How Accounting Ends: Self-Undermining Repetition in Accounting Life Cycles*

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ABSTRACT

This study develops a process model of how accounting may come to an end. Grounded in a longitudinal study of a risk culture survey, this model focuses on the dynamics that underpin the repetition of accounting practices, and sheds light on two boundary conditions of successful repetition and continuation, which are in tension with each other. On the one hand, there are pressures for repetition that preserves continuity and comparability. On the other hand, there is the ongoing organizational need to adjust accounting practices. Iterating between the case study findings, social studies of accounting, and the sociology of replication in scientific practice, the model shows how moving too close to either boundary increases the risk that repetition undermines the accounting practice being repeated: "perfect repetition" may be perceived as uninteresting and decision-irrelevant; very "imperfect repetition" may be perceived as something too different and idiosyncratic, and hence also decision-irrelevant. As a result, the analysis extends a rich literature that has examined empirical instances of failure of the conditions that sustain the repeatability of accounting practices. Via the theory of "self-undermining repetition," this study shows how the possibilities for accounting's ending are paradoxically inherent in the very act of repetition. This notion of "self-undermining repetition" is deepened by a discussion of how it may be affected by four contingencies: task ambiguity, organizational politics, organizational actors' reflexivity, and external networks of support. Overall, the analysis of the self-undermining dynamics of repetition and related contingencies contrasts with research that foregrounds the constitutive nature of repeated uses of accountings. It shows how repetition may also undermine, rather than cumulatively consolidate, accounting practices.

Keywords: survey, risk culture, repetition, process theory, accounting life cycle, practice

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Comment la comptabilité prend fin: la répétition autodestructrice dans les cycles de vie de la comptabilité

RÉSUMÉ

Cette étude développe un modèle de processus pour expliquer comment la comptabilité peut prendre fin. Fondé sur une étude longitudinale d'une enquête sur la culture du risque, ce modèle se concentre sur la dynamique qui sous-tend la répétition des pratiques comptables et met en lumière deux conditions aux limites de répétition et de continuation réussies qui sont en tension l'une avec l'autre. D'une part, il existe des pressions en faveur de la répétition qui préserve la continuité et la comparabilité. D'autre part, il existe un besoin organisationnel permanent d'adapter les pratiques comptables. En faisant le lien entre les résultats des études de cas, les études sociales de la comptabilité et la sociologie de la réplication dans la pratique scientifique, le modèle montre comment le fait de s'approcher trop près de l'une ou l'autre limite augmente le risque que la répétition défavorise la pratique comptable répétée: une « répétition parfaite » peut être perçue comme inintéressante et non pertinente pour la décision; une « répétition très imparfaite » peut être perçue comme quelque chose de trop différent et d'idiosyncrasique, et donc également non pertinent pour la décision. En conséquence, l'analyse s'inscrit dans le prolongement d'une riche littérature qui examine les cas empiriques d'échec des conditions qui soutiennent la répétabilité des pratiques comptables. Par le biais de la théorie de la « répétition autodestructrice », cette étude montre comment les possibilités de fin de la comptabilité sont paradoxalement inhérentes à l'acte même de répétition. Cette notion de « répétition autodestructrice » est approfondie par une discussion sur la façon dont elle peut être affectée par quatre contingences: l'ambigüité de la tâche, la politique organisationnelle, la réflexivité des acteurs organisationnels et les réseaux de soutien externes. Dans l'ensemble, l'analyse de la dynamique autodestructrice de la répétition et des contingences connexes contraste avec les recherches qui mettent en avant la nature constitutive des utilisations répétées des comptabilités. Cette analyse montre comment la répétition peut également défavoriser, plutôt que de consolider cumulativement, les pratiques comptables.

Mots-clés : enquête, culture du risque, répétition, théorie du processus, cycle de vie de la comptabilité, pratique

1. Introduction

How does accounting end? To address this question, many influential studies have focused on the ever-present possibility that the organizational and institutional conditions that sustain the repetition and continuation of accounting practices may fail (see, for an overview, Chapman et al. 2009). In this study, we focus on accounting repetition itself: we explore what it means for accounting to continue through a series of repetition events and the tensions involved in each act of repetition. In so doing, we reach beyond conventional explanations that emphasize the failure of one or more of the conditions that sustain the possibility that accounting is repeated, leading to managerial discontent with the accounting and its abandonment. We theorize instead how the end of an accounting life cycle may also be driven by dynamics that are inherent in the very act of repetition itself. In short, repetition may be "self-undermining," thereby increasing the risk that accounting comes to an end.

We ground our theoretical analysis of repetition as social practice in a longitudinal study of a risk culture survey at Zeta, the UK subsidiary of a major international insurance firm. We argue that the use of this survey is a form of early-stage accounting practice that might well have developed a routinized organizational life and infrastructure for the continuous production of accounts of risk culture, as other surveys can do (Igo 2007; Pflueger 2016; Allard-Poesi and Hollet-Haudebert 2017). Yet, it did not, as we learned from our interventionist research approach (Jönsson and Lukka 2007), which enabled us to interview a range of individuals at Zeta and to directly observe how they dealt with, made sense of, and followed up on survey data over a four-year period (2012–2015).

Our case analysis, structured into three temporal blocks, sheds light on the survey's beginning (first iteration), continuation (second iteration), and ending. It shows how an initially explorative production of survey data can become a key resource whose mobilization is part of a process of engagement in, and enquiry about, wider organizational issues and problems. The conditions supporting this engagement enable the survey to be seen as purposeful and underpin calls for its repetition. However, repetition (the survey's second iteration) also reveals the limitations of the survey in producing data that keep leadership engaged. Moreover, in our case setting survey repetition paradoxically increases the visibility of new organizational problems and change ambitions, which the survey itself fails to address. In short, repetition, something that initially seems to consolidate the role of the survey, undermines the conditions for the continuation of the survey.

Iterating between our case study findings, social studies of accounting (Chapman et al. 2009; Miller and Power 2013; Hopwood and Miller 1994), and the sociology of replication in scientific practice (Collins 1992), we develop a process model of how accounting ends, which foregrounds the tensions inherent in accounting repetition. Our model articulates a linear process through which new data-gathering techniques can develop an organizational life beyond the spur of the moment as they inform the sense-making of organizational participants. This process unfolds as these accountings produce action-generating facts that are perceived as relevant to organizational concerns. To theorize the end of accounting within such a linear process, the model defines the dynamics of accounting repeatability as a space defined by two boundary conditions that exist in tension one with the other. On the one hand, as shown in our case, an ambition to replicate accounting perfectly may lead to results that are comparable but that are perceived to be uninteresting because they are disconnected from new or shifting managerial concerns. On the other hand, our model also suggests that too much change may be equally problematic. Organizational actors may generate an entirely new form of accounting practice that is too discontinuous with what they already know and therefore could be perceived as idiosyncratic and decision-irrelevant.

Our analysis of these internal dynamics of repetition adds nuance to a much debated view of accounting as a precarious and ongoing achievement (see Hopwood 1983; Meyer 1986; Power 2021; Quattrone 2009). We acknowledge that, as shown in previous work, accounting repetition is sustained by organizational and institutional conditions and processes that may always break down or be taken down. However, we shed light on how the very act of repetition itself is a complex and often fragile social achievement that can potentially undermine the accounting practices being repeated. On the one hand, there are pressures, often institutional in nature, for replication that preserves continuity and comparability over time and across settings (Power 2004, 2021; Meyer 1986). On the other hand, there is an ongoing organizational need to adjust accounting practices via repair (Ahrens and Chapman 2004), tinkering (Dambrin and Robson 2011), and experimentation (Wouters and Wilderom 2008; Andon et al. 2007). Both near "perfect repetition," emphasizing continuity and comparability, and very "imperfect repetition," emphasizing ongoing adjustment, increase the risk that repetition itself contributes to the end of accounting as a practice in which data collection remains entangled with salient organizational concerns and corporate change aspirations. We deepen this theorization of "self-undermining repetition" by exploring how it may increase the risk of accounting ending depending on four possible contingencies: task ambiguity, organizational politics, organizational actors' reflexivity, and external networks of support.

Our core contribution in this paper is the analysis of accounting repetition as a social and organizational process in its own right. We do not develop a type of accounting that might figure in a typology of accounting's forms (e.g., ad hoc vs. general purpose; temporary vs. permanent). Our model instead focuses on the conditions under which surveys, understood as a form of accounting practice, could continue or end, thereby providing insights that are relevant to scholars interested in how accounting may (or may not) stabilize in relation to different organizational and

institutional conditions. We propose the notion of "self-undermining repetition" to show how the end of accounting can be seen as an *unfolding process of ending*, sustained by boundary conditions in tension one with the other, rather than only a stage in a process of continuation where one or more conditions of continuation fail, as documented in many previous studies. Importantly, our notion of "self-undermining repetition" also provides a stark theoretical contrast to work that emphasizes the constitutive and generative nature of ongoing and repeated uses of accountings (see Power 2021; Quattrone 2009). Finally, our analysis makes a contribution, albeit small, to the study of accounting as practice (Ahrens and Chapman 2007), showing how it is at each point of repetition that we can obtain rich insights about how accounting continues or ends as a meaningful organizational practice.

2. Repetition in accounting life cycles

In this section, we draw upon the rich literature on accounting as a social and institutional practice (see, for an overview, Chapman et al. 2009; Miller and Power 2013; Hopwood and Miller 1994) to set the background for our analysis of accounting life cycles and our specific focus on *how accounting ends*. The biological metaphor of the life cycle helpfully encourages the analysis of accounting as something that progresses from birth to death, from beginnings to endings. And yet a view of accounting as a social and institutional practice also poses a problem for the study of accounting life cycles. If accounting is understood as a situated accomplishment without clear-cut and stable functionalities (Burchell et al. 1980; Hopwood 1983), then it is problematic to demarcate the discrete phases of an accounting life cycle, including its ending.

To address this challenge, our analysis focuses on one aspect of continuation: *accounting repetition*. Although not always made explicit, the problem of repetition is at the center of studies of accounting as a social practice, just as it is central to practice-oriented processual studies of organizations and management more generally: for example, as put by Hernes (2014, 135), "Practice is principally about repetition, and practice in the social realm would imply repetition. . . . Without repetition, actors fail to be reminded of the organization and its possibilities." Indeed, in the absence of functionalistic notions of implementation success, as noted by Quattrone (2009, 113), "Accounting needs always to be conceived of as a continuous form, i.e., accounting." In other words, to succeed, accounting has to continuously happen; it has to repeat.

At first sight, the notion of accounting repetition is deceptively simple. The duration of an accounting life cycle can be framed in terms of the number of produced iterations of devices such as budgets, performance measures, costing systems, financial accounts, and so on. We can also distinguish between shorter or longer life cycles. Some studies show how new accountings can be short-lived, similar to a "temporary organization" (see, for a review, Bakker 2010). They shed light, for example, on "playful" experimentations to "tickle curiosity in organizations" (Hedberg and Jonsson 1978, 49; see also Cooper et al. 1981); the use of prototypes to inform the development of "better" forms of accounting (Goretzki, Strauss, et al. 2018; Earl 1978; Wouters and Roijmans 2011); or special purpose studies to address specific problems (Rowe et al. 2008). These accountings are intentionally temporary and "disposable" (March 1995, 434). One iteration may be enough to address specific tasks or to develop a better understanding of the environment (Hall 2010).

A larger body of literature sheds light on how accounting is intended to be repeatable and thus can continue for longer than one or a few iteration(s). Importantly, continuation does not have to do with technical sophistication (see Hall 2010) as most accountings have been described as imperfect (Swieringa and Weick 1987), flawed (Dambrin and Robson 2011), or incomplete (Jordan and Messner 2012). Repeatability is instead grounded in varied features of the organizational and institutional context in which accounting practice operates: accounting's visual properties and inscriptions (Busco and Quattrone 2015); microlevel meaning-making interactions and experience-based experimentations (Lorino et al. 2017; Englund and Gerdin 2015; Goretzki, Mack, et al. 2018); network building processes (Chua 1995; Briers and Chua 2001); the

entanglement of accounting with situated understandings of goals (Ahrens and Chapman 2004) and local work contexts (Kilfoyle et al. 2013); retrospective understandings of local and informal organizational histories (Cooper et al. 2019); bricolage and patchwork through which accounting is combined with other informing practices (Dambrin and Robson 2011; Preston 1986; Martinez and Cooper 2019); and infrastructures for accounts production (Power 2015; Barman et al. 2021).

