The London School of Economics and Political Science

Shifting corporate concerns: Three papers on sustainability, corporate responsibility and the changing role of accounting

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A thesis submitted to the Department of Accounting of the London School of Economics and Political Science for the degree of Doctor of Philosophy

London, September 2023

Declaration

I certify that the thesis I have presented for examination for the MPhil/ PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

I warrant that this authorisation does not, to the best of my belief, infringe the rights of any third party.

I declare that my thesis consists of 75,466 words.

Acknowledgements

With profound gratitude, I would like to thank my supervisors, Professor Mike Power and Dr. Andrea Mennicken, for their academic guidance, personal encouragement and intellectual stimulation.

I gratefully acknowledge the generous funding I received from the Adeline and Karl Goeltz Scholarship and the LSE Department of Accounting in support of this PhD thesis.

I am indebted to my colleagues at LSE, especially Dr. Finia Kuhlmann, for their feedback on my work and advice throughout this PhD journey. I likewise very much appreciate the community atmosphere of the Department of Accounting at the Stockholm School of Economics, which allowed me to learn and grow. My sincere thanks also go to my academic network, fellow PhD students, writing group members, accountability buddies and other individuals who inspired me along the way and supported, challenged and guided me through this process with patience and wisdom.

Furthermore, I am grateful to the fieldwork organisations and involved interviewees for their time, flexibility and curiosity in facilitating qualitative research during a pandemic and for sharing their insights.

My deepest thanks are owed to my family and friends for their extraordinary enthusiasm, understanding and moral support. This journey would not have been possible without you.

Abstract

This thesis examines the emergence and change of the concern with corporate sustainability from the 1950s onwards, as manifested in the discourse of practitioners, academics and standard-setters primarily in Europe. By drawing on different notions of responsibility, the study explores how corporations take on responsibility for sustainability issues and how they demarcate their impact on supposedly external issues. The empirical core of this thesis are fieldwork involvements at the Global Reporting Initiative and at an investment trust, that are supplemented by semi-structured interviews and document analyses. These insights allow taking on a historical, a regulatory and an investor-related perspective, respectively, in the three papers. The first paper offers a historical analysis of the emergence of the concern with corporate sustainability revealing narrowing and widening tendencies in its spatial, substantial and temporal dimension. The second paper critically assesses the mobilisation of materiality in the crowded field of sustainability standard-setting and characterises it as co-dependent. The third paper sheds light on the organisational articulation of corporate sustainability and argues that matters of fact and matters of concern jointly stabilise. The thesis aims to contribute to our understanding of the accounting entity in times of growing responsibility of firms for formerly external impacts, specifically the process of taking on such responsibility. Struggles of translating between heterogenous ideas on environmental, social and governance factors and the corporate sphere reveal how materiality of impacts is determined. Responsibility shifts from being a liability to becoming an investment opportunity for firms. Further, tensions are unpacked between the inherently boundary-spanning nature of responsibility and the boundary-enforcing accounting entity. Ultimately, the thesis shows processes underlying the usage and extent of responsibility in a corporate context. Based on this, a grammar of demarcation is introduced shedding light on the role of accounting in dealing with the concern with corporate sustainability.

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Introduction: How sustainability becomes a corporate concern

The concern with corporate sustainability

In November 2021, one of the leading accounting standard-setters in the world, the IFRS Foundation, announced its ambition to form a separate standard-setting body to address questions around corporate sustainability reporting. Only four months later, the newly established International Sustainability Standards Board (ISSB) had already published its first exposure drafts on sustainability-related as well as climate-focussed financial disclosure, had established relations with other standard-setters and invited stakeholders to comment on their proposed standards. This development reflects the ways in which sustainability is advancing into the corporate sphere: A sense of urgency and a structured, accounting-like approach to regulation seem to be distinctive of the observed phenomenon.

This thesis investigates the emergence of the concern with corporate sustainability, the perceived responsibility of firms to take on responsibility for environmental, social and governance (ESG) issues. It further attends to the processes that bring together a growing interest in the so-called “green”, “non-financial” or “impact-related” involvement of firms with reporting, standard-setting and decision-making. Especially the interplay between the increasing pressure on corporations to internalise externalities, disentangled here in different meanings of responsibility, with accounting means and the corresponding entity assumption are unpacked.

The taken-for-granted presumption that businesses engage not only with their social and natural surroundings but also bear responsibility for these external aspects raises queries for accounting. The focus of corporate sustainability is often channelled through metrics, actors and practices as derived from financial accounting. However, the scope of sustainability considerations appears to extend beyond the narrow confines of the traditional accounting entity as seen in financial reporting. Accounting operates on the premises of a defined entity, yet the spill-over of accounting practices into the sustainability domain challenges this clear-cut approach to demarcating the firm.

This thesis sets out to explore how corporations take on responsibility for sustainability and how they demarcate their impact on issues that potentially lie outside their firm. The examination of these processes provides a better understanding of the relationship between an opaque concept like sustainability on the one hand, and accounting measures seeking to translate the concept into the corporate context on the other hand. The analysis adds to the literature by tracing the shift of responsibility from a perceived liability to an investment opportunity. It, thereby, provides a framework for the examination of demarcations as changing forms as well as their engagement in separating or bridging several spheres. The provided grammar of demarcation helps understand the demarcations in the context of corporate sustainability and the corresponding accounting.

The overarching aim of the thesis is to unpack the close entanglement of responsibility, sustainability and the demarcated entity, and to scrutinise how and why this has shifted. The introduction of the thesis therefore sets the scene by elaborating different meanings of responsibility. Based on this, the thesis moves through three different sites of sustainability discourses to then establish a grammar for the understanding of demarcation. To address how corporations take on responsibility for the concern with corporate sustainability and how they then demarcate this responsibility, the examination provides background on the multiplicity of meanings of responsibility in the corporate context.

The thesis consists of a collection of three sole-authored stand-alone papers. The first paper sheds light on the historical emergence of the concern with corporate sustainability. The second paper investigates how the concern with corporate sustainability has been addressed by different standard-setters. The third paper unpacks the concern with corporate sustainability at organisational level focussing on the development of a corporate policy for responsible investment. The discussion section of the thesis condenses a grammar of demarcation to link the responsibility of the demarcated entity with the far-reaching concern with corporate sustainability. The connection between overarching research question and the content of the thesis can be seen in figure 0-1 below.

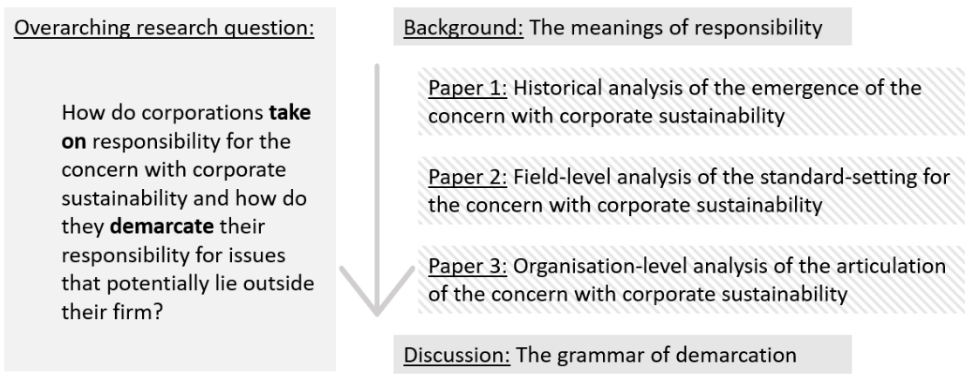

Figure 0-1: Connection between overarching research question and content of the thesis

Previous scholarly work conveys a multiplicity of notions of responsibility in a corporate context (Berthoin Antal & Sobczak, 2004; Gray & Bebbington, 2000; Macmillan et al., 2004). By carefully disentangling these connotations as part of a literature review, this thesis establishes a few main clusters of meaning that range from leeway to liability, from good judgement to measurability, from moral to corporate orientation (Archel et al., 2011; Carroll, 1991; Margolis & Walsh, 2003;

Messner, 2009; Schwartz & Carroll, 2003; Schweiker, 1993). This taxonomy of the term "responsibility" reveals close interlinkages to the concept of sustainability, i.e., the ability to maintain operations over the long-term, as well as major differences to the notion of accountability, understood as the obligation to give account to affected parties (Belal et al., 2015; O'Dwyer & Unerman, 2007; Parker, 2011; Spence & Rinaldi, 2014; Unerman & O'Dwyer, 2006). However, the notion of responsibility in all its variations implies, at its core, an exercise of differentiating between the inside and the outside, the considered and the disregarded object of responsibility. This thesis unpacks tensions between the inherently boundary-spanning nature of responsibility and the accounting entity which is maintained and shifted by boundary-enforcing processes (Hines, 1988).

Besides a noticeable increase in disclosure, legislation and research on responsibility and sustainability topics, the importance of corporate sustainability had become taken for granted: Businesses are increasingly perceived by society, peers and legislators as morally liable for issues beyond their immediate substantial, spatial or temporal boundary (Bebbington et al., 2014; Buhr et al., 2014). Consequently, the employment of the opaque notion of responsibility, which arguably requires a form of conscience is a baffling occurrence in the market-driven business context.

The derived research puzzle for the thesis is the usage and extent of responsibility in a corporate context. As the existing literature shows, corporate operations and the reporting on them have been characterised by differentiation decisions for a long time. The influx of responsibility topics and the increased pressure from various stakeholders make these considerations more acute and heated. Conceptual and practical debates become mixed, qualitative and quantitative factors combined and longstanding convictions on the impact of the individual firm challenged. To address the multiplicity of perspectives on the concern with corporate sustainability, the three papers pose the following overarching questions: *How do corporations take on responsibility for sustainability issues and how do they demarcate their impact on issues that potentially lie outside their firm? How does this understanding and demarcating link to historical, field-related or firm-inherent characteristics?*

The meanings of responsibility

Being responsible for something can have very different connotations ranging from a perceived worry about something and striving to mitigate negative effects to an independent leeway and opportunity to be able to do something. To conceptualise responsibility on an individual level is already very challenging, let alone articulating it in a corporate context. What exactly the term "Corporate (Social) Responsibility" denotes is largely contested and far from clear-cut or settled.

How multiple value-infused connotations of responsibility can be applied to legal structures like firms, is debatable, and often the notion of responsibility itself becomes fuzzier in such processes of corporate translation, rather than clearer. In view of this, the following taxonomy seeks to disentangle different meanings of responsibility and to sensitise readers for its complexity.

In the context of this thesis, the concept of responsibility is seen as an iteration between the two extrema of *good judgement*, i.e. having the right to independently act without authorisation, and attribution of *liability* or culpability (cf. Cambridge English Dictionary, 2017). Zooming in on the manifold notions of "responsibility" aims at fleshing out the complicated nature of responsibility in terms of perceived care, duty or liability (cf. Oxford English Dictionary, 2010). Moreover, the objects towards which responsibility is directed (For *whom*?) also seem to shape the nature of "responsibility" itself. In the following taxonomy, different meanings of corporate responsibility are considered separately to highlight tensions that come with the oxymoron[1] "corporate responsibility". It is investigated how delineations of corporate boundaries (i.e. the accounting entity) are challenged when "corporate" and "responsibility" are brought together in various ways. Unpacking the link between responsibility and entity reveals puzzling aspects of businesses' responsibility, which will form starting points for the following papers of this thesis.

In the literature, many authors avoid occupying themselves with the myriad of meanings of responsibility, especially in the corporate sphere, by stating that terms "such as 'sustainability', 'environmental, social and governance' and 'corporate social responsibility' are frequently used interchangeably to describe similar information" (Eccles et al., 2012, p. 65). Others criticise that the overly specific disentangling of nuances of wordings might be "an empty, if not rhetorical exercise" (Michelon et al., 2020, p. 13). The disclosure on responsibility in its widest sense has furthermore been described as "common sense currency" for dealing with these topics rather than taking on responsibility in essence (Andrew & Cortese, 2013, p. 401).

In contrast, this thesis argues that responsibility itself needs to be unpacked to facilitate a better understanding of the moral fibre of corporations, and to reflect more precisely on their theoretical and conceptual capability of taking on responsibility (Mayer, 2020, 2021). It is crucial to undertake this examination due to the nature of firms' operations, their impact assessment and their position in the natural and societal environment which is changing while the usage of the term "CSR" and its neighbouring idea of commitment to ESG issues flourishes (ibid.).

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[1] In so far as this concept refers to many activities that are not straightaway or traditionally "corporate".

In the following, different meanings of responsibility in the corporate context, which were identified in the literature, are presented to lay the foundation for the papers of the thesis. This introductory work sets the scene for the empirical analyses, undertaken as part of the three papers and allows for discussing the grammar of demarcation at the end of the thesis. The overarching puzzle, the workings of the concern with corporate sustainability, more precisely, the link between general ideas of responsibility and the responsibility of an entity, is unpacked from two ends. The responsibility part and the demarcation side of the entity are scrutinised. In this taxonomy, the ubiquity and at the same time vagueness of the concept of responsibility is addressed by locating variations of responsibility on a two-dimensional spectrum between leeway and liability as well as the corporate entity and the planet. The notions of responsibility that are discussed in the following can be organised in several clusters that range from 'Engaging independently with societal concerns' on the one hand to 'Living up to a liability-like responsibility' on the other hand.

The below presented disentanglement of various notions of responsibility aims to dissect the nuances of a concept that is often employed as a set phrase and overstrained due to its adaptiveness and apparent ability to travel across contexts – as the inflationary usage of CSR and ESG suggests (Cooper, 2017; Unerman et al., 2018). The following analysis does not aim to refer to responsibility for different topics or substantive issues only, e.g. responsibility for social issues versus responsibility for the environment[2]. Quite the opposite, this introductory piece targets responsibility on a conceptual level. The neighbouring concept of accountability that is discussed by a comprehensive stream of literature in the field of accounting goes beyond the perceived duty of responsibility and refers to a more formal mechanism that allows affected parties to demand an account of reasons for certain decisions (O'Dwyer & Unerman, 2007; Parker, 2011; Spence & Rinaldi, 2014; Unerman & O'Dwyer, 2006). In short, accountability is focussed on a linear connection between future developments and current actions whereas responsibility is more difficult to capture, fuzzier and comes from a moral conviction of caring about something (Messner, 2009; Schweiker, 1993).

It is relevant to undertake this organising exercise because, first, empirical studies, like the three papers in this thesis, are better able to identify and make sense of notions and practices concerning responsibility in the field when they have a more nuanced conceptual understanding (Samiolo, 2012). Second, the connection between responsibility and corporate operations

[2] For an in-depth analysis of styles of calculation characterising a link between economic and environmental appraisal as well as the inter-relationship between economic representations of the environment, see Samiolo (2012).

should not be presumed as self-evident, particularly in a resource-constrained, market-oriented business environment (Solomon et al., 2013). Finally, interlinked influences such as reporting standards, investor expectations, customer voice, talent attraction, peer pressure or regulatory requirements become closely tied and ritualised which might have indirectly deflected scrutiny of responsibility itself as a side effect. A careful examination of the manifold meanings of responsibility in the literature may help to address these potential shortfalls in studies touching upon responsibility.

Approach to organising notions of corporate responsibility

The presented taxonomy lays bare the too often black-boxed term "responsibility" and presents a variety of conceptualisations of responsibility which circulate in the literature – ranging from a value-oriented, philanthropic notion of doing something additionally to core corporate considerations to the direct, economic concern with profit making. While different motivations for this range of meaning of responsibility can be observed, it should not be concluded that different substantial areas of responsibility are the main driver of this differentiation. Rather, the taxonomy is based on fine differences in understandings of responsibility itself. Within the different parts of the taxonomy, links to the notion of sustainability are examined. For each meaning of responsibility the question "responsibility to sustain *what*?"[3] is posed to connect responsibility with the underlying entity assumption in a reasonable way. Adding this concern into the taxonomy, enables us to understand responsibility as it moves from concerns with sustaining internal values of the firm to sustaining externalities; at the same time, the focus shifts from responsibility to corporate impacts and the measurability of inputs and outcomes increases (Blowfield & Murray, 2014).

Not only have academia and practice employed the terms of CSR, ESG, responsibility, sustainability since the 1950s, also several attempts to structure the field have been made since. For example, Carroll's (1979) endeavour to introduce a typology of corporate responsibilities splits firms' practice into discretionary, ethical, legal and economic responsibilities that are motivated by different drivers – ranging from contribution to the societal good to profit orientation. Although academic interest and business operations have grown significantly since this early-day typology, the spectrum of different understandings of responsibility still ranges from philanthropic engagement to material impacts of corresponding corporate practices (Archel et al., 2011; Carroll, 1991; Margolis & Walsh, 2003; Schwartz & Carroll, 2003).

[3] This question implies the question "towards whom?" since the corresponding entities, the corporate firm and the planet, relate to different stakeholders.

The taxonomy presented below builds on previous literature and is hoped to provide new insights and structure into the manifold meanings of responsibility characterising the corporate sustainability literature and practice. Figure 0-2 illustrates the structure of the taxonomy. It shows the two main axes of conceptualisations of responsibility which were identified in the literature: on the one hand, a planet-oriented, socially focussed, more independent responsibility and on the other hand a liability-like responsibility, which targets corporate aims of profit making. The taxonomy works with four main clusters of meaning that integrate several meanings each. These clusters range from 'Engaging independently with societal concerns', via 'Doing the right thing beyond profit' and 'Ensuring profit making in a multi-stakeholder environment' through to 'Living up to a liability-like responsibility', as clusters 1 to 4 respectively.

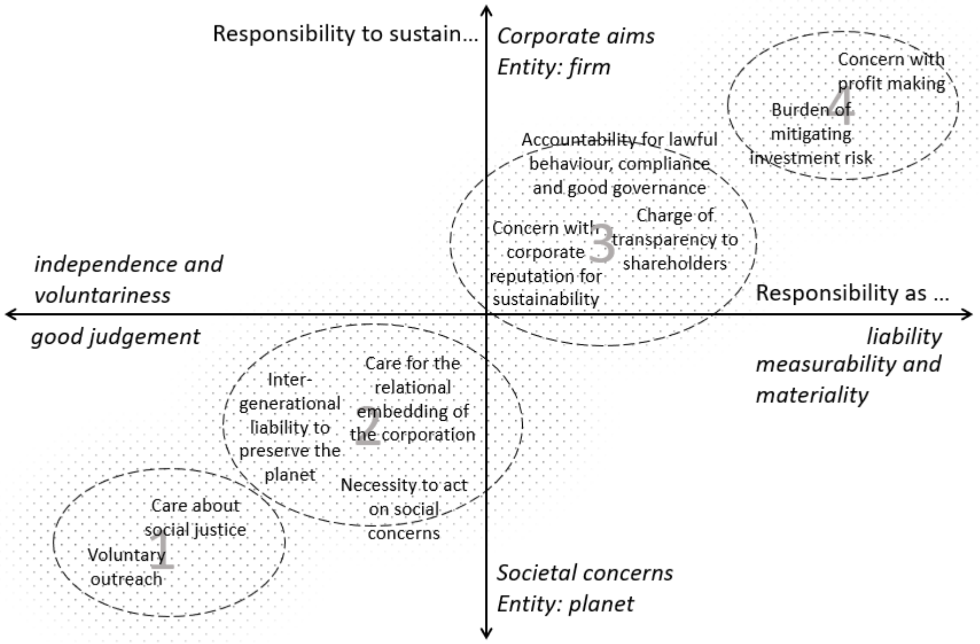

Figure 0-2: Structure of the taxonomy

Cluster 1: Engaging independently with societal concerns

The first identified cluster of meanings of responsibility reflects responsibility as an independent engagement for societal concerns. These matters are labelled as 'voluntary outreach' and 'care for social justice' in the taxonomy. This cluster of meanings of responsibility is assumed when corporations aspire to use their influence and corporate practices for reform of social norms (Spence & Rinaldi, 2014). Such aspiration is based on forms of intrinsic motivation and is premised on a conscience for social issues beyond, and not necessarily linked to the corporation.

The voluntary outreach

To voluntarily take on responsibility for social, environmental and governance issues has been described in the literature as the purest form of responsibility, or sometimes even a prerequisite for responsibility (Archel et al., 2008, 2011). The voluntary dimension of responsibility is understood as closely related to safeguarding moral-oriented values (Blowfield & Murray, 2014).

More specifically, in this conceptualisation, responsibility is not employed as a means to an end by corporations but as an opportunity in itself to fulfil a set of beliefs that go beyond the operating of a profitable business (Burchell & Cook, 2006; Waddock, 2001). Since responsibility is understood as voluntary outreach, the exercising of good judgement and independent assessment of impact factors are essential for the unfolding of this form of responsibility. Here, moral-oriented values such as integrity or fairness are at the forefront of corporate operations.

This notion of responsibility is thus only loosely connected to business considerations and rarely applied in an isolated form. Captured under the 'voluntary outreach' perspective are those understandings of responsibility in which corporations aim to sustain the entrepreneurial, independent nature of corporate decision-making. From this point of view, corporate operations themselves are a form of responsibility in terms of voluntarily caring for a corporate objective. This first meaning of responsibility is the closest to the moral side of responsibility with this concept in itself as a value, as a practice driven by inherently voluntary considerations and values.

The care for social justice

Closely related, but slightly further away from purely exercising good judgement for its own sake, is the 'care for social justice' (Aguilera et al., 2007). Moving from the more granular approach of the 'voluntary outreach' to the more comprehensive perspective on social justice, the care for the wider good does not occupy itself with different objects of responsibility. It is the conceptual lens that shifts here. With this meaning of responsibility, an outward looking component fuelled by internal, moral-related, value-motivated drivers is captured (Joyner & Payne, 2002). This reflects notions of responsibility which take the non-business, external surroundings into account – motivated by an independent engagement with societal concerns.

The 'care for social justice', as the purpose of this form of responsibility, refers to a more comprehensive understanding of the firm as embedded in society. This form of responsibility considers the political potential of caring for wider society as inherent to business actions. Responsibility is understood as independently doing good with corporate actions. Thus, this meaning of responsibility aims to sustain the entrepreneurial forces inherent to business operations. The "doing good" for the outside world is still independent but undertaken internally with the purpose of impacting the exterior, i.e. the surrounding society.

Cluster 2: Doing the right thing beyond profit

Gradually moving along the spectrum between philanthropy and materiality towards the corporate part of responsibility, the second cluster captures meanings of responsibility that do not directly support the business agenda. The following three forms of responsibility are relatively independent of corporate profit orientation. They describe meanings of responsibility that are based on the conviction of 'doing the right thing beyond profit' while – as opposed to the first cluster of responsibility – already having a separate purpose or direction.

The inter-generational liability to preserve the planet

The conceptualisation of responsibility as an 'inter-generational liability to preserve the planet' refers to corporate understandings of responsibility which seek to sustain the base to operate for future generations from a moral point of view. Such a view is premised on the belief that business operations allowed today will remain in place in the future. The label 'inter-generational liability' pronounces a connection between corporate operations and the consequences for wider society, even beyond generations, which is often expressed as a liability in the literature. For example, the term "Corporate Accountability" indicates a link between independent decision-making on specific corporate actions and an impact narrative (Parker, 2014).

Although, the "liability" wording of this responsibility indicates a hard and fast, measurable and determinable responsibility, it is still relatively vague on how issues such as global environmental questions or long-term impacts on future generations can be addressed. This form of responsibility refers to corporate actions motivated by convictions rather than market-driven or business-oriented sets of actions directly linked to stakeholder interest. This meaning of responsibility, therefore, refers primarily to concerns around environmental factors, driven by social considerations of keeping the environmental base for future generations to make their own (corporate) decisions.

The necessity to act on social concerns

Another conceptualisation of responsibility underpinned by the literature is a responsibility stemming from external pressures which trigger corporate engagement and concern. This concept is labelled as the 'necessity to act on social concerns' in the taxonomy. It is neither induced by market pressures such as economic considerations nor established as predominantly voluntary as previously described meanings of responsibility (Bénabou & Tirole, 2010). Rather, this particular notion of responsibility refers to the meaning of responsibility that gets taken on based on manifold social concerns pressing the business, ranging from external societal issues, such as local communities' concerns or talent attraction, to signalling the perceived necessity to care for internal purposes. This conceptualisation of responsibility as a 'necessity to act on social concerns' sustains the social licence to operate – a necessary but not sufficient condition for corporate operations. Moreover, a shift from focussing on internal values to the adoption of responsibility for externalities[4] – although in a relatively indirect manner – can be witnessed which becomes even more dominant in the following meanings of responsibility.

The care for the relational embedding of the corporation

This meaning of responsibility differs from the previous ones, as it seeks to capture those understandings of responsibility in the literature which are premised on a relational perspective on the corporation. The connection between a corporation and its surrounding is here understood as an organisational embedding through manifold processes of creating and exercising responsibility. The dynamics between different actors that unfold in such relatedness create social change or environmental advancement (Fordham & Robinson, 2018). Similarly to what Power (2015) describes in his work on accounting for research impact that is worked towards as a boundary object, the here described responsibility unfolds as it becomes part of work processes and gets reflected in standards, disclosure and infrastructure (Star, 2010). The 'care for the relational embedding of the corporation' is therefore partly driven by internal values of the firm that are acted upon as well as their counterpart, the materiality consideration of economic decision-making. While responsibility in this sense also includes causal effects outside the corporation, such purpose of organisational actions is less defining for this conceptualisation. Rather, the 'care for the relational embedding of the corporation' emphasises the importance of connections between firm and external parties in defining responsibility of corporations. Hence, the relationships themselves are understood as worth keeping rather than an emphasis on maintaining certain characteristics of a social, environmental or governance involvement.

Cluster 3: Ensuring profit making in a multi-stakeholder environment

The following cluster is even more closely aligned with corporate aims and a materiality-oriented[5] conception of responsibility. The three meanings of responsibility that come together under the heading of 'ensuring profit making in a multi-stakeholder environment' deal with the 'care for corporate reputation for sustainability', the 'charge of transparency to shareholders' and the 'accountability for lawful behaviour, compliance and good governance'. These meanings of responsibility are more closely tied to the corporate sphere and only vaguely connected to

[4] The internal can also be driven or shaped by the external. Rather than highlighting a binary divide of sources of pressure, the direction of travel is underlined in this cluster of meanings of responsibility.

[5] Notwithstanding the detailed engagement with the concept of materiality in Paper 2, materiality is here, for the purpose of this taxonomy, seen as a rationalised measure for importance of pieces of information (cf. Firth, 1979; Frishkoff, 1970).

wider societal concerns or moral reflections of corporate decision-making (Cooper & Owen, 2007).

The concern with corporate reputation for sustainability

This conceptualisation of responsibility seeks to capture the ways in which corporate decision-making relates to sustainability through considerations of reputation. It encompasses discussions in the literature about firms' need to establish and preserve trust in the firm and loyalty of parties such as employees, customers, suppliers in the immediate surrounding of the firm. For example, studies outline that firms which care for a good reputation run successful corporate profit-oriented operations while taking interests of external parties into account (Cho et al., 2012; Herremans et al., 1993). Here, responsibility is conceptualised as a responsibility towards maintaining a good reputation, trust and loyalty. In other studies, attempts to establish legitimacy by balancing different interest groups and creating public accountability are termed social licence to operate. Connecting corporate practices with the establishing of legitimacy is also studied by a stream of work in the field of capital market studies of firm performance and market reactions, like customer awareness and perception (Servaes & Tamayo, 2013). Such duty to the market builds the base for corporate operations (Brunsson, 1990). Again, it reflects an underpinning conceptualisation of responsibility as focussed on corporate considerations and the balancing of competing pressures from external and internal stakeholders – rather than charitable, society-focussed motivations that are driving other conceptualisations of responsibility.

Another example of this meaning of responsibility can be found in the corporate sustainability literature on supply chains which focusses on the operations of corporate entities. Supply chains are interconnected economic operations which require complex controlling processes. Corporations are supposed to take on responsibility for upstream or downstream activities; and yet much research shows that firms are often not able to control these operations which take place outside of their entity boundaries (Spence & Rinaldi, 2014). Similarly, studies on accountability in supply chains are also underpinned by an assumption of responsibility for supply chain integrity. While such responsibility may not be possible to successfully discharge, corporations are nonetheless required to care for, or in other words, show that they assume some degree of responsibility for their supply chains – if not for reasons of moral obligations, then out of a focus on running profitable economic operations. In this case, responsibility is more akin to material liability. In the taxonomy of notions of responsibilities, as the tangible, measurable and material part of responsibility grows, the morally infused concerns become less defining of what responsibility is understood to be.

The charge of transparency to shareholders

The 'charge of transparency to shareholders' receives detailed attention in both the capital markets and corporate governance literature. Issues such as access to finance, stakeholder engagement, information asymmetry and transparency are closely connected (Cheng et al., 2014). The literature reflects a presumed responsibility to provide shareholders with insights into the inner proceedings of the firm – rather than moral notions beyond the corporation. Transparency to shareholders is connected to maintaining the shareholder base, reducing agency costs and channelling shareholder activism (Michelon et al., 2020; Patten, 1990). This literature stream examines responsibility more explicitly. For example, many academic analyses hypothesise links between corporate responsibility, the signalling of this responsibility to outside parties and firm performance (Eccles et al., 2012; Ioannou & Serafeim, 2017; R. W. Roberts, 1992). While the detailed mechanisms of firm behaviour, information intermediaries and price development are subject to debate, the monitoring and directing of the flow of information towards capital market participants, including shareholders, is understood as a core part of corporate responsibility in the literature (ibid.). Firms that provide transparency to shareholders outperform their counterparts in terms of stock market and accounting performance (Eccles et al., 2014). Within the rapidly evolving stream of work on corporate responsibility, many aspects of the interplay between the described parties are still underdeveloped but the necessity to present CSR and ESG matters to shareholders is widely acknowledged as part of the concern (Eccles et al., 2012). Thus, underpinning this literature is the notion of responsibility that corporations ought to strive to meet shareholders' interests to keep the equity in the firm. In other words, responsibility here is not about discharging responsibility based on transparency, i.e. accountability, but rather refers to providing transparency for being a good capital raising business.

The accountability for lawful behaviour, compliance and good governance

This conceptualisation of responsibility is the closest to the concept of accountability, understood as a highly instrumental, direct and externally induced requirement. Here, responsibility refers to a multitude of corporate actions targeting the prevention of unlawful behaviour or the active promotion of compliance and good governance. Although this form of responsibility interacts with society, standard-setters and legislators, it is considered as an attempt to operate within the boundaries of the law and a common-sensical understanding of what is right – driven by economic considerations. A moral perception of acting in a correct manner is closely tied to this responsibility but more in the background due to a narrow focus on lawful decision-making (Archel et al., 2011). This notion of responsibility tries to sustain a regulatory licence to operate. However, this licence is the prerequisite for corporate operations and is embedded in economic considerations rather than activities that are guided by business values or moral deliberations. This meaning of responsibility is consequently best described by a narrow concept of accountability that refers to a linear connection between current corporate actions and their future impacts on the world as well as the tracing of this link.

Cluster 4: Living up to a liability-like responsibility

At the end of the spectrum, liability-like responsibility which targets corporate aims and is captured in measurable, materiality-oriented terms, deals with the 'burden of mitigating risk' and the 'concern with profit making'. These two meanings of responsibility are the furthest away from previously discussed voluntary, independent meanings of responsibility, they rather focus on the corporate entity and its operations.

The burden of mitigating investment risk

The internalisation and magnification of risk management is a burden that increasingly gets addressed by instrumentalising CSR as a risk response. Academic literature and corporate practice agree on the ability of CSR to limit companies' downside risk (Lins et al., 2019). Interestingly, conceptualisations of responsibilities described before, such as trust, confidence and social capital, are employed to explain this protection (ibid., Ioannou & Serafeim, 2010). Moreover, the responsibility to carry the burden of mitigating investment risk is seemingly connected to signalling a careful approach to corporate operations, including involved employees, that is rewarded by the market with lower bond spreads (Amiraslani et al., 2018). Since value implications of taking CSR issues into account are widely accepted, firms face the burden to worry about investment risk mitigation by means of responsibility (Khan et al., 2016). As a consequence, firms seek to deal with these material value implications of responsibility and take on the burden of mitigating investment risk (Ioannou & Serafeim, 2017). This form of responsibility refers to attempts to sustain the financial resources of the business by preventing overexposure to investment risks. In other words, through managing intangible factors, such as trust and investor confidence, material issues of profitability are pursued.

The concern with profit making

Last but not least, responsibility is understood as a concern with profit making which is conceptually at the heart of corporate operating (cf. Friedman, 1962, 1970). Whereas the targets addressed by the different notions of responsibility vary in their degree of specificity and ability to be reached, the targeted stakeholder group of this responsibility can be clearly defined and delimited. This form of responsibility is fuelled by corporate considerations and the materiality for the economic success and financial viability of the firm. Because of the fundamental importance of the income stream for the business, this responsibility is the closest to being a liability for the firm, a non-negotiable prerequisite for maintaining the operations. This responsibility relates to corporate aims of the firm entity and can be captured by measurable materiality considerations.

Take aways for the thesis

The above taxonomy deconstructs the rather broad and ambiguous concept of responsibility by relating it to different concerns with corporate sustainability. Two main configurations of the meaning of responsibility have been established in the taxonomy. On the one hand, responsibility can be more independent and sustain societal concerns against the background of the planet as a whole. On the other hand, responsibility can be seen as more measurable and with a direct link to sustaining corporate aims of the entity of the firm. Beyond those two 'poles' on the spectrum, the previous sections have shown that meanings of responsibility underpinning the literature encompass a wide spectrum, ranging from a value-driven and philanthropic approach of going beyond core corporate considerations, to a more direct focus on economic profit making (Archel et al., 2011; Carroll, 1991; Margolis & Walsh, 2003; Schwartz & Carroll, 2003).

The taxonomy implies potential tensions between processes of demarcating the corporate entity which are induced by business considerations as well as responsibility-driven attempts for demarcating. These approaches employ different paradigms for locating businesses in their environment. Recent developments in corporate practice, standard-setting, investment decision-making and accounting disclosure under the umbrella of corporate responsibility involve a wide variety of processes of demarcating the boundaries of the corporation itself and the responsibilities of the corporation. In particular, attention to a wide variety of impacts, consequences, involved parties, sourcing areas, financial returns requires a reconsideration of processes delimiting vast and interrelated dependencies. In such processes of demarcating and differentiating between issues to be taken into account and those which are to be precluded, responsibility emerges.

The three substantive papers of the thesis examine how different conceptualisations of responsibility – at times in tension with each other – play out and interrelate in different empirical settings. Given the conceptual ambiguity and multiplicity of responsibility, turning to practice can help us understand the tensions between different notions of responsibility, as well as how such tensions are navigated. Paper 1 of the thesis focusses on the emergence of responsibility and its shifting nature in the corporate context. Paper 2 furthers the analysis by unpacking the delimiting of responsibility from standard-setter side. Paper 3 closes the investigation with perspectives on the process of determining what is understood as responsible investing by an investment trust. The three empirical papers provide insights into how different meaning components of responsibility can go together or preclude each other. In practice, it can be witnessed that firms claim to be driven by different ends of the outlined spectrum. To what extent can different meanings of responsibility be combined, not only in a practical but also conceptual sense? And, assuming a certain limit to issues that can be addressed, how do firms work with this variety of meanings? How did the concern with corporate sustainability move from its early deliberation to the financialised understanding prevalent in recent times? And did responsibility thoroughly emerge or become more nuanced?

These questions indicate how much the locating of firms in their wider societal and environmental surrounding is contested. Businesses are increasingly perceived by society, peers and legislators as morally liable for issues beyond their immediate substantial, spatial or temporal boundary (Bebbington et al., 2014; Buhr et al., 2014). Consequently, the employment of the opaque notion of responsibility that arguably requires a form of conscience is a puzzling occurrence in the market-driven business context. Across the papers, this thesis therefore firstly analyses how responsibility is interpreted in the corporate context; secondly, how responsibility gets delimited; and thirdly, how this understanding and demarcating link to historical, field-related or firm-inherent characteristics.

Overall, this enquiry helps to reveal tensions between processes of demarcating the corporate entity induced by business considerations and more responsibility-driven processes of demarcating. The increased attention to all sorts of impacts, consequences, involved parties, sourcing areas or financial returns under the heading of corporate responsibility requires a reconsideration of processes delimiting vast and interrelated dependencies since responsibility is created by differentiating between issues to be taken into account and those to be left outside. Consequently, recent developments in corporate practice, standard-setting, investment decision-making and accounting disclosure introduce a more granular perspective on processes of demarcating both firm responsibility and the business itself as well as the interplay between these two.

In short, this thesis examines the dynamic process of taking on responsibility as a firm, involved parties, internal and external pressures, demarcating considerations, subtle decisions on the employed notion of responsibility, involved connections to sustaining certain factors, i.e. the discourse of taking on responsibility on a corporate basis. At the core of this enquiry is the manifold involvement of the notion of responsibility which shapes and is shaped by the aforementioned factors.

The research project and research questions

This study examines how firms demarcate their impact on issues that potentially lie outside their firm's boundary and explores how firms thereby assume particular forms of responsibility. The manifestation of different ways of bringing the accounting entity and the concern with corporate sustainability together is analysed as being produced by company-internal practitioners and academics in the field, standard-setters as well as financial intermediaries. In a threefold manner, the understanding and demarcating of responsibility for corporate sustainability is explored: First, the thesis reveals the historical emergence of the concern with corporate sustainability. Second, it studied the linking of accounting entity and sustainability, focussing on notions of materiality in a competitive standard-setting field. Third, it delves into the explicit articulation of inherent conceptions of the concern with corporate sustainability in a particular organisation.

These examinations unpack the concern with corporate sustainability. Analysing how corporations assume responsibility for ESG issues sheds light on their involvement in issues beyond their immediate sphere of control. Further, this enquiry provides insights into the interplay of historical, field-related, or firm-inherent characteristics with the dynamic nature of responsibility. Lastly, turning to this form of investigation helps understanding the demarcating of responsibility for the concern with corporate sustainability.

The research project is based on the following three separate data collections: One, an analysis of secondary data, historical material and interviews with academics, practitioners, standard-setters, consultants and analysts on the development of the concern with corporate sustainability over time; two, a participant observation at the Global Reporting Initiative (GRI), supplemented with interviews and document analysis in the wider standard-setting field for sustainability reporting; three, a participant observation and interviews in a project team developing an ESG policy in a London-based investment trust.

The analysis zooms in on the role of accounting in enabling, allocating and demarcating responsibility for ESG issues to firms. This responds to the research puzzle of the usage and extent of responsibility in a corporate context which can be broken down into, firstly, concerns with conceptions of responsibility in a corporate context and secondly, the boundaries of responsibility for corporate sustainability. To make these considerations more processual, the interference of responsibility and its demarcation is observed in three different contexts, the historical, the regulatory and the investor domain. In short, the thesis is guided by the following research questions: *How do corporations take on responsibility for sustainability issues and how do they demarcate their impact on issues that potentially lie outside their firm? How does this* *understanding and demarcating link to historical, field-related or firm-inherent characteristics?* The first paper of the thesis adds historical perspectives, the second paper zooms in on field dynamics and the last paper examines the organisational level of taking on and demarcating responsibility for sustainability issues.

In this way, this research aspires to draw novel perspectives on accounting as a qualitative and quantitative set of tools that does not only reflect but also shape the processes it is deemed to present (S. Burchell et al., 1980; Hopwood, 1983; Miller & O'Leary, 1987; Miller & Power, 2013). Accounting, as studied in the historical context, the standard-setting field and in investment due diligence, shapes, maintains and shifts the firm-society demarcation and the negotiation of notions of materiality in the struggles of determining responsibility. The following section introduces the thesis structure and gives an overview of the approach of the papers.

The thesis structure

To address these research questions, the different papers of the thesis focus on different dimensions of the interplay of accounting entity and the concern with corporate sustainability. The interactions of sustainability, a spectrum of meanings of "responsibility" and the demarcated entity are studied in three settings which move from discursive historical debates on corporate responsibility into decision-making processes of a specific firm. The first paper takes a historical perspective on debates around demarcating firms' responsibilities for ESG issues. The second paper zooms in on the field level of determining where firms' responsibilities begin and end. The third paper of the thesis analyses the determination of the firm boundary of responsibility from inside a particular firm.

The first paper, "Traces of the concern with corporate sustainability: How CSR turned into ESG", explores the historical emergence of the close entanglement of business operations and corporate care for wider impacts of these on ESG issues. This paper traces processes of dealing with responsibility in the corporate context since the birth of corporate sustainability as a field of knowledge and practice. It examines how responsibility as a spectrum between voluntariness and materiality is put to work in a longitudinal way. The puzzling interplay between corporate practices and the concern with corporate sustainability seems to unfold a variety of notions of responsibility that gain or lose importance in delimiting the responsibility of the firm. To unpack overarching trends, key aspects and drivers, this study draws on academic publications, traces of political events and societal movements, frameworks stemming from non-governmental activities, legislation relating to corporate sustainability since the 1950s and semi-structured interviews with academics, standard-setters and practitioners (27 interviews, 10/2020-02/2021, 45 min on average). The paper identifies the following three phases of the development: The first phase ‘Making responsibilities present’, the second phase ‘Accepting past responsibilities’ and the third phase ‘Bringing in future responsibilities’ come with different implications for the spatial, substantial and temporal dimension of the concern with corporate sustainability. Based on these findings, the paper argues that meanings of responsibility themself shift towards emphasising the materiality of impacts whereas processes of taking on responsibility in substance rely on good judgement. This work contributes to our understanding of how the concern with corporate sustainability is made to fit into the corporate approach to dealing with responsibility.

The second paper, “Relational dynamics in the standard-setting for sustainability reporting: How materiality is mobilised in co-dependence”, assesses the crowded, yet not hostile, field of standard-setting for the concern with corporate sustainability. This paper unpacks the relational dynamics between parties in the field that seem to be clustered around references to materiality by drawing on fieldwork at the Global Reporting Initiative (GRI) (350h, 05-08/2022 and 6 interviews, 55 min on average) and interviews at the International Sustainability Standards Board (ISSB) (13 interviews, 07-12/2022, 42 min on average). Both the GRI and the ISSB frame sustainability factors in their own favourable terms to compete for endorsement and adoption. However, these standard-setters do not just challenge each other, they also cooperate in some areas which results in an entangled, complex relationship. The paper argues that their relationship develops around the use of materiality and establishes a form of co-dependence. It introduces the notion of co-dependence to refer to a spectrum of competitive and cooperative references to materiality undertaken by the two parties. This examination of different centres of gravity for the use of materiality, that is often associated with a financial reporting logic, contributes to the ongoing materiality debate in two ways. First, drawing attention to the workings of materiality in the sustainability context helps underscore the delimiting characteristics of the materiality concept. Second, attending to the reference to materiality in the reporting process sheds light on the complexity of the standard-setting field and carves out frictions in the institutional environment of sustainability reporting.

The third paper, “Articulation of embedded approaches to ESG: How the loose interaction of matters of concern with matters of fact stabilises responsibility”, analyses the processes of capturing existing investment practices under the umbrella of ESG engagement in an investment trust. Drawing upon insights gained by observing the development of an ESG policy of an investment trust (230h, 05-07/2021 and 6 interviews, 07-08/2021, 31 min on average), this research addresses the activities and transformations that take place to stabilise understandings of responsibility as both matters of concern and matters of fact. Although the recent past has witnessed a proliferation of the corporate concern with ESG, little is known about the inner workings of committing those comprehensive, tacit, embedded approaches to paper. This paper employs the Latourian concept of matters of concern to unpack the unfolding of accounting traces of formerly implicit ESG considerations. It argues that the dynamics of articulating existing practices brings matters of concern and matters of fact in loose interaction. These two strands enabling responsibility could not exist in separation but are differently referenced in various contexts. Because of that, the emerging traces of ESG do not result in material changes, disruption or decoupling, they rather embed responsibility for investment decision-making into the operations of the trust. The explicit creation of narrative accounting traces in addition to the pre-existing concerns with corporate responsibility, the "germination of the seed" as perceived by fieldwork participants, provides a comprehensive inclusion of the complex issue of responsibility into the investment context. These findings reveal the workings of accounting representation of an emerging topic in an institutional setting that is *per se* heavily reliant on combining facts and concern in its practices. These insights firstly contribute to the analysis of responsibility in accounting as a complex concept and secondly have implications for the study of matters of concern as interacting much closer with matters of fact than current scholarship suggests.

Based on these three papers that shed light on processes of taking on responsibility from a historical, a regulatory and an investor perspective, the role of accounting in enabling, allocating and demarcating corporate responsibility is discussed. After presenting the three empirical papers, the thesis develops a grammar of demarcation for understanding the nature of various configurations of delimiting the impact of corporations. These insights contribute to the critical accounting literature since the ubiquitous and vague concept of sustainability provides the backdrop for a comprehensive overview and detailed analysis of properties of demarcations such as framing, classifying, categorising or permeably demarcating that delimit the accounting entity. Furthermore, the discussion draws on the tracing of the development of the concern with corporate sustainability to provide novel perspectives on the role of accounting, with both its narrative accounts and calculable metrics, in shaping the practices it is deemed to reflect. The thesis shows how heavily accounting is involved in negotiations of a changing firm-society boundary as well as in combining a materiality with an impact logic. The following table gives an overview of the respective approaches of the substantive papers and summarises key aspects of each paper, such as research questions, findings, core arguments and contribution.

Shifting corporate concerns: Three papers on sustainability, corporate responsibility and the changing role of accounting			
	Paper 1	Paper 2	Paper 3
Title	Traces of the concern with corporate sustainability: How CSR turned into ESG	Relational dynamics in the standard-setting for sustainability reporting: How materiality is mobilised in co-dependence	Articulation of embedded approaches to ESG: How the loose interaction of matters of concern with matters of fact stabilises responsibility
Focus	Historical	Regulatory	Investor-related
Empirical setting	Literature-based historical analysis of development	Field-level analysis of relational dynamics in standard-setting	Organisation-level analysis of responsibility in investment due diligence
Method of data collection	Collection of academic publications, traces of political events and societal movements, frameworks stemming from non-governmental activities and legislation; expert interviews	Field study, participant observation, expert interviews, document collection	Field study, participant observation, interviews, document collection
Method of data analysis	Historical, genealogy-inspired analysis	Thematic analysis	Discourse analysis, documentary analysis
Main research questions	How do corporations take on responsibility for sustainability issues and how do they demarcate their impact on issues that potentially lie outside their firm? How does this understanding and demarcating link to historical, field-related or firm-inherent characteristics?		
	How did the concern with corporate sustainability emerge and change?	How is materiality discussed on the ground and what does that tell us about the relational dynamics of the standard-setters?	How does the process of articulating an ESG policy unfold in an investment trust?

Shifting corporate concerns: Three papers on sustainability, corporate responsibility and the changing role of accounting (continued)			
	Paper 1	Paper 2	Paper 3
Findings	The development of the concern with corporate sustainability can be captured in three phases: 'Making responsibilities present', 'Accepting past responsibilities' and 'Bringing in future responsibilities'. Responsibility over time expands in its spatial, substantial and temporal dimension, while it narrows in its meaning for involved actors, employed measures and voluntary considerations.	Both the GRI and the ISSB involve in materiality-talk for framing sustainability factors in their own, favourable, terms to compete for endorsement and adoption. However, these standard-setters do not just challenge each other, they also cooperate in some areas which results in an entangled, complex relationship.	The explicit creation of narrative accounting traces, in addition to the pre-existing concern with corporate responsibility, results in struggles of accounting representation but allows for a perception of comprehensively including the complex issue of responsibility into the investment context. The introduction of articulated matters of fact leads to a shift in balance and causes confusion before it leads to acceptance.
Core arguments	The spatio-temporal expansion of responsibility, in parallel, brings a narrowing of the meaning of the term: firms seemingly move along the materiality side of the spectrum of meanings of responsibility whereas processes of taking on responsibility in substance very much remain powered by voluntary adoption.	The juxtaposition between an investor-oriented, financial accounting-inspired and entity-focussed standard-setter, the ISSB, and a standard-setter referring to the planet as their entity, the GRI, is perceived as mediated by the concept of materiality. This materiality-talk reveals forms of cooperative and competitive co-dependence.	Responsibility for investment decision-making is perceived as a both precise and lived issue that gets stabilised by combining matters of fact with matters of concern. To fully integrate ESG factors, lived care for this topic area was backed up by precise written traces.
Contributions	The paper provides insights into the process of arranging the concern with corporate sustainability to fit into the corporate approach to dealing with responsibility.	The paper reveals a logic which underscores the delimiting characteristics of the materiality concept. Attending to the references to materiality in the reporting process sheds light on the complexity of the standard-setting field.	The paper shows that responsibility requires both a fact-based and a populated, debated strand to align with existing practices. It also sheds light on the process of articulating embedded social practices and the emerging of accounting representations.

Figure 0-3: Overview of approach of the papers

1 Traces of the concern with corporate sustainability: How CSR turned into ESG (Paper 1)

Content

Abstract

Previous research and public opinion suggest a strong connection between business operations and corporate care for their wider impacts on environmental, social and governance (ESG) issues. Yet, our understanding of the processes for dealing with responsibility in a corporate context remains limited. This paper draws attention to the development of the concern with corporate sustainability over time and how responsibility as a spectrum between voluntariness and materiality is put to work in a longitudinal way. The puzzling interplay between corporate practices and the concern with corporate sustainability reveals a variety of notions of responsibility that gain or lose importance in delimiting the responsibility of the firm. To uncover overarching trends, key aspects and drivers, this study draws on academic publications, traces of political events and societal movements, frameworks stemming from non-governmental activities, legislation relating to corporate sustainability since the 1950s and semi-structured interviews with academics, standard-setters and practitioners. I in this way identify the following three phases of the development: The first phase 'Making responsibilities present', the second phase 'Accepting past responsibilities' and the third phase 'Bringing in future responsibilities'. Responsibility over time expands in its spatial, substantial and temporal dimension, while it narrows in its meaning for involved actors, employed measures and voluntary considerations. These key findings suggest a shift towards emphasising the materiality of impacts in the meaning of responsibility itself, whereas processes of taking on responsibility in substance rely on good judgement. Ultimately, this work contributes to understanding how the concern with corporate sustainability is integrated into the corporate approach to dealing with responsibility.

Introduction

The typewritten, yellowed pages of the 1954 annual report of Unilever, a British consumer goods manufacturer, mention all kinds of overseas sourcing regions of cacao, coffee and palm oil but do not address the impacts of these far-reaching business operations on the environment, social questions or corporate governance, let alone responsibility for any of those issues (Unilever, 1955). In contrast, the 2020 disclosure gives a different picture. The entire report is focussed on the two-fold discussion of "how [they] are running a responsible and effective business" (Unilever, 2020, p. 3), with numerous references to people, planet and sustainability, and the term "responsibility" appears more than a hundred times. One question directly following from this observable turn of the tide – that is illustrative for an industry-wide trend – is what shifts of the concern with corporate sustainability have taken place during the last seven decades. More concealed, yet already pinpointed by firms such as Unilever, which devotes a major part of their sustainability report to "Scope and Boundaries" (ibid.), is the consideration of processes of demarcating this responsibility. Consequently, this paper firstly examines how the variety of notions of responsibility are navigated over time, secondly, how certain meanings gain or lose importance for involved parties, and thirdly, how responsibility gets delimited in different phases of the described development of the concern. By studying the emergence of the concept of responsibility since the birth of the concern with corporate sustainability as a field of knowledge in the 1950s, nuances of meaning of responsibility in a corporate context get addressed in a longitudinal manner. The study finds that responsibility has become more comprehensive yet narrowed in its meaning components. It is therefore argued that firms seem to lean towards the materiality side of the spectrum, whereas processes of assuming responsibility fundamentally remain powered by a voluntary adoption of responsibility.

The occurrence of an idea labelled "responsibility" in the corporate context arguably combines different logics: a consolidation of business operations and impacts of those. Nuances of meaning of responsibility which are captured in a form of accounting link corporate operations with the concern with corporate sustainability (see figure 1-1). Over time, this puzzling link may shift leading to tensions between narrowing and widening tendencies – that are both facilitated and captured by accounting measures. This interplay of corporate practices and the concern with corporate sustainability seems to unfold a variety of notions of responsibility that gain or lose importance in delimiting the impact of the firm. In practice, accounting captures the described link between corporate practices and their impacts and serves to delineate the comprehensive concern with corporate sustainability. This interplay between accounting, responsibility and the demarcating of the latter creates frictions for both, the observed accounting entity and the concern with corporate sustainability. In other words, the reach of the responsibility of the individual firm into the environmental and social sphere is at stake when it comes to comprehensive sustainability considerations.

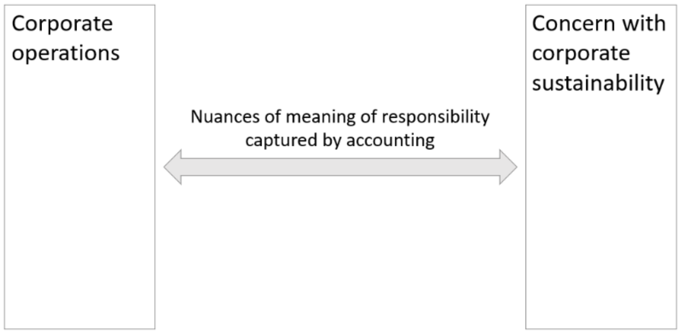

Figure 1-1: Examined link between corporate operations and impacts of those

In the literature, responsibility is described as a multifaceted phenomenon that relates to processes of demarcating the area of impact or care. The concept itself is thereby an iteration between the two extrema of good judgement, i.e. having the right to act independently without authorisation, and attribution of liability or culpability (cf. Cambridge English Dictionary, 2017)[6]. The neighbouring concept of accountability, which is discussed by a comprehensive stream of

[6] A comprehensive taxonomy of meanings can be found in the introduction to this thesis.

literature, goes beyond this perceived duty. It refers to a more formal mechanism that allows affected parties to demand an account of reasons for certain decisions (O'Dwyer & Unerman, 2007; Parker, 2011; Spence & Rinaldi, 2014; Unerman & O'Dwyer, 2006). In short, accountability is more focussed on a linear connection between future developments and current actions[7] as well as the tracing of this link. Responsibility, however, is more difficult to capture, fuzzier and comes from a moral conviction of caring about something (Messner, 2009; Schweiker, 1993).

