Information vs knowledge

Corporate accountability in environmental, social, and governance issues

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Abstract

Purpose – The purpose of this paper is to offer a new and more elaborate view of the relationship between information and knowledge in accountability settings.

Design/methodology/approach – The study investigates how knowledge is accomplished when accountability is demanded. The "knowing-in-practice" perspective (Lave, 1988; Orlikowski, 2002; Pentland, 1992) is introduced to theorise knowledge as the ability to purposefully go on with practice and information as a resource that may contribute to this knowledge. Empirically, the study investigates Nordic investors' engagement with companies addressing environmental, social, and governance issues.

Findings – The findings illustrate how information may contribute to knowledge in an accountability setting. Whether or not the information contributes to knowledge in the accountability setting depends on the information's origin, convergence with other accounts, and use in contradicting and disproving executives' information. The analysis also shows how knowledge in accountability settings may be achieved without information – for example, by enacting theories.

Research limitations/implications – The study suggests that research should more carefully distinguish between knowledge and information. According to the perspective used here, knowledge is the ability to purposefully go on with practice. Information is one of many resources that can contribute to knowledge.

Practical implications – This study provides insight into the relationship between accounting systems and the practice of demanding accountability. Such understanding is valuable when designing accounts-based governance and civil regulation, such as for addressing sustainability issues, as in this study.

Originality/value – The study challenges the view of knowledge as a representation or factual commodity, and provides a new and more elaborate view of the relationship between information and knowledge in accountability settings by introducing the knowing-in-practice perspective to the accounting literature.

Keywords Sustainability, Knowledge, Accountability, Engagement, Information, ESG

Paper type Research paper

Introduction

This study suggests that we should more carefully distinguish between knowledge and information. It proposes a new perspective on the relationship between information and knowledge in accountability settings in response to a body of work that has treated information as knowledge (i.e. the power to act) and information as control.

The literature argues that, because accounting information provides visibility (Burchell *et al.*, 1980; Miller and O'Leary, 1987; Robson, 1992, 1994; Spence and Rinaldi, 2014), it thereby allows the receiver to "know" what is being reported (Roberts *et al.*, 2006; Roberts and Scapens, 1985). While the accounting literature underscores that any accounting information is flawed – it highlights certain issues and conceals others – it does not question that information facilitates the demand for accountability and enables control. Accounting systems, and the information they produce, are thus assumed to facilitate accountability – the giving and demanding of reasons for conduct (Roberts and Scapens, 1985).

Accounting, Auditing & Accountability Journal
Vol. 31 No. 2, 2018
pp. 586-607
Emerald Publishing Limited
0951-3574
DOI 10.1108/AAAJ-01-2013-1198

The idea that accounting information enables accountability has also informed practice. In "civil regulation", a common form of regulation, civil society actors employ information to exert pressure on business (Kolk *et al.*, 2008). Rather than directly regulating corporate performance, the state regulates the accounting system and provision of accounts. The information should, in turn, enable stakeholders to demand accountability. In such forms of regulation, it is assumed that accountability will take place based on delivered accounts and that corporate conduct is regulated because of it.

A range of empirical studies has studied such regulation in practice, finding, particularly regarding sustainability, that stakeholders may be informed of performance through corporate accounts but may not demand accountability (e.g. Kolk *et al.*, 2008; O'Dwyer *et al.*, 2005; Solomon *et al.*, 2013). These studies demonstrate that possessing corporate accounts as information does not necessarily lead stakeholders to demand accountability. Consequently, accountability might not occur despite the mandatory accounting systems in place.

This study challenges the view of representation and factual commodity as knowledge that enables control by clearly distinguishing between information and knowledge. To this end, the study introduces the "knowing-in-practice" perspective (Lave, 1988; Orlikowski, 2002; Pentland, 1992) to the accounting literature. This perspective theorises knowledge as purposeful performance. While information may take the form of representation or factual commodity, knowledge is a way of acting and a contextual achievement. This perspective instructs us to study how knowledge is accomplished and examine the resources, whether information or other kinds, drawn upon to accomplish it.

Empirically, this study investigates Nordic institutional investors' engagement with companies addressing environmental, social, and governance (ESG) issues. This is a case of accounts-based governance where regulators rely on accounting systems and stakeholders' use of accounts to regulate companies' behaviour. Combining this case and the theoretical perspective of knowing-in-practice, this work investigates how investors accomplish knowledge when demanding corporate accountability for ESG issues.

The findings highlight the distinction between information and knowledge, and exemplify how information may contribute to knowledge in accountability settings. The information's origin, convergence with other accounts, and use in contradicting and disproving executives' information are all important aspects. To understand whether information enables the investor to hold the company accountable, we need to consider these aspects. The findings also show how knowledge in accountability settings may be achieved without the use of information, for example, by enacting theories.

The rest of the paper is organised as follows. The next section discusses the literature and the knowing-in-practice perspective as well as its contribution to accounting and accountability research. Then, background on the Nordic investors and their accountability practice targeting ESG issues is provided. The next two sections describe the study's methods and how the knowing-in-practice perspective informs the analytical approach. In the three sections that follow, I analyse how investors accomplish knowledge when demanding corporate accountability in ESG issues. The paper ends by, first, discussing what we can learn from this study about the relationship between corporate accounts as information and the demand for accountability and, second, offering conclusions.

The relationship between accounting information and knowledge in accountability settings

In both research and practice, it is commonly assumed that reported accounts enable accountability. When organisations or individuals account for their performance, their accounts allow external parties to monitor performance and demand accountability.

Information should thus be disseminated and accessible in order to enable an evaluation of the accountable's performance (Shaoul *et al.*, 2012). Based on the idea that accounts enable accountability, accounting systems are commonly used for accounts-based governance. Roberts (2009) calls this "transparency as a regulatory instrument". While the accounting literature underscores that any transparency from reported accounts is illusory, it seldom questions the notion that accounting facilitates accountability.

The accounting literature's perspective on accounting information, knowledge, and accountability is shaped by at least three kinds of theoretical influence. First, as Power (1991) shows, our view of accountability is influenced by the agent-principal thinking (e.g. Jensen and Meckling, 1976), central to which is the idea that agents know more about the nature of their own actions than principals do[1], causing information asymmetry between them. The problem is that information is hidden from the principal; reporting makes what is hidden visible to the principal. Power (1991), like others in the accounting literature, underscores that accounting information is flawed, as it highlights certain issues and conceals others; however, he does not question the fundamental assumption that the agent's reporting and information enable and facilitate demand for accountability.

