



Structuration theory in accounting research: Applications and applicability[☆]

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ABSTRACT

Ever since Giddens' structuration theory (ST) was introduced into the accounting literature some 25 years ago, it has strengthened its position as one of the major schools of thought used to explore accounting as organizational, social and political phenomena. The purpose of this study is to review how ST has been applied, and can be applied, in this sizeable literature. Overall, the review of some 65 published papers, suggests that not only has ST contributed to challenge the assumptions of 'inherent and functional' features of accounting systems per se characterizing mainstream research, but also to develop other alternative theoretical perspectives. However, our review also suggests several limitations. These include that the accounting community has not really worked as a collective to develop a structurationist understanding of accounting practices, and that most researchers remain largely uncritical to ST as a theory. We also find that accounting scholars have not yet developed a mutual understanding of how to interpret ST (i.e. there are conceptual unclaritys and even inconsistencies), or how to apply ST methodologically in empirical research. Based on these limitations, and the identification of a number of 'black spots' in the literature, we suggest several directions for future scholarly effort.

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1. Introduction

A quarter of a century ago, [Roberts and Scapens \(1985\)](#) introduced Giddens' structuration theory (ST) into the accounting field of research, since when there has been a continuous and even growing output of such works. Indeed, today the ST-informed accounting literature consists of some 65 published papers and has become one of the dominant 'sensitizing' approaches used to explore accounting as an organizational, social, and political phenomenon ([Busco, 2009](#); [Coad and Herbert, 2009](#); [Englund et al., 2011](#)).

In this paper, we set out to critically (but sympathetically) review this literature and suggest potential avenues for the future. Indeed, a number of such literature reviews have already been undertaken. For example, [Englund et al. \(2011\)](#)

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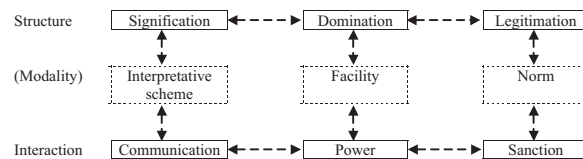


Fig. 1. The dimensions of the duality of structure (Giddens, 1984, p. 29).

recently discussed the past, present, and future of the ST-based accounting literature, with a main focus on the major contributions and limitations of this literature in relation to other interpretive and critical streams of accounting research. In other cases, accounting researchers have reviewed this literature with a focus on particular empirical issues or domains, such as Ahrens and Chapman's (2007) discussion of accountability issues, and Meira et al.'s (2010) discussion of inter-firm relationships (see also Busco, 2009; Scapens, 2006).

In contrast to these previous reviews, we focus our attention on the (various) ways in which accounting scholars have applied, i.e. brought in and drawn upon, ST when conducting accounting research. More specifically, the purposes are: (i) to evaluate how this literature has applied key ST concepts and assumptions both theoretically and methodologically, and analyze to what extent the accounting community has worked as a collective to capitalize on these core ideas and (ii) to point out relatively unexplored potentials in the accounting-oriented ST literature and, based on these, identify opportunities for future research.

Overall, our emergent analysis of how ST has been applied suggests four key themes reflecting large and to some extent surprising variations in the literature. These are: (i) how individual core ST concepts have been cited and translated into an accounting context, (ii) the research strategies adopted when applying ST in accounting research, (iii) how accounting researchers have collected data on, and analyzed, structuration processes, and (iv) how the accounting community has worked as a collective to capitalize on these ST ideas and assumptions.

Based on both quantitative and qualitative analyses of these themes, we conclude that the literature seen as a whole has made several important contributions to the larger accounting literature—not least through the introduction of a duality perspective—and the development of several important research topics, such as that of (systems of) accountability (cf. Roberts and Scapens, 1985; see also the discussion in Ahrens and Chapman, 2007). We also identify a number of limitations—including, conceptual unclarity and limited cumulativeness—based on which we propose an array of directions for future research.

The remainder of our paper is organized as follows. The next section presents a summary of the core concepts and underlying arguments of Giddens' works. Next, we describe how the articles reviewed were collected and analyzed, followed by an articulation of the findings organized around the four themes (mentioned above). In the concluding sections, we discuss the findings and propose a number of possible avenues for future research.

2. Giddens' structuration theory: an overview

Below, we will sketch out some of the key features of ST. We start by outlining core concepts and assumptions developed in Giddens' earlier works and then turn to his more recent writings.

2.1. Core concepts and assumptions

In the pioneering books from 1976, 1979 and 1984, Giddens formulated an ontological framework for the study of human activities, focusing neither on "the experience of the individual actor, nor the existence of any form of societal totality, but [on] social practices ordered across space and time" (Giddens, 1984, p. 2).¹ Central to such an understanding of social order is the distinction between situated practices per se (i.e. what actors actually say and do) and that which generates such practices (i.e. that which underlies and produces the 'patterns' as such). In ST, the former is denoted by *social systems* while the latter is denoted by *social structures*. Social systems then, (i) comprise the actual activities of human actors, (ii) are always situated in specific time–space settings, and (iii) are always linked to specific subjects. Social structures, on the other hand, (i) constitute the structural properties which allow for the 'binding' of time–space in social systems, (ii) are out of time and space with only a virtual existence, and (iii) are marked by the absence of the subject (Giddens, 1984).

A second important presumption of ST is that these generative structures may be divided into a sub-set of structural properties, whereby three dimensions may be identified, namely, signification, legitimation, and domination (see Fig. 1).

Structures of signification provide general 'interpretative schemes' necessary for communication (see left-hand side of Fig. 1). Such interpretive rules provide ways for people to see and interpret events, and hence, give meaning to (inter)actions. *Structures of legitimation*, on the other hand, provide norms which sanction certain forms of conduct (see right-hand side of Fig. 1), while *structures of domination* provide facilities for the exercise of power.

¹ ST is best understood as a response to his critique of some major schools of thought regarding the individual and society, specifically, the 'naturalistic' and 'interpretive' sociology (see Giddens, 1976, 1979).

A third core idea in ST is that structures and systems are recursively interrelated through the *duality of structure*. That is, those structural properties that actors draw upon in the production and reproduction of social systems are both the medium for, and outcome of, social action (see the vertical double-headed arrows in Fig. 1). Consequently, agents and structures do not constitute two independent sets of phenomena (a dualism), but represent two sides of the same coin (Giddens, 1984).

Importantly, however, while ST holds that reproduction and continuity characterizes much of social life, we cannot predict human action since actors are highly *knowledgeable*. That is, a fourth key assumption of ST is that human agents know a great deal about the conditions for, and consequences of, what they do in day-to-day practices and, based on this, they can always choose to do otherwise.

Related to such transformative capacity of human agents, ST also presumes that power is an integral element of social life. In its most basic form power is the means of getting things done (1984), and hence, concerns *human agency as such*. However, power is also depicted as relational and as a property of social interaction—*power as domination*. In this narrower sense, power refers to the capability that some actors may have to secure outcomes ('power to do'), where the realization of such outcomes depends upon the agency of other individuals ('power over others') (1976). Importantly, though, in order to avoid a deterministic view on power relations, whereby some actors may be seen to be 'controlled' by others, power relations should be analyzed in terms of what Giddens refers to as the *dialectic of control*. That is, regardless of the form of dependence, there are always some resources which 'subordinates' may mobilize so as to influence the conduct of their 'superiors' (see Giddens, 1984).

Overall then, Giddens' notion of *structuration* emphasizes the 'ongoingness' of human activities, involving both continuity and change of social systems. Giddens (1995) also stresses that the study of structuration implies a study of the *conditions* under which structures are (re)produced. And as will be discussed below, Giddens identifies and discusses a number of such conditions which, he argues, foster both continuity and transformation.

2.2. Giddens' later writings

As suggested by a growing stream of research, Giddens' later writings on modernity may also advance our understanding of accounting practices. In these works (see e.g. Giddens, 1990a, 1991, 1994, 1999), he argues that modernity is "vastly more dynamic than any previous type of social order. It is a society – more technically, a complex of institutions – which unlike any preceding culture lives in the future rather than in the past" (Giddens and Pierson, 1998, p. 94).

Three main sources of such 'dynamism' are identified, namely; (i) the separation of time and space, (ii) the development of disembedding mechanisms, and (iii) the reflexive appropriation of knowledge (1990a). As an example of time–space separation, he observes how in modernity, space is typically separated from place, whereby specific locales become "thoroughly penetrated by and shaped in terms of social influences quite distant from them" (1990a, p. 19). Such processes (which may be related to the idea of globalization as a 'shrinking world') refers to what Giddens terms *disembedding* and *reembedding*, whereby distant events and actions are 'lifted out' of their context (disembedded), and then become recombined and 'pushed back' into other contexts (reembedded). And importantly, he also identifies a major mechanism for this, namely *abstract systems*. Such systems, which include 'symbolic tokens' (e.g. money) and 'expert systems' (e.g. written and electronic media), work to 'bracket time and space' through linking actors who are widely separated in time and space.