While focusing on diverse research phenomena and embracing different methodologies, studies such as these foreground the variety of processes and conditions under which accounting practices remain repeatable. In general terms, as shown in a recent theoretical model about accounting persistence and amplification (Power 2021), repetition and repeatability are constitutive features of practices in general. Repeatability is grounded in how accounting-generated data continues to be seen, and made sense of, by actors as action-generating "facts" that refer to plausible, rather than accurate, organizational narratives, which are "talked into existence" (Weick et al. 2005, 409) as part of ongoing processes of accounting elaboration and refinement. In so doing, accounting not only helps to make sense of the world of action, but also shapes it. As put by Power (2021, 8), regardless of perceived accuracy and despite initial resistance, the repeated enactment of accounting "brings about and sustains the organizational conditions for the continued production of its own kind of 'accounting truth' about performance."

This brief overview of previous research adds nuance to our understanding of accounting repetition as a series of iterations of the "same" devices. Accounting repetition can be seen as a socially situated, performative accomplishment, contingent upon the realization of certain conditions and processes, which may always break down or be taken down: networks of allies may break up (Briers and Chua 2001); experimentations may not produce seemingly useful local outcomes (Andon et al. 2007); inscriptions may fail to elicit questioning and interrogation (Busco and Quattrone 2015); the accretion of accounting infrastructures always remains open to contest and dispute (Power 2015); or certain accountings may lose out against others that more convincingly frame a performance evaluation situation (Goretzki, Mack, et al. 2018).

In our analysis, we build on and seek to extend these insights about repetition as a critical social practice within accounting life cycles. Taking inspiration from studies about replication in science (Collins 1992), we highlight a core tension at the heart of accounting repetition, which will be the main focus of our later theory-building. Collins reinforces the view of repetition as a social accomplishment, reminding us that the notion of "sameness"—of what counts as "going on in the same way" (Collins 1992, 46)—is itself constantly negotiated among groups of competing scientists. In addition, Collins (1992) persuasively shows how, to be a meaningful test of a previous result, an experiment's replication must be neither exactly the same nor too different from earlier experiments. Perfect replication is only feasible when the area under exploration and expected outcomes are well known and undisputed, such as experiments carried out by science students for training purposes. And yet very imperfect replication with extreme differences (e.g., substituting scientists and their labs with toddlers and science-inspired toys) will equally make repetition meaningless. In short, repetition has to differ, but not too much.[1]

This tension can also be traced in social studies of accounting practices. On the one hand, maintaining some degree of similarity plays an important role in accounting continuation. Intuitively, accounting implies "a certain kind of stability and replicability of operations" (Power 2004, 770). Despite initial resistances and critiques of their reductivist nature, performance measurement and control systems may not change to maintain measurement protocols and rules of aggregations that enable the "commensuration" (Mehrpouya and Samiolo 2016; Espeland and Stevens 1998) and comparability required by institutional stakeholders (Meyer 1986; Power 2004). On the other hand, a rich literature on management accounting "in action" stresses

1. Research on organizational routines highlights a similar "replication dilemma" (see Aroles and Mclean 2016; D'Adderio 2014). Organizational actors need to strike a balance between the (often unrealizable) ideal of "exact replication" with the need to adjust routines to changing organizational context.

how performance measures, costing techniques, and balanced scorecards, for example, are continuously adjusted based on shifting organizational priorities and managerial concerns via repair processes (Ahrens and Chapman 2004), tinkering (Dambrin and Robson 2011), and experimentations (Wouters and Wilderom 2008; Andon et al. 2007). Indeed, an apparent "break in a series of repetitions" (Ahrens 2009, 31) may even mean that accounting practices remain organizationally relevant.

While this contrastive framing is somewhat stylized,[2] it enables us to develop two boundary conditions which, by remaining in tension one with the other, define a dynamic *space of repeatability*. Organizational participants need to maintain some degree of "sameness" so that a new iteration of accounting is perceived as a continuation of the preexisting; and yet, whether intentionally or not, they are also likely to experiment with changes to accounting devices and their practice context.[3] In evolving and politicized organizational settings, just as for the replication of scientific experiments (Collins 1992), there is likely to be no single, fixed equilibrium point in such a tug-of-war to produce both sameness and change. Furthermore, the key implication of our framing of this tension is that it points toward the need for a processual analysis (Cloutier and Langley 2020) of an accounting life cycle that foregrounds repetition not just as something that can break down or be taken down, but as a core "generative mechanism" (Cornelissen 2017, 6) defining a "space of possible paths" (Pentland et al. 2020, 5) that can equally explain practice continuation or ending.

To summarize, this section defines the contours of our approach to the analysis of an accounting life cycle. By focusing on tensions inherent in the social practice of repetition, we propose a potential process mechanism that can explain how accounting ends. In the remainder of this paper, we build on the empirical insights generated from a longitudinal case study of a risk culture survey to further refine and extend this theoretical orientation and then discuss its general applicability to studies of accounting as a social and institutional practice. Before proceeding with the discussion of our empirical setting and analysis, the next section seeks to justify our focus on surveys as a form of accounting.

3. Positioning the study of the survey as accounting

The narrative analysis that follows is derived from a longitudinal study of the use of a survey that aimed to collect data about organizational risk culture in the UK subsidiary of a large, internationally active insurance company. In this section, we justify how this risk culture survey counts as a form of accounting and thereby enables our analysis to generate insights about accounting life cycles and their endings more generally.

A survey is defined as "a systematic collection and analysis of data relating to the attitudes, living conditions, opinions, etc., of a population, usually taken from a representative sample of the latter" (OED Online 2022). A survey is normally operationalized by using questionnaires that present respondents with a standard set of questions and response options. Responses can generate qualitative or quantitative data for analysis. A survey of this kind can be seen as an accounting instrument that helps to measure and assess different "objects" of organizational concern, such as customer satisfaction, employee morale, and quality of service. This view of *surveys as accounting* is further reinforced by a historical study (Igo 2007) that reminds us how the word "survey" carries three distinct meanings, namely, (i) to measure or count; (ii) to oversee, or examine

2. For example, studies of rankings show how more or less fine-grained adjustments of indicators and scoring guidelines are required to maintain comparability over time (see, e.g., Mehrpouya and Samiolo 2016).

3. While the accounting device template may remain the same, as shown in field studies of management accounting, this template may acquire new meanings and have new effects when other elements are added: contextual knowledge (Jørgensen and Messner 2010), networks of allies (Briers and Chua 2001), and other accounting devices and inscriptions (Martinez and Cooper 2019). This reminds us that repetition involves multiple dimensions of potential "sameness," besides simply the formal template of an accounting device like a survey or a balanced scorecard or a budget. The device-in-practice is likely to be constantly mutating (see Ahrens 2009).

closely; and (iii) to observe panoramically in order to gain a broad perspective. These meanings suggest that surveys can be seen not only as measurement tools, but also as instruments for management control, accountability, and oversight.

There is limited accounting research on the survey as an accounting instrument (see, for an exception, Pflueger 2016). However, practitioners often use surveys to measure seemingly important drivers of organizational and individual performance (Ittner and Larcker 2003). Furthermore, work in sociology and organization studies provides insights into how surveys can be used to count, measure, and oversee heterogeneous social phenomena and governance objects, such as culture, political orientation, and sexual behavior (Igo 2007), organizational stress (Allard-Poesi and Hollet-Haudebert 2017), work ethics (Kelly et al. 2007), animal welfare (Law 2009), customer satisfaction about technical work (Orr 1996), and garbage collection and recycling (Woolgar and Neyland 2013).

These studies commonly criticize the way surveys simplify complex objects via limited sets of seemingly idiosyncratic questions—a theme that is familiar to accounting scholars (Power 2004). And yet they also show how surveys produce organizationally and institutionally salient facts that shape social lives and contribute to a normative order in which the normal and value-adding can be distinguished from the deviant and non-value-adding (Allard-Poesi and Hollet-Haudebert 2017; Kelly et al. 2007). Whether customer surveys, for example, convey any real information about the work done by employees, or whether they are filled in by relevant customers, are often not matters of concern so long as "managers seem to believe they do" (Orr 1996, 82). Indeed, flawed surveys can nevertheless be attention- and action-orienting, leading, for example, to the creation of focus groups and the use of performance indicators (Woolgar and Neyland 2013).

As with other forms of accounting, surveys can vary considerably. At one extreme, a survey may be a one-shot diagnostic tool and therefore something with a very limited timespan. It is initiated on the spur of the moment, used as an ad hoc tool, and then discarded. For example, Simons's (1999) risk calculator enables managers to quickly obtain a snapshot of emerging pressure points in their organizational units. In contrast, a mature survey may be periodically repeated, producing data for regular management reporting. In this context, the survey supports accountability about a range of objects of concern, such as employee morale (Allard-Poesi and Hollet-Haudebert 2017), patients' experiences (Pflueger 2016), and employees' performance (Orr 1996).

In our view, this potential for surveys to be repeatable makes them a relevant focus for a more general analysis of how accounting ends and the role of repetition in the process of ending. And yet, given the multiple manifestations of the survey as an accounting instrument, it is important to clarify the specific scope of our theorizing efforts based on our research setting.[4] First, our case survey is an instrument at the margins of accounting (Miller 1998) and is, at the time of our research, weakly institutionalized. There is therefore no prior external expectation at the time of our research that an organization should have a risk culture survey or, if it does, that it should continue in use after its first iteration. Second, at the beginning of our analysis, the survey is in effect an early-stage data-gathering technique that resembles an organizational "inquiry" (Lorino and Mourey 2013, 51) to find things out about an elusive area of intervention (e.g., risk culture). Its organizational future life depends on the facts that it produces becoming embedded in the preoccupations and problems facing key organizational participants, such as leadership teams and boards of directors. Third, and relatedly, the perceived salience of the survey does not depend only on the perceptions of individuals, as in the case of vernacular accountings (Kilfoyle et al. 2013) and other local processes of informing (Preston 1986). Rather, it derives also from the larger institutional diagnosis of the 2008–2009 global financial crisis (see Power et al. 2013)

4. These contextual features of our case study setting are particularly important in the discussion of how specific contingencies may affect our theorization of how accounting ends (see section 9).

as well as its ability to attach itself to preexisting organizational worries and crises (Palermo et al. 2017).

In summary, in what follows, we are dealing with a form of accounting-in-the-making characterized by extreme initial fragility. Its possible durability as a meaningful practice to account for risk culture is contingent upon continuing to be perceived by the organizational leadership as salient and actionable. This case study setting makes visible the mechanisms of accounting continuation (or ending) and their interdependencies, which are harder to observe in more established and traditional cases of accounting. More specifically, it enables us to explore how organizational actors deal with the tensions inherent in repetition (see section 2) as they confront a new area of intervention that is uncertain and opaque. In the next section, we further elaborate the key features of our research setting and research approach, how they influence our effort to theorize accounting life cycles, and, specifically, how they end.

4. Research approach and methods

The remainder of this article draws on a single case study developed through an interventionist research approach (Jönsson and Lukka 2007). The case study focuses on the design and use of a risk culture survey in the UK subsidiary of a large and internationally active insurance company (Zeta). The following section provides the rationale for our research approach and its benefits and limitations in enhancing our empirical and theoretical knowledge of accounting life cycles, how accounting ends, and our understanding of the significance of accounting repetition as a social process.

Rationale for an interventionist approach

Following preliminary interviews, members of Zeta's Risk Function expressed an interest in using the survey instrument that had already been used by the researchers (authors) in other financial sector organizations. In exchange for the work on survey design, members of Zeta's Risk Function promised access to internal meetings where survey data were going to be discussed, as well as follow-up interviews with relevant individuals. Accordingly, our survey instrument constitutes the key entry point into Zeta. The scope of our research is also specific. We are not directly investigating the wider organizational effects of the survey and the implementation of its results. Our focus is limited to the perceptions of the organizational leadership about the salience of the survey and the work of the group within the Risk Function responsible for the production and management of the survey and its results.