A relation between corporate practices and the consequences of their operations for their social and environmental surrounding, as shown with the example of Unilever, is not *per se* a novel phenomenon. Corporate Social Responsibility had been taken on for long – even before the abbreviation "CSR" came into being. It was echoed in corporate decision-making of various nature, academic debates in different fields, societal movements on many levels, legislation around the globe and engagement of non-governmental organisations (NGOs) of manifold scope. Indeed, considering a social component within corporate activities and taking wider societal consequences of firm operations into account can be traced back far into the past: In ancient Roman Law, the corporation is set up as an entity that is *per definitionem* separate from society and caries at the same time an inherent responsibility for social matters (e.g. in the form of asylums, hospitals and orphanages). This already indicates how deeply rooted the tension between the bounded corporate organisation and its demarcation towards the environment is (Chaffee, 2017; Latapí Agudelo et al., 2019). The history of corporate behaviour comes with many examples of firms taking the notion of the "corporation" – derived from the Latin "corpus" for "body of people" – literally as a twofold construct consisting of an entity (i.e. the "body") and a people component (i.e. "of people") motivating certain social involvements, for instance, the social orientation of Quaker corporations or the participation in abolishing slavery by the East India Company.

However, these linguistic and conceptual origins of the company do not inhibit an orientation towards profit making in corporate activities. It rather is an interesting observation that the field of knowledge "concern with corporate sustainability[8]" emerged in the early 1950s and developed over time from philanthropic CSR to an investment screening tool under the label of ESG for environmental, social, governance-related[9] corporate involvement (Carroll, 2008). After

[7] The accountability link between action and corresponding reaction is much tighter than a responsibility connection between current practices and their impact.

[8] Using this term instead of "responsibility", "accountability" or even "sustainable development" might be puzzling. The reason for choosing "sustainability" is to use an umbrella term different from CSR or ESG to describe practices perceived by interviewees.

[9] Some of the interview participants dissect the acronym and e.g. speak of "the 'E'" for environmental issues etc.

centuries of corporate engagement in social and environmental matters, a field of knowledge emerges. This concern with corporate sustainability gets captured by a label, referred to by actors from practice, academia and civil society as shown above. It was equally promoted by frameworks as well as regulation and reported on in firm disclosure with various metrics. It lastly shifted in conjecture with overarching political, societal, historical trends and underlying discourses. In other words, the concern with corporate sustainability became the product of representing and object of intervening by human actors – without assuming at this point a specific understanding of "corporate sustainability" or the concern with it (Hacking, 1983).

In 1953, Bowen, later known as the father of Corporate Social Responsibility, published his book "The Social Responsibility of the Businessman" that – although, not yet mentioning the CSR acronym – became the steppingstone of the rise of the field of knowledge of CSR (H. R. Bowen, 1953). Other sources refer to a pivotal lawsuit in the same year that clarified that the US company Standard Oil is not restricted by shareholders' interests in its philanthropic donations (Heslin & Ochoa, 2008). These points of view on the beginning of modern-day CSR can be seen as symptomatic for the field of knowledge itself. It gets considered from various disciplines, practice and academia, it has close connections to legislation as well as standard-setting and has always been a global phenomenon. Put another way, CSR is a non-coordinated ecology that flows over different organisational and institutional levels while being ubiquitous and vague at the same time. This rather fuzzy bundle of philanthropic corporate-society interplays additionally changed its focus, stakeholders and audience over time which can be illustrated by shifts in naming the phenomenon that potentially stand for changes in the field of knowledge itself. Consequently, the changes in the labelling and locating in a discipline of CSR could indicate emerging underlying discourses beyond the pure naming of a field of knowledge. The focus of the analysis here is the extent and nature of responsibility for the concern with corporate sustainability.

This paper zooms in on the shift[10] of the concern with corporate sustainability from CSR to ESG to unpack different dimensions[11] of responsibility of the corporate entity. Overarching societal and political trends, key actors as well as illustrative metrics are derived by engaging with academic publications, traces of political events and societal movements, frameworks stemming from non-governmental activities and legislation relating to corporate sustainability since the

[10] More precisely, the paper deals with these aspects in the Anglo-Saxon capitalism. This choice of focus area goes back to the location of the researcher, home institution and course of the snowball sampling. To unpack dominant meanings of CSR and their shifts, a cultural backdrop for the observed field had to be stable (cf. Archel et al., 2011).

[11] Although, related terms such as "areas" could be used, the "extent" or "expanse" connotation of the term "dimension" is deliberately chosen.

1950s. Semi-structured interviews with academics, (quasi[12]) standard-setters and practitioners conducting research or working in the area as well as reading of company disclosure on sustainability are added to the picture.

This tracing ascertains how the firm responsibility expanded in the spatial (geographical) dimension from a local concern to supply chain tracking and even prospectus business areas later on. Responsibility also broadened in the substantial dimension from a focus on social issues over the addition of environmental matters to a threefold ESG responsibility. It lastly developed in the temporal dimension from a narrow incorporation of present responsibility via considerations of the past to future-encompassing responsibility. In parallel, the meaning of responsibility shifted from voluntary considerations to regulated targets, diverged from a positively framed business activity to a mandatory component of a corporate strategy and narrowed down from good judgement to materiality screenings of business opportunities. Thus, the historical tracing of the field of knowledge allows novel perspectives on the question of how different dimensions of firm responsibility emanate from underlying discourses. This goes beyond and reveals tensions about the accounting entity and corresponding processes of demarcation that get unveiled by this analysis. The main research question guiding the tracing of the descent of the concern with corporate sustainability is: *How did the concern with corporate sustainability emerge and change?* More specifically the paper asks in a three-fold approach 1) How the variety of notions of responsibility gets navigated over time; 2) How certain meanings gain or lose relevance and 3) How responsibility gets delimited. The analysis thereby allows a more nuanced reflection on how the understanding and demarcating of the concern with corporate sustainability developed. A light is shed on the societal and political circumstances in different periods of the development of responsibility. More precisely, the interaction among actors in the field and their outlook on the emerging field of knowledge is examined. Both key shifts and gradual developments are taken into account.

[12] The term "quasi" is employed to indicate the ambiguous nature of parties involved in designing reporting standards. Some parties develop non-binding, voluntary codes and best practices, some standards are endorsed by national regulators and others are directly linked to mandatory disclosure formats. But – as articulated by interview participants – the statutory nature of the reporting recommendation/ requirement does not necessarily reflect the employment in practice.

This paper argues that the journey from CSR to ESG with all its components and implications indicates a significant inflection point in terms of dealing with responsibility itself. The concept has a variety of meanings that can be located between good judgement and liability. Over time, the meaning of responsibility shifts from the former towards the latter as depicted in figure 1-2 (Archel et al., 2011; Carroll, 1991; Margolis & Walsh, 2003; Messner, 2009; Schwartz & Carroll, 2003; Schweiker, 1993). On the one hand, responsibility can have a strong meaning of independence and voluntariness. On the other hand, it can be closely tied to measurable and material allocation of a liability. Dissecting the developments of the concern with corporate sustainability, involved parties, key aspects, metrics, accounting instruments and practitioners' perception, a recast in thinking of responsibility becomes recognisable. The two poles making up responsibility, the more independence-oriented and the measurability-focussed side, get addressed differently over time.

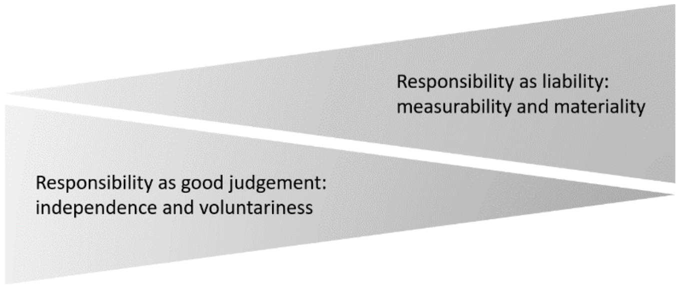

Figure 1-2: Two extrema of responsibility

In the course of the emergence of the concern, the two meaning components of responsibility fade into each other and construct a very particular notion of responsibility in the corporate context (as shown in figure 1-3). Responsibility seems to become wider once the spatial, substantial and temporal dimension become broader. The growing measurability in accounting terms and the materiality for the business, as already indicated in the excerpt of the 2020 Unilever disclosure, foster more comprehensive responsibility. Topics like impact considerations, the quantification and financialisation of previously fuzzy narratives as well as the inclusion of risk in the sustainability sphere, are traces of the shifting concern. While these factors indicate an expansion of responsibility, the independent, moral, voluntary meaning of responsibility decreased over time. Moreover, the manifold concept of responsibility got reduced to a calculable investment opportunity. Firms seem to address the concern with corporate sustainability with an understanding of responsibility that leans itself more towards materiality whereas processes of taking on responsibility in substance very much remain, however, powered by the voluntary adoption of responsibility.

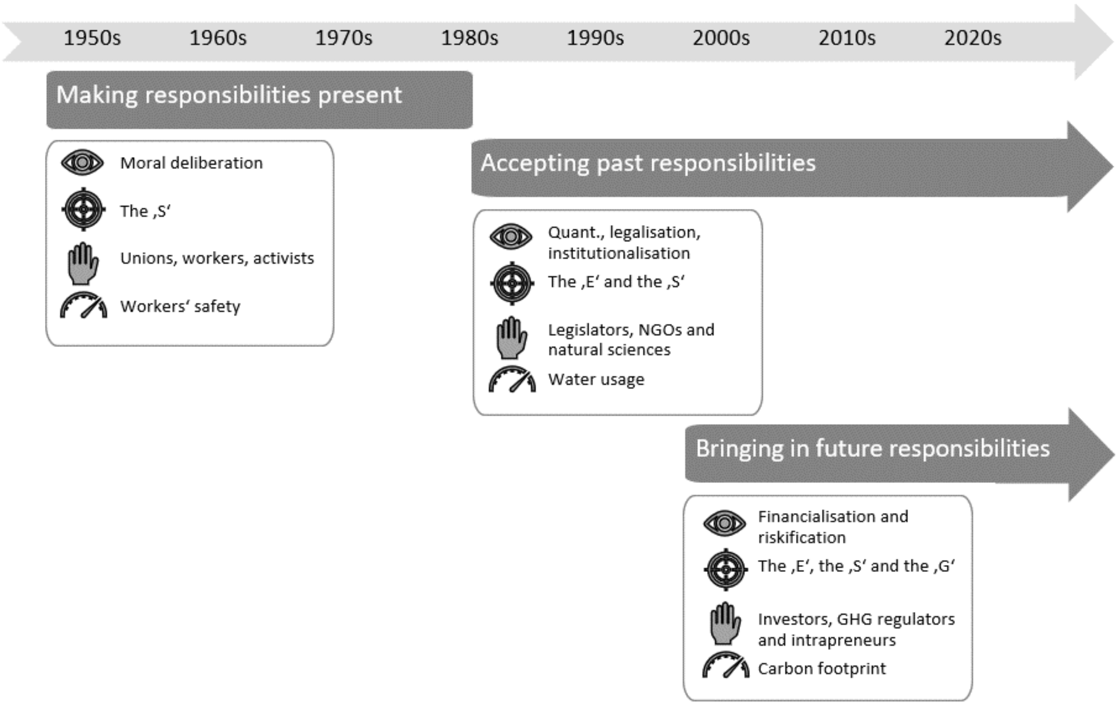

Figure 1-3: Overview over the phases of the development of the concern with corporate sustainability

This research firstly sensitises readers to the workings of incorporating a hard-to-grasp, non-linear, measurable and at the same time uniquely perceived concept into the structured accounts of corporate disclosure. The dynamic shifts in the meaning of responsibility in the corporate context change the angle on the concern from perceiving it as an area of good judgement to capturing it as a liability and lastly to seeing it as an investment opportunity. The paper secondly provides insight into the link between responsibility and accounting which stands for an integration of opaque ideas into the business context. The nuanced ideas on responsibility studied in this paper advance our understanding of the nature of accounting and its role in enabling and disabling a highly complex relationship between accounted measures and processes translating fuzzy ideas (such as responsibility) into the business context.

This paper proceeds as follows. The next section introduces the research approach before three distinct phases of the development of the field of knowledge around the concern with corporate sustainability are separately analysed. The first phase, lasting from the 1950s until the mid-1980s can be titled as *Making responsibilities*[13] *present*. At that time, growing awareness for corporate responsibility remains limited to preventing employees from harm or restricting the use of endowment funds for war purposes. Actors during this period are mostly parties interested in social issues such as workers, unions and societal movement activists.

[13] The plural form is used to pay tribute to the multiplicity of meanings and understandings of the concept without being too quick in assuming a certain definition or even binarity of being or not being responsible.

These developments are superseded by the second, still-ongoing phase summarised as *Accepting past responsibilities*. Driven by nuclear disasters and oil spills around the world, an environmental focus supported by regulators and NGOs becomes more dominant. This phase translates into the clean-up of contaminated land, brings in a perspective on external responsibilities and adds a recognition of corporate legacy.

From the early 2000s onwards, the concern with sustainability developed further to 'Bringing in future responsibilities' without concluding the previous phase. Induced by a long-term perspective on emissions that remain in the atmosphere for centuries, ideas like life-cycle assessments, cradle-to-cradle narratives, strategic CSR longing for business benefits, consequential emissions accounting as well as ESG investment, which incorporates other forms of future investments returns, emerge. Additionally, the increased attention to internal governance constellations triggered by major corporate scandals plays a role in the internal processes of connecting sustainability issues holistically. Mainly actors from capital markets and, to a lesser extent, governments and civil society, refer to this significant shift in paradigm.

The analysis considers overarching trends and key aspects of each of the phases and sheds light on key drivers as well as exemplary metrics of the dynamic development of the concern (as summarised in figure 1-4). The discussion brings the historical emergence of the dimensions of responsibility back to their relevance for responsibility itself that – in practice – draws on different ends of its spectrum of meanings. The conclusion summarises the ideas and contributions of this paper.

Phase		Phase 1: Mak*ing* responsibilities present	Phase 2: Accept*ing* past responsibilities	Phase 3: Bring*ing* in future responsibilities
Time horizon		1950s-mid 1980s	1980s-now	Early 2000s-now
Overarching trends		Activism-induced philosophical deliberation, moral questioning of business activities	Quantification, legalisation, institutionalisation, closer alignment with natural sciences	Financialisation, riskification
Key aspects		Social aspects Focus on employees, workers' safety, consumer protection	Social and environmental aspects Focus on pollution, contamination, clean-up of land	Social, environmental and governance-related aspects Focus on GHG emissions (even downstream), life-cycle assessments, ESG investment, double materiality
Key drivers		Unions, workers, activists	Legislators, (quasi) standard-setters, NGOs, (reference to) natural sciences	Investors, legislators especially in relation to GHG trading mechanisms, intrapreneurs
Illustrative metrics		Workers' safety: number of safety incidents	Water usage: cubic metres of water used in the supply chain	Carbon footprint: tonnes of CO2e
Dimensions of responsibility	Spatial	Rather local	Supply chain tracking down to sourcing areas	Prospective business areas and regions for potential future business development
	Temporal	Present responsibilities	"Remedy" of past responsibilities not taken on back then	Responsibilities for issues that materialise in the future
	Substantial (in scope)	Social aspects	Social and environmental aspects	Social, environmental and governance-related aspects

Figure 1-4: Development of the concern with corporate sustainability

Methodology

Data collection

To investigate how the concern with corporate sustainability developed, in particular focussing on the widening and narrowing of responsibility itself as well as the enabling and disabling role of accounting in this context, a triangulation between a variety of sources was undertaken (Alexander, 2006; Fourcade, 2011). Due to assumed conceptual and practical connections between this concern and accounting, traces of reporting instruments, metrics and the expertise of drivers of the emergence of the field of knowledge are scrutinised (Carnegie & Napier, 1996; Hopwood, 1990; Loft, 1986; Miller, 1998; Miller & Napier, 1993; Pflueger, 2016; A. M. Preston, 1992). Specifically, the study draws on academic articles on CSR, sustainability, ESG matters, sustainable development, natural capital, integrated reporting *et cetera* as well as UK and EU legislation[14] on non-financial reporting and greenhouse gas (GHG) emissions trading (Alejandro et al., 2023; Cooren, 2004; Cummings et al., 2018; Bueger, 2015; Bueger, 2021). The examination of these sources is supplemented by expert interviews.

The archival data was collected by starting from academic articles on the historical development of the concern with corporate sustainability (Bodansky, 2001; Carroll, 1999, 2008; Latapí Agudelo et al., 2019) and followed references thereby employed as well as subsequently searching for mentioned concepts, authors, trends and milestone events. The legislative material was compiled by checking both references in the described academic articles and researching the regulatory base of (reporting) practices referred to in corporate reports[15].

This material is complemented with 27 semi-structured interviews that were remotely conducted between October 2020 and February 2021, audio recorded, transcribed and interviewees provided for revision. Although, the interviewing process started as part of an exploratory research stage, the interviewee sampling soon developed into a specific direction following a dedicated rationale: Neither practitioners dealing with sustainability on a daily basis, e.g. as part of a corporate CSR department, nor those immediately affected by the concern with corporate sustainability, e.g. workers or local communities, were targeted. Unintentionally starting with the trajectory of the snowball sampling, later on consciously pursuing this direction, field-level actors were approached. Academics doing research from an accounting perspective on the concern with corporate sustainability as well as law, management and political science scholars studying forced labour and supply chains as well as quasi standard-setters, ESG investors and sustainability consultants were contacted.

The reasoning behind interviewing experts that can neither be categorised as insiders nor outsiders is that they arguably provide a perspective on the emergence of the field of knowledge with its evolving streams, dimensions, actors, metrics and labels. In other words, the examination of the perception of interviewees of processes determining corporate responsibility undertaken in this research project is deliberately limited to practices that get witnessed by the described parties. These interviews enriched the perspective provided by the compiled, linked documents since they helped cover the lived experience with the emerging field of knowledge. The written sources and the oral accounts relate to each other since interviewees often referred to documents, pieces of legislation or influential corporate reports.

[14] The study focusses on the Anglo-Saxon and EU context since this was the research environment of the project and the area most sources clustered around.

[15] This encompassed a set of corporate reports by UK firms with business practices potentially harmful for the environment (energy and utilities) and socially challenged firms (pharmaceuticals) compiled for a previous research project, retrieved from the corresponding corporate websites.

The overarching themes of the collected documents also became much clearer once interviewees highlighted turning points from their point of view.

The interviews started with introducing my research project, online conferencing related housekeeping and clarifying questions regarding the information sheet and consent form as well as briefly summarising the reasons for contacting the interviewee and their research, recent publications or current job title. The interview guide that structured the following conversation dealt with five main areas: the connection of the interviewee to the field of knowledge; the preference of labelling the concern and motivation for the latter as well as potential greater importance of a sub-area of corporate sustainability for the interviewee; challenges of implementing and measurement issues; drivers and motivations; the development of the concern over time. During the interviews, the order and extent of the areas varied but the motive to ask for specific day-to-day examples and experiences of the interviewees for the described processes ran through all interviews.

Data analysis

The empirical material was continuously analysed over the study period (G. Bowen, 2009; Prior, 2004). However, a major part of compiling the documents was done between June and September 2020 and collected during this period on a large handwritten poster[16] which categorised documents as either relating to political milestone events, legislation, academic publishing or NGO framework development. This form of hands-on compilation of sources was chosen to dynamically re-arrange the developing 'CSR bundle' wherever necessary. A deliberately flexible approach was taken to actively reflect on the choice of documents, milestones or actors. After having stabilised a structure for the multi-level development of the field of knowledge, the overview was captured in a flow-chart and the scope was narrowed down to processes related to the EU[17], more precisely the UK. The iterative analysis of documents and interviews enriched subsequent interviews but also led to several paths not followed further such as focussing on the growing profitability of sustainability or considering emerging professions around the concern with corporate sustainability over time. The periodisation adopted for the analysis crystalised early on due to the massive shifts taking place

[16] Please refer to the appendix of this paper.
[17] The UK officially left the EU in January 2020 but went through a transition period until December 2020. At the time of the research project, close institutional, legislative and political ties connected the UK and the EU (2019/C 384 I/01, European Union & United Kingdom, 2019). Therefore, the focus of this study is the Anglo-Saxon capitalism in the UK context that was shaped by the EU and comprehensively impacted by continental European perspectives throughout the time horizon of the study.

in the mid-1980s and early 2000s but the parallel existence of the second and the third phase, as described here, developed later on.

During the analysis, the spatial and substantial dimension of responsibility become obvious by immersing into the material, whereas the temporal dimension could only be mobilised by stepping back and considering the data from a distance. Moving back and forth between data and potential patterns, a structure for making sense of the development of the concern with corporate sustainability emerged. After having developed a scaffolding for the phases and dimensions, quotes were grouped, reorganised and summarised as referring to key aspects, key drivers or illustrative metrics as well as sub-themes. Interestingly, the examination of language and rhetorical devices was less insightful than the careful reflection about what interviewees were bringing up in response to open questions (Fairclough, 1992; Kotwal & Power, 2015; Van Dijk, 1999; Wodak, 2001).

Conceptually, it is important to keep in mind that the interviewed experts not only describe their perception, their sense-making and their role in the development of the field of knowledge from a very specific position – as outlined above – but they also refer to the discourse from a historically challenging perspective that requires further consideration. They look at the field of knowledge, how they are experiencing it and how they understand the history of the concern but this is their presentational account of traces of the concern with corporate sustainability, not their operational experience (Van Maanen, 1979). Moreover, the interviewees' accounts[18] were carefully regarded to study the discourse about corporate sustainability – rather than taking the utterances as neutral accounts of the development of the concern (Kreiner & Mouritsen, 2005).

Analysing the historical emergence of the field of knowledge reveals three distinctive and at the same time linked phases of the concern with corporate sustainability that represents and intervenes in the underlying discourse. More specifically, the stream of traces was unpacked and analysed for shifts in the underlying perspective on the field of knowledge. To study the multifaceted development, every phase is examined and explicated in terms of overarching societal, political and economic trends, key aspects of the concern with corporate sustainability, key drivers and lastly illustrative metrics. The movement from 'Making responsibilities present' via 'Accepting past responsibilities' to 'Bringing in future responsibilities' is disentangled in the following three sections. Afterwards, the usage and delimiting of different notions of responsibility during the development is discussed. Based on this analysis, it can be shown that

[18] Interviewees were also acknowledged as part of changing actors constellations. Because of that, their perspectives were brought together to paint a picture of the changing field of knowledge.

the spatio-temporal expansion of responsibility also brings a narrowing in the nature of responsibility.

Analysis

Phase 1: Making responsibilities present

The emergence of the concern with corporate sustainability clusters around moral questions about business activities, the value created for shareholders as opposed to potential limits to growth and rather philosophical deliberations about the role of the corporation within society. From the 1950s until the mid-1980s, the engagement of firms in the area of sustainability is centred on social aspects considering workers' safety and consumers' protection which is fuelled by rather local drivers such as employees, unions and closely related activists. Corporate responsibility is consequently taken on at a local level, very much focussed on preventing harm from current activities and centred around social issues. A core metric reflecting and condensing these characteristics is the number of safety incidents per individual plant, capturing workers-related responsibility in the short term and referring to the local interest of the company to keep their operations running. During this phase, the process of 'Making responsibilities present' refers to both, the discovering of the area of corporate responsibility and the incorporating of abstract ideas into contemporary accounts.

Overarching trend: Moral deliberation

The concern with corporate sustainability gains a foothold soon after the 1948 UK Companies Act has triggered discussions on the role of companies in society and the wider field of philanthropy. This increases the level of mandatory disclosure in financial statements as well as requires auditing of business reports. While corporate law and practice are driven by a strong belief in the primacy of economic concerns, the idea of drawing attention to the connection between private business decision-making and public welfare enters the debate (H. R. Bowen, 1953). In the following decade, a re-conceptualisation of the relationship between firm and society takes place that is driven by the growing impact of societal movements like workers' rights and safety initiatives, the fight for minority rights and consumer protection. Additionally, matters less directly linked to corporate issues such as civil rights initiatives, anti-war protests and women's rights movements play a role: On the one end of the institutional spectrum, the International Labour Organization has issued several conventions targeting employee rights and the inspection of working environments which require endorsement at country-level (International Labour Organization, 1964, 1969). On the other end, Anti-Vietnam war protestors are demanding, in addition to their peace agenda, that university endowment funds cease investing in defence contractors (Oreskes, 1985).

This multiplicity of areas of societal rethink affects the previous understanding of corporate operations and adds considerations of the so-called Limits to Growth to the primacy of economic concerns (Club of Rome, 1972). Profit making is still seen as the purpose of businesses but their operating within society receives nuanced attention (McGuire, 1963). Although the 1950s can be seen as the cradle of corporate social responsibility, capitalism and freedom of corporate profit making are the overriding principles in the corporate sphere (Friedman, 1962).

Based on these developments, the concern with corporate sustainability takes off in the following years (Mathews, 1997; Thomson, 2014): Academic and legal publications are clustered around the balance between moral obligations of companies beyond profit considerations or legal requirements and shareholder primacy rooted in the definition of the firm (Carroll, 1979; Committee for Economic Development, 1971; Confederation of British Industry, 1973; Mobley, 1970). In the beginning of the 1970s, the academic and public debate sheds light on the understanding of corporate responsibility rather than modes of accounting for these ideas that are introduced later on and receive detailed examination in the second phase of this analysis. Moreover, corporate responsibility and responsiveness are seen as inherently voluntary and as a question of motivation rather than performance (Ackerman, 1975; Manne & Wallich, 1972; Organisation for Economic Co-operation and Development, 1976). A certain social co-responsibility for value issues of the business is understood as inherent to the role of the businessman or even complementary to economic goals (American Institute of Certified Public Accountants, 1973; Elbing, 1970).

The perspective on the business-environment relationship further evolves into discussing the role of attestation (Beams & Fertig, 1971), problems of assigning numbers to social and environmental issues (Churchman, 1971) and quantifying the interaction between organisation, people and environment on an abstract level (Linowes, 1972; Ullmann, 1976). Part of this stream consists of the following two unfolding conceptions: First, a move from questions of morality to those focussed on capturing responsibility is evident, as seen in debates on the statement of value added, social overheads and negative externalities (Accounting Standards Steering Committee, 1975; American Accounting Association, 1975; Benston, 1982; S. Burchell et al., 1985; Carroll & Beiler, 1975; Donaldson, 1982; L. E. Preston & Post, 1981; UK Department of Trade, 1977). Second, responsibility is viewed as a distinct motive separate from economic performance (Backman, 1975; Bowman & Haire, 1975; Ramanathan, 1976; Sethi, 1975). This dual development which is located in rethinking the moral role of companies as a conceptual, philosophical and theoretical exercise results in quantifying the concern with sustainability in the following phase.

Until the mid-1980s, the focus remained on social consequences and business ethics of companies' activities, which broadly questioned the role of businesses in society, i.e. the definition of corporate operating, and narrowly examined the local circumstances in plants and factories. The overarching trends of activism-induced moral debates surrounding corporate activities in society and environment are reflected in the key aspects considered during this first phase. Namely social matters, key drivers of the concern with sustainability such as local unions and workers and safety-related metrics that illustrate and summarise the employed sustainability approach, were taken into account.

Key aspect: The 'S'

The examination of processes determining different dimensions of responsibility taken on by companies becomes more granular by including the interviewees' perspectives. The substantial dimension of responsibility during this first phase is very much focussed on social issues close to corporate operations: "The *'S' part* is driven primarily by the older part of CSR which has to do with *employees*, but also *community*."[19] (interviewee A-01[20]) Interviewees often equate the term CSR with the concern with corporate sustainability in regard to social issues as interviewee A-12 does: "There are two different *tools of CSR*, which are *social auditing and ethical certification schemes*[21]. And with both of those I've been looking at them in *relation to forced labour*." This importance placed on the well-being of employees and immediate neighbours of the firm is perceived as stemming from the conceptual set-up of the corporation as well as the historical emergence of operating in society. Interviewee S-03 gives a comprehensive account of the outlined entanglement:

> "I would argue for a long time really *since the establishment of the corporate form*, there has been an *emphasis on the 'S'*. […] There's a strong commitment to staff training […] [and a] very high standards of manufacturing. So, I would argue that the *'S' is driven culturally*. And I think there's less ignoring the 'S' within the EU."

The focus on social issues such as workers safety, employee benefits, community engagement and to a certain extent consumer protection, not only highlights a prioritising of engaging with people, but it also comes with spatial processes of demarcation. The responsibility taken on by firms is limited to the local, as interviewee P-02 understands this period: "In the early years, most of the companies were focussing on *their own operations, their own business, their own*

[19] All emphases added by the author.

[20] Interviewees are anonymised as follows: academics (A-xx), practitioners (P-xx), (quasi)standard-setters (S-xx).

[21] For the historical emergence of social auditing and ethical certification schemes see (Carroll & Beiler, 1975; Tregidga et al., 2019).

factory." The particular firm with its specific responsibilities is stressed by the concern with corporate sustainability which can also be witnessed in a lack of coordinated exchange among firms. Interviewee A-13 reconciles their rising interest in CSR in the 1980s which was crudely encountered with the following words: "There are maybe *200 companies in the world* that are looking into the subject. *What is this*?" In other words, the consideration of CSR issues during that time is a niche topic that seemingly does not travel beyond the factory walls.

In addition to these aspects, interview participants spontaneously refer in a comprehensive manner back to the cultural and historical background of CSR[22], without being asked by the interviewer to give this kind of insight. The emergence of CSR seems to be deeply rooted in the social environment of corporations. Interviewee A-09 understands the connection between societal developments and social responsibilities of firms as follows:

> "If you go back in terms of history and exploration, India is driven by *caste-based discrimination*. And, if you take caste-based discrimination and if you read about it, you will know that many of the old caste people were *denied access to land* for farming, for housing etc., which led them to depend on land-owners and other actors, for *their survival*."

Although A-09 describes a very specific phenomenon in a geographically and historically unique setting, the linkage between the concern with corporate sustainability, in particular for social issues, and the emergence of the corporation is perceived as rather direct. The temporal dimension of responsibility is communicated between the lines as focussed on the immediate, direct and short-term effects of processes of corporate decision-making. In short, the first phase of the concern with corporate sustainability is focussed on social issues in relation to workers and communities and is bound to present responsibilities of the specific plant. Key drivers and metrics disentangled in the following unpack the processes of 'Making responsibilities present' even further.

Key drivers: Unions, workers and activists

The emergence of the field of knowledge considering the concern with corporate sustainability is described by interview participants as driven by unions and activists that have a close affiliation with social topics. Interviewee A-07 perceives the development of CSR as a direct answer to social movements as they put it:

[22] Because of that, the study focusses on the European influenced Anglo-Saxon discourse. Observing the development of the concern with corporate sustainability with a clear geographical horizon allows more nuanced insights into the background of the development.

> "I think that the […] key drivers of CSR are […] *social movements of various kinds*, various kinds of protests […]. That's really important and if you look at […] the *development of CSR*, it has been very much in *response to these social protests*. So, you know, if you look at, let's say, Nike that was one of the *leaders in developing CSR* and it is very much dependent [on] those protests."

In addition to the emergence of the concern with corporate sustainability as a perceived response to social movements, the role of unions is underlined that "physically really monitor [workers' rights and safety], they depend on unions on the ground doing something, and that depends on *local unionisation*" (interviewee A-07). Consequently, the key drivers of this phase seem to reflect the social orientation of the emergence of the concern and are locally and temporally centred around the immediate operations of the corporation. The emerging field of knowledge is driven by social movements, activists and unions that advance workers' safety and employee wellbeing as illustrated with the key metric unpacked in the following section.

Illustrative metric: Workers' safety

On the one hand, the number of safety incidents[23] as a metrics for workers' safety illustrate the outlined focus on social issues in the immediate area of corporate influence that is limited to present operations. On the other hand, this metric evade its relevance in the following phases due to its specificity to these circumstances. During times of care for workers' health and safety on the factory floor, corporate support for workers' housing and mortgage assistance as well as community development, the number of accidents is carefully tracked and reported. The metric thereby stands for the focus on the here-and-now of the early years of the concern with corporate sustainability. Although this measure is still included in firms' disclosure, it decreased in importance since the idea of not harming the employees operating in the firm became taken for granted.

Moreover, the number of safety incidents shifts from reflecting accidents and responding to adverse working conditions to being more comprehensively employed by outsiders as a measure of more difficult-to-track forms of workers' exploitation as interviewee A-12 describes their perception of the measure:

> "We know now that the *tip of the iceberg*, as you say, the forced labour modern slavery is actually very hard to disentangle from more minor forms of exploitation. I think a

[23] From 1956 onwards, it was required to keep records of accidents and diseases (Agriculture (Safety, Health and Welfare Provisions) Act, 1956). The most comprehensive standard of safety-related regulations was introduced with the Health and Safety at Work Act in 1974. This piece of legislation provides the fundamentals for occupational health and safety until today.

common feature of most CSR programmes is that because they're focussed very much on the *tip of the iceberg*, they're not taking some of the *very basic information* such as around whether people are paid living wages, their safety. Those kinds of basic things […]. That information can be really useful in predicting and pinpointing where forced labour would be most likely to occur."

Consequently, the number of safety incidents exemplifies the nature of the concern with corporate sustainability and loses its importance during the following phases. It remains in a few areas of consequent phases in order to unpack more opaque practices such as forced labour but significantly loses its relevance as an influential metric.

Phase 2: Accepting past responsibilities

The second phase supersedes the previous one with an additional focus on environmental issues. From the mid-1980s, onwards the concern with corporate sustainability shifts to increased attention to companies' role in pollution, past contamination and clean-up of land – while carrying social issues and corresponding metrics forward. However, the phase of 'Accepting past responsibilities' denotes a turning point relying on quantification, legalisation, institutionalisation of the concern with sustainability as well as taking on a backward-looking perspective on accountability and remedy for previous corporate impacts. Driven by institutional parties like legislators, (quasi) standard-setters and NGOs, the first environmental reports get published (KPMG, 1999; Unerman et al., 2018). Additionally, supply chains and sourcing regions receive further attention, i.e. the geographical area of responsibility vastly extends. One emerging metric that stands as a symptomatic example of the nature of this phase is the measuring of and reporting on water usage in the supply chain – already reflecting care about natural resources and attention to indirect, preparatory activities of production. The process of 'Accepting past responsibilities' stretches firms' responsibility not only to tracing the history of their sourced material and incorporating environmental issues, but it also extends the employed time perspective to considering corporate legacy.

Overarching trends: Quantification, legalisation and institutionalisation

In the mid-1980s, the focus of the concern with corporate sustainability shifts to environmental matters after several major incidents. Most notably the Three Mile Island and Chernobyl nuclear disasters in 1979 and 1986, respectively, the 1984 Bhopal disaster and the Exxon Valdez oil spill five years later that massively harm nature increase attention to environmental matters (Mathews, 1984; Thomson, 2014). In the aftermath of these highly impactful ecological incidents, the irreversibly destructive potential of companies for goods understood as belonging to the public such as the oceans, the atmosphere or the groundwater becomes visible to society, scholarship and practice (Mathews, 1997). The changed perception can be illustrated by the extensive lobbying, especially in the US, for the clean-up of contaminated land by the polluter and the UK legislation on protecting the environment from pollution, waste and radioactive substances (Environmental Protection Act, 1990). In addition, the concern with corporate sustainability receives increased attention from an accounting perspective accompanied by debates on approaches to quantifying the impact of firms on the environment (Parker, 1986; UEC (Union Européenne des Experts Comptables Economiques et Financiers), 1983). This form of numerical inscription seems to signal accuracy of numbers and linkages to scientific practice (Robson, 1992). Moreover, the quantification is motivated and aligned with the findings of the natural sciences (Lambooy, 2011; Pereira et al., 2012; Unerman et al., 2018).

The late 1980s continue along these lines with academic discussions about the exact terminology of CSR and its consideration as part of the accounting domain which stabilises the concern with corporate sustainability as belonging to corporate practice (ibid.). Under the heading of corporate social rectitude, Frederick (1987) sheds light on the social performance of firms while taking the overall necessity to deal with this topic for granted. Besides this manifestation of taking social and environmental consequences of business operations into account, the motivation and relevance for organisational legitimacy are subject to lively exchange (Guthrie & Parker, 1989). Along these lines, sustainable development and the role of companies within it, is considered from a political perspective relating to broad topics like connecting economic growth, environmental protection and social equality with high-level questions of intra- and inter-generational equity (UNEP (United Nations Environment Programme) & World Bank, 1989; WCED, 1987).

A new era of interest in the concern with corporate sustainability, especially the environmental side to it, starts in the next decade. This phase commences with an influential publication by Pearce et al. (1989) on environmental economics and an accounting calculation for impact on nature as well as a response by Gray (1990) which summarised possible internal accounting and information systems for environmentally sensitive organisations (Mathews, 1997). The concern has a foothold in the field of accounting as well as auditing – but more than that, it is seen as both a connecting element between corporate policies, plants, processes and products and as a matter of concern in all these areas (Elkington, 1990). The degree to which principles of social and environmental responsibility motivate corporate actions and the substance of environmental audit are critically examined which arguably signals a growing importance of the topic for businesses (Gray & Collison, 1991; Shimell, 1991; Wood, 1991). Nonetheless, the development of the concern from an activism-related critical view on corporate morality and locating in society – as in phase one – to increased adoption by the accounting and auditing profession was disputed. Among academics, the greater quantitative reflection of sustainability activities, the growing regulatory response to CSR disclosure and lastly the emerging institutionalisation of the concern and academic field were discussed. This can be exemplified by special issues of Accounting, Auditing & Accountability Journal and Accounting Forum on social and environmental accounting during this period (Batley & Tozer, 1993; Gray, Bebbington, & Walters, 1993; Gray, Kouhy, & Lavers, 1995; Owen, 1992; Power, 1991; Zadek & Raynard, 1995).

Apart from the academic debate, the concern with corporate sustainability receives attention as a source of uncertainty and an opportunity to mitigate corporate risk which becomes more dominant in the third phase (Cadbury Committee, 1992). In 1992, the World Business Council for Sustainable Development as a forum for CEOs is founded and in the same year the United Nations Earth Summit in Rio de Janeiro comes together as a conference for global collaboration on sustainability. The Kyoto Protocol as an international treaty for the reduction of GHG emissions at country-level is signed in 1997. A year later the United Nations Declaration on Fundamental Principles and Rights in Labour Law, closely followed by The Global Sullivan Principles promoting CSR from a social justice point of view that trace back to the fight against the apartheid (Sullivan & UN Secretary General, 1999). In addition to these developments on the world stage, practitioners and professional bodies investigate the obstacles and potentials of environmental reporting and the Dow Jones Sustainability Index as a key reference point in sustainable investment is launched. This becomes even more relevant in the third phase of the development (SustainAbility et al., 1993). Lastly, a rather long-term perspective on sustainability and the company as a global citizen collaborating with NGOs addressing manifold aspects, the so-called triple bottom line of people, planet, profit, enters into academic, practice-oriented and legal sensemaking (Carroll, 1999; Elkington, 1997; Hart, 1997; Marsden & Andriof, 1998).

During the first couple of years of the 2000s the legalisation, i.e. the reflection in legislative documents, of the concern with corporate sustainability gains pace and regulators become involved. The European Union adopts directives on employment quality (Directive 2000/78/EC) and GHG allowance trading (Directive 2003/87/EC). The UK introduces a climate change levy, regulates GHG emissions (Finance Act 2000 c17, Part I; Climate Change Act 2008 c27) and deals with precedential cases on Rio Tinto's and Cape plc.'s environmental pollution abroad, down their supply chains. In the field of NGOs, the Global Reporting Initiative develops in 2000 its first version of guidelines for reporting on sustainability and the World Resources Institute together with the World Business Council for Sustainable Development publish in 2001 their Greenhouse

Gas Protocol as an accounting standard for capturing emissions. The ISO standard 14064 regulates this form of accounting as well as emissions trading in 2006. The United Nations Sustainability Development Goals set in 2015 specify country-level targets with tangible indicators for each goal – such as restoration of degraded land and soil in percentage of total land (Target 15.3, Indicator 15.3.1). After a long period of consultations, the European Union in 2014 issues its non-financial reporting directive (Directive 2014/95/EU) that refers back to different approaches to reporting sustainability put forward by the various outlined parties.

In short, the voluntary and legally binding reporting landscape on a country- as well as corporate level accelerates and the concern with corporate sustainability is enforced by legislators, NGOs and standard-setters, i.e. non-corporate, external parties. While the reporting practice becomes quantified, standardised, regulated and even audited, academia grapples with a potential conflict between the business agenda and environmental protection, the role of the concern with the environment in improving corporate reputation and the CSR term itself as probably too narrow for a global, multifaceted phenomenon (Berthoin Antal & Sobczak, 2005; Gray & Bebbington, 2000; Macmillan, Money, Downing, & Hillenbrand, 2004). This divide between tangible practice and conceptual questions of an emerging field of knowledge reflects and crystallises at the same time the overarching trends of quantification, legalisation, institutionalisation that all require defining the subject under scrutiny as well as pinning broad ideas down to concrete measures. The key aspects and metrics as well as driving actors considered during this second phase, namely social as well as environmental issues supported by standard-setters, legislators and NGOs and rather backward-looking quantitative measures, illustrate the overarching process of 'Accepting past responsibilities' dominating this phase.

Key aspects: The 'E' and the 'S'

During the second phase, social and even more environmental aspects, specifically pollution, contamination and clean-up of land, seem to be key matters. The substantial dimension of responsibility enlarges in comparison to the previous phase to also and predominantly incorporate environmental issues. Interviewee A-03 explains this shift in focus from their point of view by referring to visibility, tangibility and reducibility to an indicator:

> "They talk about how *observable* the regulated outputs are, how easy it is to see what a company is doing […]. With environmental stuff, we can often see how much a company is polluting, we have *readily observable indicators* that they can't really hide unless we're talking about Volkswagen, like emission-cheating devices and that sort of thing, which took that *observability* and turned it on its head. But with labour, I ask my students all the time, I say, what makes a safe workplace? And they sit there. And ultimately the

> answer is there's *no one thing*, there's never one thing that makes a safe workplace, and that's why it's a harder thing."

Not only do interviewees attribute this sudden shift in emphasis to advantages in terms of representing and intervening in the environmental area, but also drastic worry of irreversibly harming the environment is expressed by many interviewees, such as A-03: "now is the time to prepare a world for our kids that is *going to be liveable*".

The consideration of environmental issues – during this second phase mainly related to contamination of land and water usage – is accompanied by processes of tracing back supply chains and consequently, stretching the spatial dimension of processes of taking on responsibility. Interviewee A-07 describes this emerging corporate practice as: "You have some kind of, at least an indication, that firms were beginning to think in terms of their *supply chain*, […] you have *increased supply chain transparency*, that's been a big movement." Notably, interviewee A-05 summarises the emerging analysis of supply chains with the following words: "We've clearly got *the spatial dimension* coming, and it's great because it's actually, you're starting to get the *geography*, the physicality of stuff there."

As interviewee A-08 puts it, this far-reaching consideration of geographical responsibility receives more nuanced attention, especially in recent years:

> "It's not about vertical integration. It's about just narrowing. It's just like saying, I have four tiers of suppliers. I'm going to have only one or two, and the reason for this is because otherwise I *can't deal with my responsibility* beyond that. It's impossible. I will always be accused of something that I have *not been able to deal with*."

This quote highlights the intervening part related to the field of knowledge since the tracing of supply chains not only reflects current business practices but also invites changes in operations to meet certain responsibility expectations as outlined by interviewee A-10: "If you like to introduce a liability for managers for […] supply chains, we have a *reorganisation of our supply chains* in the European Union […] as a consequence." "Open[ing] the black box of CSR", is similarly described by Interviewee A-03 as the point where "we realise we have a lot of work to do to either make [it] better, improve it, or maybe find a different model, especially when it comes to *big global supply chains* and trying to weed out the often-terrible things that are happening in supply chains." Interviewee P-02 points out that a change in practice based on comprehensive supply chain tracing is not only limited to sourcing companies but also affects the supply side:

> “[A] lot of companies are […] look[ing] […] at their value chains. They have a lot of initiatives with their main suppliers. They get *a lot more data* from these kinds of companies. So, then this is *creating pressures and opportunities*. If companies want to carry on being a supplier for company x or if they want to have the opportunity to work for company x, they need to have a lot more of a *focus on sustainability*.”

Interviewees’ perception of the nature of the practice of taking on this spatially stretched responsibility for the supply chain and the frequently mentioned role of regulation is rather manifold and reaches from interviewee A-12 describing “a quite deliberate *deregulation of supply chains* in certain respects [since the late ‘90s]. Of course, money and capital and goods are quite heavily regulated, however, when it comes to labour standards there’s been a relative consensus among policy makers that companies shouldn’t have *formal liability for labour standards in their supply chains*.” They continue with referring to rising legislation that “tr[ies] to *establish some corporate accountability* or responsibility for labour standards and severe labour exploitation in supply chains”. Similarly interviewee A-07 is depicting “*increasing regulation of supply chain*, to some extent, so the extent that you’re getting these new laws coming on stream”, whereas interviewee A-09 characterises the actual practice as follows: “stem firms cannot just directly command [suppliers] and say, this is what you have to comply with. They tried using their own codes of conduct and having their own internal auditors. Send their own internal auditors to *govern in their supply chains*.” In short, environmental issues are taken on in contrast to social issues that are perceived as incorporating difficulties with measuring and influencing them. Nonetheless, both environmental and social matters are understood as part of CSR. The key drivers and metrics disentangled in the following unpack the processes of ‘Accepting past responsibilities’ even further.

Key drivers: Legislators, NGOs and natural sciences

The focus on social and environmental issues, especially pollution, contamination and clean-up of land as well as the incorporation of matters along the supply chain, as perceived by the interviewees fleshes out by greater attention to key drivers of the described development: Interviewee P-02 states that “they have been in the scope of legislation. They are the ones that are the most under NGO focus, investor pressure, all these kinds of drivers.” The engagement of investors gets more prominent in the next phase, while the involvement and non-involvement of legislators or standard-setters, the role of quantification as well as natural sciences and the pressure by NGOs are considered in the following.

The influence of legislators and (quasi) standard-setters is mentioned in the same breath since “there isn’t necessarily a *clear distinction* between voluntary and mandatory” (interviewee S-

03), however, “there are lots of different types of multi-stakeholder initiatives driven by different actors, participated by different actors, trying to achieve the same goal, but in *different ways*” (interviewee A-09) in the regulation of the concern with corporate sustainability. Many interview participants, such as interviewee A-07 take on the perspective that “whether what they do is shaped by regulation or is voluntary, *doesn’t really matter* so much [it is] not that important whether or not it’s enforced by law or determined voluntary [due to mechanisms of] perceived regulation”. The latter is put by interviewee A-04 as “*anticipating government regulation* that hasn’t happened yet, it’s anticipating changes in market norms that haven’t happened yet”.

Nevertheless, interviewee S-02 understands this approach to voluntary standards as less progressive or effective:

> “I was shocked that when I started this job, […] when I asked what are the rules, what are we supposed to do? I was surprised to find that there are no rules, *you can do what you want*. There are voluntary standards but you don’t need to follow them.”

Interviewee S-03 adds a similar perception to S-02’s rather loosely committed reading of voluntary standards. They state that voluntary standards do not unfold a binding character and therefore relevance for involved firms:

> “Governments are starting to realise that just requiring companies to disclose, but then leave the standards or the nature of that disclosure in many respects to be voluntary, doesn’t necessarily change behaviour. […] Unfortunately, *voluntary means that it’s the other* and so it *means it doesn’t matter*.”

Furthermore, the legal base for CSR is described as constantly emerging and adopting requirements:

> “And I think, as the European Commission *started their regulations*, they started with CSR reporting, then they go on with sustainable finance […], and maybe they will go on with sustainable corporate governance regulation.” (interviewee P-03)

More specifically, the process of regulation is depicted by interviewee A-10 as “a solution to start, either *a recommendation* or a code. And if the legislator can see the market is not enough, the market mechanism, there's no compliance, then as a next step, we can talk about *a regulation*.” However, firms are also characterised as “trying to be *pre-emptive* and […] avoiding regulation” (interviewee A-07).

Interviewee P-01 articulates the reason for this steady rise of reporting requirements as being connected to government possibility to "articulate what they think *good behaviour looks like* and how it can be rewarded through those [tax] *incentive schemes*". "*Government control policy* sets the rules", describes interviewee P-04 the situation in a similar manner and continues: "it really drives change easier. So, that's why I think *policy pressure is prime*." Interviewee A-09 perceives the role of regulation as more nuanced and says that "legislations plays an important rule. In some contexts, it plays, and in some contexts, it should play a role […] [but] it just requires firms to publish statements". The same interviewee also refers to the nature of regulation as "lots of *remedy-related regulations*" that comes with the "problem that there is lack of enforcement" which could have an impact on future business practices. While interviewee A-11 concludes legal certainty of firms due to "responsibility [that] is defined by the rules of that scheme", interviewee P-06 underlines the necessity for regulators to "move in the same direction to improve disclosure, data availability and put pressure on companies to align their strategy with [the sustainability] trajectory". At the same time, concerns with auditability and disclosure increased and shaped the aforementioned developments.

Along these lines of described backward-looking regulation and lack of enforcement, the multiplicity of standard-setters and reporting frameworks is outlined in interviewees' description of the scattered landscape of drivers:

> "There isn't a *recognised standard-setter with legitimate authority*, and there therefore isn't an enforcement mechanism for a particular set of standards, but there are *several voluntary frameworks* for reporting. We have an *incomplete regulatory structure*, basically, in terms of reporting in that space, and all of that is separate from their legislative requirements to meet certain targets." (interviewee A-04)

The area of reporting on the concern with corporate sustainability is communicated as prone to triangulation between voluntary frameworks, business reporting practice and regulator enforcement of rules. Interviewee S-01a refers to this interrelation with the following words: "The accounting standard-setters have a lot of work to do. And they are already progressing. […] But beyond that, the standard-setters can only do so much in terms of they are ultimately *enforced by the regulators*."

In addition to the depicted obstacles, the mere reference to regulation and outlining perceived weaknesses was an interesting occurrence in the interview processes and condensable by interviewee A-04's description of CSR regulation as reflecting a broader societal debate:

> “In general, regulation is so vague it basically says report what you think seems sensible to you, kind of thing. But I think you can’t have standards and regulation until you’ve got some sort of consensus on what it is that gets regulated. Again, you have a kind of *social process* going on here, that if people can’t agree on what ought to be measured and how one ought to go about doing it, and those are, to a degree, arbitrary choices.”

Interviewee A-05 lastly summarises the ambiguity of complying with regulation and not necessarily with the spirit of the standard: “If you follow a standard, you *can’t be held accountable* for the negative consequences. You're blaming the people who invented the protocol. […] So it's very much an external accountability, or more a *compliance device* […]. And they're not necessarily going to question the implications of it”.

The driving force of voluntary and mandatory regulation stemming from various legislators and standard-setters are seen as complemented by an increase in quantification and reference to targets derived from science. Interviewee A-10 directly links a “better climate change or sustainable management strategy in your field”, with the need for “very *high quality of big data*”. Interviewee P-01 goes more into detail regarding this aspect:

> “Obviously, science-based targets is a big terminology because people want *science-based evidence* that shows that companies are in fact having an impact in terms of what they say and do. It is not just looking for whatever evidence you can come up to create a positive sounding sustainability report you can publish once a year and hopefully nobody digs too far into it.”

Interviewee P-02 witnessed as follows: “What we have seen a lot more often – and this is very important – is that [an] increasing *alignment with the science* took place. […] A big problem has been that a lot of great work has been done but because there was no connection to the science, we were collectively not achieving the amount of change that we needed to”. Interviewee A-06 pictures the concern with the intangibility of sustainability data putting quantification during the second phase forward similarly: “So, talking about technical issues, talking about the data behind it, there’s a huge issue with the *quality of sustainability data* which is not nearly up to the level in most companies’ that the financial data has.”

Connected to descriptions of the rise of quantification – not necessarily financialisation that becomes more dominant in the third phase – is the notion of encountering greenwashing by means of quantification. On the one hand, interviewees seem to perceive quantitative measures as introduced to make the disclosure verifiable. On the other hand, this approach could invite choosing among a multitude of indicators to tailor the reports in order to meet certain targets. Interviewee A-03 formulates the issue:

> "CSR can be a greenwashing sort of initiative, that [firms] are going to do what they can in the least costly way. They're going to try and *hit the right indicators*. But there are so many different indicators when it comes to CSR, that there are some things you can do well that really don't cost you that much *while maybe deep down you're still polluting* a lot or you're still underpaying your workers."

Interviewee A-10 continues with the so-far non-financialised connection between quantified sustainability information and financial parts of firm disclosure. They illustrate the shift that takes place in quantifying the concern with corporate sustainability:

> "[Firms need] quantitative information on those financial and non-financial issues to show what will be the final relationship to [their] overall heading, financial performance, key performance indicator, like capital value, […]. But *you have to measure it*, because everyone likes to know, of course, the *quantitative information* in the end."

Interviewee P-06 furthermore underlines this driver of the second phase by stating that "a lot of the information is very readily available in standardised metric format" that helps steer the concern with corporate sustainability.

The last major driver of the development during this phase is the involvement of NGOs as already indicated by publication of manifold reporting frameworks and NGO-related pressure on corporations. Interviewee P-02 perceives NGOs as active in a two-fold manner – impacting the subject matter, i.e. environmental issues, as well as the reporting side of the concern with corporate sustainability:

> "There are *really important NGOs active in this area*. There are organisations like WWF [an environmental NGO] and CDP, which is the main kind of global NGO around environmental reporting […]. This kind of information was not in the view of companies, this was *data they were not collecting*. That is why, there was the need for this kind of initiatives to be *spearheaded* from elsewhere but increasingly they are now embraced by companies."

