through a sender-model of communication that regards outside norms, values and the like as social entities with almost a thing-like status, i.e. very much as a resource (Dowling & Pfeffer, 1975; Suchman, 1995).

Alternatively some scholars have therefore started to explain reaching a legitimate agreement on the form and adoption of varieties of non-financial reporting through an institutional lens (e.g. Bebbington et al., 2009; Brown, de Jong, & Lessidrenska, 2009; Etzion & Ferraro, 2010; Larrinaga-González, 2007). Whereas it shares the quest for legitimacy as the heart of organisational activity, it typically sees coming to a legitimate agreement on the meaning of a practice rather as a more passive compliance with broader 'rationalised myths' (Meyer & Rowan, 1977) than an purposeful strategic process (see also Suchman, 1995). For instance, Bebbington et al. (2009: 615) analysed the influence of cultural-cognitive, normative and coercive isomorphic pressures on how sustainability reporting was shaped in six New Zealand firms. This compliance-model of communication thus suggests integrated reporting's trajectory is largely determined by outside legitimating forces.

Overall, whereas these lines of work may help to provide reasons why to engage in integrated reporting, they remain largely silent on exactly how legitimate compromises are negotiated. Thus, they are ill-equipped to explain the more dynamic aspects of the development of integrated reporting (e.g. Owen, 2008; Smith et al., 2011) and how to evaluate and reconcile the inherent difficulties and complexities involved. Moreover, all these extant studies see legitimising audiences more as external evaluating judges than as one out of a range of actors in a process of communicative dialogue and co-achievement

(Palazzo & Scherer, 2006; Reinecke, Spicer, & Van Bommel, 2012). This is particularly noteworthy as new multifaceted practices such as integrated reporting develop in a complex and pluralistic environment where multiple logics of valuation need to be reconciled in search of a legitimate agreement or compromise. In order to start to unpack the repertoires of evaluation at work around integrated reporting and the difficulties in bringing them durably together I turn to the sociology of worth framework of the French pragmatist school.

Sociology of worth

A fundamental assumption of SOW is that pluralism and complexity are the norm. As long as violence is to be avoided, social actors are confronted with an imperative to justify themselves in the face of moments of uncertainty or dispute. To be sure, other regimes of coordination such as love, familiarity and violence can equally be called upon to suspend justification, as Boltanski (1990) differentiates between an institutionalised 'state of peace' ("paix en justesse") and a contested 'state of justification' ("dispute en justice"). Justification though is needed "when more local regimes of coordination based on either 'personal convenience' or 'conventional utilization' are not sufficient to deal with the misfortune of the situation and determine what is convenient or appropriate" (Boltanski & Thévenot, 1999: 362). It is through justification that "we come to understand how social coordination is achieved and how institutions are constructed and stabilized" (Annisette & Richardson, 2011: 231). Essentially, social actors make reference to a limited number of "broad-based sets of values and conceptions of the common good" (Cloutier & Langley, 2013: 364) or "moral anchors" (McInerney, 2008: 1092) when making justifications. That is, in order to make one's critique and actions comprehensible and ultimately reach a state of agreement, reflexive actors draw on so-called 'orders of worth'. There is thus no singular form of justness or rationality, but worth or legitimacy can be shown by alluding to the various orders of worth.

Actors establish worthiness, or legitimacy for that matter, by referring to these orders of worth which are comprised of a set of material, cognitive and symbolic elements that make up unique ‘worlds’ and they make thus “reference to different sorts of value, principles, or models for judging what is good, worthy, and right” (Thévenot, Moody, & Lafaye, 2000: 236). Orders of worth are broad values-based Weberian ideal-type constructions resting upon notions of the common good. The moral basis of an order of worth is embedded in philosophical and political traditions, which have become engrained in everyday social life. Actors need to justify that a certain practice promotes the ‘common good’ – being beneficial to all – rather than individual gain. Neither should it be just ‘instrumentally’ in line with a dominant logic. Worthiness thus relates to a sense of justice so that the “notions of worth and of the common good are merged, combined in the higher common principle” (Boltanski & Thévenot, 2006: 77). The capability of reaching legitimate agreement through justifications thereby rests on the recognition of a shared, common humanity, which surpasses the particular interests of each participant in a dialogue.

The orders of worth identified by Boltanski and Thévenot (2006) include a *market* worth which has a short-term focus and is based on the scarcity of goods and services and the mode of evaluations rests on price and costs. In the *industrial* worth efficiency, rationality, professionalism and planning reign supreme. Together they typically form the sphere of economic relations (Boltanski & Thévenot, 1999: 372). The *civic* worth is based on sacrificing personal interest for the collective common good and the formalised equality and rights of members of society. The *inspired* worth is based on creativity, being artistic, singularity and grace. Worth is not attained from outside recognition but from an “immediate relationship to an external source from which all possible worth flows” (Boltanski & Thévenot, 1999: 370). The *domestic* worth is based on kinship, paternal authority, traditions and a person's presence in a network of (local) dependencies in which trust and reputation is valued. In the world of *fame* or *renown* worth is based on reputations on opinions from the outside. You are measured by the recognition of others rather than your own esteem or relations, unlike in the two worths discussed previously. Subsequent work has documented the emergence of a *projective* worth based on connectivity and flexibility and providing the new spirit of capitalism (Boltanski & Chiapello, 2005), and *green* worth based on principles of environmental friendliness (Lamont & Thévenot, 2000).

As shown in Appendix E, the framework of worth consists of several interrelated dimensions that "define the parameters for legitimacy tests" (Patriotta et al., 2011: 1809). Any order of worth is "... based on a superior principle which specifies what needs to be valued or respected in any social situation, the qualities of attributes that social agents must demonstrate, the type of effort or investments that individuals must make to gain respect, and a test ('*epreuve*') that is considered to be fair in order to determine or restore legitimacy within a given world" (Denis, Langley, & Rouleau, 2007: 191 emphasis in original). Encoded within each order of worth are situations where one is asked to demonstrate their worthiness in a particular peak moment which is called a 'test' where "[t]ests perform the evaluative operations that assign worth and allow the common identification of a good as belonging to a particular economy of worth. They do so by establishing equivalencies according to the organizing principles specific to the economy of worth that the test belongs to" (Reinecke, 2010: 565). For instance, market worth is based on the higher common principle of competition. It is associated with buyers and sellers (subjects) generating wealth and objects of luxury (objects). A state of worthiness is shown by being an affluent market winner and the deal or transaction functions as a test of worth. As noted by Boltanksi and Thévenot (1999: 373), in the case of industrial order of worth experts are revered and persons or objects "are said to be worthy when they are efficient, productive, operational. They implement tools, methods, criteria, plans, figures, graphs etc. Their relationships can be said to be harmonious when organized, measurable, functional, standardized". According to Annisette and Richardson (2011: 242), "The idea of tests of worth provides a key concept at the level of interaction to explain how disputes over the relevance of orders of worth in a given social setting are resolved and how distinctions among people and objects within a setting are justified". For example, in a university exam, one cannot pay with money to pass, but needs to prove one's worthiness through knowledge.

Settling the dispute: agreement and orders of worth

An essential aspect of SOW is that the full array of orders of worth can apply in any given situation and social actors have the capacity to draw on each order of worth. Orders of worth are thus potentially always in conflict and the attainment of worth or legitimacy is a constant achievement that reflects a settlement, a "temporary truce" (Hoffman, 1999), between multiple orders of worth. Contestation and instability are hereby the norm rather than the exception. One type of dispute flagged up by SOW is concerned with which order of worth applies to a specific situation and how to reconcile these orders of worth (Annisette & Richardson, 2011; Gond & Leca, 2012; Stark, 2009). In the case of integrated reporting it is thus unclear "what kind of test, relevant in a certain world, would really fit the situation" (Boltanski & Thévenot, 1999: 374). The SOW framework suggests that a settlement can be reached by resorting to one dominant order of worth, constructing a local arrangement or by reaching a compromise between various orders of worth (Boltanski & Thévenot, 1999, 2006; Cloutier & Langley, 2013; Jagd, 2011).

A first way to reconcile difference is when actors may attempt to (re)assert the order of worth they champion as the *dominant* one, in particular when power is unevenly balanced, and close the dispute by resorting to one test only that brings coherent equivalence to an order of worth. This can happen either more or less peacefully, where in the latter case active force can be exerted to overwhelm proponents of alternative orders of worth akin to Bourdieu’s 'symbolic violence'. For instance, Spicer and Sewell (2010) discuss the emergence of public broadcasting in Australia that can be reinterpreted as a class of worth between managers, the broadcaster and the broader public. To justify its stance of providing public goods such as education (gaining civic worth), rather than giving customers what they wanted (gaining market worth), the nascent public broadcaster engaged in public actions of justification where ultimately it positioned itself largely in terms of the civic good of nation building (Spicer & Sewell, 2010). However, senior management sought to assert the market as the most important criterion that the organization’s actions should be judged upon and all other criteria were made subordinate to this over-arching market based criterion.

A second way to reconcile differences is through *private arrangements*, i.e. “contingent and local agreements, oriented towards private interests” (Huault & Rainelli-Weiss, 2011: 1411). For instance, in their study on the failed attempt to construct a European market for weather risk, Huault and Rainelli-Weiss (2011) argue that promoters of the derivatives, working within a market world, and firms faced with weather risks, working in an industrial world, resorted to this form of settlement. That is, in the absence of a general financial market individual industrial firms construct case-specific transactions with market promoters. These arrangements however “remain local, contingent, oriented towards private interest, and, as such, difficult to generalize” (Huault & Rainelli-Weiss, 2011: 1411) as they ignore the common good or general interest. In order to forge a more sustainable compromise in the form of a market for weather risk, the authors follow Boltanksi and Thévenot in arguing that reconciling different orders of worth requires a problem of *common interest* that actors can agree upon as well as a degree of *ambiguity* and avoidance of full *clarification* of interests and motives (Boltanski & Thévenot, 2006; Huault & Rainelli-Weiss, 2011).

A third way to reconcile differences is to appease contestations between orders of worth through a *compromise* where “people agree to come to terms, that is, to suspend a clash – a dispute involving more than one world – without settling it through recourse to a test in just one of these worlds” (Boltanski & Thévenot, 2006: 277). Stakeholders may stick to their preferred order of worth, but treat competing orders of worth as equivalent and compatible and thus “act as if they could rely upon a higher-level principle” (Boltanski & Thévenot, 1999: 375) as long as they avoid full clarification which leaves the underlying differences and tensions too exposed. For example, Patriotta et al. (2011) studied the justifications made by various stakeholders in the aftermath of a controversy resulting from an incident with a nuclear plant. Trying to repair its legitimacy, the energy company went through several rounds of justifications based on various orders of worth as did other stakeholders. Interestingly, these “were not prisoners of their own institutional worlds; rather, they were able strategically to combine justifications from various worlds in order to strengthen their support for (or criticism of) the institution at stake (Patriotta et al., 2011: 1828). Ultimately, a new arrangement was reached in the form of a compromise that was adequately ambiguous and avoided too explicit a clarification, yet was still linked to a common interest and this compromise thus suspended the dispute for the time being. When such compromises are established they lead to a degree of legitimacy since they are able to provide an account of why particular activities are judged to be acceptable. The stability of the compromise varies though and is inherently unstable since the settlement does not meet the demands of the test. The tension between multiple orders of worth is never completely resolved and ambiguous situations containing multiple orders of worth are easy to denounce (Boltanski & Thévenot, 1999).

Methodology[14]

In this paper, I am primarily interested in identifying the various orders of worth and justifications brought forward by actors to legitimise integrated reporting through a form of compromise. This in turn ought to enrich our understanding of the potential and limitations of integrated reporting. Integrated reporting has rarely been studied so far and this new practice is not well understood yet. A more explorative and in-depth qualitative approach that is able to provide a rich understanding of the complexities and justifications around integrated reporting in its real-life context is therefore appropriate (Bryman & Bell, 2007; Yin, 2009). The SOW framework sits well with integrated reporting thanks to its attempt to juxtapose distinctly different ways of valuing the role of the firm and of a report and thus shows the multiplicity of how the value and use of integrated reporting changes as it becomes differentially objectified within multiple orders of worth.

To be sure, the universe of SOW comes with an expansive 'toolkit' in which each order of worth is populated with various attributes (Appendix E). In this more explorative setting where the aim is primarily to better understand integrated reporting I intend to show what it means when one conceptualises a practice such as integrated reporting as constituted by various orders of worth. An analysis in minute detail of the workings of each dimension of a world is for now beyond the scope of this chapter.

[14] Some replication of the methods sections of Chapter 2 and Chapter 3 cannot be avoided here as the respective chapters share a lot of methodological aspects.

Case selection

For SOW a typical unit of analysis is a case that shows the “uncertainty of the critical moment” (Boltanski & Thévenot, 2006: 15) which “aims at identifying the justificatory resources that actors mobilize in order to make sense of situations that involve conflicting principles of valuation, to substantiate decisions, but also to criticize, challenge and re-negotiate the rules and instruments of evaluation themselves” (Reinecke, 2010: 568). In short, the introduction of integrated reporting invokes such a critical moment where controversy arises and agreement or compromise has to be reached for legitimacy to emerge.

