A POST-ANT STUDY OF THE TRANSLATION OF A PERFORMANCE MANAGEMENT SYSTEM

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ABSTRACT

This dissertation consists of three individual research papers that push the boundaries on the ontology, epistemology, and methodology of the actor-network-theory (ANT) pertaining to its mobilization in sociological and organizational accounting research. All three papers anchor on an ethnographic field study wherein a team of two consultants developed a new performance management system (PMS) in a subsidiary of a state-owned enterprise (SOE) in China. Chapter 1 introduces the overarching theses in this dissertation, which are characterized by the ontological boundaries of ANT that the three papers push and the new dimensions of accounting research it opens up by pushing such boundaries. Paper 1 (Chapter 2) explores the ways in which accounting enacts multiple reality in the organization by mobilizing the notion of multiple reality contributed by Actor-Network Theorists Annemarie Mol (1999, 2002) and others (Dugdale, 1999; Law, 2002; Law & Singleton, 2005), and seek to extend our understanding of the roles of accounting by explicating how accounting practices enact, circulate, sustain, and erode multiple reality; how the multiple reality coexisted, relied on, opposed to, and were outside and inside one another; as well as how accounting translation is executed when the reality is multiple. Paper 2 (Chapter 3) probes the theoretical and methodological dilemma posed by ANT's "flat ontology:" how to approach institutionalized contexts with the vocabulary of ANT. Through examining the roles that SOE context plays in the translation processes of accounting technology, I identify context' roles in the actor-network as black boxes, discursive resources, devices of interessement, and performative actants. Drawing on the Bakhtinian notions of genre and intertextuality, the third paper (Chapter 4) examines the role that "linguistic gaps" can play during the introduction and formation of management accounting practices. These linguistic gaps involve the cross-language gap between different languages, the generic gap between speech genres suitable for particular purposes or communicative situations, and the performative gap between text and verbal performance. These gaps, on the one hand, contribute to the "incompleteness" of performance measures by enabling interpretive and performative spaces; and on the other hand, can be mustered as a rhetorical strategy by actors to persuade and recruit others during the formation of accounting objects. Chapter 5 concludes the dissertation by bringing a critical spirit into ANT-inspired accounting research.

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CHAPTER 1: INTRODUCTION

Chapter 1 Introduction

This dissertation consists of three individual research papers that push the boundaries on the ontology, epistemology, and methodology of the actor-network-theory (ANT) (Callon, 1984, 1990; Latour, 1987, 1988, 2005; Law, 1987, 1994), especially pertaining to its mobilization in sociological and organizational accounting research. All three papers anchor on an ethnographic field study wherein a team of two consultants developed a new performance management system (PMS) in a subsidiary of a state-owned enterprise (SOE) in China.

ANT has been invoking controversies and receiving criticisms since its inception in the studies of science, technology and society (STS) (e.g., Amsterdamska, 1990; Button, 1993; Collins & Yearley, 1992). ANT itself, as a fact or an object, has been translated and modified "as it goes along from hand to hand" (Latour, 1987, p. 104), both by its key initiators (e.g., Callon, 2010; Callon & Rabeharisoa, 2004; Latour, 1999, 2004; Law, 1990, 2002) and its subsequent enrollees (e.g., de Laet & Mol, 2000; Singleton, 1996; Star, 1992). ANT is undoubtedly not a monolith. Law (2009) classifies three chronological periods in the circulation of ANT. The first is the "origin stories" period, or what the Centre for Science Studies (CSS) at the Lancaster University—of which John Law is a member—categorizes as the "precursors" and "early theory" (Centre for Science Studies, 2000). This period saw the publication of Laboratory Life in 1979 and the adoption of Serres' (1974) concept of translation by Callon (1980) and Latour (1987). In the late 1980s and early 1990s, ANT started to be recognized as a distinctive approach, and Law (2009) refers to the subsequent period as actor-network theory 1990 (p.146). From the late 1990s onwards, however, pushing the boundaries of the ANT ontology into different directions has driven it into a "diasporic" (Law, 2009) phase, also referred to as "After ANT" (Law, 1999) or "post-ANT" (Law & Singleton, 2005, p. 341).

ANT-inspired accounting research started to appear in the late 1980s and early 1990s (e.g., Hines, 1988; Pinch et al., 1989; Preston et al., 1992; Robson, 1991, 1992), shortly after the publication of Latour's seminal work *Science in Action* (1987), particularly the notions of translation (Preston et al., 1992; Robson, 1991), inscription (Chua, 1995; Robson, 1992), and action at a distance (Robson, 1992, 1994). Prior to ANT's arrival, both the STS and the accounting communities were dominated by some types of social determinist discourses. ANT thus urged us to step back from "social" explanations of things and equipped us with the steps necessary to follow "heterogeneous chains of associations" (Latour, 1987, p. 141) in order to

understand science, technology, or accounting in the making (Latour, 1987, p. 15). Various types of accounting practices have hence been conceptualized as inscription and calculative devices that are constitutive of and constituted by networks of human and non-human actors.

Accounting, once a secondary phenomenon "to be explained through reference to macro conditions or personal sensemaking" (Justesen & Mouritsen, 2011, p. 163), has thereby become a protagonist.