Not only the reporting side is influenced – from interviewee A-03's point of view – by NGOs, "that sort of information will also be grabbed upon by different NGOs and other groups like that that might take it and publicise the information and *let people know* what's going on" which is perceived as a driver of the development during this phase. A-03 continues by describing the processes as "there was *pressure* from different NGOs that said, look, company X, you're saying very little in this statement, you need to be much more specific about what it is that you're doing". Even in the social area, which is rather overshadowed by the increasing focus on the environment, interviewee A-09 states that the situation changed in comparison to drivers of the previous phase: "The unions do not have much of a voice, but rather, you have *local NGOs* acting for workers, which is very important."

The concern with corporate sustainability that clusters around social and environmental issues, especially the remedy for past pollution and clean-up of contaminated land, is driven by a very fine-grained approach to regulation between mandatory and voluntary commitments. Also, an advanced interest in quantification and inclusion of science-based targets and NGO involvement in both determining environmental impacts and designing the reporting landscape for the emerging field of knowledge is noted.

Illustrative metric: Water usage

One metric that appeared during the second phase is the indicator for water usage in the supply chain that illustrates both, the backward-looking incorporation of past supply chain responsibilities and the focus on environmental issues rather than locally bound social matters. The measurement is focussed on capturing the effects of historical corporate decisions rather than future consequences of corporate activities as in the third phase (Ahi & Searcy, 2015; Björklund et al., 2012).

Interviewee A-09 refers to the difficulty of incorporating supply chain metrics in companies' disclosure:

> "There are some metrics that you can find out from their factory sites. They have their reports published publicly. What they selected is not so clear. But there is no universal metric on [all parts of sustainability]. Will it be possible? It's really hard because there are *so many moving parts*. Some visible, and mostly invisible. It would require a huge amount of resources that no single organisation can actually afford. So, it requires a huge amount of collaboration to track down, to *trace down supply chains*."

The described complexity of supply chains and the difficulty to trace them is regarded as even more problematic if fraudulent parties are involved as interviewee A-12 understands the matter at play:

> "I think there are two key things there, one is that they are *not collecting the most relevant information* that would help them to find problems in many cases. And in the second case even where they are collecting that there is a *huge amount of deception*

> *and fraud* involved in auditing and certification. […] Sometimes, the factory or the producer is double-bookkeeping, so they're presenting a fraudulent set of records."

Noteworthy, even controls of suppliers are connected to a lot of criticism as interviewee A-07 conceives the circumstances in sourcing regions and plants:

> "The auditing data is itself not very reliable at all, because it's just a *snapshot* on a couple of days. […] You've now got this whole industry grown up around auditing and you've got firms basically specialised in *helping you to pass your audit*. So, you're just hiring a firm that will come and do your audit for you."

Consequently, the set of metrics around water usage and intensity is closely linked to the ability to make supply chain processes visible to the parent company and to trust in records potentially produced and audited far away from the company's headquarter. The information on the water already used exemplifies the incorporation of past responsibilities and the reliance on quantitative indicators. The metrics emerge and are of greater relevance for some industries such as food and beverages, chemicals and garment, however, they seem at the same time to stand for a massively simplified perspective on the multiplicity of impacts stemming from the supply chain.

Phase 3: Bringing in future responsibilities

With the beginning of the 21st century, a third phase of the concern with corporate sustainability enters the debate. It accompanies the second phase with more dominant governance concerns, while at the same time placing attention on GHG emissions at the centre of companies' responsibility. Life-cycle assessments, consequential accounting and downstream tracing of emissions are taking hold. Nevertheless, the major development during this still ongoing period is the financialisation and riskification of considerations which started several decades ago as philosophical deliberations. Financialisation refers to the growing dominance of the financial economy and its actors that is accompanied by financial metrics and impacts (Wade, 2007). Riskification describes the growing importance of risk as a meeting point for various operational concerns (Power, 2005). Both concepts are related to each other and can be observed in the shift towards liability where riskification of responsibility in terms of financial metrics, so financialisation, and riskification in terms of liability risk take place in parallel. Under the heading of ESG and related investment screening processes, the arising metric tons of CO2 emissions equivalents gains momentum and is employed by investors, legislators especially in relation to GHG trading mechanisms, and internal drivers. The dominance of future-oriented responsibility is not only reflected in tracing issues that materialise in the future but also in stretching the spatial responsibility to prospective business areas and regions for potential future business development. The *Bringing in of future responsibilities* consequently takes place in the temporal and spatial dimension while the substantial focus becomes broader and relies on a financialised investment take on responsibility. At the same time, the meaning of responsibility becomes more clearly bound and therefore narrower.

Overarching trends: Financialisation and riskification

The 2000s start with high-level corporate scandals and collapses, including Enron and WorldCom, that result *inter alia* in increased attention to corporate governance and the passing of the Sarbanes-Oxley Act of 2002 in the US and the non-statutory Combined Code of Corporate Governance a few years earlier in the UK (Deakin & Konzelmann, 2004; Romano, 2004). As part of this emerging consideration of corporate governance issues, a UK legislation requiring mandatory disclosure of an Operating and Financial Review with clear directors' responsibilities and management commentary is drafted, withdrawn and lastly partly implemented in 2007. However, the internal organisation of practices, ensuring sound corporate governance, is understood as complementing the social and environmental aspects of corporate social responsibility.

Apart from adding governance to the field of knowledge, GHG emissions undergo a significant uplift in importance and a novel lens gets employed for looking at the concern with corporate sustainability: The grand trend of the third phase is the financialisation and riskification of CSR which, thereby, turns into ESG. The riskification of responsibility in terms of financial metrics on the one side – which is financialisation – and the riskification in terms of liability risk on the other introduce an era of growing quantified cause-effect relationship (Power, 2007). The idea of approaching sustainability from a monetarised perspective rather than a moral questioning of business activities starts with the foundation of the UN Global Compact in 2000, as a forum for discussion, passing non-binding norms on the responsibility of transnational corporations about human rights as well as principles of responsible investment. Academic publications examine the competitive advantages of CSR and the complementary creating of societal and economic value (Braun, 2009; MacKenzie, 2009; Porter & Kramer, 2006). As opposed to the previous phase, this development relies not only on capturing the concern with corporate sustainability in quantitative terms but also on aligning sustainability with the financial logic of the more traditional parts of corporate operating and reporting. The launch of the International Integrated Reporting Council in 2010 – aiming to combine financial and non-financial, yet in financial terms expressed, information – can be seen as an example for the shifted take on the concern. Not only does the Dow Jones Sustainability Index provide guidance for investors employing sustainability information, also the 2006 UN Principles for Responsible Investment and Global Sustainable Investment Alliance's Review from 2012 add to the picture. In the aftermath of the financial crisis of 2008 and the connected public scrutinising of financial institutions, sustainability gets changed into an object of concern for investors and the financial sector. But the idea to translate sustainability into the language of the markets – representing an alignment between both areas and facilitating intervention – remains the object of academic and practical examination as the Impact-weighted accounts project aiming for monetary valuation of climate risks in financial statements from 2020 illustrates (Serafeim & Trinh, 2020). It thereby also shifts its acronym to ESG reflecting a different take on the field of knowledge.

The social side of the concern with corporate sustainability is slowly reinterpreted as the human face of capitalism. Ideas such as business citizenship and the combination of financial success, societal impact and addressing social problems under the heading of social entrepreneurship become more apparent. A range of activities taking social goals and commercial exchange into account as well as hybrid organisations enter the field (Ansari et al., 2012; Battilana & Lee, 2014; Dacin et al., 2010; Peredo & McLean, 2006; Wood et al., 2006). This approach to addressing social issues again seemingly follows a financialised logic of beating the impact of businesses at their own game instead of adding philanthropic aspects to it. The G8 Social Impact Investment Taskforce announced in 2013 is striving to catalyse social improvements through the logic of financialisation and highlights the perceived similarity of both domains – the concern with corporate sustainability (now often referred to as ESG) and the financial industry.

At the same time, environmental concerns receive increased attention, especially GHG emissions that get comprehensively captured by regulatory instruments such as the UK Carbon reduction commitment from 2010 or the Directors' Report Act eight years later. This requires firms to comply with Streamlined Energy and Carbon Reporting, international treaties like the 2016 UN Paris Agreement with specific emission targets to combat climate change and reference to GHG emissions in corporate reports. GHG emissions are thereby split into Scope 1 emissions, direct emissions from production, Scope 2 emissions, consumption of purchased electricity, and Scope 3 emissions, upstream and downstream indirect emissions. Although, reporting on the latter is voluntary in the current regulatory set-up, the third scope of emissions raises attention to issues such as employee travel, waste, distribution, use of sold products, end-of-life treatment and even investments. In other words, the engagement with the corporate carbon dioxide footprint not only introduces a calculable and – with respect to carbon-budgets – financialised perspective on the environment, but it also follows the lifecycle of goods leaving the factory, i.e. accounts for consequences of corporate activities.

The overarching trends of financialisation and riskification are reflected in the key aspects considered, namely the three-fold attention to environmental, social and governance issues, driven by investors and capital markets as well as legislators, especially in relation to GHG emissions reporting that becomes captured in the newly employed metric of tonnes of carbon dioxide equivalents emitted.

Key aspects: The 'E', the 'S' and the 'G'

Key aspects during the third phase of the concern with corporate sustainability are the additional consideration of governance topics as well as a rather interlinked understanding of all three areas, i.e. social, environmental and governance issues, expressed by the interview participants. The examination of processes determining the spatial, temporal and substantial dimension of responsibility taken on by companies reveals a spatially extended inclusion of prospective business areas and regions for potential future business development. It also shows a substantial shift in focus to GHG emissions as well as life-cycle assessments and other means of consequential accounting. It further let a transformation of the concern to investment-related, risk-incorporating ESG and lastly, a temporal re-consideration to responsibilities for issues that materialise in the future. Interviewee A-04's perspective on the concern with corporate sustainability makes the contrast to previous understandings of the field of knowledge quite explicit: "Sustainability doesn't mean you take care of the Amazon; sustainability means you find a new way to *justify the existing financial economic system*. And it means sustainability of corporate profit, not sustainability in some natural sense.“

The substantial dimension of responsibility enlarges in comparison to the previous phase to integrating the three letters of the ESG acronym – with the environmental concern leading the engagement. Interviewee P-01 outlines this perceived sense of urgency and interconnectedness related to the environmental aspects:

> "We are prioritising the climate issue because if you do not resolve that […], all the other problems are going to *cascade*, the quality of life, whether it is migration or unemployment. There is a direct sort of negative impact from climate change that is going to *wash through* the rest of the society. Dealing with climate change is our *first priority*. We can otherwise not do anything about social inequality for example because climate change is going to create more social inequality. I do not like to think that there is necessarily a more important letter, but I think that the E and climate are critical because many of the other challenges *stem from it*."

Interview participants also refer to the environment by attributing arguably unique features to nature, like interviewee A-04 does: "[The environment] is different in type from other resources, it has these *systemic properties*, it has these *nonlinear properties*. You'll find if you push it too far it all breaks and you're in real trouble, kind of thing, and then it has *positive feedback loops*";

and interviewee A-08 continues in a similar vein: “If you look at climate change, A, it’s going to be *exponential*, B, you have what we call *tipping points and cocktail effects*. That means that whatever we calculate, we don’t know if, at some point, *we’ll go too far*.”

The environment already receives corporate attention in the second phase but is now described as the ”game changer” (interviewee A-01) and “to talk about climate change is something that’s hugely pressing” (interviewee A-03) as well as relevant for all companies as interviewee P-02 puts it:

> “I think it has become clear that there are indicators that are *material to every company*, so there should be a set of core indicators like around GHG emissions. If climate change is the *top issue* to the global economy and we all live on the same planet, *we all will be affected* by global warming. Climate change is a material issue *for all companies*.”

In addition to the as all-encompassing perceived nature of environmental, more specifically climate-related, matters, some interviewees portray the described interconnectedness as resulting in greater embedding of the substantial dimension of responsibility in the business operations:

> “Because, it is not going to work if a company has a sustainable part of the business but then the rest of the business carries on business as usual with unsustainable practices. This is not going to work. So, what is needed is *integration across the business*, across function, so we need a lot more integration, a lot more *embedding*.” (interviewee P-02) or
>
> “I think the companies that are more serious about their social responsibility in recent years especially have begun to *integrate their CSR teams into their company* in a more meaningful way. We do have some examples where the people tasked with ensuring social responsibility in supply chains are part of the same team influencing sourcing decision-making and that sort of thing.” (interviewee A-12)

Not only refer interviewees to an integration of the concern with corporate sustainability into the organisation of business activities, but also the three substantial dimensions of the concern seem to get connected in their accounts and the governance concern added: “I call it ESG, because I think this concept is much nearer to my confession, because the *governance topic is included* in the ESG concept and not in the traditional CSR concept.” (interviewee A-10) Interviewee A-06 stresses the relation between incorporating governance and taking on a financialised perspective on the concern with corporate sustainability:

> "ESG is very high on the agenda if you look to the *financial market*, the EU taxonomy and especially *the G is very much influenced*. So, the theory that we are working with, they are very much coming from a G sense because the anti-corruption perspective we have on transaction cost. This is very much for the sector of banks and so on, or of allowances, and that's why G is so much stressed in the EU taxonomy."

The connection between social and environmental questions also often plays a role in interviewees' communication of processes during this third phase:

> "They polluted the local river and the river *led to a lot of social issues* also, in terms of affecting women's fertility and skin cancer. So, that created an impact on workers as well. […] There are *lots of connections* that you can make between human rights and environmental rights. I believe that both are *inter-related* in some aspects." (interviewee A-09)

The close entanglement between all three spheres of the concern is often described as rather far developed in a conceptual sense and at the same time lacking practical implementation as the two-fold quote by interviewee P-04 indicates:

> "My climate engagement took the social element encore, because I think it just didn't make sense, if not. We're not doing this because of just the planet. It's *always the people*. […] Some of my colleagues are working on that, but we are actually hiring people because we think the social aspects are a *blind-spot* at the moment. And we don't have, actually, a *strong expertise*. We're *very focussed on environment and governance* […] but we're hiring on social issues. I think, because we see, we are not giving enough attention."

The outlined processes of determining the substantial dimension of responsibility as perceived by the interview participants undergo a major reinterpretation in terms of their orientation towards financial markets during the third phase. Interviewee A-04 takes up that point by stating that "the social perspective and the corporate perspective *merge*". Most obviously indicating a potential turning point is the debate about a suitable term for the concern with corporate sustainability reflected in many interviews. Interviewee A-01 refers to CSR as "the *older concept*, which is applied to the entity by the entity, so it is an older management concept". Interviewee A-02 continues along these lines characterising CSR as "the *old way* of talking about it", while interviewee S-01b sees businesses employing "CSR *historically* and more ESG *now*". Interviewee P-03 notably contrasts CSR with ESG by saying that "CSR is corporate philanthropy and ESG is an investment concept. [ESG] is very much *integrated into your processes*, while CSR is more about more cuddly kind of marketing stuff, which you do with NGOs to do something *completely* *unrelated* to you, or maybe donate part of your profits". On the contrary, interviewee A-06 states that "you will find CSR, ESG, sustainability and sometimes also shared value as terms which more or less are *overlapping*, dealing with a similar topic". The intense and sometimes even emotional entanglement of the terms is thereby communicated as closely connected to developments in the underlying discourse: "This company moved away from *corporate social responsibility* and called it *corporate responsibility*. So, the social got dropped and the *mindset changed* from this is doing good to this is *strategic*, which is interesting, and where in accounting can add value." (interviewee S-02) Many interviewees describe the shifted concern with corporate sustainability as linked to profit-impact, strategy, investment return or even ideas of innovation and progress:

> "CSR tends to be viewed by *progressive business* as philanthropy or charity. […] Language is important in sustainability, and *progressive companies* have *moved on*. At the heart of CSR is this notion of philanthropy, but it just doesn't capture the connotations. Academia has a bit to still catch up, but *progressive businesses* are not using that terminology." (interviewee S-02)

Moving forward from this close attention to used terminology, the investment-orientation of the concern with corporate sustainability gets unpacked in the following by firstly looking at the accounting-like nature of tools and measures, secondly the profit-relevance of ESG and thirdly, the role of the latter in investment processes.

Interviewees seemingly frame businesses' connections to the environment with accounting terms such as "GHG *inventories*" (interviewee A-11), "carbon or water *budgets*" (interviewee S-03), "*investment* in a social responsibility project" (interviewee P-05), capturing nature by "the same *currency*, or the same relation in comparison to our income statements or balance sheets" (interviewee A-10) and that it should be the "overall strategy to link environmental and social aspects with *classical financial figures* or financial stuff" (ibid.) since ESG is perceived as "an example of being pragmatic and more manageable" (interviewee P-02). Interviewee S-03 exemplifies this notion of pragmatism or tangibility even with the following words: "It's *quantitative science-based accounting*. People move away from magical solutions. […] So accounting should help people bridge the gap between strong narrative emotions, and I would say what would be a temptation to look for magical solutions, which will make us stop thinking about the problem." Instead of only quantifying sustainability as in the previous phase, interviewee A-04 sees the current trend as "[businesses] are trying to *monetise*, put an *economic valuation*, on social contribution and so on". In short, the process qualifying this phase is observed as "looking at externalities, and how to translate environmental damage, or the costs of prevention into *monetary units* so that they could be adopted or included into some sort of accounts" (ibid.).

Building on this translation into financialised terms, ESG is embraced as important for the generation of profits. Interviewee A-10 refers to the link between the concern with corporate sustainability and the financial outcome for the firm:

> "[Firms need] to have one report with all the material information inside, from the financial, and also from the non-financial side, because the CSR or ESG aspects are *pre-financials*. They will *get into financial perspective* in a few years if the company is successful. Or if it's not successful, of course, they will never go into positive, but negative financial figures. And so far, there is a *very clear link.*"

Connected to this conceptual stage is the practical account of interviewee A-02 that describes the link between these two perspectives:

> "In practice, usually, when it comes to deriving those carbon numbers, they will start with *the same figures* which are *driving the financial reporting*. It is just a matter of *converting those numbers* that you already have into carbon numbers. Of course, there is going to be a close interlinkage between your energy emissions and your energy expenses."

These practices of framing, translating and linking are scrutinised by some interviewees such as A-07: "Because I think all this debate about whether CSR is *profitable or not*, all of that depends on the way, probably at least, the accounting is framed within the organisation. So, in some ways it's kind of a construct, isn't it?" Often, the implicitly mentioned tension to "make" sustainability profitable is expressed in terms of materiality:

> "So what's *material from an environmental perspective*? But what's *material from a financial perspective*? And how do they very much *complement* one another? So, what could be material from an environmental perspective, such as water? So is water a really material thing within a particular supply chain? And how do those material water issues become financially material issues? And once it becomes a financially material issue, what should accountants be doing within this space to really account for it." (interviewee S-01b)

In addition to materiality for the business, ESG in the opinion of other interviewees gets considered as having to follow a profit logic because of the circumstance of not excluding it from core business operations like in the firm of P-05:

> "And we *don't have a philanthropy budget* […]. The year does not begin with a certain allocated budget, that, okay, this is what we are going to do *non-commercially*. This is what we are going to spend towards *pure philanthropy*. […] So, you don't do it *over and above* doing your business as usual, but the *way you run your business*. […] And doing it that way makes you a responsible corporate, not that you do business and then you take some of your *business profits* and plough it back into society for a good cause."

The accounting-like tools and language employed for the concern with sustainability and the linkage to profit making both pave the way for the integration of ESG in investment processes. Interviewee S-01a uses the question "How can investors understand the *financial implications of climate*?" as the title for the current phase of financialisation of the concern with corporate sustainability. Interviewee P-04 describes the process of linking ESG with investment returns as their effort rather than an inherent one:

> "I manage to do what I think is impactful for the planet, for the social element. Then I think, if there's a gap, how is this positive for the investment? For the risk management? Or, for the profit bit? So, *first, I find impact*, and *then explain the positive investment return* internally, in the company, to get the green light."

Others are referring to the technical bit of merging ESG with financial returns as interviewee P-06 does in their work where they "support [asset managers] with *integration of ESG metrics into their investment*, financial analysis and investment decision-making" or interviewee P-03 who witnessed "that if you have a company which cares about those [ESG] things, they will *drive better economic outcomes*". Lastly, a growing number of investment instruments is described by interviewees as including sustainability such as "*climate funds*, or net-zero funds, or Paris Aligned funds and so on" (ibid.).

As a motivation for these outlined types of investment, risk is employed by asset managers like interviewee P-04:

> "But how will this make me bring *more profit*? Are you an investor? Almost questioning why, I, as an investor, I am not putting profit first. My response is, well, we're seeing this as a sector issue. We're seeing it as a *sector risk* […]. I think your *mitigation will drive profit*. […] I get always asked, well, what is the *risk prevention*?"

In contrast to the quantification of the second phase, the concern with corporate sustainability goes through a process of financialisation and in the same breath of riskification during this third phase as interviewee A-10 does:

> "And so far, [institutional investors] put pressure on the management to integrate sustainable goals, especially climate change issues, because these are *risks*, and these go into *financial risks* during […] the next years. […] No financial institution, no investor likes to invest money into a *very risky business model*. And so far, you must start to transfer your business model. You should analyse your *climate risks* with scenario analysis, and your CO2 footprint, and then should think about new strategies."

This quote also points out that more than seeing the relationship of the business with social, environmental and governance issues from a risk perspective, a non-sustainable business model is equated with being risky. "As a starting point it was really about how can you *mitigate environmental risk, or social risks*? And in time, the idea was that you'd start looking at opportunities and value creation. […] But there is a lot of narrative about what or how those *risk factors, the E and S*, ultimately impacts the business." Interviewee S-01b perceives the connection to risk as enabling value creation afterwards but takes the inherent riskiness of the concern with corporate sustainability as for granted.

The tools employed for working with ESG in investment processes are seen by interviewee P-04 as similar to activities undertaken in other investment areas: "And then, climate transition risk and climate physical risk. […] So, it's very much of a *risk-mapping*. Sort of exposure and how the emerging risk is." However, the risk perspective on ESG expressed by many interviewees links back to the enlarged responsibility introduced at the beginning of the section and perceived by interviewee P-06 as follows:

> "So, at [name investment management company] we have the view that climate change is one of the *most significant risks* facing the *global economy* in the medium to long term is very much from the very top of the organisation, and it *permeates through*. And so, it follows that if climate change is a *significant risk* to the *world economy*, it's a *significant risk* to our clients' assets, and therefore as a steward of those assets, it forms just a natural part of our fiduciary duty to try and manage those risks."

Interviewee P-02 summarises these aspects as "we are realising that what we are talking about is *business-critical*. A lot of influential reports have come out over the last few years which clearly show that risk such as *climate risks* are *business risks*, they are *financial risks*."

The spatial dimension of responsibility gets extended to incorporating prospective business regions as interviewee P-05 describes in their example on Myanmar: “[My firm] invested quite a bit for almost five plus years in creating the first generation of digital natives, *not just by selling our networks*, because even to create that traction there was a *large education project* with [company’s education initiative] done with support from [other telecommunications firm] and the Department for International Development, UK.”

Notwithstanding these changes, the temporal dimension of responsibility that gets stretched to also taking on responsibility for issues that materialise in the future is the striking feature of the third phase and which is referred to by various interviewees.

> “[…] The problem here is that we tend to look at risk management through the lens of a timeline, so we look at the *next three years*. That’s *very long* for some companies. And we predict well, will [climate change] happen in the *next three years*? If you say what is the likelihood that this will happen in the *next three years*? [The management] will say no problem, no, it’s not going to happen. There is no probability. So, we’re already asking the wrong question.” (interviewee S-02)

The low probability for most of the ESG matters to occur within the next reporting cycle seems to be one reason for interviewees to refer to difficulties with connecting the concern with sustainability with the time dimension. Interviewee P-05 adds another practical obstacle with time and capturing it by the financialised tools outlined above: “I face this *time challenge*, that *impact in the future* versus, okay, what can you show me next quarter?”

Interviewee P-02 perceives the understanding of corporate operations as subject to rethink that might even have already taken place as the use of the past tense indicates:

> “The prevailing paradigm and economic models *were focussed* on looking at the *short-term direct impacts, direct financial impacts* and on certain stakeholder groups, the company, the investors. Sustainability asks us to look at the *whole system* to think about the *bigger picture*, the *long-term impacts*, […] not just the direct financial proceeds but *indirect ones*.”

The employment of indirect consequences seemingly is supported by interviewee P-01 who states that “large parts of the money that is invested in a traditional economy is focussed on investment gain and not necessarily *investment consequence*”, while interviewee P-03 finds unconventional words to describe the long-term perspective: “ESG […] is about making sure that you are sustainable for the long term […]. People are not going to enjoy their *retirement savings* if the world has heated”. However, “it’s not the current CEO’s problem, and it’s probably not going to be the CEO-after-that or the *CEO-after-that's problem*" (interviewee P-06). Interviewee A-14 sees the challenge of ESG in "how do you take an inherently long-term issue and create a bridge between the long-term and the short-term". Furthermore, new paradigms in the time dimension are mentioned in various interviews as playing a role in their research or daily work, such as "circular economy and end-of-life recycling" (interviewee P-01) or "consequential accounting" (interviewee A-11).

Especially the consideration of GHG emissions is perceived as introducing novel challenges to the time dimension regarding obstacles of tracing emissions once a product has left the factory: "Scope 3 [emissions] [are] kind of problematic […]. If you do want to report the emissions of your customers for example, how are you going to affect a difference? This is *beyond the control* of the company." (interviewee A-02) Interviewee A-08 goes more into detail and relates their perspective to the nature of GHG emission:

> "The rationale behind climate accounting is that gases are going to be in the air for *100 years*, but basically, it's more like *500 years*. It's much more, so all of these things are, for a human being, really, really *difficult to fathom* because you know that you're not going to be there."

Whereas interviewee A-05 adds that "the climate above us is a *consequence* of all the emissions that have been made. […] Some of the really big global gases are almost *indestructible*. They're up there *forever*." Interviewee A-11 introduces a connected aspect by saying that "[there are] other gases like nitrous oxide that *persists for hundreds of years*. And so people do debate, well, how do we compare short-lived gases with long-lived gases?"

Interviewee S-03 refers to the ESG-induced consideration of time in accounting that is reflected in many interviewees' voices:

> "So I think businesses are seeing ESG criteria as a way to *extend* the way they think. And they see their business environment in a more enlarged way. Businesses should think about the *consequences* of what they do. […] A big challenge is to find a way to *shorter time horizons*, so that we are forced to act before it's *too late*. […] It is a real challenge and a real question for accounting, because we have a tendency to give preference to the very short-term."

The problem with the time frame employed in accounting is described by interviewee A-04:

> "We are in a unique position in economic development where human activity threatens the viability of the planet and its resources and with potentially catastrophic

> *consequences*. […] There is this anticipated *discontinuity* coming, as it were, and that makes sustainability reporting important over and above just straightforward financial reporting. It makes it something *in its own right*. And then that's when it gets tricky."

Not only the lengths of the period considered in accounting, but also the continuity or going-concern assumption employed seem to be challenged by the concern for corporate sustainability. But apart from problems occurring with any kind of valuation ("of course, time is implicated in valuation, so valuation incorporates an anticipation of the future, business activity is not in the future, it's in the present", interviewee A-04) refer interviewees to "[the] problem with current accounting that is that it is *over once the year ended* and [deals] with historic information" (interviewee S-02), and not "about *future* generations" (interviewee S-03).

The call for a long-term perspective that comes with the concern with corporate sustainability is not only expressed in practical terms asking for "modern ways of forecasting, […] *longer forecasting* periods, ten, 20 years" (interviewee A-10) but also conceptually discussed like in interview S-01:

> "When we talk about financial reporting, it uses the position, performance and prospects of a business. And talking about prospects, but actually it's never really addressed, this idea of *longevity of a business*. And what the financial implications of that are, or is the company in a financial position that has prospects more than three, five, ten years? It's very much a short-term horizon. […] And then you start to question the *longevity of a company*. What is its ultimate purpose? Yes, what is its ultimate purpose? But then is it very much to deliver short-term returns, or *long-term returns*. […] Maybe there's a requirement for the *going-concern assumption* to go beyond one year. Maybe go into five, ten, or 15-year time horizons."

What this all amounts to is that during the third phase of 'Bringing in future responsibilities', the substantial dimension expands to also incorporating governance issues as well as considering all three letters of the ESG acronym in an interrelated manner. The spatial dimension increases to also referring to prospectus business areas. The pivotal element of this phase is the incorporation of responsibilities that only crystallise in the future. Thereby, the concern with corporate sustainability becomes financialised and oriented to mitigating risks by employing accounting-like tools and measures, underlining the profit-relevance of ESG and integrating the latter into investment processes.

Key drivers: Investors, GHG regulators and intrapreneurs

The overarching trends and key aspects described above are brought forward by three key drivers, namely investors, GHG regulators and intrapreneurial forces, that will be separately considered in the following section. The increased financialisation and riskification of the concern with corporate sustainability indicates the involvement of investors, predominantly under the title of ESG, rating agencies and analysts as interviewee P-03 claims: "ESG is a concept between company, data providers that rank them and *investors* that consume that data, while CSR is *marketing*." How this potential influence of investors on processes of determining corporate responsibility is organised, not assuming that they build a homogenous group, describes interviewee P-04: "You [as an investor] speak to the corporates and have the investor-corporate dialogue in which you try to […] influence strategies, or to *include considerations on sustainability issues*, […] that they hadn't viewed." Notwithstanding the mechanisms of reasoning behind this kind of investor interest previously outlined, i.e. the connection to profit and long-term risk mitigation, seem investors to have a rather close connection to corporations with at least perceived power and confidence to steer decision-making: "You send the letter and you either request a meeting or ask questions to be responded. And then you *start a dialogue* with them." (interviewee P-04) But more than that, investors signal to be faster or stricter than the regulator in their take on the concern with corporate sustainability:

> "We say to companies, just because the *right policies are not in place today*, doesn't mean that you don't *need to be working on this already*. You should be working on this already because the odds are that if the policies are not in place today, we might see a *sudden policy response* five, six, [or] seven years down the line, when policy-makers finally *wake up* to the fact that, we're all going to die if we don't do this."

While this quote communicates rather modest aspirations about regulation, the reliance on the accounting profession and assurance services is often referred to by the investment side as a partner in decision-making: "Because around 2012, 2013, the *accounting profession* […] started to show an interest in sustainability. The accounting firms were starting to see a *growth in assurance* services over sustainability information." (interviewee S-02) This relatively recent rise in data availability and trustworthiness seems to be an important issue for investors that heavily comment on data quality during the interviews: "With S and G, a lot of that data is *very readily available*, right?" (interviewee P-06); "Because you can have *plenty of numbers*, you can have *whole spreadsheets worth of data* that investors can go through. […] But actually, you need to have that *contextual information* […] and the *real thinking behind* what these numbers might mean and might not mean." (interviewee S-01a); "There's a huge issue with the *quality of sustainability data* which is not nearly up to the level in most companies' that the financial data has." (interviewee A-06); "It's *difficult to rely on* the GHG emissions data that is out. I mean, we have to rely on it because we have no other choice, but to *improve the quality* of that I think is really important." (interviewee P-06) Consequently, investors describe their involvement in the concern with corporate sustainability as entering into dialogue with firms, asking them to go beyond current legal requirements, and at the same time require the growing sector of assurance of sustainability data to support their decision-making.

The financialisation and riskification of this third phase developed in close connection with processes of ESG investment but the focus on GHG emissions is triggered by the level of regulation and standardisation in this area. "What really draws me to climate reporting is that the *level of standardisation* of climate reporting […] it's very *accounting-like*. There is a *standard, numbers*, there is a *clear way of calculation* your carbon emissions." (interviewee A-02) Interviewee A-11 adds to the regulation-induced way of calculating and reporting emissions that "allocating responsibility […] [takes place] through legal measures as well as emissions trading schemes or even the Paris Agreement", which assumes that responsibility is made tangible by regulation. Interviewee S-02 interestingly witnessed a demand for more comprehensive regulation expressed by firms which underlines the role regulation seems to play: "Historically, business has been shy of wanting to say *we need more regulation*, but we're starting to see a change in more progressive companies saying can we please have a *level playing field*?"

In addition to these tangible drivers of the development which either refer to financial returns or legal measures, another driver appeared during the interviews that got mentioned without directly having asked interviewees about it: the passionate internal leader of corporate sustainability. "The head of sustainability is just an amazing woman, really driving it. [She] is the *key driver*." (interviewee P-04) Interviewee A-10 brings a similar example but underlines the role of expertise: "We need some persons on the board who are *familiar* with climate change, with social aspects." During interview S-01 the idea was expressed more indirectly and focussed on a certain spirit of pioneering: "So, when our CEO created a *small task force*, it was a very eclectic task force. […] He just set us a challenge. And it came together, primarily, because all of these different individuals had *different expertise* to put on the table, and to *figure out a solution*." After considering the two influential parties, financial markets and regulation, a quote by interviewee P-04 sums the translation into business practice up: "So, it requires some *leadership*. Unfortunately, I always thought leadership was a bit overstated. Like, oh, leadership this, leadership that. But now I think, institutions and organisation, but actually, no. *Someone needs to do it*. It's about *someone doing the work*." Thus, the third phase is steered by investors, GHG regulators and intrapreneurial forces.

Illustrative metric: Carbon footprint

A metric melting down the described overarching trends, aspects and drivers of the third phase is the metric for tonnes of CO2e[24] that is employed to represent the consequences of corporate operations and to intervene in climate-harming pollution. This relatively new measure[25] is often described concerning the ability to calculate and interpret the numbers as interviewee A-05 does: "But given the *poverty of our carbon literacy* and knowledge, whatever we do, we're going to need this transaction [bookkeeping]. How they're evaluated, how they're incorporated into accounts and decisions is *absolutely needed*." The emergence of this metric is consequently perceived as the beginning of a new area of accounting for the environment and the concern with corporate sustainability.

The reason for undertaking this kind of accounting is communicated as two-fold: substantially is climate a pressing topic, as previously documented, and several regulatory frameworks require compliance, practically, this kind of disclosure seems to be closely aligned with logics of corporate decision-making. Interviewee A-11 describes the former as a cascade:

> "And if we want to restrict global warming to 1.5 degrees how many more *billions of tonnes of CO2* can society put into the atmosphere, and once you know that it's *budgeting*. And if you know what your budget is, then you can work out how quickly do we have to cut emissions, and then you can work that back into *national targets*, you can work that back into *corporate level targets* potentially."

In other words, a necessity to act at a global level is broken down into calculable, tangible targets. Interestingly, interviewees highlight the clarity that comes with this measure rather than difficulties with Scope 3 emissions or allocation of external impacts. Connected to the described straight-forward translation between world climate into individual firm targets is interviewee A-02's perspective that refers to the second reason for the increased importance of the metric:

> "Climate reporting feels like it's *more feasible*. Because there is already *calculation*. […] Because it is easier for [managers] to *measure and to justify* why we need to report on climate – because we can *measure* it and we can *action* on it as well. Because with the numbers we justify it, the numbers are important to *demonstrate the business case*."

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[24] This term refers to gases covered by the Kyoto Protocol, namely carbon dioxide, methane, hydrofluorocarbons, nitrous oxide, perfluorocarbons and sulphur hexafluoride that are most of the times converted and reported in tonnes of carbon dioxide equivalents (Directive 2003/87/EC).

[25] See (Braun, 2009; MacKenzie, 2009) for the pre-history of carbon accounting.

Interviewee S-02's perception of the steady rise of interest in emissions metrics goes in a similar direction as well as underlines some visibility as well as ignorance and a sense of convenience connected to carbon emissions reporting:

> "To be honest, climate change is the easiest to address because *the science is there*. We know what the science is telling us and we know what the *scenarios* are, with respect to one-degree, two-degree, three-degree and four-degree. […] So, nature and biodiversity often gets ignored because the *easiest thing to measure and report* on is carbon and GHG emissions."

The practical component of calculating this metric is standardised as interviewee A-11 says: "So for the EU Emissions Trading System, there's a *huge handbook* that explains *how to calculate emissions*, and those rules therefore *define what you're responsible for*." The last part of the quote even communicates a certain idea of calculating responsibility away that A-11 criticises in the following: "But the bigger questions about *intergenerational equity* then that's not something that is factored into say the output metrics". This highlights the future-oriented mindset of interviewees referring to the third phase. In addition to this outlined criticism in the measure, the practical control and the described level of standardisation are questioned:

> "I would say one key thing is that we *really, really need audited GHG emissions* by companies. […] Ultimately, that's what we're trying to measure to see if we're on a path to meet the *Paris Agreement target*. And at the moment, especially for the indirect emissions, a lot of companies are putting their finger-in-the-air kind of data out in the public domain." (interviewee P-06)

Some interviewees, such as A-11, describe the consideration of tonnes of CO_2e as leading in the right direction: "Certainly, big companies like say Google and Microsoft and IKEA they are *undertaking action* based on their understanding of what their emissions are. So they are using some form of *GHG account to make decisions*, so it happens." This statement is, however, slightly reluctant, as it only claims that firms have an understanding of their emissions and do not necessarily have full control.

The metric is thereby again connected to a financialised approach to the concern with corporate sustainability that in a second step gets linked back to questions of dealing with risk:

> "We do not only need quantitative information about social and environmental issues, we do not only need the CO_2 emissions, we must go further, and we should do a *monetary valuation* of these aspects. This means we must *find a currency amount for CO_2 costs* of one company and the best way, we will, of course, put it also in the products

> or the services so that a company *can measure* what is the relation between the environmental issues, or the *climate change risks*, and one production unit."

Lastly, the consideration of tonnes of CO2e illustrates the main themes of this phase: the concern with environmental issues, the focus on financialisation and riskification, the employment of a future-oriented responsibility, as for gases partly remaining in the atmosphere for hundreds of years, in short, the *Bringing in of future responsibilities*.

Discussion

This paper described the development of the concern with corporate sustainability through a process of interlinked societal trends, key aspects and important drivers and illustrating metrics that represent and intervene in experts' perceptions of this field of knowledge. The emergence is re-narrated in three inseparable yet distinctive phases that come with particular features of the different dimensions of responsibility taken on in business operations. These phases are 'Making responsibilities present', 'Accepting past responsibilities' and 'Bringing in future responsibilities'. In addition to analysing processes of determining the spatial, temporal and substantial dimension of responsibility, the examination of the concern with corporate sustainability allows to study the notion of responsibility itself as well as the longitudinal development and delimiting of responsibility.

The responsibility of firms expands in the spatial dimension from a local concern to global supply chain tracking and prospectus business areas. It further broadens in the substantial dimension from a focus on social issues over the addition of environmental matters to a threefold ESG responsibility. It lastly develops in the temporal dimension from a narrow incorporation of present responsibility via considerations of the past to future-encompassing responsibility. While these are widening tendencies of responsibility that make the perceived responsibility more comprehensive, narrowing aspects get also added to the picture. Over time, those areas of businesses' impact once voluntarily and independently considered, shift into measured and regulated targets that are screened for materiality. Even more than that, responsibility shifts from being employed for referring to a field of good judgement for firms to capturing a liability. Responsibility developed from being a positively framed business activity to belonging to the foundations of a corporate strategy that must be provided. Eventually another change takes place: The narrowly circumscribed obligation to comply with certain societal expectations and (quasi) binding regulation opens up to understanding responsibility as something that helps firms excel by providing an opportunity to invest. Moreover, actors driving the development in the different phases get, as opposed to the increase of topic areas in the substantial area, added for only one specific phase. They gain influence and shape the corresponding phase; however, they do not remain the audience that responsibility is ensured towards or that keeps lobbying for corporate responsibility; quite the opposite, responsibility to certain actors widens and narrows relatively quickly over time.

The following figure illustrates the parallel development of expanding and narrowing tendencies of responsibility. Over time, the spatial, substantial and temporal dimension of responsibility expand. Other aspects of the meaning of responsibility narrow down, such as the voluntary perspective on the concept, shifting actors or the framing as a positive business activity (see figure 1-5).

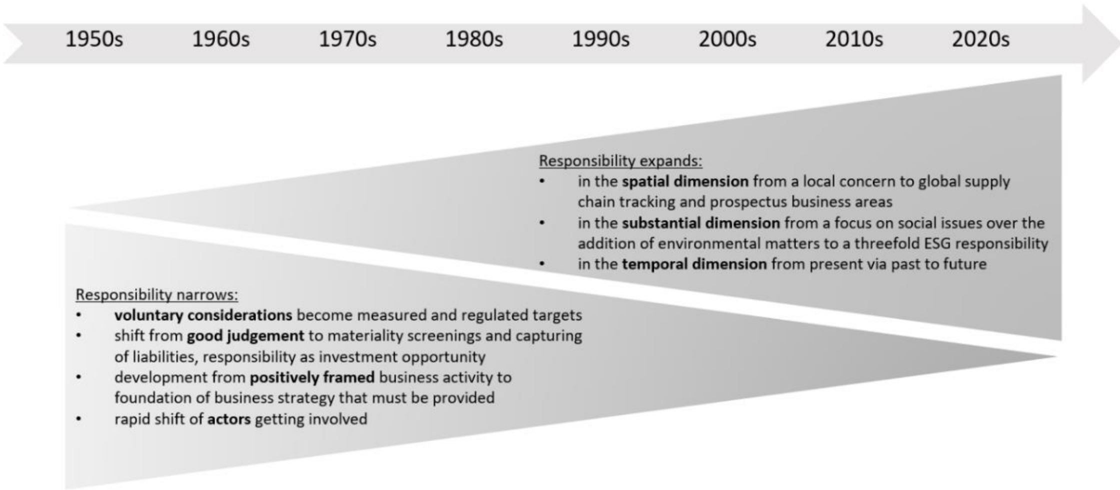

Figure 1-5: Parallel development of expanding and narrowing tendencies of responsibility

In the first phase, which took place between 1950 and the mid-1980s, political protest movements not directly related to CSR draw attention to social aspects of corporate operating, such as workers' safety and consumer protection. Against this backdrop, the discussion about the role of businesses in society is more related to moral questions and entanglements than practical considerations. The safety aspect of firm activities is very much reflected in the prevailing measure for safety incidents and the involved parties, namely unions and workers, in addition to activists, steering the external protest movements. These aspects are emblematic of the process of 'Making responsibilities present' and illustrate the connection between the three dimensions of responsibility. The substantial focus is, as the term "Corporate *Social* Responsibility" already indicates, on the social that spatially lies within the factory walls and is limited to the current affairs of the company.

The second phase, which captures the years from the mid-1980s until now, starts with a turning point that motivates the talking of a new phase. Related to major environmental catastrophes, the concern with environmental issues gains momentum and the responsibility of firms is extended to matters of pollution, clean-up of contaminated land and care for the ecology. The concern with corporate sustainability gains attention by legislators as well as NGOs which goes hand in hand with the growing institutionalisation and regulatory coverage of the CSR topic. Additionally, the understanding of the interplay between businesses and the environment is informed by the natural sciences and very much relies on quantification of social and environmental issues. Thereby, supply chain tracking of corporate activities is undertaken, as the measurement of water usage along the supply chain illustrates. This setting and sense-making builds the base for focussing on both social and environmental issues but expands the spatial dimension of responsibility to supply chain origins which is linked to referring to the corporate past. Both of them are near in the case of sourcing decisions but also further away when it comes to roots of environmental disasters. In other words, the *Accepting of past responsibilities* takes place in all dimensions yet the most revolutionary change occurs in the temporal perspective on responsibility.

The third phase begins with the arising concern with corporate governance in the aftermath of high-level corporate scandals in the early 2000s as well as the growing interest in GHG emissions. It is distinct in its take on corporate responsibility but does not finish up the previous phase, they rather run in parallel. The substantial area of responsibility grows to incorporating the variety of ESG issues that gets observed from a financialised, even risk-related, point of view driven by capital markets and investors. The concern with corporate sustainability develops into an investment screening device aiming to mitigate future risks. The subject expertise about GHG emissions is brought forward by regulation on trading mechanisms and (quasi) standard-setters blurring the line between voluntary as well as mandatory disclosure and financialisation is part of investors' concern. The nature of the described issues translates into the outlined extension of the substantial area of responsibility and considerations of prospectus business areas. But an inherent aspect of the care about GHG emissions and investment decision-making is the stretching of responsibility to matters that materialise in the future. The metric for the carbon footprint of gases that remain in the atmosphere as well as life-cycle assessments, cradle-to-cradle product developments and downstream supply chain analyses illustrate the *Bringing in of future responsibilities* taking place during the third phase.

In other words, all these aspects taken together do not reveal different phases of a rather straight-line growth of responsibility. On the contrary, they show that responsibility oscillates between the two extrema of meaning: leeway and liability. Carefully tracing the emergence of the concern with corporate sustainability highlights the inherent tensions of responsibility that cannot only grow to keep its substance. Without melting certain parts of responsibility down, no widening of other areas would be possible. Consequently, responsibility requires processes of demarcating it to work. One could wonder what responsibility was if it was not demarcated or if only processes of demarcating allowed taking on responsibility. While materiality-oriented parts of responsibility become apparent, especially during the last phase, the voluntary motivation to take on more substantial, spatial and temporal responsibility remains an important trace of the development.

This multifaceted shift of responsibility can be summarised as a movement from one meaning cluster of responsibility to another while actions referred to as ESG or CSR become more comprehensive. The spatial, substantial and temporal dimensions become wider – as described in the different phases. Nevertheless, responsibility itself develops from an un-coordinated, spontaneous, voluntary bundle of issues that is at the same time socially focussed, moral-centred and qualitatively assessed to a materiality-oriented responsibility. In the last phase, the concern emerges to having the characteristics outlined above and responsibility fulfils an overarching aim which is aligned with the business strategy – as shown at the beginning of this paper in the Unilever example: Unilever addresses corporate sustainability not only for running a “responsible” business, yet this responsibility also has to serve the business in an “effective” manner. Responsibility is understood as productive, as tied into the firm’s operations, and therefore as adding value to the business beyond the concern with corporate sustainability. The inclusion in economic sense-making comes with the described growth in all three dimensions of responsibility as well as limits responsibility to a measurable concept that can be used in economic terms. However, the situation seems to be more nuanced since the voluntariness of responsibility remains a driver of witnessed processes. Firms seem to move along the materiality side of the spectrum of meanings of responsibility whereas processes of taking on responsibility in substance very much continue to be based on perceived leeway.

All these vague ideas of responsibility are reflected in different forms of accounting – ranging from measures, metrics and targets to narrative accounts and reports. Accounting thereby communicates the understanding of responsibility at a time and creates responsibility by offering a space for the concern with corporate sustainability to develop. The described enabling function of accounting brings forward the measurable liability component of responsibility which can disable the good judgement side of the concept in parallel. In practice, the possibility to demarcate responsibility and to make it tangible motivates the close interlinkages with accounting. Accounting then again is tied to an entity conducting the measuring, capturing and reporting of responsibility. It is consequently involved in enabling certain parts of responsibility and disabling others while also taking part in demarcating responsibility itself. In other words, while accounting creates a complex and granular notion of responsibility and responsibility enables employing accounting for the concern with corporate sustainability, the objects of both spheres are at stake: The corporate entity on the one hand and social, environmental and governance responsibility on the other hand get redefined during the interplay between accounting, responsibility and demarcating.

The described narrowing and widening of responsibility that accounting is involved in takes place in close connection with processes of demarcating the responsibility-bearing entity. Responsibility as good judgement and responsibility as liability seemingly have a relational component, they require a point of reference – more specifically, a demarcated area of reference – to unfold their potential of being responsible *for* something. Notwithstanding the phase the concern with corporate sustainability is in, the demarcating of responsibility is mentioned, perceived and imagined in the same breath – as the conducted interviews indicate. Interviewees link the concern with corporate sustainability to questions of drawing a boundary around the corporation. Interviewee A-02 describes these processes as inherent to dealing with the concern:

> "Now, the move is more *towards sustainability*, sustainability reporting. Recently people talk about integrated reporting, non-financial reporting, extra-financial reporting and so on. I think it is kind of difficult to put a finger on the link between all of those. But certainly is the *definition of the entity* quite important. They are all trying to capture the relationship that an entity has with its external constituents."

Consequently, the dimensions of responsibility discussed so far seem to come with both a recast of the concept of responsibility itself and a connection with demarcating the entity that is taking on responsibility. In the beginning, this takes place rather voluntarily, later on in a productive, materiality-oriented manner. Unpacking the link between demarcating and taking on responsibility that is implicitly made throughout the interviews provides insights into processes of boundary-drawing that are discussed in the following.

Interviewee P-01 refers to this connection between exploiting responsibility, employing it with a productive aim in mind and demarcating it at the same time: "So [companies'] *boundaries* typically are *short-termism* and that they do not want to compromise on profit during the *next years*". Interviewee A-05 questions the acceptance of accountability for consequences of corporate decision-making that interferes with the ability to understand responsibility as either good judgement or as a liability: "Anyway, this idea of *intergenerational equity*, businesses as *time machines*, shifting things forward and back *over time*…". Whereas interviewee A-11 links these utterances back to practical questions of employing a different accounting method which again illustrates the tight coupling of all three spheres in the concern with corporate sustainability: “Your idealised consequential method *won’t have a boundary*. If you could do the perfect consequential method in an ideal world *conceptually it would not have a boundary*.” Interestingly, interview participants use terms from the field of boundary-drawing to talk about responsibility: “It’s all about what are the *social environmental impacts* within my value chain, and the value chain is the *boundary of responsibility*.” (interviewee A-11) Moreover, they are frequently touching upon this issue in an emotional manner: “Environmental issues are starting to be seen now. It's moving from that longer term to short-term, medium-term timeframes. But it's a *bigger question than I think we can grapple with as individuals*. And my *brain starts hurting* when I looked into this, to be completely honest.” (interviewee S-01b)

While these voices indicate a certain personally moved interest in processes of demarcating the responsibility that belongs to a defined, (potentially just a momentarily) delimited entity, other interviewees are denying the suitability of an accounting paradigm that relies on the bounded accounting entity. “The relationships between an entity and its wider environment *don't necessarily get accounted for* within the scope of accounting.” (interviewee S-01a) Interviewee A-08 communicates this idea more drastically: “I’m not here to account for an entity […]. I’m here to account for sustainable development. […] The entity concept is, of course, *wrong for the accounting for sustainability*. […] To account for sustainability, you cannot be at the entity level.” Although rejecting the appropriateness of a demarcated entity, or an entity that is involved in processes of demarcating, they do refer to the temporal dimension of responsibility in a way that underlines the productive features of using responsibility beyond good judgement or seeing it as a liability: “There’s no sustainability without *going beyond the legal boundary*. […] We are going the wrong way in the next few years because companies will keep failing by looking at *short-term entity-based risk*.” This quote highlights that misunderstood responsibility and failure are perceived as almost synonymous, but even more than that, effectively employed responsibility, i.e. productive responsibility, interplays with the boundary of the firm.

Interview participants take the temporal dimension of processes of demarcating the accounting entity into account, but they also link these questions back to spatial boundaries like in interviewee P-02’s remark: “We are now *exceeding planetary boundaries* of key resources.” Or interviewee A-08: “People who are in sustainability science today, they will take *the earth as the entity*.” Interviewee A-07 mentions the construction of a boundary: “They *constructed a boundary* within which they were working, and they refer to this as the pre-competitive space.” Interviewee S-03 introduces the possibility to recover boundaries: “I need to say, well, the *planetary boundaries have been exceeded*, so in order to *restore the planetary boundaries*, my company, Company-X, needs to limit its CO2 emissions". Interviewee S-02 lastly observes boundary-crossing activities in the spatial dimension: "So, sustainability *doesn't happen inside* the organisation. It happens in the *context within the operation* in the organisation's operating environment." At the same time they are highlighting the arguably important differentiation between permeable boundaries and no boundaries at all: "It's *not necessarily a global issue* but it can be. There're *global consequences*, but the decision needs to be taken *locally*." Taken together, these quotes underline that accounting, demarcating and responsibility are not only associated in an academic context or understood as related by firms such as Unilever that report on "Scope and Boundaries" in their sustainability reporting, but they also seemingly come up as interlinked, processual, enabling and disabling counterparts under the heading of the concern with corporate sustainability.

The last major theme about processes of demarcating the accounting entity is the very careful consideration of the nature of those processes, in particular the relationship between the concern with corporate sustainability, the reporting on it and the entangled demarcating of the accounting entity. Interviewee A-02 describes the process as follows:

> "What reporting really does is that it is really powerful for the way *people perceive things*. If you are thinking about the entity or *how does the entity materialise in practice*, I would conjecture that people *think about the entity as materialising in reporting via metrics*. That the metrics that you measure matters is one of the key assumptions of doing a measurement, so, this is very powerful since it *steers people's perspective* […].

Interviewee P-01 expresses their perception in a slightly different manner but transports a similar understanding: "I feel like that *internal culture* is where those *boundaries* will be discovered. The boundaries are *entirely manufactured by those cultures*." Thereby, this perspective is, therefore, less focussed on metrics. It emphasises rather something referred to as internal culture that in the same way as metrics stems from internal decision-making. Interviewee S-03 continues with a broad link between binary accounting decisions and the way people think:

> "So, that boundary is very negotiable and in many ways, *politically driven*. […] We've tended to think about all of these issues in a *fairly binary way*. So, either they're in the accounts or they're not in the accounts. And if they're not in the accounts, then they're somehow of a lesser order. […] I think I see *mental boundaries*, more than impossible to do something, is the boundaries more explained by the *limitations in the way people think*, than by actual physical boundaries."

Thus, this paper shows that the concern with corporate sustainability develops through three phases that have specific characteristics and vary in their spatial, substantial and temporal expansion. The examination of the evolvement of the concept of responsibility itself since the birth of the concern with corporate sustainability as a field of knowledge in the 1950s reveals a meandering of responsibility. It widens and narrows while oscillating between its two extrema of reflecting voluntary, independent good judgement and a measurable liability. However, a recast in thinking of responsibility remains since it becomes more comprehensive in the studied dimensions while the independent, moral, voluntary responsibility decreases over time. When the fuzzy concept of responsibility becomes reduced to an investment opportunity, it is still driven by a form of voluntary engagement with ESG issues. In short, firms seemingly move along the materiality side of the spectrum whereas processes of taking on responsibility in substance very much remain powered by the voluntary adoption of responsibility.