This research approach meant that we, as researchers, were part of Zeta's organizational inquiry into risk culture, at least in its early phase. This is an aspect of our study that we take into consideration when developing our final set of theory-building propositions (see section 9). We influenced the survey design by providing both the initial suite of questions and also the infrastructure to distribute the questionnaire via an online survey development software. At the request of Zeta's managers, we also provided an initial analysis of the survey's results. While this lack of independence in itself seems to be a methodological weakness, we consider our intervention in Zeta to be a net methodological gain for the study. This is because it helped to build a relationship of trust with Zeta's managers, leading to a longitudinal engagement that enabled us to observe and analyze the use of the survey as it occurred in vivo.

Moreover, our interventionist approach provided invaluable access to the practical reasoning of the people who dealt with the survey in Zeta. We were able to keep track of all the exchanges with members of Zeta that related to the design and fine-tuning of the survey, thus providing insights into how the survey came to life through a combination of preexisting questions (provided by the researchers) and the concerns of Zeta's managers. We were also able to observe how senior management reacted to preliminary analyses of survey results and how they tried to interpret or challenge survey facts. In short, in a manner similar

to previous studies based on participant observation (see Lorino et al. 2017), we had the opportunity to observe how organizational participants' agendas, expectations, and efforts unfolded over the course of the study, at times taking unexpected turns. Besides specific sources of data such as interviews and documents (see the next section), these observations were pivotal to theorizing the trajectory of the risk culture survey, including the effects of our interventions, and to the development of our core argument about the self-undermining nature of survey repetition.

Research site and data sources

The selected case study arose from a larger study of risk culture in financial organizations. Between 2012 and 2017, we approached a variety of insurers and banks, both large and small, and we also extended our work by engaging with consulting firms and regulatory agencies.[5] Our primary point of entry into the field was via corporate risk functions, working jointly with senior risk managers. We embraced this approach partly on pragmatic grounds—these were the easier points of entry to organizations—and partly from a prior view that corporate risk functions were most likely to be at the leading edge of risk culture change programs with their reputations at stake (for more information about our research approach in the larger study of risk culture in financial organizations, see Power et al. 2013).

Zeta was a participant in our study of risk culture. Our longitudinal research engagement with Zeta involved five main onsite engagements spread over four years, during which we met a range of individuals, observed internal meetings, and collected internal and publicly available reports about leadership's efforts to change Zeta's culture (see the research instrument in the online Appendix).[6] This allowed us to observe how interest in, and work on, the survey progressed over time. The initial interaction (July 2012) with this organization came via the head of Enterprise Risk Management (ERM), who was responsible for the development of risk policy frameworks in financial service environments. Following this initial contact, we met other members of the Risk Function. These initial interactions led to the use in Zeta of our survey instrument. This was adapted to the context of Zeta in collaboration with staff from the Risk Function and distributed in February 2013. Further meetings and field visits at Zeta's offices followed from 2013 to 2015. A report on Zeta's cultural change transformation published by a human resources professional association in 2015, with inputs from Zeta's senior managers, proved particularly helpful to corroborate our interpretation of some of the key dynamics that we had the opportunity to observe via our field study.

The meetings took place in two main forms: (i) interviews, in particular with members of the Risk Function, which consisted of a number of discrete risk teams reporting to the chief risk officer (CRO) (see Table 1) and (ii) two seminars, which included top managers such as the CEO, the CRO, and the chief operating officer (COO) (but not the CFO), and other managers from different functions such as Risk, Compliance, Internal Audit (IA), Human Resources (HR), and Actuarial (see Table 2). The purpose of these sessions was to discuss survey results (May 2013) and subsequent survey-related actions and future plans in the area of managing and changing risk culture (December 2013). The seminars lasted around two hours and were followed by informal conversations with individuals who had responsibility for the risk culture survey implementation.

Data analysis approach and methods

Our fieldwork at Zeta generated a diverse set of materials, including interview transcripts, participant observation of internal risk culture seminars, notes on informal exchanges during field visits,

5. The authors complied with the Research Ethics Review policy and procedures of the London School of Economics and Political Science (LSE), which were in place when the study was conducted. No significant ethical issues emerged from this process.
6. Please see supporting information, "Research Instrument Supplement," as an addition to the online article.

TABLE 1
Interviewees at Zeta

Role	Date of meeting	Name
Head of ERM	July 2012	—
Head of Corporate Governance	July 2012	—
Senior risk manager (head of Risk Team)	December 2014	Bill
Senior risk manager	December 2014	Mike
Risk manager (Risk Team, liaising with IA)	December 2014	—
Risk manager (Risk Team)	December 2014	—
Risk manager (Risk Team)	December 2014	Tom
Actuarial trainee (Risk Team)	December 2014	Joe
Actuarial trainee	December 2014	—
Member of Group Risk Management	October 2015 (by phone)	—
Senior risk manager (reorganized Risk Team)	November 2015	John
Senior risk manager	November 2015	Mike
Risk manager (reorganized Risk Team)	November 2015	Nina
Internal Auditor	November 2015	—

Notes: The interviewees are described in the table based on their roles when the meeting took place. Mike changed roles over the course of the study: he was the head of ERM in 2012. The team within the Risk Function responsible for the survey is referred to as the "Risk Team." The table reports personal names, if used in the empirical analysis. All names have been changed to protect anonymity. The table includes information about audio-recorded meetings only.

survey data (first iteration), internal reports about survey data, and texts such as emails with updates about ongoing survey design work. In order to make sense of this varied material, we drew upon processual approaches to data analysis and theorization (Cloutier and Langley 2020; Langley 1999). Specifically, we adopted a narrative-based theorization of our data (Cornelissen 2017) and sought to capture key phases of the survey's life cycle using a "temporal bracketing" strategy (Langley 1999, 703). In what follows, we structure our data around three successive but connected blocks, which present continuity within each period and discontinuity at their frontiers. As a result, the data are organized to reflect sequential stages of an accounting life cycle that progresses from beginning to ending. More specifically, following the theoretical concerns highlighted in section 2, we build on the transition between each block to unpack the dynamics that may explain the survey life cycle's progress and possible points of inflection with a specific focus on what happens around each act of repetition.

Within this general orientation, we adapted our data analysis techniques to the source of material. For example, we created a folder with all our email exchanges with members of the Risk Function during the first iteration of the survey. This enabled us to generate a detailed chronology of the beginnings of the survey, and its key turning points, such as changes in the team responsible for the survey or shifts in leadership interest in the survey data. We also coded available interview transcripts over the research period (2012–2015) to capture insights about survey development in relation to broader organizational narratives, and the way in which this relationship changes as the survey is repeated. Finally, we used the qualitative materials (e.g., transcripts, notes, PowerPoint presentations) arising from our observations of internal risk culture seminars (May and December 2013) to capture the relation between the survey raw data and the sensemaking of senior actors by which these data are "talked into existence" (Weick et al. 2005, 409) and acquire organizational "facticity" (Power 2021, 8).

TABLE 2
Risk culture seminars' participants at Zeta

Title and date of the meeting	Role	Name
"Risk Culture Seminar," May 2013 (referred to as "RCS-1" in the empirical sections)	CEO	—
	CRO	—
	COO	—
	HR Director	—
	Head of Communications	—
	Member of IA	—
	Chief Actuary	—
	Senior risk manager (Risk Team)	Bill
	Senior risk manager	Mike
	Senior risk manager	—
	Risk manager (Risk Team)	Tom
	Actuarial trainee (Risk Team)	Joe
"Follow-up Risk Culture Seminar," December 2013 (referred to as "RCS-2" in the empirical sections)	CRO	—
	COO	—
	HR Director	—
	Head of Communications	—
	Chief Actuary	—
	Compliance officer	—
	Senior risk manager (Risk Team)	Bill
	Senior risk manager	Mike
	Senior risk manager	—
	Senior risk manager	—
	Risk manager (Risk Team)	Tom
	Actuarial trainee (Risk Team)	Joe

Notes: The seminars' participants are described based on their roles when the meeting took place. The table reports personal names, if used in the empirical analysis. All names have been changed to protect anonymity.

5. The risk culture survey begins

This empirical section focuses on the first iteration of the risk culture survey in a context characterized by organizational changes and leadership preoccupations with certain aspects of Zeta's working environment. The survey takes place between February and March 2013. We document below how this iteration of the survey is not only about the production of data but also reveals situated meaning-making exchanges during which risk managers and senior executives make sense of survey data in the light of their own understanding of key problems, potential solutions, and normative expectations about future "good" outcomes for Zeta. We show how the survey is transformed from an early-stage data-gathering technique about an elusive topic into an instrument of internal accountability as the survey data attract the attention of senior managers, such as the CEO and the CRO, and feed into board reporting.

Survey design and implementation: Context and key events

Table 3 summarizes key events that take place in the first temporal bracket of our analysis, providing a timeline for the organizational journey of the survey from the initial expression of interest (November 2012) by a senior manager in the Risk Function to its administration, data analysis, and the reporting of its findings. The rhythm of work on risk culture reflects the fluid organizational environment. For example, activities related to survey design suddenly stop in early January 2013 due to an organizational restructure. They then resume, and

TABLE 3
Survey beginnings and first iteration

Date	Description of the event	Actors
November 13, 2012	Expression of interest in a risk culture survey	Head of ERM
November 13–December 19, 2012	Discussion of survey practicalities and survey sign off	Risk manager, reporting to head of ERM
January 7, 2013	Risk culture topic transferred to Bill's Risk Team	Joe (on behalf of Bill's team)
January 28, 2013	Survey signed off by Risk Team	Joe (on behalf of Bill's team)
February 11, 2013	Request to add questions about "risk taking" and "risk aversion"	Joe (on behalf of Bill's team)
February 22–March 25, 2013	Questionnaire signed off and going live/closed	Joe (on behalf of Bill's team)
March 21, 2013 (follow-up April 5, 2013)	Repeated requests for a report with preliminary results	Joe (on behalf of Bill's team)
April 8–10, 2013	Report sent; results considered "interesting"; follow up internal Risk Culture Seminar confirmed	Tom/Joe (on behalf of Bill's team)
May 10, 2013	Internal Risk Culture Seminar to discuss risk culture survey results	Researchers; Risk Team; senior executives
July 2, 2013	Survey raw data sent to Risk Team for an internal report	Joe (on behalf of Bill's team)

Note: Timeline of events leading to, and after, the first iteration of the survey.

proceed quickly, when the risk culture topic becomes part of the area of responsibility of a senior manager in the Risk Function ("Bill") and his newly created team (hereafter the "Risk Team").

The survey data at the center of our analysis in this section is the product of a questionnaire that was made available by the researchers through an online survey development software between February 22 and March 25 to 70 staff members, leading to 45 responses (see the research instrument supplement in the supporting information in the online Appendix for the full text of the questionnaire). The Risk Team, in agreement with the CRO, defined the target sample of respondents, encompassing people from different functions and with different levels of seniority in the organizational hierarchy. Responses were obtained from people in staff and supporting functions, such as risk and compliance (27% of respondents), operations and information technology (16%), and finance (22%), as well as frontline business functions (27%). The majority of respondents designated themselves as managers or senior managers (76%).

Throughout the timeline illustrated in Table 3, we see how implementation tasks carried out by junior members of the Risk Team (e.g., Joe, Tom) are entangled with wider institutional pressures on financial organizations to show that action is being taken to understand, reform, and manage organizational risk culture. Accordingly, the survey tool that we examine in this study is different from local or informal accountings that are developed and become accepted as salient at specific sites within organizations (e.g., vernacular accounting; see Kilfoyle et al. 2013). As shown in the following email extract, the board at Zeta had exerted pressure to do something about risk culture, as did many other boards of financial sector organizations (Power et al. 2013), and the survey emerged as a possible option:

> We discussed risk culture at a recent Board meeting and the Directors are keen for the firm to participate in this risk culture survey/questionnaire as a way of better understanding current and target risk culture states. (Head of ERM, email, November 2012)

Furthermore, a member of Group Risk Management at Zeta's parent company, tasked with overseeing risk management initiatives across subsidiaries such as Zeta, emphasized how the main users of risk culture surveys were senior management and boards of directors in response to regulatory requirements. When asked about the use of risk culture surveys, she stated:

> I mean the context there was that the boards, you know, more and more are actually required also by regulations to ensure there is a risk-aware culture within the company. And this [surveys] was more for the boards to support them and how could they follow up on it. (Group Risk Management, interview, October 2015)

Our longitudinal analysis also highlights how, following the first round of data collection, the Risk Team was under pressure to report key findings to senior management. For example, as the survey was about to close, Joe and Tom solicited a report from the researchers on survey results. The completeness of the analysis, including the possible use of additional benchmark data collected from other organizations, seemed to be of relatively little interest in the light of a pressing concern to obtain any kind of data. Speed of delivery was important to be able to use preliminary findings for a report due at the end of April. Informal interactions with Bill confirmed that the report was tabled as a discussion item for a board meeting. Subsequently, as reported by Joe, the CEO expressed interest in participating in a "risk culture seminar," where the survey data could be discussed, to "gain a deeper understanding of the Risk Culture within the firm" (Joe, email, April 2013).