One preoccupation of critical accounting scholars is with the problematization or deconstruction of accounting, which purposes to show that the taken-for-granted accounting phenomena—costing systems, benchmarks, accounting standards, auditing expertise, and so on—are fabricated and moulded by a number of different actors (Justesen & Mouritsen, 2011, p.181). Such problematizing of existing accounting practices, as Miller (1998, p. 175) states, is itself an accomplishment. Nevertheless, Miller's statement was made over two decades ago, and we, accounting scholars, have since problematized so many accounting phenomena that we may establish a common understanding that no accounting phenomenon should be taken for granted.

ANT is not a theory (Latour, 1999), and it is used for descriptive purposes rather than explanatory (Law, 2009, p. 141); what other contributions can we make, then, beyond simply describing cases and deconstructing the taken-for-granted? (Law, 2009, p. 148). This dissertation will try to go beyond the mere deconstruction or yet another case by delving into the following six themes as an attempt to extend the ANT-inspired accounting literature.

1. Theses

1.1 Persuasion, Representation, and Stability

ANT 1990 in STS responded to the question above—are we simply left with describing cases—by "exploring the logics of network architecture and looking for configurations that might lead to relative stability" (Law, 2009, p. 148). In recent years, accounting scholars also called for studying why some networks are more stable than others (Baxter & Chua, 2017, p. 447; Robson & Bottausci, 2018, pp. 71–72). Robson and Bottausci (2018, p. 72) consider the stability of accounting inscriptions a complex discussion involving forms of calculation and representational validity. Such representational validity was a conspicuous theme in my field study. The social and natural reality "is a result of the generalized negotiation about the

representativity of the spokesmen" (Callon, 1984, p. 218). The stability of a network thus has to do with how valid or legitimate the spokesmen represent their "actants" (Latour, 1987, p. 84). In Callon (1984), it is the representational validity of the fishermen represented by their representatives, and in turn, represented by the three scientists.

Pertaining to representation is the practice of persuasion, or the "Machiavellian" (Latour, 1987, p. 125) enrolment or the establishment of an "obligatory passage point" (Callon, 1984; Ezzamel & Xiao, 2015; Latour, 1987). To enroll is often to persuade, and a number of accounting studies have demonstrated diverse techniques of persuasion (e.g., Chua, 1995; Preston et al., 1992). Notwithstanding, these studies tend to be networks of success, at least temporarily, and perhaps examining how networks of accounting inscriptions fail (Robson & Bottausci, 2018, p. 72) would help us understand the difference between the ones who can be persuaded and the ones who cannot.

Although interests are "multiple, shifting and diverse" (Baxter & Chua, 2017, p. 444), I find persuasion done by sophistry is more transient than solidarity. It proffers one explanation of why some networks are more stable than others, which accounting literature is interested in. However, it may seem essentialist as it implies those who are interested have already been interested, which would be diametrically different from the Latourian tradition. Nevertheless, these ontological questions have always been discussed among ANT scholars in STS. As Mialet puts it, "is everything already there potentially present inside us from the start?" (Mialet, 2017, p. 324). What is suggested here is not that it is impossible to enroll actors with diametrically different interests. Instead, whether the enrolment is achieved through radical Machiavellian strategies or smooth solidarity contributes to "weaker or stronger associations" (Latour, 1987, p. 136).

1.2 Asymmetrical Anthropology

Generalized symmetry, one of the three principles of ANT identified by Chapman, Chua, and Mahama (2015, p. 267), is probably the aspect of ANT that suffers the most criticism. It means we should approach non-human actors the same way as human actors, because ANT does not celebrate the idea that there is an intrinsic difference between people and objects (Law, 1992, p. 383). According to Latour (1987), it is no more and no less difficult to interest a group of

people than to interest non-human actors such as the wind, and people are "kept in line *just as much* as the wind is" (p. 129, emphasis in original).

ANT was a revolutionary approach because the dominant discourse at the time of ANT's inception was cognitive explanations of science and technology (Latour, 1987, p. 247), and suspending humans' cognitive abilities helped better understand science in the making. Latour thus proposed "a ten-year moratorium" on cognitive explanations of science and technology (ibid). Over three decades later, as ANT has become mainstream in STS and popularized in accounting, maybe we could suspend the moratorium for a moment and consider what is missing when cognition is jettisoned.

Mialet (2017) offered a different perspective in reconciling ANT and cognition, whereby cognition is "distributed" rather than jettisoned. Her ethnography on Stephen Hawking demonstrates how the subject is constructed through diverse attachments, yet resisted at the centre, and thus become "a distributed-centered subject" (p. 321). This insight is pertinent to my field study and to the representation discussed above. Of the ways in which the consultants established themselves as "spokesmen" for others, wherein the stability of the network is related to how much translations drift, one of them is constituting subject for each employee in the firm by constructing attachments through creating performance measurements for the employees.

