

Editorial

Academic contributions to enhancing accounting for sustainable development



Leaders of business, public service and third sector organizations are increasingly recognizing that in discharging their varied duties they must address the significant risks of global environmental change, including the economic and social risks that can flow from it. They are also recognizing the interaction of a broader range of risks and opportunities arising from, and impacting upon, ecological, social and economic sustainability as among the most urgent and complex challenges facing their organizations and society more broadly (Hopwood, Unerman, & Fries, 2010).

As organizational leaders have become more aware of a wider array of sustainability-related challenges, their organizations and advisors have worked on developing a growing range of accounting, accountability and assurance practices to help identify and manage these sustainability-related risks and opportunities (Bebbington, Unerman & O'Dwyer, 2014; Malsch, 2013; O'Dwyer, Owen & Unerman, 2011; Power, 1997). Alongside the development of such practices and engagements between organizations and their stakeholders have emerged critiques and debates, supported with insights from academic research, regarding the degree to which such practices and engagements might be considered as substantive (Gray, 2010).

There is a long-standing tradition of academic research examining a range of policies, processes and practices related to sustainability accounting and accountability (Buhr, 2007; Gray et al., 2010; Owen, 2008; Thomson, 2007, 2014). Journals such as *Accounting, Organizations and Society*, *Accounting Auditing and Accountability Journal*, *Critical Perspectives on Accounting*, and *Accounting Forum* have welcomed and encouraged a variety of this social and environmental accounting and accountability research over some decades (Gray, 2002; Gray & Laughlin, 2012; Lehman, 1999; Owen, 2008). Academic networks such as *The Centre for Social and Environmental Accounting Research* and its associated journal *Social and Environmental Accountability Journal* have also played a central role in building research capacity in this field. This capacity building has been, and continues to be, important because a body of high quality academic literature not only relies upon the imagination and inspiration of individual

scholars but also develops from cohorts of researchers engaged in long-term synergistic conversations that networks such as *The Centre for Social and Environmental Accounting Research* have facilitated and promoted.

Increasing organizational interest in sustainability accounting and accountability, along with increased academic investigation of these accounting issues, has paralleled much greater evidence and public awareness of the collective unsustainability of many human activities (IPCC, 2013, 2014a, 2014b), especially the negative ecological and social impacts of business activity (Bebbington & Larrinaga, 2014b; Hopwood, 2009). Across the diverse range of sustainability accounting and accountability research (Thomson, 2014), we discern three broad strands of literature – albeit with some overlapping studies and blurring between these strands.

One strand seeks to demonstrate relationships between social and environmental performance, social and environmental reporting, and economic performance (including stock market valuations). An often implicit argument underlying this strand of literature is that elements of sustainability can be highlighted and/or addressed through existing market mechanisms. In sharp distinction, a second strand of research suggests that social and environmental unsustainability is largely a consequence of the capitalist system and argues that the best (or only) way to move towards a socially and ecologically sustainable system is to radically reform or even overthrow markets and capitalism. The third strand of research seeks to constructively but critically engage with businesses and other organizations to help them identify a range of social and environmental sustainability risks and opportunities and make changes to the way they operate in a direction intended to result in less unsustainable operations.

As can be seen in Fig. 1, Sustainability studies from natural science demonstrate that organizations need to make substantive changes in the short term if we are to avert catastrophic global environmental change and resultant societal dislocation.

Academics working in the third broad strand of sustainability accounting and accountability research might well accept arguments from studies in the second strand that