I focus my analysis on integrated reporting in the Netherlands. I follow Jennings and Zandbergen (1995) here in their suggestion that sustainable practices are often local in character (see also Adams & Kuasirikun, 2000; Kolk, 2005), making a focus on a particularly country very apt. Moreover, by now an entire field with actors and subject positions has formed. Borrowing from institutional theory, fields are defined as “… those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products” (DiMaggio & Powell, 1983) and it is here that “collective rationality” (Scott, 2008: 217) is constructed. For reporting, in addition to firms actors of interest are NGO’s (Kolk, 2004a, 2004b), the government (Lambooy, 2010; UNEP & KPMG, 2006), professional services firms (Levy et al., 2010), institutional investors and standard setters such as the Dutch-based Global Reporting Initiative. Moreover, out of the 80 companies participating in the IIRC pilot programme, 12 are Dutch, which makes the Netherlands the frontrunner in this pilot. Overall, this transparency of the field allows for good theoretical development and offers an exemplary case as subject positions are often contested and “transparently observable” (Eisenhardt, 1989: 537; Yin, 2009) thus making the Dutch example of integrated reporting a salient case.

Data collection

I consulted various data sources. Triangulating the data sources enhanced trustworthiness (Lincoln & Guba, 1985), contextualised the data (Yin, 2009) and made it possible to better analyse actors’ justifications and attempts at compromises. Data collection was managed as follows.

First, I consulted four key contacts, all with a minimum of 10 years of experience in the field and involved in the developments around integrated reporting. These conversations provided not only an overview of the field, helped to better grasp integrated reporting but also resulted in a list of prospective interviewees who were contacted. After this, a snowball sampling technique was applied based on further recommendations of interviewees (Bryman & Bell, 2007). This approach made it possible to efficiently concentrate on contacting field actors with desired characteristics fitting the framing of the study, more akin to theoretical sampling (Strauss & Corbin, 1998). In addition to snowball sampling also conference attendance lists and documents were consulted in order not to exclude potentially important and useful actors. A fair representation of various stakeholder positions was controlled for in order not to skew the data and provide heterogeneous perspectives (Jacobides, 2005). Keeping track of potential non-representativeness prevented selection bias and ensured a rounded overview of the various subject positions present (Malhotra & Birks, 2003). Still, as table 8 shows in particular investment specialists and public sector officials were interviewed less frequently yet are important for the development of reporting. The congruency of the message among these interviewees brought simply earlier saturation than with other stakeholders.

Table 8 Overview of interviewees

Actor group	Number of interviewees
Public sector	10
Civil society	21
Investment community	10
Reporting firms	25
Academics	6
Professional services firms	21

Table 9 Overview of data sources

Type of data	Detail of source	Amount of data	Data analysis
Interviews with field informants	Interviews with firms, civil society, investors/raters, consultants, accountants, policy officials, academics.	64 interviews with a total duration of approx. 75 hours	Transcribing, analysing and coding of interviews. Through analysing the references made to specific orders of worth and compromise mechanisms a SOW story of integrated reporting emerged.
Documentary material	Newspaper articles of Dutch press, consultancy reports, NGO studies, government reports; investor statements	500 pages	Contextual reading, familiarisation with integrated reporting, background for interviews and enhanced credibility and further validation of interview data interpretations.
Conferences and workshops	Dutch Annual Seminar CSR Reporting 2012; Seminar Integrated Reporting: 'Measuring is knowing'; Roundtable Sustainable KPI's	30 pages	Notes from discussions, informal meetings and presentations reviewed. Showed justifications and orders of worth 'in situ', possible to validate results from interviews and documents, discuss proposed theorisations.

In total 64[15] interviews were conducted between February 2011 and late 2012, after which a saturation point had been reached (both theoretically and empirically). Table 8 provides an overview of the background of my interviewees (total number of interviewees exceeds 64 because some people are equally involved in various spheres). Interviews allow for a

[15]This study is part of a larger project on the history of sustainability reporting in the Netherlands for which 94 people were interviewed and a broad collection of documents were consulted. The analysis in this paper rests on a subsection of this data pool, in particular those sources where integrated reporting was specifically discussed. In addition, some overlap with methods section of pervious chapters cannot be avoided.

direct account of events, opinions, motives and attitudes and their explanations (Malhotra & Birks, 2003). Interviews were semi-structured, about 75 hours in length, tape recorded and transcribed (except five for which extensive notes were taken). The interviews focused on the following main question areas: (a) understanding of integrated reporting and stakeholders involved; (b) the goal of integrated reporting; (c) their general opinion of integrated reporting; (d) important or critical moments in the development of integrated reporting; (e) existence of conflicts or problems and ways to overcome them.

Second, I combined my main body of data from interviews with other data sources (see table 9). I consulted a broad collection of documents. This not only allowed for contextual reading and further field familiarisation, but is also a form of "checks and balances" against which I could test insights derived from interview material (Yin, 2009). Yet, no major contradictions were observed. Articles in main Dutch business and general newspapers, government reports, publications of professional service firms, reports and statements of NGO's and investors, academic publications and integrated reports of companies were consulted. Finally, I attended several workshops and conferences on integrated reporting that were attended by various stakeholders. Although these events were not coded directly, I observed proceedings and took extensive notes. This allowed me to experience the process of justifying value positions and compromise building directly, allowing a further refinement and testing of earlier analyses.

Data analysis

To achieve my research aim I analysed the data as follows. First, I read all documents, reports, articles, notes and interview transcripts to familiarise myself with the Dutch field and its main stakeholders, events and developments. In particular this was done to get a better 'feel' for the case prior to the actual coding and analysis.

Second, I identified the dominant orders of worth visible in the case of integrated reporting. For this I used a form of qualitative content analysis in Nvivo, a programme for qualitative data analysis software. This involved reading the interview transcripts and documents, identifying the moments where actors rely on justifications and subsequently code these justifications to orders of worth. This aspect warrants some additional description though, since for SOW studies a common difficulty is "defining a real-life situation and its attribution to a given world of reference" (Ramirez, 2013: 854). Patriotta et al. (2011) tried to overcome this challenge with a more mechanical form of coding, akin to content analysis, based on a list of semantic indicators derived from the work of Boltanksi and Thévenot complemented with the authors' own empirical data. I follow instead the broader interpretative approach of, for instance, Ramirez (2013: 855) in his SOW study on the consequences of a shift towards an accountability logic for the Institute of Chartered Accountants in England and Wales (ICAEW). He tried "by making use of observations that are not fully captured or explained by the available terms or by reference to evidence outside the situation itself, to relate the micro-aspects of a situation to broader, more contextual elements that help make sense of the story" and thus include a more interpretative element rather than making it just a counting exercise.

While reading the documents and interview transcripts with the SOW framework and keeping semantic indicators in mind (see Boltanski & Thévenot, 2006: 159–211; Patriotta et al., 2011: 1815–6), it is thus important to look for instances where actors "move beyond stating a particular or personal viewpoint toward proving that the statement is generalizable and relevant for a common good, showing why or how this general claim is legitimate" (Thévenot et al., 2000: 236). I paid hereby attention to the discursive as well as the material and organisational aspects visible when appeals to the common good are made. For example, when asked why to engage in integrated reporting, a CSR manager professed that “it’s time to fully integrate CSR in the business and integrally link it to profit maximization”, thereby clearly making reference to the market order of worth. It soon became apparent that references were predominantly made to the market, industrial, green and civic orders of worth, and I will focus my analysis mainly on these. This zooming in is not uncommon in SOW studies, following for instance Reinecke’s (2010) focus on industrial and civic worth and Patriotta et al. (2011) on industrial, market, civic and domestic. The outcomes of this stage are discussed in the first part of the findings below and relate to the first research question (see also table 10).

Third, I focused my analysis on the attempts to reconcile differences into an agreement. Here I more closely followed prior SOW work, in particular the study of Huault and Rainelli-Weiss (2011: 1402) on the market for weather derivatives and the different forms of agreement involved. In this part of the analysis I coded transcripts and documents for “the emergence of disputes, i.e., of debates and discussions regarding the usefulness” of integrated reporting and followed this by analysing “the search for an agreement, i.e. the different attempts to overcome conflicts through compromise”.

I used here an abductive (Peirce, 1978) method by iteratively comparing the raw data with the various types of agreements identified by the SOW framework and previously discussed in the theoretical section of this paper. I hereby operationalised the compromise further in instances of seeking a common interest, avoiding clarification and ambiguity within the compromise. For example, one CSR manager expressed the wish that “We would like to, and that is a real challenge, serve all our stakeholders with this one integrated report. This is a real challenge indeed to find this commonality but I think the external community is slowly getting ready for this”, thereby alluding to the constructing of a compromise rather than a single dominating order or local arrangement and seeking of a point of common interest. This analytical focus on the attempts to reconcile the various modes of valuation identified through orders of worth makes it possible to gain insight into the potential as well as the "limits and fragility" (Annisette & Richardson, 2011: 243) of integrated reporting. The outcomes of this stage are discussed in the second part of the findings below and relate to the second and third research question (see also table 11).

Findings

Research setting: Context and background of the Dutch reporting landscape

After a short-lived first wave of interest in primarily social aspects of corporations in the 1970's (Dierkes & Antal, 1986) reporting picked up momentum in the late 1980's when the first separate (environmental) reports came out, mainly as a consequence of the early Dutch interest in environmental management systems. This interest continued in the wake of the 1987 Brundtland Report and the Earth Summit in 1992, government regulation on environmental reporting[16] and the emergence of the first standards and guidelines[17]. At the turn of the century a transition took place from environmental reporting to forms of triple bottom line reporting, given further impetus by the emergence of a dominant standard in the form of the GRI and work of sustainability consultants. By 2011, 82% of the Dutch largest 100 companies published sustainability reports (KPMG, 2011a), up from 35% in 2002 (KPMG, 2002b). Moreover, reporting gets increasingly linked with the "business case" and goes beyond its initial appeal on corporate values and reputation. In the language of SOW, it is here that in particular the market, industrial, green and civic orders of worth become more prominent. As noted by accounting scholars more generally (e.g. Milne et al., 2009), in

[16]See Wet Milieubeheer, Staatsblad 1997, nr. 170. See Chapter 12, accessed on 14-06-2012 at: http://wetten.overheid.nl/BWBR0003245/Hoofdstuk12/geldigheidsdatum_15-06-2012
Wet van 10 April 1997, Staatsblad 1997, nr. 170 & Besluit Milieuverslaglegging of 17 November 1998, Staatsblad1998, nr. 655

[17]For example, the CERES Principles, the work of the European Chemical Industry Council's (CEFIC), the World Business Council for Sustainable Development (WBCSD) manager's guide to environmental reporting, the European Union's Eco-Management and Audit Scheme (EMAS) and the joined work of the consultancy SustainAbility and the United National Environment Programme (UNEP).

practice the triple bottom line is less interlinked than in theory, yet with the next step towards integrated reporting and the explicit development of an accounting framework that tries to combine these different orders of worth.

In the aftermath of the accounting scandals at the start of the first decade of the 21st century, and the financial crisis a few years later, recognition that non-financial aspects needed more corporate attention became increasingly commonplace in the Netherlands and beyond. The reason was that these so-called non-financial aspects could have substantial financial consequences after all. The updated Dutch Frijns Code[18] on corporate governance introduced CSR more specifically, for example. As analysed in detail by Lambooy (2010: 107–46), this Code, applicable to listed companies with a Dutch registered office, firmly puts CSR (strategy) as a core strategic part of the firm that falls under the responsibility of both the management and supervisory board. Combined with investor interest (among others the large Dutch pension funds), the sustainability-adjusted annual reporting Guideline 400 and the Guide for Sustainability Reporting of the Dutch Council for Annual Reporting, as well as international developments around integrated reporting through the Prince's Accounting for Sustainability (A4S) Project, GRI and the IIRC all sparked an interest in integrated reporting in the Dutch reporting field. Without the stick of regulation integrated reporting has picked up momentum in the country. For instance, companies such as Philips (2009), DSM (2010), Rabobank (2009), AkzoNobel (2008) were among the first to make the switch, but also less well known and more recent reporters such as the waste management company Van Gansewinkel (2010) and the Port of Rotterdam (2009) have started to use a form of integrated reporting. Whereas only 3% of reporting companies published an integrated report in 2008, 26% already did so by 2011

[18]See Staatsblad 2009, nr 545, ("Besluit van 10 december 2009 tot wijziging van het Besluit van 23 december 2004 tot vaststelling van nadere voorschriften omtrent de inhoud van het jaarverslag (Stb.747").

(KPMG, 2011a). Below I examine the various perceptions of integrated reporting's value and how to reconcile the differences to gain legitimacy.

Orders of Worth

Below I address the first part of my research aim and examine the rationalities or value articulations (i.e. orders of worth) that can be identified in the case of Dutch integrated reporting. Table 10 provides additional data evidence. The second part of this findings section discusses in more detail the attempt to reconcile these orders of worth in a negotiated compromise.