1.3 The Multiplicity of Reality

Multiplicity can mean different things in ANT: "the multiplicity of objects" (Latour, 2005, p. 83), the multiplicity of ordering (Law, 1994), and the multiplicity of reality (Mol, 1999, 2002). Borrowing Foucault's notion that modes of ordering are mini-discourses, Law (1994) finds the multi-discursive ordering of the Daresbury SERC Laboratory contributed to its relative stability because other discursive ordering may be able to hold the network together when one fails. In ANT diaspora, or after ANT, Mol (1999) shows that reality is multiple, but not plural, by delineating the diagnoses of anemia in clinical, statistical and pathophysiological forms. These various anemias "are not simply opposed to, or outside, one another. One may follow the other, stand in for the other, and, the most surprising image, one may include the other. This means that alternative realities don't simply coexist side by side, but are also found inside one another" (p. 85).

The concept of multiplicity has been widely discussed in STS, but not so much in accounting. Quattrone and Hopper (2005) contribute to our understanding of multiplicity in accounting by demonstrating how loci of control are multiplied through the "implementation" of ERP and thus created "multiple centres and multiple peripheries" (p. 760). This enriched understanding of loci of control corresponds to the multiple configurations of orders in Law (1994). It is somewhat problematic to reconcile my field study with the extant literature. There were multiple discourses, but they did not contribute to relative stability as in Law (1994). They were, however, coexisted, opposed to, outside and inside one another, thus created multiple reality. This reality pertains to multiple "intents" (Quattrone, 2009) and involves some "hidden interests" (Bourdieu & Wacquant, 1992, p. 68).

Theses 1, 2, and 3 above will be the central theme for Chapter 2, "Performing the Reality Multiple: The Ontological Consequence of Translating a Performance Management System." This chapter highlights that the performative nature of accounting implies that accounting performs multiple reality. The multiple reality enacted by accounting coexisted, relied on, and opposed to one another. A failed actor-network in one reality may be a success in others. Further, a failed network in one reality may be caused by flawed representation in another reality.

1.4 Where does Context Fit?

This dissertation will also discuss where "contexts"—cultural, institutional, or otherwise—fit empirically in ANT. While ANT is antithetical to metanarratives (Baxter & Chua, 2017, p. 444) or any type of "social" determinism, institutionalized contexts become an irreconcilable object in the approach. In the rebuttal against Hopper and Bui's (2016) criticism that ANT does not explain the formation of networks, Baxter and Chua (2017, p. 447) note that the purpose of ANT is to study facts-in-the-making or problematize taken-for-granted facts rather than examining ready-made facts. The question is, however, whether the "ready-made facts" play a role in "facts-in-the-making"? And if they do, what are they in the network? The articulated institutionalized contexts in my fieldwork were blackboxed as "immutable mobiles" (Latour, 1987, 1990a) long before I started to observe. Should I open every backbox and trace everything down? Or can I assume a time zero where these black boxes are just intermediaries?

Should we take it for granted that context is taboo in ANT? The answer, as will be argued in Chapter 3, is no. Latour's abstaining from institutional factors was for two main reasons. On

the one hand, "such factors scarcely exhaust the social character of science" (Latour & Woolgar, 1986, p. 152). On the other hand, "there is a danger that whenever these kinds of social factors are not immediately apparent, certain sociologists of science might conclude that the activity they observe does *not* fall within their domain of competence" (Latour & Woolgar, 1986, p. 152, emphasis in original). Overall, ANT abstains from institutional factors to avoid the caveats of the other extreme, not to forbid us from approaching it.

The aversion to metanarratives, however, is not the only challenge that institutionalized context faces in ANT because any "ethereal" or non-material objects would be difficult, if not insurmountable, to trace. ANT-inspired research suggests that we should only take into account entities that exist, and if context exists, it would be in a difficult place to find (Justesen & Mouritsen, 2011, p. 181). Chapter 3 will attempt to delve into this controversy by showing how human actors muster the specific state-owned enterprise (SOE) contexts as discursive resources.

This Thesis 4 will be explored in Chapter 3, "Performance Management System in Context: When Flat-earthers Encounter High-rise Structures." Through examining the roles that SOE context plays in the translation processes of accounting technology, Chapter 3 identifies context's roles in the actor-network as black boxes, discursive resources, devices of *interessement*, and performative actants.

1.5 When Sociology of Translation Meets Linguistic Translation

We have talked about asymmetrical anthropology and non-material resources mustered by actors as two forms that push the ontological boundaries of ANT. What if there is something that embodies both these traits (asymmetrical and non-material), yet is intrinsically ANT? The alternative terms for ANT that do not invoke misunderstandings are the sociology of translation (Callon, 1980, 1984; Latour, 2005) and material semiotics (Law, 2009, 2019); both are metaphoric of linguistics.

Both the Italian "traduttore-traditore" (Callon, 1984, p. 224) and the French "traduction, trahison" puns (Law, 2009, p. 144) are used to describe that translation is betrayal or treason. The puns are used for linguistic translation originally because "to translate is to make two words equivalent. But since no two words are equivalent, translation also implies betrayal...So translation is both about making equivalent, and about shifting" (ibid). The notion of translation

emphasizes the displacements and transformations of goals, interests, devices, human and non-human actors, and inscriptions (Callon, 1984, p. 223).