After shedding light on the concept of responsibility itself and how its variety of notions gets navigated over time, the paper explored how certain meanings gain or lose relevance for the business and the delimiting of responsibility. Accounting is, therefore, involved in processes of perceiving the world rather than being an instrumental or purely a technical activity (S. Burchell et al., 1980; Hopwood, 1983; Miller & O'Leary, 1987; Miller & Power, 2013). The historical tracing of the development of the concern with corporate sustainability revealed that accounting is not neutral in the formation and emergence of this field of knowledge, it is more than that, as it is deeply involved in determining the employed meaning nuance of responsibility. Accounting enables the establishing of a responsibility-creating relationship between actors and entity which creates a liability. Over time, it also disables another part of the notion of responsibility, the good judgement side to it. The concern with corporate sustainability and the historical tracing of its development consequently helped analyse the inner workings of responsibility as well as the interplay between accounting, demarcating and responsibility.

Conclusion

The paper unpacks the development of the concern with corporate sustainability from CSR to ESG. It traces a massive uplift in interest in ascribing companies a certain responsibility for environmental, social and governance issues – as exemplified by the Unilever case. The historical analysis does not only show that responsibility widens in its substantial, spatial and temporal dimension, it also reveals narrowing tendencies that can be found in the understanding of the concept of responsibility itself. While responsibility seemingly becomes more comprehensive, it meanders between its good judgement and its liability extremum. It notably is the tension between a narrowing and a widening of responsibility facilitated and captured by accounting measures that takes place in parallel which calls for a more nuanced understanding of these processes demarcating responsibility.

In this context, it can be observed that the inherently boundary-spanning nature of the concern with corporate sustainability can only be exercised due to boundary-maintaining properties of accounting. Accounting creates a complex and granular notion of responsibility, whereas responsibility also enables employing accounting for the concern with corporate sustainability. However, through this interlinkage, the objects of both spheres are at stake: The corporate entity and social, environmental and governance-related responsibility get redefined during the interplay between accounting, responsibility and demarcating.

More specifically, the paper approaches three questions dealing with the variety of meanings of responsibility. It traces the organisational navigation through the multiplicity of notions. In this light, it studies how certain meanings gain or lose relevance and it eventually unpacks how these different components of responsibility get delimited over time. By considering these processes, the interplay of accounting, responsibility and demarcating the responsibility-bearing entity is approximated. Based on the analysis, it can be argued that the journey from CSR to ESG with all its components and implications indicates a significant inflection point in terms of dealing with responsibility itself. Responsibility has a variety of meanings that can be located between voluntariness and materiality. Dissecting the developments of the acronym, involved parties, key aspects, metrics, accounting instruments and practitioners' perception, a recast in thinking of responsibility remains: The two poles making up responsibility, the voluntary good judgement side and the liability part of it, get addressed differently over time. The emergence of the concern addresses the two extrema of meanings of responsibility. The concept seems to become wider or more comprehensive once the spatial, substantial and temporal dimensions become broader. The growing measurability in accounting terms and the materiality for the business, as already indicated in the excerpt of the 2020 Unilever disclosure, foster wider responsibility. Nonetheless, this observation in itself is not sufficient since the independent, moral, voluntary responsibility decreased over time. Moreover, the fuzzy concept of responsibility got reduced to a calculable investment opportunity. The core argument of this paper consequently is that firms seemingly move along the materiality side of the spectrum whereas processes of taking on responsibility remain driven by the voluntary adoption of responsibility.

For the critical accounting discipline, this argument is of relevance over and above the particularities of the concern with corporate sustainability. The nuanced ideas on responsibility brought forward in this paper advance our understanding of the nature of accounting and its role in negotiations of the changing firm-society boundary. The triangulation between the concept of responsibility, processes of demarcation and accounting reflected in – but not limited to – the concern with corporate sustainability is of wider significance for incorporating the hard-to-grasp, non-linear, measurable and at the same time uniquely perceived concept of accounting for responsibility, a form of good judgement which developed into a liability emerging again into an opportunity.

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Appendix

Empirical material

Documents

- Academic articles on Corporate Social Responsibility, sustainability, Environmental, Social and Governance-related issues, natural capital, sustainable development etc.
- UK and EU legislation on non-financial reporting and GHG emissions trading

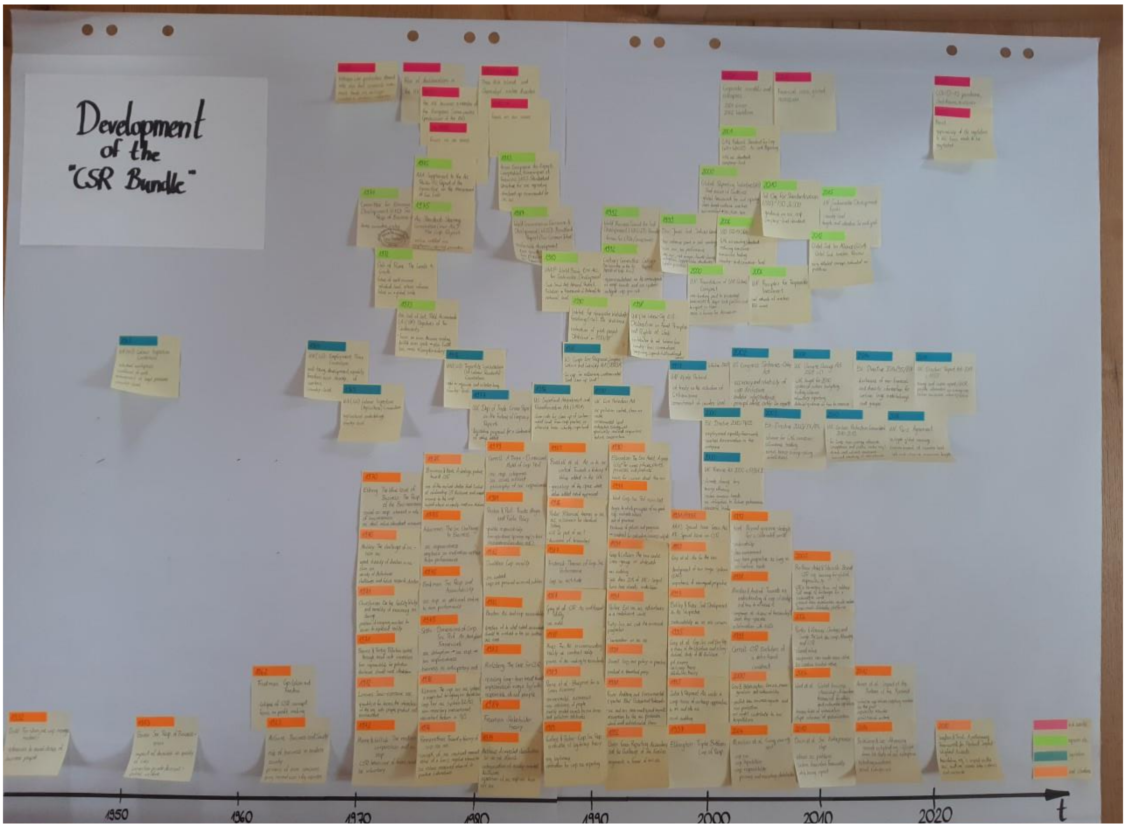


Figure 1-6: Poster on the development of the concern with corporate sustainability

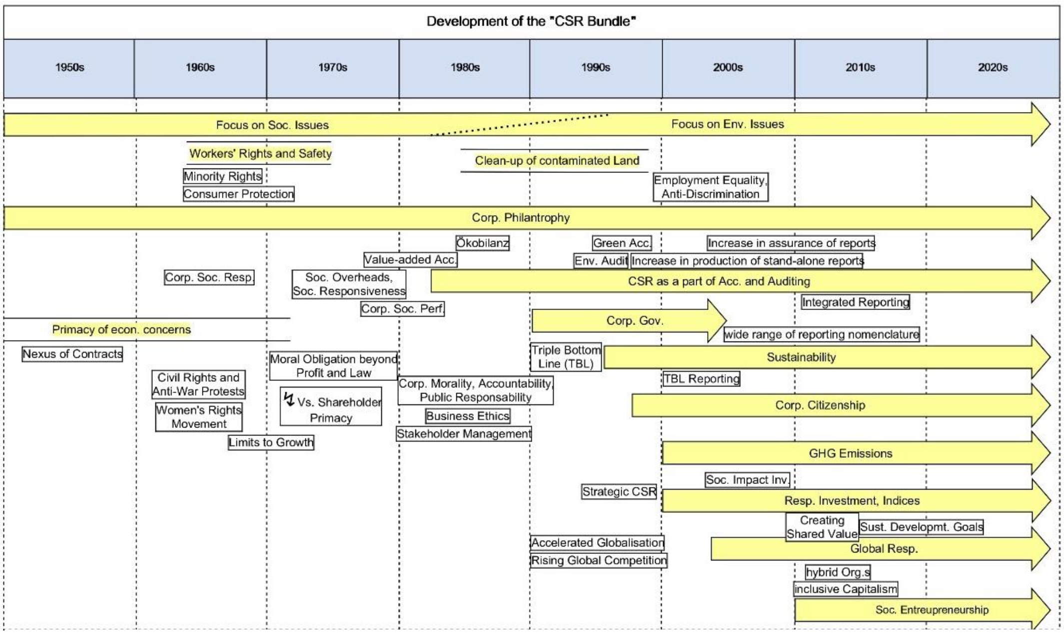
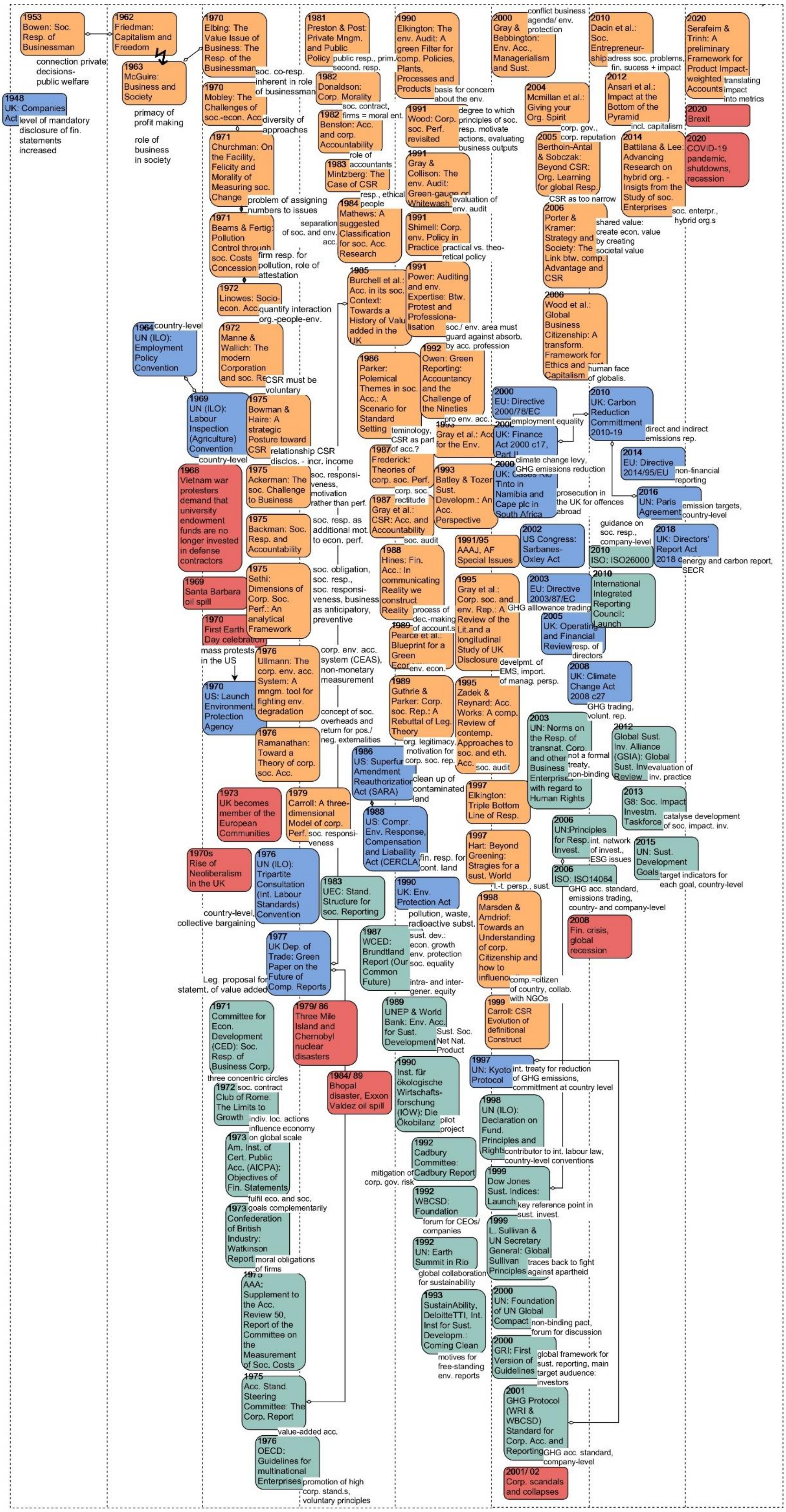


Figure 1-7: Stylised development of the concern (continued on next page)


1953 Bowen: Soc. Resp. of Businessman
connection private decisions-public welfare
1948 UK: Companies Act
level of mandatory disclosure of fin. statements increased
1962 Friedman: Capitalism and Freedom
1963 McGuire: Business and Society
primacy of profit making
role of business in society
1964 UN (ILO): Employment Policy Convention
country-level
1969 UN (ILO): Labour Inspection (Agriculture) Convention
country-level
1968 Vietnam war protesters demand that university endowment funds are no longer invested in defense contractors
1969 Santa Barbara oil spill
1970 Elbing: The Value Issue of Business: The Resp. of the Businessman
soc. co-resp. inherent in role of businessman
1970 Mobley: The Challenges of soc.-econ. Acc.
diversity of approaches
1971 Churchman: On the Facility, Felicity and Morality of Measuring soc. Change
problem of assigning numbers to issues
1971 Beams & Fertig: Pollution Control through soc. Costs Concession
firm resp. for pollution, role of attestation
1972 Linowes: Socio-econ. Acc.
quantify interaction org.-people-env.
1972 Manne & Wallich: The modern Corporation and soc. Resp.
CSR must be voluntary
1975 Bowman & Haire: A strategic Posture toward CSR
relationship CSR disclos. - incr. income
1975 Ackerman: The soc. Challenge to Business
soc. responsiveness, motivation rather than perf.
1975 Backman: Soc. Resp. and Accountability
soc. resp. as additional mot. to econ. perf.
1975 Sethi: Dimensions of Corp. Soc. Perf.: An analytical Framework
soc. obligation, soc. resp., soc. responsiveness, business as anticipatory, preventive
1970 First Earth Day celebration
mass protests in the US
1970 US: Launch Environment Protection Agency
1976 Ullmann: The corp. env. acc. System: A mngm. tool for fighting env. degradation
corp. env. acc. system (CEAS), non-monetary measurement
1976 Ramanathan: Toward a Theory of corp. soc. Acc.
concept of soc. overheads and return for pos./neg. externalities
1973 UK becomes member of the European Communities
1979 Carroll: A three-dimensional Model of corp. Perf.
soc. responsiveness
1970s Rise of Neoliberalism in the UK
1976 UN (ILO): Tripartite Consultation (Int. Labour Standards) Convention
country-level, collective bargaining
1977 UK Dep. of Trade: Green Paper on the Future of Comp. Reports
Leg. proposal for statemt. of value added
1971 Committee for Econ. Development (CED): Soc. Resp. of Business Corp.
three concentric circles
1979/ 86 Three Mile Island and Chernobyl nuclear disasters
1972 Club of Rome: The Limits to Growth
soc. contract
indiv. loc. actions influence economy on global scale
1973 Am. Inst. of Cert. Public Acc. (AICPA): Objectives of Fin. Statements
fulfil eco. and soc. goals complementarily
1973 Confederation of British Industry: Watkinson Report
moral obligations of firms
1975 AAA: Supplement to the Acc. Review 50, Report of the Committee on the Measurement of Soc. Costs
1975 Acc. Stand. Steering Committee: The Corp. Report
value-added acc.
1976 OECD: Guidelines for multinational Enterprises
promotion of high corp. stand.s, voluntary principles
1981 Preston & Post: Private Mngm. and Public Policy
public resp., prim./second. resp.
1982 Donaldson: Corp. Morality
soc. contract, firms = moral ent.
1982 Benston: Acc. and corp. Accountability
role of accountants
1983 Mintzberg: The Case of CSR
resp., ethical people
1984 Mathews: A suggested Classification for soc. Acc. Research
separation of soc. and env. acc.
1985 Burchell et al.: Acc. in its soc. Context: Towards a History of Value added in the UK
1986 Parker: Polemical Themes in soc. Acc.: A Scenario for Standard Setting
teminology, CSR as part of acc.?
1987 Frederick: Theories of corp. soc. Perf.
corp. soc. rectitude
1987 Gray et al.: CSR: Acc. and Accountability
soc. audit
1988 Hines: Fin. Acc.: In communicating Reality we construct Reality
process of dec.-making of account.s
1989 Pearce et al.: Blueprint for a Green Economy
env. econ.
1989 Guthrie & Parker: Corp. soc. Rep.: A Rebuttal of Leg. Theory
org. legitimacy, motivation for corp. soc. rep.
1986 US: Superfund Amendment Reauthorization Act (SARA)
clean up of contaminated land
1988 US: Compr. Env. Response, Compensation and Liability Act (CERCLA)
fin. resp. for cont. land
1983 UEC: Stand. Structure for soc. Reporting
1987 WCED: Brundtland Report (Our Common Future)
sust. dev.: econ. growth env. protection soc. equality
intra- and inter-gener. equity
1989 UNEP & World Bank: Env. Acc. for Sust. Development
Sust. Soc. Net Nat. Product
1984/ 89 Bhopal disaster, Exxon Valdez oil spill
1990 Elkington: The env. Audit: A green Filter for comp. Policies, Plants, Processes and Products
basis for concern about the env.
1991 Wood: Corp. soc. Perf. revisited
degree to which principles of soc. resp. motivate actions, evaluating business outputs
1991 Gray & Collison: The env. Audit: Green-gauge or Whitewash
evaluation of env. audit
1991 Shimell: Corp. env. Policy in Practice
practical vs. theoretical policy
1991 Power: Auditing and env. Expertise: Btw. Protest and Professionalisation
soc./ env. area must guard against absorb. by acc. profession
1992 Owen: Green Reporting: Accountancy and the Challenge of the Nineties
pro env. acc.
1993 Gray et al.: Acc. for the Env.
1993 Batley & Tozer: Sust. Developm.: An Acc. Perspective
1991/95 AAAJ, AF Special Issues
1995 Gray et al.: Corp. soc. and env. Rep.: A Review of the Lit.and a longitudinal Study of UK Disclosure
develpmt. of EMS, import. of manag. persp.
1995 Zadek & Reynard: Acc. Works: A comp. Review of contemp. Approaches to soc. and eth. Acc.
soc. audit
1997 Elkington: Triple Bottom Line of Resp.
1997 Hart: Beyond Greening: Stragies for a sust. World
l.-t. persp., sust.
1998 Marsden & Amdrlof: Towards an Understanding of corp. Citizenship and how to influence it
comp.=citizen of country, collab. with NGOs
1999 Carroll: CSR Evolution of definitional Construct
1990 UK: Env. Protection Act
pollution, waste, radioactive subst.
1990 Inst. für ökologische Wirtschaftsforschung (IÖW): Die Ökobilanz
pilot project
1992 Cadbury Committee: Cadbury Report
mitigation of corp. gov. risk
1992 WBCSD: Foundation
forum for CEOs/ companies
1992 UN: Earth Summit in Rio
global collaboration for sustainability
1993 SustainAbility, DeloitteTTI, Int. Inst for Sust. Developm.: Coming Clean
motives for free-standing env. reports
1997 UN: Kyoto Protocol
int. treaty for reduction of GHG emissions, committment at country level
1998 UN (ILO): Declaration on Fund. Principles and Rights
contributor to int. labour law, country-level conventions
1999 Dow Jones Sust. Indices: Launch
key reference point in sust. invest.
1999 L. Sullivan & UN Secretary General: Global Sullivan Principles
traces back to fight against apartheid
2000 UN: Foundation of UN Global Compact
non-binding pact, forum for discussion
2000 GRI: First Version of Guidelines
global framework for sust. reporting, main target auduence: investors
2001 GHG Protocol (WRI & WBCSD) Standard for Corp. Acc. and Reporting
GHG acc. standard, company-level
2001/ 02 Corp. scandals and collapses
2000 Gray & Bebbington: Env. Acc., Managerialism and Sust.
conflict business agenda/ env. protection
2004 Mcmillan et al.: Giving your Org. Spirit
corp. gov., corp. reputation
2005 Berthoin-Antal & Sobczak: Beyond CSR: Org. Learning for global Resp.
CSR as too narrow
2006 Porter & Kramer: Strategy and Society: The Link btw. comp. Advantage and CSR
shared value: create econ. value by creating societal value
2006 Wood et al.: Global Business Citizenship: A transform. Framework for Ethics and Capitalism
human face of globalis.
2000 EU: Directive 2000/78/EC
employment equality
2000 UK: Finance Act 2000 c17, Part II
climate change levy, GHG emissions reduction
2000 UK: Cases Rio Tinto in Namibia and Cape plc in South Africa
prosecution in the UK for offences abroad
2002 US Congress: Sarbanes-Oxley Act
2003 EU: Directive 2003/87/EC
GHG alllowance trading
2005 UK: Operating and Financial Review
resp. of directors
2008 UK: Climate Change Act 2008 c27
GHG trading, volunt. rep.
2003 UN: Norms on the Resp. of transnat. Corp. and other Business Enterprises with regard to Human Rights
not a formal treaty, non-binding
2006 UN:Principles for Resp. Invest.
int. network of invest., ESG issues
2006 ISO: ISO14064
GHG acc. standard, emissions trading, country- and company-level
2008 Fin. crisis, global recession
2010 Dacin et al.: Soc. Entrepreneurship
adress soc. problems, fin. sucess + impact
2012 Ansari et al.: Impact at the Bottom of the Pyramid
incl. capitalism
2014 Battilana & Lee: Advancing Research on hybrid org. - Insigts from the Study of soc. Enterprises
soc. enterpr., hybrid org.s
2010 UK: Carbon Reduction Committment 2010-19
direct and indirect emissions rep.
2014 EU: Directive 2014/95/EU
non-financial reporting
2016 UN: Paris Agreement
emission targets, country-level
2018 UK: Directors' Report Act 2018
energy and carbon report, SECR
guidance on soc. resp., company-level
2010 ISO: ISO26000
2010 International Integrated Reporting Council: Launch
2012 Global Sust. Inv. Alliance (GSIA): Global Sust. Invest. Review
evaluation of inv. practice
2013 G8: Soc. Impact Investm. Taskforce
catalyse development of soc. impact. inv.
2015 UN: Sust. Development Goals
target indicators for each goal, country-level
2020 Serafeim & Trinh: A preliminary Framework for Product Impact-weighted Accounts
translating impact into metrics
2020 Brexit
2020 COVID-19 pandemic, shutdowns, recession

Interviews

- Number: 27
- Timeframe: October 2020 - February 2021
- Length: between 26-58 min, 45 min on average
- Geographical scope: all interviewees have a connection to the UK, 8 interviewees were located abroad at the time of the interview (Covid-related remote working arrangements), namely in Germany (2), France (2), Türkiye (2), Spain (1), the US (1)
- Professional affiliation: Accounting scholars (11), Political science, law, management scholars (5), (Quasi) standard-setters (4), ESG investment analysts (4), Sustainability consultants (2), Sustainability at corporate level (1)
- Categorisation of pseudonyms in this paper: academics (A-xx), practitioners (P-xx), (quasi) standard-setters (S-xx)

Interviewees

Pseudonym in the paper	Letter in research process	Role	Location	Date	Duration in min
A-01	A	Professor of accounting	UK	01/10/2020	40
P-01	B	COO sustainability initiative (Big 4 audit firm)	UK	23/10/2020	50
P-02	C	Sustainability director (Big 4 audit firm)	UK/ Türkiye	30/10/2020	50
P-03	D	Investment stewardship (financial sector)	UK	11/11/2020	26
A-02	E	Lecturer in accounting (CSR accounting)	UK	17/11/2020	45
A-03	F	Associate professor of public policy (CSR, Eco Audit Schemes, labour markets)	UK	23/11/2020	46
A-04	G	Professor of accounting	UK	24/11/2020	44
A-05	H	Professor of accounting and sustainability	UK	21/12/2020	54
A-06	I	PhD student in sustainability software	Germany	08/12/2020	44
A-07	J	Professor of employment relations (CSR, international labour standards)	UK	07/01/2021	45
P-04	K	Responsible investment analyst (financial sector)	UK	07/01/2021	44
A-08	L	Professor of acounting for sustainable development	France	11/01/2021	41
A-09	M	Associate professor of sustainable supply chains, workers' exploitation and labour rights in supply chains	UK	11/01/2021	33

A-10	N	Professor of accounting, auditing and corporate governance	Germany	12/01/2021	49
A-11	O	Senior lecturer in carbon accounting	UK	13/01/2021	44
A-12	P	Professor of politics (forced labour in global supply chains)	Canada	19/01/2021	42
S-01	Q	Technical director CDSB	UK	21/01/2021	44
P-05	R	Head sustainability and corporate responsibility IT services firm	Türkiye	23/01/2021	45
S-02	S	COO WBCSD	UK/ Switzer-land	26/01/2021	40
S-03	T	Director WBCSD and professor of management accounting	UK/ Switzer-land	02/02/2021	29
A-13	U	Professor in accounting for sustainable development and for the circular economy	France	02/02/2021	51
P-06	V	Senior sustainability analyst (financial sector)	UK	02/02/2021	57
A-14	W	Lecturer in accounting (CSR reporting)	UK	05/02/2021	57
S-04	X	Director of sustainability at ICAEW	UK	08/02/2021	58
A-15	Y	Professor of accounting (social and environmental accounting)	Spain	11/02/2021	45
A-16	Z	Professor of industrial relations (sustainable labour standards)	US	11/02/2021	53
P-07	AA	Senior global ESG analyst (financial sector)	UK	12/02/2021	44

Interview guide

Introduction

- Introduce myself
- Explain the purpose of this research: gaining exploratory insights into issues currently at stake in the field of CSR
- Thank for agreeing to participate
- Explain confidentiality and right to withdraw
- Review and sign information sheet as well as consent form
- Ask to record the interview

Interviewee background

- [information on interviewee]

Guiding interview questions and prompts

<table>
<tr><th>Interview questions</th><th>Research motivation/ purpose</th></tr>
<tr><td>Connection of the interviewee to CSR
Could you explain your role as [name of the position]? How do your day-to-day activities look like? [How did yesterday look like?]
How do you get involved in CSR?</td><td>approach concrete experience and not only opinion of interviewee in relation to CSR</td></tr>
<tr><td>Specific questions for interviewee
What is CSR? And what is ESG? What role does it play in your work environment? [ask for specific examples]
What do you think does ESG <u>include</u>? And should include? What is excluded?
Are certain aspects of E/S/G more important?
Could you explain a bit more about <u>ESG aspects</u> that are predominantly considered in your work? How get ESG aspects involved in decision-making processes in your organisation? [Where does ESG matter most? At what point does it matter? Ask for specific examples and experiences]
How is CSR (or ESG?) organised in your firm? [Is it a separate department? How is this embedded in the organisation?]</td><td>unbundle CSR context, relationship CSR-ESG, demarcation in the context of CSR</td></tr>
<tr><td>Talking of ESG, what <u>measures</u> get employed in this context? [in your organisation]
And what do you see as an <u>obstacle</u> when it comes to these ESG measures? What are challenges of measurement that you have experienced? What are issues of turning ESG aspects into accounts? [ask for concrete examples]
Why does your business consider ESG?
Who are the <u>actors</u> involved in promoting ESG in your organisation? Did you come across any value conflicts? [Did you witness any tensions?]</td><td>challenges of implementing and measurement issues, motivations</td></tr>
<tr><td>Over the last years, – based on your experience – how did ESG <u>develop</u>? How did the concept of ESG emerge?</td><td>development of the CSR bundle</td></tr>
</table>

[pot. prompts: Did you experience any major shifts of companies' approach towards ESG? Did you witness a shift of the perspective on CSR from e.g. "do no harm", to "doing good" and now potentially "economically use the good"? Did an expansion of the geographical and/ or substantial scope of CSR activities take place?]	

Concluding

- Is there anything else you would like to share about your experiences?
- Would you recommend anyone else as an interviewee?
- Thanking for the time and concluding interview

List of figures

2 Relational dynamics in the standard-setting for sustainability reporting: How materiality is mobilised in co-dependence (Paper 2)

Content

Abstract

Sustainability standard-setters operate in a crowded, emerging field where complex references to other parties can be observed instead of mere competition amongst each other. These relational dynamics evolve around the mobilisation of materiality. In the literature, a multitude of granular definitions of this concept is discussed and refined indicating an importance of materiality and competition over meanings. This paper unpacks the relational dynamics that materiality is mobilised for by drawing on fieldwork at the Global Reporting Initiative (GRI) and interviews at the International Sustainability Standards Board (ISSB). It introduces the notion of co-dependence to describe a spectrum of competitive and cooperative references to materiality between the two parties. Both the GRI and the ISSB frame sustainability factors in their own, favourable, terms to compete for endorsement and adoption. However, these standard-setters do not just challenge each other, they also cooperate in some areas which results in an entangled, complex relationship. This paper consequently argues that their relationship develops around the use of materiality and establishes a form of co-dependence. This examination of different centres of gravity for the use of materiality contributes to the ongoing materiality debate in the following two ways: Drawing attention to the workings of materiality in the sustainability context that is claimed to stem from a financial reporting logic helps underscore the delimiting characteristics of the materiality concept. Further, attending to references to materiality in the reporting process sheds light on the complexity of the standard-setting field. The dynamics examined here carve out frictions in the institutional environment of sustainability reporting.

Introduction

Attempts to disentangle double materiality from dynamic materiality or sesquimateriality from nested materiality dominate the current debate in sustainability practice and academia. This paper advances these debates and returns to the fundamental question of asking why materiality attracts so much attention and is seen as a subject of interest being mobilised in relational dynamics of different standard-setters. The study consequently aims to direct "[…] the enquiry […] away from the noun *per se*, and its various semantic bewitchments, towards the role of managerial and administrative practices" (Power, 2007, p. 4) in order to unpack the role of materiality in different moments of referring to it for conceptualising relational dynamics in the field. Traces of materiality in interviews, fieldwork environment and documents as well as the circumstance of engaging with materiality as a concept to differentiate in the standard-setting field are the starting point for questioning how materiality is used to mobilise the relationship of standard-setters in the field. Several sustainability standard-setters operate in a crowded, rapidly evolving field but instead of competition only, we can also observe cooperation and interlinkages. This paper zooms in on these dynamics and unpacks various roles of materiality.

A growing body of literature deals with the nature of materiality, its assessments and employed matrices in the sustainability context. Materiality is described as a screening tool “to identify, select and prioritize the [sustainability] issues that have the most significance to companies and their stakeholders” (Calabrese et al., 2016, p. 248) or that “it helps narrow down the broad universe of [sustainability] information to those items that help inform investors and other stakeholders about a business’s ability to create and sustain value” (Eccles et al., 2012, p. 67). Condensing sustainability considerations to core areas of perceived or measured significance and relevance seems to be a prevailing exercise not only in business operations, but also standard-setting. The Global Reporting Initiative (GRI)[26] refers to material topics, one of its key concepts, as an organisation’s “most significant impacts on the economy, environment and people” (GRI, 2021a, p. 8), while the International Sustainability Standards Board (ISSB)[27] relates materiality with providing the base for decision-making by report users (ISSB, 2022b, p. 33). Tensions between these two understandings are expressed by interviewees like G-07[28] (GRI director of standards, 03/11/2022) who states that “no one would believe the ISSB anymore if GRI was part of it”. Here, an indication for materiality being involved in much more complex roles relating these two bodies at the far ends of the standard-setting landscape becomes empirically visible. The multiplicity of meanings indicates an importance of the term “materiality” and its involvement in a competition for meaning.

The literature in critical accounting goes beyond a functionalistic understanding of materiality as a decision-making heuristic and acknowledges materiality as a “grey area for decision, a growing area of concern, the line for decisions is fading, an opportunity for figures massaging” (Chong, 2005, p. 61). Rather than unpacking the technical use of the term, the constitution of “multiple categories of knowledge, with divergent roles […], a mysterious shield” (Edgley, 2014, p. 255) has been examined based on the genealogy of the concept[29]. Materiality is described as a “moral responsibility; a solution to the problem of over-auditing; a solid epistemic foundation for financial reporting; a scientific technique; a quantitative rule of thumb; a risk management

[26] The Global Reporting Initiative prepares multi-stakeholder sustainability reporting standards that are the most widely used worldwide. Please refer to the appendix for a full list of abbreviations and bodies.
[27] The International Sustainability Standards Board is a standard-setting body under the supervision of the IFRS Foundation that was formed by merger of several former sustainability standard-setting bodies.
[28] Observed fieldwork participants and interviewees are anonymised as follows: affiliated to the ISSB (I-xx), affiliated to the GRI (G-xx), others (O-xx).
[29] For a detailed discussion of the classical theory of the concept, especially the disentanglement of Marx and Latour on materiality, see White (2013).

concept" (ibid.). In short, materiality is conceived as a way of limiting the scope of thus far-reaching sustainability issues that at the same time seems to assign relevance to remaining factors.

In line with this opaqueness (Brennan & Gray, 2005; Canning et al., 2019; White, 2013), in my fieldwork at the GRI, observed participants discussed "difficulties with the materiality assumption, [since] everything is material until you can proof that it is not" (G-08, senior policy coordinator, GRI, standards division meeting, 14/07/2022) and struggled with limiting their focus: "… financial materiality… if something is financially material, it should be in the financial reporting if it is that relevant… – We should have a separate session on double materiality … [people smile]" (G-09 and G-04, manager and head of technical development, GRI, standards division meeting, 14/07/2022). Interviewee G-04 further says that the GRI even removed a materiality matrix from its standards because it "was too confusing" (interview, 27/07/2022). O-01 states that "there are certain areas where we do not assess materiality anymore, we say 'that's clearly not acceptable, we are not doing it'" (TCFD[30] member, interview, 11/08/2022).

As indicated with the outlined empirical material, there is a puzzling discrepancy between areas of expertise and the framing of materiality as a relevant factor. Moreover, materiality used to delimit reporting, but seems to be a fuzzy concept itself. This observation will be investigated in the following paper. The main research question thereby brings the outlined materiality discussion in the sustainability area and its translation into accounting terms together: *How is materiality discussed on the ground and what does that tell us about the relational dynamics of the standard-setters?* Based on this overarching question, two sub-questions aim to guide the engagement with materiality by observing the standard development and the interplay of various standard-setting bodies in the field: *How is the notion of materiality conceptualised in the two standard-setters? How does such conceptualisation reference the other party?*

The core argument thereby is that the juxtaposition between the ISSB, an investor-oriented, financial accounting-inspired and entity-focussed standard-setter, and the GRI, a standard-setter referring to the planet as their entity, is perceived as mediated by the concept of materiality. It seems to be unlikely that one standard-setter will cease to exist in the short- and mid-term. However, both standard-setters employ materiality – as observed in materiality-talk – in distinct ways to align with their expertise and perspective on ESG matters for the corresponding entity. In this crowded field with a lot of movement, one would expect the standard-setters to compete. However, materiality seems to fulfil a spectrum of roles that

[30] The Taskforce on Climate-related Financial Disclosures is an international initiative developing a risk management and disclosure framework for investor-oriented reporting on sustainability topics.

contrast the standard-setters' approaches and also connects them. The observed materiality-talk in various ways reveals forms of co-dependent cooperation and competition. These ties, called here "relational dynamics", bring the GRI and the ISSB in relation, but make them rather co-dependent than fully competitive – as one might expect in an emerging market for ESG reporting frameworks.

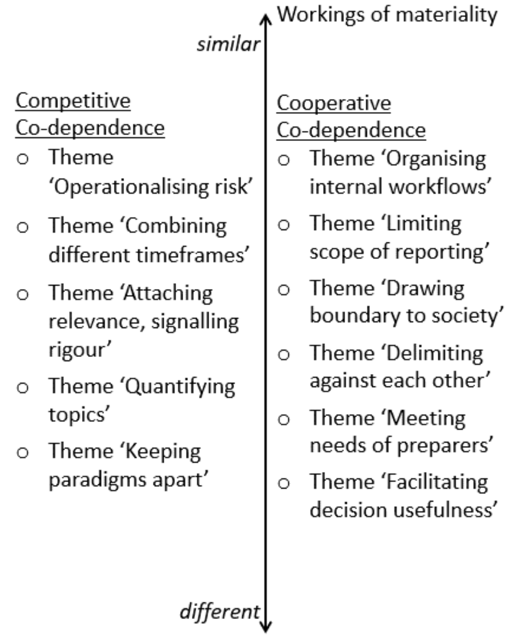


Figure 2-1: Core argument of this paper

Further, the narrow production of corporate reporting instruments for sustainability factors, i.e. accounting, and the broad engagement with environmental, social, governance topics, i.e. sustainability, unfolds around relevance-inducing materiality. However, this process of making some topics material and others not on standard-setter side reveals an iteration between practical relevance of some topics and granting opportunity for using discretion over the scope in other cases. In short, the formation of a boundary based on "materiality" creates co-dependence between the two standard-setters with their incompletely interacting roles of materiality. The emerging demarcation still allows for unfolding ties between the two bodies that induce relevance for considered topics. This dual nature of the interrelated processes provides the opportunity to unpack the political economy of the field revealing competitive and cooperative co-dependence of the standard-setting bodies. Based on rich empirical insights, assumptions on materiality in the field get carved out. Figure 2-1 illustrates the core argument: Materiality-talk creates competitive and cooperative co-dependence. References to materiality can be organised along a spectrum ranging from a relatively similar usage of the term (like in the operationalising of risk or the organising of internal workflows) via the attaching of relevance and signalling of rigour or the drawing of a boundary to society to a different employment of the concept (as in the separation of paradigms or the facilitating of decision usefulness). So, there are different forms of connections that range from rather proximate employment of materiality to distant engagement with the concept.

First, this research sensitises readers to the importance of zooming in on the workings of materiality in the sustainability context. It shows that this process of delimiting the scope of reported issues differs from the eponymous concept in financial reporting (Calabrese et al., 2016; Eccles et al., 2012; Edgley, 2014). In many ways, materiality of sustainability reporting aligns with boundary-drawing considerations of relevance and decision usefulness as known from financial reporting; however, this study contributes to the debate by providing more granular insights into the disjunction between demarcating the reporting scope to the outside and assigning relevance to the covered issues to the inside (Frishkoff, 1970). For example, evaluating a topic as material results in responsibility for this factor to the outside and significance to care about it internally.

Second, this paper gives insights into the political economy of the standard-setting field. Rich empirical material reveals the dynamics of competing and cooperating amongst parties in the field (Llewellyn, 1998; Star, 2010). In doing so, the study sheds light on the complexity of demarcating and connecting in an institutional field (Star, 1989; Trompette & Vinck, 2009). Attending to the dynamics and tensions of forming a relationship amongst standard-setters helps unpack the workings in the field and the complexity of finding a commensurate basis for materiality-talk (Espeland & Stevens, 1998). Rather than reducing complexity and enhancing interaction of parties and reporting contexts, the observed compartmentalisation of materiality into various roles creates a form of co-dependence between the parties. The concept of co-dependence is loosely used to theorise how materiality is discussed on the ground and how it reflects specific relationship dynamics. While this loaded term is mostly used for inter-personal connections with an emotional connotation, a referential care and responsibility for another party seems to be at the core of the concept (cf. Oxford English Dictionary, 2010). While co-dependence refers to a mostly pejoratively interlinked under- and over-functioning of two parties, some interpretations do even provide positive examples of such an entanglement stabilising cross-referential reliance on each other (cf. Cambridge English Dictionary, 2017).

For the purpose of this paper, the interlinked over- and, respectively, under-functioning of related parties will be examined based on this concept. Materiality becomes a vehicle to discuss certain concerns, keep the organisation actionable and position it in the standard-setting field. However, it does not enable the demarcating process of far-reaching sustainability and fails to open up avenues for assigning relevance to considered issues. Therefore, this paper advances the research on financial and sustainability reporting with insights into the workings of materiality in standard-setters. The sociological, critical accounting literature gains from the unpacking of relational dynamics in the standard-setting field. The contributions of this paper are visualised in figure 2-2.

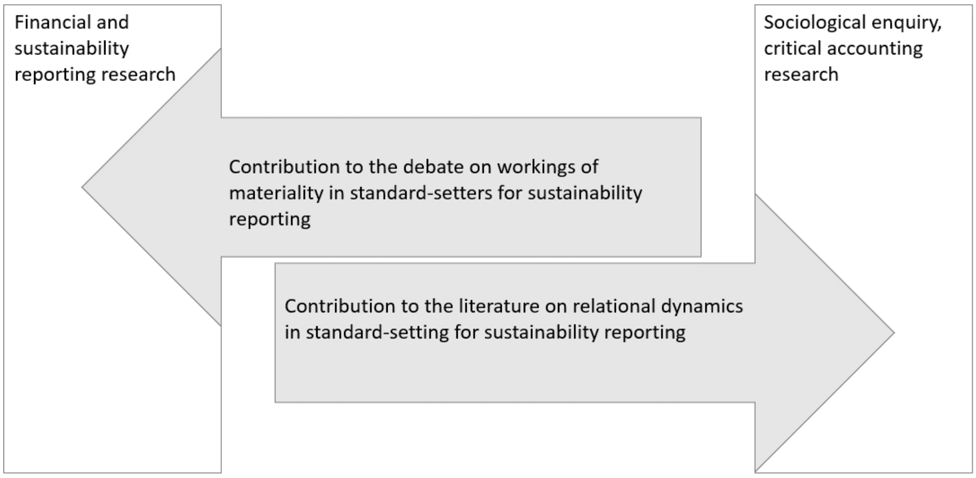


Figure 2-2: Contributions of this paper

Before laying out these contributions for advancing the accounting research on materiality and the sociological enquiry of the standard-setting field, the paper reviews the literature on materiality in the accounting domain as well as in the sustainability context. This approach is motivated by the growing compartmentalisation of the term "materiality" in these two areas as shown in the beginning of this paper. Building on the academic work on boundary formation, which provides a theoretical lens for zooming in on the relational dynamics, the fieldwork setting and methods are introduced. After having presented the findings of the investigation, the discussion advances the notion of boundary formation by unpacking the dynamics and tensions of the standard-setting field.

Literature review

Materiality in the accounting literature

In accounting, the concept of materiality is used for various purposes ranging from enabling risk management to materialising moral responsibility – all having in common an exercise of determining what is included and what not (Edgley, 2014). Materiality is described as permeating the entire field of accounting yet lacking an agreement on how to judge the materiality of an item (Bernstein, 1967). Frishkoff (1970) points out that "for every decision made in accounting there is a prior, if often subconscious, decision that the item in question is material" (p. 116). This sorting function of assigning relevance goes back to "legislation and the accounting profession regard[ing] certain types of transactions as being important" (Firth, 1979, p. 283). The here mentioned "importance" is then operationalised as assessing the relative importance of a piece of information for decision-making by a user (cf. Frishkoff, 1970; cf. SEC Regulation S-X, § 210.1-02, o). However, the role of quantification in this process, the mechanisms of decision-making, the nature of information and the characteristics of the user have occupied the academic literature, engagement of various standard-setters and the discussion in practice for the last fifty years.

Milestones of the debate of materiality in academia are the zooming in of Hofstedt and Hughes (1977) on the professional decision-making in deciding on an appropriate, materiality-oriented level of disclosure. Followed by research on auditors' interpretation of materiality and percentage thresholds that are employed in practice (Chewning, Pany, & Wheeler, 1989; Woolsey, 1954), the focus has then shifted to unpacking effects of other financial and non-financial information in judging materiality (Iskandar & Iselin, 1999). Carpenter et al. (1994) further examined the social context of the audit firm and investigated factors such as firm culture or professional experience as impactful for the materiality judgement. Recent research furthers this line of investigation by disentangling quantitative assessments from qualitative factors in the decision-making on materiality (Green & Cheng, 2019; Hegazy & Salama, 2022).

The FASB[31] separates relevance from reliability and importance from materiality by referring to magnitude, nature and circumstance of the judgement on inclusion of an item based on a certain threshold (FASB, 1980, nos. 123–132). The IASC[32] (1989) states in its first Framework for the Preparation and Presentation of Financial Statements that materiality – as a specification of relevance – is a qualitative characteristic of financial statements. More specifically, the connection between "nature and materiality" (no. 29) of an information is assumed to affect relevance, meaning some aspects matter regardless of their size or any professional judgement. However, the following paragraph challenges this perspective since materiality is then strictly summarised as "provid[ing] a threshold or cut-off point rather than being a primary qualitative characteristic which information must have if it is to be useful" (no. 30).

The SEC[33] Staff Accounting Bulletin on materiality (SEC, 1999) then introduces a negative definition of the concept as a material item being a previously omitted or misstated item that if included or corrected would have influenced judgement in a decision-making process. The IASB[34] aligns in its Conceptual Framework for Financial Reporting 2010 with the idea of defining materiality based on the difference the omission of an aspect would make (IASB, 2010). Further attention is directed to the context-dependence of materiality that is an "entity-specific aspect of relevance based on the nature or magnitude, or both, of the items to which the information relates in the context of an individual entity's financial report" (QC11). As opposed to the IASC

[31] The Financial Accounting Standards Board establishes the US-GAAP.
[32] The International Accounting Standards Committee was the predecessor of the International Accounting Standards Board (IASB) working on harmonising reporting practice.
[33] The US Securities and Exchange Commission monitors efficient markets.
[34] The IASB develops international accounting standards.

framework, the IASB refrains from advising on a “uniform quantitative threshold for materiality or predetermin[ing] what could be material in a particular situation” (ibid.). The 2018 revision of the IASB continues along these lines and specifies that information is material where “omitting, misstating or obscuring it could reasonably be expected to influence decisions” (2.11).

For practitioners, the consideration of materiality in accounting has led to various attempts to guide through the process of determining what falls under the materiality criterium. Since March 2014, the IASB is working on a practice statement to help with judging in this context. Despite the constant usage of relevance and materiality as synonyms in the guidance, a four-step process (identify, assess, organise, review) to help report preparers with making materiality judgements is suggested.

Materiality in the sustainability literature

Research on the adoption of a materiality logic in the reporting on environmental, social and governance topics indicates that the decision-making on including a certain factor or not relates to materiality but is differently addressed due to the “voluntary, unregulated, qualitative reporting arena […] where accounting and non-accounting organisations are in competition” (Edgley et al., 2015, p. 1). A patchwork of localised understandings of materiality arises that borrows from its original usage for financial decision-making by shareholders as a group (Edgley, 2014) and adds scope and audiences for ensuring quality in “softer [sustainability] data” (Edgley et al., 2015, p. 5). This process of referring to “materiality” in the sustainability area is seen as an act of “translation […] in new spaces” (Canning et al., 2019, p. 2), i.e. a clear direction of adoption is assumed.

The introduction of the concept in sustainability reporting was mainly driven by the IFAC[35], the GRI and AccountAbility[36] (Edgley et al., 2015). These bodies[37] refer to materiality in a two-fold manner. First, they align with the outlined financial characteristics of materiality and second, they add a notion of responsibility for wider stakeholder groups and topic areas. The IFAC refers to economic decision-making but also requires auditors to judge materiality based on “surrounding circumstances” (IFAC, 2010, p. 314). AccountAbility (2008) mentions stakeholders and sustainability performance more explicitly and the GRI lists “impacts on the economy,

[35] The International Federation of Accountants is an international organisation fostering the accounting and auditing profession.
[36] AccountAbility is a global non-profit organisation supporting Corporate Social Responsibility and the reporting on it.
[37] Despite the apparent differences in the nature of these organisations and in their capacity to set standards, it must be acknowledged that sustainability reporting was shaped by contrasting drivers.

environment and people" (GRI, 2006, 2021b, p. 4) without any differentiation in its materiality definition[38].

This perspective on the materiality concepts does not only expand the number of items to consider and stakeholder groups to take into account but also turns the filtering function of the concept on its head (Puroila & Mäkelä, 2019). In financial accounting, the threshold idea of materiality goes back to ensuring all relevant aspects are faithfully presented (IASB, 2010); meanwhile in sustainability reporting, quality concerns result in attempts to limit flexibility, cluttering and information overload in reporting by defining materiality (Edgley et al., 2015; FRC, 2011).

Amongst sustainability standard-setters, materiality became a core concept as the GRI Standard 3 on material topics, the SASB[39] industry-specific materiality finder or the dedicated ISSB FAQ section on materiality indicate. The limbo with applying financial materiality and translating the concept into the sustainability context is thereby differently approached (S. Cooper & Michelon, 2022). The SASB comprehensively provides "financially material, decision-useful sustainability information to investors" (SASB, 2022, p. 2) whereas the GRI more precisely claims that "the impacts that have been identified through this [materiality assessment] process will eventually become financially material, sustainability reporting is also highly relevant in its own right as a public interest activity and is independent of the consideration of financial implications" (GRI, 2021b, p. 8). The newly formed ISSB aligns in its early work[40] with the rather specifically financial approach of the SASB but also allows some discretion as the following quote from the climate-related exposure draft indicates: The reporting should "provide material information […] that is useful to users of general-purpose financial reporting [for assessing] […] the enterprise value of the entity" (ISSB, 2022a, pp. 51, B5f.). This approach was slightly amended by an ISSB decision to remove the notion of "enterprise value" and focus on decision usefulness of information for the intended audience, i.e. investors (ISSB, 2022c).

Notwithstanding these differently close linkages to financial implications, these standard-setters have a similar approach to focussing on topics to address. As opposed to the difficulty of

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[38] GRI 3 deals with material topics and is part of the GRI Universal Standards standing before sector- or topic-specific standards. In 2016, "reporting the management approach for each material topic" (GRI 3) became part of the modular system of GRI standards. Beforehand, these disclosures were scattered across the GRI guidelines.

[39] The Sustainability Accounting Standards Board worked as a non-profit organisation on developing sustainability accounting standards before building the base for the work of the recently formed ISSB. The ISSB builds on and consolidates the SASB standards.

[40] So far, exposure drafts on general sustainability-related disclosures and climate-related disclosures have been issued. In June 2023, inaugural standards for these topics have been published.

assessing materiality of sustainability issues that has been explicated in the outlined literature, these introduced bodies approach the materiality assessment rather descriptively by listing specific environmental, social and governance items that manifest for various industries[41]. In other words, the qualitative nature of issues that need to be assessed in terms of materiality is addressed with a concrete suggestion for topics[42].

In the field of standard-setting for the concern with corporate sustainability, the characteristics of the arena with its audience, scope, materiality understanding and purpose of reporting are constantly re-negotiated and debated (Afolabi et al., 2023). The position of the GRI is thereby characterised as preserving the traditional objectives of sustainability reporting, whereas competitors are more oriented towards capital market interests (ibid.).

The recent regulatory and academic debate tries encapsulating the described two-fold approach to materiality with many different terms going back to the notion of "double materiality" that was introduced[43] by the European Commission in 2019 (Adams et al., 2021; Baumüller & Sopp, 2021). The EU guidelines on non-financial reporting[44] state that information on "the company's development, performance and position indicate financial materiality, in the broad sense of affecting the value of the company" (C 209/4) and directly claim that this would be "typically of most interest to investors"[45] (Christensen et al., 2020). Social and environmental materiality, circumscribed in terms of the impact of companies' activity, is then stated as of "most interest to citizens, consumers, employees, business partners, communities and civil society organisations [and] an increasing number of investors" (ibid.). To clarify the mechanism that brings those two parts of materiality together, bodies like the TNFD[46] use the terminology of the so-called "outside-in", nature impacting the company's immediate financial performance, as well as the "inside-out", describing the organisations impact on its environment.

The tension between these two – potentially contrasting – streams in the understanding of materiality led to a multitude of more granular terms for materiality in the sustainability context. "Dynamic materiality" aims to capture the potential of issues to become material over time

[41] The SASB interestingly calls aspects that are considered material based on their materiality map as "relevant issues", i.e. assumes these terms are synonyms.
[42] The SASB thereby focusses on climate-intensive sectors, whereas the GRI is much more general with complementary sector guidance.
[43] See Baumüller and Sopp (2021) for the pre-history of double materiality in EU legislation.
[44] This Communication from the Commission (2019/C 209/01, European Commission, 2019) complements the EU Directive 2014/95/EU that requires certain large firms in the EU to report on non-financial topics.
[45] Some literature on investor decision-making suggests that their approach to evaluating materiality information is black-boxed and might be less decision relevant than assumed by providers of these assessments (Christensen et al., 2020).
[46] The Taskforce on Nature-related Financial Disclosures is an international initiative developing a risk management and disclosure framework for investor-oriented reporting on sustainability topics.

(Adams & Abhayawansa, 2022; WEF, 2020). “Sesquimateriality”, literally “one-and-a-half” materialit(ies), refers to financial materiality and additionally recognises the risk stemming from environmental and social impacts without acknowledging the importance of these issues for the firm (Alexander, 2022). The term “core materiality” narrowly focusses on the importance of greenhouse gas emissions, labour and business ethics only (Kuh et al., 2020), while “nested materiality” relates to three broader reporting lenses covering issues that are reflected in the entity’s financial statements, those that are likely to influence enterprise value and a broader range of matters relating to the impact of the entity’s activities (GRI, 2022b; IFRS, 2022).

Materiality, boundary formation and co-dependence

For making sense of the potential interaction of various incidents of materiality-talk, this paper grounds itself in the literature on boundary formation. Especially the work on boundary objects allows focussing on the materiality of boundaries because they are perceived as acted upon, as worked with (Hoque et al., 2022; Llewellyn, 1998; Lukka & Kasanen, 1995; Star, 2010; Young, 2003). More precisely, boundary objects play a vital role in overcoming boundaries by helping actors from different fields to collaborate across boundaries (ibid.). This is possible since these boundary objects are adaptable from different viewpoints while keeping their identity as part of several worlds (Briers & Chua, 2001; Star, 1989; Star & Griesemer, 1989; Trompette & Vinck, 2009). The latter aspect, the quality of belonging to multiple spheres, serves as a theoretical starting point for unpacking the role of materiality in accounting and in sustainability – instead of working with a narrow, two-sided perspective on determining boundaries between areas. This paper particularly builds on boundary-spanning relational dynamics rather than the creation of a demarcating boundary itself.