Finally, and related, he also suggests that human reflexivity² takes on a different character during modernity (Giddens, 1991). That is, although social practices have always been altered in the light of new 'discoveries', it is only in modernity that this form of critical reflection upon conventions and traditions becomes radicalized to cover all aspects of life (1990a, p. 39). Reflexivity is, as Giddens puts it, "introduced into the very basis of system reproduction, such that thought and action are constantly refracted back upon one another [...] and] the fact that social practices are constantly examined and reformed in the light of incoming information about those very practices, thus constitutively altering their character" (1990a, p. 38).

3. Method

The review was conducted in four steps. First, we scanned all major accounting journals from their inception through 2010, searching for works where the author(s) declared the use of ST in an accounting context. We also used Google scholar and Scirus, which added mainly unpublished material, but also articles from lower-ranked journals and book chapters.

Second, we selected papers to review based on the criteria that they were published, that they had an accounting focus, and that there was a substantial use of Giddens' writings. As a result, the following types of papers were removed from our database:

- i. Unpublished works, including dissertations (e.g. Mouritsen, 1990), conference papers/proceedings (e.g. Macintosh and Scapens, 1987), and working papers (e.g. Skoog, 2004).
- ii. Papers with only a marginal accounting focus (e.g. Hamilton and Hogartaigh, 2009; Heydebrand, 2009; Le Theule and Fronda, 2005; Yuthas and Dillard, 1997).

² It should be noted here that this form of reflexivity does not refer to what Giddens elsewhere denotes 'the reflexive monitoring of action' (e.g. Giddens, 1984), but rather to "the reflexive appropriation of the conditions of system reproduction" (Giddens, 1990b, p. 306), even though they are, of course, interrelated.

Table 1
Emerging themes in the review of structuration-oriented accounting research.

Theme	Description of the emerging theme	Further explored through	Treated in section
i. <i>Citation and application of core ST concepts</i>	Researchers cite and translate key ST concepts in different ways	Quantitative analysis of the use of key concepts (from ST) and references to Giddens' works, in each paper, and qualitative analysis of how concepts have been translated into an accounting context	4.1
ii. <i>Overall application(s) of Giddens' works</i>	The ways in which researchers draw upon Giddens' works to contribute to accounting research are highly varying	Qualitative analyses of the ways in which researchers have drawn upon Giddens' works	4.2
iii. <i>Research methods applied</i>	Varying methodological approaches have been used to study accounting practices	Quantitative and qualitative analyses of the research design and how data were collected and analyzed in each paper	4.3
iv. <i>Use of previous accounting research</i>	The ways in and the degree to which researchers draw upon, and try to contribute to, previous ST-based accounting research are highly varying	Quantitative and qualitative citation analyses among the papers included in this review	4.4

iii. Papers with a marginal use of, or single references to Giddens and/or ST (e.g. Burns and Scapens, 2000; Covalesski and Dirsmith, 1988; Johanson et al., 2001).

The selection procedure resulted in a set of 65 papers (see Table 2 for an overview of the literature).

Third, we then carefully (re)read these papers, analyzing them as we proceeded, in a rather inductive manner. That is, apart from our own readings of Giddens' works and our overall purpose to discuss the applications and applicability of ST in accounting research, we had no predispositions as to the topics that would be (dis)covered. Rather, based on an initial coding of each paper, where we made notes on various aspects, such as research questions, use of key ST concepts and assumptions, references, and conclusions, we then searched for similarities and differences among the papers resulting in a number of *emerging themes* for the review (see Table 1). Within these themes, we then developed taxonomies which helped to characterize and synthesize the literature (see Tables 3–7).

Fourth, and finally, we have also tried to take a step back and envisage each theme from the viewpoint of our own readings of Giddens. Although we do realize that this is a somewhat hazardous project—not least as Giddens himself (1990b) has previously submitted to sometimes being in more agreement with his critics than his pleaders—such an analysis allowed us to identify a number of limitations (and advancements) of the accounting literature and also some promising areas for future scholarly effort.

4. Findings

As indicated above, our literature review covers some 65 papers published during the last 25 years (1985–2010). Table 2 shows an overview of the literature.

As suggested by the table, the great majority of the ST papers has been published in peer-reviewed journals. In particular, four venues dominate, namely *Accounting, Organizations and Society* (12 papers), *Critical Perspectives on Accounting* (10), *Management Accounting Research* (9), and *Accounting, Auditing & Accountability Journal* (6). Echoing the introduction section, we also see that there has been a continuous or even growing stream of studies over the years.

The overview in Table 2 also shows that the literature consists of three main categories of ST-papers. First, there is a stream of more conceptually oriented papers (in total 15 papers). Their main purpose is to discuss ST as such, although they may also include empirics for illustrative purposes. A particular group of conceptual papers are those which henceforth will be referred to in terms of 'introducing papers' (e.g. Macintosh and Scapens, 1990; Roberts and Scapens, 1985) as their primary aim was to demonstrate the potential of ST as an approach to study accounting practices as an organizational, social, and political phenomenon. However, there are also quite a few conceptual papers which focus more specifically on particular aspects of Giddens' writings. For instance, Englund and Gerdin (2008) discussed how mediating concepts (between structure and agency) have been used in the accounting literature, while Jones and Dugdale (2001) analyzed how an 'accounting regime' may be understood as a social practice involving processes of disembedding and reembedding.

Second, there is a large stream of empirical papers (in total 43 papers). That is, their main purpose is to increase our understandings of accounting practices through analyses of 'real' settings. Below, we will present and discuss the research methodologies applied in this stream in detail, but we can already now conclude that case study research dominates (see Section 4.3).

Table 2
Overview of published structuration-oriented accounting research.

Authors	Year	Published in	Type of paper
Roberts and Scapens	1985	<i>Accounting, Organizations and Society</i>	Conceptual
Capps, Hopper, Mouritsen, Cooper and Lowe	1989	<i>Critical Perspectives in Management Control</i>	Empirical
Ouibrahim and Scapens	1989	<i>Accounting, Auditing & Accountability Journal</i>	Empirical
Laughlin	1990	<i>Financial Accountability and Management</i>	Empirical
Macintosh and Scapens	1990	<i>Accounting, Organizations and Society</i>	Conceptual
Roberts	1990	<i>Accounting, Organizations and Society</i>	Empirical
Macintosh and Scapens	1991	<i>Journal of Management Accounting Research</i>	Empirical
Lawrenson	1992	<i>Critical Perspectives on Accounting</i>	Empirical
Boland	1993	<i>Accounting, Organizations and Society</i>	Conceptual
Scapens and Roberts	1993	<i>Management Accounting Research</i>	Empirical
Macintosh	1994	<i>Management Accounting and Control Systems</i>	Empirical
Macintosh	1995	<i>Critical Perspectives on Accounting</i>	Conceptual
Mouritsen and Skaerbaek	1995	<i>The Institutional Construction of Organizations</i>	Empirical
Boland	1996	<i>Accounting, Organizations and Society</i>	Conceptual
Kirk and Mouritsen	1996	<i>Accountability, Power, Ethos and the Techn. of Managing</i>	Empirical
Scapens and Macintosh	1996	<i>Accounting, Organizations and Society</i>	Conceptual
Dirsmith, Heian and Covaleski	1997	<i>Accounting, Organizations and Society</i>	Empirical
Lawrence and Doolin	1997	<i>International Journal of Public Sector Management</i>	Empirical
Lawrence, Alam, Northcott and Lowe	1997	<i>Accounting, Auditing & Accountability Journal</i>	Empirical
Granolund, Lukka and Mouritsen	1998	<i>Scandinavian Journal of Management</i>	Empirical
Yuthas and Dillard	1998	<i>Advances in Accounting Behavioral Research</i>	Conceptual
Parker and Gould	1999	<i>Accounting Forum</i>	Conceptual
Dillard	2000	<i>Accounting Forum</i>	Conceptual
Collier	2001	<i>Management Accounting Research</i>	Empirical
Granolund	2001	<i>Management Accounting Research</i>	Empirical
Jones and Dugdale	2001	<i>Critical Perspectives on Accounting</i>	Conceptual
Ahrens and Chapman	2002	<i>Management Accounting Research</i>	Empirical
Buhr	2002	<i>Critical Perspectives on Accounting</i>	Empirical
Cowton and Dopson	2002	<i>Management Accounting Research</i>	Empirical
Granolund	2002	<i>Scandinavian Journal of Management</i>	Empirical
Baxter and Chua	2003	<i>Accounting, Organizations and Society</i>	Literature review
Caglio	2003	<i>European Accounting Review</i>	Empirical
Granolund	2003	<i>Accounting, Auditing & Accountability Journal</i>	Empirical
Saravanamuthu and Tinker	2003	<i>Accounting, Organizations and Society</i>	Empirical
Scheytt, Soin and Metz	2003	<i>European Accounting Review</i>	Empirical
Seal	2003	<i>Financial Accountability and Management</i>	Empirical
Alam, Lawrence and Nandan	2004	<i>Critical Perspectives on Accounting</i>	Empirical
Dillard, Rigsby and Goodman	2004	<i>Accounting, Auditing & Accountability Journal</i>	Conceptual
Seal, Berry and Cullen	2004	<i>Accounting, Organizations and Society</i>	Empirical
Barrett, Cooper and Jamal	2005	<i>Accounting, Organizations and Society</i>	Empirical
Conrad	2005	<i>Critical Perspectives on Accounting</i>	Empirical
Hassan	2005	<i>Journal of Accounting & Organizational Change</i>	Empirical
Jack	2005	<i>Management Accounting Research</i>	Empirical
Uddin and Tsamenyi	2005	<i>Accounting, Auditing & Accountability Journal</i>	Empirical
Baxter and Chua	2006	<i>Contemporary Issues in Management accounting</i>	Literature review
Busco, Riccaboni and Scapens	2006	<i>Management Accounting Research</i>	Empirical
Hyvönen, Järvinen and Pellinen	2006	<i>Qualitative Research in Accounting and Management</i>	Empirical
Joseph	2006	<i>International Journal of Acc. Information Systems</i>	Empirical
Scapens	2006	<i>The British Accounting Review</i>	Literature review
Tollington	2006	<i>Critical Perspectives on Accounting</i>	Empirical
Ahrens and Chapman	2007	<i>Handbook of Management Acc. Research, vol. 1</i>	Literature review
Jack	2007	<i>Critical Perspectives on Accounting</i>	Empirical
Jack and Kholeif	2007	<i>Qualitative Research in Org. and Mgt: An Intern. J.</i>	Conceptual
Chung and Parker	2008	<i>Business Strategy and the Environment</i>	Conceptual
Englund and Gerdin	2008	<i>Critical Perspectives on Accounting</i>	Literature review
Free	2008	<i>Accounting, organizations and society</i>	Empirical
Gurd	2008	<i>Critical Perspectives on Accounting</i>	Empirical
Jack and Kholeif	2008	<i>Accounting Forum</i>	Conceptual
Moilanen	2008	<i>Management Accounting Research</i>	Empirical
Busco	2009	<i>Journal of Management and Governance</i>	Literature review
Coad and Herbert	2009	<i>Management Accounting Research</i>	Conceptual
Jayasinghe and Thomas	2009	<i>Accounting, Auditing & Accountability Journal</i>	Empirical
Fay, Introna and Puyou	2010	<i>Information and Organization</i>	Empirical
Hassan	2010	<i>Int. J. Behavioural Accounting and Finance</i>	Empirical
Meira, Kartalis, Tsamenyi and Cullen	2010	<i>Journal of Accounting & Organizational Change</i>	Literature review