Table 10 Overview orders of worth

Order of worth	Representative data source
Market	"we have been improving brand reputation, and we have been improving sales thanks that activity or KPI, because we have found a way or equation to tell that this communication engagement activity has also participated in increasing the number of clients. Ah bon, this is becoming high attention and value" (NGO) "We want to know the social return on investment of our core activities and link this to our return on investment. That is our business case for shared value" (CSR manager)
Industrial	"I think that firms who have really integrated this topic, sustainability, in their strategy eventually all publish an integrated report with very clear and measurable SMART goals and targets" (Investor) "I mean the short of it is people in the world of sustainability reporting tend to be values driven, tend to be mission orientated. In their hearts they're social change people, and this is just an instrument for achieving that. ... And financial reporting, that's simply not the case. Financial reporting is very much a mechanical exercise that's getting the numbers in the right columns and getting the accounts straight and the balance sheets and income statements. So there are really no values there (NGO)
Civic	"It has everything to do with a belief or conviction that disclosure and honesty is something that is a social responsibility. After all, you operate as a firm in the public domain" (NGO) "Of course to also build a little bit more trust towards the outside" (CSR NGO)
Green	"Accountants are very good at assessing the correctness of quantitative information. But whether it's a kilogram of dioxin or of CO2 does not mean anything to them. So you have people who argue that accountants do not know anything about the environment and the impact of substances, and

	therefore they cannot possible work with these reports" (Standardising body) "For them environmental was and remains the main issue, it was the main emotional issue because it was things like three mile island and climate change and o-zone layer and deforestation, they're all environmental" (Consultant)

Integrated reporting and efficient firm valuation ('industrial' worth)

Much of the work of standard setters and accountants has its fundaments in the industrial order of worth in which professional expertise, efficiency, long term growth and planning are key components. The long-term temporal dimension distinguishes integrated reporting from more traditional financial reporting in the sense that "the integrated report definitely is required to provide a more holistic view of the performance and to see whether or not the organisation is going to be sustainable in the sense of being around for the long term" (Partner Big Four). Accountants and investors typically find many of their justifications in this realm. For example, the accountant typically is the professional and methodical expert who through careful planning and following of procedures is able to be set up or audit accounts and thereby gives its seal of approval with regards to the value of the firm. In the case of integrated reporting, a central task for this profession is thus to find out "how do we arrive at one report (or more), which provides a strategic picture of the business, explaining how it creates and preserves value now and in the future?", according to a report of the Dutch PwC branch (2012: 12). The methodical work of the accountant has an impact on the development of indicators as a measurement tool as well since "they have noticed a very logical effect, namely that by thinking through what indictors should look like it becomes possible to check them by relying on IT and controllers. That is of great additional benefit to the architecture and design of indicators" (director Big Four).

A further aspect belonging to this world that is frequently raised in the case of integrated reporting is the rigorous and often scientific development of KPI's and ways to valorise these indicators. Propagated by the financial community who argue that "to make sure that reports become an integral part of the portfolio- analysis and decision-making further steps are required. In particular regarding comparability and the financial usability" (investor), technically robust measures are developed to show the linkages between the financial and non-financial. For example, as one informant of a research NGO argued: "I think that's our focus, so that we can demonstrate for example a company can show how increasing its employee engagement will drive an additional sales performance, you know, the causal relationship. It should be possible to integrate that into your financial forecast as part of your coherent strategy". A similar emphasis on indicators is expressed by an investment specialist arguing that "a point of improvement is the standardisation of these reports, and I foresee a large role for KPI's here. ... The best would be of course a direct feed-in function, that the reports are immediately transferred into the excel-sheets of the portfolio managers".

Finally, firms themselves also make frequent reference to not only professional standards that have to be developed, but also to robust and efficiently manageable data management systems that have to be in place and can support these standards and provide the necessary data. In the words of one CSR manager: "We have developed a web-based tool, it is still under development but quite mature and stable by now, because we need this data of course". In short, the worth of reporting is here thus evaluated on the basis of measurable and reliable indicators, long-term value creation (a compromise with the market worth), and professional expertise.

Integrated reporting and the competitive firm ('market' worth)

The market order should not be confused with the industrial order, even though these are often entangled. Whereas the focus of the latter is more long-term and primarily on efficiency, planning and expertise, the former is concerned with prices and economic values in a competitive market with a short-term horizon. One informant, working for a NGO promoting CSR, explained this market argument aptly by stating that “the main objective is to move towards the so called integrated report. Because what is the real agenda? It is how enterprises can picture the real economy and value the enterprise by better linking and even integrating financial and non-financial performance. So that is their end-goal”. Thus, the worth of integrated reporting is based on more valid monetary valuations that live up to the test of better functioning markets and competitiveness.

Arguably the most visible subject here is the investor who has taken a prime position as to who an integrated report is actually made for, as it is also a primary target of the IIRC itself, and seems to have helped, to some extent at least, “the financial column of the firm to suddenly look with interest at sustainability information” (senior manager Big Four). Investors seem fairly pragmatic on the more industrial issue of the rigour of KPI development and more concerned with having the financially material and impactful sustainability indicators as part of integrated reporting: “We can continue to improve reporting by fine-tuning reporting these KPI’s etc, that is one agenda, but for us the biggest agenda, while you have to improve these, it is the connection that counts with financial aspects. That is going to reconcile within the company the financial and non-financial to picture the real economy of your enterprise” (investment specialist). Yet, compromises here between market and industrial arguments are also already visible when “investors want to know whether profits [market] are sustainable or whether short-term performance is being achieved at the expense of long-term [industrial] success (Big Four partner).

Not only investors, also firms themselves use market justifications for integrated reporting since as a consequence of the interest of the financial world “everything becomes suddenly a lot more serious” (senior manager Big Four). For example, one CSR manager stated:

> "We have not solved any problems with this marginal definition of CSR based on ethical assumptions and 'doing the right thing'. ... We are in an economic, social and environmental mess. Get rid of the old-style CSR, it's time to fully integrate CSR in the business and integrally link it to profit maximization. Let's look at society's problems through capitalist glasses and try to solve these problems by making lots of money. Capitalism 2.0".

From a SOW point of view this shows that integrated reporting is justified by denouncing 'doing the right thing' (a civic aspect) in favour of market justifications of money-making and competitiveness. An informant remarked that although a small portion of employees support integrated reporting for more emotional reasons and a desire to make the world a better place (inspirational world) most can be persuaded by "the business case, cost reductions. The challenge is to make this business case beyond a doubt and very concrete. That you show the Euros involved and that you can show that frontrunners are really performing better in the market" (CSR manager). Again, the arguments that help to put market arguments to the test are a better competitive position and profitability.

Integrated reporting and collective welfare ('civic' worth)

Whereas the industrial and market order are the orders of worth more commonly associated with standard setters, financial specialists and accountants, integrated reporting is also justified by evaluation of worth based on notions such as equality, fundamental rights, solidarity and collective welfare. Unsurprisingly, this logic is more drawn upon by civil society and NGO's. For example, as one experienced NGO reporting professional argued when comparing the intentions of financial and sustainability reporting: "I mean the short of it is people in the world of sustainability reporting tend to be values driven, tend to be mission orientated. In their hearts they're social change people, and this is just an instrument for achieving that". In this world broad transparency and stakeholder inclusiveness typify worth rather than market value and KPI's.

Whereas justifications based on a market or industrial worth focus in particular on developing and reporting on material indicators for the financial value of the firm, reasoned from a civic point of view "the function of the report should be broadened in order to include information material to the impacts on society as a whole. If that will happen integrated reporting is a preferable option" (NGO). What is of value in these arguments is thus a more general societal justness and welfare that goes beyond particular financial concerns. For example, as stated by the Dutch Friends of the Earth chapter in a response to an EU public consultation:

> "annual reports should include an analysis of the financial risks for a company of human rights and environmental abuses resulting from the company's operations. However, this should not limit the requirement to report on non-financial issues to only those that are perceived as relevant to a company's financial performance. This could produce undesired effects, potentially marginalizing important issues that do not directly affect the financial position of a company but that could have great negative impacts for communities or the environment".

Thus, integrated reporting is not rejected outright, yet its market-industrial emphasis is put into question by raising the issue of solidarity, typically in relation to the powerless, poor and exploited, for instance those people deeper in the supply chain who are affected by the actions of the firm.

To be sure, in this regard the issue of trust, more typically associated with the domestic world, gets usually combined as an aspect promoting the general interest and well-being of society. Interestingly, not only NGO's resort to this justification but also for instance a Dutch accounting body states that "integrated reporting, because of its focus on transparency, should be considered a critical element of market reform, and for rebuilding public trust. It provides insights into how a company views itself and its role in society". It thus combines here elements of a market and civic order.

Integrated reporting and environmental care ('green' worth)

As described in the previous section, much of what subsequently became sustainability reporting had its roots in attempts to protect the environment and hold firms accountable for their detrimental ecological effects. Here integrated reporting is considered worthy when it reflects environmental principles such as sustainability and environmental protection but also includes "... a temporal extension of humanity by way of an implicit or explicit reference to future generations" (Thévenot et al., 2000: 257). In particular this latter point seems salient in the Dutch reporting landscape. Expectedly, NGO's use this line of argument, when one informant stated the wish "that the children of your children grow up in a clean world. The whole idea of nature and the environment and biodiversity". Integrated reporting ought then to play a role in this. Yet, also within firms environmental and generational arguments are heard. For example, one CSR manager confided about a section of reporting proponents that "They use arguments like: "Yes, but think of my children in the future. What about the environment and nature! They are emotionally very attached to the topic. Often these people are the champions of reporting in the organization and really push for it". Here arguments from the green order of worth are combined with those based on inspiration and emotion (inspired worth).

To be sure, the latter worth is indeed noticeable in the case of Dutch integrated reporting, yet in this particular case study was relatively infrequently utilised. The same applies to arguments based on renown, image and public opinion (opinion worth). Whereas it can be hypothesised that these were more frequently used when discussing stand-alone sustainability reports which were typically seen as a PR tools and window-dressing, once integrated into financial annual reporting these justifications and critiques became arguably less salient and have thus featured less in this particular analysis. Interestingly, even these green or environmental arguments were expressed relatively infrequently compared with the ones previously discussed whereas it was the bread and butter of previous reporting modes.

Mechanisms of compromise

The above thus indicates the multiplicity of orders of worth implicated in the case of integrated reporting. For integrated reporting to successfully progress these various views need to be juxtaposed in such a way that the outlook of the practice becomes acceptable and legitimate to a broad audience. I thus continue my discussion of integrated reporting by examining the question of how a legitimate compromise is attempted to be forged out of these multiple orders of worth and the difficulties involved in this (see also table 11). In theory domination of one order of worth could be attempted, but neither does the data suggest a realistic attempt of this, nor does it seem realistic as, for instance, even purely financial reporting already blends a market and industrial worth. I will thus focus the remainder of this section on the other two ways to reconcile competing orders of worth, namely the *private arrangement* and the *compromise*. Whether ultimately a more durable compromise is forged or rather a local and temporary private arrangement depends on at least three criteria that have to be met: establishing a common interest, avoiding clarification and maintaining ambiguity and plasticity.

Table 11 Mechanisms of compromise

Mechanism	Representative data source	Significance
Common interest	"A problem still is that when you want to show to WWF how well your sustainability performance is that sending them your annual report will not be very fruitful. That includes for 90% financial data that is not of interest to WWF. So how do you make integrated reporting relevant for a broad audience other than investors and financial specialist is a concern" (CSR consultant) "Now it's a question of I think materiality of reporting against transparency and that's shorthand for this view that this ought to be about understanding better the performance of companies for some people; whilst for other stakeholder groups it's more about the transparency and integrity of companies" (NGO)	A common interest in a compromise answers in a nutshell what the purpose of integrated reporting is and who it is for. Difficult to find a broadly shared common goal for integrated reporting that transcends private interests, in particular with an often perceived dominance of the financial agenda rather than a concern for sustainability.
No clarification	"We can continue to improve reporting by fine-tuning reporting these KPI's, that is one agenda, but for us the biggest agenda, while you have to improve these, it is the connection that counts (with financial aspects). That is going to reconcile within the company the financial and non-financial to picture the real economy of your enterprise. But that is than much smarter with regards the way you communicate with shareholders and investors" (CSR NGO) "There are some companies that have gone to that extent to actually demonstrating the valorising of non-financial, some people said, 'That's quite interesting,' and others said, 'Well that's a bit cranky.' So there's a lack of credibility there and that's the issue I think they're going to have to confront (CSR think tank).	The common interest being unclear, actors seek clarification to reduce uncertainty. In particular KPI development, materialising sustainability and valorising the non-financial into the financial complicates the emergence of a durable compromise. The risk is that the perception of market/industrial private interests taking over from common interests takes hold.

Ambiguity and plasticity	“The question mark is what is integrated? Is it converting… is it simply reporting financial or non-financial in the same report or is it actually demonstrating the relationship between the non-financial and financial in a balance sheet way? And I think that’s the issue” (NGO) “You can try to figure out the impact of various oil price fluctuations and carbon price fluctuations on power plants that depend on different types of fuel mixes, and therefore you can … a good analyst like Goldman Sachs can come out with those figures, but when it comes to human rights, how you quite quantify potential impacts of human rights is more challenging. It doesn’t come with the neat numbers. You can do it, but it’s that much more difficult I think, and it’s that much more open to scrutiny and questioning and so on and so forth” (Rating agency)	Integrated reporting in theory can meet the test of multiple orders of worth in a compromise. However, in practice it often loses its aim in ambiguous appeal since it gets pulled into a market and/or industrial worth which makes it potentially invalid and not a legitimate compromise.

Establishing a common interest

A first mechanism to establish a compromise is a shared reference to a common good and a focus on a common or general interest. According to Boltanksi and Thévenot (2006: 278) a compromise "aims at a common good that transcends from the two different forms of worth in presence by including both of them". This was aptly and optimistically phrased by one informant, a sustainable investment specialist, when she argued that "everybody will realise that all themes that have something to do with sustainability, so as environmental and social and good governance, that they all have financial consequences so they are all material. That is the reason why I think we will eventually end up with integrated reporting". Integrated reporting thus becomes a practice that is meant to absorb the tensions between elements of, in particular, the market, industrial and civic worth in the name of a more sustainable and transparent world. It thereby almost transcends these orders of worth as a device that does not belong to one particular world but becomes rather a way to reinforce the compromise. The following quote of a Big Four partner shows this compromise mechanism clearly and therefore deserves to be shown in full:

> "We are in essence with integrated reporting trying to bring two worlds together, the financial world and the sustainability world. It seems they really more often collide than actually stand side by side looking at what lies ahead. They almost seem opposites. That causes a situation in which you have two directions that push against each other and you try to look which one is the most important. In my opinion, however, the solution can be found in looking again at what the performance of the firm actually is and what aspects are in play and make that central to integrated reporting. You should not call these aspects sustainability, so that's why I say you remove sustainability from the agenda, because if you don't you are back at the same discussion again".