By comprehending boundary objects as mediators between two worlds that are “embedded within temporarily stabilised, transorganisational networks“ (Briers & Chua, 2001, p. 240), the characteristic of relatedness and differentiation between different areas can be examined. The term “object” thereby refers to something that people or programmes “act toward and with“ (Star, 2010, p. 603). Consequently, its involvement in action, not its thingness or position at the edge of something, makes it a boundary object (Star, 1989). Moreover, these boundary objects, although they can be perceived across various perspectives and move between different social worlds, maintain a continuity of identity[47], they are not arbitrary (ibid.). The ability to share meaning and interpretation between different areas does not eventuate in a situation where distinction does not exist; on the contrary, the autonomy and communication of the different

[47] In the context of materiality, this characteristic can be witnessed in the variety of tools to differentiate forms of materiality, such as materiality matrices, traffic light reporting methodologies or a combination of threshold and narrative.

worlds is enabled (Briers & Chua, 2001; Star & Griesemer, 1989; Trompette & Vinck, 2009). The concept of the boundary object sensitises for these characteristics of boundary formation. Referring to boundary objects also enables a study of emerging boundaries rather than delimiting the analysis to either boundary spanning or separating aspects. The paper consequently builds upon boundary objects without restricting the study of boundary formation to strictly "applying" the notion of the boundary object.

As opposed to mediating instruments, that also work as connecting devices, boundary objects more specifically address the dual role of the translating device (Carlile, 2002; Miller & O'Leary, 2007). Mediating instruments connect two domains by underlining properties of representing expectations and intervening in actions in different arenas (Hacking, 1983; Miller & O'Leary, 2007), whereas boundary objects are not assumed to frame issues across the boundary position they are in (ibid.). While the concept of assemblages also refers to relations and boundaries as emerging rather than fixed or pre-given, this conceptualisation of mediation goes beyond the described perspective of the former two concepts by interpreting division as artefact (Orlikowski & Scott, 2008). Previous boundaries are dissolved and replaced by composite and shifting assemblages (ibid.). The form of interacting spheres is thereby only acquired by interpretation instead of acknowledgement of inherent properties. An object is consequently the effect of an array of – symmetrically relevant – relations (Callon, 1984; Callon & Muniesa, 2005; Star & Griesemer, 1989). Keeping these neighbouring concepts in mind, namely mediating instruments and assemblages, the paper will look at materiality through the lens of boundary formation to carve out the properties that make materiality belong to both the sustainability and the accounting paradigm and move on to frictions of these two areas. To make sense of this failure to create connection, attention is also paid to the concept of incommensurability (cf. Espeland & Stevens, 1998). The relational property of materiality that indicates a relevance <u>for</u> something or <u>to</u> an issue will facilitate this thought process.

Incommensurability goes back to the concept of commensuration, that is the "comparison of different entities according to a common metric" (Espeland & Stevens, 1998, p. 313), which facilitates a thought process inherent to social encounters. The here mentioned metric can be an attribute of the interacting entities or a transformation of different qualities into a metric as part of rendering the situation. In other words, commensuration can work like a boundary object or create a "third, external thing" – depending on the context (ibid.). This point of exchange aligns with the framing of the boundary object in its actionability and ability to travel across contexts. However, commensuration more specifically draws attention to the unifying power of condensing several characteristics into a single measure to let the areas speak to each other

(Lamont & Molnár, 2002). This aggregation of information is fundamentally relational since it only comes into play once conjunction between areas is created. To claim something could not be captured by one metric creates the notion of incommensurability. The inability to let two areas speak to each other can indicate uniqueness but also intransitivity, and very much alienates the considered entities. To unpack the frictions of linked, yet demarcated areas, relational dynamics will consequently be the focus of the following analysis. Thus, the analysis works with aspects of materiality that enable and disable a form of interaction. In short, the literature on the notion of boundary objects and incommensurability informs the analysis of relational dynamics.

These dynamics are described as networks, engagement or interaction of standard-setters in the field (Afolabi et al., 2023) that impact the other players in the field as well as the arena itself. Consequently, the field rapidly evolves around the interests of standard-setters. While the GRI has been established for long, the ISSB enters the field and tries solidifying its position for providing all sorts of reporting standards (De Villiers et al., 2022). A different mobilisation of the concept of materiality is used to differentiate the role of the parties (Pizzi et al., 2022). Thereby, harmony and hegemony that are "strategically calculated to maintain [the standard-setter's] influence, relevance, and defend their technical authority in the arena" appear in conjunction (Afolabi et al., 2022, p. 1). This phenomenon, an interlinked reference to the other standard-setter, or potentially, an under- or over-functioning of one party based on the role of the other one, is studied here as a form of co-dependence.

Setting

The field of standard-setting for sustainability reporting is populous and fast moving (De Villiers et al., 2022). Attempts to map the changing landscape of bodies in the field tend to be short-lived due to constant emergence or merger of involved parties (Abbott, 2005; Buhr et al., 2014; Ezzamel et al., 2012; Larrinaga & Bebbington, 2021). While the GRI has been in the field for more than two decades (Brown et al., 2009), the ISSB was launched as a consolidation of several former bodies in conjunction with the IFRS Foundation in November 2021 (Alexander, 2022). Conceptually, these two main standard-setters differ in their targeted groups of users of the then-prepared reports. While the GRI aims for decision usefulness of reports for a multitude of stakeholders, the ISSB explicitly focusses on investors as users of the subsequently produced reports (De Villiers et al., 2022).

The empirical emphasis of this paper is placed on the observed sustainability standard-setter, the GRI, with some additional interviews at the ISSB. This focus was chosen to pay attention to long-standing considerations in this fast-moving field. The two standard-setters can be located at the far ends of the institutional spectrum when it comes to their reference to civil society or capital markets[48]. Furthermore, they vary in their establishment in the standard-setting landscape and their reach. The GRI is a non-profit entity preparing universal, topic-specific and sector-oriented frameworks “to enable an organization to publicly disclose its most significant impacts on the economy, environment and people” (Section 1 of GRI 1: Foundation 2021). The organisation consists of a standards division at its core that is supported by teams for the operations (HR, finance, etc.), training and certification services, external affairs and regional hubs (Brown et al., 2009). These activities are overseen by the Global Sustainability Standards Board (GSSB), initiating work programmes and enabling the multi-stakeholder approach[49] to addressing a multiplicity of topic areas (Brown, 2011). More specifically, the standards division develops and maintains the sustainability reporting standards by producing, updating and reviewing the guidance, i.e. some issues are addressed for the first time and a standard is developed, whereas others are reviewed as part of a targeted 4–5-year review cycle.

As initiated by Ceres[50] and the Tellus Institute[51], the GRI was founded in 1997 and launched its first guidelines on sustainability reporting in 1999 (Brown et al., 2009; Larrinaga & Bebbington, 2021). After expanding the scope of the reporting guidelines over time, the framework was then called “Sustainability Reporting Standards” from 2016 onwards. Together with the UN Global Compact[52], the GRI started in 2017 to provide explicit guidance on compliance with the UN Sustainable Development Goals. While previously having general principles on sustainability reporting and some topic-specific standards, the GRI started in 2019 with another reporting cylinder, the sector-specific standards, that so far provides reporting requirements for firms in the oil and gas sector. The GRI is nowadays considered an international quasi standard-setter for corporate reporting on environmental, social and governance issues, including human rights (Buhr et al., 2014). The produced standards are the most widely used worldwide (Levy et al., 2010; Marimon et al., 2012; Van der Lugt et al., 2020). The GRI is located in Amsterdam, the Netherlands, but moved its operations online during the Covid-19 pandemic and remained remote due to changed employee working preferences and their workforce being spread around

[48] The literature on competing institutional logics suggests that internal and external logics of the field interact (Ezzamel et al., 2012). Thus, the field is not assumed to be delimited by these two players; the system where the actors are in is not seen as having fixed surroundings (Abbott, 2005).
[49] Typically, a variety of stakeholders would get in touch when drafts of new standards are prepared and during the commenting phase. These stakeholders are categorised as individuals, academics, NGOs, UN bodies, labour representatives, trade or industry associations, assurance providers, consultants or businesses. The audit profession is only mentioned as one of these groups and not explicitly highlighted.
[50] The Coalition for Environmentally Responsible Economies is a non-profit organisation that supports sustainable development and business operations.
[51] The Tellus Institute is a non-profit research institute focussed on environmental and social issues.
[52] A framework of the UN for sustainable business operations.

the globe. The GRI is funded to approximately 40% by changing programme grants from governments such as the Department of Foreign Affairs and Trade in Australia or the Swiss State Secretariat for Economic Affairs[53]. Additionally, financial support is gained through individuals and organisations paying into the GRI Global Standards Fund and through a knowledge sharing and learning community with a membership programme (Levy et al., 2010).

The ISSB was created by a merger of several global sustainability disclosure initiatives under the umbrella of the IFRS Foundation (ISSB, 2022b). At the COP26, the UN global climate summit, in November 2021, the IFRS announced forming the new investor-oriented standard-setter to provide a comprehensive global baseline for reporting on environmental, social and governance issues. The CDSB[54] and the VRF[55] merged[56] into one body in order to simplify the standard-setting landscape. Characteristics of the consolidated bodies are nevertheless maintained such as the industry-specific approach of the SASB, an integral part of the VRF, or the greenhouse gas emissions-oriented recommendations of the TCFD. In March 2022, the ISSB launched its first two proposals for standards on general sustainability-related reporting as well as on climate-oriented disclosures. These proposals were publicly commented until July 2022 and, based on the collected feedback, they were developed into exposure drafts by November 2022 and published as IFRS S1 and IFRS S2 by June 2023 (ISSB, 2022c). The ISSB has headquarters in Montreal, Canada, and Frankfurt, Germany, however, employees predominantly work from home and are deliberately spread across various jurisdictions. The ISSB is a part of the IFRS Foundation that receives its funding from the following three main sources: voluntary contributions from complying jurisdictions (approx. 47%), contributions and licensing fees of accounting firms (approx. 31%) as well as from the sale of subscription services and publications (approx. 21%) (IFRS, 2021; Wingard et al., 2016).

Methodology

Data collection

At the time of the field study, the GRI was predominantly working remotely due to Covid-related precautions and an office move taking place in summer 2022. The then-current focus of the

[53] In the past, similar governmental bodies from the UK, the US, Sweden, Germany, the Netherlands, Norway as well as the United Nations Development Programme, the World Business Council for Sustainable Development and the International Organisation of Employers have financially supported the GRI.

[54] The Climate Disclosure Standards Board is a London-based non-profit organisation working on investor-oriented sustainability reporting and the integration of climate-related factors into financial reporting.

[55] The Value Reporting Foundation houses the Integrated Reporting Framework and the SASB Standards.

[56] The predecessors of the ISSB were arguably different in their approach to standard-setting. However, the Technical Readiness Working Group consisting of members of CDSB, IASB, TCFD, VRF, World Economic Forum and IOSCO brought ideas on institutional arrangements together and conducted preparatory work.

standards division was a review of all interlinked human rights-related standards as well as of the standard on biodiversity. Moreover, standards for coal, agriculture and fishing and mining were due for development. The motivation for this particular focus went back to the targeted review schedule as well as the workplan developed by the GSSB.

The standards division itself is split into the standards team and the technical development team that supports the standard development and review with research, writing and legal advice. The standards are compiled by mapping peer standard-setters' approaches, gap analyses, benchmarking of existing standards, external (volunteer) expertise of subject experts that are consulted at several points throughout a project, as well as public comments. Created or reworked standards are then approved by the GSSB[57], the oversight board of the standard-setter, translated and issued.

My observations predominantly covered the labour standards project[58] but also some work on biodiversity standard-setting[59], coordination with the EFRAG[60] public commenting process and engagement with various stakeholders. These activities were observed during a full-time fieldwork period from June until August 2022 (approx. 350h). The majority of the engagement as a research volunteer took place remotely since all members of the organisation were working from home. A monthly in-person team meeting day and several interviews were undertaken in Amsterdam as part of a research stay in July 2022. In addition to these periods of participant observation, interviews with colleagues at the GRI and at other standard-setters were conducted and documents at the GRI were analysed (Hall & Messner, 2017)[61]. The tasks assigned to me required some understanding of the standard-setting landscape but could independently

[57] The GSSB consists of 15 members ranging from accounting professors, trade union representatives, auditors and corporate sustainability project managers to investors from around the world to represent the multi-stakeholder approach of the GRI and provide technical expertise as well as geographical diversity.

[58] This massive project aims to review all labour-related standards, at least the following ones: GRI 202: Market Presence 2016, GRI 401: Employment 2016, GRI 402: Labour/Management Relations 2016, GRI 404: Training and Education 2016, GRI 405: Diversity and Equal Opportunity 2016, GRI 407: Freedom of Association and Collective Bargaining 2016, GRI 408: Child Labour 2016, GRI 409: Forced or Compulsory Labour 2016.

[59] The combination of these two projects, labour and biodiversity, in my observations was particularly promising because they are dealing with different parts of the notion of sustainability. Moreover, the GRI was addressing these topics very differently, the labour standards project was very big and addressed many pre-existing standards, i.e. changes in one document, for example from "salary" to "wage" would have an impact on several other documents. The biodiversity project was more clearly determined. Further, the labour standards project was at a very early stage, whereas the biodiversity project produced an exposure draft just four months after the observation. The set of exposure drafts for the labour project is expected a year later than the biodiversity one.

[60] The European Financial Reporting Advisory Group tries to promote, supported by the European Commission, European views in the standard-setting process of the IASB.

[61] More information can be found in the appendix to this paper.

be approached. Although the nature of the mapping of peer standards was rather straight-forward, this exercise allowed a good amount of interaction with team members. Given the remote set-up, I felt well integrated into existing work practices, informal interactions and team calls[62].

During the fieldwork, I was involved in all team meetings of the standards division (twice a week) and all project meetings of the labour project (two to three times a week). I was also invited to listen to all GSSB meetings (once a month) and all work meetings of the various technical committees. I followed the meeting calendar of the biodiversity technical committee that got together once a month. Some webinars, presentations to the wider public or best practice discussions were observed as well (approximately once a week). The majority of the time, I met in one-to-one Microsoft Teams meetings with my colleagues from the labour project team to discuss benchmarking tasks, define terms such as "base year" or determine external authoritative instruments that needed to be taken into account for the standards development. Based on these interactions, I collected documents that were prepared, referenced or worked with. I also took comprehensive fieldnotes on the spoken content, observed settings and own reflections (Flick, 2022). I thereby followed the advice by Fontana and Frey (1994, p. 368) that "regardless of the circumstances one ought to (a) take notes regularly and promptly; (b) write everything down, no matter how unimportant it may seem at the time; (c) try to be as inconspicuous as possible in note taking; and (d) analy[s]e one's notes frequently". Towards the end of the involvement, I interviewed my team colleagues from the labour project team as well as two colleagues from the technical support function that were deeply involved in the project development (Brinkmann, 2013; Pfadenhauer, 2002). In autumn 2022, the data collection continued with interviews with ISSB technical team and board members that were reached via snowball sampling (Flick, 2022).

All interviewees and observed participants received comprehensive information on the study I was undertaking and they signed a consent form before the actual interaction (Fontana & Frey, 1994). Interviews at the GRI took place partly in-person and partly via Microsoft Teams due to the geographical location of the interviewees; all interviews with people working for the ISSB were conducted on Zoom. The interviews were semi-structured and over time more clearly revolved around encounters with "materiality". They deliberately left space for interviewees to express their observations, frustrations or perspectives stemming from their manifold institutional and educational backgrounds (King et al., 2018). Especially in the sustainability context this take on the interviewing process was carefully chosen to allow deviation from a

[62] For example, I was invited to socials or the welcome call with a recently joint employee.

potentially uniform, positive, unambiguous view on the matter that is widely shared in society (Bonnett, 2002)[63]. Interviewed actors received the transcript of their interview afterwards and could amend the script where they felt misunderstood[64].

The research project took place in times of fundamental re-organisation of many parts of societal life due to the Covid-19 pandemic. Constraints of social distancing, in-person site visits and tight health and safety regulations impacted both the observed organisational practices and the researcher's access to them (J. K. Roberts et al., 2021). Pre-pandemic methodological literature on this topic focussed on the inclusion of digital technology into the data collection process and highlighted advantages such as user-friendliness, cost efficiency and data management features (Archibald et al., 2019). However, during the pandemic, virtual meetings became participants' workplace and therefore did not remain an additional research tool but rather their well-known work environment (Santana et al., 2021). Having said this, gathering in-depth insights into all parts of organisational interaction and enabling thick descriptions of these became a challenge since ways of collaborating changed so rapidly (Geertz, 1973; Ratten, 2020; Spicer, 2020). Therefore, the digital research environment allowed to flexibly adopt and to comprehensively capture the setup at the GRI and the ISSB (Rahman et al., 2021). Both organisations rely on employees working from home and I could interview members of the organisations in their digital environment, observe a high number of virtual meetings[65], get access to the institutional intranet, take comprehensive notes and capture online interaction with screenshots (ibid.). Given the nature of the work of the GRI and the ISSB, the remote research – backed up by in-person research in Amsterdam in July 2022 – came with the drawback of having to navigate a vast amount of information, meetings, chats, document reviews and emails taking place online but at the same time integrated me into struggles of creating the "new normal" (Yanow & Good, 2020).

Data analysis

The collected empirical material, i.e. fieldnotes, interview transcripts and documents, are examined by means of a thematic analysis to pull out from the data if and where materiality

[63] The interview guide can be found in the appendix to this paper.
[64] Only interviewee I-03 commented on the transcript and suggested changing a grammatically incorrect sentence.
[65] The literature on pandemic meetings suggests on the one hand that the culture of discussions changed from "exploration and creativity towards safety and resilience" (Spicer, 2020, p. 1737), i.e. became more benevolent; on the other hand, social interaction in an environment of rapidly changing precautions and evolving measures "resulted in more need for entrepreneurship and additional ways of thinking to adapt to the new way of living" (Ratten, 2020, p. 503). Consequently, the effect on debates could be twofold and range from postponing of disagreement to active search for solutions. Given these considerations, virtual meetings were carefully observed.

forms boundaries and, more specifically, how materiality functions in different roles depending on the discourse it is getting involved with. The focus of the analysis of the empirical material is on different roles of materiality in contrasting the paradigms of accounting and sustainability (Beunza & Garud, 2007). The thematic analysis works in an iterative manner with basic codes stemming from the literature, but also patterns in the examined data (Boyatzis, 1998). The analysis tries zooming in on characteristics of materiality that make translating between accounting and sustainability impossible to carve out the conditions of their failure in forming boundaries.

The analysis started with completing the reflections on the field observations and continued with immersing myself into all sources of data I had collected. Reading through field notes, my own reflections, interview transcripts, documents on the organisational structure, documents prepared as part of the standard development or review as well as screenshots from online meetings provided me with rich insights into the workings of the GRI. I then uploaded these various files into the qualitative research software NVivo and highlighted recurring themes. Some clusters of meanings thereby referred to the interaction in the field (e.g. “Being the leader in the field”), whereas other describe the processes themselves (e.g. “Providing a technical threshold”). After regrouping the coding structure a couple of times (e.g. introducing more granular subthemes for the theme “Maintaining role in the field”), a coding structure appeared and became more trustworthy over time. The following analysis goes back to the developed structure.

Analysis

The ISSB and the GRI operate at the far ends of the spectrum of standard-setting for sustainability reporting (Abhayawansa, 2022). They have a different perspective on the entity they are designing standards for. While the GRI tries enabling corporate disclosure on economy, environment and people, and considers organisational impacts on the planet as their unit of examination, the ISSB sees the corporate entity as their focus. This variation in the analysis of space and temporality translates into different perspectives on interlinked stakeholders. The ISSB aims at providing decision-useful guidance for “sustainability-related financial disclosure” (ISSB, 2022b, p. 6). In other words, they have investors as their target audience in mind. The GRI tailors their multi-stakeholder standards to the needs of various groups in society, investors being just one of them. Consequently, the two bodies have a different understanding of the ability of the current financial and non-financial reporting system to capture the intended topics. The ISSB is potentially closer to current financial reporting, whereas the GRI requires an additional layer of information from complying firms. More precisely, the ISSB commits to general principles for reporting which follows a logic of abstraction and desectoralisation. A reporting standard is here seen as a filtering and structuring device for existing knowledge. The GRI builds their reporting requirements bottom-up from the requirements and challenges of different sectors. The emerging disclosure creates knowledge for different users. The analysis zooms-in on the materiality-talk that enables a sense-making about the role and the identity of the two standard-setters.

At the GRI, materiality predominantly appears as a reporting requirement to take impacts into account, i.e., the actual or potential consequences of a firm's operations. This impact materiality is more than financial materiality and considers corporate impacts on the economy, environment and people (GRI, 2006, 2021b). The process for deriving material topics for disclosure from the corporate context is part of the standard-setting process aiming to identify and prioritize a firm's impacts. The most significant shift in the written understanding of this concept took place in 2016 once the GRI guidelines were transferred into standards and the materiality assessment gained importance. While in 2016 an explanation of why a topic is perceived as material together with a comment on the boundary of this understanding was sufficient, in 2021 actual and potential, negative and positive, short- and long-term, intended and unintended, as well as reversible and irreversible impacts of the organisation had to be disclosed (GRI, 2021a)[66]. Just afterwards, this set of information could be used for making financial materiality judgements since most determined impacts are expected to become financially material (ibid.).

The ISSB conceptualises materiality as a user-oriented concept to delimit the scope of the reporting. This relational characteristic of materiality that targets topics that matter for investors and capital markets does not imply a threshold but rather focusses on the nature of information (ISSB, 2022b). This perspective on the role of reporting even turns the assumption that different materiality concepts exist on its head and states that only financial materiality captures all impacts that corporate operations can have. Moreover, the ISSB aims to align the materiality notion used in sustainability reporting with the existing one in financial reporting (ISSB, 2022c), i.e. to make both of them centred around financial impact considerations. Interestingly, the process of deriving topic areas that have to be included in a corporate report, stands before the scope of the standard and needs to be designed by the corresponding firm itself (ibid.). The guiding question coming with the materiality assessment at this point is not "how right is the

[66] This specification was requested by many stakeholders that commented on the exposure draft of this standard. A clearer approach to assessing material topics was seen as a way to avoid a "box-ticking approach to reporting" (GRI, 2020, p. 5) or to leave the determination of reporting topics as too "subjective" (ibid., p. 22).

reporting?" but "are you saying the right things?" (I-03, ISSB board member, interview, 06/10/2022). However, both the GRI and the ISSB acknowledge this difference in thinking of materiality and communicate this publicly like in the comment letters to the EFRAG: "When it comes to *financial materiality*, GRI strongly recommends aligning this definition with the approach of the […] ISSB" (GRI, 2022a, p. 2). Further, they claim to not contest the other party, as interviewee I-11 from the ISSB shows: "The GRI […] they're already there for a good while and they have that really strong presence across the world as well, […] we don't [want to] step on any toes" (ISSB technical staff, interview, 24/11/2022).

Despite their differences, the GRI and the ISSB share the emerging space of standard-setting for sustainability reporting and unfold a variety of ties between each other. A memorandum of understanding between the two organisations is in place and they are working together via working groups, commenting letters and personal connections. The much-referenced concept of materiality thereby fulfils a multitude of roles. On the one hand, it signals agreement of the two bodies, on the other hand, it keeps the covered aspects of sustainability apart. By zooming in on the working of materiality in different contexts, light is shed on the sub-research questions *"How is the notion of materiality conceptualised in the two standard-setters?"* and "*How does such conceptualisation reference the other party?".*

The ISSB and the GRI seemingly both work with materiality but due to their outlined differences in addressing standard-setting for sustainability reporting, they are not talking about the same thing when they use "materiality". The analysis helps to demonstrate that materiality fails to connect the two ends of the institutional spectrum but makes both organisations co-dependent. The empirical starting point for this analysis is captured in the confusion of interviewed actors on both sides:

> "I think materiality […] is a word which gets used for *different purposes* and then also in *different ways* even on that same purpose or with *different beliefs* about how or not it's being used. So, it is a word that is a little challenging for advancing discussion because people can talk across purposes on the same thing." (I-03, ISSB board member, interview, 06/10/2022, emphasis added)

> "There're many factors in play that have led to this *incorrect understanding* of what materiality is. There's still, to this day, a lot of *unclarity*, so there's a lot of awareness-raising as to what GRI is about. I always think of the analogy, we're selling a spoon, but people are using it as a fork." (G-04, GRI head of technical development, interview, 21/07/2022, emphasis added)

These quotes highlight struggles of dealing with materiality on both sides. While the notion is perceived as playing a role as a reference in the standard-setting process – both interviewees indicate the concept as being "used" – they also agree on difficulties when it comes to making sense of the connecting properties of the concept – as the "different purposes, […] different ways, […] different beliefs" and the "unclarity" signal. In the following, various uses of materiality as incompletely connecting and at the same time inseparably linking the standard-setters will be explored to unpack the statements by interviewee G-07 that "no one would believe the ISSB anymore if GRI was part of it" (GRI director of standards, interview, 03/11/2022) as well as his counterpart I-04 at the ISSB who said that there is a memorandum of understanding between ISSB and GRI but "for whatever reasons, [the GRI] does not want to merge into the ISSB like SASB did and they do have this different materiality" (ISSB technical specialist and TCFD member, interview, 10/10/2022). In other words, the nature of the collaboration between ISSB and GRI seems to be structured around different references to materiality. Yet, instead of competing for domination in the standard-setting space, the two standard-setters unfold a complex relationship to each other that seems to work with materiality.

The analysis will firstly zoom in on the mobilisation of materiality for cooperative co-dependence in both standard-setters before moving on to competitive co-dependence of the concepts. Finally, materiality is examined as a concept that reveals an iteration between practical relevance of some topics and granting opportunity for using discretion over the scope in other cases. The analysis works with different mobilisations of materiality and crystallises different forms of connections that range from rather proximate employment of materiality to distant engagement with the concept.

Figure 2-3 illustrates the roles of materiality and the structure of the analysis. To unpack the materiality-talk both standard-setters are involved in, the analysis asks how materiality is discussed on the ground, and then what this reveals about the dynamics between the two major players in the field. The workings of materiality can, on the one hand, be classified as rather similar or to a growing extent different. On the other hand, the emerging themes show signs of cooperative or competitive co-dependence. The following analysis starts with the former and moves along the spectrum of similarity of approaches, to then attend to materiality which is mobilised as competitive co-dependence.

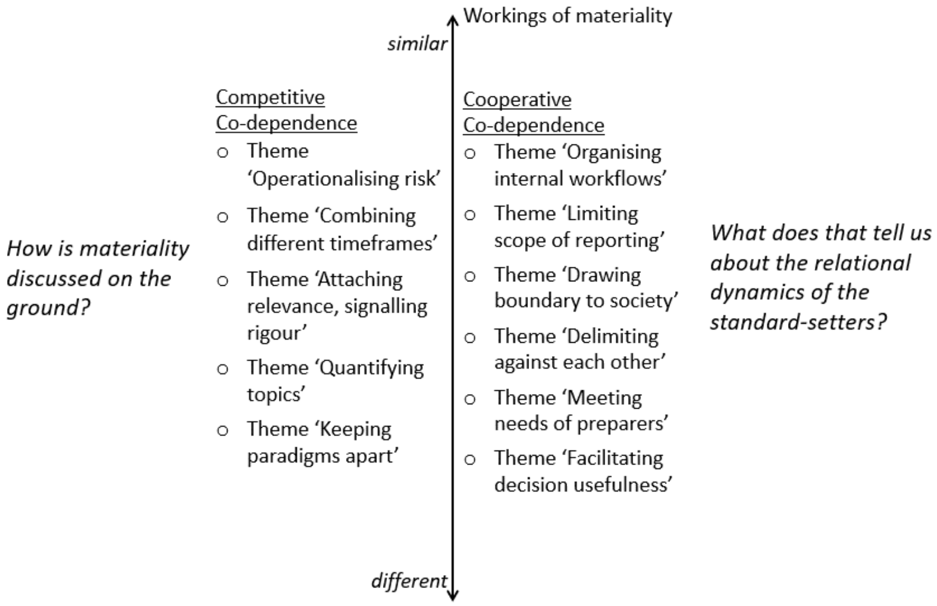

Figure 2-3: Workings of materiality

Materiality mobilised as cooperatively co-dependent

Both standard-setters mobilise materiality in ways that make the two parties rely on each other in an entangled manner, where they become co-dependent. Instead of competing for recognition of the body or adaption of the standard in all their practices, several traces of interlinked references can be observed. These ways of interacting make the parties cooperatively and competitively co-dependent as the following sections show.

To begin with the themes of cooperative co-dependence, materiality has a linking nature when it comes to the workflows of standard-setting. Materiality-talk connects the two standard-setters in a close and non-hostile manner in the internal organisation of their work. Materiality functions as a technical threshold to structure internal workflows and to manage deadlines as G-10 at the GRI does: "regarding the mining project… we are working on a list of 'likely material topics', we are on schedule" (GSSB meeting, 16/06/2022). This list of likely material topics apparently functions as a device to keep an overview of the work and progress when assessing a vast amount of information. G-02 brings those workflow-related considerations together in one of the GRI team meetings on labour standards by asking "How can we incorporate the initial screening, before looking at the impact?" (17/06/2022), and they continue to explain that "first [we need to] look at initial priorities, we need to look if that's already in our materiality analysis" (ibid.). And other team members specify this approach to work: "We have a list of tasks and we already had some working sessions, a bit of reading, materiality assessment, we want to look at case studies, to understand what we can expect organisations to report" (G-06, ibid.), i.e. a very materiality-centred determination of topics to consider. Focussing on material topics seems to guide the workflow in the organisation.

Despite the depth of topics described by G-03 by saying that "it's important for us to deep dive into these [areas] to make sure that we understand what is material" (GRI stakeholder meeting, 15/07/2022), the GRI applies an agnostic approach to defining potentially material topics – like the following quotes show: "everything is material until you can proof that it is not" (G-08, GRI standards division meeting, 14/07/2022) and "everything is assumed to be material unless you can proof otherwise" (G-04, ibid.). To navigate through this seemingly limitless number of topics, the notion of materiality is rather loosely employed as a synonym for "worth-considering". G-12 states that "a rule of thumb for significance is important in the process. We need to answer questions of materiality and salience" (GRI technical committee meeting, 14/06/2022) and G-13 perceives this focus on certain topics as "these are very interesting and important things, it's material for many sectors" (GSSB meeting, 07/07/2022). Materiality-talk motivates a focus on certain topic areas and guides through the processes of addressing these issues.

The ISSB also structures its workflow around materiality to narrow the range of topics down to – from their perspective – the most crucial ones. However, this assessment of material topics for their own work as a standard-setter is driven by a strong investor-focus as I-01 describes: "Starting point in metrics for the Climate Exposure Draft is very much TCFD […]. But then [there are] also certain standards… being industry specific metrics where we identified those matters, and thus those metrics that are *potentially or likely material* for investors" (ISSB technical staff, interview, 11/07/2022, emphasis added). This quote highlights a strong orientation on materiality for developing metrics. ISSB board member I-03 summarises this navigation through the multitude of topics by saying that "there's an infinite amount of things that could be required to be discussed […]. And an infinite set of meaningless things that would matter, so in that sense, it's quite reasonable, in the disclosure world, for materiality to be used" (interview, 06/10/2022). Materiality-talk apparently helps in the process of distilling the most relevant topics for the targeted audience.

As opposed to the GRI, the ISSB always links these considerations back to investors because it "helps them understand, then, what's the information that we can use to compare different investments, that can feed into our investment process. Internally, we discuss materiality all the time" (I-06, ISSB technical staff, interview, 13/10/2022). Moreover, considerations around "materiality […], [providing] decision-useful information for investors, [that are] cost-effective to implement for companies were [the ISSB's] few pillars for making determinations on what we might include in a standard" (I-07, ISSB technical staff, interview 27/10/2022). I-04 refers to this structuring of the standard-setting process as the task of "mak[ing] it clear that this amount of disclosure is for the investors, and this is for the other people. And make a distinction about where the line is being drawn and not commingle it all up into one big blob“ (TCFD member and ISSB technical staff, interview, 10/10/2022). The structured approach to preparing standards based on materiality works “because [the ISSB technical staff] think[s] [they] do try to ground [them]selves [in] materiality … when [they] are talking about scoping as opposed to application of the standards” (I-03, ISSB board member, interview, 06/10/2022) and “try to guide firms to say this is what we would view as reasonably material” (I-06, ISSB technical staff, interview, 13/10/2022).

Much clearer than this internal design of decision-making processes does the determination of the scope of the intended reporting draw a boundary between material and non-material information. While having different understandings of where the reporting scope should be delimited, both standard-setters refer to materiality as motivating the inclusion of topics. G-06, a GRI standards manager, describes their approach to determining the scope of the envisaged reporting as follows: “We are considering a separate section that *clarifies the scope*, we only want information on the *more important impacts*, *not all*, […], but maybe, we make some extra reference to GRI 3, *the material topics*” (team meeting, 17/06/2022, emphasis added). The ISSB side refers to their perspective on delimiting the scope in a similar way by stating that “materiality is used because it's helpful for companies to express what they think *matters*. When you do this inside-out analysis, […] there's been a lot of progress made on the *materiality assessments* and stuff“ (I-07, ISSB technical staff, interview, 27/10/2022, emphasis added). Engaging in materiality-talk provides a language for taking on the challenge of designing thorough reporting standards for a less clear-cut domain. Both standard-setters refer back to materiality to determine where the coverage of their standards and the assessment of topics worth reporting ends.

Materiality is applied to limit the scope of the reporting in both standard-setters[67]. Nonetheless, the nature of this demarcation – as a threshold, a cut-off or prioritisation – varies across the bodies. I-06, working for the ISSB as technical staff, highlights the problem with materiality:

> “Because [in financial reporting] you really put a *threshold* in place, and that’s your *number*, and that’s it. And you don’t look at anything else below this *materiality threshold*. So it is very *black and white*, and it’s certainly not the case in sustainability at all. And I think another thing that is quite difficult to interpret, and this is something that we’re really trying to work on“ (interview, 13/10/2022, emphasis added).

[67] This role of materiality does not seem to be audit-driven but induced by a variety of stakeholders (GRI, 2020).

Their colleague I-07 continues this line of thought and makes the characteristic of a threshold in sustainability reporting clearer: “It's different because it can be very challenging to draw a *hard threshold* and we don't want to. […] We don't want to draw *numerical thresholds* when it comes to this stuff, especially when so much of it is forward looking” (interview, 27/10/2022, emphasis added). Materiality seems to be perceived as playing a role in this demarcation, but is also seen as opening up new questions – like for G-15, GRI technical committee member: “Where are you most likely to have *significant impact*? It depends on the *cut-off* – where it is.” (GRI technical committee biodiversity, 14/06/2022, emphasis added) or more explicitly G-01, the GRI head of standards, who summarises the debate with the following words: “The question is what is the boundary of our scope? No-one has the answer yet. Materiality will help not opening up too much” (team meeting, 16/06/2022). This form of materiality-talk shows in how far this conversation is used to determine the scope of responsibility without having to stand out in a confrontative manner.

Interviewees working for the ISSB express a greater focus on the technical and quantitative determination of a materiality threshold, yet placing emphasis on materiality as a qualitative filter inside the delimited reporting scope like I-04, TCFD member and ISSB technical staff, describes: “Once you define those organisational boundaries about what should be reported, then materiality is a concept *within those boundaries* saying, you have all the information, but only a subset has to be reported. So, it's a concept to help you *further filter the information* that you have to report” (interview, 10/10/2022, emphasis added). While this reads rather opaque, I-06 disentangles the relationship between a boundary of the reporting scope and materiality as follows: “It’s just that [the GRI and the ISSB] started at different times, we came from different places, so we’re just trying to figure out how to really make sense of this world, that is useful for the public, the markets, the economy. And it’s hard, because I think a lot of it today is not to do with materiality. It’s more to do with structure. We’ve all come at this from different angles“ (ISSB technical staff, interview, 13/10/2022). So, materiality works in a number of ways to separate the considered factors from those left outside. Cooperative co-dependence is visible in the limiting of the scope of the reporting.

The two standard-setters also cooperatively employ materiality to refer to their role in handling the relationship with society. The scope of reporting is delimited not only by (emerging) materiality considerations, but also by the boundary between standard-setter and society. Materiality thereby is perceived as playing a role in sharing responsibility and assigning legitimacy to the standard-setting bodies. In a GRI stakeholder meeting, the director of standards explains the embedding of their own organisation in the following way:

> "GRI covers all this [here: reporting circularity of waste], but from a high-level point of view, a bit more generic, and from a *material point of view*, but we are not a government, any scheme or measurement system is voluntary, we want to make sure that the entire world can disclose and with our recent update … the circularity idea is too ambitious for some parts of the world … it's the *material impact and prioritisation question* … it's not our role to check if it is true what firms are disclosing, that's what civil society checks but not our role" (15/07/2022, emphasis added).

This quote highlights the differentiating capacity of materiality, which puts the organisation as a non-governmental player into societal debates and grants legitimacy for their mandate and expertise. The placing in this context evolves cooperatively but creates co-dependence since the parties require the other one to be there. Consequently, at the ISSB, similar to the GRI, questions on the right of the standard-setter to request non-material information are raised:

> "I think it's *outside of the IFRS Foundation's mandate* and the *bounds of what they are empowered to do* and what their mission is, to request information from companies that is not financially material. *They can't do it*. So, the people saying you should take a double materiality lens, I think that's a fundamental misunderstanding of the *mandate of the IFRS Foundation*. It is not the securities regulator's job to set policy objectives on decarbonisation. That has to come from the government in a different way, right? Otherwise, we're just using disclosure as a smoke screen to *set policy objectives* that you should be using real measures to go forward on" (I-07, ISSB technical staff, interview, 27/10/2022, emphasis added).

Materiality-talk here functions as a boundary-forming device to locate each standard-setting organisation in the wider societal context. The described struggles with placing the standard-setters in the correct space given their mandate become transiently resolved by zooming in on the embraced boundary itself. Interviewee I-06 refers to materiality as a permeable concept that gets impacted in many different ways:

> "And it could have a *financial impact*, because it could lead to fines. It could lead to customer preference. Whatever it might be. But ultimately, the first thing is that's *your impact on society*, and how that then manifests into something that's *financially material* to you can be in many ways. So I think trying to get people's understanding of that, it's just not so black and white. And it's *not a one-way street*. It *flows both ways*" (ISSB technical staff, interview, 13/101/2022, emphasis added).

Materiality is used to determine the role of the standard-setter in contrast to the societal mandate to act upon certain demands. Thereby, materiality-talk forms a boundary between the influence of the standard-setter and the wider surroundings. The perception of this flow apparently also structures the relationship of the two standard-setters as interviewee I-04's perspective illustrates:

> "And [the GRI] has this *different materiality*, they're more closely aligned with the *European version of materiality*, the *inward-facing and the outward-facing*. And I think the agreement we have with them is that there's a way to work together on that, since we're focussed on the *inward-facing materiality*, the effects on the company. We can work on that piece, they can work on the *outward-facing piece*" (TCFD member and ISSB technical staff, interview, 10/10/2022, emphasis added).

Thus, differences between standard-setting approaches are motivated by the positioning towards materiality and the perceived mandate for requesting information of this materiality. This materiality-talk shows how materiality, as a fuzzy concept in itself, is employed for dividing labour in the field of standard-setting and beyond the field at the interface with societal responsibility.

The observed role of materiality is drawing a boundary between the firm and society, but it also impacts the sharing of the space the two standard-setters are operating in. Most interviewees describe the allocation of responsibility as going back to the perspective on materiality that is taken on but refer to the other standard-setter in a considerate manner. Interviewees at the ISSB as well at the GRI summarise this connection as: "We work very closely with GRI. There's definitely no competitiveness. That's not the environment that we're in." (I-06, ISSB technical staff, interview, 13/10/2022) and: "We want to work together with the ISSB as much as possible – companies will choose the easiest way and we do not want firms to only care about financially material issues…." (G-14 and G-01, GRI standards division meeting, 14/07/2022). While these quotes show an interest in the work of the other party, if not even a will to cooperate, the last half-sentence indicates the important role materiality thereby gets assigned.

The most explicit perception of cooperative co-dependence can be found when it comes to the relational dynamic of the two standard-setters themselves. The boundary between ISSB and the GRI is perceived as depending on the understanding of materiality in the context. The GRI director of standards explains the interlinked process of approaching the ISSB, while also keeping it apart by saying that "we would like to cooperate [with the ISSB] wherever possible. I suspect biodiversity and climate. We focus on impact and they on financial materiality" (team meeting, 24/06/2022). The ISSB side confirms that “materiality has been a key part of discussions between those organisations“ (I-05, ISSB technical staff, interview, 13/10/2022). Reaching out to the other party and defining one’s own area of influences thereby goes back to a materiality-focussed conversation. The differentiation between the ISSB and the GRI grows around the concept of materiality. Interviewee G-02, a GRI standards manager, tries to make the implicit assumption of the standard-setters focussing on different aspects in their work more explicit by explaining the role of the GRI:

> “As I understand it, the double materiality is really around, so thinking about how an organisation impacts *outwardly*, and then also how the external world affects it, so, *inwardly*. GRI is focussed specifically on the organisation’s outward impact. If you think of the inward impact, it’s saying, how is what’s happening in the world going to affect our organisation’s financial health and stability, growth, prospects, etc.? We are, I think, strictly interested in how an organisation and its operations affects the *outward world*. So, affects the environment, affects the economy, affects people. So, I don’t think we would ever consider *the other side of double materiality* in how we develop standards.” (interview, 20/07/2022, emphasis added)

The quote highlights the boundary-crossing considerations in the work of the GRI. Impacts of the organisation on the outside world as well as consequences of external factors for the entity are taken into account. Yet, financial aspects of materiality remain in the realm of the ISSB. This described focus on organisational impacts on the outside world is then again commented by the ISSB as straightforward or as I-05, ISSB technical staff, puts it: “Obviously, we’re working with GRI. I think in a way, GRI is easy. Easy is a strong word, because it’s really challenging, technical discussions. But I think GRI understands very well what their purpose is, and what our purpose is“ (interview, 13/10/2022). Interviewee I-06, working for the ISSB as well, is aligned with this observation on the division of labour but more explicitly refers to materiality as a concept that provides purpose to the ISSB:

> “I think we’ve totally overcomplicated it. I think ultimately, we’re just trying to provide information that creates a transparent environment around an entity’s sustainability initiatives. ISSB just happens to be *focussed on the investor*. Yes, there probably will be instances where there is information that falls outside of that category. I haven’t researched this. I haven’t done any analysis. But I would say *95% of the information* that someone views as double materiality would fall under what we would view as *material*. Because it would have an influence over investment decision-making.“ (13/10/2022, emphasis added)

I-03, ISSB board member, agrees with I-06 and explains this take on materiality in the following way: “The labels of single versus double I think are probably reversed because in order for an investor to actually care about something it’s very often the case that some other stakeholder also cares about it. So, if you wanted to call one of them a double threshold I think it’s actually the investor-oriented materiality“ (interview, 06/10/2022). Consequently, materiality-talk is used to underline a superior understanding of mechanisms impacting the intended reporting. The “correct” – as seen by the standard-setter – take on materiality determines the position in the field and the relationship to the other standard-setter. The discussion of materiality questions does not result in a black-or-white, right-or-wrong assessment of approach, let alone a hierarchy. However, the curious observation here is the interwoven reliance on the other standard-setting body. The positioning in the field of standard-setters is relational rather than an absolute one.

Interviewee G-04, head of the GRI technical team, eventually brings both standard-setters together but interestingly highlights the role of materiality again: “People thought you have to choose between ISSB or GRI. No, because each of us come from a different perspective. If you want to apply double materiality, you need to use both in conjunction” (interview, 21/07/2022) and their colleague I-05 from the ISSB technical staff states in a similar vein: “And I think materiality was a very important concept to start having the conversations of look, these are my GRI disclosures, they mean slightly different things. Now, that’s not just materiality. That’s more of a discussion. But I think it was materiality that the industry used to understand those differences“ (interview, 13/10/2022). Especially the last sentence attracts attention since the façade of materiality seems to crumble. Despite its common use, it seems to rather work for drawing a boundary than facilitating technical discussions on thresholds.

Lastly, materiality is creating cooperative co-dependence in meeting the needs of preparers and matching standards with cause-effect relationship for enabling decision usefulness for outside parties. In other words, materiality-talk ties the two bodies together in their perspective on the user of their standards – while sharing the audience coverage based on different materiality understandings. Both standard-setters become very precise when they are attributing responsibility for assessing materiality to the preparer side. G-06, a GRI standards manager, starts by denying the standard-setter’s involvement in this step and asks: “How do you perform a materiality assessment? It’s not GRI’s responsibility to prescribe how you do that, right? So, we have guidance. But it’s guidance, it’s not a requirement, because that’s not our role to describe how to do a materiality assessment“ (interview, 22/07/2022). Interestingly, they go more into detail on this aspect of distance from the local materiality context: “I think for us at

GRI, what is material is that work has been assessed by the company or the organisation as being *significant enough* that you should report on, so, be transparent about it" (ibid., emphasis added). At the same time, the GRI standards state a clear process of how to undertake an entity-specific materiality analysis: "Reporting on material topics is the basis for impactful sustainability reporting and helps an organi[s]ation to focus on and demonstrate where it has actual or potential, positive or negative *impacts*. An organization reporting *in accordance with* the GRI standards is required to *determine its material topics*" (GRI 3, four-step approach to assessing materiality, p. 175, emphasis added).

The ISSB is less descriptive in their approach to inviting firms to perform a materiality assessment. Their technical staff clearly assigns responsibility to the outside party, to the preparer, as the following three quotes unanimously indicate: "I think the materiality determination always has to lie with the entity at the end of the day. That's their job, not ours." (I-07, ISSB technical staff, interview, 27/10/2022), "We don't apply materiality. So, if anybody comes to the ISSB and says, is this material, should I report it? We would say, you've got to make your own judgement. We can't determine what's material and what's not because it's so context-based depending upon your specific circumstances." (I-04, TCFD member and ISSB technical staff, interview, 10/10/2022) and "Ultimately, it would be up to the firm whether they want to disclose on that information. Because they have to determine if it's material to them. We couldn't make that determination" (I-06, ISSB technical staff, 13/10/2022). In other words, for the ISSB materiality here plays a role of keeping the screening for relevant topics to the individual reporting firm.

This role of materiality seems to target decision usefulness of information. The GRI asks in all questionnaires that expert committees work with: "how [would] the above-mentioned disclosures be useful or benefit your decision-making process?" (GRI biodiversity questionnaire draft, version 2, December 2021). Despite stemming from the other standard-setter, interviewee I-03, an ISSB board member, illustrates this role of materiality as follows:

> "I think different forms of materiality are also confusing because it sounds like single versus double [materiality] is merely a question of threshold, but it's actually about *who and what they want to know*. *Who needs to know it* and *what would they need to know*. Not just how much of this. It's not just a threshold" (06/10/2022, emphasis added).

The strong focus on decision usefulness for a specific group of users is further clarified by I-01's explanation of the space the body is operating in: "We're in a sustainability-related financial space. This is obviously the name of the standards we refer to. But the way we come at it is very much investor focussed. The requirement that we're going to propose for companies' reporting is to facilitate information of use to investors" (ISSB technical staff, interview, 11/07/2022). In contrast, the GRI claims to have a multi-stakeholder focus and not only the investor perspective. However, their outward-looking employment of materiality results in G-02's "understanding that, yes, we want to always maintain a kind of neutral position, again, in work that we do, and how we go about developing and distributing standards. That's one thing. I think we also support a kind of demand-driven change" (GRI standards manager, interview, 20/07/2022). Different takes on the user of the standardised sets of reporting divide the field in a manner, where GRI and ISSB have to refer to each other to provide the full picture. They further clarify their embedding in the preparer-driven but at the same time standardised reporting environment:

> "But I think it's more about just providing the tools for organisations, and then letting them decide whether or not this makes sense for them. Then it's something they want to be a part of and pursue. Because it's not mandated. It's not yet mandated. It's not yet legally required in a lot of places. It may be changing now. But it's more for organisations to, by their actions, almost start to prompt change amongst their peers, and within a certain sector and market, kind of thing, as I understand it" (ibid.).

Consequently, despite the different take on the audiences the two standard-setters have in mind, they agree on facilitating decision-useful reporting that emerges by materiality. The quote thereby highlights the boundary of the standard-setter responsibility for the considered aspects. Materiality-talk facilitates decision-making on preparer side but does not shift the assessment whether to report on a certain issue to the standard-setter itself.

The GRI and the ISSB mobilise materiality in ways that foster cooperative co-dependence. While the organisation of internal workflows resembles each other, it does not fully align. Likewise, the two parties fluidly cover each other's under-functioning. The same phenomenon can be observed in the workings of limiting the scope of the reporting and the process of differentiating the standard-setter role from societal debates. The most apparent form of cooperative co-dependence is noticeable in the differentiation from each other and their engagement with preparers. In these contexts, the standard-setters do not encourage competition between each other, but they need the other party to know where they are standing.

Materiality mobilised as competitively co-dependent

The relational dynamics between the two standard-setters can also be of different nature. The GRI and the ISSB are in their work towards external parties cooperative – as shown above. Paradoxically, in designing their internal processes, their references are much more competitive. Their operationalising of risk, their work with different timeframes, their attaching of relevance to covered topics and the signalling of rigour, the quantifying of topics and their disentangling of different paradigms create a competitive co-dependence.

Materiality works as a competitively linking mechanism when it comes to the consideration of risk. Both the GRI and the ISSB link paying attention to materiality with taking care of risk like G-03 explains: “So, I think that’s the first issue in materiality, that there’s a risk involved and that there’s a judgement involved. […] I think to do a materiality assessment you need to know your risks” (GRI standards manager, interview, 20/07/2022). The perceived difference between the two bodies is the distinct relationship between risk and financial reporting. G-03 summarises the perspective of the GRI on the ISSB as follows: “I think the materiality is not mentioned a lot [by the ISSB] because IFRS does it and it’s more financial. […] Materiality is a different one because it’s all about your company’s risk in what you do” (ibid.). A dialogue between G-06 and G-11 during one of the technical committee meetings of the GRI clarifies this perspective on risk: “we do not talk about risks in the GRI standards, we talk about potential impacts. That’s the GRI language. […] – It’s much easier for firms to identify potential impacts than to quantify this” (14/06/2022)[68]. Here, the two bodies compete over defining the positioning of their standards in the wider environment of financial and risk-related reporting. Since sustainability reporting is located in this space, the consideration of risk and its derivation into materiality-talk is very relevant for the positioning in the standard-setting field and therefore perceived as a competitive differentiation.

The GRI and the ISSB seem to be competing when it comes to the timeframes, which materiality is used to refer to. Materiality plays a role in letting the two ends of the spectrum speak to each other:

> “Now, it’s interesting, certainly, we look at a firm’s sustainability in ten, 20 years, and it will just be information *outside of the financial statements*. But that’s still *relevant* for investors. […] But because of pressing need on certain, if not many, sustainability messages, it’s *material*… But’s that the thesis we’re developing specific to sustainability where it *matters*. There is a clear connection between both” (I-01, ISSB technical staff, interview, 11/07/2022, emphasis added).

The way the interviewee is describing the difficulty of bringing sustainability-related and

[68] Throughout the comments to the 2021 exposure draft, risk was presented as a corporate, quantitative term that would not capture the comprehensive consequences of firm operations. Thus, impacts were seen as the appropriate concept to work with sustainability and responsibility in the corporate context, as comment 83 describes: “Mother Nature and Future Generations don't care if the corporation is a bank or a steel mill; it just cares if the company is harming it” (GRI, 2020, p. 19).

financial aspects together, underscores the importance of introducing a structuring concept, such as materiality. The timeframe of the two ends of the spectrum can only be combined by stating that there still is a gatekeeper, the assessment of materiality, that shapes financial statements. The two parties have to rely on each other for this exercise, but they do not agree on a shared approach to this issue.

This observation becomes even clearer once materiality is used to attach relevance to captured topics and to signal rigour as in financial reporting. The GRI equates capturing relevant topics with screening for material topics and a trustworthy procedure of deriving these. G-06, a GRI standards manager, explains in one of the team meetings: “We are considering a separate section that clarifies the scope, we only want information on the *more important impacts*, not all, all instruments are under development, but maybe, we make some extra reference to GRI 3, the *material topics* […] we need to make sure that they *explain their assumptions and what data they are using* […] they need to explain their *primary data and screening*” (17/06/2022, emphasis added). Their colleague G-04 thinks that “there’s still a lot to go till [they] get to a place *similar to financial reporting* and how that works in that area, but [they] think *hopefully eventually*, [they] will get there” (GRI head of technical development, interview, 21/07/2022), i.e. they express their inherent conviction that resembling financial reporting must be the intended outcome of the standards they are developing. While this movement towards financial reporting-oriented standards seems to be a guiding assumption for some people at the GRI, others articulate their troubles with subsuming their perception under the name of financial reporting. GRI standards manager G-05 admits that they “don't know much about financial reporting, to be very honest. And therefore [they] do not understand the length and breadth of it yet. For now, [they] feel that there can be two forms of reporting” (interview, 22/07/2022). These quotes show the ambiguous relationship between having to refer to advancements in the financial reporting to capture sustainability topics and questioning the suitability of this form of reporting at the same time.

Materiality is further mobilised to deal with the quantification of topics[69]. The GRI apparently assumes that introducing metrics for some topic areas links the assessment to financial materiality as G-01, GRI director of standards, underlines:

[69] The mechanism of justifying quantitative technical measures with strategies of persuasion has been analysed in the literature on accounting and rhetorical devices that unpacks an exercise of sense-making rather than the employment of objective claims (Hoque, Mai, & Ozdil, 2022; Lukka & Kasanen, 1995; Young, 2003).