Third and finally, we identify a small, but distinct category of ST-oriented studies, namely, literature reviews (in total 7 papers). As suggested in the introduction above, these have typically focused on particular empirical issues or domains (see e.g. Ahrens and Chapman, 2007; Meira et al., 2010). Based on the four emergent themes as depicted in Table 1, however, we shall below focus more on how ST has been applied in this literature. We begin with an analysis of which ST notions have been most frequently referred to, and how they have been applied/translated into the accounting literature.

4.1. Citation and application of core structuration theory concepts

Our review of the accounting literature shows that Giddens' works have been used in many different ways. This is evident not least when it comes to the particular ST concept(s) cited by individual studies (see Table 3).

The table suggests several observations. Perhaps the most striking (but maybe not surprising) observation is that by far the most attention has been devoted to the notions of 'social structure' and 'the duality of structure'. In particular, many accounting researchers have explored how the three modalities 'interpretative scheme', 'facility', and 'norm' are both drawn upon and reproduced by actors during the production of (inter)action (e.g. Conrad, 2005; Lawrence et al., 1997). Oftentimes, these studies also refer to Giddens' notion of social systems, thereby explicitly acknowledging the distinction between social structures and the situated and reproduced (inter-)actions they recursively organize.

Table 3 also shows that the idea of 'knowledgeable agency' has been frequently referred to, i.e. that human agents are purposive and know much about the grounds for their actions and also have a capability to reflexively monitor their own and others' actions. A large part of the literature also more or less explicitly draws upon the notion of 'structuration' emphasizing both the continuity of human activities (e.g. accounting routines/routinization) and changes or dissolution of social systems (cf. the large number of studies which refers to the idea of social change in general). Linked to this, a substantial part of the literature also refers to Giddens' (1979, 1984) notion of power, both in a broad (i.e. 'the transformative capacity of human activity') and narrow sense (i.e. 'the domination of some individuals by others').

However, other more specific ST concepts such as 'ontological security', 'reflexive appropriation', 'unintended consequences', and 'abstract/expert systems' are more sparsely used. To some extent this is because some of these were developed in Giddens' more recent work. For example, some ten years after its publication, Jones and Dugdale (2001) introduced Giddens' (1990a) notion of modernity into accounting research (and associated theoretical concepts), which has resulted in quite a few followers (e.g. Barrett et al., 2005; Busco et al., 2006; Seal, 2003; Seal et al., 2004; Moilanen, 2008). Related to this observation, Table 3 also shows that 'new' concepts are added to the research agenda, but very few disappear. Also this observation is hardly surprising as the first-used concepts such as social structure and duality of structure represent basic and unchanged assumptions of ST. As will be argued in the discussion section below, however, Table 3 also suggests an opportunity for future scholarly effort as very few have picked up on Giddens' (1990b) more elaborated discussion about sources of social change. In fact, only one accounting study (Lawrence et al., 1997) has explicitly explored the interrelationships between the four sources of change, i.e. change generated by the inherent indeterminacy of system reproduction, clashes/contradictions between social systems, reflexive appropriation, and changes in resource access.

Taken together then, our 'quantitatively oriented' analysis shows that while scholars are oftentimes selective in their use of Giddens' more specific concepts and works (see also the discussion in Section 4.2), a great majority of them explicitly refers to the core idea of a duality relationship between social structure and social systems. Related to this, a fairly large number of accounting scholars also refers to the transformative capacity (cf. power and change) of socially embedded, but highly knowledgeable and reflexive, agents. Next we will provide a more detailed and qualitatively oriented overview of how these core notions have been applied/translated into an accounting context.

If we start out with the notion social structure, our review shows that most scholars follow Roberts and Scapens (1985) and draw upon this notion to conceptualize accounting as a type of virtual and unobservable cognitive template for (inter)action. From such a perspective, accounting has been referred to as a language (i.e. a signification structure) which provides organizational members with a set of categories by which they may make sense of organizational practices (see e.g. Ahrens and Chapman, 2002; Boland, 1993; Ouibrahim and Scapens, 1989; Roberts and Scapens, 1985). Accounting has also been seen as embodying a moral order (e.g. Lawrence et al., 1997; Macintosh, 1995; Roberts, 1990), whereby it is seen as legitimating "the rights of some participants to hold others accountable in financial terms for their actions" (Macintosh, 1995, p. 305), and also, as a means for domination, whereby it is seen as providing facilities "that management at all levels can use to co-ordinate and control other participants" (Macintosh and Scapens, 1990, p. 462; see also Jack, 2007; Seal et al., 2004; Uddin and Tsamenyi, 2005).

Importantly though, and in line with the presumptions of ST, the interest in a majority of the studies is not primarily focused on the structures per se, but rather on how accounting (and its structural features) is (re)produced as a form of practice (i.e. as a social system). As Roberts and Scapens (1985, p. 445) suggested in their pioneering paper, "[i]t is the centrality of the notion of practice or practices and in particular, the analysis of the interdependent character of practices with the concepts of "system" and "structure" that make Giddens' work an attractive framework for understanding the significance of accounting in the production and reproduction of organizational life". Interestingly however, while our analysis suggests that the ST-based literature has covered a large variety of such practices in empirical research, including communal systems (Laughlin, 1990), profit-driven systems (e.g. Dirsmith et al., 1997; Seal et al., 2004) and political systems (e.g. Lawrence et al., 1997; Seal, 2003), we find very little explicit attention to the distinguishing character(s) of the different

Table 3
ST-concept(s) cited by individual papers in accounting research.