Whether all stakeholders share this belief in integrated reporting as constituting the general interest can be questioned though. For instance, the issue of materiality and financial consequences may be an obvious common interest for accountants, ratings agencies and investors, for NGO's, but also for firms themselves the issue is not as clear. According to the corporate secretary responsible for the integrated reporting process at a Dutch firm an issue of concern is that "with integrated reporting you have to consider whether you are still sufficiently informing your broad group of stakeholders. In particular those stakeholders who were well-served with a people, planet, and profit report may be put off by an integrated report with lots of financial information". This concern of who the integrated report is for, and by default which common interest it thus serves, is expressed by one experienced informant, working for a sustainability NGO, as "... these are two cultures that are very different, the financial reporting and the sustainability reporting … the origins, the genesis, the culture of these ideas are very different, and there's a lot of work to do in bringing the two together into a harmonious and unitary or unified vision for what integrated reporting ought to be".

Avoiding clarification

Related to this importance and difficulty of creating a common interest is a second mechanism of a successful compromise, namely the need to avoid clarification. That is, a compromise "... will not hold up if the parties involved try to move ahead toward clarification, since there is no higher-ranking polity in which the incompatible worlds associated in the compromise can converge. An attempt to stabilize a compromise by giving it a solid foundation thus tends to have the opposite effect" (Boltanski & Thévenot, 2006: 336), which means "clarification is the enemy of compromise" (Huault & Rainelli-Weiss, 2011: 1413). A fundamental characteristic of integrated reporting is, however, that it combines financial and sustainability elements, yet not everybody agrees on what it should ultimately look like, as explained above. For one informant, a director at a sustainability research and rating agency, a central dilemma of integrated reporting is "... how do you interpret these things into bottom line meaningful statistics which are useful to financial analysts? But at the same time you don't lose the narrative and strategic reporting on sustainability from both stakeholder perspective and a business perspective. And I think it's a genuine challenge, not a cynical remark". This tension not only makes it difficult to agree on a common interest, it also seduces some into trying to 'solve' this tension by seeking clarification of the principle of the agreement.

This urge for clarification and clarity is, perhaps unsurprisingly, most clearly visible among investors and accountants. For example, accountants "… know who pay them at the end of the day. More and stricter rules makes life for them better in the sense that it means more things to control and advise on" (employer organisation). Yet also firms often hold that "CSR data needs to reach the same level as financial data in terms of data integrity, reliability and robustness of the process" (CSR manager). Explained by an accountant, the sustainability systems "… are not nearly as robust in terms of process and control as their financial reporting systems. So one of the first steps that a company has to take that will require change is improving these systems. A problem here is that many sustainability people or people in the operating end of the business don't understand controls". This indicates a desire by these promoters of integrated reporting to define quite clearly the boundaries of this practice and develop, within an industrial worth, indicators, processes and measurement techniques. Whereas useful in its own right, this clarification can complicate the compromise situation with other orders of worth as it forces those looking at integrated reporting from more civic and green perspectives into the market and industrial realm. This tends to cause discomfort and, for instance, the claims of these powerful actors are typically denounced as “they are just selling stuff, some of these guys, the big companies are selling stuff” (NGO).

Maintaining ambiguity and plasticity

A third and final mechanism of importance for integrated reporting to solidify a compromise and establish legitimacy is maintaining a degree of ambiguity and plasticity. That is, compromises can refer to a common interest or include beings or qualities “that may derive, depending on the way they are understood, from more than one world” as “figures of the common good also lend themselves to compromises” (Boltanski & Thévenot, 2006: 279–80). Integrated reporting would thus need to mean enough to everyone to work with it and it would be solid enough in substance yet at the same time contain enough plasticity to withstand tests of various orders of worth. To a certain extent sustainability reporting had this required ambiguity. It appealed to a broad range of stakeholders and was able to flexibly include industrial, market, civic and green aspects under the umbrella of sustainability. Sustainability as a compromise object was thus offered as a solution to a problem of common interest and the ambiguity was “a means of allowing this compromise to be maintained” (Huault & Rainelli-Weiss, 2011: 1413). As made clear above, the problem of common interest is in the case of integrated reporting far less clear and widely agreed upon, even though in theory integrated reporting potentially “... is an integral story with a binding element that basically tells us that when we do it this way we will all benefit” (civil servant).

This notion of “integrated reporting” is thus, for instance, supposed to qualify the relation between the firm and the financial market in a market worth, but also between the firm and social justness from a civic worth. However, in particular stakeholders valuing reporting from the latter angle find integrated reporting often acutely skewed to a dominating market/industrial logic, thereby losing its ambiguous appeal. For example, one labour union representative argued that “there will be a desire by the accounting industry to come up with quantifiable indicators and statistics and things like this. And most, that's more than half, most of the quantifiable indicators in the social area are not valid indicators of what they're supposed to be indicating”. In other words, the wish to determine the meaning of integrated reporting through (industrial) indicator development makes it less appealing from the civic logic since the test of worth does not match anymore.

To be sure, also among Dutch firms there seems to be recognition that integrated reporting may be a practice possibly too unambiguous to function as the basis of a compromise and is rather a more focused private arrangement among a few stakeholders. According to one Big Four partner, firms:

> “fall into one of two camps. One says, ‘We’ll produce this integrated report and we will not be producing a sustainability report, a standalone sustainability report anymore.’ And others who say, ‘Yes we’re going to produce an integrated report, but we recognise that that integrated report’s primary audience is probably the investor and consequently we believe that there are still other important stakeholders to the business.’ Which means that the sustainability report, the standalone sustainability report still has a role in the future but it will be targeted much more at a different audience”.

Towards a legitimate sustainable compromise?

Having depicted the various orders of worth at work in the case of integrated reporting and discussed the compromise mechanisms of establishing a common interest, avoiding clarification and maintaining ambiguity, I next examine the question of the outcomes of this and the meaning which has been given to integrated reporting. To be sure, this is by default somewhat speculative as integrated reporting is still very much work in process and the first generation of an official framework will not materialise before late 2013. Still, my analysis sheds light on the possibility of, and impediments to, reconciling the multiple demands that exist around integrated reporting and how it moves between becoming a *private arrangement* or *compromise*.

A particularly striking outcome based on my analysis of the Netherlands is that integrated reporting runs the risk of becoming a private arrangement as it is typically denounced for privileging the concerns of the market (through market/industrial worth) at the expense of seriously advancing social and environmental justice (civic/green worth). This complicates reaching a durable and shared compromise on the meaning, purpose and outlook of integrated reporting.

In this line of thought the required common interest fails to transcend the multiple orders of worth that need to be reconciled. In SOW terms, whereas some actors may indeed believe that a common ground can be found that leads to a compromise, others suggest that this may be more difficult to achieve since the differences are too substantial. Integrated reporting for them is rather a private arrangement between primarily market and industrial concerns as the practice gets "hijacked by accountants and investors" (Interview, consultant).The imbalance in power between actors/orders of worth was remarked upon as one Big Four senior manager argued that "the financial stream is quite dominant compared to the sustainability stream. This causes difficult discussions and complicates the process, of course". This problem of the dominance of the market/industrial orders of worth, propagated by predominantly accountants, investors etc. also has repercussions for the perceived ambiguity of integrated reporting. That is, although integrated reporting qualifies the firm's relation with the market and investors, it often does so rather unambiguously and thereby risks losing its social and environmental appeal and impact. It thereby risks highlighting the continuing function and value of the stand-alone sustainability report as a safe beacon of sustainability. Finally, attempts to prevent sliding into a private arrangement by clarifying what integrated reporting is 'really' about risks being counterproductive. My analysis above suggests that such a clarification of the exact terms of integrated reporting risks leading to a denunciation where "… the compromise is reduced to a private arrangement that benefits the parties involved" (Boltanski & Thévenot, 2006: 337–8). That is, the basis of the compromise is not a common good of many anymore, but rather a specific interest of some making it difficult to generalise and achieve widespread legitimacy for it.

In short, my analysis suggests that the required mechanisms towards a legitimate compromise are at best partially fulfilled and that integrated reporting thus potentially typifies a private arrangement between firms, investors and accountants on the basis of a market and industrial worth rather than a durable legitimate compromise and a solution or pathway towards an economically, socially and environmentally sustainable world.

Discussion

Understanding integrated reporting

First, what does the analysis presented above tell us about the value of integrated reporting? Many scholars interested in sustainability accounting and reporting are not necessarily interested in whether integrated reporting improves firm valuations, but rather whether it actually improves the quality of current accounting for sustainability. In other words, does it help to solve current environmental and social crises? Some studies have questioned this potential of various forms of sustainability reporting (see e.g. Gray, 2006; Laine, 2009; Tregidga & Milne, 2006), arguing that it is primarily used as a sustainability cloak that disguises the still primarily unsustainable 'business-as-usual'. In the case of integrated reporting this idea of 'reporting as a smokescreen' applies as well as the critique on the privileging of the more market and financial aspects of integrated reporting. In particular accountants and investors, as they "mobilized a wide range of evidence, established tests that matched their evidence and attempted to influence the interpretation of evidence provided by others" (Kaplan & Murray, 2010: 137), find themselves accused of capturing the dialogue and seeking private interest rather than searching for a common interest.

This fragility and impediment to integrated reporting's success can be understood as an instance of managerial and professional capture (see e.g. Power, 1991, 1994; Smith et al., 2011). That is, the dialogue between actors in the integrated reporting field seems to be strongly influenced by professionals, namely accountants and investors, who, either more or less insidiously, propagate their market/industrial agenda and thereby advance their own commercial position. Whereas this has been remarked upon in relation to forms of sustainability reporting more generally, in-depth empirical analysis of the matter has been scarce. In addition to this form of professional capture (Power, 1991, 1994), managerial capture by corporates through a focus primarily on those non-financial aspects deemed financially material and supporting the 'business-case' of the firm rather than general accountability, social justice or ecological sustainability further makes the possibility of a shared compromise increasingly problematic as well.

This idea of capture by powerful constituents such as management and professionals draws parallels with recent additions to the SOW framework in which Boltanksi and Chiapello (2005: 8, emphasis in original) describe the ways in which firms renewed the capitalist spirit through revamping "the ideology that justifies engagement in capitalism". Studying the social movements in the 1960s and 1970s and their critique on capitalism, the authors argue that rather than ending the capitalistic reign it reinforced its supremacy by reinventing itself into a new 'networked' societal order of worth. That is, instead of bureaucracy and the 'organizational man', the post-Fordist neo-management regime started simply to celebrate the values of expressive creativity, fluid identity, autonomy and self-development. Applying this logic to the Dutch integrated reporting field, it is possible to see integrated reporting indeed not as a liberating practice towards a more sustainable and accountable business community, but in an ironic twist of events rather as a practice that "helps the capitalist market to incorporate the critique that was meant to destabilize it" (Reinecke, 2010: 578). In other words, with the initial hope of integrated reporting being a Trojan horse towards corporate sustainability, it seems the Trojans have managed to keep the Greeks inside the horse (see also Spence, 2007).

Alternatively, and also on a more positive note, one can still argue there remains a truly liberating or emancipatory potential in integrated reporting, despite its difficulties in becoming a broadly shared legitimate compromise. That is, from a practical point of view, when actors face a situation of uncertainty over a new practice such as integrated reporting my analysis suggests they seek to justify their position by drawing on various widely shared 'orders of worth'. Because of the multiplicity of orders of worth, actors face the problem of bringing together these different and often clashing orders of worth. To do this, it is thus imperative for promoters to be able to establish and create dialogues between these different positions. Whereas the current shift tends to be toward a more restricted private arrangement, Stark (2009) suggests that rather than regarding this process as problematic, it also functions as a source of opportunities as it creates creative friction between the various principles of evaluation that in turn induces compromises between orders of worth.

Integrated reporting may not be a panacea for a sustainable future, the powerful actors involved (e.g. accountants and investors) that have started to put demands on firms do have an influence on these firms. As cynical as it may seem, informants widely acknowledged that the voice of a large investor is perceived differently than a disgruntled far-away community of obscure NGO. This 'sense of dissonance', to use Starks's words, forces firms to start reflecting on the impact of previously insignificant non-financial indicators, thereby invoking productive reflection and offering the potential of integrated reporting as a 'mirror' or an internal management tool that forces firms to start considering various sustainability aspects. Multiple principles of evaluation may cause the required "societal friction that generates a reflexive cognition capable of recognizing innovative solutions" (Stark, 2009: 212). However, once again, a balancing act between the specificity of a shared common interest and the need to maintain plasticity and ambiguity determines whether integrated reports will ultimately be "stabilized enough to circulate across sites, yet plastic enough to adapt to the local constraints and needs of the disparate parties deploying them" (Stark, 2009: 194).