A second influence on the accounting literature is the work of Foucault (1979). This stream of accounting studies emphasises that accounts allow for patterns or fields of visibility that provide a basis for organisational rewards and sanctions (Burchell *et al.*, 1980). Roberts *et al.* (2006) argue that government is intrinsically dependent upon particular ways of knowing, and that knowledge/power is an indivisible nexus. Accounts of corporate activities are a source of discipline because they allow others to know corporate performance. The fact that others may know your performance induces self-discipline. This use of Foucault in accounting studies, and particularly the power/knowledge concept, has been subject to debate (cf. Armstrong, 1994; Armstrong, 2015; Arnold, 1998; Hoskin, 1994; Vollmer, 2016). Armstrong (1994, p. 40) argues that the existence of a regime of power/knowledge may not be "sufficient to ensure managerial freedom to act on the information which it generated". Armstrong (1994) thus underlines that the threat of material consequences is important for producing discipline. This aspect, he argues, is not sufficiently taken into account in Foucauldian accounting studies.

A third influence, also partly informed by Foucault (1979), is the "action at a distance" and inscriptions literature (cf. Robson, 1992, 1994). This body of literature also views accounting as the provision of visibility and thus knowledge that offers a potential for power or action. Moreover, it argues that this kind of acting upon individuals and processes is particularly likely to occur when operating at a distance. For this to occur, Robson (1992) argues, citing Latour (1988), that accounting inscriptions must have a stable relation between the inscription and the context to which it refers. Robson (1992) notes that the translations can be challenged and that the network between the actors and the context they wish to influence may be broken. In general, however, Robson (1992, 1994) argues that accounting displays the necessary characteristics of being mobile, stable, and combinable and thus holds great potential for acting at a distance.

Thus, the last two perspectives see information as knowledge and knowledge as power to act. Robson (1994) argues that power is the consequence of holding and controlling accounting inscriptions. Roberts *et al.* (2006) claim that we cannot separate information from control, referring to Foucault's (1979) power/knowledge nexus. The view of the possession of information as the power to act is not necessarily empirically supported. A range of studies, particularly in sustainability accounting research, has illustrated how accounting systems and available accounting information do not enable discipline or control over conduct. Spence and Rinaldi (2014), using Foucault's (1979) work on governmentality, find that managers were frustrated with accounting representations they viewed as inadequate or subjective assessments of what they had aimed to measure. In other cases, it is the demand for accountability rather than the adequacy of accounting information that constitutes the weak link in accounts-based governance (e.g. Asdal, 2011; Kolk *et al.*, 2008; Solomon *et al.*, 2013; Unerman and Bennett, 2004). For example, O'Dwyer *et al.* (2005) find that being provided with the desired information did not enable Irish NGOs to influence corporate practices. Concerns about NGO marginalisation, their fragmented nature, their lack of resources due to small memberships, and corporate unwillingness to engage in dialogue with them were all reasons why NGOs considered it difficult to influence companies. Cooper and Owen (2007) even conclude that it is fallacious to imagine that accountability to stakeholders can be established through reporting reform alone.

Thus, empirical studies show that accounting information and the visibility it allows do not automatically provide external or distant parties with the knowledge that would enable them to demand accountability. Therefore, this study proposes a new explanation of the relationship between knowledge and information in an accountability setting by introducing the knowing-in-practice perspective. Many researchers have elaborated on Giddens' (1984) view of human knowledgeability as the ability to "go on" within the routines of social life. This view of knowledge, rooted in Giddens and others such as Ryle (1949), is promoted by, for example, Lave (1988), Pentland (1992), and Orlikowski (2002). Knowledge for these authors is the capacity to perform or act purposefully in particular circumstances. In this view, knowledge is not a set of abstract representations, a factual commodity that can be traded, or something universal. Rather than viewing the processing, internalising, and storing of information as a primary basis for knowledge, these authors view knowledge as a result of acting in the world. Thus, the knowing-in-practice literature does not assume that knowledge will involve information or visibility.

The work by Lave (1988) illustrates the difference in perspective. Whereas the previous literature views numbers as providing knowledge of what it refers to, Lave (1988) instead studies numbers as math-in-practice. From her perspective, knowledge is achieved by acting with the numbers in contextually appropriate ways. Certainly, one's memory or pieces of information on a screen are resources one can draw upon to act knowledgeably, but they are not the only, or even sufficient, resources. Moreover, the use of these resources will depend on the practice context within which they are used. In Lave's (1988) case, the math and use of numbers were structured by the context of grocery shopping in the supermarket. Similarly, we can expect the use of accounting information in our case to be structured by the context of corporate accountability in ESG issues.

The knowing-in-practice literature views knowledge as the power to accomplish purposeful actions. Consequently, it shares a performative view of knowledge with the Foucault-inspired accounting literature[2]. There are subtle differences, however. In the knowing-in-practice literature, knowledge is not the potential to act but is contingent on actual performance. Moreover, knowledge is contextual and is always relative to a given situation (Pentland, 1992).

The case of investors, ESG analysts, and company engagement

During the first decade of the twenty-first century, the number of investors concerned with wider aspects of company performance started to grow, in a movement known as "socially responsible investment" ((SRI); Arjaliès, 2010; Bengtsson, 2008). The ethical or ESG aspects of companies' performance no longer concerned only specialized ethical funds but also involved conventional investors. An important actor in the SRI-mainstreaming movement is the set of principles of responsible investment (PRI), backed by the United Nations (UN). The PRI represent one of several UN initiatives aiming to regulate social responsibility without, or in addition to, states. The principles are not legally binding, constituting a form of "soft law" or "soft regulation" (Mörth, 2004; Sahlin-Andersson, 2006). The PRI regulates in two ways. First, it ensures that those investors who have signed the PRI will scrutinise companies' practices and thereby regulate corporate practices without or in addition to national law, a form of civil regulation (Kolk *et al.*, 2008). Second, the PRI principles also constitute a soft regulation of investor practices, whereby PRI signatories who violate them can be criticised or shamed into compliance.

Concurrent with the mainstreaming of responsible investment, a more interventionist form of corporate governance has become mainstream investor practice (Hendry *et al.*, 2007). This interventionist corporate governance movement most likely influenced the development of responsible investment practices. One example is the inclusion of governance, the "G" in "ESG". Investors should monitor not only social and environmental issues but also companies' governance structures. Another example is the strategy of directly engaging with companies through voting or dialogue, in contrast to the common responsible investment strategy of simply buying and selling shares. When the PRI was launched in 2006, one of its principles was that investors should be active owners. Based on industry standards such as the PRI, investors developed policies emphasising shareholder engagement and dialogue as the basis for responsible investment. Investors started to prioritise "company engagement" as a tool for promoting sound social and environmental company practices (Bengtsson, 2008).

Historically, the investors observed in this study had mainly used the exclusion strategy for their portfolios. At the time of the study, most investors were combining the exclusion and engagement strategies. Their company engagement strategy can be conceived of as an accountability practice of holding companies accountable for unacceptable ESG performance. The engagement strategy has much in common with corporate governance practice in general (cf. Holland, 2009; Roberts *et al.*, 2006), such as occasional face-to-face encounters between investors and company executives (although to address ESG issues specifically). Company engagements require regular interaction between investors and companies to address topics, such as social and environmental issues, in which investors have traditionally had less experience. Consequently, the investors conducting engagements have acquired resources, both internal and external, to handle them.