Reference	General category Core notion	Core concepts and assumptions													Giddens' later writings							
		Social structure	Social system	Duality of structure	Knowledgeable agency	Power	Continuity			Change						Modernity	Disembed/ Reembed	Reflexivity	Risk/ Trust	Abstract systems		
							Routines/ Routinization	Ontological security	General change	System reprod.	System contrad.	Reflexive appror.	Resource access	Critical situations	Unintended consequences							
Roberts & Scapens	1985	1	1	1																		
Ouibrahim & Scapens	1989	1																				
Capps, Hopper, Mouritsen, Cooper & Lowe	1989	1	1	1							1											
Macintosh & Scapens	1990	1	1	1	1			1						1								
Laughlin	1990	1																				
Roberts	1990	1	1	1																		
Macintosh & Scapens	1991	1		1	1	1		1						1								
Lawrenson	1992	1		1																		
Boland	1993	1		1	1																	
Scapens & Roberts	1993	1						1														
Macintosh	1994	1	1	1	1	1	1	1						1								
Macintosh	1995	1		1	1	1	1	1			1											
Mouritsen & Skaerbaek	1995	1	1	1	1	1	1	1						1				1				
Scapens & Macintosh	1996	1	1	1	1	1	1	1														
Boland	1996	1		1	1																	
Kirk & Mouritsen	1996	1						1														
Dirsmith, Heian & Covaleski	1997			1	1	1			1													
Lawrence, Alam, Northcott & Lowe	1997	1	1	1	1	1				1	1	1	1	1								
Lawrence & Doolin	1997	1	1		1					1	1			1								
Yuthas & Dillard	1998	1	1	1	1	1	1	1														
Granlund, Lukka & Mouritsen	1998	1	1					1						1								
Parker & Gould	1999	1												1	1	1						
Dillard	2000	1		1	1				1													
Jones & Dugdale	2001	1	1	1	1	1		1							1		1	1	1	1	1	1
Granlund	2001				1	1		1	1													
Collier	2001					1																
Ahrens & Chapman	2002	1	1	1					1													
Cowton & Dopson	2002		1	1	1	1																
Granlund	2002	1	1					1						1							1	
Buhr	2002	1	1	1	1	1	1	1														
Baxter & Chua	2003	1			1			1	1								1					
Scheytt, Soim & Metz	2003	1	1	1	1			1														
Granlund	2003	1		1	1									1								
Seal	2003	1		1	1	1	1	1									1		1	1	1	1
Saravanamuthu & Tinker	2003					1												1				
Caglio	2003	1		1				1														
Dillard, Rigby & Goodman	2004	1		1	1			1						1								
Alam, Lawrence & Nandan	2004											1										
Seal, Berry & Cullen	2004	1	1	1	1	1					1						1	1	1	1	1	1
Barrett, Cooper & Jamal	2005	1	1	1	1	1			1								1	1	1	1	1	1
Jack	2005	1	1	1	1	1								1								
Hassan	2005									1	1											
Uddin & Tsamenyi	2005					1			1								1					
Conrad	2005	1	1	1	1	1	1	1						1								
Scapens	2006	1		1																		
Baxter & Chua	2006	1			1				1							1						
Busco, Riccaboni & Scapens	2006							1	1	1				1				1	1	1	1	1
Joseph	2006	1		1	1			1	1	1				1								
Hyvönen, Järvinen & Pellinen	2006																	1			1	1
Tollington	2006	1	1	1		1			1													
Ahrens & Chapman	2007	1		1		1																
Jack & Kholeif	2007	1		1	1																	
Jack	2007	1				1																
Englund & Gerdin	2008	1	1	1	1	1			1													
Jack & Kholeif	2008	1		1	1	1								1								
Moilanen	2008	1	1	1	1	1		1									1	1		1	1	1
Free	2008	1		1	1	1			1											1	1	1
Gurd	2008	1		1	1			1						1								
Chung & Parker	2008	1		1	1				1													
Busco	2009	1	1	1	1	1	1	1						1				1	1	1	1	1
Coad & Herbert	2009	1	1	1	1	1			1													
Jayasinghe & Thomas	2009	1	1	1	1	1																
Hassan	2010	1	1	1	1	1	1	1					1		1							
Meira, Kartalis, Tsamenyi & Cullen	2010	1		1		1												1		1	1	1
Fay, Introna & Puyou	2010																1	1	1	1	1	1
Total		51	27	45	39	27	19	9	32	5	7	3	2	16	8	10	8	9	12	11		

systems studied (but see [Ouibrahim and Scapens, 1989](#)). Likewise, it is rarely discussed how and in what respects insights about accounting practices gained from studying one type of social system can be related to studies of others.

Instead, and irrespective of the particular system under study, it seems as if accounting scholars have centred their attention on the *relationship between social structures and systems*, i.e. on the duality of structure. From such a view, accounting practices are neither seen as the arbitrary or subjective experiences of individuals, nor the effects of structural forces ([Lawrenson, 1992](#); [Yuthas and Dillard, 1997](#)), but rather, as ongoing processes of structuration ([Dillard et al., 2004](#); [Macintosh and Scapens, 1990](#)). Such an approach was, at least in the early ST-based works, typically highlighted as a contrast to the (at the time) existing accounting literature, which had previously privileged “either structure or agency at the cost of ignoring or marginalizing the other position” ([Macintosh and Scapens, 1991](#), p. 152). As suggested by [Table 3](#), however, this core concept also remains a central assumption in the later ST-based writings. As suggested by [Cowton and Dopson \(2002\)](#), for example, although accounting may indeed increase the financial visibility of people, events, and processes, it does not constitute a determining disciplinary power. In a similar way, [Saravanamuthu and Tinker \(2003, p. 38\)](#) argued that while accounting may signify ‘control’ in head-office terminology, it still “remains a contested terrain because it is interpreted in various ways to suit the politics of local circumstances” (see also [Macintosh, 1995](#)).

Hence, a key characteristic of the ST-based accounting literature is the recognition of a non-deterministic relationship between structure and human agency (as implied by the duality of structure). As suggested in [Table 3](#), such a view is often combined with other related core concepts underlying ST, such as ‘the knowledgeable agent’ and ‘the transformative capacity of agents’ (i.e. power). As will be discussed in more detail below, these concepts have proven important as a means of incorporating agency into other more structure-oriented theoretical perspectives. For example, [Granlund \(2003\)](#) argued that the idea of a knowledgeable agent adds an important element to institutional theory, while [Yuthas and Dillard \(1997, pp. 213 and 215\)](#) emphasized how “the incorporation of reflexivity in the discussion of agents offers a more expansive perspective of [the] decision maker than is presented in most behavioural research to date”. Moreover, many accounting scholars have drawn upon such a view on agency as a means of understanding the complex processes in which accounting practices may both work to almost automatically reproduce the prevailing order, while at other times they may undergo radical change ([Conrad, 2005](#)).

Overall then, while it is evident that accounting scholars have (although in a selective way) drawn extensively upon a number of core concepts underlying ST, at least the following two remarks may be made regarding the differences in how the concepts have been applied to an accounting context. First, while most researchers have conceptualized social structure as a cognitive template for (inter)action which agents draw upon in the (re)production of social systems, there are notable exceptions. For example, [Tollington \(2006, p. 802, emphasis in original\)](#), argued that “[t]he relevant social structure here is FRS10 [i.e. the Financial Reporting Standard No. 10] as supported by the *Statement of Principles*”, while [Caglio \(2003\)](#) referred to the computerized accounting systems per se as modalities of structuration. That is, also different kinds of accounting artefacts such as written rules and systems have been considered as having structural properties.

Second, while the core idea of a duality relationship between social structure and social systems forms the backbone of most ST-based accounting research, our review shows that the meaning(s) and implications of this concept are not clear-cut. For example, the debate in *Accounting, Organizations and Society* between [Scapens and Macintosh \(1996\)](#) on the one hand, and [Boland \(1993, 1996\)](#) on the other hand, revealed that the relative importance of agency may differ substantially depending on how Giddens is put to action (see also [Englund and Gerdin, 2008](#)). That is, while Scapens and Macintosh were depicted by Boland as studying structuration from a distance which allegedly ended up in a view of accounting as monolithic structural properties (i.e. ‘structure-centered’), they in turn, argued that Boland failed to show how agency is always socially and organizationally embedded (i.e. Boland was accused of being too ‘agency-centered’). More recently, it has been argued that also Giddens’ original work is ‘imbalanced’ in the sense that it gives primacy to agency over structure ([Kilfoyle and Richardson, 2011](#)). However, there are also examples of the opposite (e.g. [Dirsmith et al., 1997](#)) where the agential capacities are seen as rather negligible, at least in certain contexts (see e.g. [Jayasinghe and Thomas, 2009](#)). But as suggested by [Cowton and Dopson \(2002, p. 208\)](#), “The structurationist approach does not presume individual agency to be significant in all situations, but it does provide conceptual room for it.”

To sum up this section then, while most researchers explicitly refer to a hand full of core ST concepts such as social structure/system, duality, knowledgeable agency and power, there are quite large differences in terms of how they have been ‘translated/applied’ to the accounting literature. As a result, there is a certain amount of unclarity as to what these core concepts stand for in an accounting context. As will be elaborated in the discussion section, it could be argued that some conceptualizations are theoretically incompatible not only with each other, but also with some of Giddens’ original works. In particular, this relates to the core concepts social structure and the duality of structure. Next, we shall take a step back and analyze how Giddens’ ST has been applied more generally in the accounting literature.

4.2. Research strategies adopted when applying ST in accounting research

Arguably, our reading of how Giddens’ ideas have been used in the accounting literature suggests that there are at least five main types of work (see the taxonomy in [Table 4](#)). Note that the categories are partly overlapping and, consequently, that an individual study may occur in several groups.

As suggested by the table, the first two categories—‘general application’ and ‘selective application’—both heavily draw upon ST concepts and explore how they can offer insights on accounting phenomena (cf. [Jones and Karsten, 2008](#)). Normally, they also claim that they contribute specifically to the ST-oriented accounting literature. That is, these papers clearly position

Table 4
Applications of structuration theory in accounting research.