Not surprisingly, linguistic translation has the same characteristics of displacement because it is a source of inspiration for ANT. This current study provides a unique opportunity to study how the sociology of translation is accomplished through linguistic translation. The "black boxes" or the "immutable mobiles" of performance management instruments that were brought to Z-Corp—the abovementioned subsidiary of the SOE—by the consultants were of English language origins. The contemporary business vocabulary that originates in English often has multiple Chinese translations that manifest different "genres" (Bakhtin, 1986). The consultants strategically chose between these translations (linguistic translation) when they translated (the sociology of translation) the PMS into Z-Corp. More precisely, this is a practice somewhere in between linguistic and sociological translation.

Chapter 4, "Stretching the Meaning: Linguistic Gaps and the Incomplete Performance Measures," will present this Thesis 5. It draws on the Bakhtinian notions of genre (Bakhtin, 1986) and intertextuality (Briggs & Bauman, 1992; Kristeva, 1980) to examine the ways in which "linguistic gaps" mediated the process of accounting practice. These gaps, on the one hand, contribute to the "incompleteness" (Busco & Quattrone, 2015, 2018a, 2018b; Dambrin & Robson, 2011; Jordan & Messner, 2012; Quattrone & Hopper, 2005) of performance measures by enabling interpretive and performative spaces; and on the other hand, can be mustered as a rhetorical strategy by actors to persuade and recruit others during the formation of accounting objects.

1.6 Deconstructing Constructivism

We have been deconstructing the taken-for-granted facts in accounting to show that "life could be otherwise" (Baxter & Chua, 2017, p. 446). However, the post ANT literature in STS has shown that it is not necessarily the case. In her provocative article "Ontological politics," philosopher Annemarie Mol (1999) suggests that ANT and its semiotic relatives "have reshaped ontology," and a consequence of the ANT-implied performativity is that:

there are *options* between the various versions of an object: which one to perform? But if this were the case then we would need to ask *where* such options might be situated and *what* was at stake when a decision between alternative performances was made. We

would also need to ask to what extent are there options between different versions of reality if these are not exclusive, but, if they clash in some places, depend on each other elsewhere. The notion of choice also presupposes an actor who actively chooses, while potential actors may be inextricably linked up with how they are *enacted*. (p. 74, emphasis in original)

In this article, Mol, with the case of diagnosing anemia, demonstrates that there are avowed options *everywhere*, but "they always end up seeming *elsewhere*" (1999, p. 80, emphasis in original). The options being elsewhere is only one of the problems involved in ontological politics. Other issues include "an unquantifiable number of other issues and realities" that are involved when one thing is at stake, as well as "who is the actor who might decide between the options? Might, or should" (1999, p. 86).

Since the precursor of ANT, there was a desire to incorporate a degree of reflexivity into our studies (Latour & Woolgar, 1986, p. 278), and ANT scholars have always been reflexive of the approach. It is, however, not always the case in accounting because we are mainly in the "ANT1990" stage (i.e., deconstructing the taken-for-granted), notwithstanding some of the accounting works that would be better associated with "After ANT" (e.g., Dambrin & Robson, 2011; Jordan & Messner, 2012; Martinez & Cooper, 2019; Quattrone, 2009; Quattrone & Hopper, 2005). When we, as scholars, make realities, we may wish to reflexively ask, "what kind of difference do we want to make?" (Law, 2009, p. 154).

Chapter 5, "Drawing Things Together," will be addressing this Thesis 6. The title of this concluding chapter quotes the title of Latour's (1990) book chapter. Following the thoughts of the last two chapters of *Science in Action*, Latour illustrates in this "Drawing things together" chapter the difference between the West and the Rest is not caused by the "Otherness," rather, it is because the West has accumulated a variety of small and practical techniques that perpetuates cumulative advantage. Chapter 5 of this manuscript will problematize this line of thoughts and explicate the conservatism of ANT (Law & Singleton, 2013; Tinker, 2005) in a post-colonialist sense.

2. Why Bother?

Some may ask if ANT presents so many controversies and inconsistencies with my perception of the field study and causes so many ontological struggles that I need to push its

boundary from different perspectives, why bother using ANT and risk being criticized for ontological "pick and mix" (Whittle & Spicer, 2008, p. 624)? The answer is simple: it is because of the perspectives that ANT brings to the understanding of my fieldwork and the perspectives that this study potentially provides to ANT, as detailed below.

2.1 Liberty to Pick

When critiquing the theoretical "pick and mix," Whittle and Spicer (2008, p. 624) state that their aim was to encourage those using ANT to be clear about the ontological, epistemological, and political commitments it brings with it so that the theories mixed with ANT are not philosophically and politically incompatible. In addition, Whittle and Spicer advise scholars of organization studies interested in developing a critical theory to refrain from using ANT. The main concerns for Whittle and Spicer are a) combining ANT freely with other theories without considering the philosophical compatibility, and b) the interests in developing a critical theory of organization. This manuscript, however, engages neither of these practices. This manuscript may seem radical in mobilizing ANT—note it is mobilizing, not implementing, as the term implementation would imply a "diffusion model" (Latour, 1987, p. 133), which is the opposite of ANT—because my account is "asymmetrical" and I will discuss the "ethereal." Nevertheless, these discussions are embedded in the ongoing conversations within the ANT community. Moreover, although there will be pieces of critical thoughts throughout the manuscript, developing a critical theory is not the purpose. Instead, the purpose is to study factsin-the-making, the ways in which representation is accomplished, the diverse and innovative resources that actors muster to achieve translation, and what contributes to stronger or weaker associations. These purposes dovetail the strengths of ANT.