Sociology of worth, legitimacy and SEAR

On a more general theoretical level my focus on SOW has implications for understanding how increasingly complex accounting practices, such as integrated reporting, gain legitimacy in pluralistic environments (Annisette & Richardson, 2011; Lander et al., 2013). I stated earlier that for integrated reporting to succeed it needs to be regarded as a legitimate practice, but that prior work on legitimacy within SEAR has so far typically emphasised audience evaluation, alignment and fit rather than viewed legitimacy as a form of dialogue or co-achievement through justifications over the interpretation of what is valued and valuable. This idea of dialogue goes beyond passive normative compliance and coping with stakeholder pressure as it "changes the modus of responsibility from the reactive model […] to a proactive concept of societal involvement" (Scherer & Palazzo, 2007: 1110). My analysis of integrated reporting offers thus the possibility to focus on legitimacy's processes and motivations (see e.g. Owen, 2008; Smith et al., 2011) and ultimately on how conflicts between contesting scripts are negotiated and resolved, thereby contributing to the possibility for sustainability accounting scholars to start opening up the legitimacy black-box. In particular, through my SOW analysis I have not only shown the multiplicity of perspectives that exist around integrated reporting. Moreover, I claim that this framework also provides an elaborate theoretical lexicon that helps to assess attempts to come to a settlement and eventual stabilisation of the meaning of a practice and thereby extend current work on legitimacy theory.

On the one hand the multiplicity inherent in orders of worth refines the conceptualisation of society of being a coherent entity that is often more or less explicitly present in many SEAR studies on legitimacy (Deegan, 2007). Instead, it adds to recent work that sees accounting (practices) situated in pluralistic institutional environment (Guerreiro et al., 2012; Lander et al., 2013). Moreover, it offers a conceptual tool box that allows researchers to get a better understanding of exactly how this process of gaining, maintaining or repairing legitimacy works. Framing accounting practices in a SOW vocabulary of contesting orders of worth, private arrangements and compromises and thereby paying attention to mechanisms such as maintaining a common interest, ambiguity and avoidance of clarification could usefully extend current work on legitimacy theory and make us better understand how accounting practices or organisations using these practices fail or succeed in establishing themselves. It makes possible an analysis of the dilemmas and difficulties associated with gaining legitimacy for complex practices, which will be beneficial for academics and practitioners alike.

Future research and practical implications

As with all studies, this one also comes with limitations that in turn give rise to future research. First, an obvious consideration is that this study focuses on the Dutch integrated reporting landscape. Although defensible theoretically and methodologically, the possibility of the Netherlands being an idiosyncratic case should not be ruled out and this study thus comes with limits to its generalisability. Therefore, future research could usefully analyse other geographical areas, possible non-Western ones too. Furthermore also the role of broader national institutions on the development of practices could be considered in this respect (Hall & Soskice, 2001). Although this particular study is based on an extensive collection of empirical data, combining both interviews and documents, the field-level scope remains quite broad and explorative. Future studies could for example also use ethnographic methods that would allow a more fine-grained account of the SOW framework (see e.g. McInerney, 2008; Reinecke, 2010) and how contestation in accounting practices constituted by multiple orders of worth works out in practice.

Second, related to this latter point is the potential that recently researchers have investigated combining insights from the SOW framework with institutional theory. For instance, blending insights with the literature on institutional logics (see e.g. Cloutier & Langley, 2013; Gond & Leca, 2012; Thornton et al., 2012) or institutional work (e.g. McPherson & Sauder, 2013; Ramirez, 2013) could provide interesting opportunities here. In cases of institutional pluralism still “little is known regarding the micro-level processes of how organizations and actors respond to competing institutional pressures” (Lander et al., 2013: 15) and thus seek to establish legitimacy (Cloutier & Langley, 2013; Suddaby & Greenwood, 2005). Where logics focus on macro-level structures, work looks specifically at the enactment of these demands at the micro-level and SOW aims to integrate both in one framework. Ultimately, all have an interest in creating, maintaining or destructing legitimacy and further research could see where they convert and diverge and the relevance of this.

Third, although SOW tells us a lot about the various types of settlements that can be agreed upon and the mechanisms to forge a compromise, we still know less about the respective strength of these settlements and the contingencies of their success. That is, future studies applying a SOW perspective on SEAR (or accounting more generally) could explore the conditions under which compromises are successful. For instance, what type of actors rely on which orders of worth, are there temporal elements of changes in this process and do some types of agreement lead to higher legitimacy than others or perhaps to variances on different dimensions of legitimacy (see e.g. O'Dwyer, Owen, & Unerman, 2011; Suchman, 1995)?

Finally, analysing an accounting practice such as integrated reporting through the lens of SOW has practical implications as well. That is, on the one hand it has a toolbox-like quality that can help policy makers and other practitioners propagating integrated reporting to more systematically assess the multiplicity of demands around the practice. Moreover, with its elaborated lexicon that characterises each order of worth (e.g. the test, subjects, objects, proof, mode of evaluation) a state of equivalence can be easier conceptualised, i.e. the purposive alignment of human, material and ideational factors in the field. However, as the pluralism of the field will most of the time make a compromise the more likely and preferable solution, the mechanisms of compromise discussed in this article provide practical guidelines on how to actually forge such a compromise (or how to insidiously frustrate one from materialising) and prevent being accused of making private arrangement that dampen the broad legitimacy of the practice. With this, the SOW applied to, for instance, integrated reporting provides a framework that combines picturing macro-level repertoires with more micro-level ‘management tools’. Hopefully a better understanding and appreciation of the complexities, difficulties and sensitivities of integrated reporting makes it possible for academics and practitioners alike to further develop this practice in a way that supports a sustainable economic, ecological and social future.

Conclusion

In this paper I empirically analysed integrated reporting, the latest form of sustainability reporting that aims to combine and merge financial and sustainability reporting. Drawing on the sociology of worth perspective (e.g. Annisette & Richardson, 2011; Boltanski & Thévenot, 1999, 2006), I analysed the pluralism of integrated reporting and focused on the possibility of, and impediments to, reconciling its multiple logics of valuation, or orders of worth, in order to forge a legitimate compromise. I showed that integrated reporting as a new practice claims considerable promise towards attaining financial, social and ecological sustainability, yet is still emerging and riddled with uncertainties. It contains elements of market, industrial, civic and green orders of worth, which need to be reconciled in order for integrated reporting to become a legitimate practice. Whereas such a compromise requires finding a common interest, avoiding clarification and maintaining ambiguity, in the case of integrated reporting these mechanisms seemed only partially in place which impeded integrated reporting’s development and legitimacy. In particular, I argued that integrated reporting is typically denounced for privileging the concerns of firms, investors and accountants on the basis of a market and industrial worth, rather than seriously engaging with the civic/green worth of those interested in social and environmental justice. This capture of integrated reporting complicates reaching a durable and shared compromise on the meaning and purpose of integrated reporting and instead suggests the presence of a limited private arrangement. At the same time, tension at the borders between orders of worth may give room for creative action.

Finally, the SOW framework furthermore helps to unpack the dynamic process through which complex new accounting practices, such as integrated reporting, gain legitimacy in pluralistic contexts as compromises are negotiated. Fundamentally, the SOW framework shows that legitimacy is not just about, for example, firms publishing reports strategically in response to scanning of legitimacy threats in its environment. Neither is it about the constrained compliance with institutional scripts. SOW makes clear that a complex practice such as integrated reporting, at its very core subject to a plurality of institutional demands or logics of valuation from a variety of stakeholders, gains or loses legitimacy through engaging in a dynamic 'dialogue' with actors in the field where these orders of worth need to be reconciled in either a compromise or a more local private arrangement. This theorisation of a complex new accounting practice thus helps to understand better the dynamic process of how some accounting practices prevail and other succumb to obscurity.

Chapter 5 - Conclusion

Summary

In Chapter One, the introduction of this dissertation, I discussed the rise of a sustainability discourse. I argued that a particular example of a corporate answer to sustainability has been demands for stronger and better accountability and transparency of firms through sustainability reporting. I explained the complex nature of sustainability reporting and the overall aim of this study to offer an explanation of how sustainability reporting has developed from a peripheral practice into a more widely accepted and adopted one. I aimed to do so by examining its development over the last 25 years in the Netherlands. Most prominent accounts to date have relied for their explanations of sustainability reporting on the potential financial benefits or business case of reporting or on attempts of firms to strategically seek legitimate 'fit' between their value system and that of society. Others saw reporting as either an ethical accountability instrument or an instrumental strategic management tool with which to respond to demands of powerful stakeholders. Still, these accounts typically remained rather functionalist and instrumental and overplayed the strategic agency of individual firms, making them ill-equipped to explain the more field-based historical process dynamics that help us understand how sustainability reporting has developed into its current meaning and form.

I therefore situated my study more broadly in a tradition of sociologically oriented organisational institutionalism and its emphasis on the enabling and constraining role of structural institutional pressures as well as the possibility of agency within this. I stipulated sustainability reporting's status as a pluralistic practice that brings together concerns of a range of constituencies in an institutionally complex environment. This complexity is pushed further by reporting's embeddedness in a more general discourse of rationalisation with its emphasis on accountability, assessment and transparency and confusion over, or decoupling of, the exact means and ends of reporting. Together, notwithstanding being a multifaceted

practice that has developed in a pluralistic institutional environment, sustainability reporting has grown steadily and established itself firmly in the corporate landscape. The three studies included in this dissertation ultimately all fit in this larger context and examine aspects of how such complexities are dealt with at the field level. In addition to their respective contributions, together they add theoretically, empirically and practically to our understanding of sustainability reporting as such as well.

Although each respective chapter had its particular use of data sources and analysis, overall I qualitatively researched sustainability reporting's development in the Dutch reporting field. The Netherlands has been an early adopter of the practice and remained a frontrunner with over 80% of its largest 100 companies reporting (KPMG, 2011a) and also being at the forefront of the latest developments around integrated reporting (PwC, 2012). The complex Dutch sustainability reporting field is still under continuous development though and populated by a variety of different actors (e.g. government, firms, consultants, accountants, standard setters, NGO's, investors) working on further developing a multifaceted practice. This made sustainability reporting a good exemplary case in which various subject positions, events, activities and decision moments were "transparently observable", allowing for theoretical development (Eisenhardt, 1989: 537). I conducted 94[19] semi-structured interviews of typically 1-1,5 hours in length and combined this with an analysis of a large number of secondary data sources (reports, laws, newspaper clippings etc.) on (the history of) sustainability reporting.

In Chapter Two I asked how the institutionalisation of sustainability reporting has been achieved despite it being a multifaceted practice focusing on complex social problems in a relatively emerging, uncertain and heterogeneous field where cause-effect relations remain

[19] Chapter Four used only 64 of these interviews because of its particular focus on integrated reporting, which was not discussed with all interviewees.

unclear. I questioned the dominant assumptions of institutionalisation and change being fairly smooth and linear processes driven by a single heroic institutional entrepreneur blessed with great foresight and purpose. I instead offered an alternative interpretation by applying insights from the garbage can model. This model has at its core a concern for behaviour and decision-making in a complex and uncertain environment where a largely unstructured, loosely-coupled and serendipitous interplay between problems, solutions, decision makers and decision moments shape social order or institutions. I drew on a qualitative analysis of the history of sustainability reporting and analysed 94 semi-structured interviews and secondary data. I emphasised the importance of so-called historical contingencies and collective institutional entrepreneurship. A range of actors muddled through and were involved in the enactment of contingencies that enabled action and change as problems, solutions, and participants were momentarily matched. Overall, in this chapter I did not aim to negate the role of human agency and purpose in processes of institutionalisation and change though. Rather, I relaxed some assumptions and contributed a lens that specifically makes room for the role of serendipity, timing, collectiveness and context rather than the relatively neat and teleological models of institutionalisation. I thereby added a touch of realism and nuance to currently popular depictions of institutionalisation and change processes.

In Chapter Three the problematic was to chart the different dimensions of commensuration as they emerged in the field of sustainability reporting and its shift from a values-based practice into a value-based one. I explained the process driving the development of these dimensions and thereby offered a theoretical and empirical understanding of the dynamics of commensuration. I drew again on a qualitative study of the history of sustainability reporting in the Netherlands. Various dimensions of commensuration could be seen to shape and guide sustainability reporting historically. Cognitive commensuration marked the first period of environmental reporting; technical commensuration took over as reporting expanded into triple bottom line reporting and finally value commensuration marked the latest phase towards integrated reporting. I presented a process model as a starting point to better understand the dynamics and temporal aspects of commensuration and argued that the shifts in the dominant dimensions of commensuration can be explained by emerging pathologies that drive the development of the succeeding phase. These pathologies can be explained by instances of means-ends disconnection, professional insulation and cultural contestation. At the same time, this study highlighted the temporal aspects of the various dimensions of commensuration as well as their potential to reinforce each other. Finally, I discussed the implications of commensuration for sustainability reporting's development as it on the one hand helped reporting's development, but at the same time commensuration also impoverished the practice by advocating those values that can be made commensurate at the expense of other, not less important, aspects.

In Chapter Four I zoomed in to the present and considered integrated reporting and the attempts to build a bridge between the 'worlds' of financial reporting and sustainability reporting, which contest over their interpretations of the purpose and value of integrated reporting. In this chapter I analysed the pluralism of integrated reporting and focused on the possibility of, and impediments to, reconciling these multiple logics of valuation and coming to a legitimate compromise. I empirically applied the sociology of worth (SOW) framework of Boltanski and Thévenot to analyse integrated reporting in the Dutch reporting field, drawing on 64 semi-structured interviews and documentary analysis. This framework combines different repertoires of (e)valuation, or so-called orders of worth, and can be used to analyse the settlement of differences and how to gain legitimacy through expressing justifications and building compromises. I first suggested that integrated reporting combined disparate domains that are organised by, most prominently, a market, industrial, civic and green order of worth. A second point following from this was that these orders of worth represent different logics of valuation that need to be reconciled in order for integrated reporting to become a legitimate practice. Whereas a solidified compromise required finding a common interest, avoiding clarification and maintaining ambiguity, in the case of integrated reporting these mechanisms seemed only partially in place which impeded integrated reporting's development and legitimacy. Finally, the outcome of the above was that my analysis suggested that integrated reporting risks being captured by investors and accountants, leading to a local private arrangement rather than a durable legitimate compromise. Taken together, this chapter helps us to better understand the potential benefits of integrated reporting, yet also highlights the difficulties and limitations it entails. The focus on the SOW framework furthermore helps to unpack the process through which complex new accounting practices, such as integrated reporting, gain legitimacy in pluralistic contexts as compromises are negotiated.