Applications	Key aspects of studies	Selected references
<i>i. General application</i>	Uncritical application of core ST ideas in order to enhance our understanding of accounting as social practice. Main objective is to contribute to extant structuration-oriented accounting literature	Caglio (2003), Conrad (2005), Hassan (2010), Joseph (2006), and Macintosh and Scapens (1991)
<i>ii. Selective application</i>	Also (uncritically) draw upon core ST ideas and contribute to the extant structuration-oriented accounting literature, but analyses focus on specific concepts such as 'dialectic of control', 'modernity' and 'expert systems'	Barrett et al. (2005), Hassan (2005), Jack (2005), Seal et al. (2004), and Uddin and Tsamenyi (2005)
<i>iii. 'Smash and grab'</i>	Also (uncritically) draw upon specific ST concepts, but the objective is to contribute to other literatures than the structuration-oriented accounting literature	Free (2008), Laughlin (1990) and Saravanamuthu and Tinker (2003)
<i>vi. Theory combination</i>	ST is (uncritically) combined with other theories in order to enhance our understanding of accounting as social practice	Collier (2001), Cowton and Dopson (2002), Dirsmith et al. (1997), and Gurd (2008)
<i>v. Critical engagement</i>	Sympathetic, but critical application of ST. Analyses seek to identify ST's limitations and/or extend original ideas	Coad and Herbert (2009) and Jack and Kholeif (2007, 2008)

themselves as ST-oriented and explicitly seek to build on and contribute to earlier papers of the same kind. Another common denominator is that they are more or less passive adopters of ST ideas, i.e. there is no ambition to critically reflect upon or extend original ideas. Most of the papers in Table 3 which mainly refer to core ST assumptions—including, social structures and social systems, duality of structure, and knowledgeable agency as developed in Giddens' earlier writings (1976, 1979, 1984)—are part of either of these two categories. A key difference between them is, however, that papers in the second group are more selective in their use of ST, focusing on particular concepts. Examples of more specific foci include Giddens' ideas about unintended consequences (e.g. Granlund, 2003; Jack, 2005), modernity (Seal, 2003; Seal et al., 2004), and the notion of expert systems as a mechanism for disembedding and reembedding (e.g. Jones and Dugdale, 2001; Moilanen, 2008).

Papers in the third group—'smash and grab'—are typically also more selective in their choice of ST concepts. For example, Saravanamuthu and Tinker (2003) focus specifically on dialectic of control, while Free (2008) draws upon Giddens' conceptualization of trust in abstract systems. A distinguishing characteristic of these is, however, that although they rely heavily on Giddens' work in their analyses of accounting phenomena, their research aim is to contribute to other theoretical fields than the ST-oriented literature.

Finally, we identify two categories of papers which broaden the perspective on ST. One of them (No. 'iv' in Table 4) includes papers which explicitly combine ST with other theories. For example, Dirsmith et al. (1997) combined it with institutional theory (see also Collier, 2001) and the sociology of professions. Along the same lines, Cowton and Dopson (2002) argued that their Foucauldian perspective benefitted significantly from Giddens' ideas about individual agency. Note, however, that also this category of research takes ST as such as largely given.

This is not the case for papers in the fifth category—'critical engagement'—depicted in Table 4. Instead, they show a more reflexive treatment of ST, exploring and challenging its assumptions. Importantly, however, we find no study that, in itself, fundamentally develop and/or revise Giddens' original ideas.³ Rather, scholars in this category typically adopt and introduce others' critical engagement with ST into the accounting arena. A good example of this is the introduction of Stones' (2005) 'strong structuration theory' to highlight and discuss the potentials and limitations of ST (see Coad and Herbert, 2009; Jack and Kholeif, 2007, 2008).

Overall then, it is evident that Giddens' writings have been approached in many different ways in accounting research. In relation to this, two remarks are worthwhile making. First, it is clear that the studies in the 'general application' category have made a distinct and significant contribution to the larger 'alternative' literature challenging the de-contextualized, apolitical and economically rational view of accounting which characterizes much mainstream research (see e.g. Baxter and Chua, 2003, 2006, for excellent reviews and discussions of the theoretical contributions of different alternative approaches). As suggested by the 'smash and grab' and 'theory combination' categories of research, however, ST has not only contributed as a standalone framework, but has also been usefully applied as a means of more directly informing other theoretical perspectives. Not least we find that the ideas of knowledgeable agency and the dialectic of control have been usefully combined with traditionally more structure-centred theories, such as critical theory (Cowton and Dopson, 2002; Saravanamuthu and Tinker, 2003) and new institutional theory (Collier, 2001; Granlund, 2003), as a means of recognizing the non-deterministic character of everyday structuration processes.

Second, the 'general application' and 'selective application' of ST have been and still are the by far most common approaches. In a way, this is hardly surprising as most 'normal science' involves the uncritical application of an existing

³ However, there are examples where accounting scholars insightfully reflect upon ST as such (see e.g. Boland, 1993, 1996; Jones and Dugdale, 2001; Scapens and Macintosh, 1996).

theory in order to shed further light on specific empirical phenomena. Furthermore, as Giddens himself argues, ST is a very general and abstract social theory and, through this, is more of a 'sensitizing device' than a concrete theoretical model. However, it is worthwhile noting that a quite large part of the research in these two categories of the literature still predominately seeks to show that the ST framework (or specific theoretical concepts) '*can be applied*'. And as will be discussed below, there may be an upper limit to these kinds of works.

To conclude our findings so far, we thus find that researchers have applied ST in many different ways, ranging from standalone, general applications of original key concepts and assumptions, to critical and/or highly selective application of specific ST components. Again, however, a common denominator of practically all studies reviewed is the explicit reference to the core idea that social structures and agency are recursively interrelated through the duality of structure. That is, the rules and resources that actors draw upon in the reproduction of social systems are themselves the product of social action and, furthermore, that such daily structuration processes are non-deterministic since actors are knowledgeable and reflexive and thus can always choose to act counter wise to existing structures. Next, we shall analyze in detail how empirically oriented accounting researchers have chosen to study these structuration processes methodologically.

4.3. Research methods applied to study structuration processes

In this section, we focus on the methods researchers have used for data collection and analysis of structuration processes in empirical papers. Before doing so, however, we may initially note that the research philosophy adopted (i.e. the ontological and epistemological perspective) is basically 'given' by the theory as such. Furthermore, when it comes to the overall research design, these studies are almost exclusively designed as longitudinal case studies (but see Boland, 1993; Scheytt et al., 2003) involving single or multiple case organizations (e.g. Ahrens and Chapman, 2002; Ouibrahim and Scapens, 1989), a specific industry (e.g. Jack, 2007), or a community (e.g. Jayasinghe and Thomas, 2009). However, a closer look at how data about structuration processes have been collected and analyzed in individual studies suggests large variation. Table 5 provides an overview of the methodologies used.

A number of observations may be made about the emerging picture. A first one is that, with a few notable exceptions (e.g. the archival studies by Laughlin (1990) and Lawrenson (1992)), papers are typically based on interviews, and complemented by various case specific documents (e.g. annual reports, budgets, internal training material, organizational charts, and minutes). In some cases, the interviews are also followed by various forms of informal conversations and feedback from interviewees. Regarding documents it may be noted that also non-case specific material is sometimes used, such as public material (e.g. documents from external regulatory bodies, constitutional amendments, official statistics, and reports on the economy), and various forms of media (e.g. press releases, newspaper clippings, and trade journals).

Another finding is that less than half of the studies have made some sort of observations. In those particular cases, researchers have primarily studied day-to-day activities through following managers on 'typical' work days (see e.g. Capps et al., 1989), and attending meetings (see e.g. Lawrence et al., 1997).

Table 5 also shows that when it comes to analyzing the collected data, two types of analyses are performed. One is what Giddens (1984) denotes an 'institutional analysis'. That is, the structural features of a specific social system are described, but as a reader, one never gets to see how agents draw upon and reproduce these structural features in specific settings. The other type of analysis is that of 'strategic conduct'. That is, rather than viewing structural properties as largely given (as is typically the case in 'institutional analyses'), this type of analysis focuses on the inherent *transformative* character of any social reproduction. Specifically, Giddens (1984) emphasizes three tenets, namely (i) describing the agent as knowledgeable, (ii) accounting for the agent's motivation, and (iii) explicitly acknowledging the dialectic of control.

Overall then, Table 5 suggests variety in terms of data sources used and types of analyses performed. In relation to this, two remarks are worthwhile making. First, while it may well be argued that researchers do not need to specify all facets of their empirical material, it is noteworthy that so many omit to include detailed information on their interviews or observations made (marked by the character 'x' in Table 5). And importantly, this becomes even more apparent when considering how researchers describe how the empirical material is analyzed. In fact, very few papers give an account of how data were analyzed (e.g. Capps et al., 1989; Dirsmith et al., 1997; Seal et al., 2004), and only a fraction of these explicitly discusses the appropriate fit between the type of analysis undertaken and type of data needed.

Second, despite the frequent references to the key idea of a non-deterministic relationship between social structure and agency (see 'duality of structure' in Table 3), only about 1/3 of the works reviewed perform analyses of strategic conduct where the role of reflexive and knowledgeable agents is explicitly considered. In other words, a majority of the papers reviewed perform 'institutional analyses'. That is, they undertake analyses whose format is similar to traditionally more structure-centred social theories such as new-institutional theory and critical theory (see also the discussions in Kilfoyle and Richardson, 2011, and Englund and Gerdin, 2011). Below, we will come back to these observations and discuss in more detail their implications for the literature. Before doing so, however, we shall first look closer at the ways in which researchers in this strand draw upon, and try to contribute to, previous ST-based accounting research.