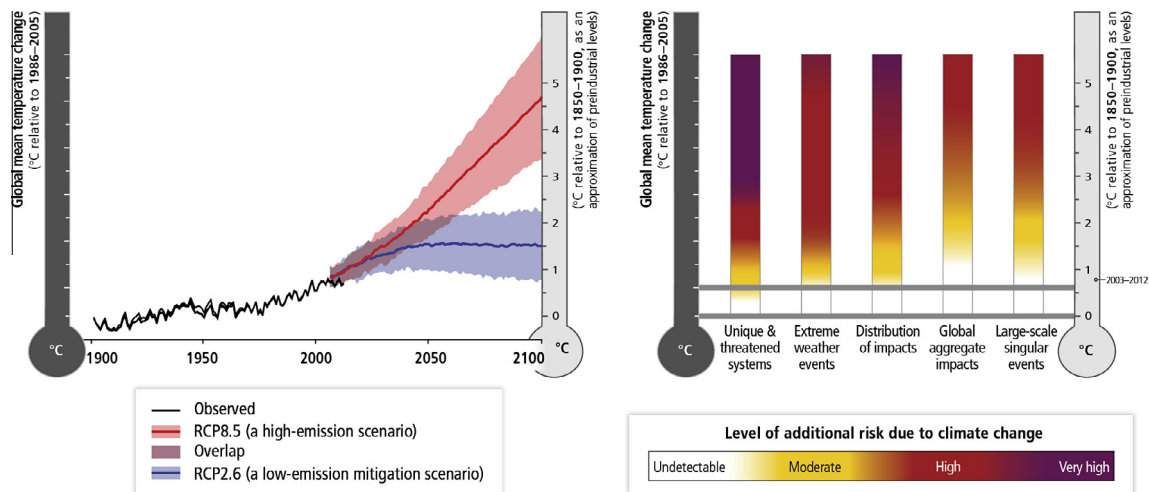


Fig. 1. Source: IPCC (2014c) Working Group II report, p. 13: Assessment Box SPM.1 Figure 1.

flaws in the capitalist system cause or reinforce social and environmental unsustainability. The motivation for their rather different approach, however, is a concern that radical reform in the capitalist system is likely to come far too late to avert catastrophic global environmental change. Perversely, such radical reform might only arise as a result of the major social and economic disruption indicated in Fig. 1 as likely to flow from catastrophic levels of global environmental change. Considering this too high a price to pay for reform, academics working in this third broad strand of research take an approach that helping organizations to change towards less unsustainable operations has potential to defer the time by which we will reach the point of catastrophic global environmental change, giving greater time and opportunity for novel solutions to challenges of global warming and social breakdown to be developed. They see such constructive engagements as essential in moving towards a low-emission scenario (RCP2.6 in Fig. 1) and away from a high-emission scenario likely to ensue in the absence of practical efforts to change organizational (un)sustainability policies and practices (scenario RCP8.5 in Fig. 1).

In this paper we focus on this third broad strand of sustainability accounting and accountability literature, a strand referred to as 'accounting for sustainable development' (see also Bebbington & Thomson, 2013). We regard research in this strand, that seeks to engage with and critique practice and policy, as perhaps challenging some of the more commonly accepted distinctions and definitions of criticality within parts of the accounting academy, especially studies within the second broad strand of sustainability accounting and accountability research. This is because within this work, it is an open question as to whether or not existing power structures are in need of replacement, reformation or redirection.

Within this third strand of literature the complexities of the detailed underlying issues and relationships indicate a need for greater attention to the development and refinement of focused novel theoretical framings (Bebbington

& Thomson, 2013). Theory plays a vital role in the interaction between observation and insight by providing an explanatory framework that helps to: simplify a highly complex word; structure the abstraction of meaningful insights from messy data; and communicate these insights to different audiences. Therefore greater theoretical sophistication can play a vital role in the provision of robust evidence and understandings upon which existing practices can be evaluated and critiqued, and new and sounder practices developed.

As the totality of shared empirical insights in any complex area grows, interpretations of this body of insights will evolve. Old insights will be questioned and over time blind spots and areas of inattention will become apparent, leading to shifts in how and why different theoretical frameworks might be considered relevant. An important aspect of research is thus maintaining an openness to review and update theoretical frameworks in use, and to develop novel theoretical framings, if evidence and understandings from new studies are to make ongoing and substantive contributions to evaluating, critiquing and developing policy and practice. We argue here (and the papers in this special section of *Accounting, Organizations and Society* serve to demonstrate) that there are benefits arising from greater development, diversity and sophistication in the formation and use of theory in research on accounting for sustainable development.

In making the case for greater sophistication and use of novel theoretical framings in accounting for sustainable development research we start by highlighting the increased complexity and unpredictability of relationships between phenomena when moving from a focus on financially- or economically-based accounting practices to a broader engagement with multifaceted and interacting social, environmental and economic sustainable development. Having established that research into accounting for sustainable development examines practices in an arena characterized by added layers of complexity and unpredictability on top of the already very complex economically-

focused accounting practices, the subsequent section builds our case around the necessity for development and diversity of theoretical understandings or framings in abstracting and communicating useful insights from empirical observations of accounting for sustainable development practices.

This is followed by a section illustrating the beginnings of a movement towards more sophisticated use of theory as seen in some recently published papers in the accounting for sustainable development research strand – in this issue of *Accounting, Organizations and Society* and elsewhere. We seek to highlight how such theoretical developments provide compelling and novel insights, moving us forward in our understanding of accounting for sustainable development practices. The concluding section contributes a few ideas for potentially fruitful avenues for theoretical formation, refinement and development in research on accounting for sustainable development.