But what if the boundaries are crossed, and ANT is combined freely with other incompatible theories to produce critical thoughts? Would that be irresponsible usage of ANT? The STS community seems to be more receptive to displacements of ANT, where the diasporic embodiments of ANT are celebrated. Notably, feminist studies scholar Donna Haraway's works are widely cited by ANT scholars in STS, and she is considered part of the community (e.g., Callon & Rabeharisoa, 2004; Dugdale, 1999; Latour, 2005; Law, 2009; Mol, 2002). When the works of a feminist, postmodernist scholar who does not use ANT explicitly are considered post-

ANT contributions (Centre for Science Studies, 2000), why would we discourage anyone from using the approach only because they do not maintain enough fidelity to the approach?

ANT seems to be more of an "immutable mobile" outside the STS community, such as in accounting and organization studies, where maintaining fidelity to ANT is valued. It may be interesting to study how ANT stays relatively more stable in accounting than in STS. However, ANT is a hybrid rather than pure. Even in accounting, where ANT is relatively stable, and even in the earlier period, scholars selectively mobilized the perspectives of ANT that were pertinent to their studies. For instance, Chua (1995, p. 117) employs ANT while rejecting Latour's view that non-humans have agency and "thereby translates ANT in a way that makes it resemble social constructivism" (Justesen & Mouritsen, 2011, p. 171).

Latour has noticed us long ago, "what happens to *our* statements [is] in others' hands" (1987, p. 29, emphasis in original). The interpretation, translation, mobilization of *Science in Action* is out of any ANT scholars' control. A faithful ANT scholar should learn not to grieve on the displacements and deformations because that is the only eternal thing.

2.2 Implementing versus Contributing

From time to time, this manuscript may look like a poststructuralist who has been newly converted to ANT and still tries to escape the Latourian ontology. As "schizophrenic" (Mialet, 2012, p. 457) as it sounds, a research setting that is not so amenable to ANT could be the best to show its strengths and caveats. As Mialet notes, pushing ANT to the extreme allowed her "to show its strengths and its limits, and…to propose a new form of subjectivity" (2017, p. 326).

This study is not about "implementing" or "applying" ANT. It is about mobilizing, reflecting, and problematizing the black box, rather than taking it indiscriminately. Incremental contribution to a grand theory is always from somewhere that things do not align. If everything aligns perfectly, we just get another instance.

It also appears that every provocative polemic ended up being added "modalities" (Latour, 1987, p. 22) to a theory toward the opposite direction later on. For example, the institutional theory was about isomorphism upon its inception (DiMaggio & Powell, 1983), yet numerous studies in later years made contributions to it by explaining more heterogeneities (e.g., Aligica & Tarko, 2013; Greenwood et al., 2009; Hoskisson et al., 2002). This phenomenon resonates with a Chinese saying, "The empire, long divided, must unite; long united, must

divide." Unless we declare "a 10-year moratorium on Latour's own symmetrical anthropology" (Mialet, 2012, p. 460), in which case things would shift to the other extreme like an ever-shifting pendulum, we would be continuingly pushing its boundaries.

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CHAPTER 2: PERFORMING THE REALITY MULTIPLE: THE ONTOLOGICAL CONSEQUENCE OF TRANSLATING A PERFORMANCE MANAGEMENT SYSTEM

Performing the Reality Multiple:

The Ontological Consequence of Translating a Performance Management System

Highlights

- The performative nature of accounting implies that accounting performs multiple reality.
- Multiple reality enacted by accounting coexists, relies upon, and opposes one another.
- A failed actor-network in one reality may be a success in others.
- A failed network in one reality may be caused by flawed representation in another reality.

Abstract

Drawing on an ethnographic field study of a Chinese state-owned enterprise (SOE) where a new performance management system (PMS) was being developed by a team of two external consultants, this study explores the ways in which accounting enacted multiple reality in this organization. Using the notion of multiple reality developed by actor-network theorist Annemarie Mol (1999, 2002) and others (Dugdale, 1999; Law, 2002; Law & Singleton, 2005), it seeks to extend our understanding of the roles of accounting by explicating how accounting practices enact, circulate, sustain, and erode multiple reality; how the multiple reality coexist, rely upon, oppose, and exist inside and outside one another; as well as how accounting translation is executed when the reality is multiple. I identify five coexisting realities that were enacted in this SOE: aspiration, decoration, justification, provocation, and segregation. The reality multiple also encourages alternative understandings of stability because a failed network in one reality may be a success in another. Furthermore, multiple reality complicates translation, representation, and persuasion because subjectivity is distributed and decentered across the reality multiple.

Keywords: The Reality Multiple; Performance Management System (PMS); Actor-Network Theory (ANT); Representation; Stability.