The beginning of the risk culture survey was also mobilized by the interest of Zeta's leadership in how the data could become relevant to preexisting issues and organizational concerns. Specifically, a preoccupation with "risk taking" and "risk aversion" emerged from different sources. A report about Zeta's cultural change transformation describes a context that in 2012 is deemed to be risk-averse and slow-moving. Our preliminary interactions with senior risk managers in July 2012 also revealed how risk culture was associated with what they considered to be a negative feature of Zeta, namely an aversion to taking individual responsibility for making decisions, due to the fear of negative consequences:

> Yes, [risk culture] is about our willingness to get things wrong I would suggest. You know, because historically we've not been willing to get anything wrong and that sort of manifests itself, should I say, in a decision-making process which isn't the most efficient. (Head of ERM, interview, July 2012)

Our involvement in the design and fine-tuning of the survey questions in early 2013 also confirmed how the perceived usefulness of the survey seemed to be a function of broader organizational change narratives and leadership concerns. While Joe had acknowledged that his team was broadly happy with the suite of questions on January 28, 2013, he asked for additional changes two weeks later.[7] A concern with capturing where Zeta stands in terms of "risk taking" and "risk aversion" had emerged following meetings with members of the senior leadership team:

> Last week we had a meeting concerning the Risk Culture Survey and a few questions were raised centering around the fact that there were no explicit questions asking about whether or not we are too risk adverse as an organisation. Therefore, we wondered if this was being inferred by the responses to other questions within the survey? If this is not the case, would it

7. We acted upon the request of the Risk Team by adding two questions, using the wording suggested by the Risk Team.

> be possible to add a question in at the end of the survey asking if we are too risk adverse as a organisation? (Joe, email,[8] February 2013)

Not surprisingly, in the light of our interactions with the Risk Team during the survey design and administration, Joe requested on behalf of his team that we foreground survey results about risk taking and aversion as a central topic for discussion during the Risk Culture Seminar in May 2013. At the very start of this seminar, Bill reminded the group how the CEO could attend only the first part of the meeting and that the meeting should therefore start with the findings about risk taking.

To summarize, this section provides a timeline of the beginnings of the risk culture survey, showing how the actions of producing survey data are part of a broader organizational inquiry (Lorino and Mourey 2013), characterized by institutional pressures to show evidence of action on risk culture combined with more or less loosely defined preoccupations about risk taking and decision-making. In the section that follows, we complement these insights with a more fine-grained analysis of how survey data acquire action-generating facticity (Power 2021) during situated exchanges between senior managers, members of the Risk Team, and the researchers during the first Risk Culture Seminar, which we observed as part of our interventionist research engagement.

From survey data to action-generating facts

As noted in the previous section, our research contacts were keen to explore Zeta's position on risk taking and risk aversion during the first Risk Culture Seminar in May 2013.[9] The survey findings about risk taking revolved around three sets of slides prepared by the researchers. The first slide showed results for a construct capturing the extent to which taking risks is perceived as being encouraged in Zeta (see Figure 1). The second combined this risk taking construct with responses about performance pressures due to stretched targets (see Figure 2). The third focused on the extent to which risk aversion is driven by the perceived need to comply with group policies.

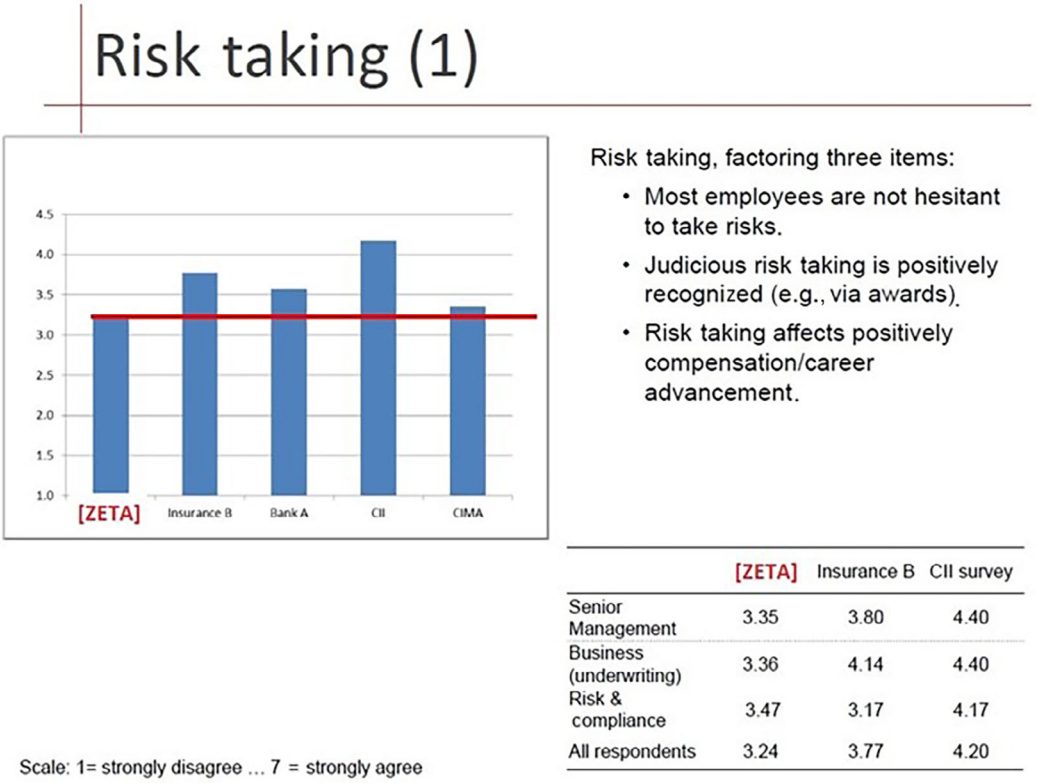
Initial reactions by workshop participants to the presentation of these three aspects of the survey tended to be critical of the validity and applicability to Zeta of the survey data. The CEO and the COO were quick to expose the limitations of survey design choices and the measurement of key constructs about risk taking. For example, the researchers presented results about the risk-taking construct using the slide in Figure 1 ("Risk taking (1)"), suggesting that Zeta emerged as a more "risk averse" organization compared to preliminary benchmark data. However, the COO claimed that risk aversion could not be inferred from answers to the three specific questions asked. The CEO added that "we've got to be careful on the numbers in terms of the actual percentages, given the numbers involved," and highlighted the lack of statistically significant results.

Yet, despite this challenging start, as the conversation unfolds, the "noisy" survey findings also became a catalyst for attention to specific issues, generating "interesting" puzzles to be solved and "worrying" results to be rectified. For example, the graph combining results for risk taking[10] and performance pressures (see Figure 2) presents data for Zeta at different organizational levels and for different functions (the triangles and circles in Figure 2) together with benchmark data (the squares in Figure 2).

The discussion of this graph showed how what is "interesting" to organizational members was "talked into existence" (Weick et al. 2005, 409) based on participants' own knowledge about perceived organizational issues at Zeta. Taking the risk taking/performance pressures graph as an example, the COO and the CEO noted how the "interesting" gap is not that between the triangles (Zeta) and the squares (benchmarks), where it is visually larger, but concerns the internal relativities that emerge from responses obtained from different organizational levels in Zeta (e.g., senior

8. The spelling in the quoted text is kept as in the original source.
9. Unless stated otherwise, all quotations in this section refer to the first Risk Culture Seminar (RCS-1).
10. As shown in Figure 1, the risk taking construct is based on three items: employees' risk taking, recognition of judicious risk taking, and the effects of risk taking on compensation and careers.

Figure 1 Survey data: Risk taking [View color figure at wileyonlinelibrary.com]



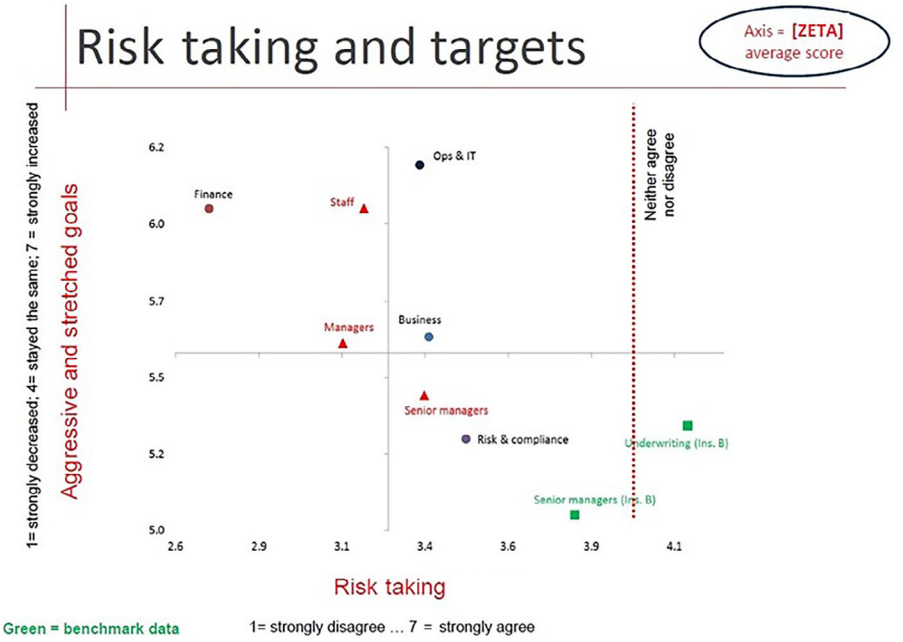
	[ZETA]	Insurance B	CII survey
Senior Management	3.35	3.80	4.40
Business (underwriting)	3.36	4.14	4.40
Risk & compliance	3.47	3.17	4.17
All respondents	3.24	3.77	4.20

Notes: The figure presents an anonymized excerpt from the PowerPoint presentation used during the first Risk Culture Seminar. Each bar of the graph indicates the average of the three questions on risk taking (included in the slide next to the graph) obtained from the surveys carried out in Zeta, in another large insurer (Insurance B), and in the UK investment banking subsidiary of a banking group (Bank A), as well as survey data collected from members of the Chartered Insurance Institute (CII) and the Chartered Institute of Management Accountants (CIMA). The straight line represents Zeta's score for the risk taking construct. The table provides information about the results across different categories of respondents for Zeta and Insurance B, and respondents to the CII survey. The surveys at Insurance B, Bank A, and among members of CII and CIMA were carried out as part of the authors' larger study of risk culture in financial organizations.

managers, managers and staff members), even though here the gap is visually smaller. As shown in the following excerpt, these data are interesting because they can be related to expectations about good results in the context of a broader organizational effort to address a historical "command and control" approach that seemingly hampered value creation (see the previous section):

> Yeah, yeah. But if managers and senior managers are lower down on that axis, that says that they've understood the goals. (COO)
>
> I'm comfortable with that, [name COO omitted], I think I'd expect them to go further right though. (CEO)
>
> Okay, yes, I would expect them to be further to the right. (COO)
>
> Because otherwise that implies a bit more of a command and control than you'd ideally want. (CEO)

Figure 2 Survey data: Risk taking and performance pressures [View color figure at wileyonlinelibrary.com]



Notes: The figure presents an anonymized excerpt from the PowerPoint presentation used during the first Risk Culture Seminar. The horizontal axis represents the score for the risk taking construct used in Figure 1. The vertical axis represents the results for the question: "Please indicate the extent of change in *aggressive and stretching goals from the top* during the last 2–3 years." The circles represent the results for different functional areas in Zeta. The red triangles represent the results based on the seniority of respondents in Zeta. The green squares represent selected results, provided as a benchmark, from the survey carried out at Insurance B.