Complexity and unpredictability in accounting for sustainable development

Economically-focused accounting is a highly complex field comprising both management and financial accounting. It can be characterized as communicating and helping to manage direct economic interactions and impacts between an organization and the world external to the organization. It draws a boundary around the organization and records, analyzes and/or reports on economically material interactions and impacts that have an effect within or across this boundary. This communication and management role may also extend to cover interactions and impacts that are ultimately but less directly economic, but where these interactions and impacts manifest themselves in economic terms within a relatively short-term time horizon. However, less direct and less certain potential long-term economic risks arising from social and environmental impacts of the organization's activities (such as its impact on climate change or social cohesion) are often ignored or evaluated as immaterial by conventional accounting practices so are excluded from the accounting analysis.

Accounting for sustainable development necessitates the broadening of these short-term economically-oriented accounting practices to incorporate not just direct short-term economic interactions and impacts but also to incorporate the direct interactions and impacts between the organization, the society in which it operates and the natural environment. These additional social and environmental interactions and impacts will often have an economic impact in the longer term (Bebbington, Gray, Hibbitt, & Kirk, 2001). Thus, in accounting for sustainable development, an already highly complex range of more conventional financially-oriented accounting practices, focusing on two-way economic interactions and impacts between the organization and its external world in the shorter term, is broadened to address a much larger array of two-way social, environmental and economic interactions and impacts between the entity and the world beyond the entity's boundaries.

However this broadening is not limited to adding these additional two-way dimensions of social and environmental impacts to more familiar economic impacts. The direct

impacts on society, the natural environment and the economy flowing from an organization's activities will usually also result in less direct impacts between society, the environment and the economy. Thus, any single action taken by an organization can initially directly impact upon and cause a variety of changes in elements of social cohesion, the natural environment and the amount and distribution of wealth. These direct impacts on society, the environment and the economy will subsequently lead individually and/or collectively to other changes in these areas. These other changes can then in turn impact further upon the organization (Hopwood et al., 2010).

To illustrate the distinction between these direct and less direct impacts and interactions, we can consider the widely reported BP Gulf of Mexico oil accident in 2010. According to a US Congressional enquiry, this accident apparently partly resulted from local decisions within the oil multinational BP and its contractors to save relatively immaterial costs by cutting corners in oil exploration safety measures (National Commission on the BP Deepwater Horizon Oil Spill, 2011). The ensuing accident might have been prevented had more robust safety measures been in place. It directly killed 11 workers employed on the oil drilling exploration rig, a clear negative social impact for these 11 people and their friends and families. It also directly caused large scale oil pollution in the Gulf of Mexico and directly incurred large economic costs for BP and its partners in extinguishing the fire, stopping the oil leak and cleaning up some of the spilt oil. These direct (and fairly immediate) external impacts on social, environmental and economic factors themselves then caused many other negative impacts in these areas. Thus, for example, the oil pollution killed many fish, prevented many fishermen going to sea to catch fish for a period and damaged the tourist industry in states close to the oil spill (National Commission on the BP Deepwater Horizon Oil Spill & Offshore Drilling, 2011). The negative environmental impact from the oil spill therefore caused other social and economic impacts on communities in coastal areas close to the oil spill. Several of these and other impacts then fed through into further economic impacts for BP and its contractors who were required to pay compensation to those affected and who suffered reputation damage. In total, BP reported costs of US\$40.9 billion in 2010 associated with the Gulf oil spill. Consistent with long-standing arguments within the academic literature, with longer time horizons, social and environmental impacts became economic impacts.

If longer-term and less direct possible economic consequences of social and environmental risks had been more prominent in routine decision-making processes at BP, the actions and outcome might have been different. Of course, we can never prove a counterfactual. However decisions informed by narrowly focused short-term economic accounting information might plausibly be very different if a broader range of direct and indirect social, environmental and economic impacts and interactions were incorporated into the accounting information and risk assessments used to inform decision-making.

Expanding existing accounting mechanisms to cover these social and environmental interactions and impacts

is far from straightforward however. This is because the dynamics and characteristics within the social and environmental dimensions differ in important ways from those in the more familiar economic dimension. One of these major differences, for example, is in the area of commensuration.

A key factor that facilitates accounting measurement, aggregation and comparison of many different economic transactions and events is that there is a sufficiently broad intersubjective consensus on the commensuration of these economic impacts in terms of financial monetary measurement. Economic activity relies in large part on the exchange of property rights. As the exchange of property rights usually involves the exchange of money there are readily available monetary measurements available for these transactions. These monetary valuations appear to lead to relatively broad intersubjective consensus on the common measurement of economic impacts of different actions and events. Thus economic impacts are often commensurated in practice in monetary terms.