Taken together, in Chapter Two I focused more broadly on the general historical trajectory of sustainability reporting's institutionalisation. In the subsequent Chapter Three I focused more on a specific mechanism, commensuration, which underpins reporting's institutionalisation and how it copes with complexity and pluralism. In Chapter Four I zoomed in even further on attempts to reconcile the inherent complexity of integrated reporting in forging a legitimate compromise. In these respective chapters I have made several contributions to current knowledge. First, I contributed to the institutional literature, most notably institutional entrepreneurship. By questioning the role of the heroic purposeful individual institutional entrepreneur I instead suggested the importance of enabling historical contingencies and collective institutional work. Second, I have also contributed to come to a deeper understanding of the dynamics between dimensions of commensuration and the mechanisms driving this process. Finally, I have enhanced our understanding of integrated reporting and the possibilities of, and impediments to, reaching a legitimate compromise and shown how this is a communicative dialogue around finding a common interest, avoiding clarification and maintaining ambiguity. Together, this has helped to better understand how sustainability reporting has developed from a peripheral practice into a more widely accepted and adopted one.

Sustainability reporting as a complex accounting practice

Although the studies that are included in this dissertation resemble related lines of inquiry rather than an unitary conceptual paradigm (Powell & Bromley, forthcoming), they have in common that they go beyond simple functionalistic rational actor explanations. They also all share an interest in the importance of context and external institutional influences. Finally, they pay specific attention to the consequences of pluralism and complexity for sustainability reporting. The specific contributions of the respective papers included in this dissertation have been previously discussed. Still, the preceding chapters on the history of sustainability reporting have some more overarching implications for our understanding of sustainability reporting as an accounting practice that prior SEAR studies have insufficiently addressed. Below I address some the theoretical and empirical implications of my study for our understanding of this practice as well.

First, the preceding chapters hinted at the multiple roles of sustainability reporting as both a consequence and driver of rationalisation, economisation and transparency pressures in its environment. That is, my study highlights the important role of sustainability reporting as an accounting practice that helped to organise the abstract idea of “sustainability” into an economic entity. I stipulate though that in this rationalisation and economisation (Miller & Power, 2013) of the field, sustainability reporting has not just been a technical and instrumental tool developed as a consequence of its institutional environment, but has at the same time also actively constituted this environment and its particular discourses and rationales and thus perpetuated its own existence.

This goes beyond extant studies that have typically offered an undersocialised view of sustainability reporting and focused on either how it actually goes against the notion of sustainability (Gray, 2010), or instead claimed the opposite by arguing it has great potential for firms and the environment alike (Burritt & Schaltegger, 2010). In both cases there is a focus on considering functionalist technical demands rather than acknowledging the (historical) importance of cultural, normative, cognitive or regulative influences (Miller & Power, 2013). My research on the one hand has shown that various rationales, discourses or logics in the institutional environment propagated or even enabled the diffusion of accounting practices and procedures in the sustainability landscape. These forces are typical manifestations of Western modernity and manifest themselves, for instance, in clarion calls for rationality, accountability and transparency (Bromley & Powell, 2012). These eventually helped to constitute sustainability as an accounting subject as it transformed from an abstract concept into a more concrete and manageable one, creating an entire industry with it.

At the same time though, sustainability reporting as an accounting practice has a pivotal position as it is not only a consequence of such institutional pressures, but also constitutive of this very institutional environment in which these are at work. My chapters have shown in various ways the constitutive nature of this accounting practice as it helps to further rationalise business and society relations and ultimately enables an environment in which "economization of organizational life becomes elaborated and institutionalized" (Miller & Power, 2013: 558). For instance, technical commensuration makes possible value commensuration, and value commensuration makes it easier to start talking about integrated reporting. Contingencies such as Brent Spar incidents and corporate scandals in turn clear the road for stringent accountability and transparency even more. In short, sustainability reporting risks becoming a self-reinforcing mechanism that eventually gets stuck in an increasingly complex web of its own making as the institutional pressures towards accountability, transparency etc. fragment the reporting field.

Second, related to this self-perpetuating tendency is that the complexity it brings along potentially leads to the decoupling of the means and ends of sustainability reporting. Either through a more focused form of reporting (e.g. integrated reporting) or the continuation of appealing to a broad spectrum of stakeholders (e.g. GRI based) the question emerges for what reason again reports are actually published. For example, as integrated reporting and commensuration progressed, sustainability reporting became less about values and the position of the firm in society, but much more focused on value and the linkage between the financial and non-financial aspects of the firm. With a nod to Weber, it shows how the instrumental means (sustainability reporting) that used to serve a more substantive end (corporate accountability and a 'better world'), became gradually ends in themselves as reporting became decoupled from its initial purpose, or became an end tailored at a very different and narrow need (corporate success). Similarly, reporting that aims to include everything ends up saying nothing, thereby going against its initial aim of advancing corporate sustainability.

These risks hold particularly true for sustainability reporting as it develops as a multifaceted practice in a rationalised environment in which a focus on measurement and financialisation easily leads to confusion over reporting's actuals goals or ends (Bromley & Powell, 2012; Pache & Santos, 2010). An outcome creeping through in my study is reporting for the sake of reporting to comply with calls for accountability and transparency, but whether it actually adds to the core business of either the firm or sustainability remains unclear. What is in fact measured or financialised may have in reality little to do with, or effect on, sustainability. In fact, the work on the garbage can discussed previously aptly highlights this means-end confusion as well, of course. In short, the more traditional policy-practice decoupling as a response to rationalised myths (Meyer & Rowan, 1977) is replaced by a form of practice-outcome (means-end) decoupling, which may be a more general tendency as some have noted (Bromley & Powell, 2012). A related point here is that my work also suggests that, perhaps contrary to popular belief, not only the active work of professions (e.g. investors, accountants, consultants) has instigated this development, but also a general zeitgeist conducive of accountability and auditability (see Power 1997; Miller and Power 2013) played its role here.

Taken together, a more comprehensive picture of sustainability reporting emerges that highlights its functional elements, constitutive power and its potential to become a 'force by itself' detached from its initial goal. These various roles of accounting practices such as sustainability reporting are important to properly understand. Not only because extant SEAR studies have relatively ignored them, but moreover because of "… the important roles it plays in shaping the world in which we live, the institutions that make up this world, the ways we understand and act on the choices open to individuals and organizations, and the ways in which we administer the lives of others and ourselves. If management without accounting has become unthinkable, accounting also makes management thinkable and actionable in specific ways" (Miller & Power, 2013: 561).

A final more overarching implication of this project is empirical and more specific to the literature on social, environmental and sustainability reporting and accounting. Scholars in this field have noted a dearth of rich qualitative studies (Gray, 2002; Owen, 2008; Parker, 2005). Leading interdisciplinary research journals have instead focused on literature studies, commentaries and other theoretical observations (Parker, 2005). Although not without value, the result has been a need for more “direct researcher engagement in the field, via qualitative research and inductive theorising” (Parker, 2005: 856). With my research I have aimed to indeed empirically “report, reflect upon, analyse and communicate” (Gray 2002: 702) on sustainability reporting. Moreover, I did so in such a way that my observations have been accompanied by fitting theorisations, be it from an institutional, commensuration, or SOW perspective. Considering the immediate practical relevance of sustainability this more empirical focus is arguably even more important. Still, a plurality of perspectives exists among researchers of sustainability reporting on which purpose this research should actually serve.

In a recent contribution Burritt and Schaltegger (2010) distinguished in this respect the critical path from the managerial path. The former sees reporting mainly as a problem not contributing to true sustainability or simply a corporate smokescreen that hides business-as-usual. The latter sees sustainability reporting rather pragmatically as a more positive problem-solving tool. The three main empirical studies included in this dissertation actually show the value of both the managerial path and the critical one, suggesting the simplistic dichotomy is neither useful nor realistic. Thus, my theoretically grounded empirical research makes it possible “to become more than an awareness building exercise and to move into problem solving” (Burritt & Schaltegger, 2010: 843). That is, by an actual in-depth engagement with the sustainability reporting field, focusing on past and present, it has become possible to combine empirically based critical observations (e.g. limits of intentionality, risk of ignoring incommensurables and the darker consequences of integrated reporting) with more practical suggestions for coming to meaningful and inclusive form of sustainability reporting (e.g. cherishing collectivity, stages of commensuration and creating compromises). This shows the richness and potential of closer empirical engagement with (organisations in) the sustainability reporting field for both theory and practice.

Future research

My analysis points to several potentially interesting directions for future research. In addition to the areas discussed in the previous chapters I briefly discuss several below.

Firstly, it is important to remember that I studied *sustainability reporting* in *the Netherlands* at the *field* level. This particular focus has been theoretically and methodologically justified, yet also raises several interesting questions that warrant further work. For example, relevant for all three studies included in this dissertation is the question of whether the findings are specific to sustainability reporting or can they be extended to adjacent issues? It thus opens up research possibilities to gain insight into garbage can institutionalism, commensuration and compromise building around a variety of practices. Do we see variances between more or less morally loaded issues, or perhaps between practices that to a lesser or greater extent question the status quo?

Similar limits to generalisation apply to my focus on the Dutch context. As a country in Western Europe, situated geographically as well as practically somewhere between the Rheinland model of Germany and the Anglo-Saxon world further west it could be interesting to see whether my observations can be extended to different geographical contexts. We know that varieties of capitalism affect the outlook of practices, structures and ideas within countries (Hall & Soskice, 2001) and prior work on sustainability reporting has hinted at the importance of national cultures (Orij, 2010). Has sustainability reporting developed different in, for example, Germany, France, Japan, UK or US compared to the Netherlands?

How exactly and what can be the explanatory factors or mechanisms here? What can we say about sustainability reporting in a non-Western context, e.g. South America and Asia? This latter point may even be more interesting as studies are largely missing in this respect. In some emerging markets reporting is starting to take off (India, China, South Africa), but can we expect to see the same emphasis on rationality and measurability or witness rather different trajectories? These are both theoretically and empirically interesting questions to explore more deeply.

Not unrelated, a final note on my field level focus should be made. A typology of fields could be useful to more systematically analyse institutional, justification as well as commensuration processes. That is, could we expect differences in the mechanisms identified in my dissertation based on the type of field in which they take place? For this purpose distinguishing, for instance, degree of fragmentation and degree of institutionalisation could be useful (see e.g. Battilana et al., 2009) to analyse commensuration, institutionalisation and constructing compromises in different contexts. In addition, whereas the field is an important institutional level of analysis and one where meaning is typically created for new practices (Wooten & Hoffman, 2008), studying sustainability reporting as well as my various theoretical frameworks at different levels of analysis can be useful (Scott, 2008). Field level practices are at the end of the day enacted at the organisational or even intra-organisational level as various departments within an organisation can clash as well. Shifting the focus of analysis to these levels could help to explain more precisely how commensuration takes place, serendipity is dealt with and various orders of worth are reconciled, and also how various stakeholders are involved in the development of sustainability reporting (e.g. the work of investors, professions or firms). In addition, distinguishing between how larger firms (the focus in my study) and small and medium-sized experience and enact the pressures for sustainability reporting and the theoretical mechanisms behind it could lead to a more fine-grained understanding. Drawing on the emerging institutional work literature could be a potential route here (Lawrence et al., 2011; Lawrence & Suddaby, 2006). Finally, the Dutch reporting field is in turn part of a larger trans-national reporting field. Peeling down these layers of levels of analyses, their interactions, enabling and constraining effects seems worthwhile.

Secondly, all chapters in their respective ways pointed to the tendency that reporting has moved closer to value and by extension to investors, accountants, analysts and the like. Whereas I have discussed the collective aspects of this shift and the role of distributed agency, the focus was primarily on human actors. Potentially interesting is to further explore the role of non-human aspects such as machines (e.g. Bloomberg-type terminals) and technologies (e.g. reporting software and XBRL taxonomies) and artefacts (e.g. reports). A potentially fruitful avenue of inquiry would be to link discussions of social media to reporting. For example, if you make information more continuously available via social networks rather than annually in a report, could this perhaps act as a sort of 'social vetting' mechanism that helps to assess the integrity and (financial) viability of firms and thereby lead to better informed decision, both in terms of financial and sustainability value? In addition, obviously insights from actor-network theory could be helpful in this respect as well with its specific focus on human and non-humans aspects as network actors (e.g. Latour, 2005)

Thirdly, related to this latter point is the potential for a more explicit inclusion on power as both in institutional theory as well as justification theory politics and power are typically underplayed. Lawrence et al. (2001: 629) argue that "a central feature of the institutionalization of an innovation is the set of power relations that supports the process". Similarly, commensuration and justifications do not happen in a vacuum. Similar to the structural and agentic aspects that I discussed throughout this dissertation, a distinction can be made between episodic power that links with agency and actions of individual organizational actors, and systemic power that links with (institutional) structure and practices prevalent here (e.g. Clegg, 1989; Lawrence et al., 2001; Lawrence, 2008). Aspects that could be worthwhile focusing on are the kind of power struggles taking place in these processes, the critical actors that engage in particular power mechanisms, the significant factors of how issues came to be issues, how non-issues were constituted and superseded, and who is and is not involved in decision-making. Together, this enhances the theoretical perspective of concern in this dissertation, and when applied to sustainability reporting sheds a more revealing light on the (possibly murkier) motives of actors involved. Again, insights from institutional work or actor-network theory, possibly in combination (see Lawrence & Suddaby, 2006), could be helpful.