This example shows how critiques and questions about the survey and its design limitations were intertwined with the interpretation of the "flawed" survey data (Swieringa and Weick 1987; Dambrin and Robson 2011; Jordan and Messner 2012) and normative statements about what is "good" and what is "bad" (Hopwood 1987, 1983; Ahrens and Chapman 2007). A recurring feature of such situated sense-making dynamics is that participants draw on additional sources of data to introduce new perspectives that make the survey data presented during the seminar interesting for them, generating puzzling new facts that may demand future action.

An indicative example of this is the use of the survey data about perceptions of a no-blame culture to discuss the first set of survey findings about risk taking (see Figure 1). These data were not explicitly part of the presentation prepared for the Risk Culture Seminar. Nonetheless, seminar participants, such as the HR Director and the CRO, brought into the conversation the importance of management actions and a leadership style that support a no-blame culture. In their view,[11] the survey data provided confirmation that Zeta's employees responded positively to the many efforts made by the CEO to explain how a "blame-free culture" (HR Director) was pivotal to taking risks and learning from mistakes.

11. This appears to be an overinterpretation of the survey data on their part. The preliminary analysis, circulated a month earlier via the Risk Team, did not support firm conclusions about no-blame culture. The numerical score related to responses to the question about the presence of a "no-blame environment" to discuss the causes of errors "if things go wrong" was not highlighted as being particularly significant vis-à-vis other results.

These emergent facts about no-blame culture framed the discussion of risk taking in terms of what it means to encourage people to take risks in a positive way. According to the HR Director, it means that people should not refrain from taking risks for fear of being sanctioned if outcomes end up badly. People should rather feel "empowered," which—we later found out (see the next section)—was a concept at the center of an ongoing corporate-wide change initiative. Building on this discussion about no-blame culture, the seminar's participants stated that "what the survey would tend to suggest" (CRO) was that people believe in "empowerment" and how "it's safe to take risks, it's okay to get it wrong" (HR Director). And yet this positive finding about no-blame culture, also created a puzzle for interpreting the survey findings about risk taking. The CRO spotted an "inconsistency" in the survey data:

> But there's likely to be an internal inconsistency here isn't there? So on the one hand we're saying that our people are . . . as an organization, we're less likely to take risks than other organizations this would suggest, or more reluctant to take risks. . . . Yet on the other hand people are saying that "Well if I take a risk and it goes wrong, that's okay. And I get supported and it's a no-blame culture." And I'm just trying to reconcile these two in my head because they don't feel [like] two consistent messages.

This perceived puzzle generated normative statements from the leadership about the work that needs to be done to make progress in a change journey toward an organization where members of staff and managers feel safe to take risks. Paraphrasing workshop participants, further actions, such as "proper" communication, are needed. Similar action-oriented normative statements concluded the discussion of the other results about "risk taking." For example, the discussion about a survey finding that respondents seemed to feel bound by rules and pressured to comply with group policies ended up with the CEO, the CRO, and the HR Director agreeing that more work is needed to make people feel more "empowered." Overall, our observations of the Risk Culture Seminar reveal an iterative sense-making process whereby noisy survey data are turned into something sufficiently factual to orient future actions for the Risk Team.

To summarize, this section provides insights into the situated sense-making dynamics through which a tentative form of data collection gets entangled with leadership preoccupations (e.g., risk taking) and organizational change narratives (e.g., empowerment). At this point in time, through our varied sources of material, we learn how the survey has become a source of data that tap into ongoing and planned change aspirations and initiatives, as well as into the diagnosis of organizational problems. In the next section, we move to a second temporal bracket (Langley 1999) addressing the organizational dynamics leading to the repetition of the risk culture survey in Zeta.

6. The risk culture survey is repeated

This second empirical section is centered around the repetition of the risk culture survey, which took place between November and December 2013. As with the first iteration of the survey, we document the organizational concerns, change aspirations, and organizational initiatives that characterize the context before and after the survey is repeated. We find important discontinuities with the first temporal block of our analysis. The focus shifts from the experimental joint efforts of the Risk Team and the researchers to gather some explorative data to an organizationally coordinated initiative in which the data speak to a more clear-cut set of change initiatives and leadership concerns.

The search for more and comparable data

Between the end of 2013 and the first half of 2014, discussions about risk culture became increasingly embedded in the broader corporate change journey that had begun in 2012 with the hiring of a new CEO and was internally championed by the CRO and the HR Director. As noted in

section 5, during the first Risk Culture Seminar, we already learned of an organization-wide effort to push through an "empowerment" narrative to encourage people to take responsibility for decision-making and risk taking in their functional areas. This "empowerment" narrative was in progress at the time of our fieldwork at Zeta in the second half of 2013:

> You know, you can tell people they're empowered, but they have to believe you first. And they have to build up that trust which is never going to come about quickly. And I think that's why we've been pushing the empowerment story and narrative probably for nine months now. Realistically you know, we've probably got another nine or twelve months to go. (CRO, RCS-2, December 2013)

Unsurprisingly, given the CRO's sponsorship, senior members of the Risk Team acknowledged how they tried to connect their work on risk culture to leadership concerns with cultural change and "empowerment." Indeed, Bill highlighted the alignment between questions asked in the first risk culture survey and the corporate-wide change program:

> Yeah, yeah, so as well as the things we're talking about already about cultural change and empowerment and that sort of thing, which again is . . . *there were a few questions, as you know, in the survey about empowerment and decision-making* and making positive decisions or taking risk from a positive point of view rather than just the negative point of view. (Bill, RCS-2, December 2013; emphasis added)

It is in such a context that the risk culture survey was repeated. A closer examination of the motivations for repeating the survey shows how the repetition of the survey is central to transforming it into a performance measurement instrument. The survey would provide meaningful data that could be used over time for management control and improvement purposes via the analysis of temporal trends and benchmarking (Power 2004). In this second temporal block, survey repetition seemed to have a defined purpose, which revolved around monitoring existing initiatives and verifying whether "we need different programmes of activity in different places to address sort of different historic risk cultures that we may have" (CRO, RCS-2, December 2013). Such a monitoring task via the administration of a second risk culture survey was a significant aspect of the work of the Risk Team during 2014. As put by the CRO, it was "a big part of [Bill]'s objectives next year" (CRO, RCS-2, December 2013). And, as put by Bill, there was a clear expectation that survey repetition would help to validate findings and inform future steps:

> So it will help to validate the information we got the first-time round to a certain extent but also help us to see as an organization how we've changed. So we got the first slug of data back, the first lot of responses, but we're just in the process at the moment of, you know, analysing that and seeing what key messages we get this time round. (Bill, RCS-2, December 2013)

Our interactions with members of the Risk Team, as they reflected on the practicalities of survey design and administration, shed light on the contextual elements that made repetition of the survey meaningful and relevant. A first contextual element was the favorable perception of surveys within Zeta and their repeated use as a source of data. For example, when Tom communicated his team's willingness to repeat the risk culture survey, he requested that the researchers transfer the questions used during the first iteration of the survey into the company's own online survey distribution software. From this request, it appeared that the risk culture survey was now on its way to become a routinized feature of organizational life:

> We're looking to do a follow-up survey to the one that you guys did for us, asking a few more people, etc. I think we'd like to do an annual survey, so that we can track the evolution of the risk culture over time. (Tom, email, October 2013)

In addition, reflecting a broader canvas of work on risk culture at Zeta, Mike recalled how IA had used a survey in the first half of 2014 to inform an audit opinion on risk and control culture. IA's survey focused primarily on members of risk and compliance functions, following institutional pressures to audit risk and control culture. But Mike recognized similarities with the Risk Team's survey instrument:

> But yeah, so clearly risk culture is very topical. Our colleagues had it on their audit programme this year and undertook a similar type of survey amongst a sort of sample of the [Zeta]'s employees' population and came up with some relatively interesting conclusions. (Mike, interview, December 2014)

More generally, reflecting on the work done between the last quarter of 2013 and the first half of 2014, Bill suggested how, during this period of time, the organizational context seemed very receptive to the practice of surveying, thanks to Zeta's existing infrastructure for survey administration and a general predisposition to being surveyed, even if the CRO highlighted the risk of "survey fatigue" at Zeta, as "we've [been] surveying for everything" (CRO, RCS-1, May 2013):

> We've got mechanisms within the organization to be able to do this sort of dip test every now and again. We work closely with the [Communications] guys, in preparing the survey. . . . It needs to be coordinated alongside other surveys. *We are an organization that likes to do this sort of thing and we like data; we like having that information available to us*. We do surveys for other things like employee engagement and various bits and pieces during the course of the year. So yeah, so it's one of the tools that we've got available to us. (Bill, interview, December 2014; emphasis added)

A second element that made survey repetition a promising focus for action were the design features of the second survey itself. First, our research partners at Zeta reminded us about how obtaining consistently comparable data, following up on the first survey, would be helpful to monitor change. In terms of survey design, the survey had to be kept as close as possible to the original in order to allow comparability over time and to add weight to the initial findings by monitoring trends. In short, there was an organizational need for the new survey data to be "commensurable" with what went on before (Espeland and Stevens 1998; Mehrpouya and Samiolo 2016; Power 2021, 2004).

Second, while the survey had to be kept broadly similar to the previous iteration, specific, small changes strengthened the links to the broader diagnosis of organizational problems that we followed during the discussion of the first set of risk culture data. For example, Bill and Mike emphasized how the first survey provided positive insights about "empowerment," but also shed light on other specific areas of concern, such as perceptions about no-blame culture and the inclusivity and openness of the decision-making environment in lower organizational levels. Therefore, the second survey targeted a larger population and included more junior Zeta employees in the sample. The wording of questions about no-blame culture was modified to make them more easily understood by the new target population. These efforts to adjust the second survey demonstrate both an overall aspiration to replicate the first one exactly and also how acceptable forms of "sameness" and comparability are constructed in situ (Collins 1992). The Risk Team determined relevant dimensions of comparison based on their understanding of pressing organizational concerns such as perceived openness and no-blame culture at lower organizational levels.

To summarize, insights about the organizational context at Zeta, as well as the practicalities of survey design, show how, between the end of 2013 and the first half of 2014, the second iteration of the survey seemed well-placed to speak to organizational concerns and corporate narratives of interest to the leadership team (e.g., "empowerment"). Survey design decisions, such as the wording of specific questions and the selection of target respondents, strengthened the potential links between additional survey data and such concerns. In short, toward the end of 2013, the risk culture

survey was becoming much more than an idiosyncratic instrument developed by the researchers for a small team of risk managers who were searching for ways to gain organizational visibility. It was becoming something repeatable. And here we begin to see how, to make the survey repeatable, Bill and his colleagues navigate the conceptual space of accounting repeatability sketched in section 2. Overall, they steer the survey practice closer to the ideal of "perfect repetition," emphasizing key dimensions of "sameness" that enable comparability over time, even though some changes to selected questions and the targeted population are made.