In considering this outcome it is important to stress that this monetary commensuration is not an intrinsic characteristic of the economic arena. Rather it reflects the weight of time and effort spent over many decades in producing intersubjective consensus. For example whilst the notion and broad definition of profit is still subject to ongoing debate and critique in some quarters, it has become widely taken for granted in others, even when the potentially fragile and subjective nature of its supports are readily apparent.

Challenges to this intersubjective consensus can arise as the mode of analysis and measurement of economic outcomes is brought to bear in arenas where other modes of thinking are prevalent. The case of the Diagnostic Related Group as a central tool in the resource allocation of healthcare resources in acute settings is a useful example. Early research on this matter demonstrated the contestation, fragility and malleability of the approach (Chua, 1994; Chua & Degeling, 1993). Moving on in time, in reviewing the landscape of contemporary healthcare costing we find that, for better or worse, the Diagnostic Related Group is now a pervasively dominant approach (Chapman, Kern, & Laguecir, 2014) and routinely offers a basis for practical commensuration in healthcare.

The term 'practical' is an important caveat here. From the perspective of researchers in the second broad strand of social and environmental accounting and accountability research, attempts by some practitioners and consultants to put a common, often monetary, value on all material sustainability impacts are in principle ill-conceived (Hines, 1991). From the perspective of researchers working in the third strand of this research, intersubjective consensus on measurement might, however, in some areas be sufficient to allow some social and environmental impacts to be practically commensurated such that they can begin to be more directly and actively considered.

One candidate for such practical commensuration is carbon impacts. Emissions of carbon dioxide (and other global warming gases) have broadly a global impact, which therefore does not vary substantively depending upon where in the world the carbon dioxide is emitted. There

are (admittedly contested) market mechanisms available through increasingly prevalent carbon trading schemes to put a traded price on carbon emissions (Bebbington & Larrinaga, 2014a). Whilst a contested matter, some would argue that sufficient consensus has now developed for commensuration with economic impacts to begin to take place in this area.

As we move to other environmental areas we find less experience and established practice of measurement however. For these environmental impacts practical commensurability is a more remote prospect. One such impact is the use of water in manufacturing, transporting and using products. It might be possible to establish accounting mechanisms to calculate the amount of water that has been used to bring each product to its current state and location – the notional amount of water embedded in a product (Russell & Lewis, 2014). However, aggregating and comparing this embedded water is highly problematic such that any resulting interpretation might not be meaningful. This is because two products with the same amount of embedded water may have each used water in their production in a manner that has very different environmental impacts.

For example, water is used to grow grass to feed cattle that produce milk and beef. Where this water comes from plentiful rainfall in an area that does not suffer water stress its use will have a very different ecological and social opportunity cost than the same amount of water embedded in the milk and beef of cattle grazing in an arid region. Further complexity is added where an area might be arid at some times of the year but very wet at others, with the opportunity cost of water embedded in the same product from the same location varying depending upon the time of year of production. Given this complexity and diversity in the social and environmental opportunity cost of a given amount of water, reaching the level of intersubjective consensus necessary for practical commensuration with a metric for the impact of water use is likely to be much more challenging than it has been for carbon.

This very brief example therefore illustrates the complexity and challenge of commensurating the environmental impact of water use and water embedded in products and services. Without the ability to commensurate, many accounting mechanisms developed to help inform decisions in the economic sphere cannot be used in the environmental or social spheres. These commensuration problems call for potentially radically new accounting mechanisms to be developed to make an effective contribution to enhancing social and environmental sustainability.

In addition to commensuration problems that arise when broadening the focus of accounting from the economic to encompass social and environmental sustainability, the relationships and interactions between social, environmental and economic impacts are much more complex than many appreciate. We indicated earlier in this paper that added complexity necessitates accounting to consider a range of direct short-term impacts along with less direct longer-term impacts. The greater the complexity of these impacts, the more challenging is the task of developing new effective accounting mechanisms and providing robust evidence regarding these mechanisms.

In this special section of *Accounting, Organizations and Society*, [Bebbington and Larrinaga \(2014b\)](#) indicate that the nature of social and environmental impacts are also very different from the relationships that characterize economic impacts that are more familiar to accountants. They point not only to the uncharted nature of many aspects of sustainable development, but also argue that the relationships between key elements of sustainable development may be unchartable. This adds further major layers of complexity and unpredictability to the issues underlying accounting for sustainable development and to the transformation of raw empirical observations into useful evidence, insights and understandings.