Implications for practice

To conclude, in addition to the practical implications discussed in the specific context of the preceding chapters, my study more broadly also offers several implications for policy makers and practitioners in the sustainability reporting field.

First, all substantive chapters in this dissertation indicate that the institutionalisation of sustainability reporting should not be seen as a smooth, linear process. The garbage can analysis highlights this very clearly, but also the dynamics and tensions around reporting's commensuration and the various perspectives on integrated reporting show the muddled and contested nature of sustainability reporting. Whereas one may expect that after more than two decades of development the meaning and shape of reporting should have crystallised by now, this ongoing tension and messiness is possibly not particularly surprising as the practice includes such a wide (and oftentimes expanding) range of aspects.

For instance, whereas the buzz was all about CO_2 several years ago, by now water, biodiversity and tax evasion have become high profile topics on the sustainability reporting agenda. In particular for policymakers this indicates that it could be wise to more readily accept, if not embrace, this messy reality. It makes legislation around reporting that defines specifically all reporting parameters not only unlikely to emerge in the near future, but possibly also unwanted. Unlikely because of the (political) differences on whether this is possible or useful. Unwanted because the limits and unintended consequences of, for instance, commensuration and integration, indicate that it has proved difficult to capture the essence of sustainability reporting. Policies and legislation that dictate too rigidly the content of sustainability reporting could thus stifle development rather than contribute to more sustainable business. In this respect it is interesting to note the non-prescriptive and relatively flexible approach the European Commission has taken in its before-mentioned recent proposal on non-financial reporting. This may in fact be a rather more sensible approach than regulated reporting on a broad range of issues (a typical NGO wish), or a more restrictive set of valorised core indicators that investors and accountants prefer.

Second, the previous chapters have shown the multitude of parties claiming an interest in sustainability reporting. Whereas to some extent it has developed by more chance-like events, within the confines of these events actors still have had room to manage and influence the trajectory of reporting. For the more managerially inclined practitioners or supporters of sustainability reporting, my study also offers some practical pointers for how to popularise sustainability reporting-like complex peripheral practices with a more moral or values-driven undertone. After all, disclosing sustainability information went against mainstream business logic which largely saw these non-financial aspects as unrelated to business-as-usual and did not recognise their strategic (and financial) importance. In order for sustainability reporting to survive and thrive it needed to change, as by remaining close to its more moral and values-driven underpinnings it risked becoming a peripheral 'tree-hugger practice'. The case of sustainability reporting suggests the importance of gaining acceptance by forging closer links with powerful actors (e.g. world of finance and accounting) and through that focus on showing strategic and financial value. It essentially required translating the values-based roots into a more value-based language. Combining elements of my analyses, three key strategies emerge. First is to secure importance and awareness by establishing a business case link with performance, operational efficiency, risk analysis, reputation, innovation and the like. Second is supporting the credibility of this business case through guidelines, indicators and other measurement techniques that improve concreteness and measurability. Third is the validation of the core strategic importance of the practice for value-creation and firm survival.

Third, the chapters on commensuration and integrated reporting have made the contestation that has emerged over what sustainability reporting should look like and, moreover, whom it should (not) serve very clear. As said, sustainability reporting is a complex practice that brings together actors that are at heart social change activists fighting for a better world and more pragmatic or business-driven actors that see sustainability as a fortunate side effect of a business reality in which firms have to deal with the financial risks and opportunities that sustainability aspects offer. Accusations of reporting as a corporate smokescreen to protect and advance hegemonic business interests and to ensure the hegemony of market values at the expense of other modes or ways of valuing are still frequently made (e.g. Spence, 2007). Compared to its beginnings, sustainability reporting has undeniably been subject to rationalisation as it has become associated with indicators, guidelines, auditing regimes and business cases. Whereas this has thus undoubtedly helped to make sustainability reporting more accessible to a broader audience, my analysis has also made clear the unintended consequences of this in the form of narrow and impoverished reporting, box ticking and means that become ends. This makes sustainability reporting thus a double-edged sword and requires a careful balancing act of firms, policy makers and other stakeholders such as NGO's, professional service firms and standard setters. My analyses suggest the importance of a broadly agreed upon common interest, which may in fact explain the success of the GRI, a truly multi-stakeholder initiative from its very beginning with a strong emphasis on this shared interest. Despite the difficulties involved, continuous communication based on multi-stakeholder approach may not be the fastest, yet the most durable road for sustainability reporting.

Difficult to capture in a 'how-to guide', appreciating the dysfunctioning of, for example, the mechanisms behind commensuration (i.e. professional insulation, cultural contestation and means-end confusion) and how to reach durable compromises puts current developments around sustainability reporting in a broader context. It shows the potential as well as limitations of further rationalisation, commensuration and economisation. Realising what can lead to the detriment of sustainability reporting can be an important factor in preventing this from happening. I earlier argued that for sustainability reporting to flourish it should offer a solution to a problem of common interest despite conflicting worldviews (Huault & Rainelli-Weiss, 2011). A deeper understanding of the potential and perversities of current sustainability reporting may thus lead to commonality outweighing differences and thereby lead to policies and corporate behaviour that can truly be called sustainable.

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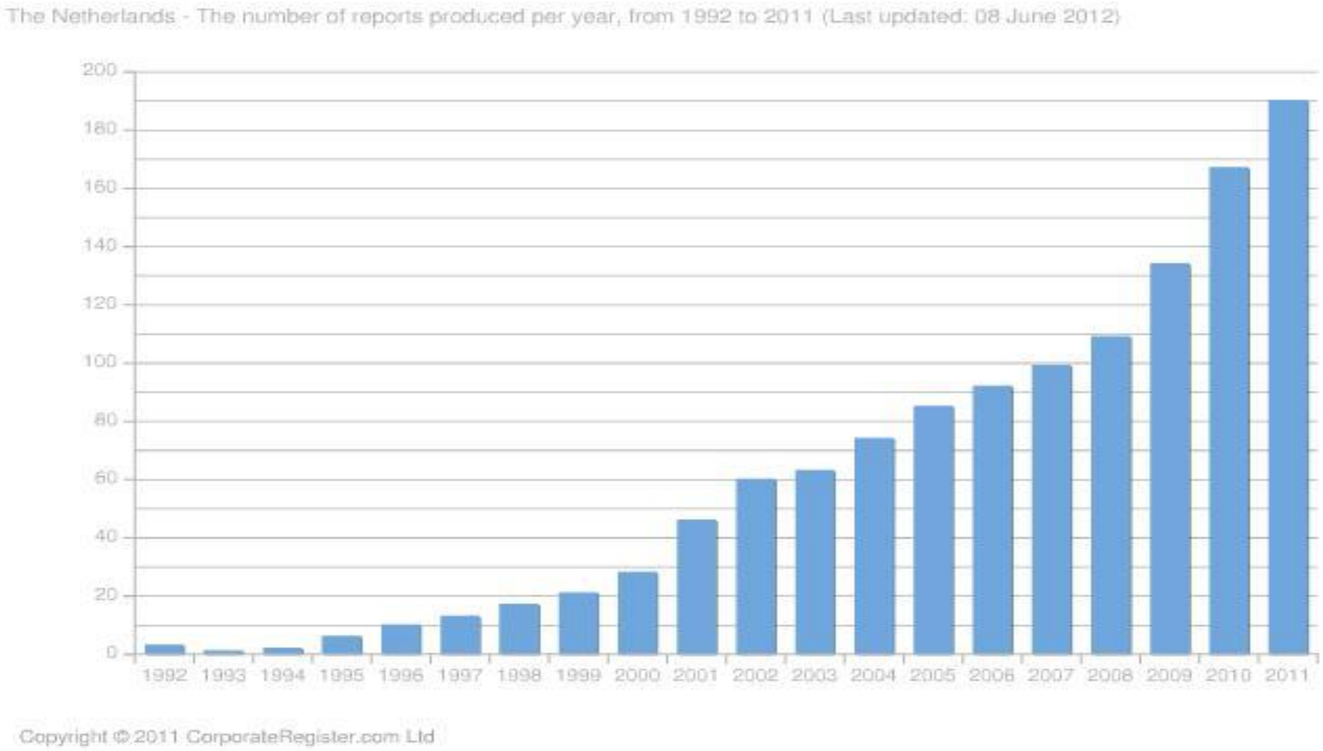
Appendices

Appendix A Number of reports published in the Netherlands



Appendix B Chronology of events

Year	Description event
1962	Publication of Rachel Carson's book Silent Spring on the consequences of pesticide use for humans and the environment
1972	Club of Rome publishes "Limits to Growth" that discusses interaction between economic and population growth and finite resources
1974	Creation of an Emission Register database of pollutant releases to air, water and soil of major polluting facilities, thereby improving environmental policies and corporate accountability and transparency. Extensions in scope and geographical reach were the IPPC (1996), EPER (2000) and global PRTR (2003/2009).
1987	The UN Brundtland Commission publishes "Our Common Future" on global environmental problems and its possible solutions, specifically using the term 'sustainable development'.
1987	Dutch multinational chemical company DSM publishes its first, then, environmental report
1988	Netherlands National Institute for Public Health and the Environment (RIVM) publishes first integral, and alarming, study "Zorgen voor Morgen" (Concern for Tomorrow) on the state of and trends in the Dutch environment and proposes drastic environmental improvement measures
1989	Institute for Environmental Management (WIMM) founded at the University of Amsterdam
1989	The first National Environmental Policy Plan, a political document prepared by the Ministry of the Environment that describes the state of affairs of the environment in the Netherlands and the national environmental policy for the years to come.
1989	UNCTAD's Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) starts developing recommendations for environmental disclosure in financial statements (published in 1991/1998).
1992	The UNCED ('Earth Summit') in Rio de Janeiro, a large-scale UN conference on various sustainability issues (e.g. climate change, water, energy, toxins), is held.
1994	Publication 'Guidelines Company Environmental Reporting, a measure of the progress of business & industry towards sustainable development', published by UN Environment Programme and SustainAbility, which contained guidelines for reporting topics.
1995	Brent spar incident for Shell: creates momentum and visibility for sustainability issues
1995	The EU Eco-Management and Audit Scheme (EMAS) is a voluntary management tool for companies to evaluate, report and improve their environmental performance, developed by the European Commission and revised in and 2001 and 2010 to include all sectors on a global level. In 2005 the EMAS award was introduced.
1995	ACC Award (Accountancy Award) for the best Dutch report was introduced by the NIVRA (Netherlands Institute of Registered Auditors) and the Vereniging voor Milieuaccountancy (Association of Environmental Accountancy). In 2011 merged with Transparency Benchmark Award.
1996	ISO 14000 series for environmental management introduced. Standard 14001 most influential in providing guidance for setting up environmental management systems, raising awareness and commitment to the environment and supporting (internally) measurement and reporting of progress and results.

1997	John Elkingtons's book 'Cannibals with Forks: The Triple Bottom Line of 21st Century Business' introduces the integrated and interconnected vision on people, planet, profit principles
1999	Dutch Environmental Protection Act changed to include a Government Report and Public Report. A selection of approx. 300 firms with high environmental impact is obliged to disclose environmental data to both the government but also publish a separate report for the general public. This latter requirement was abolished in 2005.
1999	Dow Jones Sustainability Index (DJSI) was established. It evaluates the sustainability performance of listed companies and subsequently ranks them and tracks market capitalization as a guide for sustainability investors.
2000	The Social and Economic Council of the Netherlands (SER) publishes 'De Winst van Waarden' ('The profit of values'). This main advisory body of government publishes report that stresses the importance of disclosure, however also stipulates the value of non-compulsory disclosure of companies.
2000	First full version of the Global Reporting Initiative (GRI) published: GRI Guidelines 1.0
2000	United Nations Global Compact is founded. It is a voluntary code of behavior. Firms can become signatories, committing themselves to the core principles of the Global Compact (economic, social and environmental ones) and a yearly Communication on Progress on these principles.
2000	OECD Guidelines revised in order to account better for CSR issues. It forms a framework of business management norms on economic, social and environmental aspects and encourages reporting on these issues. A national Contact Point (NCP) has to be established in participation countries to promote the knowledge and application of the Guidelines.
2001	The FTSE4Good Index Series measure the performance of a selection of firms that meet a set of corporate responsibility criteria, assisting financial specialist interested in responsible investment products.
2002	MVO Platform founded. Platform for cooperation between NGO's to promote sustainable development and CSR, thereby bringing more centralization in the NGO approach towards this subject.
2002	Second version of the Global Reporting Initiative (GRI) published: GRI Guidelines 2.0
2003	The Dutch Council for Annual Reporting revised Annual Reporting Guideline 400 (RJ-400) and explicit attention was paid to economic, environmental and socio-ethical aspects and it recommended large and medium-sized companies to account for these aspects in the annual report. In addition, a practical Guide for Sustainability Reporting was published. In 2009 these were renewed again to account better for international supply chain issues.
2003	The European Modernisation Directive (2003/51/EC) asks for the inclusion of non-financial indicators when necessary for an understanding of the company's development, performance or position. The Dutch law was revised in 2005 in order to comply with the Modernisation Directive that applies to larger enterprises only.
2004	MVO Nederland (CSR the Netherlands) was established under impetus of the Dutch government. This knowledge and network centre was to propagate CSR in the business community, for both small and large firms, and among others focus on sustainability reporting.
2004	Introduction of the "Transparency Benchmark" that ranks companies (500 by 2012) on their level of transparency on sustainability aspects. The award associated with the benchmark was in 2011 merged with the ACC Award.