The new survey data and follow-up initiatives

The previous section provides evidence that survey repetition promised to be useful for analyzing trends and for verifying organizational achievements, which were of interest not only to the Risk Team but also to Zeta's leadership. Yet, despite these positive expectations, we noticed a markedly different reaction to the results of the second survey compared to the first. The results of the first survey, even if they had been challenged, sparked discussion about managerial "puzzles" and engaged senior leadership. In contrast, members of the Risk Team expressed a lack of surprise about the results of the second survey. Even the few "interesting" results were described as "good news" which confirmed expectations. For example, Tom made the following comment:

> I think most of the results came out fairly similarly. There weren't any really big changes from the first survey to the second one. There were a few things that were interesting in the second survey, I think the more junior audience. . . . There was maybe more agreement with things like most employees are not hesitant to take risks, employees who make mistakes are not unfairly treated. [It] was kind of . . . the shoot-the-messenger type . . . so that was good news. Then some of the [results] that maybe we had probably already expected from things about empowerment and things like that. So stuff like the question on "there is an inclusive environment for decision-making" or "an open-door environment to discuss risk issues" . . . we had some lower scores in the second survey than the first one. (Tom, interview, December 2014)

Mike also remarked how other diagnostic efforts about risk culture, such as the survey of risk and control culture from IA, provided a similar confirmation of the disconnect between the perceptions of senior managers and junior colleagues about issues of "empowerment" and the decision-making environment: "[This] was aligned to a finding we had from our survey." Bill also made a more general comment about the apparent failure of survey repetition to initiate or corroborate actions regarded as organizationally salient by the leadership:

> So one of our objectives is to work with the Exec to improve risk culture within the organization and this [the survey] is one of the tools available to us. So if we're being very honest with ourselves, we can survey continuously you know, doing surveys isn't the most difficult thing. But it's much more difficult to do something with results . . . as we found this year. (Bill, interview, December 2014)

Bill used the specific example of a training initiative on decision-making, which the Risk Team coordinated to contribute to the "empowerment" change agenda. Notably, during a discussion of survey follow-up actions, this initiative had also been flagged at the end of 2013 by the HR Director for its organizational relevance:

> A good example is the learning development module that [Bill]'s also working on around our decision-making and ensuring that that's . . . helping our people understand how to make good decisions, empowered decisions, but within the framework of an insurance company where you need to be cognizant of risk. (HR Director, RCS-2, December 2013)

As part of the training, following an introduction by the CEO, an external consultant explained to attendees what "good" decision-making looked like. Subsequently, Bill sought to apply the

consultant's talk to the specific roles of the attendees with the aim of helping people understand the decisions that they can take within their authority. Despite the apparent close link to the organizational concern with "empowerment," this initiative received strong pushback from attendees. Senior management decided to stop it:

> The feedback that came back was that people really didn't need to spend an hour being told how to make a decision, that they liked the stuff about empowering, they liked the stuff about good and bad, wrong and right, but really didn't need to sit down for an hour and be told how to make a decision. So the core part of the training was felt to not be particularly well placed so the training wasn't taken forward. (Bill, interview, December 2014)

This unsuccessful implementation of the training was indicative of broader discomfort within the Risk Team about their role in a quickly changing organizational context. By the end of 2014, the corporate change narrative was couched in terms of "agility," involving quicker decision-making processes with fewer layers of approval, greater cross-functional collaboration, a reduction of the regular management information pack, and a decrease in the size and frequency of meetings. A report on Zeta's cultural change journey revealed a review of every regular meeting in terms of attendees, frequency, purpose, and outputs, leading to a significant reduction in the number of committees. As part of these changes, interviewees and documents indicate how the more agile organization also implied significant redundancies in Zeta.

With the benefit of hindsight, following the failure of their training initiative, members of the Risk Team noted how the concept of "agile" decision-making differed from the individualistic and overly rational decision-making process portrayed in the training session that they had sponsored. In addition, the training session had required people to attend an additional meeting, in a context where meetings were increasingly criticized unless clearly adding value. It is not surprising therefore that time-pressured managers had complained about the need to sit down for an hour to be told about how to make a decision. Bill recognized the existential threat that this event posed for the Risk Team:

> There is an onus on us to be pragmatic . . . to react to the changing shape of the organization. And if the organization is becoming more agile, then we need to be more agile, we need to develop processes and mechanisms which are agile and help to facilitate almost that sort of change to the increasing agility across the organization rather than holding it back. (Bill, interview, December 2014)

To summarize, this section provides insights into the paradoxical nature of survey repetition. The search for "sameness" and specific and comparable findings between the two iterations of the survey is a key driver of survey repetition. And yet by providing such findings, survey results are dismissed as merely confirmatory and expected, like pure replication of scientific experiments where the knowledge domain is well known (Collins 1992). Moreover, while the available survey infrastructure in principle made repetition easy, the Risk Team grappled with the problem of providing evidence of salient actions that could follow up on survey data. They admitted to an initiative that exposed their and the survey's disconnect from the rapidly changing organizational priorities. In the next and final empirical section, we provide insights about a third temporal bracket (Langley 1999) in which we explore the shift from a perceived loss of momentum to the end of the risk culture survey at Zeta.

7. The risk culture survey ends

This third empirical section focuses on the final phase of our fieldwork. This period is markedly discontinuous with the temporal blocks covered in our analysis so far: we learn not only about how the risk culture survey is not repeated, but also about an organizational restructuring that led to a change in the personnel responsible for the risk culture work program. Bill and some of our

other contacts had left the company. We were able to meet, via Mike, members of a new team, headed by a senior risk manager ("John"), who aimed to instill a "renewed focus" on risk culture initiatives to give them more "momentum," more "push" (using John's words).

At the end of 2015, risk managers at Zeta referred to the risk culture survey in different ways. Mike, who previously played an important role in the implementation of the survey, expressed positive views about the role that it had played as part of corporate change initiatives, highlighting senior management engagement:

> To me, you know, there are some tangible actions being taken as the result of, and in part through [the] risk culture survey which [CEO's name] participated in and other initiatives. So I take some comfort from that. (Mike, interview, November 2015)

In contrast, John and members of his team expressed more critical views. Speaking about the survey, and more generally about the work done on risk culture, John often mentioned its lack of "practical links" with day-to-day business management:

> Whilst before we talked a lot about cultural messages and had a survey . . . we also need to have that practical link thrown into how is this actually going to change the way that you manage your business on a day-to-day basis. (John, interview, November 2015)

A colleague of John's ("Nina") also supported this claim. Her comments reveal how the new team of risk managers did not ignore existing survey data. Indeed, they had worked on the second survey data and disseminated the results of their analysis across the business. And yet they had revealed what they considered to be only generic and abstract facts, which mimicked normative guidance templates:

> We did a big piece of work analysing results from our [second] risk culture survey. It went out across the business, and [we ended up with] the 10 different factors with the IRM [Institute of Risk Management] risk culture survey, I think, and that's fine. You can put in the time but . . . we're a cost to the business. We need to demonstrate to the business that we can add value. We need to demonstrate what we're helping them do is make the right decisions and, you know, take the right opportunities and identify those threats. (Nina, interview, November 2015)

This quote shows the pressure on John and his colleagues to add value in an "agile" organizational context and how this new team of risk managers explicitly considered survey repetition to be risky for their own organizational status. Repeating the risk culture survey, even with modifications, was not regarded as a form of data production that could connect with key organizational concerns and priorities. It was lacking in tangible outcomes, such as the identification of examples of both good and bad culture. John argued how they now needed a different approach as the data had failed to attract senior management attention:

> You put some stuff at high level [on] a presentation to give to an exec audience where they challenge you back "that's motherhood and apple pie" because you can come out with stuff that no one can disagree with. You know, it's about actually then saying, "How does that translate in different ways into different outcomes?" (John, interview, November 2015)

In this changed organizational context, a new form of accounting for risk culture gained momentum: the production of "cultural indicators." Such indicators would capture and log specific aspects of the day-to-day business, such as loss events and customer complaints. The analysis of these metrics was appealing as a quicker way to obtain "tangible" evidence to inform actions and prevent problems. Nina gave the following example:

> For example, if you're looking at the heat map, are your risk appetite metrics. . . . Are those indicators built into your probability and severity ratings? Do they map back to your

> objectives? That's the cultural indicators. . . . Then you can see if this [risk appetite] is embedded in the business and how it is taken in the decisions. (Nina, interview, November 2015)

We had a confirmation of this potential shift in focus from surveys to indicators from a member of Group Risk Management within Zeta's parent company:

> I mean we do have some initiatives, you know, in actually driving or, you know, building up a risk-aware culture. So there are different, you know, work streams, most of them even running in parallel. Something that Group Risk is doing, something that HR is doing. But we're not at the point where we actually measure it. For which actually you first would have to, you know, I mean conducting the survey is one thing, but actually first of all coming up with the KPIs [key performance indicators], you know, is the more difficult one. (Group Risk Management, interview, October 2015)

Our visits at Zeta also provided evidence of how this shift in practice from surveys to "cultural indicators" was not specific to the Risk Team. The IA Team, which had previously used a survey as part of their audit of risk and control culture, also switched to using cultural indicators. One internal auditor stated that IA has not "specifically followed up on that survey and the actions that were driven off the back of it." Indeed, the possibility of examining trends via survey repetition, a key strength of the survey that drove attempts by the Risk Team to improve the second survey's "sameness" compared to the first iteration, is explicitly dismissed in favor of doing something "different":

> We have done a couple of specific audits looking at culture, one of which is the one you referenced where we did the survey last year. And we have done another one this year which we're in the process of reporting at the moment, and we've taken a different approach. So, *rather than repeating a survey and looking at potential trends and things in that*, what we've done this year is we have looked to review what we've described as cultural indicators. (Internal auditor, interview, November 2015; emphasis added)

John and Nina both commented on the work by IA on "cultural indicators" as something "really interesting." They looked forward to seeing the outcomes because it had the potential to achieve what they wanted to achieve, namely that "risk insights are being used to make the right decisions at the right time and take the right opportunities" (Nina, interview, November 2015). The internal auditor himself described this new approach as an "interesting" piece of work. These positive views contrast with the lack of enthusiasm about the possibility of repeating a risk culture survey. Survey repetition remained an option. But it was not considered to be worthwhile relative to other approaches. The following exchange provides a glimpse into these reflections about survey repetition, showing how, at this juncture, doing something "different" is considered to be more valuable than replicating and validating earlier findings:

> And the reasons for having a review of cultural indicators as opposed to do again another survey, what would be the benefits? (Researcher)

> It was partly, I think, not wanting to simply pick up last year's and roll it forward that you can . . . obviously there is a lot of benefit to doing something like a survey, and you can learn a lot from it, but I would suggest that unless things have changed significantly there's a diminishing returns to repeating that. So it was looking to say, "Well, is there a different way that we can approach it this year?" And where you've had examples of, you know, potentially controls failing or things going wrong, that can give you quite a good insight to, you know, why did they go wrong and what have we done about it? So it was thinking that for this year let's approach it from that sort of angle and see what we can learn from that. (Internal Auditor, interview, November 2015)

To summarize, in this final section, we learn from various sources, such as John and his colleagues, IA, and Group Risk Management that the risk culture survey had seemingly exhausted itself as an actionable mode of intervention at Zeta. The end of the survey as an accounting practice reflects the disconnect between its form and results, leadership preoccupations, and ongoing organizational change narratives. This happens in a context in which the initial advocates and owners of the survey workstream faced significant challenges (and some left the organization). Yet even in such a context, survey practice might have continued. The renewed team of risk managers, as well as internal auditors, reflected on existing survey results and explored the possibility to repeat it. But they did not. This decision to discontinue is not just an outcome of changes in the organizational conditions that support the survey's repeatability (e.g., loss of survey's allies). The very act of repeating the survey itself also contributed to the disconnect between the survey and seemingly salient organizational concerns. The central tension of accounting repetition is this: to make the repetition meaningful, the survey had to provide more of the same data and focus on specific areas of concern already known to management. But in the very act of doing so, of doing something close to an ideal of "perfect repetition," the value of repeating the survey is perceived as having "diminishing returns." We develop this argument further in the discussion of our case analysis that follows.