On an organisational level, ESG-related analyses are generally provided by separate departments in investor institutions. In organisations with less staff dedicated to asset management, such as asset owner organisations, engagements were often the task of the corporate governance manager. Most investors also hire one or several service providers for different types of ESG services.

Methods and data collection

This study, conducted between December 2009 and November 2012, focusses on the ESG practices of 17 Nordic institutional investors. Many of them actively collaborate with Nordic as well as foreign colleagues to hold companies worldwide to account for their ESG performance. For example, three of the studied Nordic investors collaborate when conducting engagements and represent each other when engaging with companies.

In addition to investor collaborations, investors rely on ESG service providers. Although each investor had a specific responsible investment department or officer, consisting of one to eight people, most employed a service provider to collect ESG data or perform analysis concerning their portfolio companies, especially for foreign companies. In some cases, these service providers assist investors in holding companies to account. Consequently, interviews were conducted with the two main Nordic ESG service providers that offer assistance with company engagements. Interviews were also conducted with two London-based service providers from which the Nordic investors buy data and analysis services. Likewise, two interviews were conducted with staff at the UN-backed PRI clearinghouse, the officers of which conduct service provider-related activities such as matching investors looking for collaborators for company engagements.

In total, 30 interviews were conducted with 30 respondents, covering 17 Nordic institutional investors and the abovementioned ESG service providers (see Table AI for details). The interviews lasted between 30 minutes and 1.5 hours, and explored a set of predefined topics such as the control and assessment of portfolio companies' ESG performance. Respondents were encouraged to explain in detail their means of contacting the company and provide examples of cases they had handled. Respondents were also asked to describe a workday, a technique applied by Orlikowski (2002) and Czarniawska (2004), with the aim of identifying the respondents' recurrent work activities and practices. These accounts of everyday practices facilitate the kind of analysis Orlikowski (2002) does, further described in the "analysis approach" section below.

At the end of each interview, the investors were asked whether there were investors whom they would regard as being relevant to a study on accountability practice or with whom they regularly cooperate. Interviews were conducted with all the Nordic investors who were, at the time of the study, actively conducting engagements and who were repeatedly mentioned in interviews.

In addition to the interviews, the analysis is based on observations and documents. Investors' interactions with Swedish company representatives were observed on three occasions. The first was a presentation of a survey report during which Swedish investors and company representatives interacted. On the second and third occasions, the interviewer participated in annual round table discussions hosted by two large Swedish companies to which several of the respondents were invited. During the meeting, several corporate representatives (e.g. the CEO) were present, as were a small number of NGO representatives.

The data also include observations of respondents interacting with each other. The observations include four seminars arranged by a Swedish responsible investment network and one seminar organised by a service provider. The seminars took place at the offices of investors and service providers. The researcher also spent a day at an investor with a comparatively large responsible investment department, during which time I was able to observe the analysts working, chat with them, and join them for lunch in the office restaurant. The day also included an internal education programme held by the analysts, where employees from different internal departments learnt about the work of the responsible investment department.

In addition, access to several documents provided by investors, such as best-in-class analysis, industry reports, annual reports, investment criteria, and documentation from a company dialogue, as well as information available on their websites and in newspapers were useful in the research process.

Before the study began, I worked for one of these institutional investors, although not with responsible investment. This experience may have influenced my understanding of the technical language, the industry, in general, and access to the field. In this respect, personal experience can be an advantage (cf. Ahrens and Chapman, 2007). However, this kind of previous socialisation might equally lead a researcher to take for granted assumptions and arguments that could have been challenged.

As in Orlikowski's (2002) case, the study attempts to capture a geographically dispersed practice, which presents certain practical challenges. It was possible to observe face-to-face interactions only between the investors and Swedish companies. However, face-to-face interaction between investors and foreign companies is also less common. In the case of interaction with foreign companies, the respondents' narratives and descriptions of these occasions were relied upon.

Analysis approach: identifying knowledge empirically

Following Orlikowski (2002), we identify knowledge by examining the practices[3] the actors recurrently enact. These practices are individual, as they are engaged in by individuals, but are also institutional, as they shape and are shaped by organisational norms and structures. By engaging in a certain repertoire of practices over time and across situations, certain kinds of knowledge are accomplished. Orlikowski identifies practices through the activities[4] that comprise them and the knowledge thereby constituted in the practices. She does so using inductive qualitative techniques that start by identifying activities. Having identified recurring themes in the activities the studied actors engage in, she then reexamines them to determine how they comprise particular practices. This step involves aggregating and clustering activities into practices.

I have here followed Orlikowski's (2002) analytical approach by identifying recurrent activities, for example: "connecting general ESG information to companies" and "enacting theories about ownership and responsibility". Then, I aggregate and cluster the activities into practices, resulting in three overarching practices: identifying accountability targets, determining whom to address and how, and identifying good behaviour. As the final step, I identify the kinds of knowledge that are accomplished by engaging in this repertoire of practices. In this step, I find it useful to consider the analysts' accounts of when knowledge fails in contrast to when knowledge is, in their opinion, achieved. I have thus included examples of failure in the empirical analysis.

As Orlikowski (2002) describes, the analysis approach is largely inductive, emerging from the data. However, like Orlikowski, I have been influenced by the literature's description of the practice of demanding accountability (e.g. Cooper and Owen, 2007; Lerner and Tetlock, 1999; Messner, 2009; Power, 1991; Roberts, 2009; Roberts and Scapens, 1985; Unerman and Bennett, 2004) as well as by the knowing-in-practice literature, in general (e.g. Lave, 1988; Orr, 1990; Pentland, 1992). Moreover, I analysed the empirical material continuously during the fieldwork and afterwards; thus, the categories were reworked many times to ensure that I captured accountability practice adequately. The resulting analytical categories are presented, according to Orlikowski's (2002) format, in Table I.

Because knowledge is viewed as being constituted through practice, researchers that have adopted this perspective have tailored their analytical categories to the studied practice. Orlikowski's (2002) analytical categories, such as "knowing the organisation" or "knowing the players in the game", emphasise organisational coordination and innovation. Pentland's (1992) analytical categories focus on getting help or delegating tasks and combines the theory of knowing-in-practice with "move", a unit of analysis for situated face-to-face interaction proposed by Goffman (1981). The kinds of knowledge identified by Orlikowski (2002), Lave (1988), and Pentland (1992) are necessarily contingent on the studied practices of distributed global product development (Orlikowski, 2002), knowledgeable performances in

Knowledge constituted in the practice	Practice that accomplishes the knowledge	Activities comprising the practice
Knowing which companies have done something unacceptable	Identifying accountability targets	Drawing on ready-made judgements of corporate events Connecting experts' general statements to companies
Knowing which companies to address by demanding accountability	Determining whom to address and how	Enacting theories, either as models for thinking or embedded in tools
Knowing what to demand	Identifying good behaviour	Identifying what to demand Identifying when demands are met

Table I.
Activities, practices, and knowledge constituted in the practice, based on the empirical findings

software support hot lines (Pentland, 1992), and arithmetic practices in an adult math project (Lave, 1988). Moreover, Orlikowski (2002, p. 267) underscores that the repertoire of practices identified this way is not exhaustive or exclusive:

> Similarly, the repertoire of practices identified here is not exhaustive, as there is always the potential for new practices to be added or existing ones to be modified over time. While the current repertoire must be seen as open-ended, the particular practices articulated here offer interesting insights into why these five practices should be especially relevant to the accomplishment of distributed organization.