> “The question is: Is it common practice, are there some metrics out there? Is there anything out there? It’s not in the system yet, can you measure it? We have things we can measure… […] looking at the role of GRI worldwide … I read through everything in North America on this but that’s very much focussed on the financial materiality but there are more instruments that are more specific on certain topics” (team meeting, 14/07/2022).

This quote highlights how quantifying topics and summarising these considerations under the heading of materiality gets alienated by the GRI. Materiality-talk is mobilised to show how far the focus on financial materiality and quantitative measures misses the point of sustainability reporting. This reference to financial materiality indirectly differentiates the two standard-setters further. As opposed to this, the ISSB looks differently at their attempts to standard-setting, they rather describe it in a positive way: “The interesting thing on the sustainability side, to what I said about quantification, … I think it is important to be able to quantify, because then obviously that helps you come up with some kind of level of materiality” (O-01, TCFD member, interview, 11/08/2022). Not only does the interviewee link sustainability with quantification, but they also continue by combining this perception with a financial reporting logic, a monetarisation of impact:

> “What’s interesting is that normally materiality is based on an in-year profit and loss, or a balance sheet item. If you then try and bring in a new angle without any reference to *monetary terms* and talk qualitatively about climate crisis, then it’s really difficult to try to drive that change in behaviour. I think the *quantification* is hugely important. How do you define materiality when you’re not *quantifying* is a thing that I think is really very difficult, and this is where we talk about double materiality […]. That’s where I think at the moment I can see how ultimately it would be very good to be able to *measure*”(ibid., emphasis added).

These insights into the interviewees’ perception highlight the nature of the observed relationship between GRI and ISSB. Although the two standard-setters speak to each other, they underline that their area of expertise is suitable for the desired form of reporting. The way in which they link their activities back to considerations of risk and the financial reporting logic, indicates how materiality-talk is mobilised to make them win over meanings. Both parties compete over the power to define the emerging form of reporting. Whether or not monetarisation is relevant to influence behaviour, or which audiences get addressed, is negotiated amongst them through materiality. Just in conjunction, all potential audiences can be satisfied, i.e. they steer their interaction into a form of co-dependence. How they describe the other party fleshes them out as a competitive, yet important counterpart.

In addition to the previously examined roles of materiality, the concept is also employed to embed emerging standards into their institutional surroundings. Observations and interviews on both sides of the spectrum indicate a divide of the field into two streams of standard-setting that go back to different characteristics of the nature of the intended reporting. Interviewees like G-07, the GRI director of standards, highlight how dependent on each other the two bodies thereby are: "No one would believe the ISSB anymore if GRI was part of it" (interview, 03/11/2022). G-04, the GRI head of technical development, echoes this perceived necessity of a two-fold approach to standard-setting: "So, it's very much needed to offer that investor-oriented perspective. We can't just forget about that side of the coin, because you do get to a different set of issues, into a very different type of reporting, depending on what perspective you apply" (interview, 21/07/2022).

This "very different type of reporting" goes back to the perceived direction of travel of the respective standard-setting process. In many statements, like the one by TCFD member and ISSB technical specialist I-04, materiality gets immediately linked to the perceived cradle of this form of reporting: "Materiality is very important on the financial reporting side for that aspect. And I think that the concept is carried over to the sustainability side even more so because sustainability landscape and information is much broader" (interview, 10/10/2022). The way ISSB technical staff bridges between materiality and the capability of their organisation as one operating next to financial reporting, in the "sustainability-related financial space" (I-01, ISSB technical staff, interview, 11/07/2022), to capture it also underlines differences in orientation: "[Materiality] is just so well defined and understood in financial accounting, and especially from an audit perspective. […] So it is very black and white, and it's certainly not the case in sustainability at all. And I think another thing that is quite difficult to interpret, and this is something that we're really trying to work on" (I-09, interview, 10/11/2022). Further, this orientation results in referencing back to an ambition of sustainability reporting of the ISSB to foster the connection to financial reporting: "Certain things cannot be recognised because there's uncertainty. Sustainability in part is the best example of something that is incredibly uncertain. So how do we try and embed it in the financials" (I-01, ISSB technical staff, interview, 11/07/2022). I-09 continues this line of thought by saying that the ISSB "recognises that many times impacts translate into financially material risks and opportunities, so there is this red thread that goes throughout each of these reporting standards" (ISSB technical staff, interview, 10/11/2022). For the ISSB this connection seems to be vital, whereas the GRI challenges this involvement of materiality-talk – a relational dynamic unfolds between the two parties.

The necessity for this assumed connection gets contested by GRI standards manager G-05: “They're not always accounted for because the financial accounting is a different sort of accounting. So, I think it's okay to have it separate and to focus on it separately” (interview, 22/07/2022). But also ISSB technical staff questions the applicability of a materiality understanding as stemming from financial reporting: “Well, it's an open question as to whether materiality as applied as a concept in the financial reporting world does carry over adequately to the sustainability world. That's an open question. I think we're all wrestling with this right now.“ (I-04, TCFD member and ISSB technical specialist, interview, 10/10/2022) Added to this perspective on interrelations is the conviction that both inevitably go together: “I think one of the real strengths of the IFRS set-up is that the accounting standards are part of the organisation, right? And there are going to be overlap issues” (I-02, ISSB board member, interview, 25/07/2022). Interestingly, some ISSB staff members acknowledge that the financial and the sustainability reporting areas are different but introduce materiality as the linking concept: “Materiality is very important on the financial reporting side for preventing information overload. The concept is carried over to the sustainability side even more so because sustainability landscape and information is much broader” (I-04, TCFD member and ISSB technical specialist, interview, 10/10/2022). The GRI and the ISSB differently interpret the derivation of materiality into the field of sustainability standards. While underlining differences, they also acknowledge the other party in this materiality-talk which illustrates the competitive co-dependence amongst them.

Despite apparent difficulties with the suitability of the materiality concept, the advantage of not starting from scratch and rather referring to financial reporting itself are described as positive. The issue of timeframes and in how far materiality-talk is temporal shapes the perception of stakeholders to consider, as I-09 does:

> “I think that the key with ISSB is that we are still very much building on financial reporting to cover now this new set of information that is sustainability-related financial disclosures. So, I think that connection back to the IASB and IFRS is why it’s been so helpful when you’re looking at broader standards like GRI, or things that are not necessarily very much tied to financial reporting“ (ISSB technical staff, interview, 10/11/2022).

This take on the grounding of the emerging form of reporting is challenged by the GRI, who explains in their response to the IFRS Consultation Paper on Sustainability Reporting (December 2020) that "[they] believe it [is] essential for the IFRS Foundation to explicitly recognise the broader concept of sustainability reporting as a practice that should *co-exist next to financial reporting*, and to acknowledge that evolving financial reporting to include the financial implications of sustainability issues on the reporting entity, is *only a partial answer* toward a comprehensive corporate reporting regime" (p. 4, emphasis added). But even as the ISSB struggles to juggle predecessors, the influences and future developments of reporting of material topics in the field are revealed: "We were trying to then communicate that we're talking about materiality not in the way that you're thinking about it historically because we're thinking about a different user and a different use case. So, we were trying to bring it back to the original place where it started" (I-03, ISSB board member, interview, 06/10/2022). Here, materiality is employed to link the emerging forms of reporting back to older ideas in the financial reporting space that come with certain characteristics. Underlining the tradition they see themselves in facilitates competitive positioning for both standard-setters while also relying on the other party to cover the areas left outside.

This reference to the audience is further used for clarifying the materiality concept – and translating it into a concept falling into the own area of expertise, as opposed to the other standard-setter. "In the sustainability world, the difference between this inward- and outward-facing materiality concepts is how you define the stakeholders" (interview, 10/10/2022), as TCFD member and ISSB technical specialist I-04 puts it. In line with this specific understanding of the user group of prepared information, the GRI perceives the focus of the ISSB as grounded in market demand: "When you look at the market, not only the focus of standard-setters and of the frameworks, but also the focus of companies, unfortunately, it's always on the financial materiality side of things, because of the relevance of investors and all of this investor-led initiative, from stock exchanges and rankings" (G-04, GRI head of technical development, interview, 21/07/2022). ISSB board member I-03 sheds light on the interrelatedness of materiality and investor-orientation, but also acknowledges the difficulty of dealing with these linked concepts:

> "I don't tend to think of this as being so much a focus on one's outward and one's inward. There is *no inward that doesn't come from somebody outside*. Investors don't care about anything, generally speaking, that some other stakeholder doesn't happen to care about. If employees don't care, if customers don't care, if local communities

> don't care, if governments don't care, nobody cares. So, *why would an investor care*?" (interview, 06/10/2022, emphasis added).

In this respect, interviewee I-09, an ISSB technical staff member, tries to "ground [herself] on [the ISSB's] materiality, which is investor-focussed information that has the likelihood of having a material impact on your value and value creation" (interview, 10/11/2022), but also perceives the required reporting as not "asking preparers to come up with something completely new. […] It's just requiring a bit more disclosure for these more forward-looking types of information and risks that are now just becoming more relevant and prevalent to the capital markets" (ibid.).

Being challenged by different meanings of materiality for different groups of users, the GRI and ISSB end up referring to different entities with different boundaries. The former facilitates materiality for including all factors relating to the planet represented by a variety of stakeholders, whereas the latter demarcates responsibility of the firm. Interviewee I-03 works for the ISSB and adds to the consideration of different user groups the struggles with drawing boundaries given the fuzziness of the sustainability area: "The approach that we take with disclosure outside the financial statements is necessarily different because there aren't the boundaries around the concepts in the same way that there are with financial statements" (interview, 06/10/2022).

A commonly referenced remedy is the growing quantification of sustainability factors that seems to close the gap between the two paradigms. I-09, ISSB technical staff member, admits that materiality "definitely [is] an immature term when it comes to the [sustainability area]… I think people are very comfortable with quantifying materiality. Obviously, you assess qualitative factors as well, but it's going to have to evolve" (interview, 10/11/2022). To carry an understanding of financial materiality over to previously not quantified topic areas also raises questions like: "Is it financially material if you have something like discrimination or harassment in your company?" (G-01, GRI head of standards, team meeting, 23/06/2022). Connected to the measurable impact of organisational processes is the understanding of the two bodies regarding timeframes, which reporting firms should take into account: "And to suddenly change that and say, you need to think about these other things that don't necessarily improve your financial performance in the next three years, which is where most companies focus, it's huge, and people are still getting their heads around that" (O-01, TCFD member, interview, 11/08/2022). While companies and standard-setters might be grappling with the fit of sustainability information into financial reporting instruments, the overarching question is in how far materiality keeps underlying paradigms apart. "Other challenges are linked to uncertainty that is very long-term. Typically financial statements are backward-looking. They're somewhat forward looking, but they don't look far out" (I-01, ISSB technical staff, interview, 11/07/2022). Materiality-talk separates the two standard-setters here since they have a different perspective on their conceptual emergence. The GRI does not have to follow materiality considerations in their determination of topics or timeframes. The ISSB is more closely related to conceptual roots of the financial reporting paradigm which impacts these two aspects. Materiality is mobilised to compete in the field, but it also links the standard-setters together to provide full coverage of paradigms.

Moreover, the expertise in the different areas where corporations provide information is structured around different career pathways. Interviewee O-01, a TCFD member and auditor by training, jokingly summarises the problem with expertise in the sustainability area by saying that "[his] five-year-old probably knows more around climate change than definitely [he] did before [he] started this job" (interview, 11/08/2022). This lack of training in the emerging area of reporting gets linked back to materiality by G-03, a GRI standards manager (interview, 20/07/2022, emphasis added): "It's not like accountancy where you have *qualified accountants*, and they screw up you can *point the blame at them*. I think that's one thing about materiality and why it's so vague and such an issue because it's just a contentious issue. In some areas, it's *very explicit* of what is a materiality issue to you, but other times it's not. For example, labour conditions in supply chains are the worst in the USA, so there's more risk." The ISSB tries, as opposed to the GRI, to solve these problems by keeping financial reporting and emerging sustainability reporting under one roof. I-06, ISSB technical staff member, describes in an interview on 13/10/2022 how they approach arising questions: "Say, your derivative exposure, and thinking about it from a systemic risk perspective […] Then, I'm like okay, well, how is that already exposed in the financial statements? And I'm able to go to people from the IASB and ask them and have chats with them. So it's so crucial to have those relationships." Relationships are consequently valued, but at the same time seen as an area of differentiation since different networks are addressed by the two standard-setters.

Lastly, materiality keeps paradigms apart wherever consequences of the reporting are discussed. On the one hand, interviewees working for the GRI have changes in corporate behaviour in mind, i.e. that firms are not "just reporting for reporting sake but that they're actually doing something about it" (G-05, GRI standards manager, interview, 22/07/2022). On the other hand, interviewees from the ISSB side underline consequences of societal impact on investor decision-making: "It could have a financial impact, because it could lead to fines. It could lead to customer preference. […] But ultimately, the first thing is that's your impact on society, and how that then manifests into something that's financially material" (I-06, ISSB technical staff, interview, 13/10/2022). The dividing function that materiality fulfils here is – contrary to previously introduced roles of materiality – related back to the nature of the reporting. For example, I-01, an ISSB technical staff member, explains the problem with the reporting as follows: "Regardless of whether it's sustainability or not, if you have financials, it will be *reflected in the financials*. So we need sustainability to *start for investors*. Which is a valid argument up until you realise there are certain things that *cannot be captured* in the financial statements because of the accounting rules" (interview, 11/07/2022, emphasis added). Their colleague I-09 goes even further and considers the direction of travel of their organisation as follows: "Can we evolve that to capture the sustainability disclosure information that's not tied to the elements of a financial statement. I think it's so much easier for you to assess completeness of, or even quantify, materiality when you're looking at financial statements" (interview, 10/11/2022).

Materiality keeps the paradigms of financial and sustainability reporting apart while facilitating an expression of linkage between them. Especially when it comes to an acknowledgement of the legacy from financial reporting, the audience, stakeholders, quantification, expertise and consequences, the two ends of the spectrum are inevitably related but remain separate. Thereby, the close relationship of the two that brings them into a co-dependent interaction and the traces of competition come together. Materiality seems to combine the backward-looking time reference with the forward-looking perspective of the two paradigms, while also motivating comprehensiveness that goes beyond the short- or mid-term. Most importantly, different perspectives on the entity – being the firm or the planet – are only made operable by working with a definition of materiality. The concept is thereby used to quantify emerging metrics and to operationalise risk. Further, materiality determines the scope of the reporting and builds a threshold for incorporating topics in internal workflows. Finally, materiality attaches relevance to aspects laying inside the drawn reporting boundary and thereby grants legitimacy to the developed reporting standard.

These interlinked, sometimes messy, references to materiality illustrate the competitive co-dependence of the two standard-setters. However, the most prevalent observation in the field is a perception of the development of materiality-talk as expressed by I-06, ISSB technical staff, in an interview on 13/10/2022 (emphasis added):

> "[What's] material to your industry? And how can we measure those? And that's where the use case comes in, in my eyes. Look, this is all a *work in progress*. The disclosure topics aren't perfect. The metrics are far from perfect. But if you can just focus on that structure and know, over the years, it will get *better and easier and more understandable*, I do think that it will lead to something. It will lead to a standardised

approach in measuring the sustainability concepts."

This quote highlights that materiality is used even for guiding future developments that are not yet covered by existing materiality-talk. People working for the GRI share this understanding of progress and shifting perspectives on materiality like the head of technical development, G-04:

> "Sometimes, in previous iterations of the guidelines, so before we had standards, it was a little bit *ambiguous*. And that led a lot of people to believe that either GRI's *about financial materiality or about double materiality*, when in fact we were not. So, many of the discussions that have on a day-to-day basis are about *clarifying the focus* of the GRI Standards" (interview, 21/07/2022, emphasis added).

The presented empirical material shows how the competitive side of co-dependence unfolds. Differences between the standard-setters are presented as going back to a distinct understanding of materiality. In the process of carving the specificities of their own approaches out, they refer back to the other party and their understanding of materiality, which links them inevitably together. Materiality is thereby mobilised to operationalise risk, combine different timeframes, attach relevance, quantify issues and to indicate that employed paradigms differ. The standard-setters refer to each other and link their dispute back to materiality, however, they underline in how far they vary from purposes pursued by the other party[70].

The GRI determines their scope based on materiality, but they start from a broad understanding of topics – whereas the ISSB already links their workflow back to investors' perception of materiality. Both then bring in the consideration of risk, but the ISSB does this more prominently against a financial reporting background. Clearly visible becomes the difference between the two standard-setters in their approach to incorporating measurable materiality: as a guiding principle that stems from financial reporting, like the ISSB, or as an additional concept treated with caution, as in the case of the GRI. The GRI and the ISSB employ materiality in distinct ways for internal purposes and vary thereby in their approach to structuring their practices around the concept, incorporating risk, and working on quantification of sustainability topics. The two standard-setters differ in their understanding of their own role in prescribing a materiality assessment approach, like the GRI, or assigning responsibility to the reporting entity, like the ISSB. In other words, the involvement of the outside – non-standard setting – world is mediated by materiality that is sometimes under control of the standard-setter itself or otherwise of the entity. A connotation of materiality that keeps paradigms – stemming from multistakeholder vs.

[70] A more detailed summary of the analysed mobilisation of materiality in this context can be found in the appendix to this paper (figure 2-6).

financial market logics – apart shows in different assumptions on the nature of the reporting standards, as well as in their integration into the wider financial and non-financial standard-setting landscape, which makes the two standard-setters competitively co-dependent. Materiality-talk links them together, but also builds the base for demarcating themselves from the other standard-setter. They seem to compete with each other for thought leadership and interpretation of emerging ESG aspects. However, they only provide comprehensive coverage of the standard-setting landscape by referring to the other party. This observation is here characterised as competitive co-dependence.

The co-dependence created by materiality also reveals how materiality works. A core characteristic of materiality seems to be its ability to move, to shift, to adapt – rather than its fixed role in processes. The concept became involved in so many specific expectations that some interviewees even regret using the term: "I drafted our original sustainability reporting consultation paper […] and we ended up using the term single materiality. If I had my time again, I would *completely remove myself* from the use of that term. At the time, it still existed but it doesn't really *make any sense* when you look at it." (I-10, ISSB technical staff, interview, 11/11/2022, emphasis added) In the following discussion, the consequence of these relational dynamics on the political economy of the standard-setting field for the concern with corporate sustainability will be critically unpacked to zoom in on the manifold involvements of the concept of materiality.

Discussion

The analysis illuminates how the ISSB and the GRI refer to the notion of materiality and mobilise it for their relational dynamics. They summarise a vast array of meanings under the umbrella of the seemingly opaque term "materiality". Materiality-talk brings the two standard-setters in a dialogue[71] that reveals much more than the concept of materiality entails. Despite structural differences between the two bodies, the necessity to engage in talk about materiality is perceived as a shared concern. Materiality is thereby used as a reference to link sustainability to financial reporting and to bring the two organisations in interaction. More specifically, materiality is conceptualised as connecting the two organisations only to a limited extent. Both engage in materiality-talk that suggests they are connecting over a shared concept – however,

[71] One could argue that a form of language-game, a socially constrained pattern of interaction, instead of co-dependence unfolds (Wittgenstein, 2000). The two players of this game could exhibit a "family resemblance" without truly mirroring a social practice or relating to each other. Thus, in practice, characteristics of the counterpart could be arbitrary as long as the game is constituted. I argue that the dichotomy between ISSB and GRI is grounded in the emergence of these bodies. They refer to each other – in substance and not just as a social mechanism – in order to establish their position in the field (Kopytko, 2007).

they have different understandings of this fuzzy term. As a consequence, the concept does not unfold as succeeding boundary formation, but rather makes the ISSB and the GRI co-dependent. The ties that are established between the two bodies develop along a spectrum of weakly bringing them into conjunction to strongly relating the two. However, they also unveil differences that clash as part of this process.

This study of the workings of materiality demonstrates how an incompletely unfolding connection fails in its role to link but makes parties co-dependent. Materiality-talk interrelates the two bodies in manifold ways. Even more than that, zooming in on a spectrum of ties illuminates a bunch of possibilities to connect and to disconnect. Rather than a binary employment of a concept as a cut-off, a multiplicity of complex linkages can be observed. Together with ideas drawn from the functionalist financial reporting literature on materiality (Calabrese et al., 2016; Eccles et al., 2012; Edgley, 2014), as well as the sociological literature on the formation of boundaries (Llewellyn, 1998; Star, 1989, 2010; Trompette & Vinck, 2009; Wittgenstein, 2000), this paper allows to trace the delimiting process of determining the scope of envisaged disclosure based on materiality considerations and the tensions that come with this iterative approach. Beyond this theoretical motivation, the multiplicity of roles assigned to materiality in practice and the number of contrasting empirical references to materiality also drive the enquiry.

To engage with the overarching research question on the relational dynamics of the standard-setters, the metaphorical meaning of materiality as a term denoting substance in evaluating (cf. Oxford English Dictionary, 2010) is considered, and the findings are located in related academic literature. In addition to involving materiality for reaching judgements, materiality has been examined as a performative activity in materialising accounting inscriptions (Edgley, 2014). In the following, this discussion goes beyond this vaguely codified concept at the intersection of relevance for decision-making and professional judgement (Power, 1997) by bringing in the characteristics of sustainability. “Accounting's best kept secret” (Brennan & Gray, 2005, p. 1), materiality, has not only been depicted as a scientific metaphor to determine a threshold for errors, but it also incorporates a notion of fairness in data representation or even social integrity (Karmel, 1978; cf. Edgley, 2014; (Edgley et al., 2015). These clashing references to materiality will be the starting point for analysing what parts of both accounting and sustainability, as well as their entity assumptions interact or do not interact in the standard-setting process. Paying attention to these dynamics helps unpacking the political economy of the territory the standard-setters are operating in.

The first key finding of this paper is that materiality is used for wider purposes than claimed in the financial reporting literature on the role of materiality in structuring decision-making processes. The analysis shows that materiality is loosely employed for organising the workflow of the ISSB and the GRI. Referring to materiality introduces a technical threshold for quantifying previously narrative factors and for incorporating risk. These formerly comprehensive, hard-to-integrate factors can be addressed in the sustainability area by engaging in materiality-talk. Moreover, materiality comes into play once external parties need to be connected to the standard-setting. Materiality facilitates decision usefulness for preparers, combines timeframes and enables incorporating relevance and rigour – attributes of the standard-setting process that go beyond the individual organisation, yet are not directly bringing the ISSB and the GRI in competition or alignment, but making them co-dependent. Further, materiality aims at working to clarify the focus of the respective body in relation to scope, society, and opponent standard-setter, i.e. it fulfils a demarcating role. Lastly, it engages in locating the standard-setting for sustainability reporting at the interface of financial reporting and sustainability considerations. Materiality-talk allows bringing ESG factors into the reporting logic of financial accounting representations. Consequently, materiality is involved in shaping a much more complex relationship of the bodies and the boundary between included and excluded topics, paradigms, stakeholder groups and assumptions than a binary threshold could. Figure 2-4 summarises the variety of roles materiality aims at playing in the standard-setting process.

Figure 2-4: Roles of materiality in the standard-setting process

This observation contributes to the current materiality debate by shedding a light on the plasticity of the boundary of materiality and the derived decision-making process without assuming a direction of influence. In many ways, materiality of sustainability reporting aligns with boundary-drawing considerations of relevance and decision usefulness as known from financial reporting. However, this study contributes to the debate by providing more granular insights into the disjunction between demarcating the reporting scope to the outside and assigning relevance to the covered issues to the inside (Frishkoff, 1970). Rather than lending itself to the disclosure of certain topics, materiality is a concept involved in many adjunct processes of the standard-setting and therefore it is central yet evolving. The formation of a boundary based on the different roles of materiality creates relevance that is at the core of the concept. The two standard-setters compete for the correct interpretation of materiality in internal, paradigmatic workings, but cooperate in dividing responsibilities for external issues like the decision usefulness for prepares. In this interplay, the two become co-dependent and interlinked.

The second key finding concerns the ties between financial reporting and sustainability considerations which are differently perceived by the different players in the field. Materiality is seen as a translating resource that mediates between these two areas. By assessing the materiality of a fuzzy ESG factor, these topics can be captured by a financial reporting logic. However, the presented material allows more detailed insights into the unfolding dynamics of the field. Materiality is involved in connecting the ends of the spectrum of standard-setters by allowing similar internal workings, by facilitating an outward-looking connection and by differentiating the bodies against each other. Thus far, materiality evolves as a concept that is worked with in both domains (Llewellyn, 1998; Star, 1989, 2010; Trompette & Vinck, 2009). The presented material also indicates that the two standard-setters – equipped with a variety of different assumptions on the responsibility they can ascribe to firms – do not simply coalesce but become demarcated via a distinct take on materiality. In other words, materiality partly emerges as a tool to manage the boundary between them, i.e. as an intermediary that translates but also differentiates.

However, things are more complex here. The observed processes, ranging from competitive to cooperative practices between the two standard-setters, have also a wider implication. Examining the standard development and the role materiality plays in it, reveals frictions of boundary formation and highlights under what conditions they might fail in living up to their connecting qualities (Llewellyn, 1998; Star, 2010). Materiality seems to enable overcoming boundaries to the described extent by allowing to act upon it from different sides. This two-fold process is called a form of "co-dependence" here to highlight the entangled nature of the dynamics in the field. Beyond that point, interviewed participants and observed practices did indicate the opposite. Instead of becoming part of different worlds, materiality only receives attention by remaining without a separate identity (Star & Griesemer, 1989; Trompette & Vinck, 2009). The perceived characteristic of relatedness does not create a temporarily stabilised clear connection but rather a different take on "materiality" in each incidence of referencing it (Briers & Chua, 2001). The boundary fails to be created with a maintained continuity of identity and with a capacity to unfold a dual role of translating since it becomes so overly flexible that it cannot be determined anymore (Callon, 1984; Carlile, 2002). This boundary formation consequently creates co-dependent bodies in the standard-setting field. Figure 2-5 illustrates the workings of materiality as a failing boundary that is clashing between competitive and cooperative co-dependence.

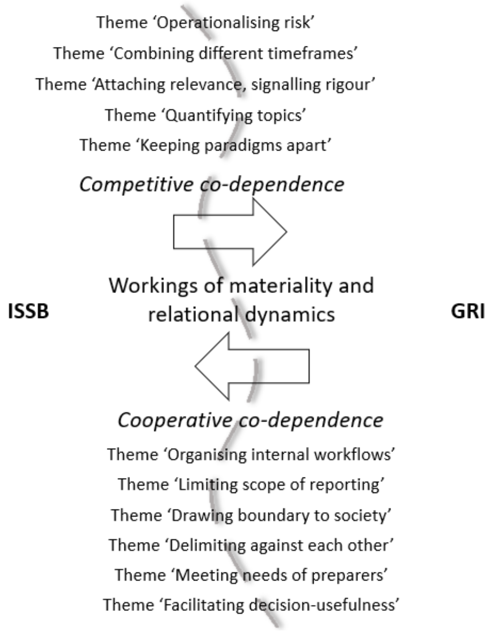

Figure 2-5: Materiality as a failing boundary

The paper consequently reveals materiality as mobilised in engaging different paradigms of involved standard-setters since both parties describe certain forms of materiality as an "incorrect understanding of what materiality is" (G-04, GRI head of technical development, interview, 21/07/2022) but do not state how they determine a materiality concept that matches their convictions. These tensions result in a lack of integration of different aspects of materiality into a shared boundary or convergence of understandings. Both parties disagree in their definition of the concept and therefore, their domains separate even further while hanging together in a multiplicity of references. Lastly, this creates disagreement over the nature and role of the considered entity – pushing the two domains further apart. Materiality that was borrowed from financial reporting does not thoroughly enter the sustainability reporting sphere but is returned to its starting point. The concept of materiality does not use its full potential but fails to reduce complexity or even create a common ground for reducing the span of the spectrum (Espeland & Stevens, 1998) – it rather makes the two standard-setters depend on each other.

These findings contribute to the literature by shedding light on the complexity of boundaries in the making (Star, 1989; Trompette & Vinck, 2009). Attending to the dynamics and tensions of forming a boundary helps introduce materiality as involved in failing boundary formation (Espeland & Stevens, 1998). Instead of reducing complexity and facilitating interaction of parties and reporting contexts, the observed formation of the boundary "materiality" disconnects and suppresses boundary-spanning mobilisation of the plastic concept "materiality". It fails to translate between different paradigms of sustainability and accounting and their entity assumptions, it only seemingly fulfils a technical role in the standard-setting organisation, and it facilitates political influence in the domain. Materiality becomes a vehicle to discuss certain concerns, keep the organisation actionable and position it in the standard-setting field. However, it does not enable the demarcating process of far-reaching sustainability and fails to open up avenues to assigning relevance to considered issues.

Conclusion

This paper aims to enhance the discussion of materiality in the literature by shedding light on the way the concept is discussed on the ground in standard-setting for sustainability reporting instead of in its scripted definition. The GRI and the ISSB differ in a number of conceptual aspects; consequently, their use of the homonymous concept "materiality" needs to be further unpacked. Materiality – being mobilised in cooperative and competitive ways – creates a spectrum of relational dynamics along the unfolding boundary between the two bodies as the various roles of materiality signal.

When it comes to managing their relationships to other parties, like the opposing standard-setter, society or preparers, the two players depend on each other to divide responsibilities. In this context, materiality is mobilised to share the field in a cooperative manner that brings them in a co-dependent relationship. Opposed to this observation is the operationalisation of risk or the quantification of topics. Here, the co-dependence of the two standard-setters is rather hostile and creates a competitive relational dynamic. Despite the perceived importance of separation in these cases, they relate to each other and become co-dependent on each other for stating their position in the field. The clearest self-definition based on differentiation from the other party takes place once reference to the different paradigms pursued by the GRI and the ISSB is made. Materiality is used to illustrate the "correct" approach to capturing sustainability topics in a reporting standard – which results in having to depend on the other party to fulfil its part. Consequently, materiality connects the standard-setters as a failing boundary that does not thoroughly travel or adopt to different contexts. It offers some room for discretion but lacks capacity to increase leeway, and it rather limits the two to work with the roles of materiality along the outlined spectrum.

The analysis therefore contributes to the ongoing academic – and also very practice-driven – debate on the concept of materiality (Calabrese et al., 2016; Edgley, 2014; Frishkoff, 1970). This paper shows that materiality plays an important role in determining the scope of the intended reporting and assigning relevance to captured topics confronted with a vast array of potentially important aspects. Materiality as a filter, expressed in manifold roles along the spectrum of ties, sheds some light on the rise of the concept in the public debate. In addition to this practical contribution, this paper provides an addition to the literature on boundary formation in a dynamic field (Bowker & Star, 1999; Llewellyn, 1994; Star & Griesemer, 1989). The formation of a boundary between the ends of the spectrum fails if it is unable to become part of the spheres the two bodies are operating in but incompletely connects and thereby make them dependent on each other. The perceived characteristic of relatedness does not create a temporarily stabilised clear connection but rather a different take on “materiality” in each incidence of referencing it. The relational capacity of “materiality” fails to unfold because the two spheres need their difference to exist – or as G-07 puts it “no one would believe the ISSB anymore if GRI was part of it”.

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Appendix

Empirical material

Fieldnotes

- Participant observation in Standards Division of the Global Reporting Initiative (GRI)
- Employed as a research volunteer, no remuneration
- Remote full-time fieldwork between 12/05 and 05/08/2022, predominantly June and July
- In-person involvement in Amsterdam between 12/07 and 25/07/2022
- Approx. 350h of participant observation in total

Observed fieldwork participants

Pseudonym in the paper	Letters in research process	Involvement	Role
G-01	AF	GRI	Leadership Standards Division
G-02	AG	GRI	Standards Manager
G-03	AH	GRI	Standards Manager
G-04	AI	GRI	Head of Technical Development
G-05	AJ	GRI	Standards Manager
G-06	AK	GRI	Standards Manager
G-07	AU	GRI	Leadership Standards Division
G-08	TB	GRI	Senior Policy Coordinator
G-09	ML	GRI	Manager Technical Development
G-10	BB	GRI	Leadership Standards Division
G-11	WS	GRI	Standards Manager
G-12	JB	GRI	Standards Manager
G-13	JK	GRI	Standards Manager
G-14	MA	GRI	Standards Manager
G-15	SB	GRI	Standards Manager

Fieldwork details

Date	Working hours	Time
12.05.2022	11:00-12:00	1h
30.05.2022	09:00-10:00	1h
04.06.2022	14:00-17:00	3h
07.06.2022	09:00-18:00	9h
08.06.2022	08:30-17:30	9h
09.06.2022	08:00-18:00	10h
10.06.2022	08:00-16:00	8h
13.06.2022	07:30-16:30	9h
14.06.2022	08:00-17:00	9h
15.06.2022	09:00-18:00	9h
16.06.2022	09:00-18:00	9h
17.06.2022	09:00-18:00	9h
20.06.2022	09:00-18:00	9h
21.06.2022	09:00-18:00	9h
22.06.2022	09:00-18:00	9h

23.06.2022	09:00-18:00	9h
24.06.2022	08:30-17:30	9h
27.06.2022	09:00-18:00	9h
28.06.2022	09:00-17:00	8h
29.06.2022	09:00-16:00	7h
30.06.2022	13:00-20:00	7h
01.07.2022	09:00-18:00	9h
04.07.2022	09:00-17:00	8h
05.07.2022	09:00-17:00	8h
06.07.2022	09:30-17:30	8h
07.07.2022	09:00-17:00	8h
08.07.2022	09:00-17:00	8h
11.07.2022	09:30-16:30	7h
12.07.2022	09:00-16:00	7h
13.07.2022	09:00-17:00	8h
14.07.2022	09:00-16:00	7h
15.07.2022	10:00-18:00	8h
18.07.2022	10:00-18:00	8h
19.07.2022	08:00-16:00	8h
20.07.2022	09:00-16:00	7h
21.07.2022	09:00-17:00	8h
22.07.2022	09:00-16:00	7h
25.07.2022	10:00-18:00	8h
26.07.2022	00:00:00	0h
27.07.2022	10:00-18:00	8h
28.07.2022	08:00-16:00	8h
29.07.2022	10:00-18:00	8h
01.08.2022	00:00:00	0h
02.08.2022	08:00-16:00	8h
03.08.2022	09:00-16:00	7h
04.08.2022	09:00-17:00	8h
05.08.2022	09:00-16:00	7h
Total		348h

Documents

- GRI, Code of Conduct for the Development of GRI Standards, January 2018
- GRI, RE: IFRS Consultation Paper on Sustainability Reporting, December 2020
- GRI, Cover Email to GRI Biodiversity Technical Committee, November 2021
- GRI, Technical Committee Member Biographies, November 2021
- GRI, Developing Content for GRI Topic Standard Guide for Technical Committee Members, November 2021
- GRI, Terms of Reference for Biodiversity Technical Committee, November 2021
- GRI, A Short Introduction to the GRI Standards, November 2021
- GRI, Reporting with GRI Standards 2021 Update, December 2021
- GRI, Draft Questionnaire Biodiversity, Version 2, December 2021
- GRI, Internal Working Paper on Different Baseline Concepts in the Field, July 2022

- GRI, Draft Questionnaire Labour, Version 1, July 2022
- GSSB Virtual Meeting Summary, 9 December 2021
- GSSB Virtual Meeting Summary, 23 September 2021
- GSSB Virtual Meeting Summary, 1 July 2021
- GSSB Virtual Meeting Summary, 17 June 2021
- GSSB Virtual Meeting Summary, 10 June 2021
- GSSB Virtual Meeting Summary, 29 April 2021
- GSSB Virtual Meeting Summary, 25 March 2021
- GSSB Virtual Meeting Summary, 23 March 2021
- GSSB Virtual Meeting Summary, 4 March 2021
- GSSB Virtual Meeting Summary, 25 February 2021
- GSSB Virtual Meeting Summary, 21 January 2021
- GSSB Virtual Meeting Summary, 10 December 2020
- GSSB Virtual Meeting Summary, 3 December 2020
- GSSB Virtual Meeting Summary, 19 November 2020
- GSSB Virtual Meeting Summary, 5 November 2020
- GSSB Virtual Meeting Summary, 22 October 2020
- GSSB Virtual Meeting Summary, 15 September 2020
- GSSB Virtual Meeting Summary, 18 June 2020
- GSSB Virtual Meeting Summary, 20 May 2020
- GSSB Virtual Meeting Summary, 23 April 2020
- GSSB Virtual Meeting Summary, 26 March 2020
- GSSB Virtual Meeting Summary, 11 February 2020
- GSSB Virtual Meeting Summary, 6 February 2020
- GSSB Virtual Meeting Summary, 10 December 2019
- GSSB Virtual Meeting Summary, 12 December 2019
- GSSB Virtual Meeting Summary, 21 November 2019
- GSSB In-person Meeting Summary, 24-25 September 2019
- GSSB Virtual Meeting Summary, 27 June 2019
- GSSB In-person Meeting Summary, 25-26 March 2019
- GSSB Virtual Meeting Summary, 7 February 2019
- GSSB Virtual Meeting Summary, 29 November 2018
- GSSB In-person Meeting Summary, 25-26 September 2018
- GSSB Virtual Meeting Summary, 28 June 2018
- GSSB In-person Meeting Summary, 11-12 April 2018
- GSSB Virtual Meeting Summary, 22 March 2018
- GSSB Virtual Meeting Summary, 22 February 2018
- GSSB Virtual Meeting Summary, 25 January 2018
- GSSB Virtual Meeting Summary, 30 November 2017
- GSSB Virtual Meeting Summary, 26 October 2017
- GSSB In-person Meeting Summary, 20-21 September 2017
- GSSB Virtual Meeting Summary, 19 July 2017
- GSSB Virtual Meeting Summary, 29 June 2017
- GSSB Virtual Meeting Summary, 24 May 2017
- GSSB Virtual Meeting Summary, 26 April 2017
- GSSB In-person Meeting Summary, 21-22 March 2017
- GSSB Virtual Meeting Summary, 7 March 2017

- GSSB Virtual Meeting Summary, 23 February 2017
- GSSB Virtual Meeting Summary, 15 December 2016
- GSSB Virtual Meeting Summary, 23 November 2016
- GSSB Virtual Meeting Summary, 27 October 2016
- GSSB In-person Meeting Summary, 30-31 August 2016
- GSSB Virtual Meeting Summary, 4 August 2016
- GSSB Virtual Meeting Summary, 21 July 2016
- GSSB Virtual Meeting Summary, 23 June 2016
- GSSB In-person Meeting Summary, 16-17 May 2016
- GSSB In-person Meeting Summary, 5-7 April 2016
- GSSB Virtual Meeting Summary, 3 March 2016
- GSSB Virtual Meeting Summary, 25 February 2016
- GSSB Virtual Meeting Summary, 4 February 2016
- GSSB In-person Meeting Summary, 3-5 November 2015

Interviews

- Number: 20
- Timeframe: July 2022 - December 2022
- Length: between 29-68 min, 48 min on average
- Geographical scope: interviewees were located in the Netherlands (6), the UK (6), the USA (5) and other countries (3)
- Professional affiliation: Working for the ISSB (12), working for the GRI (7), working for other bodies (1)
- Categorisation of pseudonyms in this paper: Affiliated to the ISSB (I-xx), affiliated to the GRI (G-xx), others (O-xx)

Interviewees

Pseudonym in the paper	Letters in the research process	Role	Location	Date	Duration in min
I-01	AB	ISSB Technical Manager	UK	11/07/2022	45
G-01	AF	GRI Leadership Standards Division	The Netherlands	14/07/2022	40
G-02	AG	GRI Standards Manager	South Africa	20/07/2022	57
G-03	AH	GRI Standards Manager	The Netherlands	20/07/2022	60
G-04	AI	GRI Head of Technical Development	The Netherlands	21/07/2022	61
G-05	AJ	GRI Standards Manager	The Netherlands	22/07/2022	47
G-06	AK	GRI Standards Manager	The Netherlands	22/07/2022	58
I-02	AL	ISSB Board Member	UK	25/07/2022	51
O-01	AO	Expert advisor TCFD Board,	UK	11/08/2022	30

		Partner Climate Risk at Big Four			
I-03	AP	ISSB Board Member	USA	06/10/2022	45
I-04	AQ	TCFD Member, ISSB Technical Staff	USA	10/10/2022	48
I-05	AR	ISSB Technical Staff	UK	13/10/2022	29
I-06	AS	ISSB Technical Staff	USA	13/10/2022	60
I-07	AT	ISSB Technical Staff	USA	27/10/2022	30
G-07	AU	GRI Leadership Standards Division	The Netherlands	03/11/2022	46
I-08	AV	ISSB Technical Staff	UK	10/11/2022	30
I-09	AW	ISSB Technical Staff	USA	10/11/2022	48
I-10	AX	ISSB Technical Staff	Germany	11/11/2022	29
I-11	AY	ISSB Technical Staff	UK	24/11/2022	68
I-12	AZ	ISSB Technical Reference Group	Singapore	05/12/2022	60

Interview guide

Introduction

- Introduce myself
- Explain the purpose of this research: unpacking the notion of materiality in the standard-setting for sustainability reporting
- Thank for agreeing to participate
- Explain confidentiality and right to withdraw
- Review and sign information sheet as well as consent form
- Ask to record the interview

Interviewee background

- [information on interviewee]

Guiding interview questions and prompts

Interview questions	Research motivation/ purpose
Understanding the involvement in the organisation *(keep it short)* • How does your work for the GRI/ ISSB look like? How do you get involved? • How did you get appointed to the board?	Unpack interviewee's role in the organisation
Understanding day-to-day practices *(keep rather short)* • Based on what you said before, how does a typical day look like? • How do meetings you are joining evolve? How do you prepare? • What do you like and what do you find challenging about your work? *(try linking back to scope of the work, materiality considerations, limit of responsibility)*	Relate to interviewee's experience with routines of organisation Approach concrete experience and not only opinion of interviewee in relation to standard-setting

Understanding the organisational employment of materiality *(always ask for examples)* • Do you ever come across the notion of materiality in your work? • Do you use the word "material" in discussions? Do you refer to relevance, significance, importance? Why? Why not?	Understand employment of materiality in the organisation Do not refer to meta-discourse only
Understanding the role of materiality in the field *(always ask for examples)* • Do you think you are using "materiality" differently than other standard-setters in the field? • Do you use materiality to differentiate your work from the work of other standard-setters? • How does the [work/ collaboration/ exchange] with outside parties (other bodies, experts and users) look like? How do you come up with material topics for this form of engagement?	Learn more about workings of materiality in the field
Understanding the nature of materiality *(always ask for examples)* • How do you assess materiality? • In how far does sustainability differ in its scope from financial reporting? What about the entity reference? The time component? • How do you perceive the connection to financial measures or financial reporting? • Do you quantify materiality in your daily work? • (Do you need materiality as a tool for example to signal rigour?)	Understand influences on materiality

Concluding

- Is there anything else you would like to share about your experiences?
- Would you recommend anyone else as an interviewee?
- Thanking for the time and concluding interview

Summary of mobilisation of materiality

Financial reporting	Materiality	Sustainability reporting
Backward-looking	Materiality operates in combining different timeframes	Forward-looking
Short-/ mid-term	Materiality is utilized to motivate comprehensiveness	Long-term
Entity reference: firm	Materiality facilitates demarcation of factors to be included	Entity reference: planet
Long-standing quantitative metrics	Materiality plays a role in quantifying topics	So far, more qualitative, emerging metrics (e.g. tonnes of CO_2e)
Risk of potentially incomplete reports	Materiality operationalises risk	Risk of potentially greenwashed or cluttered reports

Consolidated reporting clearly determined based on control principle	Materiality is used to meet needs of preparers and facilitate decision usefulness in terms of determining the nature of disclosure	Scope, “impacts“ and inclusion of supply chain items not clearly determined yet
Audit tries to ensure reliability	Materiality is applied for limiting the scope of reporting	Covered topic areas rather loosely defined and checked
Clear professional background, training and certification infrastructure	Materiality is employed as a technical threshold to organise internal workflows	Unclear expertise
Rule-based reporting	Materiality works to attach relevance to topics and signal rigour as in financial reporting	Reporting based on benchmarking and frameworks

Figure 2-6: Materiality at the interface of financial and sustainability reporting

List of figures

List of abbreviations and bodies

/	AccountAbility
Ceres	Coalition for Environmentally Responsible Economies
CDSB	Climate Disclosure Standards Board
CSR	Corporate Social Responsibility
EFRAG	European Financial Reporting Advisory Group
ESG	Environmental, Social, Governance issues
FASB	Financial Accounting Standards Board
FRC	Financial Reporting Council
GRI	Global Reporting Initiative
GSSB	Global Sustainability Standards Board
IASB	International Accounting Standards Board
IASC	International Accounting Standards Committee
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
IIRC	International Integrated Reporting Council
ISA	International Standards on Auditing
ISSB	International Sustainability Standards Board
SASB	Sustainability Accounting Standards Board
SEC	US Securities and Exchange Commission
TCFD	Taskforce on Climate-related Financial Disclosures
TNFD	Taskforce on Nature-related Financial Disclosures
/	Tellus Institute
/	UN Global Compact
VRF	Value Reporting Foundation
WEF	World Economic Forum

3 Articulation of embedded approaches to ESG: How the loose interaction of matters of concern with matters of fact stabilises responsibility (Paper 3)

Content

Abstract

This paper investigates the process of capturing existing investment practices under the umbrella of environmental, social, governance (ESG) engagement. Drawing upon insights gained by observing the development of an ESG policy in an investment trust, this research addresses the activities and transformations that take place to stabilise responsibility, comprising matters of concern and matters of fact. Despite the increasing corporate focus on ESG, little is known about the inner workings of committing those comprehensive, tacit, embedded approaches to paper. To unpack the unfolding of accounting traces of formerly implicit ESG considerations, the Latourian concept of matters of concern is employed. It argues that the dynamics of articulating existing practices brings matters of concern and matters of fact in loose interaction. These two strands that enable responsibility could not exist in separation but are differently referenced in various contexts. Because of that, the emerging traces of ESG do not result in material changes, disruption or decoupling, instead, they embed responsibility for investment decision-making into the trust's operations. The explicit creation of narrative accounting traces, in addition to the pre-existing concern with corporate responsibility, is perceived as "germination of the seed" by fieldwork participants for comprehensively including the complex issue of responsibility into the investment context. These findings give insights into the workings of accounting representation of an emerging topic in an institutional setting that is *per se* heavily reliant on combining facts and concern in its practices. By referring to these insights, the paper firstly contributes to the analysis of responsibility in accounting as a complex concept and secondly reveals implications for the study of matters of concern as interacting much closer with matters of fact than current scholarship suggests.

Introduction

Since the early 2000s, businesses have considered sustainability related and non-financial aspects of their operations under the umbrella of ESG (environmental, social and governance issues). This comprehensive approach to capturing the company-environment interplay could be witnessed in corporate disclosure, regulatory requirements and business decision-making (Bebbington et al., 2014; Buhr et al., 2014). The multiplicity of tools shaping and being shaped by the responsibility of firms has been described as merely mitigating risk for the corresponding company (Dallas & Patel, 2004). Apart from that, the production of transparent accounts of their operations triggered by increased shareholder demand (Michelon et al., 2020; Michelon & Rodrigue, 2015; Servaes & Tamayo, 2013) or more broadly the reduction of negative consequences of firm externalities on wider society have been described in the literature (Bénabou & Tirole, 2010; Moser & Martin, 2012). Previous academic work has studied ESG as a definite, fixed variable but overlooked the formation of this accounting representation as an organisational process. Especially the role of ESG as a filter in decision-making is far from being unpacked because of its company-internal and often unconscious nature (ibid.). This paper sheds light on the process of articulating long-standing embedded approaches to ESG by observing the development of an ESG policy in an investment trust. Based on a board decision to carve out long-standing due diligence practices and communicate them in a comprehensive ESG policy, an internal project team together with an external ESG consultancy developed the required document. The analysis that followed the conducted participant observation emphasises the complex nature of responsibility and its fit into the existing practices of an organisation. The observed trust combines empirical facts with individual qualitative assessments of potential investments which creates a loose interaction of matters of concern and matters of fact, simply speaking lived, discussed aspects and precise, concluded factors.

The puzzling empirical starting point for this paper builds the observed move in the investment trust from a conviction that "designing or finding a tool or grid [for articulating ESG] should not be too difficult" (T-01[72], 05/05/21, call[73]), to "envisaging the 'product' as a narrative and a framework, table etc." (T-01, 20/05/21, call), to struggles when involved actors "[could not] see the policy yet" (T-01, 01/06/21, call) and lastly stating that the policy is a "very good reflection of what we are doing" (F-02, 27/07/22, interview). Putting existing practices into writing and collecting them under the heading of ESG is apparently a challenging task. More than that, despite the efforts spent on articulating existing due diligence processes and filters as ESG, the result first lead to confusion if not shock in the firm that later resolved into satisfied agreement. Although the process of searching for traces of ESG topics in everyday work routines is praised as "articulat[ing] our approach very well" (F-03, 16/06/21, via email), the consolidated final document is commented as "I was expecting more of a framework" (T-02, 09/06/21, call) but later on seen as a "very reasonable report" (F-06, 11/07/22, interview). Observed actors seemingly grapple with the articulated ESG that should not be "overly analytical, otherwise [one] would not get the full picture" (F-06, 10/05/21, call) but they apparently also "don't feel the need to refer back to the actual framework" (F-02, 27/07/22, interview). These impressions of struggles appearing in the field open up pressing questions on the nature of ESG factors for actors, the process of articulating those embedded, lived practices and integrating the complex concept of responsibility back in as well as the organisational engagement with different

[72] Observed fieldwork participants and interviewees are anonymised as follows: part of the ESG team (T-xx), working in the fund (F-xx), external consultant (C-xx).
[73] Details can be found in the appendix to this paper.

references to the policy. This journey helps problematise how an emerging concern and accounting representations co-emerge and stabilise.

The paper is located at the intersection of two different strands of literature, the scholarly work on articulation and matters of concern as well as the literature on emerging accounting representations. The notion of articulation is used to refer to the observed struggles in the fieldwork organisation as a translation of previously hidden, unconscious processes into written traces (Håkanson, 2007; Tregidga et al., 2014). This articulation leads to a representation of the social world by putting matters of concern into dialogue (Mouritsen, 2011). In this context, matters of concern are publicly disputed aspects while matters of fact are silent, finite objects (Latour, 2004, 2005). These concerns thereby come with a collective, intersubjective component that makes them relevant nodes in an articulation process that opens the black box of isolated facts (Creed et al., 2020). In addition to these considerations, the literature on novel accounting tools and their footprint in organisations is enriched. ESG, as a bundle of activities and traces, clearly is a new form of accounting representation that arguably provides a novel perspective on organisational struggles for implementing an emerging form of representation and thereby revealing attributes of organisational routines (D. J. Cooper et al., 2017; Ezzamel et al., 2004; Grisard et al., 2017; Latour, 1986; Qu & Cooper, 2011).

Consequently, this research project is guided by the following questions: *How does the process of articulating an ESG policy unfold in an investment trust? How is responsibility for ESG issues stabilised in this process? How are references to matters of concern and matters of fact integrated in different contexts?* This paper argues that responsibility for investment decision-making is perceived as a complex issue that gets stabilised by combining matters of fact with matters of concern. Matters of concern have to matter, have to be liked, they have to be populated and durable (Latour, 2004). The loose interaction between these two strands of reasoning pre-existing in the assessment of potential investments is used differently depending on the context. However, the articulation of the ESG policy did not just create matters of fact but brought them into more comprehensive and explicit writing. Consequently, the interaction between these strands created embedding of responsibility into the operations of

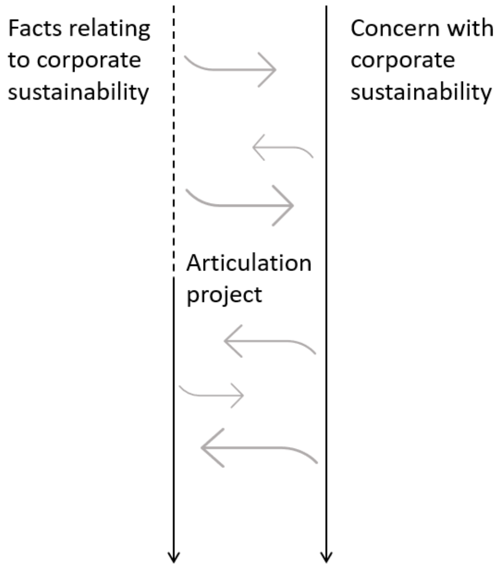

Figure 3-1: Core argument of this paper

the trust while being differently perceived throughout the process and therefore came with observable struggles. In short, to fully integrate ESG matters into the operations of the investment trust, the lived care for this topic area had to be backed up by precise written traces. Figure 3-1 summarises this core argument.

To explore these theoretical objectives, the paper draws on insights gained during fieldwork at a London-based investment trust (approx. 50 employees, one of the UK's ten largest investment funds) and follow-up interviews conducted one year after the initial research phase. Between May and July 2021, a part-time remote internship observing participants and collecting documents has been conducted. The author got involved as a researching intern in performing benchmark analyses of peer approaches to ESG articulation and took part in conducting interviews with employees of the trust on their daily routines of assessing investments. The involvement was closely connected to the company's journey of articulating an ESG policy. Despite having strict due diligence processes as well as a strong discussion culture in place already, the firm put its approach to ESG into writing for the first time. Based on a board decision to engage more explicitly in responsible investment and to comply with the UN PRI standard, a small but high-level, internal team took on this task and interviewed the firm's investment analysts to reveal current practices in relation to ESG. A year after leaving the fieldwork site, follow-up interviews with all involved participants that remained in the firm where conduced to get additional perspectives on the role of the policy in the organisation.

The participant observation and interviews were informed by the documentary method to "uncover meaning-making processes that people in the field use to make sense of their world" (Marvasti, 2014, p. 361). The analysis therefore moves through several steps from the explicitly communicated to the implicit common frame of orientation. This method goes back to Garfinkel's (1986) work on ethnomethodology and the idea to pay attention to the individual for understanding social situations. The documentary method "offers […] an access to the pre-reflexive or tacit knowledge, which is implied in the practice of action" (Bohnsack, 2010, p. 103) and particularly focusses on a separation of different spheres of sense-making which is beneficial for unpacking the complexity of responsibility and references to matters of fact and matters of concern. Given the set-up of the remote fieldwork, this processual component required attention for developing a trustworthy structure of the sense-making.