4.4. Communication structure within the accounting literature

As suggested above, the picture of the accounting literature that emerges is that there is variety in terms of which ST concepts have been focused (Table 3) and how they have been applied (see discussion in Section 4.1). Also, there are

Table 5
Main methodologies applied in the empirically oriented accounting literature.^a

Reference	Methodological aspect General category Methodology	Data collection									Data analysis			
		Dialogue			Documents				Observations			Institutional	Strategic conduct	
		Interviews	conversations	Interviewee feedback	Case specific Documents	Public material	Press/ Newspapers	Historical material	Secondary data	Meetings	Training sessions			Work activities
Capps, Hopper, Mouritsen, Cooper & Lowe	1989	x			x					x		x		1
Ouibrahim & Scapens	1989	120		x	x								1	
Laughlin	1990					x			(x)				1	
Roberts	1990													1
Macintosh & Scapens	1991									x			1	
Lawrenson	1992						x						1	
Scapens & Roberts	1993													1
Mouritsen & Skaerback	1995	x			x	x		x					1	
Kirk & Mouritsen	1996	x												1
Dirsmith, Heian & Covaleski	1997	180	x	x	x			x		x				1
Lawrence & Doolin	1997	12	x					x					1	
Lawrence, Alam, Northcott & Lowe	1997	x	x	x	x					x			1	
Granlund, Lukka & Mouritsen	1998				x								1	
Collier	2001	52			x	x				x		x	1	
Granlund	2001	38	20		x							x	1	
Ahrens & Chapman	2002	x	x	x	x					x	x	x		1
Buhr	2002	4			x	x	x						1	
Cowton & Dopson	2002	x		x	x	x				x				1
Granlund	2002	x			x			x		x		x	1	
Caglio	2003	x	x		x								1	
Granlund	2003	38	20		x			x				x	1	
Saravanamuthu & Tinker	2003	x	x		x							x		1
Scheytt, Soin & Metz	2003													
Seal	2003	x											1	
Alam, Lawrence & Nandan	2004	18		x	x	x							1	
Seal, Berry & Cullen	2004	x	x	x	x			x				x		1
Barrett, Cooper & Jamal	2005	38	x		x					2	2	5		1
Conrad	2005	38			x	x	x						1	
Hassan	2005	x			x	x						x	1	
Jack	2005	x						x					1	
Uddin & Tsamenyi	2005	x	x		x	x	x						1	
Busco, Riccaboni & Scapens	2006	90+	x							x	x	x	1	
Hyvönen, Järvinen & Pellinen	2006	13	x		x								1	
Joseph	2006							x					1	
Tollington	2006				x	x							1	
Jack	2007	20			x	x	x	x					1	
Free	2008	65+			x	x	x	x		5				1
Gurd	2008	x	x		x					x			1	
Moilanen	2008	12			x			x						1
Jayasinghe & Thomas	2009	28			x	x						x		1
Fay, Introna & Puyou	2010	35	x										1	
Hassan	2010	27			x	x						x	1	
Total No.		33	15	7	29	14	10	7	3	11	3	13	28	13

^a The papers by Roberts (1990) and Scapens and Roberts (1993) do not include any descriptions of research methods, even though their findings sections indicate that multiple data sources were used.

Table 7
Within-network discussion circles.

Topics/pioneering papers	Key aspects of topics	Participants in discussion circles
<i>i. Characterizations of structures</i> Roberts and Scapens (1985)	Elaborate on accounting as structure through illuminating the different characters that such structures may have	Ouibrahim and Scapens (1989), Scapens and Roberts (1993), and Jayasinghe and Thomas (2009)
<i>ii. Changes in structural dimensions</i> Macintosh and Scapens (1990, 1991)	Focus on understanding how and why structures may change, often involving change from a 'non-accounting structure' to an 'accounting structure'	Lawrence et al. (1997), Lawrence and Doolin (1997), Parker and Gould (1999), and Gurd (2008)
<i>iii. Accounting and continuity/resistance</i> Scapens and Roberts (1993)	Focus on understanding how and why accounting practices are reproduced and/or new accounting practices are resisted	Granlund (2001), Jack (2005), and Hyvönen et al. (2006)
<i>iv. Systems of accountability</i> Roberts and Scapens (1985)	Elaboration of how accounting is or becomes implicated in various forms of accountability	Roberts (1990) and Ahrens and Chapman (2002, 2007)
<i>v. Accounting as abstract/expert systems</i> Jones and Dugdale (2001)	Draws upon Giddens' more recent work, with a particular focus on how accounting may work as an expert system	Seal et al. (2004), Jack and Kholeif (2007), and Moilanen (2008)
<i>vi. Critical analysis of accounting literature</i> Boland (1993)	Critical discussion of how ST more generally, or specific ST concepts, have been applied in accounting research	Scapens and Macintosh (1996), Boland (1996), Cowton and Dopson (2002), and Englund and Gerdin (2008)

fundamental differences as to how ST has been applied more generally (Table 4), and how structuration processes have been studied empirically (Table 5). This said, however, we also find that there is a general agreement on what represents the core notions and assumptions of ST. In this section, we analyze how accounting researchers have worked as a collective to capitalize on these ideas. Specifically, we will examine communication patterns within the ST-oriented accounting literature, starting with a quantitatively oriented analysis of citations which is then followed by a more qualitative one. Table 6 shows the extent to which individual accounting papers have cited previous work in the field.

As a proxy of network centrality, we use adapted measures from Hesford et al. (2007) of indegree and outdegree centrality. Indegree centrality is the number of citations of the paper in question, while outdegree centrality is the number of citations of others in the paper in question. A high indegree score for a paper is thus a crude indicator of within-network influence in the sense that it is frequently cited. A high outdegree score is a proxy of the degree to which individual accounting papers try to pull together ideas from the previous literature.

As suggested by the summary line at the bottom of Table 6, the early papers written by Macintosh, Scapens and Roberts show a very high indegree centrality score. In fact, they are the authors of seven of the most cited papers, each having ten or more citations per paper. The table also shows that over 80% of all papers reviewed cite one or more of these introductory papers. Regarding outdegree centrality, i.e. the extent to which individual papers explicitly build on and synthesize the previous literature, we see that very few papers (14%) cite ten or more previous works (e.g. Englund and Gerdin, 2008; Jack and Kholeif, 2008; Jayasinghe and Thomas, 2009). The table also shows that more than half of the papers published from 2001 and onwards cite five or less previous works.

As a complement to this quantitative analysis of the accounting literature, we also performed a more qualitative one where we identified discussion circles (Lukka and Granlund, 2002). More precisely, we wanted to get a picture of the extent to which researchers have 'clustered' around particular research topics, and the extent to which citations were made to clarify how the paper in question contributed to these strands of the literature. Accordingly, papers that cite previous work only to position the study as ST-oriented more generally, or to define particular ST concepts, were not considered as participants in the discussion circles identified.

The emerging taxonomy of discussion circles is presented in Table 7. Note that not all papers in each discussion circle cite all previous work in that particular circle. Note also that there may be yet more studies which elaborate on one or more of the topics in the table. Again, however, only studies which explicitly cite and build on previous work in the particular discussion circle are listed.

The table suggests that several discussion circles have emerged over the years. Some draw heavily on the introductory papers (Macintosh and Scapens, 1990, 1991; Roberts and Scapens, 1985) and elaborate on the different characters and influences that accounting structures may have (e.g. Ouibrahim and Scapens, 1989) and how they may be changed (e.g. Gurd, 2008; Lawrence et al., 1997). Yet other studies are focused on understanding structural reproduction (Jack, 2005), including studies of resistance to formal accounting change (e.g. Granlund, 2001; Scapens and Roberts, 1993).

The table also indicates that there are discussion circles that focus on specific 'applications' or 'uses' of accounting. One stream has examined how accounting may be(come) implicated in systems of accountability (Roberts, 1990; Ahrens and Chapman, 2002), while another has focused on theorizing accounting as an 'expert system' (e.g. Moilanen, 2008; Seal et al., 2004). Echoing the finding in Table 4, there is also a cluster of papers whose primary aim is to (critically) discuss how to understand and use ST within accounting research (e.g. Boland, 1993, 1996; Englund and Gerdin, 2008).

Overall then, our analysis of within-network citations and discussion circles suggests several interesting patterns. First of all, our proxy of indegree centrality indicates that a handful of papers have proved very important for the literature as a whole. In fact, not only have they been important for introducing ST to accounting researchers, but also for setting the agenda for several of the discussion circles that have emerged over the years (see [Table 7](#)).

Furthermore, we find that several important subjects from an accounting perspective have been covered. As mentioned above, for example, [Roberts and Scapens \(1985\)](#) and followers were pioneers in respect of focusing more on systems of accountability than on the accounting systems per se. And these early studies of accountability have proven important for a wider accounting audience (see e.g. the recent discussion in [Messner, 2009](#)). In a similar vein, there are discussion circles which have specifically explored sources of accounting continuity and change, thereby contributing to the larger literature on these topics.