Rather than determining in any permanent way the practices and knowledge required to demand accountability, my interest is in how knowledge is accomplished. While the practices and accomplished knowledge shown in Table I are quite specific to the context of investor-company relations and ESG, how knowledge is accomplished illustrates something more general about the relationship among accounting information, knowledge, and accountability. In Table I, we see that knowledge is accomplished in a range of ways and that none of them is as simple as reading corporate accounts. For example, in the case of knowing what is unacceptable, analysts draw on third-party information such as NGO or UN statements and relate it to information about companies' operations. The latter activity partly involves corporate accounts. When the analysts enact theories about ownership and responsibility in order to identify which companies they should address to demand accountability, however, this can be done without corporate accounting information. Furthermore, in line with Orlikowski (2002) and Pentland (1992), the analysts do not achieve these kinds of knowledge independently. To achieve knowledge, theories, tools, colleagues, service providers, NGOs, and even competitors are involved.

The knowledge and how it is accomplished is analysed and exemplified in the three analysis sections below.

Knowing which companies have done something unacceptable: identifying accountability targets

The ESG analysts need to demonstrate to colleagues, media, and sometimes to the company itself that they know which companies have done something unacceptable. To accomplish this knowledge, the analysts engage in a practice to identify potential accountability cases. We can distinguish between two kinds of activities within this practice, which differ in terms of how the accountability targets are identified. The first kind of activity draws on ready-made judgements of corporate events such as NGO or media reports. The second kind of activity connects experts' general statements on ESG issues to the companies the investor owns or might invest in.

In both kinds of activities, the information about unacceptable events does not originate from corporate sources but from NGO, UN, or media reports. In the latter activity, the third-party information does not even concern the company directly. When such general information is used in combination with corporate information, however, it informs the analysts of unacceptable corporate behaviour.

Drawing on ready-made judgements of corporate events

The media constitute one available source of information about corporate events:

> It appeared in [an investigative journalism TV-show], I think. So media matters, absolutely. But we don't want to be taken by surprise by the media. We want to know beforehand. Of course we're not omniscient, so clearly things show up that we didn't know of. Maybe the companies don't know it either. Sometimes. Of course *someone* within the company knows these things but it can be a recently acquired business in some part of the world and they don't know it at the head office. In principle, we speak to the head office and there are maybe 10,000 employees in the company so of course we can be taken by surprise as well (I-17).

In these cases, investors are faced with ready-made judgements, not only of the companies but also of the investors themselves. During the 2010 BP oil spill, for example, the *Dagens Nyheter* newspaper published articles about Swedish investors' ownership in oil companies and BP in particular. One of the articles claimed that BP should be held accountable for its inefficient crisis management and unsuccessful attempts to address the oil spill. In the article, the investors speak of why they have not addressed the issue to BP. Some contested "what" they should hold BP accountable for. The legal process was at this time only beginning. Others accepted that they should demand accountability but questioned the timing. When, as in the BP case, investors appear on a newspaper's front page, they have, in their opinion, failed. They have not demonstrated that they know which companies are involved in unacceptable business practices.

Failing to identify unacceptable corporate events and being held accountable for such oversights is, unsurprisingly, undesirable among investors. They want to be informed beforehand and through less public means. The difficulty is, as the quotation indicates, that sustainability reports and direct corporate contacts do not guarantee that investor analysts will be informed when something unacceptable occurs. These information channels may fail because corporate executives are uninformed or choose not to disclose. Investor analysts have therefore found information channels other than corporate ones. Service providers, for example, offer lists with the names of companies involved in unacceptable business practices. Most investors source some version of these lists. When composing the lists, service providers attribute unacceptable actions and their consequences to specific companies – through triangulation, for example, as described in the next section.

In addition to the service providers' lists, certain NGOs focus specifically on corporate behaviour and link corporate actions to unacceptable social and/or environmental events. I observed how investors refer to such NGO reports during company round table discussions:

> Investor K: This audit in Mexico, I saw the results.
>
> Company presenter: The reason we chose Mexico is that [an NGO] had criticized us for things we weren't sure of. [Concludes that the audit showed positive results].
>
> Investor K: But it was nonetheless serious allegations!
>
> Company presenter: But the point is that many things that [the NGO] alleged did not show in the audit.
>
> Investor H: The [NGO] report. Either you or [the NGO] were wrong.
>
> Company presenter: We are doubtful of [the NGO]'s information. We went through this in detail. And a lot of it has to do with the trade union structure that is in place in Mexico […] and from all of this came lots of information on harassed employees etc.
>
> Investor Q: Did [the NGO] see the report?
>
> Company presenter: Yes, and partly made an excuse. Lots of reports are released by [the NGO] and [another NGO]. We cannot engage in a conflict for each report (O-6).

In this example, investors K, H, and Q rely on an NGO's report of specific corporate events in Mexico in an attempt to hold the company accountable. The company representatives, in turn, respond to the allegations by contesting the "what" for which they are being held accountable and suggest that they have more accurate information and that the NGO is mistaken. Thus, as in the case of Ahrens and Chapman (2002), demands for accountability are being contested. Following the company's contestation and explanation, the investors agreed that trade unions in Mexico represent a difficult issue and did not pursue the Mexico case further. Thus, although NGO reports inform the investors of unacceptable events, the corporate executives in this case successfully contested the information. While it may seem that these NGO accounts allow us to know corporate performance and thereby hold the company accountable for it, the knowing-in-practice perspective underlines that this information only contributes to knowledge if it assists the analysts in their practice. In this example, the NGO report was indeed information but was successfully contested; thus, it did not enable the analysts to hold the company accountable.

Connecting experts' general ESG judgement to companies

Although some NGOs focus on companies, many NGOs specialise in environmental or social issues, such as human rights, wildlife, or even a certain geographical region:

> The NGOs release reports. They contact us, so you often get information there. Generally, the NGO reports aren't company-specific, more area-specific. Recently, a report on slave labour issues in Malaysia was released, for example. Then you can bring this knowledge with you when you meet the companies. If you have low-cost labour located in Malaysia, how do you handle slave labour? Do you, as a Swedish or foreign company, even consider whether you have slave labour in your supply chain? Many don't, so then you have to take that issue and ask how they address it (I-26).