[Bebbington and Larrinaga \(2014b\)](#) argue that if accounting practices are to develop in a manner that can positively contribute towards sustainable development, there is a need for researchers to draw more broadly from the latest understandings provided by sustainability science. From this perspective, effective research into accounting for sustainable development requires a move far beyond the focus prevalent in much social and environmental accounting research, where studies often examine rather conventional accounting elements of sustainability accounting. This, they argue, will require researchers to be more open to appreciating the broader context of sustainability science and sustainable development. Researchers then need to embrace greater levels of uncertainty and unpredictability in relationships being researched, with sustainable development viewed as a 'wicked' problem combining scientific evidence with political and social discourse in a way that raises novel and complex ontological and epistemological questions.

[Bebbington and Larrinaga \(2014b\)](#) also highlight recent developments in recognizing a need to address these complex problems of sustainable development using a 'post-normal' approach to research and developments in policy and practice. This requires a multi-disciplinary problem-focused rather than a siloed-disciplinary approach to research, enrolling the knowledge, views and participation of many in the research rather than just an elite of experts. Viewed from this perspective, effective research into accounting for sustainable development requires us to embrace and handle considerable complexity, a challenge that will be appealing to many academics.

The value of greater theoretical depth and diversity in research on accounting for sustainable development

Given the rapidly changing and highly complex accounting for sustainability arena, as discussed above, the challenge of engaging in research that supports constructive critique of existing practices and innovation of new practices in accounting for sustainable development is a large one. Issues related to articulation of compelling and theoretically informed research questions together with an examination of the strengths and weaknesses of different research approaches have been longstanding topics of discussion in the accounting literature (see, for example, [Chapman, 2012](#); [Chua, 1986](#)). However, for

reasons outlined above, there is a need for greater attention to be paid to the role of theory in the accounting for sustainable development literature than is generally found (but see: [Gray, Owen, & Adams, 2010](#)). In the words of [Gray and Laughlin \(2012, p. 241\)](#):

What must be avoided in the future is the myopic, isolated and colourless concentration on descriptive studies of social accounting practices...which has dominated research over the last 20 years.

Articulation of compelling research questions (or problems) and use of research methods suited to collection of data in a form appropriate to addressing these questions are central to the possibilities for academic contribution ([Alvesson & Sandberg, 2013](#); [Broadbent & Unerman, 2011](#); [Silverman, 2011](#)). Theory plays a vital role in articulation of research questions, in identification of appropriate methods to collect data to address these questions and in analysis of this data (see, for example, [Ahrens & Chapman, 2006](#); [Alvesson & Sandberg, 2013](#)). Theory offers a vital tool in the transformation of data from a description of 'what is' into in-depth insights, surfacing the drivers underlying 'what is' and providing perspectives on 'what could be'.

A prerequisite to examining and seeking to advance the roles of theory in any area of research is a shared understanding of what the term 'theory' means as 'there are many views on theories in the social sciences' ([Alvesson & Sandberg, 2013, p. 51](#)). [Ahrens and Chapman \(2006, p. 823\)](#) characterize 'theory' as meaning 'an orienting set of explanatory concepts...[where] events in the field may best be explained with reference to multiple theories'. Similarly, [Silverman \(2011, p. 52\)](#) explains that the role of a theory is to:

...arrange sets of concepts to define and explain some phenomenon...[w]ithout a theory, such phenomena as 'gender', 'personality', 'talk' or 'space' cannot be understood by social science [we would add accounting and sustainability to this list]. In this sense, without a theory there is nothing to research...theories provide the impetus for research.

In the arguments we put forward in this paper, we use the term 'theory' in the way defined in the above studies, as a framework of concepts that help to structure our observations and then our understandings of these observed elements of the world, and to communicate this understanding (see also: [Ohlson, 2011](#)).

Interpretive research approaches are common in accounting for sustainable development research studies, perhaps because of the nature of the complexity and nuances underlying the issues being researched. In any research approach, theory represents an exercise in simplification in relation to an infinitely complex world. As is commonly discussed in the method sections of interpretive studies, the role of such work is to be plausible, trustworthy and fruitful since direct claims towards truth become complex in the absence of a realist objective benchmark for judging these claims. This does not equate to a collapse into

relativism (Chua, 1986), rather it suggests the value of some development within and diversity between multiple strands of theorization.

For some time, theorizing in sustainability accounting and accountability research, and especially within the accounting for sustainable development strand of research, has been dominated by rather broad versions of stakeholder and legitimacy theories (Bebbington, Unerman, & O'Dwyer, 2014; Deegan, 2002, 2014; Deegan & Unerman, 2011; Rinaldi, Unerman, & Tilt, 2014; Unerman, 2008). Employment of these theories was effective in developing useful insights in earlier stages of the development of social and environmental accounting practice and research – particularly when research focused on external reporting practices. However applying the same broad brushstrokes of a theory time and again with different data does not usually produce major insights to advance the evidence base upon which more solid policies and practices can be developed.