1. Introduction

Accounting—including its numbers (Vollmer, 2007), calculations (Jeacle & Miller, 2016), inscriptions (Qu & Cooper, 2011), discourses (Cooper & Ezzamel, 2013), and other diverse forms of practices (Mouritsen, Larsen, & Bukh, 2001)—even its absence (Busco & Quattrone, 2015)—is performative: it informs organizational change (Hopwood, 1987); alters people's behaviour (Oakes, Townley, & Cooper, 1998) and perceptions (Burchell, Clubb, Hopwood, Hughes, & Nahapiet, 1980, p. 16); enables control (Miller & O'Leary, 1987) and emancipation (Busco & Quattrone, 2018); creates order (Edwards, Ezzamel, & Robson, 1999) and disorder (Covaleski, Dirsmith, & Rittenberg, 2003); empowers action at a distance (Robson, 1994) and invokes resistance (Christensen & Skærbæk, 2010); and so on. The performativity of accounting, however, concerns not just the above actions; it has a radical ontological consequence (Mol, 1999, p. 74).

As one of the key principles or stories¹ (Baxter & Chua, 2017, p. 444; Law, 1999, p. 4) of Actor-Network Theory (ANT) (Callon, 1984, 1990; Latour, 1987, 1988, 2005; Law, 1987, 1994), performativity (Callon, 1998; Garcia-Parpet, 2007; MacKenzie & Millo, 2003; Miller & O'Leary, 2007) has reshaped ontology by underlining that "the reality we live with is one performed in a variety of practices" (Mol, 1999, p. 74). If we acknowledge that the reality is performed, the radical consequence of this is that the reality itself is multiple (Law, 2009; Mol, 1999). Although it has been established that accounting performs the reality (Dent, 1991; Hines, 1988), less is known about the ways in which accounting performs multiple reality² simultaneously. Drawing on an ethnographic field study wherein a team of two consultants developed a new performance management system (PMS) for a subsidiary of a state-owned enterprise (SOE) in China, this paper examines how the "enactment" (Mol, 2002, p. vii) of accounting—including benchmarking, the key performance indicator (KPI), the International Position Evaluation (IPE) system, and other inscription and calculative devices—produced multiple reality that coexisted in the organization.

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¹ Baxter and Chua (2017) summarized the four principles of ANT as generalised symmetry, recursivity, radical indeterminacy, and performativity. Law (1999) encapsulates ANT in two stories: relational materiality and performativity.

² Using "a singular noun . . . with a pluralizing adjective" (Mol, 2002, p. viii) allows us to capture the reality that is "multiple" rather than "plural" (Mol, 1999, p. 75). I will therefore use the singular "reality" when expressing the notion that the reality is multiple, and the plural form when juxtaposing the multiple realities found in my ethnography, and when I depict how actors, actants, and configurations traverse multiple realities.

In recent years, multiplicity—an ANT "diaspora" (Law, 2009) or "After ANT" (Law, 1999) notion contributed by ANT philosopher Mol (1999, 2002) and other ANT scholars (Dugdale, 1999; Law, 2002; Law & Singleton, 2005) in the studies of science, technology and society (STS)—has emerged in accounting literature (e.g., Ezzamel & Xiao, 2015; Martinez & Cooper, 2019; Modell, Vinnari, & Lukka, 2017; Quattrone, 2009; Yu & Mouritsen, 2020). Indeed, accounting literature has demonstrated the "multiplicity" of accounting practices in myriad ways. For example, Ahrens and Chapman (2004) explain how management control systems can be used to serve multiple functions, including flexibility and efficiency, simultaneously. Quattrone and Hopper (2005) demonstrate how loci of control can be multiplied through the implementation of Enterprise Resource Planning (ERP), thus creating multiple centres and multiple peripheries. Cooper, Ezzamel, and Qu (2017) show the Balanced Scorecard (BSC) to be populated by multiple measures. Yu and Mouritsen (2020) examine how accounting may act on a demand chain that is practised as a multiple. Finally, in a non-ANT study, Cooper, Ezzamel, and Robson (2019) explore how multiple performance measurement systems may be practised and made sense of in an organization. In most of this literature, however, the term "multiple" means more than one, rather than multiplicity in an ontological sense.

To date, accounting literature has not tended to distinguish between "the *epistemological* and the *ontological*" (Law & Singleton, 2005, p. 333, emphasis in original) multiplicity, or between the "plural" and "multiple" (Mol, 1999, p. 75). Epistemological multiplicity, or plurality, involves objects being watched by different pairs of eyes, each of which is informed by particular backgrounds, habits, and preoccupations (Mol, 1999, p. 76). The plural realities generated by many gazes are mutually exclusive perspectives that exist side-by-side (Mol, 1999, p. 76). To this extent, extant accounting research focuses more on pluralism, or "interpretively complex objects" (Law & Singleton, 2005, p. 333) than on ontological multiplicity. For instance, Yu and Mouritsen (2020)'s "object multiple" resembles ANT's notion of "boundary object" (Briers & Chua, 2001; Dechow & Mouritsen, 2005; Star & Griesemer, 1989), because it "*means* different things to [...] different groups" (Law & Singleton, 2005, p. 333, emphasis in original).

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³As Star and Griesemer (1989) explain, a boundary object is "an analytic concept of those scientific objects which both inhabit several intersecting social worlds [...] and satisfy the informational requirements of each of them. Boundary objects are objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. ...They have different meanings in different social worlds but their structure is common enough to more than one world to make them recognisable, a means of translation" (p. 393, emphasis added).

As Yu and Mouritsen (2020) find in their study of the demand chain: "Volumes sold' is a sales activity while 'shipment' is a procurement and production activity" (p. 2).