By relying on the NGO's statement, the analyst can argue that this kind of practice in that geographical area is unacceptable. To determine whether their portfolio companies should be held accountable for it, the investor has to identify the report's relevance to those companies. In the quoted case, the analyst relates slave labour in Malaysia to their portfolio companies' supply chains. Portfolio companies with low-cost supply chains in Malaysia then become potential targets for the investor's accountability practice.

As illustrated in the last section, although an NGO report may inform investors of events, it is not guaranteed that referring to the report will enable them to hold the company accountable. To ensure that the information will be useful, the analysts use authoritative sources, such as UN agencies' statements, when available. Another strategy is to rely on several different sources that describe the same state of events. One service provider called this strategy "triangulation":

> Service provider analyst: We have had a categorisation where one either has "observation cases" or, if we have it confirmed from an official source, "admittance".
>
> Researcher: From the company itself?
>
> Service provider analyst: Exactly, either the company admits or we can triangulate. I don't know if [a colleague] told you, but we've said that if we can find two or three reasonably good sources that say the same thing independently of each other. So if one has an NGO that reports something but you also already have a journalist with their own investigation, together with, I don't know, a UN body saying something not about the company but the issue, then we can triangulate these cases so that it's a burden of proof equivalent to a UN body statement on the issue. Or if we have a UN resolution on, for example, the Israel conflict. There one has the Security Council's resolution saying the settlements are illegal, and that's enough of a source for us. If we just know that the company is doing business in that area, then one can put it all together. […] Then it's an "engage/exclude" case and, depending on the customer's own investment policy, they choose to engage and conduct a dialogue or actually exclude [the company from the investment portfolio] (I-23).

Information is thus particularly useful in accountability practice if it comes from an incontestable source such as the UN. If it does not, the information can still be useful if it can be corroborated by additional sources. In the case of the service provider's triangulation, three independent sources should indicate the same state of affairs. Thus, the informational content is not enough to make the account useful or enable the analyst to hold the company accountable. Both its origin and how well it is supported by other pieces of information are important.

Knowing which companies to address by demanding accountability: determining whom to address and how

Investor analysts should demonstrate that they know how to address the case to both organisational colleagues and the company in question. When doing so, the analysts frequently enact theories. For example, when determining and motivating what the investor's rights and obligations are, the analysts refer to generic theories about ownership. When determining the severity of a case and deciding if a company should be held accountable, the analysts draw on theories that are specific to the investor institution. These theories are often incorporated into tools such as investment policies or calculations.

Enacting theories embedded in tools

When determining whether the case should be addressed by demanding accountability or be excluded, the ESG analysts generally conduct some kind of systematic assessment. One example is the service provider's classification "engage" (i.e. to demand accountability) or "exclude" (i.e. to exclude the company from the portfolio). Another kind of assessment is using the investment policy. Generally, investors denote in their policy the percentage of a company's revenues that may be derived from a certain unacceptable practice. A kind of common financial accounting information, revenues, is used as input in calculating this percentage. The calculated result is judged according to a decision rule. Companies with percentages above the specified are viewed as unlikely to be influenced by investor demands. If the company exceeds this percentage, the investor sells the holding.

One of the large ESG analyst teams had an even more elaborate system for determining whether a case should be addressed by demanding accountability:

> Researcher: How do you judge how serious [a case] is?
>
> Analyst: We look at a range of things. We look at when it's done. This is important. We have a five-year rule. It is not absolute but, if it has happened in the last five years, it is relevant. We look at the magnitude of the case. In corruption cases, how much money is it? How many people are involved? If it's a part of the company that's involved, is it a small subsidiary? Or, if you observe the same issue in several parts of the company, departments, or subsidiaries etc. You look a lot at hierarchies. If it is people in the management that are involved, then we know it's serious. And we look at if there's been a verdict or investigation.
>
> Researcher: And how did you arrive at this way of working, is it something you have developed in the course of time?
>
> Analyst: What we do internally? This valuation? We have a schedule that we use. We have a scoring schedule. We allocate points for how serious the case is (I-22).

The assessment in this example is systemised to the extent that they have a scoring schedule for evaluating how serious a case is. Seeking to produce knowledge this way, by employing a fixed technology to produce answers, is a form of epistemic practice (Coslor and Spaenjers, 2016; Du Rietz, 2014; Knorr Cetina, 1981; Lowe, 2004; Pollock and Williams, 2015). Such scoring models are, in the words of Kalthoff (2005), "theory-loaded instruments of representation". Assumptions and beliefs about what makes a case serious are embedded in a technology that guides the analysts. For example, the case is less serious and gets a lower score if those involved are at a lower hierarchical level. The company also gets a lower score if something happened several years ago and if fewer countries and people are involved. The score can be further reduced if the company shows a commitment to improving the situation. If the final score is above a certain number, the decision rule states that the case should be excluded from the investment portfolio. Like the simple percentage rule, scoring requires input for the calculation; it requires information about the case, such as the amount of money and number of people involved and their seniority, as a basis for the scoring.

The scoring schedule and the percentage are also examples of math-in-practice – of arithmetic activity taking place within the setting of accountability in order to accomplish knowledge. That we find these kinds of activities in this part of the practice is likely related to the fact that these systematic assessments are used as a basis for decisions and for explaining to organisational colleagues, and companies, and sometimes the media why a certain strategy (i.e. engage or exclude) should be applied. Lave (1988) notes that arithmetic and measurement devices are commonly taught and used as examples of rational, value-free, technical methods. They are means of making impersonal judgements. Math is a resource used to generate claims about rationality in this context (Lave, 1988).

The subsequent decision to exclude is generally taken by an internal ethics or investment committee. In addition to the systematised assessments, the committee asks the ESG analyst about the case, at which point the analyst must demonstrate thorough knowledge of it:

> […] because they are concerned with "yes, we have checked it" and that we know the issue well. And if they are satisfied that we know the matter well and that we've done a proper review, they usually go for our recommendation (I-22).

This process is yet another situation in which the ESG analysts need to accomplish knowledge. While some form of calculative practice can be involved, it is not sufficient to accomplish knowledge. Knowledge in this setting also entails the analyst's personal performance and argumentation at the meeting.

Enacting theories about responsibility and ownership

During the fieldwork, as in the case of Roberts *et al.* (2006), the investors referred to agency theory to explain why they had the right to hold the corporate board responsible for the company's actions. In the following example, investor analysts and company representatives discuss the results of a survey:

> Here [in a survey sent to the companies] the board, the owners' representative according to the agent-principal theory, gets a chance to answer. How "our" representatives think they are performing. Are they doing a good job? Here they may find potential for improvement (Investor D, O-1).

Thus, the agent-principal theory is used to motivate the right to demand corporate accountability in both financial and sustainability issues. In this example, the investors made sustainability issues a concern for the board of directors and used the theory to (successfully) motivate the need to target this part of the corporate organisation.