So, for example, once it is realized that legitimacy plays a role, the incremental value of looking further for a broad brushstrokes notion of legitimacy falls rapidly. This is not to devalue legitimacy as a concept however, rather it is to suggest the need for the concept of legitimacy to take on nuance and detail over the course of a stream of studies rather than acting as a fixed reference point. We note that similar considerations could be applied within the second broad stand of sustainability accounting and accountability research that focuses on issues around managerial capture of social and environmental accounting practices. Once a number of research studies have demonstrated that there is managerial capture, we could question how much potential there is to make a substantive additional contribution to knowledge by simply highlighting further this managerial capture. While the general tendency might persist and thus merit continued attention, greater value from such ongoing observations might arise from further development and detail in the nature of capture.

Theory choice involves a purposeful choice of emphasis on the nature of a matter of enquiry. Given the inherent limitations of any simplification provided by any one research study, interpreting data using any particular theoretical framing highlights particular matters of concern that are the focus of that theory but necessarily leaves out many other matters of concern. It is important to note therefore that when a number of studies each providing related simplifications are viewed collectively, they together provide a much richer understanding of the field of enquiry.

From this perspective, theoretical development and diversity is far from a sign of fickleness among academic researchers. Rather, it is a sign of a confident and mature academy. Individual theories benefit from development over time but, even given development, no single theoretical framework can provide anywhere near a complete or meaningful understanding of a highly complex and changing field being studied through the abstraction of a variety of empirical data across numerous studies. An academic division of labor, often unplanned in advance, with different aspects of an overall picture of a field provided by different academic studies, can be the most effective way for the academy to contribute robust insights to evaluate,

critique and develop practice. These different studies and their insights are not in competition with each other. No one study's insights are necessarily better than those of other studies, but the insights provided by each individual study are made more powerful when combined with insights from other high quality studies in a particular field.

Over time it is the challenge for research communities to develop such understandings of problems that they find fruitful. At some point they also need to be ready to acknowledge potential dead ends in inquiry, and/or perhaps just the more attractive avenues that different novel or refined theorizations might bring with them. This need not represent a kind of Kuhnian paradigm shift, since in interpretive work the newly proposed theory does not represent the falsification of the last one.

That said, clinging to an unchanging theoretical framework to view and communicate a changing world, where theoretical abstractions also need to change in light of new evidence of changed practices, risks providing ever less relevant and compelling interpretations of empirical observations.

In interpretive studies, simply using the same theory over and over without letting it evolve in light of new evidence and thinking shows a degree of stagnation incompatible with the philosophy underlying interpretivism and the messiness of the data. Furthermore, clinging to existing theories precludes, or at best hinders, the formation of new theory that could help provide new perspectives both in informing methods of observing practices and policies in accounting for sustainable development, and in surfacing robust evidence from these often complex and messy observations.

Recent theoretical development and diversity in the literature on accounting for sustainable development

Although research into sustainability accounting and accountability has been dominated by studies of organizational reporting practices, advances in accounting for sustainable development practices in recent years have offered great opportunity to research complex internal management accounting and control aspects of accounting for sustainable development. Studies in this area examine how accounting practices can and have been used to embed considerations of sustainable development into decision-making at different levels within organizations (Bebbington, 2009; Bebbington & Fraser, 2014; Bebbington & Thomson, 2013; Owen, 2008). These complex practices are fertile ground for the use of a variety of theories to help provide robust evidence and understandings upon which organizations can further develop such practices (Bebbington & Thomson, 2013).

A variety of theoretical framings were used by papers published in a recent (2013) special issue of *Management Accounting Research* on the theme of sustainable development in management accounting practices. For example, both Arjaliès and Mundy (2013) and Rodrigue, Magnan, and Boulianne (2013) use levers of control theory; while both Bouten and Hoozee (2013) and Contrafatto and Burns (2013) draw on Laughlin's (1991) theoretical

framing of organizational change and Moore (2013) draws on Dillard et al.'s (2004) framing of organizational change. However, Bebbington and Thomson (2013) argue that while the insights from these papers make good use of theory, there is potential for even more compelling and useful insights emerging from collective use of a broader base of theorization.