We have learned through a number of studies how accounting can be epistemologically multiple (e.g., Briers & Chua, 2001; Dechow & Mouritsen, 2005; Yu & Mouritsen, 2020), yet we know less about the ontological multiplicity of accounting. Drawing on Mol (1999, 2002) and others on the multiple enactments of reality in STS (Law, 2004, 2007; Law & Singleton, 2005), this current study shows how accounting enacts multiple organizational reality that means different things to the same groups. We thus move from "multiple perspectives on the same reality" to "multiple versions of the real" (Law, 2004, p. 25). As such, it is also conspicuous that heterogeneous interests and intents reside in the same actor when multiple reality is performed simultaneously. While some studies have identified the "multiple ontologies" of accounting (Andon, Baxter, & Chua, 2007, p. 279; van der Steen, 2011, p. 510) and promoted a shift from multiple interpretations of objects to thinking about multiple objects themselves (Law & Singleton, 2005, p. 334; Quattrone & Hopper, 2006, p. 214), their primary focus was not performing multiple reality. This study hence seeks to extend our understanding of the roles of accounting by explicating how accounting practices enact, circulate, sustain, and erode the multiple reality; how the multiple reality enacted by accounting coexists, relies upon, is opposed to, outside of, and inside one another; as well as how accounting translation can be executed when the reality is multiple. As Mol (1999, p. 75) emphasizes: "Not plural: multiple."

In addition to my primary interest in highlighting reality as multiple, this study also seeks to shed light on another recent thread of ANT-inspired accounting inquiry which concerns stability. ANT is not a theory (Latour, 1999a): it is descriptive rather than explanatory (Law, 2009, p. 141). Law (2009) discusses how ANT scholars could go beyond merely describing cases and recommends "exploring the logics of network architecture and looking for configurations that might lead to relative stability" (p. 148). In recent years, accounting scholars have also called for an examination of why some networks are more stable than others (Baxter & Chua, 2017, p. 447; Robson & Bottausci, 2018, pp. 71–72). Robson and Bottausci (2018) note that probing the stability of accounting inscriptions requires the complex discussion of forms of calculation and "representational validity" (p. 72). Such representational validity is crucial for the stability of networks because social and natural reality is "a result of the generalized negotiation about the representativity of the spokesmen" (Callon, 1984, p. 218). The stability of a

network thus has to do with how valid or legitimate the fishermen are represented by their representatives, and in turn, represented by the three scientists in Callon (1984). The multiple enactments of reality complicate the network because representation validity and stability of the network depend on which reality is being enacted, and the multiple networks can be stable, transient, and dissident at the same time.

In order to further anchor and conceptualize this study, in the next section, I outline the relevant literature on multiplicity, representation, and persuasion. Section 3 describes my methodological approach and introduces the research site. Section 4 presents how accounting enacted multiple reality—the realities of *aspiration*, *decoration*, *justification*, *provocation*, and *segregation*.⁴ This is followed by further analysis and discussion in Section 5, and my conclusions in Section 6.

2. Rationale

ANT, or the sociology of translation (Callon, 1984), is a disparate family of material-semiotic tools that "describes the enactment of materially and discursively heterogeneous relations that produce and reshuffle all kinds of actors" (Law, 2009, p. 141). Heterogeneities converge through the process of translation whereby stronger networks and their spokespersons successfully recruit enough allies, thus producing a "black box" (Latour, 1987; Latour & Woolgar, 1986)—that is, a taken-for-granted fact, machine, system, or practice. Law (2009, pp. 141–142) observes that describing ANT in the abstract is problematic in two ways. First, it misses the point because ANT is grounded in empirical case studies, rather than being abstract. Secondly, ANT is certainly not a monolith.

Chronologically, ANT can be classified into three periods. First, the early period⁵ that saw the publication of *Laboratory Life* by Latour and Woolgar in 1979 and also the adoption of Serres' (1974) concept of translation by Callon (1980) and Latour (1987). In the late 1980s and early 1990s, ANT started to be recognized as a distinct approach, leading to the second period known as "ANT 1990" (Law, 2009, p. 146). Here, accounting scholars started to apply ANT—particularly the notions of translation (Preston et al., 1992; Robson, 1991), inscription (Chua,

⁴ These five terms are italicized when they mean the specific reality.

⁵ The first period is also referred to as the period of "origin stories" (Law, 2009, p. 142), the period of the "precursors," or the "early theory" (Centre for Science Studies, 2000).

1995; Qu & Cooper, 2011; Robson, 1992), and action at a distance (Robson, 1992, 1994). From the late 1990s onwards, the boundaries of ANT's ontology were pushed in different directions, driving it into its third, diasporic phase (Law, 2009), which is also referred to as "After ANT" (Law, 1999) or "post-ANT" (Law & Singleton, 2005, p. 341).