The observed project team in the investment trust worked on developing an explicit ESG policy, as mandated by a company board decision to comply with the UN PRI reporting standard. Based on interviews with analysts from the different investment teams and benchmarking of peers' approaches, long-standing due diligence processes were articulated as engagement with ESG.

However, the deliverable of the project seemed to be surprising for involved actors that commented on the ESG policy: “I don’t know why… I was expecting some sort of a table for the [ESG] framework … but is it your understanding that these documents essentially are the framework?” (T-03, 09/07/21, call) and later on continued: “I just talked to T-02 and he thinks maybe this is what [the ESG consultancy] calls their ‘framework’ and it’s just our view that it should be in a table. – So this is maybe what it looks like.” (ibid.) Consequently, the articulation of an existing practice appears to result in a structured written format that at the same time requires involved actors to continue assessing ESG factors in their thoughtful, embedded manner.

The main tension of this process is the integration of references to matters of concern and to matters of fact into investment appraisal practises that work with these two strands already. Responsibility for the trust gets stabilised by loose interaction of reference to matters of fact and matters of concern but is shown to be complex. Drawing on a fact-oriented and a concern-driven perspective leads to the observed struggles and disappointments in the articulation process – although investment decision-making processes followed a similar reasoning. In other words, ESG factors had to be aligned with existing approaches to working with information in the investment trust. Before the articulation took place, the perceived care for these topics existed but the documented, precise assessment lacked behind. The project brought these two parts of reasoning together.

ESG aspects are in some contexts perceived as controversial, meaningful, subject to debate and important drivers of analysts’ commitment as participants describe it. Some traces of these already exist but are then articulated in a formal manner as part of the project which removes the concern, “the whole scenography” (Latour 2004, p. 39), and reduces them to a discussion of facts. More specifically, this regress from matters of concern to matters of fact is not a move from concerns to facts but the stripping off of the four specifications of matters of concern (liked, populated, durable, matter for actors) that made them so embedded in the organisational processes. In other words, the ESG policy is not incorrectly summarising the described practices but is not able to articulate the struggles that made ESG factors matters of concern. In short, the envisaged opening up of the black box of inherent, embedded ESG results in a display of disjointed tools (Latour, 2004). The analysis of the articulation of ESG reveals the struggles actors encounter in the process of referring to matters of concern just as matters of fact while making the nature of ESG issues explicit and meeting the requirements of rigorous investment appraisal. The operations of the trust consist of quantitative, empirical assessments and individual, controversial analyses. Some of these processes already refer to ESG in its broadest sense.

However, the articulation of ESG disrupts the loose interaction of matters of concern with matters of fact and is therefore seen as a correct, yet surprising, reflection of practices on the ground. Providing matters of fact through the articulated policy, adds substance to the existing matters of concern and is therefore seen as a novel representation of an existing theme.

These findings show the struggles of accounting representation in an institutional setting that is carefully assessing its practices while struggling with articulating embedded ESG considerations in a rather structured environment. Those struggles are the creation of facts for an existing concern and the challenges of keeping the concern while the facts grow in substance. This analysis firstly enriches the literature on responsibility in accounting as a much more complex concept than clear-cut accountability on the one hand or hard-to-grasp moral liabilities on the other hand. More specifically, the examination of the process of articulation provides insights into accounting representations of responsibility. The analysis helps shedding light on the process of articulating embedded social practices that evolve against the backdrop of populated, disputed spaces as linked to matters of concern. The analysis secondly zooms in on matters of concern that interact much closer with matters of fact than current scholarship suggests. The articulation project as an incidence of explicitly stating the two strands of investment assessment practices shows how the loose interaction of these two matters can stabilise issues without decoupling or disrupting them.

The paper proceeds with a careful disentanglement of notions of articulation in the process of revealing matters of fact and matters of concern. This literature review is followed by a description of research methods, the approach to data analysis and the fieldwork context. The paper then analyses how the articulation project unfolds to stabilise responsibility and how references to matters of concern and matters of fact are differently made depending on the context. It is shown how the articulation of the policy combines matters of concern with matters of fact but the loose interaction of these two strands also triggers some confusion due to the nature of the reference. The paper continues with a discussion of insights gained from this explicit creation of facts for the pre-existing concern that is perceived as disruptive yet not different from other practices. Here, the trustworthiness and durability of matters of concern and their corresponding matters of fact are at stake. The last section concludes the paper by highlighting how the emerging accounting representation of ESG sheds light on the complexity of responsibility in accounting and the interaction of matters of concern with matters of fact.

Literature review

The observed process in the fieldwork organisation includes an internal discussion process and results in an ESG policy as a deliverable. This form of (re)presenting the organisation is here in this paper described as “articulation” (Tregidga et al., 2014). The concept involves disembedding of previously unconscious, hidden or disintegrated ideas in a “process of constructing the dominant discourse around sustainability” (R. Gray, 2010, p. 48). Articulation involves the struggles of unveiling inherent approaches to ESG, highlighting its capacity to “make tacit skills and knowledge explicit” (Håkanson, 2007, p. 51) instead of the more comprehensive concept of codification, which renders articulated aspects in a “fixed, standardized and easily replicable form” (ibid.).

However, the quest for such a standardised format may not always be the main driver for the development of traces which brings codification itself into focus. A symbolic, abstract or even universal representation of practices as related to by codification goes beyond the idea of simply showing – i.e. articulating – existing practices (Agrizzi et al., 2021; Rowbottom et al., 2021; Watkins, 2005). Codification is further understood as emanating from a system of rules or coercive enforcement which has a more dominant impact than articulation (Bebbington, Kirk, & Larrinaga, 2012).

While codification refers to a process that almost follows on articulation, the neighbouring concept of tacit coordination stems from a related yet more linguistics-informed area of scholarship (Scott & Lyman, 1968; Vollmer, 2019). Here, talk is understood as the “giving and receiving of accounts” (Scott & Lyman, 1968, p. 46), an act of accepting responsibility for something without an associated pejorative quality. Thus, the social practice of tacitly coordinating this responsibility results in distinct, regular outcomes without explicit instruction (Vollmer, 2019). Producing accounts through tacit coordination consequently focusses on the structured outcome whereas the coordinated process of getting there remains unverbalised (ibid.)

Against the backdrop of these different nuances of articulation practices, accounting is discussed as involved in both representing and creating a “tiny fraction of potential knowledge” (Mattessich, 2003, p. 455). More specifically, certain forms of accounting, i.e. measures and inscriptions, are seen as able to create spaces of representation for practices (Ezzamel, Lilley, & Willmott, 2004; Mehrpouya & Samiolo, 2016). Mouritsen (2011) describes the nature of representations not predominantly as a form of correspondence but connection with the wider surrounding by “[l]inking representation to a social world [in the form of] a process of translating matters of concern into dialogue and intervention” (ibid., p. 228).

The distinction between matters of fact and matters of concern helps zooming in on the characteristics of the represented. Matters of concern are disputed, uncertain, publicly relevant, populated gatherings, whereas matters of fact remain silent, finite objects (Latour, 2004, 2005). Matters of concern are thereby understood as matters of fact surrounded by everything that belongs to them, “the whole scenography, much like […] shifting […] attention from the stage to the whole machinery of a theatre” (Latour, 2004, p. 39). Matters of fact are precise, harsh, highly coded, indisputable, obstinate and “simply there” (ibid.). Matters of concern, in contrast, have the following four main specifications: First, they have to matter, in other words, they need to be of interest or visible in certain disputes. Second, they need to be liked, a rather hard-to-grasp feature that refers to the necessity of debating the matter beyond a mere presentation of facts. The third specification is that matters of concern have to be populated gatherings, controversial affairs and detached from a bifurcation of objective vs. human representation. The fourth specification relates to the durability of matters of concern that has to be obtained not by closing the debate with a matter of fact but by keeping the dispute alive (Latour, 2004). While related ideas such as matters of opinion, places of concern or traces of concern have been discussed in the literature (Schaeffer & Smits, 2015), the specifications of matters of concern itself will be at the core of this analysis aiming to study the articulation of embedded approaches to ESG. The critical examination of concerns is thereby inspired by Latour’s notion of matters of concern but also paying attention to a more intersubjective, collective understanding of a concern as a matter of interest as developed by Creed et al. (2020). Concerns in this paradigm are seen as products of sedimented, individual experiences and interests that animate the creation of diverse institutional processes. ESG fits this take on concerns well due to its emotionally charged nature and the passion it is met with. In this paper, it is argued that this particular take on representing ESG had to be stabilised by an equally accomplished approach for communication a fact-based assessment.

The paper uses the literature on articulation and matters of concern that relate in their focus on underlying factors for the inscribed but also speaks to the literature on emerging accounting representations. It is not just since the rise of ESG considerations in organisations, that changes in the form of existing inscriptions or the emergence of new written measures have been studied (Ezzamel et al., 2004; Arjaliès & Mundy, 2013). ESG undoubtedly comes with unique perspectives on corporate responsibility, impact and connection to stakeholders but is far from being a novel incidence of forming accounts and narratives (R. Gray, 2010). Research on the introduction of the Balanced Scorecard or activity-based costing highlighted the capacity of explicitly drawing attention to certain topic areas due to the novel instrument – while implicit operational approaches did not change (Cardinaels & Van Veen-Dirks, 2010; Lipe & Salterio, 2002). The process of forming the innovative representation is described as a continuous linking of organisational failures with potential solutions (Greenwood et al., 2002). The organisational process of representing transforms a very specific management tool into management knowledge as a "product of […] local man[o]euverings and understandings" (Ezzamel et al., 2004, p. 1019). These textual forms of local events are mobile and immutable beyond their immediate context which makes them durable representations to act on the captured reality (Latour, 1986; Qu & Cooper, 2011). Given the manifold interaction between accounting representations and organisation, the emergence of traces, which means the struggles of turning implicit processes into accounting representations, remains black-boxed (Grisard et al., 2017).

Against this backdrop, previous scholarly work on representing ESG practices in the financial sector has focussed on the struggle of identifying information as objects worth interpreting (Du Rietz, 2014). The process of distinguishing information from irrelevant accounts co-emerges with the definition of what is searched for and consequently precedes the articulation process (ibid.). Financial inscriptions are described as different from ESG accounting narratives when it comes to the ambiguity of non-financial data, the difficulty of attaching a monetary value to ESG issues and the distortion stemming from aggregated descriptions – aspects that scrutinise the common "integration" narrative (Young-Ferris & Roberts, 2021). Recent research on the workings of this integration highlights the importance of visualisation and financialisation for combining traditional financial measures with ESG factors and representing the latter (Arjaliès & Bansal, 2018). This visibility created by accounting representation of previously hidden aspects is discussed as having an information's origin, a convergence with other accounts, and a use in conflict or resistance (Du Rietz, 2018). These aspects underline the struggles that come with a not neutrally reflecting but shaping exercise of representing ESG practices (S. Burchell et al., 1980). These core ideas, the workings of accounting representation and the capacities of different matters, are mobilised in the following paper.

Methodology

Setting and data collection

This paper is based on 230 hours of participant observation as a part-time intern in a London-based investment trust. The fund is one of the ten funds of the UK with the largest market capitalisation and listed at the London Stock Exchange. The fieldwork took place remotely between May and July 2021. It focussed on the process of articulating ESG in order to comply with the UN PRI – as mandated by preceding company board decision. The involvement included participating in the work of an internal team consisting of the Chief Operating Officer, the Company Secretary and an assistant that interviewed their colleagues in the three investment cylinders of the trust (public equity, external managers and private investments) on their decision-making generally and their ESG considerations more specifically. This engagement was supported by an external consultancy that was specialised in ESG topics and provided advice at several stages during the project.

The trust already had long-standing due diligence and open team discussions in place that indirectly touched upon ESG topics but aimed for codifying these considerations in a more formal way. Prompted by the board that was aiming for compliance with the UN PRI standard, a written policy was envisaged as the "deliverable" to shareholders, employees and the interested public. The three-months process was delimited by a Board Away Day as the deadline for presenting the final ESG policy. The following figure 3-2 gives an overview over the project timeline and the parts of the research study.

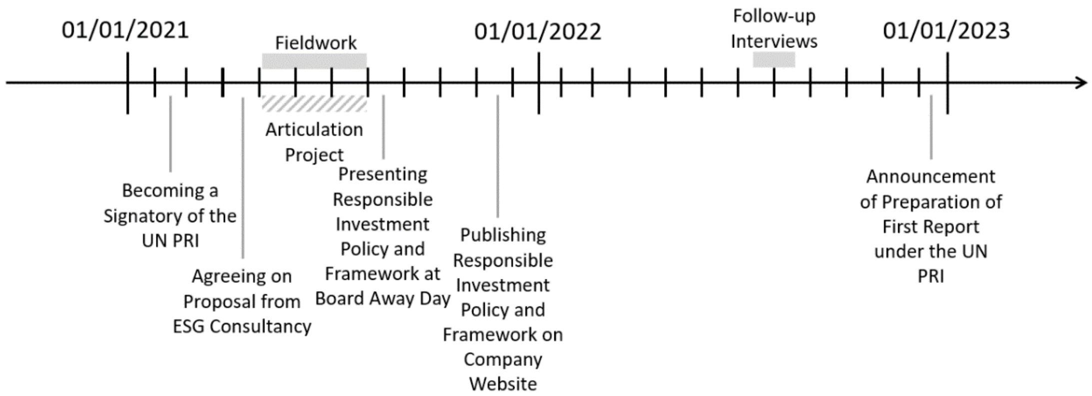

Figure 3-2: Project timeline and research involvement

The process of distilling a policy from the actual practice was structured into a first phase, the interviewing of the firm's investment analysts, a second phase, the analysis of the interviews and benchmarking of peers' approaches, a third phase, the follow-up interviews and a fourth phase, the write-up and circulation. The consultancy was contacted once in each phase to give feedback on tasks completed internally and to give methodological advice for next steps.

The contact between researcher and the project team was initialised in January 2021 through a gatekeeper that had a long-standing relationship with the company. In February and March 2021, the timeline for the research involvement was stabilised and the university's ethics approval obtained. During the internship, comprehensive fieldnotes of both, encountered situations and dialogues as well as reflective thoughts of me as the researcher were taken. The data analysis that was undertaken on days off during the involvement and afterwards is based on these notes and collected materials. The researcher analysed and categorised peer's approaches to ESG reporting, translated the requirements of the UN PRI in concrete action points, derived an interview guide for the discussion with analysts from the consultancy's questions and participated in the interviewing process before distilling findings from the interview notes.

The initial fieldwork in early summer 2021 was complemented with follow-up interviews with all involved project team members and analysts that were still working in the firm in summer 2022. In July and August 2022, six in-person interviews reflecting on the articulation project, the pre-history of ESG in the firm and the usage of the developed ESG policy have been conducted. Interviews were audio recorded, fully transcribed and lasted on average 31 minutes. This additional research stage fed into the analysis of the fieldwork material.

Data analysis

The aim of the analysis is to unpack the process of articulating an ESG policy which stems from existing due diligence to reveal the workings of accounting representation of a fuzzy phenomenon like ESG. The performed discourse analysis is informed by the method of documentary analysis based on Bohnsack (2014) – moving through several steps from the explicitly communicated to the implicit common frame of orientation. This method goes back to Garfinkel's (1986) work on ethnomethodology and the idea to pay attention to the individual for understanding social situations. The documentary method "offers […] an access to the pre-reflexive or tacit knowledge, which is implied in the practice of action" (Bohnsack, 2010, p. 103) and particularly focusses on a separation of different spheres of sense-making which could be beneficial to the analysis of process of articulation (ibid.). In the observed case, such tacit knowledge could be the mentioned moral compass that never before materialised in terms of "ESG".

More specifically, the analysis of field notes, documents and interview transcripts was performed in an iterative manner that moved between basic codes, organising themes and global themes as facilitated by the software NVivo. Core themes emerged in a more functionalist manner (e.g. "ESG can be validated") and in a fuzzy way (e.g. "ESG requires gut feeling") which is reflected in the two-fold interpretation in the analysis. The structured findings, as presented in the next section, emerged bottom-up from the coded observations. The focus of the discourse analysis that targeted the articulation of tacit knowledge was on the intertextual rather than linguistic elements (Fairclough, 1989, 1992). The reference to intertextual elements such as discourse strategies, i.e., moves and countermoves, the usage or omission of genre, certain perspectives or narratives allowed to study the interlinked production of a codified approach to ESG (Fairclough, 1993). Linguistic elements were examined less comprehensively since the scrutinised material did give some insights into phonology, grammar, vocabulary, semantics, intersentential cohesion, argumentation, rhetorical figures and lexical style only (Van Dijk, 1993). These perspectives on the collected data were enriched by including insights from the context, access patterns, setting and participant roles, as well as situational and socio-political or historical context (Baker & Ellece, 2011; Dunn & Neumann, 2016; Wodak, 2001).

Analysis

This paper investigates the process of articulating ESG in an investment trust. The organisational process of articulating formerly embedded ESG takes place as a move from unstructured yet seriously considered, established ESG practices to formalised and still vague processes. In the following, the loose interaction of matters of concern and matters of fact as part of the articulation project is analysed. The observed process thereby reveals characteristics of the persistent investment assessment. Because of that, the articulation of existing ESG results in struggles and surprise which later resolves in calmer satisfaction with or acceptance of the deliverable. The paper argues that the articulation shows how matters of concern and matters of fact interact in the trust. By referring to both strands of reasoning in different contexts, responsibility gets stabilised as following the organisational practices. A loose interaction between matters of fact, like a "traditional financial matrix" (F-03, 11/07/22, interview), and working with matters of concern has characterised the decision-making process of the trust long before ESG became a topic. F-06 describes their reference to disputed, subjective assessments as follows: "Due diligence on people […], understanding people by an instant interpretation of somebody by just basic instinct … that's something I've been doing for over a decade in operations due diligence" (11/07/22, interview). In other words, the trust relied on bringing matters of fact and matters of concern together. The articulated ESG policy follows this procedure but the circulation of it comes with some confusion since the policy reveals the strands of investment practices. By combining matters of concern with matters of fact – as in other parts of investment assessment – the responsibility of the trust gets stabilised and integrated.

Crucially, the written ESG policy is not the first trace of stakeholder-induced consideration of responsibility. F-02 gives insights into the approach to these topics before articulation: "In the last two years, we've got to the stage where […] we have a specific section in our investment papers which we didn't have before, even though I think the topics that we cover in that section, we were all familiar with and adhered to anyway. Within the last couple of years that we formalised that and had a specific section where we detailed ESG. And I think over time, we've developed even that section from being just a general comment on ESG worthiness to making specific comments on each of the E, S and G elements." (27/07/22, interview) Figure 3-3 provides a summary of the observed stabilising of responsibility. In addition to the previous figure which showed the addressing of ESG only, this figure here contrasts investment decision-making and the engagement with ESG factors. It is highlighted how investment decision-making works: matters of concern and matters of fact interact by adhering to a moral compass. Before the articulation project took place, the addressing of ESG could not follow the same mechanisms since the fact side was underdeveloped. The articulation enabled the same interaction as in the investment decision-making and therefore stabilised the care for responsibility.

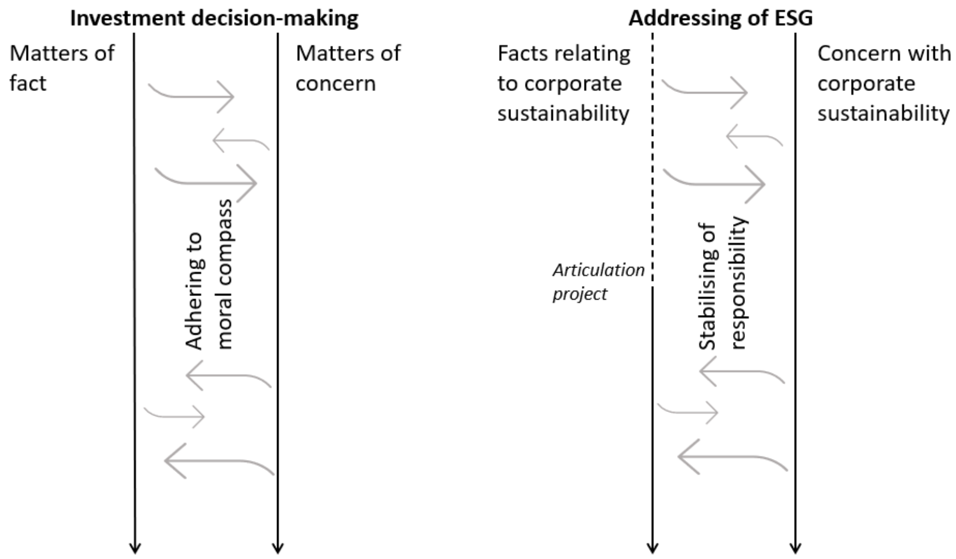

Figure 3-3: Interaction between matters of fact and matters of concern

In the following, ESG is analysed as both, a matter of concern and a matter of fact, to show the loose interaction between these two strands of organisational practices. In short, the analytical focus centres on practices related to the trust's responsibility and the continuous emergence of a complex notion of responsibility, rather than a clear-cut before-after divide of practices.

ESG as a matter of concern

Even before the start of the articulation project, ESG is perceived as a matter of concern by involved actors. The 2020 annual report (pre-articulation project) states that "sustainability is a natural component of how we approach our long-term objectives" (Annual report 2020, p. 6). ESG is not only an emotional passion for most investment analysts, but they also describe it as something they are deeply concerned about, the topic is liked as a disputed topic, ESG is populated and durable as a bundle of factors requiring further definition. F-01 stated in an interview that they were searching for an investment where "their approach resonated with [them], [where they] think the same" (F-01, 12/05/21, interview), rather than hard and fast measures. In other words, gut feeling and manifold heart-felt aspects have been part of the investment decision-making of the trust for a long time. Interviewee F-06 reflects on the pre-history of ESG in the firm as "[we had] a firm with a good, strong culture, social, with good independent controls governance long before, I think, and long after [the articulation project]. It's my bread and butter, it has been since I've been doing this job" (11/07/22, interview).

These characteristics of the holistic approach to investing and assessment of potential investments are disentangled in the following (see figure 3-4). ESG is addressed since it has been a concern. It matters for organisational actors, it is liked as a disputed topic, it is populated and durable. However, the articulation project had to take place to provide the fact-based side of the concern. Beforehand, the addressing of ESG lacked behind in its work with matters of fact. These matters of fact are silent, finite and indisputable as well as precise. The combination of ESG as a matter of concern and a matters of fact stabilises responsibility for the investment trust.

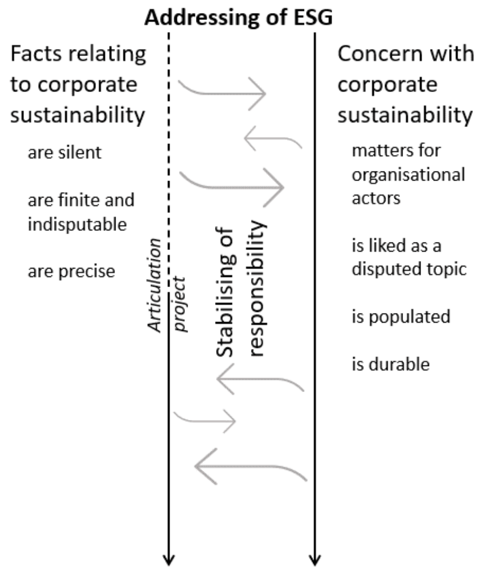

Figure 3-4: Characteristics of matters of fact and matters of concern

ESG matters for organisational actors

ESG is at the heart of analysts' approaches to their daily routines since they firstly understand ESG as aligning with their long-standing due diligence processes. ESG is seen as one filter out of many in the investment appraisal and as a consideration alongside their corporate strategy. They secondly perceive ESG as ingrained in their investment practice, as an inherent feature of assessing potential investments since they always relied on thoroughly understanding and questioning all sorts of impacts of a potential investment. Interviewee F-03 reflects on this continuity of ESG as follows: "The results of the studies were *unsurprising* in some ways because *we already all use* some sense ESG filter… sensibility already, within the various processes for each of the different verticals in the firm" (11/07/22, interview, emphasis added).

Taking ESG in its widest sense into account matters for the observed investment trust. Practices that deal with ESG issues are *en passant* part of day-to-day routines that operationalise the firm's strategy of "aim[ing] to *protect* and enhance shareholders' wealth *over the long term*" (corporate website, emphasis added). The tacit integration of ESG questions does not only align with the corporate due diligence processes but also seems to follow a logic of carefully assessing every investment not only in form but in substance. Even before the articulation project, investment due diligence included team discussions and assessment of various parts of the potential investment in a dedicated form. The 2019 annual report (pre-articulation project) states in the section devoted to assessing private investments:

> "We have considered [...] the results of the [team] *discussions* [...]. We view the work as *detailed, comprehensive* and that the persons preparing the reports have *sufficient and appropriate expertise* through their *experience and qualifications*. Furthermore, we believe that the *process is planned and managed* so as to devote adequate time and resource to preparation and review [...]" (p. 41, emphasis added).

ESG is understood by investment analysts as closely tied to the trust's grown approach to operating and as ingrained in their values as the 2020 corporate report shows: "[the] team [...] operates in accordance with our *core values* within a *culture of high performance*" (p. 6, emphasis added). To address ESG issues is not an additional step in their daily routines but part of their rigorous analysis of potential investments. T-01 explains to his colleagues that they "should not be alarmed. We only codify what we are doing already … nothing more complicated … how we approach ESG right now" (12/05/21, call), "we simply show what we do" (T-01, 12/05/21, interview) and "we create a more formal policy around what, to large degree, we were already doing" (F-02, 27/07/22, interview). Overall, these ESG aspects are latent but conscious, i.e. employees could put a finger on aspects they are proud of, they could explain their strategy or give examples for rejected investments. This take on ESG is integrated but not hidden or invisible for participating actors. The 2020 corporate report refers to this embedded approach to ESG as the following quote shows:

> "[W]e believe that this focus on sustainability is a *natural component* of *how we approach* our long-term objectives; for some time now, we have *more explicitly incorporated* ESG into our fundamental assessment of investments. We will *continue* to develop our approach in this area, which will necessarily evolve over time" (p. 4, emphasis added).

The incorporation of ESG in investment decision-making is thereby just one filter out of many (such as documentation, team discussions or quantitative analyses) that ensure thorough operations and this conviction is communicated to involved employees that are interviewed to "get an understanding of how ESG considerations are currently integrated in [their] work" (T-01, 11/05/21, via email). The project explicitly targeted the "current way of thinking" (T-01, 11/05/21, call) and was described in essence as "a codification of current practice" (ibid.), as "set[ting] out [their] approach in a slightly more formal way" (T-01, 24/05/21, call) or "captur[ing] much of what [they] are already doing in a coherent and disclosable fashion" (T-01, 11/05/21, via email). Even a year after the articulation project, interviewees look back and conclude that the policy is “very good reflection of what we are doing” (F-02, 27/07/22, interview) and that they “don’t think [they] have changed because of [their] policy” (F-06, 11/07/22, interview). The articulation is also seen as capturing the status quo while “retain[ing] the flexibility that [they] have now” (T-02, 25/05/21, call). ESG is also integrated in the operations because of its alignment with current due diligence. Further, ESG is not seen as a separate issue since “value alignment” (F-03, 24/05/21, interview) and “portfolio transparency” (ibid.) are the aims while “controversial topics” (ibid.) get discussed in the teams. This integrated approach to ESG is seen as a rich process which keeps allowing flexibility where necessary.

ESG matters for the trust’s operations since the due diligence processes require a rather long-term oriented take on decision-making. ESG is seen as “a very important objective of the board” (T-02, 04/05/21, call), as triggered by a board decision and leading up to a presentation of the codified policy in front of the board. Based on a board decision – since “shareholders expect you to take ESG seriously “ (T-02, 02/08/22, interview) – the trust signed the UN PRI standard and prepares to report against this standard. However, this motivation for articulating ESG is not understood as driving the issue itself, ESG is rather seen as “practically relevant” (T-01, 05/05/21, call) and based on consciousness in the firm. The policy “must not be culturally alien to [employees]” (T-01, 20/05/21, call with consultancy) that have a “pragmatic” approach (F-01, 24/05/21, interview) to formal ESG. The interviewed investment analyst, F-01, outlines his way of dealing with ESG exclusion lists that some firms use or require: “Questionnaires are easy to fill in and comply with – but we have a more comprehensive, much richer process” (F-01, 24/05/21, interview). He continues to describe the relationship with external fund managers that is strategically employed to scrutinise potential investments and to ensure due diligence. His colleague, F-02, adds that they do not refer to any targets or “hard and fast measures” (F-02, 25/05/21, interview) but rely on their gut feeling to “make sure that [their] investees do not do anything inappropriate in ESG, not the other way around” (ibid.).

In addition to the alignment with the corporate operations, the second factor of this dedicated approach to ESG is the recognition of ESG as inherent to investment practice and as a longstanding factor in rigorous decision-making. The aim of disclosing ESG was to “codify what [they] already do” and to “capture [that] in a coherent and disclosable fashion” (T-01, 11/05/21, call). “An authentic amount of reverse engineering” (T-01, 10/05/21, call) would be necessary to keep the articulated ESG close to the routines executed by investment analysts. F-02 states a year later that this goal was reached since the policy “reflected what we already did” (27/07/22, interview). The articulation of ESG seems to be driven by the conviction that only ESG stemming from practice is “real ESG” (cf. F-06, 10/05/21, call) and that one should not be “overly analytical, otherwise [one] would not get the full picture” (ibid.). Here, a tension between articulating of what has always been part and parcel of the investment process and adequately meeting internal and external expectations to make ESG more explicit seems to occur.

ESG matters for organisational actors whenever the approach is embedded in their routines. Involved analysts understand ESG as close to the corporate due diligence processes and as inherent to investment practices which makes ESG a matter of concern for them.

ESG is liked as a disputed topic

ESG also is a matter of concern since the dispute related to the topic is desired. ESG is understood as firstly requiring gut feeling to be properly executed and secondly, it is seen as a sector-specific, fine-tuned topic. This approach to ESG is prevalent before the start of the project. During the articulation itself, those hard-to-grasp, interdependent, non-financial factors were turned into matters of fact.

This first element of ESG being an actively debated topic is the necessity to rely on gut feeling in the process of assessing investments for their suitability. ESG is not seen as alien to daily investment activities: “You got what I believe is the heart of the matter, namely, to identify how in practical terms […] considerations are embedded in our activities in a way that make them aligned with our corporate objective and a part of how we operate rather than a separate exercise.” (F-07, 28/06/21, via email) F-03 adds via email that “ESG integration into our investment process sounds completely holistic and pragmatic (which it is). […] [We have a] sensible attitude to ESG issues” (28/06/21). And F-02 reflects on this gut feeling as it “comes down to your own moral understanding and compass” (27/07/22, interview). Analysts describe their engagement with ESG issues as relying on “smell tests”, they ask themselves “does it look and smell good” and whether there is a “warm working environment” (F-06, 12/05/21, interview). As long as analysts operate within the leeway of relying on embedded, unspoken – but controversial – feelings, they see ESG as a matter of concern. In other words, the only way to reach the described assessment is to accept the issue as fuzzy and complex. The careful trust in analysts’ understanding of the field from organisational side and an integrated perspective on ESG were rewarded with organisational actors talking about ESG as part of their practices. This approach comes with the challenge of being unable to distinguish between already integrated practices to develop further and those that need to be added to the existing toolbox for investment decision-making.

An important part of the observed fund’s investment decision-making is mitigating risk for preserving shareholders’ funds in the long-term. To rise to this challenge, investment due diligence and operational due diligence are part and parcel of the trust's operations, "it's [their] bread and butter, it has been since [they] have been doing this job" (F-06, 11/07/22, interview). From the start of the ESG articulation project, involved project team members were convinced that "no re-inventing of the wheel or any significant upheaval of what already works well" (T-01, 11/05/21, via email) was required, just some "reverse engineering" (T-01, 10/05/21, call) of existing practices necessary to "retain the flexibility that [they] have now" (T-02, 25/05/21, call). Due to the perceived strict standards of investment decision-making and the corporate culture, the project seemed to be an attempt to detect everything that is already existent and can be articulated under the heading of "ESG": "[investment analysists] should be proud, […] I don't want them to think 'I have to do prep'" (T-01, 10/05/21, call), the team aimed to "find out what [they] already do and codify it" (T-01, 05/05/21, call) while not doing this in a "top-down or prescriptive" manner (ibid.). During the interviews, it became apparent that a public health harming fizzy drinks manufacturer, a greenhouse gas emitting aircraft producer or a privacy interfering intelligence service provider have been rejected as investees despite their impeccable financial credentials (cf. 12/05/21, interviews with F-01, F-03 and F-06).

ESG secondly appears as a disputed topic when certain sectors are mentioned as requiring specific approaches. The conflict here seems to be the necessity to adjust ESG as a bundle of practices to various circumstances while remaining a rigorous investment manager. C-01 does this in a call on 10/05/21, where she recommends to "focus on sectors where business activities have more of a direct and obvious impact on ESG factors". This claim highlights that ESG also gets considered as a sector-specific layer in the assessment of investments. Furthermore, the potential usage of an exclusion list with sectors that are rejected as a matter of principle is a question that runs through the entire articulation project. Interviewed analysts denied the necessity of such a list since there are some firms that "put a lot more effort to be good at ESG but it's a spectrum" (F-04, 12/05/21, interview). More specifically, they do not describe any constraints based on the sector but rather ask "if this sector is excluded who helps the companies through the transition?" (ibid.) or make clear that they look at firms more "holistically" (ibid.), consider the "direction of travel" (ibid.) and ask themselves whether they "like it or not" (F-01, 24/05/21, interview) because of the "natural ESG side to it" (F-02, 25/05/21, interview). ESG becomes an explicit criterion in the assessment of some investments but gets included in the normal course of action due to their attempt to simply "pick the best businesses" (T-01, 20/05/21, call). However, the internal disputes and the pleasure to settle those conflicts runs through the consideration of ESG.

Even before ESG topics were addressed with an explicit ESG policy, environmental, social and governance issues in its widest sense were disputed and required discussing of comprehensive, inherent gut feelings and a granular approach to assessing the nature of requirements of different sectors.

ESG is populated

ESG appears as a matter of concern when it is populated, understood as a manifold concept and seen as requiring specific expertise. These characteristics make ESG similar to practices of the trust that do not explicitly deal with sustainability-oriented questions. Interviewee F-02 describes this fine line between caring about ESG and not directly mentioning it in the following way: "I'd say ESG, although it's tangential to the core investment decision, is probably the first thing we think about when something gets raised at our team meetings" (27/07/22, interview).

ESG is initially populated when a matter is touched upon that requires specific expertise. Interviewees describe this phenomenon when they refer to the struggles of finding a suitable ESG consultancy that can work with their circumstances. Throughout the project, the expertise of the consultancy is questioned or critically examined like "they finally understand that they have to produce something instead of just finding everything interesting" (T-01, 20/05/21, call) or "finally we have a clear commitment of them" (T-02, 03/06/21, call). Even more than that, they were criticised as delivering "generic material that seemed to be compiled in a rush" (T-02, 03/06/21, call) in an internal teams call. This observation highlights the distinct nature of ESG when it comes to dealing with expertise. But also further down the line, F-05, the manager of several interviewees contacted at a later point, was consulted to find out how the "doing" of ESG is considered in his investment cylinder. He recommended: "Start by asking: How do you holistically approach the matter?" (F-05, 10/05/21, call). This approach to executing ESG shows that ESG animates, brings people to thoroughly disentangling debates and to collectively thinking about the core of the dispute.

ESG is also populated as soon as actors come to the realisation that ESG is manifold and hard-to-grasp. The praised flexibility and context dependence of ESG practices also results in collective work to understand and determine the topic. Therefore, peers were taken into account to consider their approach to ESG for getting inspiration for the articulation. However, this sheds a light on ESG considerations themselves that were populated without any weight placed on what others were doing. For example, pictograms used by peers for illustrating their responsible investing policy were acknowledged without having to copy them. The benchmarking of peers was very much driven by how-type questions and layout consideration. The described practice of ESG is manifold, latent and grown but the articulation of it new and black-boxed. Throughout the articulation process, best practices had to be employed to gain insights into peers' approaches to talking about ESG. These considerations included sub-headings, figures, wordings or the use of exclusion lists. The format of the policy that should be the deliverable was so unclear that even the project team became puzzled: "I was expecting more of a framework", as T-02 put it (09/06/21, call). The necessity to search for specific expertise and the difficulty of including peers' approaches to ESG highlight the disputed and collectively assessed nature of ESG.

ESG is durable

Finally, ESG is a matter of concern because it is seen as a durable, ongoing process rather than a fixed policy. "As a firm, I remember long before this project started, ESG was always in front of our minds at what we do" (F-06, 11/07/22, interview). Observed actors talk about it as the difficulty of pinning a practical, lived, emerging set of factors down to a written policy. "A lot of this project is a process but there also is a product" (T-01, 20/05/21, call) which results in the necessity to abruptly freeze an emerged practice. Connected to this is the worry of not being ready to communicate a responsible investment policy to the outside and or to publish a UN PRI-aligned report. T-01 asked the external consultancy in a call "How much do we already have?" and they responded, "maybe 60%" (T-01 and C-01, 03/06/21, call). Independent from this assessment, it remained an aim to report something in every category that ESG might incorporate for peers or a reporting standard. The balance between high-level and granular communication is also a challenge where the talking about ESG becomes further away from practice (cf. T-01, 03/06/21, call).

Together, these quotes highlight the disputed nature of ESG as a topic which turns it into a matter of concern. Thereby, ESG is only durable as long as it remains disputed and subject to debate. All those outlined attributes of ESG, namely the relevance for involved actors, the disputed nature of the topic, the collective, populated approach to dealing with ESG and its durability, make it a matter of concern.

ESG as a matter of fact

During the articulation project itself, i.e. when deeply ingrained, inherent, invisible aspects have to be turned into a written policy, long-standing and emerging fact-oriented practices of the trust become more apparent. The trust describes its approach to investment decision-making as rather conscious of the long-term preservation of wealth and therefore aims for a modest income yield (cf. Annual report 2021). To reach sustainable income in the long run, the trust works with quantitative and qualitative documentation of various sources of information. As previously analysed, ESG fulfilled core characteristics of being a matter of concern. However, as part of the articulation, the fact-based strand of the trust's operations became more visible in the ESG context. This results in greater stabilisation of responsibility as both a matter of concern and a matter of fact. The very first sentence of the ESG policy highlights that it "summarises the alignment between the [corporate] objective of 'delivering long-term capital growth, while preserving shareholders' capital…' with a commitment to principles of responsible investment" (ESG policy, p. 3). It continues by saying that "[this policy] sets out how ESG factors sit alongside traditional financial measures" (ibid.). Consequently, ESG as a topic adhering to the same mechanisms as the organisational practices gets introduced as also relating to facts. The surrounding scenography, the concern, has been around for a long time and facts implicitly appeared but the latter was only clarified and extended as part of the articulation. In the following, the nature of ESG as a matter of fact, as a silent, finite and indisputable, precise issue is described.

ESG is silent

ESG becomes more silent, clearly circumscribed, and captured in writing during the articulation process due to its specification as a tool for attracting talent being directly tied to fulfilling the purpose of finding junior employees. Interviewed actors state that they "recruit around this culture and values" (T-01, 21/05/21, call). Employees are both proud of the ESG encompassing operations and aim to maintain those standards: "If I read something in the news [about the firm] I want to be proud" (F-02, 25/05/21, interview) and "we've got such a high bar on new deals that if there's anything that's at all grey, it's very easy for us to say no" (F-02, 27/07/22, interview). ESG is also understood as something where "the perception needs to be internally driven" (C-01, 03/06/21, call). It has been communicated to interviewed employees that the project team will "draft the framework and get back to [them] to see that [they] are happy about it" (T-02, 25/05/21, call).

The ESG policy more explicitly models ESG to a silent, fact-like input-output relationship as in "ESG factors will influence a company's *performance*" (p. 4, emphasis added) or in "we've got a good sense of what responsible investing is [and we] apply that to both our operations and to our investment" (T-02, 02/08/22, interview). Leaving room for some discretion and leeway, ESG remains a financialised measures as described on page eight of the policy:

> "The team choose *not to use standardised checklists* which invariably become *'tick box' exercises* and hence do not give sufficient colour or nuance to our ESG analysis. Rather we are committed to a *'deep dive'* which gives us a comprehensive understanding of relevant ESG factors for that particular investment. Crucially, the depth of our

relationships with many investee companies gives us *leverage* and enables us to *press for practical improvements*." (emphasis added)

This rather loose approach to ESG that is at the same time reduced to a financial impact measure is taken seriously "in the event that the investment falls short of the *standards we expect* and gives rise to *significant ESG concerns*, then we will take steps to *redeem our investment* in the manager" (p. 11, emphasis added). Put differently, ESG is used as a non-disputed, fixed concept that should fulfil a purpose beyond its meaning for the firm as a matter of concern.

ESG is finite and indisputable

ESG also becomes a much clearer matter of fact that is finite and indisputable as part of the articulation process once peers' approaches to ESG are analysed and taken as a benchmark without discussing the suitability for the specific circumstances of the trust. Moreover, ESG that previously was seen more as a process or a journey, is now reduced to a clearly determined project that might get improved in the future but at this stage of the project, no room for development is granted. Consequently, ESG can be described as closed, self-contained topic area that does not require negotiated approaches for dealing with it.

The benchmarking of peers firstly shows that the articulation itself turns ESG in an indisputable matter of fact. As previously described, the ESG policies of peers were analysed to find formatting solutions or inspiration for the structure of the document. More importantly, the dispute itself is translated into a silent, closed, accurate writing task. The project team therefore does not discuss what other funds in the field are doing in relation to ESG factors, they rather examine their way of writing about it. This take on the articulation process indicates an emotionally reduced debate of the issues. Further, interviewee F-04 signals in their reflection on the nature of the articulation project that "the idea was obviously to consolidate thoughts across the firm and to make a consistent policy across the firm" (11/07/22, interview), i.e. create closure and consensus for disputed topics.

The articulation of ESG is secondly seen as an indisputable matter of fact that should deliver a clearly determined policy. The articulation of ESG is perceived as producing "something to show" (T-01, 24/05/21, interview and T-02, 25/05/21, interview) to the outside world through a "good chunk of reverse engineering but that's plausible and legitimate" (T-01, 21/05/21, call). More specifically, the main characteristic of the distilled ESG practices is that it should be "coherent and disclosable" (T-01, 11/05/21, call) as well as "more formal, not the disjointed" (T-02, 10/05/21, call). The vision of deliverable of the project changes in clarity over time. While in the beginning, the overriding idea is that "designing or finding a tool or grid should not be too difficult" (T-01, 05/05/21, call), it shifts to "envisaging the 'product' as a narrative and a framework, table etc." (T-01, 20/05/21, call) and lastly to struggles since T-01 "cannot see the policy yet" (01/06/21, call).

During the process of articulating ESG, the team had to admit that "there are some parts where we have to say: we need to go the other way around and bring something to them top-down" (T-01, 20/05/21, call). This decoupled perspective on ESG was a conscious choice but motivated by saying that it "must not be culturally completely alien to them but we will be able to integrate it" (ibid.). The development of ESG was also the main area of critical debate with the consultancy because the integration narrative of the trust and the improvement idea of the ESG consultancy – as shown in the project plan and communicated in team calls – clashed. T-02 openly criticised C-01 during a call on 01/06/21 that they would not understand that ESG is only one filter out of many and not an ambition for the future. This difficulty of locating the practices of the trust on the scale of having organically grown approaches to ESG or having to implement further aspects remains an issue throughout the articulation process.

The ESG policy refers to ESG as a finite and indisputably clear set of measures that play a set role in corporate decision-making processes, like on page three of the policy: "ESG factors sit alongside traditional financial measures to provide a holistic view of the *value, risk and return potential* of an investment" (emphasis added). By including these factors into investment appraisal, shareholders' wealth can be "protect[ed] and enhance[ed] [which] reflects our *investment values and our financial goals*" (p. 3, emphasis added). Moreover, the "continual engagement with our counterparties will help protect and enhance our shareholders' capital which is our *core Corporate Objective*" (p. 4, emphasis added). These indisputable factors are considered to investigate "investment opportunities where the *potential returns* align with high standards of *business conduct, risk management, independence of governance, and transparency*" (p. 5, emphasis added). Thereby, ESG measures are taken for granted as clear, finite aspects that serve their purpose in assessing potential investments: "We focus on businesses and external managers with *solid business models, strong management, a principled culture*, and a *commitment to the long term*. As a result, we look for counterparties with *impeccable credentials*" (p. 7, emphasis added). Interviewee F-06 adds the reputational effect of these values to the mechanism: "So your reputation of how you behave individually and collectively is hugely important to our brand name. […] That's in your ESG, if you ask me" (11/07/22, interview). These factors are consequently employed for both understanding investment strategies and ensuring integration in the pursued strategy. Again, two finite, indisputable input-output relations as described on page ten (emphasis added): "This […]

produces a comprehensive understanding of the *drivers of returns* but ensures that potential managers are fully *aligned with our Corporate Objective and values*."

ESG is precise

ESG lastly becomes a much stronger matter of fact during the articulation as soon as the manifold and intensively discussed topic gets complemented by traditional financial measures. The hard-to-grasp engagement with ESG factors that was discussed with all factors that make it a matter of concern is given a layer of accuracy by collecting aspects that can be validated.

The former debate of ESG as loosely fact-related moves into the direction of becoming a matter of fact due to the focus on validation and measurement during the articulation phase. Although the articulation project aims to reflect the current approach to ESG, the instruction of measures is discussed in the context of the articulation. Formerly unimportant criteria, e.g. one information session on ESG per year for each employee as a target, are discussed for validation purposes. This form of validation does not gain traction beyond the articulation project but becomes apparent during the project. Apparently, it was an idea stemming from the mindset of the articulation project rather than a more concrete action plan. Linked to this perspective on measures is the employment of ESG as a leverage for fostering financial measures as the policy indicates: "We have a deep understanding of the ways in which ESG issues can affect *investment performance* and therefore may drive *returns* or expose our portfolio to potential *investment risk*" (p. 7, emphasis added). The fuzzy nature of ESG becomes apparent in F-02's perspective who says that "flexibility I think is the wrong word. I think there is subjectivity because some of these issues are subjective rather than objective. I mean, there are shades of grey I think around some certain issues. But I think ESG is generally hard and fast, yes or no. I think other filters are sometimes more subjective" (27/07/22, interview).

However, the ESG policy describes the employed measures as clearly determined and precise factors that allow drawing financial conclusions from them: "Integrating the analysis of ESG factors in the investment process helps to *deliver enhanced risk-adjusted returns* over the long term" (p. 4, emphasis added). ESG became a distinct item on the investment due diligence form and it entered team discussion. The policy continues with exact and definite consequences of this matter of concern in describing the impact of the policy as "enabling us to meet high standards of ESG consideration, thereby *reducing risk exposure, enhancing returns and meeting the expectations of our shareholders*" (p. 6, emphasis added). The formerly disputed area of concern is eventually summarised as allowing "evaluat[ion of] this information in light of material considerations, taking into account *ESG quantifiable metrics*, as well as how they *compare* to their sector peers" (p. 9, emphasis added). The consequence of this engagement with ESG factors is summarised in a precise manner: "Our investment decisions therefore benefit from a *rigorous, credible evidence base* and enables consideration of each opportunity on its merits, *including ESG factors*" (ibid., emphasis added). The evaluation of ESG aspects is finally seen as following financial assessment mechanisms that allow testing like in the case of traditional investment appraisal techniques: "We refer to their historical portfolios to *test their alignment* with our expectations and we will take a particularly close look at the *health of the firm's culture*, with an emphasis on excellence, accountability and respect" (p. 10, emphasis added).

In sum, ESG before the articulation project clearly was a disputed, populated issue that then gets articulated as a precise matter of fact. The characteristics that made this topic area a matter of concern, as described above, get complemented by silent, finite and precise measures and ESG turned into a matter of fact.

Discussion

This paper studied how matters of fact become more formalised in the described ESG articulation project. As a consequence, responsibility of the organisation is perceived as more complex but also more tightly integrated into existing practices. Long-standing matters of concern have been supplemented by implicit as well as formalised matters of fact, such as a "specific ESG section in [their] investment papers" (F-02, 27/07/22, interview), but became thoroughly complemented only by articulating matters of fact. Due to this closing up of matters of fact to the integration of ESG-related matters of concern, the concern with corporate sustainability could become part of organisational practices. Having these two strands of the consideration of ESG on an equal footing, triggered some confusion in the process because ESG has been perceived as an integrated yet alien concept. However, this period of struggle was closely followed by acceptance and integration which allowed bringing matters of fact, i.e. precise aspects, and matters of concern, the lived care, in loose interaction.

The observed fieldwork organisation itself summarised its ESG project as pursuing three purposes, namely "investigat[ing] the *current implicit involvement* of ESG considerations in investment analysis, investment management and active ownership as well as [their] own operations; communicat[ing] *existing ESG practices* to internal and external parties, strengthen[ing] the *integration of ESG factors* in [their] sustainable, long-term oriented investment approach as well as [their] corporate values" (PowerPoint presentation, Board Away Day 08/07/21, p. 5, emphasis added). These bullet points highlight the nature of the engagement with ESG issues for involved actors. The project was designed to transfer existing, lived practices into written format, not to improve routines or to invent novel approaches to the topic area.

Existing ESG-related processes such as operational and investment due diligence, team discussions, smell tests were articulated in the policy. In other words, this fine line between expressing existing practices and showing them in a structured manner that might look unrecognisable, triggers some confusion over the extent of change related to the project.

The articulation process enabled an integration of ESG considerations in decision-making processes that were well-established in the organisational context. In other words, ESG aligned with established approaches to combining facts with concerns, measures with gut feeling. The loose interaction between these two strands in decision-making introduced a complex notion of responsibility that matched existing organisational practices and therefore integrated well. However, the project revealed struggles with bringing both sides of the engagement with ESG, the matters of fact and the matters of concern, together. The described interaction of both strands can be illustrated by the following sentence from the policy: "[this policy] enable[s] [the company] to meet high standards of ESG consideration, thereby *reducing risk exposure, enhancing returns and meeting the expectations of [their] shareholders*" (p. 6, emphasis added). Both, the disputed, populated, lived nature of ESG, i.e. the high standards of ESG consideration, and the clearly determined, precise, silent account of ESG are brought into conjunction.

Thereby, the framing of existing practices changed, while the dominant rhetorical claim underlined that nothing had to be changed in order to produce an ESG policy. This clash is at the core of the engagement with ESG for the trust. Here, the mobilised literature on representations of embedded unconscious knowledge is enriched. The balancing act of matters of concern and matters of fact represents and creates a stabilised practice. These two strands together embed the engagement with ESG in existing practices while providing a structured, durable base for the emerged care for ESG issues.

Further, the tension of preserving an unstructured assessment in the structured setting of rigorous investment appraisal was resolved by articulating and formalising matters of fact to balance the mere attention to matters of concern out. The deliverable of the project, the ESG policy, articulates alignment of corporate strategy and ESG assessment. Consequently, the rigour in investment appraisal enters the debate of ESG which strengthens both strands. ESG as a part of the corporate strategy and the previously vague approach to ESG clashed in their rigour which could be resolved with the formalisation exercise. The paper argues that this interaction between articulated facts and acknowledgement of heart-felt drivers in this topic area results in integration of ESG in the operations of the trust. Moreover, the formerly fuzzy consideration of responsibility becomes a legitimate topic for involved actors and therefore more stable. The following figure illustrates the stabilising of responsibility as a balancing act of matters of fact and matters of concern. Responsibility gains durability in the organisation by combining matters of concern with matters of fact. During the articulation project, responsibility becomes framed in a way that aligns it with existing practices and therefore allows a stable integration.

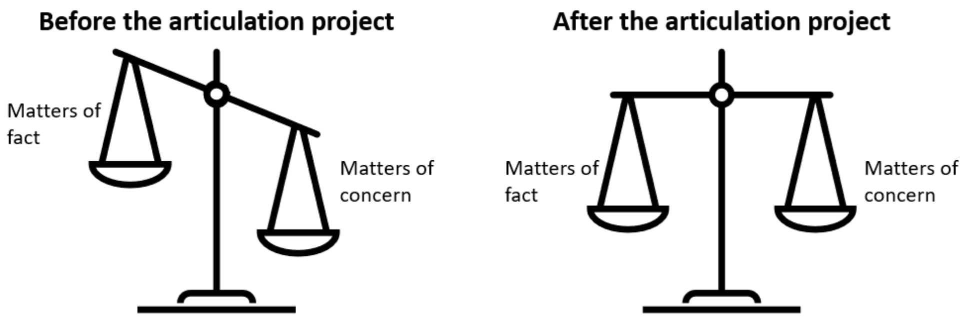

Figure 3-5: Stabilising of responsibility

The presented material suggests that a "strong moral compass" (PowerPoint presentation, Board Away Day 08/07/21, p. 8) of employees can run – together with consideration of ESG factors – "through all phases of the investment process" (ibid.), in other words, matters of concern and matters of fact. The introduction of articulated matters of fact leads to a shift in balance and causes confusion that is later on leading to acceptance. Bringing in ESG issues as a topic area worth-considering while at the same time framing this form of responsibility as long-standing, results in confusion over the suitability of the concern against the background of existing practices. These findings align with well observed processes of struggles with implementing novel accounting representations that cause organisational contention over adequate information (Du Rietz, 2014). The described case goes beyond this understanding since no visible conflict is part of the articulation project, rather agreement and manifold involvement in the process (Du Rietz, 2018).