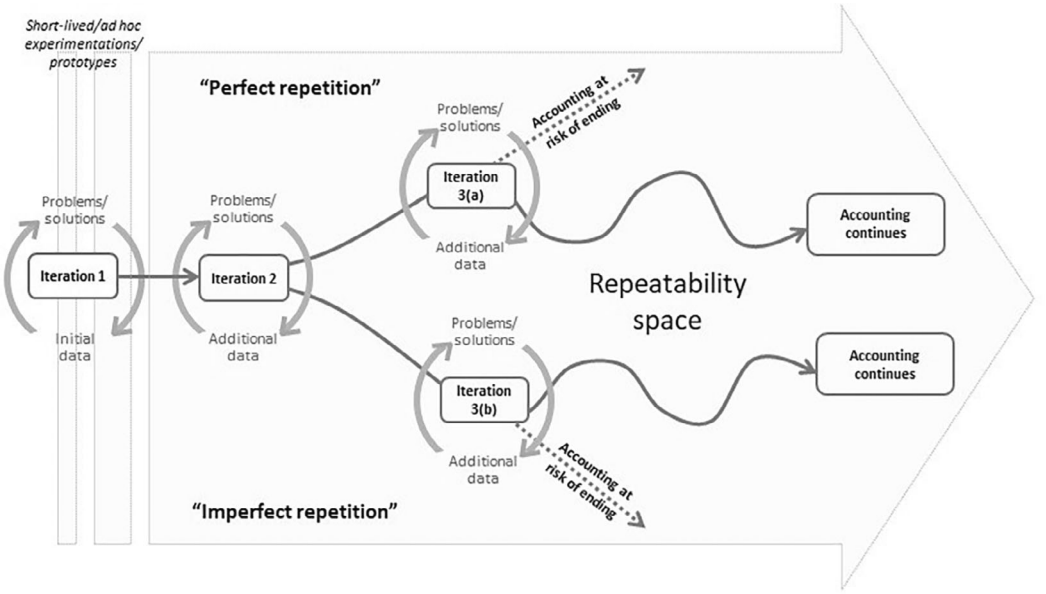
8. Theorizing from the risk culture survey case: How accounting ends

Our longitudinal narrative of the risk culture survey at Zeta reveals a breakdown in how survey-generated data are seen and made sense of by actors as action-generating "facts" linked to organizationally significant purposes and corporate narratives. Put simply, senior managers do not seem to "like" the risk culture survey anymore. And it is probably no surprise that, in politicized and changing organizational settings, the conditions that sustain the repeatability of accounting break down. Yet, drawing on our discussion of repetition as social practice, we are nevertheless able to enrich our understanding of such breakdowns in the conditions of repeatability. We go beyond the empirical observation of managerial discontent with accounting to theorize how the outcome of an accounting life cycle may also be driven by dynamics that are inherent in the nature of repetition itself. We summarize our case-based observations, and their theoretical extension, via the processual model presented in Figure 3.

At the beginning of the process on the far left of Figure 3, the model acknowledges how some forms of accounting are explicitly understood by organizational actors as short-lived and "disposable" (March 1995, 434; see, e.g., Goretzki, Strauss, et al. 2018; Hedberg and Jonsson 1978; Rowe et al. 2008). In contrast, some accountings are intended to continue, possibly through several iterations (in Figure 3: iteration 2, iteration 3). Over time, the initially experimental and explorative production of data may lead to the routine production of additional data. This transition in practice happens as the initial data-gathering technique, and the subsequent collection of additional data, become intermingled with bundles of problems and their possible solutions and change aspirations ("problems/solutions" in Figure 3). In our case study setting, the initial survey data make visible and actionable "risk aversion" as a diagnosed problem and "empowerment" as its potential solution. In turn, this set of problems and solutions sustains the perception that the initial survey data are contributing to initiatives that are deemed organizationally salient. Thus, the relation between "problems/solutions" and "data" in our model is initially tight and depicts how some data come to be seen, and made sense of, by organizational participants as action-generating facts, thereby constituting the accounting as "purposeful" (Meyer 1986; Hopwood 1987).

The critical and central feature of our model, derived from our case, is that the sequence of iteration boxes from left to right takes place within what we call a "repeatability space" defined by two boundaries: one that reflects the ideal of "perfect repetition" and another that reflects highly "imperfect repetition." For each repetition event in the process of continuation, organizational actors navigate this space of repeatability, eventually moving closer to one of the two

Figure 3 A process model of how accounting ends



Notes: This figure provides a graphical representation of our theorization of how accounting ends. The boxes represent different repetition events. The solid lines indicate a continuation of accounting via different pathways. The dotted lines indicate two potential pathways to the end of accounting.

boundaries to maintain the mutually reinforcing relationship between data and the currently salient sets of problems/solutions. On the one hand, a move closer to the "perfect repetition" boundary, as in iteration 3a, emphasizes values of similarity, standardization, and comparability in accounting practice, often driven by institutional demands (see, e.g., Meyer 1986; Power 2004). On the other hand, a move closer to the "imperfect repetition" boundary, as in iteration 3b, emphasizes the organizational value of adaptation via tinkering, repair, and experimentation (Andon et al. 2007; Dambrin and Robson 2011; Ahrens and Chapman 2004; Wouters and Wilderom 2008). In short, both these movements toward each boundary of the repeatability space can in principle consolidate and stabilize the accounting practice. And yet, and here lies the core of our argument, the movements toward the boundaries of the repeatability space may also *increase* the risk that the life cycle of an accounting practice comes to an end, as shown by the two dotted arrows.[12]

The case of the risk culture survey at Zeta provides rich insights into the ending pathway closer to "perfect repetition" in the upper section of the diagram. This does not mean that the same device is exactly replicated; in fact, as we would expect, the second survey has some differences compared to the first iteration, including the absence of explicit support from the researchers (see Proposition 4 in the next section). Rather, we underscore how the Risk Team actively promotes certain aspects of "sameness" as key drivers for repetition, by emphasizing how they kept questions similar to the first round to verify trends and how they focused their analysis on questions that they thought would elicit additional information for organizational

12. In the diagram and in the propositions in section 9, we use the more concise wording of "accounting at risk of ending." Consistent with our analysis focusing on the entanglement between data collection devices and organizational problems and change narratives, "accounting" implies accounting practice rather than the data collection device only.

concerns of particular interest to upper management (e.g., no-blame culture among staff members). This approach reveals an aspiration to repeat the risk culture survey in a way that it becomes, or could become, a routine data collection exercise: an annual survey like many other corporate surveys. A high degree of perceived "sameness" between the different iterations of the survey, in terms of questions, areas of investigation, and expected results, is key to this aspiration.

However, this way of framing the new iteration of the survey in terms of providing "more of the same" paradoxically undermines the very conditions of further survey repeatability. The more the Risk Team searches for comparable temporal trends, thus enhancing the potential for data commensuration (Espeland and Stevens 1998) and standardization (Meyer 1986), and the more they focus on searching for specific findings (e.g., no-blame culture among junior staff), the more they end up producing data that are merely confirmatory and expected. In addition, by repeating the survey and implementing survey-based actions, the Risk Team not only fails to contribute to an "empowerment" change agenda, but it also shows how parts of the organization, including the Risk Team itself, are not in accordance with the emerging value of "agility." In short, near "perfect repetition" in this setting, far from being an engine of stability and routinization, generates the visibility of new concerns, which it fails to address. The risk culture survey might have survived the loss of its closest organizational champions (Bill and his team). The new members of the Risk Team examined the survey results and considered the possibility of running another survey. But they concluded that survey repetition had "diminishing returns" and that "different" (their words) approaches to account for risk culture had more potential to deliver data that senior management would find of interest.

So far, we have focused on the upper boundary in our process model because it reflects the specific pathway that emerged from our case study analysis. Nonetheless, the model can also be used to highlight how a different pathway to accounting's ending could result from a movement toward the lower boundary of "imperfect repetition." While our analysis around this lower boundary is not grounded in empirical data, it is possible to hypothesize a situation in which organizational participants substantially adjust the survey practice. For example, to reflect the overall corporate value of "agility," they might develop frequent pulse surveys to be used as short, regular check-ins with employees in some business areas in order to identify pressing, and possibly unexpected, issues that deserve immediate attention.

This strategy, based on considerable adjustments to the survey practice may help to keep it alive (e.g., iteration 3b in Figure 3), as suggested in previous accounting research. It may also help organizational actors who are aware of their precarious position to maintain organizational visibility (see Propositions 2 and 3 in the next section). However, the adjusted survey practice is also likely to be perceived as very different—too different—in form, organizational rhythm, and scope from the previous iteration. The new approach to surveying for risk culture may be seen as the start of something else, such as one of the many information sources that feed the new organizationally legitimate way to account for risk culture, namely "cultural indicators." In addition, it may also be criticized for generating results that are idiosyncratic and too local (e.g., the concerns of a specific business area). Questions may arise in relation to its usefulness due to lack of comparability, also bearing in mind general concerns with survey fatigue, which have been acknowledged in our case analysis of Zeta. Either way, when moving toward the lower boundary, a new iteration may increase the risk that the very act of repetition undermines the conditions of repeatability of the risk culture survey.

Overall, our model shows how accounting continuation takes place within two boundaries that exist in tension one with the other, adding nuance to a much debated view of accounting as a precarious and ongoing social and organizational achievement (Hopwood 1983; Meyer 1986; Power 2021; Quattrone 2009). Organizational actors need to balance pressures for repetition that preserve continuity and comparability over time and across settings (Power 2004, 2021; Meyer 1986) with the need to adjust accounting practices to changing contexts and purposes

(Ahrens and Chapman 2004; Dambrin and Robson 2011; Jordan and Messner 2012; Wouters and Wilderom 2008; Andon et al. 2007). In so doing, they need to select, execute and promote some dimensions of "sameness," including a replication of the "facts" that they hope data collection will generate, while keeping the accounting open to changes in other dimensions. Getting this balancing act wrong is risky: "perfect repetition" may be perceived as unfeasible or uninteresting; very "imperfect repetition" may be perceived as something too new, too different, and too local. We therefore maintain that the very act of repetition contains the risk that it will overflow the repeatability space and undermine the very forms of accounting practice being repeated. In short, repetition can be self-undermining.

To conclude, in comparison with prior studies, we do not only foreground an empirical instance of the breakdown of the conditions for accounting continuation. We also theorize the organizational dynamics of a space of repeatability and argue that repetition is risky because it has in-built self-undermining properties, which can weaken the mutually reinforcing relation between the production of data and the way in which such data are seen as referring to organizational issues and leadership preoccupations. This riskiness is paradoxical because specific choices made at each point of repetition (e.g., to emphasize certain aspects of "sameness" in our case study setting) are made precisely to reinforce the entanglement between data collection and organizational concerns. Notwithstanding this claimed contribution, our proposed model requires further nuance. To this end, in the next section, we refine the basic model by discussing four sources of empirical variation.

9. How accounting ends: A research agenda

In this section, we extend our processual analysis, by exploring four "contingencies that might drive events in different directions" (Cornelissen et al. 2021, 9) in the repeatability space sketched in Figure 3: task ambiguity, organizational politics, organizational actors' reflexivity, and external networks of support. While each of these themes has already been analyzed in the accounting literature, our analysis theorizes how they influence the pathways by which repetition may increase the risk of accounting ending. On this view, they are sources of variation, leading to the amplification or dampening of the self-undermining properties of accounting repetition, thus making it more or less likely that we observe the ending outcomes represented via the dotted arrows in Figure 3. While we discuss these four contingencies separately, they can also be considered jointly as mutually reinforcing conditions.

Accounting repetition and task ambiguity

We explore a setting where the task at stake—accounting for risk culture—is ambiguous and the organization is in a state of inquiry (Lorino and Mourey 2013). Our research partners need to do something about an elusive phenomenon via an instrument that is not core to their expertise and has a relatively short history of use in the financial sector (Power et al. 2013).

We suggest that, when task ambiguity is high, repetition is more likely to put accounting at risk of ending. On the one hand, the more that organizational participants actively construct repetition as using the "same" solution to provide more of the "same" findings to address an ambiguous task, the more that they risk being perceived as addressing the "wrong" set of problems/solutions or as lacking creativity when dealing with elusive phenomena open to different interpretations (see also Proposition 2). On the other hand, to account for something ambiguous, organizational participants may significantly adjust their data collection devices, as shown in previous work (Andon et al. 2007; Ahrens and Chapman 2004; Dambrin and Robson 2011; Wouters and Wilderom 2008). Through continuous adjustment, though, organizational actors may generate something that is too discontinuous with what is already known about the ambiguous phenomenon to be accounted for and/or relative to other sources of information already at managers' disposal (see Hall 2010). The adjusted accounting practice may be perceived as providing idiosyncratic data and therefore decision-irrelevant.