In this special section of *Accounting, Organizations and Society*, Spence and Rinaldi (2014) make novel use of governmentality theories to help us understand how a supermarket chain used accounting-based decision-making mechanisms in a quest to embed commitments to enhanced sustainability management and social responsibility among other organizations in their supply chain. Some of these other organizations were small farms, and use of governmentality theories helps surface insights related to management of the power dynamics between these small farms and the supermarket. Specifically, Spence and Rinaldi (2014) use and develop Dean's (2009) four 'analytics of government' (fields of visibility, techne, episteme, and identity formation) to structure an understanding of how specific accounting practices, in the context of a new regime of sustainability practice instituted by the supermarket, were effective in shaping the governance of the supply chain. This novel theorization in accounting for sustainable development research enabled Spence and Rinaldi (2014) to develop an understanding of how the new regime of sustainability practice was developed in a manner that enabled sustainability governance to transcend the corporate boundaries of the supermarket chain and extend to indirect governance of other organizations within the supermarket's supply chain.

Thomson, Grubnic, and Georgakopoulos (2014) also use governmentality theory in developing novel accounting for sustainable development insights – but in a somewhat different manner to, and using a different framing than, Spence and Rinaldi (2014). In using a different theoretical framing they help to illustrate our earlier argument that multiple developments or refinements of theory across separate studies can provide complementary understandings and insights. Thomson et al. (2014) enroll the governmentality concepts of programmatics, mediation and mediating instruments in drawing upon and developing theories in the area of accounting hybridization to analyze evidence related to accounting for sustainable development in the public sector from the perspective of accounting-sustainability hybrids.

Against a context of government policies aimed at fostering greater sustainability in delivery of public services, Thomson et al. (2014) use this theoretical conceptualization to help understand aspects of, and constraints to, public sector accounting for sustainable development that lead to or hinder substantive sustainable development and transformation within the activities of the two very different public sector organizations. This novel application of a hybridization theoretical framing helps Thomson et al. (2014) provide evidence about how, despite government policies aimed at enhancing sustainability, pressing financial resource constraints in the UK public services coupled with imperatives to continually meet tough service delivery targets have limited the effectiveness of the

accounting-sustainability hybrids. This limitation of effectiveness was in terms of failing to deliver the deeply embedded sustainability transformations and improved social justice that were an aim of the hybrids.

Moving from management control aspects of accounting for sustainable development to external reporting research, some papers examining social and environmental reporting practices have developed and refined the types of new theoretical perspectives we call for in the preceding section of this paper. Examples of some of these studies include Bebbington, Kirk, and Larrinaga (2012), Bebbington, Larrinaga-Gonzalez, and Moneva-Abadía (2008), Brown, de Jong, and Lessidrenska (2009), Contrafatto (2014), Etzion and Ferraro (2010), O'Dwyer, Owen & Unerman (2011) and Tregidga, Milne, and Kearins (2014).

Bebbington et al. (2008), for example, develop a theoretical and empirical understanding of reputation risk to help provide more nuanced insights into motivations underlying sustainability reporting practices than would have been apparent using the broad version of legitimacy theory that is dominant in the literature. While retaining a focus on legitimacy theory itself, O'Dwyer et al. (2011) use a more in-depth, focused and nuanced legitimacy framing than is common in accounting for sustainable development research to help understand the processes through which practices of assurance of sustainability reports became legitimated among different stakeholders of these practices.

A further way to develop this theme is to draw on theories that have long provided useful insights in other areas of accounting and management, such as management accounting and control studies (Higgins & Larrinaga, 2014). For example Contrafatto (2014) makes use of an institutional theory framework to understand the progressive processes and stages through which social and environmental reporting became embedded and a generally accepted practice within a multinational company.

The theoretical framing employed in Contrafatto (2014) helped identify three key stages that led to the institutionalization of social and environmental reporting practices. The first of these occurred before any systematic external sustainability reporting and involved the development of shared understandings among key players about the corporation's social and, in particular, environmental responsibilities. The institutional theory framing in Contrafatto (2014) facilitates an understanding of the dynamics leading to the development of these essential shared understandings. The second stage involved the continual development of practices and process used to produce annual sustainability reports, with institutional theory again helping the study to abstract and surface insights into factors that were core to the development and ongoing refinement of these practices. The final stage, leading to firmer institutionalization of these sustainability reporting processes and routines, was the much greater formalization of the sustainability reporting processes and systems, including the roles of staff and departments involved in these processes.

Moving away from legitimacy and institutional-related framings, Bebbington et al. (2012) use theoretical insights from a combination of regime theory, constructivism and

norm cascades to understand why a mandatory environmental reporting regime in one country (Spain) was characterized by lack of compliance (the reporting had not achieved the status of a norm) whereas a voluntary environmental reporting regime in another country (the UK) for the same industry at the same time as the Spanish example attracted high levels of compliance. Use of a complex interplay of theory and data in [Bebbington et al. \(2012\)](#) provides theoretical and empirical insights into compliance with different environmental reporting regimes that would not have emerged from simply describing the data or from using, for example, a broad version of legitimacy theory.