The same theory can also be used to motivate why the investor does not need to engage with a company. When the investor does not hold stock in the company, the ownership and responsibility theories state that the investor is not responsible for the company. Consequently, the investor cannot be accused of failing in their accountability practice if they have sold the holding. Accordingly, when investor analysts receive information about unacceptable corporate practices, they compare the names on the list to the companies in their investment portfolio. This initial procedure is uncomplicated: either they own the company or they do not. However, firm ownership changes over time, and the investor's right and responsibility to hold the company accountable also changes. An accountability dialogue may take years, and the investment portfolios may change, for other reasons, during this time. Consequently, while most analysts responded that they addressed the companies in which they held stock, they did not always do so in practice:

> Researcher: Do you own all of the 100 companies?
>
> Analyst: No we don't, but we are potential owners in all companies except, for example, [name of company]. Otherwise it changes all the time depending on our portfolio managers, maybe 40 firms out of these 100 (I-1).

The investor participates in an initiative that addresses 100 Swedish companies, although the investor cannot invest in some of them because of its investment policy. While some analysts argued that you may influence a company as a potential owner, and did so routinely, holding no stock in the company can pose a problem:

> And sometimes it happens, we had some issues with a company just recently. For some reason we didn't get any information from [the company]. We didn't understand why and then we started looking at the owner lists and realized that oops we've exited all our investments. So, there was a clear connection. We didn't have a problem with them before but now there was. They didn't think they had reason to work with us anymore. It's rare, but it happens (I-17).

As the quotation indicates, failure typically consists of addressing a company but not being judged as having the right to make demands. However, an even more common form of failure, as in the BP case, is when investors are blamed for not addressing a company they own and should address.

It is thus not only the investors who adhere to theories about ownership and influence. As Roberts *et al.* (2006) noted, companies also adhere to ownership theories, and sometimes even internalise investor interests. For instance, one company provided the investors with a form with which to evaluate the company's sustainability performance. The company representatives had clearly internalised the idea that investors should evaluate them and influence the company's priorities.

The investor analysts also use theories to determine and motivate how to prioritise cases:

> Analyst: […] and that we mostly do when it [an incident] appears, and of course we have to prioritize but the way in which we prioritize is those [companies] where we are large owners or have influence or some other reasons.
>
> Researcher: Influence how?
>
> Analyst: We have formal influence when we are large owners but in the Nordics, I'd say, we're not large owners but we have influence because of our well-known brand. Then there are other aspects. It could be informal contact with this company, so they know us, have confidence in us and therefore listens to us (I-25).

Thus, apart from formal responsibility in terms of ownership, the question of whom to hold accountable may depend on how the investor theorizes its own responsibility. Such theories-in-practice (Ahrens and Chapman, 2006) may posit that the investor is particularly responsible for companies in which it has large holdings. Shared nationality was another aspect that would influence the investor's view of its responsibility. The investors would engage in dialogues with Swedish, Nordic, and/or European companies or even a certain industry, arguing that they had a particular responsibility in such cases. A Norwegian analyst team argued they had a particular responsibility for fish industries, for example. However, the general argument among analysts seems to be that, when an investor has greater possibilities to influence, it also has a greater responsibility.

Knowing what to demand: identifying good behaviour

As is evident in this analysis so far, making demands that are refuted or receiving dismissive corporate responses is not enough for accountability practice. For investors, successful demands are those that are fulfilled. Successful demands are those that remedy what is unacceptable and that are achievable by the company. This also requires identifying when the company has fulfilled them.

To identify which demands to make, the investor analysts research best practices. This involves identifying both good investor behaviour as well as good corporate behaviour. Investors thereby identify what is acceptable to demand and what the companies could achieve.

By using a checklist for successful accountability dialogue, the investor analysts know when the demands are fulfilled. The investor analysts accomplish this kind of knowledge by demanding feasible and acceptable corporate actions and by drawing on standardised criteria for a "successful" accountability dialogue.

Identifying what to demand

One way to know what to demand from a company is to learn what other actors, such as investors, NGOs, or states, have demanded and simply mimic their demand:

> Some of our colleagues sold these holdings directly and then we decided that we won't do it that way [...] We created this ethical council to support the portfolio manager, and then we invited the company here, so their chairperson, CEO, and information officer came without delay and went through what had happened and what they were doing about it. Then we decided that we would follow the government in this case. Save the Children and the Red Cross and the government all examined this issue, so we created a dialogue with them simply to see, because we don't have the resources to go there ourselves [...] So I have received so much material of different kinds about this critical event, but in the end we didn't sell the stock in the meantime. And what they did to meet, they handled it very well from [the company]'s side. They created a very pronounced code of conduct for how to act when entering difficult areas, how to balance difficult political interests (I-2).

As shown in the quotation, the investor analysts orient themselves among the possible courses of action and notions of what to demand from the company. The investor above adopted the position of certain actors – in this case, not their colleagues in the financial industry but the government, Save the Children and the Red Cross, which had investigated the case. By observing the demands these actors made to the company, the investor knew what was possible and/or acceptable to demand from the company in this context and at this time. As Pentland (1992) writes, for an action to be knowledgeable, it generally has to be ratified, implicitly or explicitly, by others. Who should ratify the action depends on the specifics of the context. In the case quoted above and in the context of Swedish investors holding stock in a Swedish multinational, the investor adopted the viewpoint of the Swedish Government and Swedish branches of international NGOs.

At the time, this was a knowledgeable demand to make on the company. However, knowledge is contextual and is always relative to a situation (Pentland, 1992). When the situation changes, what is regarded as knowledge also changes. Consequently, and as Orlikowski (2002) notes, knowledge is not given or stable. Some years later, further information surfaced via a new NGO report that reviewed the ten-year-old event. The new information prompted questions about how well the company had handled the event and whether a policy was a sufficient remedy. The new information thus disrupted what had previously been considered knowledge. Because of this new information, some investors changed their position. New demands were made on the company. Eventually, because of the company's refusal to meet the new demands, investor D sold their holding in the company. What was considered an acceptable and sufficient demand before the NGO report was not viewed as such after its release.

As the empirical examples illustrate, demands for accountability are frequently contested. The investor analysts are not as familiar with the company's business as are the corporate executives, and the latter may take advantage of this fact and contest the investors' demands. However, there are ways to go on with accountability practice even when demands are contested. One resource is information about how other companies handle the same type of event. Corporate executives' arguments – such as that "it can't be done" – can be disproved by referring to companies that have done what the investor is asking them to do:

> Now they have started working on this the last three, four years, so it's coming, but it the beginning it was like "No, we can't track the cotton". "Ok, so why can't you do it when other sectors can and

> they do it like this?" I think, that often, you're blind or look at your competitor or you're participating in initiatives where there are only sector peers and then a little bit of new blood is needed, some injection (I-26).