In contrast, when task ambiguity is low, organizational participants have a better understanding of the issues to be addressed. Their initial efforts more easily connect to salient organizational concerns. In such a case, accounting may end not because of the self-undermining properties of repetition, but rather because a task is considered accomplished (in a manner similar to the dismantling of "temporary" organizations, see March 1995). Or, repetition may lead to a sustained stream of actions, which become increasingly self-evident to organizational actors as a relevant intervention area. Under these conditions, we expect something closer to "continuation" through repeated enactments that enable comparison, commensuration, and standardization (Meyer 1986; Power 2021, 2004). Within such a continuation pathway, we also cannot discount how institutional factors can reduce task ambiguity. Indeed, a theorization of continuation via performative repetition recognizes that a "fact" is always "a redescription of an action according to an institutional purpose—accounting for performance in a specific way—that is more or less widely accepted by organizational actors" (Power 2021, 13).[13] In summary, regardless of the varying outcomes sketched here, we suggest that with low task ambiguity, repetition is less likely to put accounting at risk of ending. Thus, we propose the following proposition for further consideration:

PROPOSITION 1. *The more (less) ambiguous the task to be accounted for, the more (less) likely it is that repetition will put accounting at risk of ending.*

The politics of accounting repetition

Our theorization of accounting repetition so far does not directly address the local politics of accounting change, but we know that forms of accounts production are often stakes for internal experts seeking to advance their own organizational agendas (Burchell et al. 1980). From this point of view, we suggest that repetition is more likely to put accounting at risk of ending in contexts characterized by rivalries among groups of organizational participants and, more generally, in organizations undergoing restructuring. The end of accounting is likely to be the outcome of a struggle, where weaker organizational groups are more likely to be attacked either because they produce expected results (when moving closer to "perfect repetition") or not comparable, idiosyncratic results (when moving closer to "imperfect repetition"). Either way the fate of the accounting is intertwined with that of those promoting it, as shown in previous research (Briers and Chua 2001) and in line with our view of repetition as a social accomplishment (Collins 1992). Within our analysis, what is at stake is that groups of functional experts may not be able to promote the new iterations of accounting as something that navigates and balances the ideal of "perfect repetition" and the need for adjustments and repair.

In contrast, we might expect that accounting repetition is less likely to put accounting at risk of ending, and indeed may contribute to its continuation, in a more stable organizational environment. Groups with greater organizational authority may be able to repeat the use of data collection devices that are purposefully kept the "same" in some dimensions, even if they do not prove to be immediately effective, and for longer, without concern for being attacked by others. Or they may have more leeway to experiment with adjustments and repair, promoting these changes as a continuation of preexisting forms of data collection related to organizationally relevant purposes and perceived problems, without facing open opposition. In these less politicized organizational contexts, accounting, and its proponents, may have the time to reinvent themselves, stabilize their practice and justify their organizational purpose. These reflections suggest a second proposition:

13. This microlevel approach to explore the role of institutions can also explain some aspects of our case study. While we document institutional factors such as pressures on boards to account for risk culture, the resulting accounts fail to become "facts," as described by Power (2021).

Proposition 2. *The more (less) an organizational setting is characterized by rivalries among expert subunits and struggles over organizational change, the more (less) likely it is that repetition will put accounting at risk of ending*.

The reflexivity of organizational actors

Experienced managers who have seen multiple change processes are likely to have some kind of reflexive understanding of the consequences of accounting repetition. We suggest that when organizational participants believe that they are engaged in a form of accounting that has the potential to become organizationally salient only for a limited period, and they have some grasp of the risk of repetition for their perceived organizational authority (see Proposition 2), then they will tend to see accounting as a "stopgap" solution. This means something that usefully addresses a pressing problem, but that can also be *deliberately* abandoned when something better is found. Such reflexivity about the stopgap nature of accounting suggests that repetition is even more likely to become self-undermining. Organizational actors will seek to avoid the risk of being associated too closely with something that, in their view, will ultimately end. Therefore, they may actively try to anticipate the point at which they are seen as producing "expected" results (as in our case analysis); or they may try to anticipate the point in which continuous adjustment efforts are not likely to reinforce their organizational position.

Organizational actors may also exploit these weaknesses by proposing "new" accounting techniques, which they could help to develop and own within their area of responsibility. In this case, they are likely to actively reinforce the perception of discontinuity between the old and the new. This is tantamount to saying that, anticipating the weaknesses of the second iteration of the risk culture survey, the members of the Risk Team could have actively framed the repetition of the risk culture survey as problematic because they had a solution ready—that is, replacing the survey with "cultural indicators." Had they done so, they would have demonstrated agility and would have remained relevant in the eyes of senior management. They might have been praised for their ability to adapt their methods of inquiry into risk culture to the renewed purpose in Zeta.

In short, further work on reflexivity may help us to understand how groups of organizational actors, with relatively weak status (see also Proposition 2), develop capabilities to move rapidly from one form of accounting to another, and actively promote the new iterations of accounting as something with distinctive features, even if some elements of previous practices remain (e.g., in our case, such a residual element could take the form of frequent pulse surveys to collect data for the cultural indicators). In contrast to expending the necessary effort on routinization and infrastructure accretion (Power 2015; Barman et al. 2021), such actors would be skilled at anticipating when a given form of accounting is beginning to exhaust its actionability and therefore abandon it. In this extreme case, accounting would consist of a stream of ever-changing episodes of "stopgap" accounting as organizational actors constantly grapple with the accounting for new problems. This suggests the following proposition to be explored:

Proposition 3. *The more (less) that organizational actors are reflexively aware that they are engaged in a form of accounting that is a "stopgap," the more (less) likely it is that repetition will put accounting at risk of ending*.

Accounting repetition and external networks of support

Our analysis so far emphasizes organizational factors and dynamics, but a view of accounting repetition as social practice cannot completely ignore the role of institutions. While there are many ways in which this institutional analysis could be done, we can exploit one specific feature of our case study setting, namely that the Risk Team acted with our support as academics. We propose that external networks of support like this are likely to influence the extent to which repetition puts accounting at risk of ending. Theoretically, our supportive role in the case study setting can be understood in part as an effect of institutional pressures to account for efforts to improve

risk awareness and manage risk culture. In other words, as well as being supporters of the Risk Team at Zeta and part of their network, we are also, to a large extent, mediators of broader institutional pressures for reform.

We suggest that the risk of accounting ending due to "self-undermining repetition" is higher in the absence of (credible) support networks external to an organization. This is because external experts such as scientists, academics, policy analysts, and consultants are also carriers of powerful institutional norms and are agents of institutionalization of new practices (see Strang and Meyer 1993; Sahlin-Andersson and Engwall 2002). On this view, their absence also means an absence of institutional support that could drive accounting's continuation.[14] In our case study setting, we, as interventionist researchers (Jönsson and Lukka 2007), can be seen (rightly or wrongly) as "culturally legitimate theorists" (Strang and Meyer 1993, 494) who imported into Zeta a view of what matters in risk culture debates. We also provided benchmark data, which helped, among other things, to crystallize "risk aversion" as a key concern in the first temporal bracket (see Figure 1). While it is difficult to precisely determine the extent to which we influenced the survey life cycle, our analysis shows how, for all the work done to make the second iteration of the survey the "same," there was one clear difference: we were not involved. Hence, data were not benchmarked with peer organizations, and survey choices could not be justified based on latest debates about risk culture assessment. In addition, managers also did not have the opportunity to pose and answer survey data-driven puzzles during corporate meetings, regardless of the accuracy of survey results or their belief in the efficacy of the survey instrument (see also Orr 1996).

In contrast to the specific pathway shown in our case analysis, we can speculate that networks of (credible) external advisers (e.g., academics, consultants) may dampen the likelihood that accounting repetition becomes self-undermining in two ways. On the one hand, when closer to the "perfect repetition" boundary, external experts such as consultants can highlight and reinforce the benefits of comparable data over time. Indeed, large consulting firms often claim that they add value when they use standardized toolkits because they can shed light on the position of their client vis-à-vis industry peers (Levy et al. 2010). On the other hand, (credible) external advisers can frame adjustments as best practice developments in accounting for something (e.g., risk culture) in a sector (e.g., financial organizations). They can add context and their knowledge of business trends to make seemingly not-comparable data somewhat comparable (Power 2004), thus reducing the pull toward ending in the bottom half of Figure 3. This discussion of the role of external networks of support suggests a fourth and final proposition, which could be explored further:

> Proposition 4. *The more (less) accounting repetition continues to be supported by institutionally credible external experts, the less (more) likely it is that repetition will put accounting at risk of ending*.

10. Conclusions

This paper develops a processual analysis of the life cycle of accounting grounded in a longitudinal study of a risk culture survey. The empirical scope of our analysis is limited by our reliance on a specific organizational subunit—the Risk Function—as the key point of research access. As a result, we provide only limited empirical insights into other organizational units although, through our participation in internal seminars, we engaged with members of the executive team (other than the CFO) and observed their thinking about the risk culture survey and survey-generated

14. As for Proposition 1, this pathway reminds us of Power's (2021) theorization of accounting continuation. Specifically referring to research on risk culture in financial organizations, Power (2021, 22) states that strong performativity is "accelerated by organizational actors with positional power to share and diffuse practice within and across organizations."

actions. This limitation is also offset to some degree by our inductive theory building. Through the process model presented in Figure 3, and subsequent research agenda setting propositions, we extend our analysis of the case of the risk culture survey at Zeta to propose generalizations that may be of broader interest for scholars working on accounting as a social and institutional practice. In conclusion, we draw attention to the following three academic contributions of our study.

First, broadly speaking, in our analysis, the end of accounting can be seen as an unfolding process of ending, sustained by boundary conditions in tension one with the other. This view complements the many previous studies that have shed light on the end of accounting as a contingent outcome or stage, which can happen sooner or later, intendedly or unintendedly, within a more or less sequential process of continuation. Our study goes beyond an examination of the empirical conditions under which the users of accounting may like it (or not). The notion of "self-undermining repetition" underscores that the possibilities for accounting's ending are inherent in repetition as a negotiation about what goes on "in the same way" (Collins 1992, 46). The four contingencies discussed in the previous section point to the conditions under which the inherent tendency to self-undermine will be amplified or reduced, therefore increasing (or decreasing) the risk of accounting ending.

Second, our model of the dynamics of "self-undermining repetition" provides a clear point of contrast with accounting research that foregrounds the constitutive and generative nature of ongoing and repeated uses of accountings (see Power 2021; Quattrone 2009). The performative view of accounting repetition presented in previous research provides a powerful explanation for the emergence and consolidation of a broad range of accountings. For example, keeping with the survey setting example, student satisfaction surveys in the higher education sector may have been dismissed as noisy data some years ago. And yet universities kept using them, so that, at the time of writing, such surveys are a fundamental focus of action for university administrators, at least in the United Kingdom, with personnel dedicated specifically to survey administration and analysis, and senior management monitoring survey-based key performance indicators. While we recognize the validity and applicability of this strongly performative view of repetition, our study provides an equally important and complementary angle of analysis, underscoring the in-built fragility of repetition and how it may also undermine, rather than cumulatively consolidate, accountings.

Third, our analysis follows in many ways an orientation to study accounting as practice (Ahrens and Chapman 2007). On this view, accounting exists as a device-in-practice in which its technical features and design templates and the actions taken in its name are mutually supportive (Hopwood 1987). Our conceptualization of the conditions of accounting's ending reflects this broad practice orientation, foregrounding dynamics through which data collection devices are entangled with, and subsequently disconnected from, leadership preoccupations and organizational change narratives in Zeta. In addition, and here lies our contribution, while in previous work repetition itself remains somewhat black-boxed as "repetition of the same" and contrasted with innovation, change, and "indeterminate re-production" (Nicolini 2009, 1404–1405), our analysis shows how this tension between sameness and difference is inherent in the very act of repetition itself. Therefore, an important way to study accounting as a social and institutional practice—a key trope in many studies in the last decades (see Chapman et al. 2009; Miller and Power 2013; Hopwood and Miller 1994)—is to pay careful attention to what happens at and around the event of repetition. It is in this repetition event space that we can obtain rich insights into how what appears as "repetition of the same" (Nicolini 2009, 1404) or otherwise a seeming "break in a series of repetitions" (Ahrens 2009, 31) may (or may not) contribute to the continuation of accounting as a meaningful organizational practice.

Finally, our study has implications for managers themselves. If managers and functional experts, such as risk managers and accountants, commit to the development and institutionalization of accounting practices, they need to build durable and credible positions within

organizational settings often characterized by political struggles and constant experimentation with management tools and processes. If successful, they can consolidate their position as the experts who can make new information sets usable and actionable. However, our analysis suggests that managers who commit to this strategy are also vulnerable when their efforts end for the reasons we suggest. Operating in such a world is undoubtedly risky for organizational actors, as the experience of the Risk Team at Zeta demonstrates.

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