[Tregidga et al. \(2014\)](#) draw upon Laclau and Mouffe's version of discourse theory to analyze how, over almost two decades, corporations in one national context used their sustainability reports to construct their collective identities as supposedly sustainable organizations, and how this identity construction using sustainability reports changed over time. The paper demonstrates how sustainability reports have been used to construct evolving sustainable identities for corporations that enabled corporations to maintain operations that were far from sustainable while giving the image of caring for society and the environment.

The discourse theory used in the paper helps abstract evidence showing how discourse within corporate sustainability reports has both influenced and helped transform over time societal conceptions of what sustainability comprises. This discourse has also helped construct societal conceptions of what sustainable organizations should look like (how to identify such organizations) while not posing a challenge to much of the unsustainable operations of the corporate world. The main sustainable identities identified from this theoretical framing evolved over time and are split into three distinct phases. The first phase (the 1990s) is characterized by [Tregidga et al. \(2014\)](#) as one where the constructed identity was one of organizational compliance with environmental regulations and other societal expectations on environmental responsibility. The second phase (the first part of the 2000s) is characterized as one where the identity of sustainable organizations is constructed through the provision of leadership in furthering sustainability. The final phase (the last half of the 2000s) is one where being a sustainable corporation has been transformed to mean a business that is economically successful while delivering social and environmental benefits.

Overall, the papers discussed here indicate that novel theoretical frameworks are beginning to be used beneficially in accounting for sustainable development academic research. These papers, including papers in this special section of *Accounting, Organizations and Society*, have used theory to help inform processes employed to collect data and to organize and interpret this data that is often complex and messy – reflecting the complex and dynamic nature of the underlying phenomena encompassed by concerns for sustainable development. While we find it encouraging to see novel theoretical frameworks being developed, refined and used in this manner, we share [Bebbington and Thomson's \(2013\)](#) observation and concern that a much wider array of theoretical perspectives,

including some from outside accounting and management studies, need to be drawn upon if the accounting academy is to provide a more powerful evidence base upon which more effective accounting for sustainable development is to be built (see also: [O'Dwyer and Unerman, 2014](#)).

Conclusions and directions for future theoretical developments in accounting for sustainable development research

We have sought to briefly outline the complex dynamics and interdependencies underlying accounting in the area of sustainable development. We made the case that a sensitivity to this framing suggests the benefits of a greater degree of theoretical development and diversity than has often characterized extant research in the area. We also reviewed a selection of recent papers that demonstrate this interplay of framing, theorization and insight.

Between them, these papers use a variety of theoretical framings to derive evidence and understandings from complex data. The understandings provided by each paper do not compete with each other for the status of the correct or best explanation. Rather, they are complementary, each providing different insights that collectively build towards a more complete understanding of the highly complex arena of accounting for sustainable development. Given the rapidly increasing array of complex accounting for sustainable development practices and policies, the papers discussed above do not, however, collectively provide anywhere near a complete picture or understanding of accounting for sustainable development. There is therefore considerable scope for other novel theorizations to be applied in the analysis of empirical observations to contribute further towards the robust evidence and understandings that we believe the academy has a duty to provide about accounting for sustainable development.

In making this case, a question that might be wondered at is what might be specific examples of novel or further refined theories. Directly attempting an answer to such a question might offer a chance to promote some particular personal favourites. However this would risk replacing one set of established theoretical directions (and limitations) with another. A more important message regarding theory that follows from our arguments above is of the need to consider the dynamic flux and complementarity of different streams of research and theoretical framings.

A risk to be carefully considered is the importation of theorizing into a particular area without an awareness of subsequent developments of the imported theory in the originating area. Given the evolution and development of theory, subsequent discussion of limitations and potentials needs careful attention. Of course, given the potentially very different interests that might guide theoretical development in different arenas this is not to say that the most recent set of preoccupations of what might be considered a founding group of thinkers is salient. It is to say, however, that an awareness of how and why such a group might have sought to push their own agendas forwards is important.

Accounting for sustainable development represents a complex and pressingly important area of research. We have argued in this paper for the benefits of greater

theoretical development and diversity in such work. Faced with potentially emotive and pressing concerns to introduce radically different approaches to our understanding of what sustainable development does and should mean, there is a risk that the kind of intellectual investment necessary in understanding theory is perceived of as a distraction from important and practically relevant work. The counter argument is to remind ourselves of Kurt Lewin's famous observation that "There is nothing so practical as a good theory." We hope that the issues discussed here, along with the examples provided in the other papers in this special section of *Accounting, Organizations & Society* will help in this undertaking.

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