However, the results in [Table 6](#) also point at potential problems in the ST literature. For example, our measure of outdegree centrality suggests that there are remarkably few citations to previous ST-oriented research in many studies. Again, a majority of papers cite five or less previous works, and many of these citations are primarily made to position the study as ST-oriented and/or to define core ST concepts. In other words, quite many papers do not acknowledge, let alone explicitly contribute to previous insights made in the area.

Indeed, there are several factors that may explain this pattern. For example, the low level of outdegree centrality can to some extent be explained by the fairly large 'smash and grab' application of ST (see [Table 4](#)), i.e. where scholars certainly rely heavily on Giddens in their analyses, but research contributions are directed towards other accounting literatures. We also see examples of more or less pioneering works where authors introduce new ST concepts such as modernity ([Jones and Dugdale, 2001](#); [Seal, 2003](#)) of which there, for obvious reasons, is limited knowledge in the preexisting accounting literature. Above, we have also noted that some studies combine ST with other theoretical frameworks. However, also after taking these factors into account, the within-network knowledge cumulativeness seems low for the literature as a whole (although, indeed, there are notable exceptions), which would seem to resonate with [Hopwood's \(2009\)](#) more general concern that there has been too little 'cumulative patterns of research' in the accounting literature.

Also, a closer look at the discussion circles identified in [Table 7](#) suggests that, while again the topics identified are highly relevant to an accounting audience, we find that the circles as such are very small. Our citation analysis also shows that there is very limited transfer of knowledge *between* discussion circles, despite the fact that several topics can be considered to be closely related. Next, we will discuss the implications of these and our other findings concerning how the accounting community has applied Giddens' theory of structuration in order to better understand accounting as a social practice.

5. Discussion and directions for the future

As suggested by the title, this paper discusses extant application(s) and future applicability of Giddens' theory of structuration in the accounting literature. More specifically, the purposes are: (i) to evaluate how this literature has applied key ST concepts and assumptions both theoretically and methodologically, and analyze to what extent the accounting community has worked as a collective to capitalize on these core ideas and (ii) to point out relatively unexplored potentials in the accounting-oriented ST literature and, based on these, identify opportunities for future research.

On the whole, our review suggests both major advancements and limitations/underexplored areas of this literature. Below, we will focus mainly on the latter as these suggest opportunities for future scholarly effort. However, if we start out from the advancements, we firstly find that the introduction of ST contributed significantly to challenge the functionalist assumptions underpinning mainstream research (cf. [Baxter and Chua, 2003, 2006](#); [Englund et al., 2011](#)). Specifically, as suggested by the frequent citation of core ST concepts and assumptions (see left-hand side of [Table 3](#)), and by the 'general application' category of ST use ([Table 4](#)), accounting researchers have successfully contributed to relocate our focus from the 'inherent and functional' features of accounting systems as such to the social structures that enable and constrain how we interpret and mobilize these systems (cf. [Roberts and Scapens', 1985](#), notion of systems of accountability). Importantly, however, we also find that ST has informed other streams of alternative research. For example, the 'smash and grab' and 'theory combination' applications of ST ([Table 4](#)) suggest that ST has provided important bits and pieces to other theoretical perspectives. As noted above, in particular the notion of duality of structure and related concepts such as knowledgeable agency and dialectic of control have added important ideas to traditionally more structure-centred theories such as new-institutional theory and critical theory (see e.g. [Collier, 2001](#); [Mouritsen and Skaerbaek, 1995](#)).

Our analysis of discussion circles ([Table 7](#)) also indicates that the ST-oriented literature has successfully taken part in, or even initiated, a number of core research streams in the accounting field. For example, the notion of (systems of) accountability, which was introduced by [Roberts and Scapens \(1985\)](#) has attracted interest far beyond the ST-oriented literature (see e.g. [Messner, 2009](#)). As suggested by [Tables 3 and 7](#), it is also evident that the accounting-oriented ST literature has addressed the key question of how to understand accounting continuity and change, respectively, as a non-deterministic interplay between extant social structures and reflexive agency ([Englund and Gerdin, 2011](#); [Englund et al., 2011](#), see also discussion below).

However, a more critical reading of the ST-based accounting literature suggests several limitations/opportunities for future scholarly work as well. One such limitation is that *accounting researchers have not really worked as a collective to develop a structurationist understanding of accounting practices*. As suggested above, most studies indeed cite the previous ST-oriented accounting literature, in particular the introductory work by Roberts, Scapens, Macintosh and Boland. However,

remarkably few scholars explicitly build on and discuss their contributions in relation to this literature, thus limiting the potential for cumulative inquiry and knowledge attainment. Indeed and again, there are several good reasons why this is the case in some studies (e.g. some 'smash and grab' application of ST where authors primarily seek to contribute to other fields). Nevertheless, it seems fair to say that the literature lacks communication, not only between the discussion circles identified, but also within them.

It is of course difficult to have a strong opinion about the long-term consequences of such communication structures. However, it seems reasonable to assume that if we as researchers build on and clearly elaborate our contributions in relation to the extant ST literature, it would take the literature one step further. The premise is that such explicit and comprehensive consideration of previous works would stimulate more (critical) discussions about insights made, and also enhance cross-circle communication.

A second and closely related limitation is that *accounting researchers have remained largely uncritical of ST as a theory*. As indicated by [Tables 4 and 7](#), the literature as a whole can be characterized as comprising a number of quite small and diffuse streams of research that some 25 years after the landmark study of [Roberts and Scapens \(1985\)](#), consists of many studies that more or less passively adopt one or more of Giddens' core ideas (although notable exceptions exist). Indeed, and as argued above, the common 'general' and 'selective' applications of ST are not in themselves problematic. As it is today, however, we believe that (too) many studies claim that their major contribution is to show that ST 'can be usefully applied' to a particular accounting phenomenon. While this certainly is a reasonable research strategy when introducing a new framework into an existing field of research (cf. the 'introducing papers' referred to above), we believe that there is an upper limit to these kinds of works. The premise is that an overly passive use of Giddens' ideas risks in the long run to result in that new contexts and accounting phenomena are being added to a long list, but few new understandings/explanations emerge.

We also note that, in comparison with closely related fields, we find substantially fewer (if any) attempts to develop more phenomenon-specific adaptations of ST. In the Information Systems (IS) literature, for instance, a number of studies have sought to extend ST to incorporate information technology (cf. 'Adaptive Structuration Theory' developed by [DeSanctis and Poole, 1994](#), and the idea of 'Duality of Technology' launched by [Orlikowski, 1992](#)). There are also interesting examples in the management literature where scholars such as [Barley \(1986\)](#) and [Barley and Tolbert \(1997\)](#) have sought to bring the literature forward through advancements in research method and analysis. Indeed, this type of developments may be considered an overly ambitious task. However, we do suggest that we as accounting scholars should, more than is typically the case today (but see e.g. [Coad and Herbert, 2009](#); [Dillard and Roslender, 2011](#); [Jones and Dugdale \(2001\)](#) and [Jack and Kholeif \(2007\)](#), for interesting exceptions), adopt a more critical, yet sympathetic, stance towards ST. One promising way of doing this is to increase the number of studies in categories 'iv' and 'v' in [Table 4](#), i.e. studies which use other (social) theories both to identify potential limitations of ST and to highlight opportunities for theoretical extension. Importantly, however, such future scholarly efforts should explicitly identify the nature and the extent of the difference(s) between the positions taken in the individual accounting study and those of Giddens.

A third limitation of the ST literature is that *accounting researchers have not developed enough mutual knowledge of how to interpret ST as a theory*. As suggested in [Section 4.1](#), we find that accounting as such has been conceptualized in fundamentally different ways, namely as a social structure and as an artefact (e.g. computerized system, formal written rules and inscriptions/reports). We also find a variety in the ways that the relationships between these have been conceptualized (cf. the debates referred to above on how to understand the notion of duality of structure).

True, variation in terms of how accounting is conceptualized and modeled is in itself not necessarily a problem. On the contrary, as will be argued below, we think that there are highly interesting, yet largely unexplored dynamics between accounting as structure and artefact. However, we do propose that when specific ST concepts are applied in very different, even contradictory ways, this may negatively affect the progression of the literature. In particular, we find it problematic when the concept of social structure has been translated to denote both the cognitive templates which actors draw upon in the production and reproduction of accounting practice (see e.g. [Conrad, 2005](#); [Lawrence et al., 1997](#)) and as an artefact such as formal written accounting rules or systems (see e.g. [Tollington, 2006](#)).

As we see it, this latter application of the structure concept may be controversial as it could be argued that such humanization of artefacts is inconsistent with ST as such. As [Giddens \(1984\)](#) proposes, social structure should denote the general and guiding principles *which are out of time and space, subject-less and only virtually existent* (see also [Section 2](#)). In other words, we should avoid talking about accounting structures as being *inherent* or *embodied* in accounting artefacts as, again, structure is virtual, existing only in its instantiations in daily accounting practice. Along the same lines, we argue that the conceptualization of an accounting system as a modality of structuration (cf. [Caglio, 2003](#)) is problematic as Giddens' notion of modality refers to interpretative schemes and norms of conduct "incorporated within actors' stock of knowledge [...] which actors draw upon in the production and reproduction of interaction" (1984, p. 29). That is, modalities denote what *generates* (accounting) practices, a capability which a physical artefact cannot have from a ST point of view (see also the discussion about accounting as modalities in [Englund and Gerdin, 2008](#)).