In this context, knowledge is achieved by referring to the "black swan" that disproves the claim that swans must be white or that you cannot track the cotton you source. Occasionally, investors try to find potential corporate best practice cases by contacting companies directly because they have a reputation for handling certain ESG issues particularly well. When there is no good example within the industry, the analyst can look for best practice cases in other sectors, as shown in the quotation. This investor analyst saw the sharing of information about other companies and sectors as a part of her specific contribution:

> That's my large knowledge resource, that I analyse a large amount of different companies. I identify best practices in different industries, in various companies, and then I have the opportunity to pass that knowledge on. Because often they, the engineering companies, sit and discuss the same issues, for example supply chain management. But the challenges of supply chain management are the same in the textile industry, only they have come farther. Or paper industry. You can use the same system in these sectors. You can use the same problem solving, really, if it is the same type of problem that should be solved.
>
> Researcher: And how do you know it's the same type of problem?
>
> Analyst: Well, you can never know exactly. You have a company with a large supply chain. Then you find a similar company with a large supply chain. Then it won't be exactly the same issues that arise in these two different [supply chains] because it is different sectors, but you can anyway identify best practice methodology and different ways of solving the problem between the sectors. That's not an issue (I-26).

By arguing that it is a question of large supply chains and finding a company with a large supply chain that does what the analyst wants them to do, the analyst proves that it is doable and a reasonable demand for them to make on the company. As the analyst states, information such as corporate accounts from other sectors is a resource that can be used to accomplish knowledge when making demands on the company. Possibly more important than the contents of these accounts, therefore, is the way and context in which they are used.

Identifying when demands are met

To identify when their demands have been met, the analysts generally check off some kind of criteria. For example, one of the service providers applies the following criteria that a company has to fulfil for an accountability dialogue to be successful: the unacceptable practice should stop, the company must answer responsibly, the company must "find a way forward" and change management systems and programmes to prevent reoccurrence, and these steps must be externally verified. Such standardised criteria, provided by a service provider that is an expert on corporate accountability dialogues, constitute one way for investors to know what they should achieve when making demands on the company.

Although the criteria may seem basic, from the service provider's experience, if all boxes are ticked, they have achieved something significant:

> If we take the BP case, it's not only that the oil should stop leaking when it [the case] is closed; it's about making sure it will never happen again. And then, it's a giant process. And I can feel that investors sometimes are impatient in regards to our work, thinking we demand too much. That we want too much in relation to, "Ok, this is a one off incident it's about", and then we start talking about, you know, that the whole company should change for it never to happen again (I-23).

Although the criteria are standardised, demands that "the violation should stop" or "it will not be repeated" can be interpreted to entail different things. The criteria have to be interpreted in the context of the accountability dialogue at hand. Consequently, the speed of the accountability dialogue, and how much to require for it to be successful, could pose a conflict between the service provider and the investors who buy their services. Changing the company so that something will never happen again is undoubtedly a long and uncertain process. The service provider analyst theorised that the investors' impatience to see results originated in the fact that investors are themselves held accountable for their accountability practice. This service provider's solution was to highlight examples of progress that could be shared with external parties to demonstrate achievement without necessarily considering the accountability dialogue as being finished.

In order to check off criteria, the analysts generally need some proof of achievement. Here, documents serve as evidence:

> […] or if they can show an evacuation plan. I've had a couple of corruption cases where I get to see the table of contents. I didn't get the actual file, but it has been enough for me to see that there is a table of content that covers these areas. And then I can check this off on my checklist. And then I can say, "Ok, it's enough", because it's confidential and they won't share it. It depends entirely on the type of issue, what you can demand and what is realistic etc. (I-23).

As the quotation suggests, these accounts are not necessarily information, as the analysts cannot always read the contents, but rather signal (cf. Vollmer, 2016) that the company meets the investor's demands. In other cases, however, the evidence is content, and thus information about how the company meets the investor's demands. Such evidence may take the form of sustainability accounting reports:

> Researcher: What could this evidence be?
>
> Analyst: In many cases, it's an improved annual report from the company where they clearly show "Ok, we have these risks and this is our strategy to deal with these risks. Here are our goals. This year we've done these activities with this result. We'll do this next year". So, you all the time can see that this is part of the company's processes that they're working with. There's systematization in it, that the company themselves constantly follow up. That they have goals, that they follow up the goals they've put up and that they make sure to not only report on the Swedish part of the business, which many do, but on the entire business. Then we see that there's a system in place (I-26).

Discussion

As shown in the analysis, information is commonly drawn upon in accountability practice but does not necessarily enable the analysts to hold the companies accountable. Information from an NGO about events in Mexico prompted investors to ask the corporate executives to explain their conduct. The executives responded to the allegations but successfully rejected the information as inaccurate. One could argue that this represents accountability according to its definition as the "giving and demanding of reasons for conduct" (Roberts and Scapens, 1985). However, and also according to Roberts and Scapens (1985), accountability involves a power dimension wherein the accountee may seek to impose a definition of what has happened and who is responsible. In the Mexican trade union example, the investor analysts tried to impose the NGO's definition of events but failed.

Demands for accountability thus often fail because they are contested, an everyday feature of accountability, as Ahrens and Chapman (2002) have shown. Corporate executives can contest the accuracy of information – for example, on what they are being held accountable for, as in the Mexican trade union example. They can also contest the investor's right to hold them accountable. In addition, they can contest the investors' demands by, for example, arguing that they are unrealistic and unfeasible.

The investor analysts may overcome such contestations and still proceed with their accountability practice. For example, when corporate executives contest the feasibility of a demand (you cannot track the cotton), the analyst may use information about a company that does track cotton to disprove the executives' claims. When the company contests what it is being held accountable for, information with a more authoritative origin or that corroborates the initial information may assist the analysts. Consequently, aspects of information other than its content will affect whether it supports the analysts' accountability practice. The findings show that aspects such as the information's convergence with other accounts as well as its origin matter. However, these aspects are not sufficient to achieve knowledge. A crucial factor is how the information is used in a situation, for example, to support or disprove other information.

Information can thus be used to disprove the information of others and even to disrupt achieved knowledge, which occurs when what was previously the right response (e.g. if a company policy remedied an issue) is no longer adequate. In the case of the NGO report that reviewed ten-year-old corporate events, the new information disrupted what, for the investors, had been knowledge and successful accountability practice. While the report questioned previous events, it did not enable the investors to accomplish knowledge and hold the company accountable anew. The corporate executives contested the information and any new investor demands. As a result, investor D chose another strategy, selling their holding, instead of proceeding with the contested new demands.

Because knowledge is a contingent achievement and is dependent on circumstances, it is, in a sense, co-produced[5]. When the investor ESG analysts conduct their practice, they encounter a range of other internal and external actors who affect the extent to which the ESG analysts can hold the companies accountable and thus accomplish knowledge in this context. The corporate executives shape what will become knowledge by accepting or contesting statements and arguments. The investor analysts, in turn, shape what is knowledge by resigning their demands or proceeding with them and seeking to change the executives' point of view. As Cooper and Owen (2007) argued, accountability should result in an understanding, consensus, or new course of action. If the investor analysts do not achieve results, they are themselves held accountable by their colleagues and media, who thus also shape the practice and understanding of what successful accountability practice is.