The articulation process principally addresses all three letters in the ESG acronym, notwithstanding a different approach to them beforehand. Interviewee F-06 observed the following: "So the S and the G have always been there. […] The E is the thing which I don't think I've changed because of our policy. I think I've […] probably changed because of the shift in the world order in terms of how people […] think about the impact to the environment" (11/07/22, interview). Social, governance and environmental issues developed over time, not only for the firm but also for the outside world. While the "nature of the firm guides the questions and it depends on this nature" (F-04, 12/05/2021, interview) how ESG criteria are employed, for the topic area of the social, policies are vaguer than for environmental or governance aspects. The ESG policy describes social factors for example as "open and honest communication across the firm" (p. 14). In the environmental area, measures such as "removal of bottled water" (ibid.) are listed. Governance considerations include board committees, oversight procedures and shareholder engagement, i.e. strictly regulated aspects. Consequently, the ESG filter is active at different points in the assessment process. F-04 refers to his way of thinking as

> "I don't run ESG screens, we are not an ESG fund, we have no constraints… If a sector was excluded, who would help these firms through the transition? We have good companies and we avoid some companies. We ask ourselves 'Are there reasons we should not invest?' … large cap will have ESG frameworks in place anyways" (12/05/21, interview).

The situation before the articulation took hold thus tried to prevent investing in ESG harming firms. After making these factors more explicitly part of the policy, the filtering shifted from a "bad reject" filter to a "good pass" filter with more descriptive, more formalised rules. These processes unfold against the backdrop of a corporate culture that suppresses conflict over value-oriented, ethics-related topics as well as the demand of the board. As F-02 puts it: "There was a detailed and iterative process involved in putting the framework together. And I think that is synonymous with the culture here" (27/07/22, interview).

One might be concerned about the fine line of pre-existing matters of fact, like the ESG section in investment papers, and the explicit mentioning of these in the developed policy. This paper argues that this is not a paradox of engagement it rather allows novel insights into the substance of matters of fact (Latour, 2004). Not lacking complexity, as the presented material suggests, the characteristics of matters of facts for involved actors themselves, namely their silence and precision, induce meaning in the process. These concerns still matter for actors and play their role in condensing lived practices into a written policy. By providing the core of the disputed factors without engaging with the discussion itself, they facilitate the transition to a stabilised concern. Apparently, they are more than just matters of concern without their scenography.

Overall, the analysis reveals how struggles of accounting representation unfold in a structured institutional setting where actors assess their practices and try to integrate a moral-oriented vague filter into decision-making. This analysis enriches the literature on matters of concern by providing a pivotal case of adding more explicit matters of fact to a strong consideration of matters of concern. This stabilising of responsibility as an internal practice and an external communication device is thereby grounded in a combination of rigour and careful assessment while having to transport the opaque nature of ESG within one set of practices and representations. These findings give insights into the workings of accounting representation of an emerging topic in an institutional setting that is *per se* heavily reliant on combining facts and concern in its practices. A second contribution to the literature stems from the examination of the process of articulation that is linked to accounting representations that work with matters of concern. The analysis helps shedding light on the process of articulating embedded social practices that evolve against the backdrop of populated, disputed spaces as linked to matters of concern. Consequently, the analysis enhances scholarly work by providing perspectives on both the nature of matters of concern and the struggles of their articulation. Referring to these insights firstly contributes to the analysis of responsibility in accounting as a complex concept and secondly reveals implications for the study of matters of concern as interacting much closer with matters of fact as current scholarship suggests.

Conclusion

This study set out to explore the development of a narrative ESG policy in an organisation from the financial sector. The articulation of embedded practices unfolded over several months of interviewing involved financial analysists, benchmarking peer approaches to putting ESG into writing and drafting a compiled policy document. This paper has argued that the observed investment trust used to handle matters of fact in conjunction with matters of concern in their established decision-making. Dealing with metrics and individual assessments has been at the core of the operations for long. Once ESG entered the debate, this long-standing approach could not fully unfold since the "concern" strand of the emerging practice was so much further developed and apparently stronger than the "fact" strand. The articulation of these matters of fact brought the addressing of ESG back in balance. After a short period of confusion over the developed accounting representation of a heartfelt topic area, the approach to ESG aligned with existing practices and therefore, responsibility could be stabilised. Matters of fact and matters of concern can loosely interact with each other once the two-fold practice is established. The articulation project completed the surrounding context, what Latour (2004) calls the scenography, with a structured, precise and condensed account of the debate.

These findings give insights into the workings of accounting representation of an emerging topic in an institutional setting that is *per se* heavily reliant on combining facts and concern in its practices. Referring to these insights firstly contributes to the analysis of responsibility in accounting as a complex concept. Responsibility is shown to require a fact-based and a populated, debated strand to align with existing practices. The concept is not just accepted because of its moral importance or is clear-cut accountability, it rather requires treatment similar to other topic areas present in the organisation. The findings also shed light on the process of articulating embedded social practices and the emerging of accounting representations. As the outlined literature suggests, accounting representations influence the preparing organisation as much as the organisation shapes the tool. However, the presented insights gathered by this study highlight how an articulation process can structure emotionally driven practices in a way that embed these even more in the practices of the firm. This consequently is a novel insight into mechanisms of turning implicit approaches into explicit narratives. The paper secondly reveals implications for the study of matters of concern as interacting much closer with matters of fact as current scholarship suggests. Only by bringing these two strands into the organisational context, a highly complex responsibility can thoroughly unfold and sustain. In other words, together, matters of concern and matters of fact can build the frame for the organisational addressing of a hard-to grasp topic area.

A question raised by this study is how references to matters of concern and matters of fact integrate in different contexts. While the observed investment trust started their engagement with the topic from a moral point of view, it would be worth investigating how the loose interaction of matters of fact and matters of concern develops in situations where metrics and precise measures were introduced first and a moral conviction to take on responsibility appeared to be less dominant. There is, therefore, a definite need for further disentangling of the struggles of embedding ESG in the organisational context of various institutional setups.

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Appendix

Empirical material

Fieldnotes

- Participant observation in ESG policy articulation project team
- Employed as research intern
- Remote part-time fieldwork between 01/05 and 31/07/2021, predominantly on Mondays, Tuesdays and Wednesdays
- 230h of participant observation in total
- Professional affiliation: Working for the studied fund, part of the ESG project team (3), working for the studied fund, not part of the ESG project team (7), working for the ESG consultancy (1)
- Categorisation of pseudonyms in this paper: Part of the ESG team (T-xx), working in the fund (F-xx), external consultant (C-xx)

Observed fieldwork participants

Pseudonym in the paper	Letters in research process	Involvement	Role
T-01	IA	Internal, ESG project team	Chief Operating Officer
T-02	IB	Internal, ESG project team	Legal Manager and Company Secretary
T-03	IC	Internal, ESG project team	Executive Assistant to COO, Project Assistant
F-01	ID	Internal	Senior Funds Executive
F-02	IE	Internal	Head of Private Investments
F-03	IF	Internal	Senior Funds Executive
F-04	IG	Internal	Head of Public Equities
F-05	IH	Internal	Chief Investment Officer
F-06	II	Internal	Senior Funds Executive
F-07	IJ	Internal, member of the board	Non-Executive Chairman
C-01	EA	External, consulting	ESG Consultant

Fieldwork details

Date	Working hours	Time
04/05/21	9:00-18:00	9h
05/05/21	9:00-18:00	9h
10/05/21	8:30-18:30	10h
11/05/21	8:30-18:30	10h
12/05/21	8:30-18:30	10h
Interval		
20/05/21	16:00-17:00	1h
21/05/21	8:00-9:30	1.5h
24/05/21	8:30-18:00	9.5h
25/05/21	8:30-18:00	9.5h
31/05/21	UK Bank holiday	0h
01/06/21	9:00-18:00	9h
02/06/21	9:00-18:00	9h

03/06/21	10:00-11:00	1h
07/06/21	8:30-18:00	9.5h
08/06/21	8:30-18:00	9.5h
09/06/21	8:30-18:00	9.5h
14/06/21	8:30-18:00	9.5h
15/06/21	8:30-18:00	9.5h
16/06/21	8:30-18:00	9.5h
21/06/21	8:30-18:00	9.5h
22/06/21	8:30-18:00	9.5h
23/06/21	8:30-18:00	9.5h
28/06/21	8:30-18:00	9.5h
29/06/21	8:30-17:00	8.5h
30/06/21	8:30-18:00	9.5h
05/07/21	8:30-18:00	9.5h
06/07/21	8:30-18:00	9.5h
07/07/21	8:30-18:00	9.5h
Total		230h

Documents

- ESG Report, Greenwood UK Wind, 2019
- Sustainable Investing Policy, J.P. Morgan Asset Management, 05/2020
- Responsible Investment Policy, Dalmore, 06/2020
- Responsible Investing Policy, Aberdeen Standard, 07/2020
- Responsible Investment Policy, Troy Asset Management, 08/2020
- Unlocking value through ESG integration, Presentation and discussion document, 09/2020
- Responsible Investment Policy, Ruffer, 10/2020
- Sustainability Policy, InfraRed, 10/2020
- Sustainable Investing: Principles and Policies, Franklin Templeton, 01/2021
- Responsible Investment Policy, Cordiant Capital, 02/2021
- ESG Policy, Harbour Vest, 03/2021
- Responsible Investment Report, Ruffer, 03/2021
- Annual Report 2020, Witan, 03/2021
- Environmental, Social and Governance Policy, Ancala, 03/2021
- [Name of the trust] Responsible Investment Framework, Reporting against the PRI: Benchmarking document, 05/05/2021
- Responsible Investment Framework, interview guide, 12/05/2021
- Responsible Investment Framework: Best practices for specific sections of the emerging framework, document, 26/05/2021
- Responsible Investment Framework, drafted document, 06/2021
- Responsible Investment Framework: Note for Introduction (PRI focus), document, 01/06/2021
- Reporting against the PRI in annual reports, document, 23/06/2021
- Responsible Investment Framework and Policy, presentation Board Away Day, Version 1 to 6, 07/2021

Interviews

- Number: 6
- Timeframe: July - August 2022
- Length: between 22-40 min, 31 min on average

Interviewees

Pseudonym in the paper	Letters in the research process	Role/ comment	Location	Date	Duration in min
T-01	IA	retired, left the firm	n/a	n/a	n/a
T-02	IB	Legal Manager and Company Secretary	UK	02/08/2022	40
T-03	IC	left the firm	n/a	n/a	n/a
F-01	ID	Senior Funds Executive	UK	11/07/2022	27
F-02	IE	Head of Private Investments	UK	27/07/2022	34
F-03	IF	Senior Funds Executive	UK	11/07/2022	27
F-04	IG	Head of Public Equities	UK	11/07/2022	22
F-05	IH	not available for follow-up interview	n/a	n/a	n/a
F-06	II	Senior Funds Executive	UK	11/07/2022	28
F-07	IJ	not available for follow-up interview	n/a	n/a	n/a
C-01	EA	not available for follow-up interview	n/a	n/a	n/a

Interview guide

Introduction

- Introduce myself
- Explain the purpose of this research: gaining insights into perception of ESG articulation project and implementation of policy one year after development
- Thank for agreeing to participate
- Explain confidentiality and right to withdraw
- Review and sign information sheet as well as consent form
- Ask to record the interview

Interviewee background

- [information on interviewee]

Guiding interview questions and prompts

Interview questions	Research motivation/ purpose
Involvement in articulation project • How did the project start, what's the pre-history? • Could you summarise your role in the articulation project? • How did you perceive the articulation project? (Where did it start? Where did it end? How is it currently evolving?) • What's the output of the project? Are there new indicators now?	Relate back to participant observation and the articulation project
Connection of the interviewee to ESG • What is ESG for you (in your daily practices)? Give me an example! • Did your perspective on the importance or practice of ESG change during the articulation? Give me an example! • How and where do you talk about ESG in your daily life? Here in the trust?	Approach concrete experience and not only opinion of interviewee in relation to ESG
Work with ESG policy • How do you work with the ESG policy? Give example! Do you refer to it? Do you use it to explain something to external parties/ new joiners/ in discussions? • Did your practices change? Talk me through a typical day at work/ a typical team discussion! • How do you use your moral compass? (How)did corporate values change? • In how far is ESG one filter out of many in the investment appraisal process? • In your opinion, are E, S and G differently perceived? Give me an example!	Disentangle role of the policy from grown considerations Do not refer to meta-discourse only

Concluding

- Is there anything else you would like to share about your experiences?
- Would you recommend anyone else as an interviewee?
- Thanking for the time and concluding interview

List of figures

Discussion: How the concern with corporate sustainability reveals a grammar of demarcation

This thesis forges a bridge from the concern with corporate sustainability to delimiting the corresponding responsibility through various meanings of responsibility in the corporate context. In this section, a grammar of demarcation is introduced to state the wider contribution of this research project. Since grammar in a literal sense refers to the rules in a language for changing the form of words and joining them into sentences (cf. Oxford English Dictionary, 2010), the metaphor is employed here to examine demarcations as changing forms as well as their engagement in separating or bridging several spheres. This approach to demarcations helps seeing them as interrelated concepts that at the same time adhere to different rules for linking, crossing or shifting the demarcation.

To study a phenomenon always means to draw a line around the object of investigation, to exclude unrelated matters, to define a category of interest, to make a distinction between inside and outside the scope as well as to set boundaries for the research. Most notably in an academic context, where the word "to define" already includes a boundary-drawing property[74], the importance of demarcation becomes explicit. Differentiation of entity and surrounding is a necessary condition of perception and therefore plays an important role in the construction of reality (Keshet, 2011; Lamont, 1992; Lamont & Molnár, 2002; Santos & Eisenhardt, 2005; Wimmer, 2014; Zerubavel, 1991).

Lines, distinctions, classifications, boundaries, borders, edges, margins, rims, frames and islands of meaning are employed in all sorts of contexts: We classify diseases and categorise books, we travel across borders and set ourselves limits but we also tacitly employ frames, sort some things and match others. Four main strands for the "topography of things" (Bowker & Star, 1999, p. 31) emerge in the literature and will be analysed in this discussion: boundaries, categorisations and classifications, frames as well as permeable demarcations (Bowker & Star, 1999; Casey, 2011; Zerubavel, 1991).

While the following discussion does not aim to synthesise these concepts, its goal is to provide a more comprehensive understanding of the entity, especially the corporate entity, by shedding light on these concepts of demarcation from a wide range of sociological, economic and political perspectives. These different processes of demarcating are studied as work in progress that might come to a momentary halt but are fundamentally subject to constant emergence,

[74] The word "to define" is derived from the Latin word "finis" for limit, end, boundary (Zerubavel, 1991).

rebuilding and maintaining. The starting point of this discussion is the assumption that demarcations are unstable social constructs that are contingent on actors shaping them.

This discussion lays bare often implicit demarcating processes to formulate the theoretical contribution of the thesis. The context of corporate social responsibility on the one hand enables investigations of shifting processes of demarcating the accounting entity itself and on the other hand invites questions of where and how to draw a boundary around businesses' impacts. Both perspectives incorporate conceptual, programmatic and practical aspects that are unpacked. The concern with corporate sustainability is an example of an emerging field of knowledge that invites a comprehensive examination. Unpacking the concern reveals how emerging accounting representations of corporate social responsibility develop between financial accounting and responsibility for ESG factors.

The first paper shed light on the historical emergence of the concern with corporate sustainability and revealed how responsibility became more comprehensive in the spatial, temporal and substantial dimension over time. In this part of the thesis, it is argued that firms explicitly focus on materiality of responsibility whereas processes of taking on responsibility implicitly remain powered by a voluntary adoption of responsibility. The second paper enriched the analytical progress of the thesis by arguing that materiality is implicated in relational dynamics when it is mobilised in cooperative and competitive ways. To make this point, the paper provided a detailed empirical account of roles of materiality and boundary formation in the standard-setting field for reporting on the concern with corporate sustainability. The last paper connected the various meanings of responsibility and processes of boundary drawing with insights into the articulation of the concern with corporate sustainability in an investment trust. It argued that responsibility requires a fact-based and a populated, debated side to align with existing practices.

Taken together, this discussion builds the contribution of the thesis that teases out shifting processes of demarcating the accounting entity to understand how accounting enables and disables corporate responsibility. The first paper indicated how different areas of the concern with corporate sustainability gain traction in corporate responsibility over time. The second paper zoomed in on the regulatory standard-setting for forms of accounting to address such responsibility. The last paper revealed how accounting traces emerge to embed this responsibility in organisational practices. More specifically, the various underpinning concepts of demarcation refer to the overarching research questions, how corporations take on responsibility for the concern with corporate sustainability and how they demarcate their responsibility for issues that potentially lie outside their firm. This discussion of practices of the concern with corporate sustainability reveals a grammar of demarcation and responds to the research questions addressed in the thesis: The empirical insights across the three papers suggest that firms are caring about "more", i.e. regions further away, a variety of stakeholder groups and a multiplicity of topics in their supply chains and their factories ranging from human rights to carbon emissions. To make sense of such widening, but also narrowing, of responsibility in certain areas, the fine line around the area of responsibility needs to be better understood. Relatedly, accounting seemingly plays a role in demarcating, that is enabling and disabling, responsibility as expressed in terms of corporate sustainability. Derived from these questions is the last area of interest of this study: the interplay between responsibility and processes of demarcating responsibility. The interlinkages between these two spheres will be analysed by closely connecting them to thoughts of this discussion on the relationship between object and its own demarcation.

The following sections consider concepts of demarcation that are vastly discussed in the literature. For each concept, the highlighting as well as silencing of different facets through their particular logic and the creation of visibilities and invisibilities are analysed (Bowker & Star, 1999). Furthermore, each concept is examined in terms of process dependence and in relation to the entity assumption in accounting. Finally, the conclusion draws on the theoretical aspects presented in this discussion to conclude the analysis.

Boundaries

A boundary is a distinction between objects, entities, ideas, concepts or activities (Lamont & Molnár, 2002). While boundary-drawing is sometimes equated with setting up categories (Zietsma & Lawrence, 2010) or used as a metaphor for practices of categorisation (Wimmer, 2013), only the linking of several boundaries creates an entity inside these boundaries (Abbott, 1995). It is thereby a defining feature of a boundary to lead to a two-sided result, a boundary <u>between</u> two modes, one part of the total incorporating an attribute and the other part not having it (Abbott, 1995; Casey, 2011).

More specifically, boundaries are often described – referring to the work of Pierre Bourdieu – as the opposite to a field in which actors possess various forms of capital and a particular habitus, i.e. a "sharing of criteria for evaluation and judgement" (Barth, 2010, p. 413). Beyond the field boundaries, such capital and habitus are absent (Bourdieu, 1987, 1996; Lamont & Molnár, 2002). Thus, the field is the area of structured, socially patterned activity with internal protocols, whereas the boundary of the field is the area where struggles among actors over the positioning in this particular field do not take place (Bourdieu, 1987; Krause, 2018; Lawrence, 2004; Zietsma & Lawrence, 2010). In other words, by describing the attributes of the field as the counterpart to its boundary, the latter is defined (Gieryn, 1983). Bourdieu (1996) even equates the struggles of defending the order in the field with the struggles of defining as well as controlling the field's boundaries.

Hence, fields need to be understood as a site of constant struggle, an everlasting re-positioning in the field that never solidifies in a fixed condition. In other words, fields develop in a processual manner. Consequently, the same applies to boundaries that are subject to dynamic boundary-making (Gracia & Oats, 2012; Lampel & Meyer, 2008; Wooten & Hoffman, 2017). Boundaries thereby become material when they are acted upon, and are worked with (Llewellyn, 1998; Star, 2010). In this context, so called boundary objects play the specific role of overcoming these boundaries by helping actors from different fields to collaborate across boundaries (ibid.). The literature on boundary objects sees them as not only adaptable from different viewpoints while keeping their identity but as part of several worlds (Briers & Chua, 2001; Star, 1989; Star & Griesemer, 1989; Trompette & Vinck, 2009). The latter aspect, the quality of belonging to multiple spheres, might not fit into the two-sided perspective on boundaries employed in this discussion that is why, the section on permeable demarcations comes back to this point.

Due to the described struggles of setting up boundaries, constant boundary work establishes, maintains, reinforces or undermines the boundary of a field (Annisette, 2017; Burri, 2008; Carlile, 2002; Gieryn, 1983, 1999; Gracia & Oats, 2012; Suddaby & Greenwood, 2005; Wimmer, 2013; Zietsma & Lawrence, 2010). Actors make conceptual distinctions between different objects and practices, they often (but not always) struggle in this process but "come to agree upon definitions of reality" (Jenkins, 2014; Lamont & Molnár, 2002, p. 168). The literature on the making of professions refers to boundary work as a practical activity since the very nature of professions is not thoroughly constructed by codes or licences. Rather, the boundaries of professions are determined by a discursive practice allocating certain characteristics as well as a body of knowledge using a certain rhetoric to members of a developing group (Abbott, 1988; Gieryn, 1983; Hall et al., 2015; Mikes, 2011; Taylor, 1991). Within these groups, certain practices become normalised and internalised by discourses over regimes of truth that are demarcated in a particular area of e.g. a profession (Foucault, 1991).

Boundary work describes firstly the constitution of a field of expertise and secondly the differentiation of inside and outside (Annisette, 2017). When boundaries are provisionally determined through the ongoing process of boundary work, they both enclose and reflect the bounded object (Santos & Eisenhardt, 2005). Abbott resolves the outlined circular relation between a bounded entity[75] and its boundary by stating that "social actors tie social boundaries together" (1995, p. 860) and this act constitutes the entity (DiMaggio & Powell, 1983). This postulate of primacy of boundaries requires a consideration of the attributes of boundaries.

As described above, boundaries capture relationality and need to be a boundary of something (Abbott, 1995; Emirbayer, 1997; Lamont & Molnár, 2002; Somers, 1994). Furthermore, a boundary, unlike a border, has a natural parameter enabling demarcation. In the case of state borders, this means that a river, a mountain pass or a continental shelf limit is a natural barrier, a boundary, and lacks exact positioning (D. H. Gray, 1997; HM Land Registry, 2019). Borders are often but not necessarily at places of boundaries; they can also be demarcated purely based on agreements (Casey, 2011). This comparison to borders seeks to illustrate the nature of boundaries as being salient, i.e. incorporating characteristics such as environmental, social or historical aspects that are not artificially made up for determining the boundary and existed prior to situational interactions (Annisette, 2017; Lamont, 1992). On the contrary, they stand out and allow drawing a line in a particular field context (Lamont & Molnár, 2002). This imaginary line thereby does not have a thickness or width, i.e. does not cover any part of the bounded object[76] (HM Land Registry, 2019). Closely connected to the salience characteristic is the durability and visibility of boundaries (Lamont & Molnár, 2002). The porousness or permeability of boundaries is another property often discussed in the context of boundaries (Casey, 2011) but for the analysis of this discussion, permeable demarcations will be dealt with separately to thoroughly consider the question whether permeability is a defining feature of boundaries or a characteristic of some but not all boundaries (Ringel et al., 2018).

Regarding the accounting entity, the salience of the boundary around the entity needs to be underlined. In her seminal piece, Hines (1988) refers to this aspect in the firm context and warns to take the fence, i.e. an artificially negotiated or set up demarcation, as the boundary of the firm. Quite the opposite, only attributes holistically characterising the firm by its legal, practical, technical, financial, social, environmental struggles taking place inside the firm can be employed for the determination of a boundary. Thereby, no boundary-drawing of an outside institution takes place, the boundaries are in constant progress due to the boundary work dynamically shaping the entity (Power, 2018). The entity itself is therewith regarded as a proprietary, economic, managerial, social unit with its own rights and obligations which is either seen from

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[75] Abbott does not refer to the notion of field but for the purpose of this discussion, both considerations of field boundaries and entity boundaries in the literature will be used.

[76] Whereas the term "margin" as employed in Miller (1998) refers to that "part of the terrain or surface [...] that, at a particular point in time, is immediately *within* its boundaries" (p. 605, emphasis added).

a proprietary[77], pure entity[78] or functional perspective[79] resulting in different boundaries enclosing the entity[80] (Baxter et al., 2019; Kurunmäki, 1999; Meyer, 1973; Power, 2018).

While different approaches toward the accounting entity are dominant in different jurisdictions, across all of them, the accounting entity is – from a legal perspective – separated from external parties and its owners by an imaginary boundary that can be crossed by arm's length transactions (Meyer, 1973; Pickering, 1968). This determinable line requires thorough consideration regarding e.g. the rights to exercise control in groups or the bailout of banks with taxpayers funds in the aftermath of the financial crisis: Power (2018) shows that the technical area of group accounting and the assumption of control based on percentages of equity ownership[81] does not necessarily align with the firm's boundary. However, the legal entity – even though under various juridical circumstances in different countries – is defined as a unit with different amounts of minimum capital[82] and numerous possibilities for legal or natural person for getting involved that can be sued for its wrongdoings, needs to pay taxes and is able to hold legal titles on its own (Husband, 1954).

The genealogy-inspired analysis of the first paper of this thesis revealed how the boundary between firm responsibilities and external factors shifts over time. While more comprehensive issues get considered and different understandings of responsibility itself emerge, the nature of the boundary between entity and its outside remains unaffected. The second paper sheds a different light on the boundary between several standard-setters in the field. Here, the boundaries between are pushed, crossed and maintained from both sides. This demarcation seems to be acted upon in a more fluid manner. While more comprehensive issues get considered and different understandings of responsibility emerge, the nature of the boundary between entity and its outside remains unaffected. Similarly, the third paper examined the boundary between investing firm and what things outside the entity the firm chose to take corporate responsibility for. The paper analysed the boundary between corporate responsibility

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[77] This is an entity concept that prioritises the rights of owners to increase their wealth by using the firm as their instrument and extension.
[78] This concept refers to an understanding of the accounting entity as an entity in its own right.
[79] Here, the entity concept that does not refer to the entity in ownership terms or a special interest group but focusses on either the enterprise, the fund or managers and investors.
[80] See (Baxter, Carlsson-Wall, Chua, & Kraus, 2019; Meyer, 1973; Power, 2018) for a comprehensive consideration of the various approaches and (Kurunmäki, 1999) for the political process of making an accounting entity.
[81] Even though, de facto control can be exercised with less than the majority of voting rights if the share ownership base is dispersed or decisions of suppliers can be influenced by powerful – but formally independent – companies (IFRS 10 and 11).
[82] Even no minimum capital is possible (e.g. private limited company in the UK, GbR in Germany (§705, 706 HGB)).

and investing firm as one characterised with two-fold lived as well as measured aspects. In other words, the observed boundary can be determined but its fabric is made out of qualitative and quantitative, narrative and material issues.

Categorisations and classifications

The concepts of categorisation and classification follow logically on boundary-making, as they group the demarcated entities into classes (Bowker & Star, 1999; Coser, 1988; Durkheim & Mauss, 1963). Categorisation and classification are processes of sorting entities into groups but the former is inductive (categories emerge by grouping similar entities), the latter is deductive (entities are sorted based on predefined characteristics) (Bowker & Star, 1999). More precisely, *categorisation* describes the process of dividing reality into groups of entities sharing certain characteristics, i.e. being at least in a particular aspect similar (Jacob, 2004; Rosch & Mervis, 1975). While *classification* refers, firstly, to a system of classes to order entities based on predetermined principles, secondly, a group in a classification system and thirdly, the process of assigning entities to classes in a classification system (Jacob, 2004).

Both categorisation and classification consider the world as incorporating entities with various attributes which results in class building as an exercise of perception not creation (Jacob, 2004; Rosch, 1973). Because they share this perspective on demarcation, they will consequently be examined together. Forming groups of things requires discretion of what counts as similar enough to be considered as of one kind (Keshet, 2011). As a consequence, it can be summarised that "classifications are not determined by how the world is but are convenient ways in which to represent it" (Hacking, 1999, p. 33). Moreover, selecting properties that matter for classifying and ignoring others, i.e. treating them as irrelevant for the assessment, highlights certain aspects of distinction and is therefore not value-free, objective or purely technical (Nobes & Stadler, 2013; Young & Williams, 2010).

Similar to the circular relation that characterises the boundary-drawing complex in the previous section, the categorisation or classification of entities helps to make sense of the world and at the same time requires an understanding of the attributes, similarities and differences of things (Keshet, 2011; Perec, 1997). This results in a circular understanding of the world and the classifying of it[83]. Foucault's (1970) call for an archaeological examination into the origins and consequences of a range of social categories helps analyse this relationship: He draws attention to the emergence and transformation of discourses. The concept of dynamic nominalism relates

[83] E.g. Perec (1997) asks in his essay "Think/Classify" whether he thinks before he classifies or if he classifies before he thinks and how he classifies what he thinks and how he thinks when he seeks to classify.

to this perspective by stating that category and people covered by it emerge hand in hand, which is why people fit their categories (Hacking, 2002). Furthermore, the labels applied to people condition, stabilise or even create social reality, while social change creates new categories of people at the same time, the so called “looping effect” of classifying human beings comes into play (Hacking, 1995, 2002). This theory predominantly targets the making up of people since they are influenced by words about them but can show more generally the mutual interaction between phenomena, practices or people in the world and the emergence of categories of them.

Also other notable thinkers have written extensively about classification and categorisation. For example, even though, Marx’s theory of social class in modern capitalist society refers to the access of certain groups of people to means of production and is therefore of a very different nature, it draws attention to the perception of people in a class of this class: Not only groups with members recognising their class (“class for itself“) but also groups with members being unconscious about their affiliation (“class in itself“) can be called a class (Azeri, 2015; Crossley, 2008; Elster, 1986). In contrast, Bourdieu underlines the necessity of a real existence of a class as an organised group, not just a construct from outside (Bourdieu, 1979; Crossley, 2008; Wacquant, 2013). He sets forth that the drawing of categories is subject to symbolic struggle that takes place depending on the logic of the specific field (Bourdieu, 1987, 1996). Slightly differently, Durkheim and Mauss (1963) describe systems of classification as stemming from social categories of people (Coser, 1988). They see the root of the human perception of reality as categorised in social processes reflecting the social organisation of society (ibid.).

To draw the distinctions between different classes or categories, i.e. to undertake a spatial, a temporal or a spatio-temporal segmentation of the world, constitutes a system of knowledge or a large-scale information infrastructure (Bowker & Star, 1999; Keshet, 2011). This system should, in an ideal case, exhibit the following properties: Consistent as well as unique classificatory principles should be employed, the categories need to be mutually exclusive and the system should “provide total coverage of the world described“ (Bowker & Star, 1999, p. 11; Parkin, 1974). This final property of comprehensiveness makes for an important difference to boundaries, as boundaries do not necessarily span the complete set under consideration.

Applying these insights to the accounting entity highlights the very nature of categories and classifications as a second order demarcation: Only already bounded entities can be sorted into different boxes, i.e. categories or classes. Therefore, a process of categorising does not stem from the inner struggles of the entity. Controversially, it could be argued that this form of demarcation is more exact since the boundaries of the entity are not considered but classes or categories of entities with similar characteristics following a classification logic and fulfilling at least one determining requirement are built (Wimmer, 2014).

The first paper of this thesis examined categorisations and classifications by unpacking the mechanisms that established different categories for the concern with corporate sustainability. The emergence of environmental, social and governance issues as part of the concern included an exercise of sorting comprehensive ideas into boxes in order to address them. The second paper linked back to these ideas with standard-setters' take on classes of users and therefore categorised pieces of required information. The third paper lastly explored how lived experiences and perceived care for certain issues gets classified as worth capturing under a sustainability lens or left outside.

Frames

In comparison to the concepts of demarcation presented so far, frames enclose the bounded object from <u>outside</u> "whether this be a painting or an idea or a text" (Casey, 2011, p. 385). A frame is thereby not determined by its characteristics or the absence of characteristics of the surrounded matter but by its ability to enclose the meaning of the content (Zerubavel, 1991). The main attribute of a frame can be summarised in channelling perception or even broader, by creating visibility against the background of invisibility: Frames separate the irrelevant surrounding from the spots that require focus (ibid.). In regard to a picture frame, the wall is the background and the painting should be recognised.

While this definition of a frame depicts the frame as a passive enclosure of the framed object, a second line of definitions in the literature goes further and sees a frame as influential for the interpretation of the framed content. A frame therewith is the lens that is used to make sense of a complex reality by structuring an issue, helping to organise it, guiding the approach to it or presenting the content in a certain way (Ascui & Lovell, 2011; Bay, 2011; Benford & Snow, 2000; Entman, 1993; Fisher, 1997; Gamson et al., 1992; Rein & Schön, 1993).

The complex theory of Frame Analysis developed by Goffman (1974) highlights this two-fold nature of frames: Frames are a bridging concept of cognition as well as culture and both interplay (ibid.). The reality is perceived and reported in a culturally informed way, not a "raw form" (Gamson et al., 1992, p. 384). Frames are also transported and shaped by active recipients of them. Thereby, particular "frames arise from the combined effect of information and the social context" (Beunza & Garud, 2007, p. 35) that surrounds the interpretation of information. In other words, frames are culturally determined definitions, conceptual structures, of reality that guide the understanding of people (Goffman, 1974).

Based on this, frames are conceptualised as an active process and consequently, the verb form "framing" is employed (Benford & Snow, 2000). The process of framing refers to an act of setting a situation or a thing in mental brackets (Zerubavel, 1991). In the framing literature, these considerations are applied to dynamics of social movements and expanded to a number of "processes associated with the development, generation and elaboration of collective action frames[84]" (Benford & Snow, 2000, p. 627) that go beyond the scope of this discussion. In the field of cognitive psychology, Kahneman and Tversky (1981) refer to frames as determinants of choices in decision situations and highlight thereby – even though in a very different setting – the influence of frames on the framed content. This understanding of frames traces back to the idea to recall a frame from memory when encountering a new situation (Minsky, 1975). A similar aspect can be found in Van Dijk's work on critical discourse analysis where he defines a frame as a "set of propositions characterising our conventional knowledge of [a] […] situation" (1977, p. 99).

Entman (1993) summarises the points outlined so far as four functions of frames, namely, to define problems, to diagnose causes, to make moral judgements as well as to suggest remedies. This clearly goes beyond the narrow definition of frames offered in the beginning of this section. Benford and Snow (2000) see the functions of frames similarly in inspiring and legitimating activities and campaigns of social movements. While most of these aspects might relate to a very specific social movement context and cannot easily be transferred to other circumstances like entities, the origin of framing as a concept should be kept in mind as well as the two tendencies in the literature to either locating the frame outside the matter or setting it in context with the framed content.

Regarding the accounting entity, it can be concluded that a certain framing of the entity channels attention and changes the perspective on the entity but not the boundaries of the entity itself. Boundaries of the entity can become problematised by a shift in frames and hence unsettled and changed. Due to framing processes taking place, connections to other situations might be drawn or the understanding guided into a particular direction but the demarcated entity remains unaffected: E.g. a sustainability framing applied from outside on an entity's activities will not shape the boundaries of the firm if the inner struggles do not refer to this logic. However, the linking of different frames can create a relationship between contrasting ways of framing.

The first paper of the thesis refers to the shifting frames of topics over time. What has been considered as part of the concern with corporate sustainability changed as the discourse

[84] This refers to action-oriented sets of beliefs that are outcomes of negotiated shared meanings (Benford & Snow, 2000).

emerged and factors got framed in different ways. The second paper zooms in on the framing of materiality as mediating the relationship between different standard-setters. The third paper adds to the advancement of this line of thought by observing a shift in the way topics are addressed. What has been covered by a moral compass is then seen as responsible investing, i.e. the framing of the concern with corporate sustainability interferes with the demarcation of impacts to consider.

Permeable demarcations

While the concepts of demarcation introduced so far assume a clear-cut line between the bounded, classified, categorised or framed object, the following concept assumes that demarcations can be permeable, fluid or overlapping (Annisette, 2017; Miller, 1998; Neu, 2006; Ringel et al., 2018). Instead of a plain in/out determination of a boundary, "gradated sliding scale[s]" (Poon, 2009, p. 667) or positioning of the object under consideration on a continuum might more adequately capture reality (Fourcade & Healy, 2013). This approach criticises a somehow fixed perception of entities since this "ignores entity change through birth, death, amalgamation, and division" (Abbott, 1988, p. 171) rather than embracing reality as "multiple overlapping and intersecting socio-spatial networks of power" (Emirbayer, 1997, p. 295; Mann, 1986, p. 1). Such a relational setting is characterised by network patterns and temporal processes like a matrix instead of a bounded entity (Somers, 1994). For example, this feature can be witnessed in the uneven overlapping of state borders with cultural identities, "a diversity of intersecting networks of social interaction" (Emirbayer, 1997, p. 295) and institutional clusters of connections among people (Somers, 1994).

Applied to entities, a move away from conceptualising organisations as definite monoliths towards viewing organisations as shaped by their environment can be witnessed (Ringel et al., 2018). Most behaviour is embedded in networks of interpersonal relations criss-crossing formal structures (Granovetter, 1985; Ringel et al., 2018). Moreover, power is not possessed by an entity but exercised in relationships and power requires permeability (Emirbayer, 1997; Santos & Eisenhardt, 2005).

Yet, such ontological views of the world do not result in a denial of boundaries but rather result in claims of permeability regarding the nature of boundaries. To better understand this particular strand of conceptualisations of demarcation, the historical emergence of institutions as taken-for-granted typifications for reality can be considered (Berger & Luckmann, 1966). Processes of habitualisation and objectivation of the institutional order occur and consequently, the institutional order is comprehended as non-human facticity and gains legitimacy (ibid.).

Therefore, institutionalisation and stabilisation of certain forms of boundaries take place in every social interaction over time (ibid.).

However, boundaries are constantly renegotiated and altered by competing institutional pressures (Greenwood & Suddaby, 2006; Hines, 1988; Kurunmäki, 1999; Miller, 1998; Power, 2018). Where boundaries are located depends on the lens employed and the purpose of this kind of exercise as the entity typology of Meyer (1973) already shows (Power, 2018; Ringel et al., 2018). Permeable demarcations, can be considered as boundaries that allow the passing through or the exchange of substances (in a narrow understanding) and boundary-spanning processes (in a wide understanding), still incorporate attributes of boundaries as discussed in the first section of this discussion. In addition to the attributes of salience, durability and visibility, which were examined in the section on boundaries, permeable demarcations require formalisation, a form of border control, from the inside and outside: Without this form of checks, no demarcation would be in place, only permeability (Barberio et al., 2018).

The nature of permeable boundaries seems like an oxymoron, incorporating a contradiction between the fluidity of permeability and the stability of a boundary. Nevertheless, the shift in analysis from the location of the demarcation to the consistence of the demarcation makes visible another distinct attribute of permeable demarcations: antifragility, that is, stability <u>by</u> being permeable (Taleb, 2012). Instead of gaining stability through fortification, the flexible, constantly evolving reaction to external shocks improves the boundary like a dam that builds a stable demarcation due to its spillway (ibid.).

The concept of overflows, rooted in Actor Network Theory, ties in with this metaphor but deals with an exchange with the environment from a different perspective: It refers to positive, i.e. generalised benefits, or negative, i.e. outsourced costs, (side-)effects of a decision as externalities (Callon, 1998; Kastberg & Siverbo, 2007). Even though these transfers between an entity and its environment are inevitable, they show that a demarcation as a reference point is necessary to identify the overflow, metaphorically, the water not fitting into the basin. Callon (1998) asks in this context whether frames[85] are the norm and overflows the leak or whether boundaries are necessarily imperfect and overflows built-in features of them. Although, frames can be conceptualised as both stable structures channelling overflows and as fragile, artificial, expensive states at the same time, he embarks on the argument that “each of these elements, at the very same time as it is helping to structure and frame the interaction [...] is simultaneously

[85] Callon calls the form of demarcations he describes “frames”. However, these considerations should not be equated or confounded with the notion of this term employed in the section of this discussion dealing with frames.

a potential conduit for overflows“ (Callon, 1998, p. 254). In other words, within the concept of overflows, the demarcation represents a threshold facing the larger external environment and a binding structure for the internal workings (Gowthorpe, 2009; Llewellyn, 1994). This inevitability of permeability highlights a quality of demarcation as (re-)connecting or cutting of spheres that are not within one entity but stand in relation to each other due to an exchange of something flowing out of the entity (Callon, 1998; Kastberg, 2014). Overflows direct attention to the very nature of this object travelling from inside the entity to the environment: The overflow transports an inner part, formerly making up the entity to the outside (ibid.). Consequently, neither the entity nor the demarcation are stable but stabilised – not cemented – by a permeable demarcation (Kastberg, 2014; Latour, 1987; Mouritsen & Thrane, 2006).

The literature on boundary objects looks at this characteristic of relatedness by comprehending boundary objects as mediators between two worlds that are “embedded within temporarily stabilised, transorganisational networks“ (Briers & Chua, 2001, p. 240). The term object thereby refers to something, people or programmes “act toward and with“ (Star, 2010, p. 603). Thus, its involvement in action, not its thingness or position at the edge of something, makes it a boundary object (Star, 1989). Moreover, these boundary objects, although they can be perceived across various perspectives and move between different social worlds, maintain a continuity of identity, they are not arbitrary (Star, 1989). The ability to share meaning and interpretation between different areas does not eventuate in a situation where distinction does not exist, on the contrary, the autonomy and communication of the different worlds is maximised (Briers & Chua, 2001; Star & Griesemer, 1989; Trompette & Vinck, 2009).

Concerning the accounting entity, business interactions with the environment like with suppliers or tax authorities do not refer to permeable boundaries. Companies engage in various boundary-spanning processes such as the cooperation with stakeholders for environmental and social purposes[86], or the exchange of employees with non-governmental organisations[87]. Such engagements go beyond the clear-cut boundaries which demarcate the inner struggles of the cooperation. Therefore, only an accounting entity that is involved in intersecting networks of people and overlapping power relations, i.e. outside parties that have power over the corporation by other means than purely financial or economic reasons, have permeable boundaries (Gowthorpe, 2009). The incorporation or dispense of externalities can thereby be either positive (i.e. including externalities), e.g. a company benefits free of charge from the

[86] e.g. the support of the subsistence agriculture of banana growers in Ghana by M&S in addition to the safeguarding of the firm’s supply chain (see https://corporate.marksandspencer.com/stories/blog/water-for-all-dialling-up-collaboration, accessed 16/12/2019).
[87] See e.g. HSBC Group News February 2004, p. 13-16.

research done by a peer company, or negative (i.e. excluding externalities), e.g. a firm generates profits by polluting the environment, for the particular entity (Callon, 1998). Opportunities and drawbacks of business activities are consequently crossing the demarcation of the entity which is an inevitable aspect of economic transfers (ibid.). But more than that, accounting takes part in complex disentanglements and captures overflows itself, e.g. by reporting carbon dioxide emissions (Chua & Mahama, 2007; Hopwood, 1983; Kastberg, 2014; Llewellyn, 1994; Strathern, 1999).

The first paper of the thesis showed how permeable demarcations help to make sense of the concern with corporate sustainability. Theorising the increasing corporate sustainability action by means of permeable demarcations helps understand the concern. Factors gain importance and enter the area of responsibility of the firm, while the meaning of responsibility itself develops into a more measurable form. This interlaced form of demarcating was even more pronounced in the second paper. The co-dependent interaction of standard-setters relies on connected, yet permeable spheres in the standard-setting field. The third paper illustrated this characteristic of a permeable demarcation with its back and forth between perceiving sustainability issues as innovative and potentially disturbing and at the same time acknowledging a long tradition of dealing with these factors. In other words, the new form of articulating the concern with corporate sustainability goes back to a circumscribed yet fluid set of topics.

Implications of the discussion

The different concepts of demarcation reveal contrasting perspectives on the accounting entity. These views range from a boundary, fencing in the inner struggles of the cooperation, to a second order categorisation and classification based on shared characteristics and a framing that is shedding a particular light on the entity to a permeable boundary enforcing the stability of the demarcation. The introduced concepts can be simultaneously applied and are not mutually exclusive, they highlight different aspects of the accounting entity: Boundaries underline the inner workings, the struggles inside the bounded entity and the boundary work of setting up and maintaining the demarcation. Categorisations and classifications refer to a system of rules underlying the sorting process. Frames focus attention and include a culturally informed notion of perception. Permeable demarcations are not only a special form of boundaries, but also stress boundary-crossing social networks that enforce the stability of the demarcation. A shared characteristic of all these concepts is the processual nature of setting-up, maintaining, shaping, shifting, reinforcing and undermining demarcations in terms of boundary work, categorising, classifying, framing and boundary-spanning activities. Without these constant struggles, no demarcations would be in place.

Importantly, this discussion is not about whether demarcations are real or metaphoric. It is rather about how they are developing in their respective context and which processes are shaping them (Hines, 1988). While these four strands of demarcations borrow their language from real life phenomena like a field on the countryside, classes, picture frames and state borders, it is vital to ask what these meaning transfers stand for (Jenkins, 2014; Wimmer, 2013). Put simply, how does this potential thingness of demarcation – in its various forms – emerge?

On the one hand, the processes and attributes described, firstly, require acceptance as real to spread out their potential to construct reality (Zerubavel, 1991) and, secondly, they can be witnessed as "literal realities, not imaginative simulacra" (Jenkins, 2014, p. 810; Lamont & Molnár, 2002). On the other hand, the different concepts of demarcation could be processes of differentiation that do not result in static lines or things (Wimmer, 2014). Furthermore, one could argue that boundaries are always fluid and depend on the perspective employed, whereas categorisations and classifications – of arguably not clear-cut entities – are the only existing demarcation (ibid.).

In order to get closer to the processes establishing, stabilising and changing demarcations, the empirical papers of this thesis examined the nature of processes of demarcation in practice. They thereby analysed widening and narrowing tendencies of the concern with corporate responsibility and studied the interlinkages between sustainability factors in the corporation and demarcating those. Such conceptual unfolding of the nuances of demarcation also has implications for our understanding of corporate practice: The different boundaries utilised in the firm are not in place based on definitions, they evolve in dynamic boundary-making, parties winning over each other, perceptions that happen to be framed differently, outside pressures or coincidental focus on similarities resulting in categorisations. In other words, explicit demarcations like a group structure can be determined and communicated; whereas implicit perceptions of demarcations are evolving among various parties, with reference to several actors, and emerge parallel to day-to-day business activities.

Studying the dynamic configuration of these processes motivated the study of the historical emergence of corporate sustainability, the relational dynamics of standard-setters in the field and the articulation of responsibility through financial means. How the firms take on responsibility in different corporate settings, is the core concern of the investigation presented in this thesis. The inherently boundary-spanning, i.e. outward-looking, responsibility-incorporating, comprehensive nature of the concern with corporate sustainability and its impact on accounting capturing the concern in practice – and vice versa – are unpacked on the organisational and field level. The emergence of the concern itself was only studied as one example of an area where processes of constructing, perceiving and maintaining different forms of demarcation are taking place. As part of the analysis, human actors, organisational actions and institutionalised activities – including accounting – and their involvement in boundary-making processes were considered to allow insights into the accounting entity demarcated by various processes.

Conclusion

The concern with corporate sustainability first emerged under the name of "CSR" as corporate involvement in social, later environmental, and, more recently, governance-related aspects. This substantial expansion of considerations was accompanied by more comprehensive care for present, past and future impacts of corporate operations. The widening of the temporal dimension also happened in the context of further reaching spatial responsibility that went beyond the immediate walls of the firm. This threefold development shows that the nature of the studied concern with corporate sustainability shifts over time: The implied responsibility becomes more material for the business context but the motivation for dealing with these ESG factors stems from a previously independent, arguably voluntary, adoption of these issues. Accounting enables the transfer of hard-to-grasp responsibility ideas into corporate practices but also reinforces a precise boundary around considered factors. Consequently, accounting, responsibility and its demarcation interact with one another. Zooming in on the struggles around the changing firm-society boundary, reveals a development of the concern with corporate sustainability from being a form of good judgement that developed into a liability that again emerges to being an opportunity.

At the field level, the concern with corporate sustainability evolves around materiality as an operationalisation of different perspectives of standard-setters for sustainability reporting on the considered entity. The GRI and the ISSB as dominant, yet contrasting, players in the field are entangled in a web of both cooperative and competitive ties stemming from their mobilisation of materiality in their inward- and outward-facing practices. This spectrum of relational dynamics between the two bodies connects the standard-setters through a boundary that does not thoroughly adopt to different contexts. It offers some room for discretion but lacks capacity to increase leeway, it rather limits the two to work with the roles of materiality along the outlined spectrum (i.e. creating competitive and cooperative co-dependence). The targeted nuanced interpretation of accounting, the corresponding demarcated entity and the derived design of responsibility make the two standard-setters co-dependents rather than purely competing rivals.

The interrelated workings of accounting, responsibility and demarcations on the organisational level can be derived by observing the process of articulating an ESG policy in an investment trust. A fine-tuned balance of financial accounting aspects, understood as matters of fact, and fuzzy responsibility topics, theorised as matters of concern, is reached by providing a fact-based policy for the populated, debated strand of the concern with corporate sustainability. This interplay of accounting representations of an emerging topic, the translation of responsibility into the corporate context and the demarcation of these two strands eventually enables the desired integration of the concern into existing corporate practices.

The changing nature of the concern with corporate sustainability, the accounting-based, materiality-centred co-dependence of field-level actors on these topics and the integration of fact and discourse in organisational practices show characteristics of the process of taking on responsibility. The concern with corporate sustainability enters the corporate space as a bundle of measurable accountability and a vague moral compass that depends on the underlying entity assumption. Over time, the referenced firm boundary becomes wider and more permeable while the perception of responsibility itself shifted towards incorporating a materiality threshold.

To study how firms take on responsibility in various institutional settings helps to establish a grammar of demarcation. As the discussion demonstrates, different concepts of demarcating the accounting entity underline different features of the bounded corporation. The studied corporate practices always – directly or indirectly – refer back to a delimiting characteristic for integrating vast sustainability factors into long-standing, established, measurable routines. In other words, the concern with corporate sustainability seems to go hand in hand with narrowing tendencies of the different concepts of demarcation. It rather is the demarcating itself that allows integrating environmental, social and governance issues into the corporate world and connecting responsibility with the corresponding firm.

These observations have three theoretical implications. First, the relationship between accounting and the concern with corporate sustainability is unpacked. Two formerly separate ways of allocating resources, establishing cause-effect relationships or capturing transactions between inside and outside are brought together by taking on responsibility (R. Gray, 2010; Hopwood, 2009; Hopwood & Unerman, 2010). This process can be described as evolving over time and shifting substantial, temporal and spatial focus, including both matters of concern and fact, and revealing wider negotiations of influence and prerogative of interpretation. Second, responsibility itself is shown to be much more nuanced than the common reduction to either measurable accountability or a vague moral compass (Buhr, 2010; Rubenstein, 1992). In the studied settings, different parts of this spectrum are referenced in conjunction. The development of the ESG reporting landscape, improving data quality, growing expertise, increasing peer pressure and a comprehensive societal rethink of the concern with corporate sustainability reflect and invite further investigations which facilitate a detailed engagement of different nuances of responsibility in the corporate context. Third, examining the process of taking on responsibility reveals how processes of demarcating unfold and maintain, shift or establish various forms of boundaries between the firm and the "outside" (Hines, 1988).

The insights gained through the examination of various appearances of the concern with corporate sustainability in organisations and the field also has implications for the world of practice. In particular, the shift of the dominant discourse from debunking so-called "greenwashing" to taking corporate responsibility for ESG factors as a given results in three main implications. Since the concern with corporate sustainability is not an entirely new phenomenon and has gained a financial dimension in organisations – reactions to the role of the concept in the firm should focus on both, the persistence of values related to the concern and the translation of these into the monetary corporate logic. Further, this thesis reveals that the concern with corporate sustainability has, since its emergence, shifted in focus and how it is demarcated. This finding may encourage firms to develop an understanding of their responsibility based on their practices. This bottom-up approach can result in an accounting-like reporting instrument by performing a materiality assessment of derived factors. The process of taking on responsibility of firms for the concern with corporate sustainability lastly takes place against the background of an ever-evolving web of involved parties that are occupied with their very own relational dynamics. Consequently, concepts such as "ESG" or "Corporate Sustainability" stand for a much more comprehensive negotiation of the demarcation of the firm against the "outside".

This thesis contributes to our understanding of the interplay of the accounting entity and the concern with corporate sustainability, the mechanisms of taking on responsibility of firms and the role of accounting in dealing with a non-coordinated ecology like the concern with corporate sustainability. It seeks to challenge the commonly held view that corporate sustainability simply involves added topics to the area of corporate impacts in existing corporate practices. In contrast, this thesis argues that the very notion of responsibility shifts. By shedding light on the demarcating of responsibility for issues that potentially lie outside the firm (Berthoin Antal & Sobczak, 2004; R. Gray & Bebbington, 2000; Macmillan et al., 2004), this research extends Hines' (1988) notion of the entity. Through the focus on the development of the extent of the concern with corporate sustainability itself, dynamic relations in the field and the integration of ESG factors in existing practices, a new conceptualisation of the process of taking on responsibility of firms is put forward.

Given the ambitious examination of the concern with corporate sustainability, several limitations have to be acknowledged. Despite having carefully assessed the reasonability of the contexts for the three papers, the scope and the nature of the data collections and fieldwork involvements are limited with regards to the complexity of observed topic areas, nature of the considered organisations and interrelations of the concern. While providing trustworthy insights into three settings – a historical perspective, the field level and the organisational level – these involvements remain isolated and discrete. The emerging field of the concern with corporate sustainability is rapidly shifting, vast and complex. Against the background of a multiplicity of angles, literatures and time horizons, it is conceptually and practically challenging to draw a boundary around the area of investigation. Yet, demarcating the investigated object is – as shown in this thesis – a prerequisite for research. Consequently, this work had to focus on some key tensions and their reflection in the data. Especially connections between various actors relating to the concern with corporate sustainability are predominantly made analytically. In addition to the limitations stemming from subjectivity associated with the coding and interpreting of rich data sources as discussed in the papers, the selection of fieldwork sites was driven by a careful assessment of the appropriateness of this setting as a window into the workings of the concern with corporate sustainability.

These limitations, however, could also build the starting point for future investigations. Promising research avenues would bridge the work on the three levels of the concern with corporate sustainability by zooming in on the translation between field-level and organisational considerations or the connection between historical developments of the concern and emergence of the institutional landscape. Further research could be conducted on the interplay of (quasi) standard-setters and the multitude of frameworks used by organisations in the field that lack endorsement and grounding in the political development of the concern with corporate sustainability. The societal consequences of a corporate bundle of topics would be another path worth following – notwithstanding the varying approaches of different jurisdictions. It could lastly be of wider interest to open up the acronym "ESG" and to examine centrifugal tendencies of the three individual factors.

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