2004	A manual for the Preparers and Users of Eco-efficiency Indicators that guides systematic reporting on environmental performance vis-à-vis financial performance is published by ISAR.
2005	United Nations backed initiative Principles for Sustainable Investment (UN PRI) is introduced. Investors can become signatories and thereby commit themselves to the six core principles of sustainable investment. By 2012 over 1000 investment institutions had becomesignatories.
2006	Third, and most expansive, version of the Global Reporting Initiative (GRI) published, with an updated 3.1 version published in 2011: GRI Guidelines 3.0
2006	The UN Global Compact for the Netherlands was founded in 2006 in order to raise the profile and awareness of the Global Compact among Dutch companies and as an exchange platform for participants (90 by 2012).
2006	The Dutch Association of Investors for Sustainable Development (VBDO) introduced its 'Responsible Supply Chain Award', a benchmark of companies on the responsibility shown in their supply chain management based on their publicly disclosed information.
2008	The SER publishes an advisory report on the international aspects of CSR for Dutch enterprises, focusing among others on human rights and the supply chain. Further progress and evaluation reports were published in 2009, 2011 and 2012. The Council for Annual Reporting was asked to revise its Annual Reporting guidelines accordingly.
2008	UNCTAD/ISAR published "Guidance on Corporate Responsibility Indicators in Annual Reports" that aims at the director's report of the annual report and the inclusion and development of concise and comparable corporate responsibility indicators within annual financial reports.
2009	Revised version of the Annual Reporting Guideline 400 and the Guidance Document published by the Council for Annual Reporting to account better for international supply chain management issues.
2009	The Frijns Code on corporate governance is introduced. This updated version of the 2003 Tabaksblat Code on Corporate Governance for Dutch listed companies, stipulates that the material aspects of CSR for the operations of the business needed to be analysed, discussed and communicated by and among the management and supervisory board, as well as disclosed in the annual report.
2010	The International Integrated Reporting Council (IIRC)is founded and aims to develop a global framework for Integrated Reporting through a multi-stakeholder approach combining academics, firms, standard-setters, accountancy firms, investors, regulators and NGO's.
2010	In 2010 the ISO, the International Organization for Standardization, launched ISO 26000, an International Standard providing guidelines for social responsibility (SR). It is a voluntary non-certifiable standard for organizations that want to integrate CSR in their operations. Reporting is also a component of ISO 26000.
2010	MVO Prestatieladder (CSR Performance Ladder) introduced. This Dutch certification scheme that sets a set of criteria at various performance levels (five) on CSR and CSR management system in a firm. The aim is to make CSR better measurable, more objective and visible and based on international guidelines.
2010	The European Commission conducts a public consultation on companies' disclosure of non-financial information, exploring the possibility of changing the Fourth Company Law Directive on annual accounts that is part of the Modernisation Directive of 2003.

2011	Article by Michael Porter and Mark Kramer on Creating Shared Value appears in Harvard Business Review, linking CSR and corporate strategy as a way to face the crisis of capitalism and boost growth and innovation.
2011	Updated version OECD Guidelines published, with additional focus on human rights, international supply chain responsibility and reporting on these aspects.
2011	The Special Representative of the UN Secretary-General on Business and Human Rights (John Ruggie) develops the United Nations Guiding Principles for Business and Humans Rights (the so-called Ruggie Framework) that looks at human rights in value chain.
2013	The International Integrated Reporting Council (IIRC) publishes consultation draft on its integrated reporting framework
2013	The European Commission adopts a proposal for a directive enhancing the transparency of certain large companies on social and environmental matters.
2013	Latest version of the guidelines published: GRI Guidelines 4.0

Appendix C Commensuration dimensions and sustainability reporting

Phase	Commensuration dimension	Event	Representative data	Significance
Environmental reporting (<2000)	Cognitive	Push for corporate (environmental) accountability and transparency in society Emergence of sustainability as a logic of ‘license to produce’ through regulation with a role for transparency Publication reports linking the state of the environment with corporate behaviour (e.g. Agenda 21 & Brundtland)	“I think sustainability reporting, the concept has been a beneficiary of movements and pressures that are driving business or signalling business that transparency is not an option any longer, it's really an expectation and you must respond to it” (NGO) “Here you talk about a relation primarily with the government: license to produce. It’s about regulation, permits and compliance. If you do well, you can go about your business, if you don’t follow the rules you will get a fine or lose your permit” (sustainability manager) “Sustainability is broadly shared and considered as important. Particularly sustainability in the broad sense: don’t do things that harm the next generation. The Brundtland definition of sustainability” (CEO MNC)	Shows emergence of a meaning system in which both sustainability/ corporate responsibility and transparency start to play a role. Reclassification of the outlook of the future and the role of corporations in society and their responsibilities towards accountability and transparency.
Triple bottom line reporting (2000-2007)	Technical	GRI guidelines and expansion of indicators	“They went through a kind of teenager situation where they became almost obese with their KPI’s. Fine, it is a normal child or teenage disease, every organization goes through that type of thing” (NGO) “If you design GRI, even version 1.0 or G1, as a purely environmental framework you will be behind the curve, not ahead of the curve. You must shift your thinking to sustainability, and while G1 may still be dominated by environment content, think ahead, keep an eye ahead of the curve, and by the time you do G2 you must be more comprehensive” (GRI founder)	Emergence of dominant guidelines for reporting and demarcations of what sustainability reporting entails and how to measure its aspects. Sophistication of indicators and measurement

		Development of indices, benchmarks and national accounting standards	“The call for standards and all increases also from companies themselves. They get more and more requests for data and questionnaires etc on various topics. It is more efficient to have standards for that so they do not drown in requests with various requirements (rating agency) The Council for Annual Reporting was asked by the SER to assess whether “in addition to financial-economic guidelines for reporting, the Council can also develop methodologies that can improve the transparency of corporate policies on all three dimensions of CSR” (SER, 2001)	techniques.
Integrated reporting (2007<)	Value	Development of KPI’s linked to value-added by firms Ratings and rating agencies gain prominence	“Initiatives of many investors who are working on KPI development. So per sector they say that these ten or twenty indicators are simply financially relevant” (consultant) “It’d be very useful if there was one figure that immediately makes clear: this company you have to buy … but that does not exist yet. It’s a challenge for companies and investors I think to find indicators in the environmental, social and sustainability areas that are reliable enough and also timely enough to use in more quantitative processes” (investment specialist) “There’s a lot of confusion in the marketplace about what is sustainability and what is ESG and what is SRI … so they’re like, ‘Well I want a ranking that tells us what the most responsible investments are’ and that’s quite a subjective thing. But if you can get that criteria given to you in the form of a rating or anything, you can just say, ‘I don’t have to think about it’” (rating agency) The main objective is to move towards the so called	Demarcation between financial and non-financial and between sustainability and more mainstream traditional reporting becomes increasingly blurred. Valuation of firms takes onboard sustainability criteria which thus have to be simplified and quantified in order to make them measurable and comparable.

		Rise of integrated and impact reporting	integrated report. Because what is the real agenda? It is how enterprises can picture the real economy and value the enterprise by better linking and even integrating financial and non-financial performance (NGO)	
		Reported data gets treated as a valuation instrument	“this will become sort of the norm because it will show a fully integrated report around all the business risks ... and they will be quantified around providing a value of that risk or opportunity” (partner Big 4)	

Appendix D Pathologies, purpose and people in sustainability reporting

			Driver of change	Contextualaspects	
Reporting phase		**Dominant commensurationdimension**	**Pathology**	**Purpose**	**People**
Environmental Reporting (<2000)	**Description**	**Cognitivecommensuration**	**Reporting for ‘ values-driven tree-huggers’**	**Creating awareness; moral framing and an add-on to business-as-usual**	**Civil society; state**
	Representative data	“investors and the NGOs are like this is rubbish! And the companies actually said well, tell us what you want. And it was like ding! So well, these are the things we want and the companies would say well, that's just unfeasible, that this is the data we already collect, would you like to know that? … And it just started a dialogue” (NGO)	“Various actors were involved, but in the early stages most had a very ethical and normative viewpoint” (analyst) “Well, when firms make moral appeals I get tears in my eyes! I think, yes, but that is not how things work. … As long as there is no business case supporting it...” (sustainability manager)	“As we approach the end of the 20th century the position of companies in society has changed dramatically compared to the 1950s and 1960s. Companies are not only expected to operate in a responsible manner, but are increasingly asked to demonstrate this publicly” (KPMG 1999, p.7)	“The societal pressure was very strong. From NGO’s in particular and the government, investors far less” (sustainability specialist)
Triple bottom line Reporting (2000-2007)	**Description**	**Technical commensuration**	**Reporting as a mindless tick-the-box exercise**	**Business case (efficiency, risk & reputation)**	**Standard setters and consultants**
	Representative data	“let’s all come together and try to create a global consensus among major stakeholders over what should be expected regarding environmental health and safety and social and economics” (sustainability manager)	“Generally speaking, I contend that firms use guidelines such as the GRI too much as a checkbox” (consultant); “reporting becomes reporting in which you do not say much but you are	“It is of course a business case. The world is changing, markets are changing, so we have to prepare ourselves for these new markets” (sustainability manager) “That means that	“Of course, the work of consultancies pushes this further as well, as does the direction that for example the GRI provides” (civil servant)

		“What is the scope, what are we talking about? What are the themes? What are the KPI’s?” (sustainability manager).	simply organizing all kinds of sources. And, once again, the strategic importance evaporates, than it is only for a public relations or reputation world!” (consultant)	somewhere there has to be a business case, because otherwise it simply will not happen. It is as simple as that” (employer association).	
Integrated reporting (2007<)	**Description**	**Value commensuration**	**Incommensurablesimpoverishreporting**	**Strategic value creation (growth, innovation, comp. advantage); valuation**	**Investorsand accountants**
	Representative data	The main objective is to move towards the so called integrated report. It is how enterprises can picture the real economy and value the enterprise by better linking and even integrating financial and non-financial performance” (NGO)	[on commensuration]: “this stuff is very scary, because it creates false impressions, it isn't valid and it's a big problem” (trade union representative) “for social it is much more difficult since we do not have the price for a gram or kilo of stress or discrimination. In environmental you have that” (civil society)	“Ultimately, the goal of sustainability reporting and moreover integrated reporting is to evaluate and value the quality of the firm” (investor) “CSR is not something you do for fun, it is no free for all. No, it is an adaptation of your strategy to the new global mid-markets. Important investors want to know whether you as a firm are prepared for that. So we have to move towards integrated reporting” (sustainability manager).	“Slowly but surely the interest of investors has increased, together with the belief that sustainability cannot be seen on its own, but as a valuation pillar for a firm” (partner Big 4); “with the integrated reporting there will be a real strong push from the accounting industry” (trade union)

Appendix E Overview orders of worth

'Common worlds'	Market	Industrial	Civic	Domestic	Inspired	Opinion	Green	Projective
Mode of evaluation (worth)	Price, cost	Technical efficiency	Collective welfare	Esteem, reputation	Grace, singularity, creativeness	Renown, fame	Environmental friendliness	Easy and flexible connectivity
Test	Market competitive-ness	Competence, reliability, planning	Equality and solidarity	Trustworthi-ness	Passion, enthusiasm	Popularity, audience, recognition	Sustainability, renewability	Mobilization of network
Form of relevant proof	Monetary	Measurable: criteria, statistics	Formal, official	Oral, exemplary, personally warranted	Emotional involvement and expression	Semiotic	Ecological ecosystem	Number of connections
Qualified objects	Freely circulating market good or service	Infrastructure, project, technical object, method, plan	Rules and regulations, fundamental rights, welfare policies	Patrimony, locale, heritage	Emotionally invested body or item, the sublime	Sign, media	Pristine wilderness, healthy environment, natural habitat	Projects
Qualified human beings	Customer, consumer, merchant, seller	Engineer, professional, expert	Equal citizens, solidarity unions	Authority	Creative Beings, artists	Celebrity	Environmentalist & ecologist	Partners and brokers
Time formation	Short-term, flexibility	Long-term planned future	Perennial	Customary part	Eschatological, revolutionary, visionary moment	Vogue, trend	Future generations	Flexibility/temporal

Source: Thévenot et al., 2000: 241; Boltanski & Chiapello, 2005

Appendix F Interview guide

1. Introduction of the project, interviewer & interviewee.

2. What have been the most important changes/developments over time in a) the development of the sustainability field in general and b) disclosure and reporting on sustainability aspects in particular that you have witnessed during the time of your engagement with the subject?
   - **For example:**
     - Development in content of disclosure/reports
     - Developments of standards/guidelines
     - Developments in approach/view within organizations towards the subject
     - Developments in expectations of various stakeholders

3. What has been the role and impact of you/your organization in this respect?

4. Emphasis on how the interviewee tried/tries to achieve his/her aims.
   - **For example:**
     - Consideration of strategies employed; actions undertaken; participation in initiatives and collaborations; engagement in public debates, stakeholder consultations etc.
     - How to deal with potential conflicts and discussion points with other actors;
     - Main arguments brought forward to support case/position.

5. Which other main parties (e.g. NGO/consultancies/government/academics/firms /standards setters etc.) have been primarily involved in your view and what did/do these parties do to achieve their aims in the development of sustainability disclosure?

6. What are the main current and future challenges for sustainability and in particular reporting in your particular field?

7. What is the role and impact of the interviewee is this respect?

8. Overall, what would you consider to be the biggest successes as well as problems and how were these achieved/overcome?

9. Any document (magazine/research report/publication/book) that in one way or the other has played an important role in the development of sustainability reporting?

10. Do you know other important players in the field who would be useful participants?