Importantly, however, this does not imply that accounting artefacts are less important in the study of structuration processes. On the contrary, as shown by a number of accounting scholars, for example, there is an interesting interplay between accounting as a social structure and accounting as an information system ([Ahrens and Chapman, 2002](#); [Alam et al., 2004](#); [Conrad and Guven Uslu, 2011](#); [Gurd, 2008](#)). However, there is no *systematic* investigation of *how* different accounting artefacts are (become) implicated in organizational (re)action. Accordingly, while [Scapens and Roberts' \(1993\)](#) early critique

that studies on organizational change usually suffered from a focus on content of the change to neglect of its context and process was essentially well-founded, we propose that future research should broaden the focus to also include the particular *contents* of the accounting artefacts and/or practices studied.

Again, however, such research agenda means neither that particular accounting systems (or other artefacts) embody a number of 'objective' and 'fixed' structural characteristics, nor does it imply that there are universal empirical patterns 'out there' waiting to be revealed. However, we do suggest that different systems, as any physical environment and artefact, provide social spaces which may both constrain and enable human action in different ways (cf. [Orlikowski, 2007](#)). And we need more systematic knowledge about how various categories of actors (re-)interpret different accounting systems across time.

A fourth limitation of the literature is that *accounting researchers have not yet explored the full potential of ST*. As suggested above, one underexplored area concerns the many sources of social change as identified by Giddens (see [Table 3](#)). In particular, this applies to more endogenously oriented sources of change (but see e.g. [Ahrens and Chapman, 2002](#), and also the discussion in [Englund and Gerdin, 2011](#)). Again, only one study ([Lawrence et al., 1997](#)) explicitly explores the interrelationships between the four major sources of social change suggested by Giddens (1990b), i.e. change generated by the inherent indeterminacy of system reproduction, clashes/contradictions between social systems, reflexive appropriation, and changes in resource access.

Arguably, further exploration of these sources of change is important for several reasons. First, such an approach would reduce the number of studies which depict particular issues and events (e.g. financial downturns and changes in ownership) as critical per se. Again, from a ST perspective, any 'jolt' must be constructed as critical by knowledgeable agents for social change to occur. And, our knowledge about how different types of accounting information may contribute to shape actors' perception of certain issues and events is limited.

Second, the consideration of several sources of endogenous social change would allow us to more systematically explore how, when and why these sources may interplay over time. In other words, more of a focus on the daily (re)production of accounting practices (including a focus on human agency) would allow us to more fully understand "the essentially transformational character of all human action, even in its most utterly routinized form" ([Giddens, 1984](#), p. 117). Again, as suggested in [Table 5](#), surprisingly few scholars have undertaken such analyses of strategic conduct, despite that the idea of duality of structure constitutes a central and distinguishing characteristic of ST (but see the conceptual framework developed by [Englund and Gerdin, 2011](#)).

Another underexplored area concerns how accounting contributes to link situated practices to features of overall societies (cf. [Giddens, 1984](#)). That is, although a core assumption of the ST-oriented literature is that accounting systems are important 'binders' of time and space (e.g. [Jones and Dugdale, 2001](#); [Lawrence et al., 1997](#); [Macintosh and Scapens, 1991](#); [Roberts and Scapens, 1985](#)), few attempts have been made to explore the processes through which accounting practices spread away from their immediate contexts—both spatially and temporally. In fact, the notions proposed by [Giddens \(1984\)](#) to explore such processes, such as for example 'time-space distanciation' and, above all, 'social integration' and 'system integration', have hardly been mobilized at all in the accounting literature (but see [Roberts and Scapens, 1985](#)).

A fifth and final limitation is that *accounting researchers have not sufficiently enough discussed how to apply ST in empirical accounting research*. That is, it seems that the ST literature generally lacks in-depth discussions about *how* to study structuration processes (but see e.g. [Capps et al., 1989](#); [Seal et al., 2004](#)). Indeed, [Giddens' \(1984\)](#) own writings imply that it is hard to be 'overly critical' regarding the use of certain methodologies. However, we do propose that future research should more explicitly discuss appropriate methods for data collection and analysis. The premise is that different types of data have very different strengths and limitations. For example, the dominating forms—interviews and archival material—are indispensable when we seek to retrospectively study structuration processes (see e.g. [Lawrenson, 1992](#)) stretching over long time-spans (e.g. [Jack, 2005](#)). However, such methods may be far from ideal when studying ongoing structuration. The premise is that all reproduction of social practices is *situated within certain time-space boundaries* (see [Giddens, 1984](#), for a discussion of this). Indeed, interviews as such are, of course, also situated in a specific time-space, but the information that the researcher tries to attain typically refers to issues and events situated in other time-space contexts. And, as suggested by [Collier \(2001\)](#), such recapitulations always run the risk of providing agents' espoused theories rather than theories in use. Or as Giddens (1984, p. 4) himself observes "the reasons actors offer discursively for what they do may diverge from the rationalization of action as actually involved in the stream of conduct of those actors."

This dilemma was in fact observed in many of the early studies like [Roberts and Scapens \(1985\)](#), [Capps et al. \(1989\)](#) and [Boland \(1993\)](#). As [Capps et al. \(1989, p. 229\)](#) argue, "Giddens' approach emphasizes the need to observe actions rather than relying upon descriptions by involved parties." However, as noted by [Englund and Gerdin \(2008\)](#) such a proposed emphasis on observational data for capturing in situ structuration processes per se, does not exclude other sources of data. On the contrary, "while participative observation is crucial for the identification of recurrent management accounting action, the recurrent (inter-) actions themselves often reveal very little about the non-situated and virtual principles that guide this action. [...] Accordingly, we also need to use various types of non-observational sources of data such as interviews, training manuals and minutes in order to seek actors' *interpretations/explanations* of their interactions" (2008, pp. 1131–1132, emphasis in original).

Furthermore, drawing upon [Barley and Tolbert \(1997\)](#), it could be argued that multiple sources of data are crucial for determining whether an observed change in patterns of (inter)action implies structural change, or simply is the result of actors interpreting and applying a particular unchanged (accounting) structure to a new situation or context. Again however,

interviews and documents are not only valuable for corroborating evidence from other sources such as direct observations (cf. Yin, 1994), but may also provide *additional* insights into the structuration process as such.

Importantly though, we also think that future scholarly effort should not only, more than is typically the case today, give an account of and discuss their methods for data collection, but also elaborate on what type of data are needed for the type of analysis undertaken. As our review of the accounting literature shows (see Section 4.3), very few studies pick up on Giddens' key idea about methodological bracketing and explicitly discuss its implications for data collection and analysis (but see e.g. Englund and Gerdin, 2008; Englund et al., 2011; Scapens and Macintosh, 1996). Arguably, this may explain the prominence of interviews and case-specific documents as primary sources of data despite that it has been questioned whether such data can 'capture' structuration processes as such (see e.g. Capps et al., 1989; Collier, 2001; Englund and Gerdin, 2008). An important task in future research is thus to pinpoint key differences between an institutional analysis and one focused on strategic conduct, and explicitly discuss the appropriate fit between the type of analysis performed and type of data needed.

6. Conclusion

The purposes of this study are to in a critical, yet sympathetic way, explore how accounting scholars have drawn upon Giddens' theory of structuration and, based on this, suggest avenues for future research. Unlike previous reviews of this literature—which have typically focused on particular issues/findings (see e.g. Ahrens and Chapman, 2007; Baxter and Chua, 2003; Englund et al., 2011; Meira et al., 2010)—this paper thus sets out to specifically discuss *applications* and *applicability* of ST as a framework for understanding accounting practices as an organizational, social, and political phenomenon.

Overall, we find that not only has ST contributed to challenge assumptions of 'inherent and functional' features of accounting systems per se characterizing mainstream research, but also to develop other alternative theoretical perspectives, including new-institutional theory and critical theory. In particular, the non-deterministic view on accounting continuity and change implied by the key notion of duality of structure and related concepts such as knowledgeable agency, power and dialectic of control, have proved useful (see e.g. Collier, 2001; Mouritsen and Skaerbaek, 1995; Saravanamuthu and Tinker, 2003).

However, our review also suggests several limitations. These include that the accounting community has not really worked as a collective to develop a structurationist understanding of accounting practices, and that most researchers remain largely uncritical to ST as a theory. We also find that neither have we developed a mutual understanding of how to interpret ST as a theory (i.e. there are conceptual unclarities and even inconsistencies), nor how to apply ST methodologically in empirical research. However, based on these limitations, and the identification of a number of 'black spots', we also conclude that we have not yet explored the full potential of ST. On the contrary, we strongly believe that additional theoretical and empirical advancements are possible through further careful, and critical, applications of Giddens' works. In fact, the accounting discipline has proud traditions to defend insofar as the pioneering works of Boland, Macintosh, Roberts and Scapens have been acknowledged by (and also reprinted in) the more general sociological literature on Giddens (Bryant and Jary, 1997, 2001). So the question is perhaps not whether, but when and how, accounting scholars will follow the lead of the IS and management literatures and develop phenomenon specific adaptations of ST, or even take the next step to develop ST per se.

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