The analysis further shows that knowledge may also be accomplished without accounting information – for example, by enacting different forms of theories and math-in-practice (Lave, 1988). As previous studies have suggested (e.g. Roberts *et al.*, 2006), the agent-principal theory is enacted in accountability situations between investors and companies, both when financial and sustainability issues are at stake. The analysts also reason according to more informal theories-in-practice (Ahrens and Chapman, 2006) in order to understand and motivate their responsibility, right, and obligation to demand accountability. Moreover, both formal and informal theories may be embedded in models, such as in criteria for a successful accountability dialogue and the models for scoring the severity of a case. Such embedded theories and their assumptions are enacted when these models are used (cf. Du Rietz, 2015; Kalthoff, 2005). Theories embedded in models are thereby involved in producing knowledge, as the epistemic practice literature highlights (Coslor and Spaenjers, 2016; Du Rietz, 2014; Kalthoff, 2005; Knorr Cetina, 1999; Pollock and Williams, 2015).

Should we then conclude that the corporate sustainability report is not useful for holding a company accountable? Not necessarily. Although the annual sustainability report rarely informs the investors of negative corporate events, it may serve other purposes, such as providing information about best practice cases. Moreover, the investor analysts can use corporate information in combination with third-party information to produce useful arguments. The most useful aspect of the corporate accounting system may be that it "institutionalises the notion of accountability; it institutionalises the rights of some people to hold others to account for their actions" (Roberts and Scapens, 1985, p. 448). In this study, not only the investors and companies but also media and NGOs sensed that the investor had certain rights and obligations to demand corporate accountability. However, it is difficult to determine if the rights to demand corporate accountability in ESG issues are institutionalised because of the corporate sustainability report. Ideological frames, such as an agent-principal-based shareholder orientation, may interact with, and be more or less congruent with, other frames (cf. Yang and Modell, 2015). Most likely, there are several forces at work, of which the mandatory accounting system is one, that help institutionalise investors' rights to demand accountability in ESG issues.

Conclusions

This study contributes to the accounting literature by offering a new and more elaborate view of the relationship between information and knowledge in accountability settings. Previous work, particularly Foucauldian studies, has tended to treat information as representations and facts and these, in turn, as knowledge that enables power over conduct. A body of empirical studies on stakeholders and accountability (e.g. Kolk *et al.*, 2008; O'Dwyer *et al.*, 2005; Solomon *et al.*, 2013) challenges this view by illustrating that accounting information does not necessarily enable accountability or control.

Based on that insight, this study first suggests that we should more carefully distinguish between knowledge and information. According to the knowing-in-practice perspective (Lave, 1988; Orlikowski, 2002; Pentland, 1992) used here, knowledge is the ability to purposefully go on with practice. Information is one of several resources that may or may not contribute to this knowledge. Second, when we discuss the role of information in accountability practice, we need to take into account many more aspects of information than its ability to represent. As this analysis shows, the information's origin, convergence with other accounts, and use in contradicting and disproving executives' information are all aspects that matter. To understand whether information enables the investor to hold the company accountable, we need to consider these aspects also.

This study has implications for practice. While regulators tend to rely on accounting systems to enable external parties to monitor and scrutinise the reporter's work, previous studies indicate that such regulation may not work. This study's findings support Cooper and Owen's (2007) conclusion that accountability to stakeholders is unlikely to be established through reporting reform alone. Indeed, in the present case the ESG investors relied on many sources other than the annual corporate accounting system. When accountability demands are not based mainly on accounts from the accounting system, accounts-based governance does not work as planned. However, this does not mean that the accounts are useless and not relevant for accountability. Instead, they may simply be used in unintended ways, for example, as benchmarks for competitors or in combination with third-party accounts. Moreover, the practice of regularly accounting to stakeholders may help to institutionalise the rights of stakeholders to hold the reporter accountable. Future research could examine this possibility in more detail by investigating alternative explanations for what fosters the institutionalisation of accountability rights.

Acknowledgement

The author gratefully acknowledges the financial support of Jan Wallander and Tom Hedelius foundation, as well as the Infina foundation. Earlier versions of this paper have been presented at the EAA conference and colloquium 2011, the MASOP workshop 2012, Noracc 2014, and IPA 2015. The paper has benefited from the generous comments of the two anonymous reviewers as well as Katarina Kaarbøe and the Action research group, Sven Modell, Svetlana Sabelfeld, Kalle Kraus, Ebba Sjögren, the MUSICA research group, Martin Messner, and Thomas Ahrens.

Notes

1. This assumption may be questioned because, as Messner (2009) warns, the self is not necessarily transparent to itself; it has a level of "opaqueness".
2. I thank one of the referees for this insight.
3. Orlikowski (2002, p. 256) views social practice as "recurrent, materially bounded and situated social action engaged in by members of a community".
4. Orlikowski (2002, p. 256) refers to activities as "what members did every day as part of their complex and distributed product development work".
5. I thank one of the anonymous reviewers for pointing this out.

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Further reading

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Appendix

Interview	Organisation	Type of organisation	Location
I-1	A	Capital owner	Café, Sthlm
I-2	B	Capital investor	Office café, Sthlm
I-3	C	Capital investor	Office, Sthlm
I-4	D	Capital investor	Café, Sthlm
I-5	E	Capital investor	Office, Sthlm
I-6	F	Capital owner	Office, Sthlm
I-7	G	Capital investor	Office, Sthlm
I-8	H	Capital investor	Office, Sthlm
I-9	I	Service provider	Office, Sthlm
I-10	J	Capital owner	Office, Sthlm
I-11	K	Capital owner	Office, Sthlm
I-12	L	Capital owner	Office, Göteborg
I-13	M	Capital owner	Office, Sthlm
I-14	N	Service provider	Office, Sthlm
I-15	O	Capital investor	Office, Sthlm
I-16	P	Capital investor	Office café, Sthlm
I-17	Q	Capital investor	Office, Sthlm
I-18	F	Capital owner	Office Sthlm
I-19	D	Capital investor	Office Sthlm
I-20	R	Capital investor	Cafe Sthlm
I-21	C	Capital investor	Office Oslo
I-22	C	Capital investor	Office Oslo
I-23	I	Service provider	Office Sthlm
I-24	S	Capital investor	Cafe Sthlm
I-25	O	Capital investor	Office café, Sthlm
I-26	P	Capital investor	Café, Sthlm
I-27	T	Service provider	Café, London
I-28	U	Service provider	Office, London
I-29	V	UN-PRI	Office, London
I-30	V	UN-PRI	Office, London
Observation		Type	Location
O-1		Survey presentation	Nasdaq OMX Sthlm
O-2		Network seminar	At investor Q's office
O-3		Network seminar	At investor O's office
O-4		Day at investor	At investor C's office
O-5		Round table discussion	At company's office
O-6		Round table discussion	At company's office
O-7		SRI Conference	At conference establishment
O-8		Network seminar	At investor C's office
O-9		Customer seminar	At service provider's office
O-10		Network seminar	At investor H's office

Table AI. Interviews and observations

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