Mobilizing ANT's early theory and ANT 1990, one preoccupation of accounting scholars was to deconstruct taken-for-granted accounting phenomena—costing systems, benchmarks, accounting, standards and auditing expertise—in order to show that they are fabricated and molded by various actors (Justesen & Mouritsen, 2011, p.181) and that "life could be otherwise" (Baxter & Chua, 2017, p. 446). However, the idea that things could be otherwise was displaced in post-ANT literature in STS. In her provocative 1999 article "Ontological Politics," Mol problematized the presupposition that there are options between different versions of an object and that actors choose which one to perform. In the case of diagnosing anemia, Mol (1999) demonstrated that there are avowed options everywhere but that they always end up seeming elsewhere. The latter (i.e., options being situated elsewhere) is not the only problem involved in ontological politics. Indeed, there are an unquantifiable number of other issues at stake when choices are made between alternate performances, such as which actor might, or should, decide between different options (p. 86). Furthermore, different versions of reality are often not mutually exclusive. They can clash with one another in some places and elsewhere depend on one another. The notion of choice also presupposes that actors choose actively, whereas in practice, actors are inextricably tied to how they are enacted in a network (p. 74).

By juxtaposing the multiple reality, my study attempts to discuss some questions of ontological politics. Moreover, when multiple reality is enacted in networks of relations, our understanding of translation and configurations of networks should change accordingly. For instance, when reality is multiple, what does stability mean? and how is representation accomplished?

2.1 Stability and Multiple Reality

Stability can describe two interrelated concepts in ANT: objects that move along chains of translation, or a network of relations. Law and Singleton (2005) refer to these two sets of stability as having a "double immutability" (p. 337). The first means that objects "can be moved back and forth without additional distortion, corruption or decay" (Latour, 1987, p. 223). In order

for accounting inscriptions to enable action at a distance on unfamiliar events, places and people, they must be mobile, stable, and combinable (Latour, 1987, p. 223; Robson, 1992). Latour (1987) names these objects that move through the chains of translation and sit at the beginning and at the end of a long network, the "immutable and combinable mobiles" (p. 227). For Robson and Bottausci (2018, p. 72), the stability of inscriptions in the first sense (i.e., avoiding corruption in a material sense) is unproblematic; what needs more attention is the second type of stability (i.e., the stability of a network of relations). Thus, as accounting scholars, we should probe how accounting infrastructures are built to enable a network of accounting inscriptions to hold along the chains of translation. As Robson and Bottausci (2018, p. 72) suggest, one way to explore this matter is to look more closely at how and where networks of accounting inscriptions fail.

Indeed, to understand the "more or less stable structure in a network of relations" (Law & Singleton, 2005, p. 337), we need the insights from failures, especially when compared to the successes, albeit temporary and fragile. For example, in their discussion of one success story, Boedker and Chua (2013, p. 263) found that when the corporate headquarter set audacious targets and circulated anxiety, local actors "almost unconsciously" accepted this form of discipline as both sensible and legitimate. In contrast, such "unconscious acceptance" did not appear in my study: the employees remained skeptical throughout the process and the PMS project ended up a failure in the conventional sense; it is interesting to explore why.

Whereas scant attention has been paid to stability in accounting research (Robson & Bottausci, 2018, p. 71), in post-ANT STS literature, the understanding of stability has been transformed. It is somewhat paradoxical for ANT scholars to examine stability because any stability—even for stronger networks such as scientific facts—is temporary, fragile, and fluid (Baxter & Chua, 2017, p. 447; Justesen & Mouritsen, 2011, p. 165). In ANT's translation model, such transience, fragility, and fluidity are essential qualities of networks. Indeed, if black boxes can remain closed and unproblematic, a "model of translation" must become a "model of diffusion" (Latour, 1987, p. 132), and this contradicts the ontological foundations of ANT. Because stability is such a controversial notion for ANT, research that develops new insights about stability (e.g., de Laet and Mol, 2000) tends to push the ontological boundary of ANT.

For early ANT, immutability is an essential quality; otherwise, the object or statement might be transformed beyond recognition (Latour, 1987, p. 108) and fact-builders would lose

their authorship of the fact at the "trials of attribution"—trials judging to whom objects, machines, and facts are attributed to (Latour, 1987, p. 117). However, in their post-ANT study, de Laet and Mol (2000) describe the Zimbabwe Bush Pump as a changeable—not immutable—object. It had survived more than half-a-century of alterations without losing the "trials of attribution." It was a fluid technology where no part was immutable. Thus, the villagers did not have to rely on the original design and, as a result, travel great distances to get spare parts; they used whatever was at hand. However, the pump remained a black box that circulated through long networks even though it was constantly altered—in other words, it was what Law (2009, p. 153) terms a "mutable mobile."

Some accounting studies also provide new understandings of the meaning of a stable network. For example, Dambrin and Robson (2011) depict a performance measurement system in the French pharmaceutical industry where an interrupted and incomplete network still functioned. The pharmaceutical representatives showed little concern for the apparent ambiguity even though their bonuses depended on the flawed measures. Jordan and Messner (2012) have also shown how incomplete performance indicators can be circulated in a network, as long as they can be handled flexibly.

Furthermore, while fluidity and flexibility interplay with stability in interesting ways, multiplicity complicates it more. In STS, some ANT studies have illustrated how multiplicity intervenes with stability. For example, borrowing Foucault's notion that modes of ordering are mini-discourses, Law (1994) identified four such modes operating in the Daresbury SERC Laboratory. He suggested that multi-discursive ordering of the laboratory contributed to its relative stability, because other discursive ordering were able to hold the network together when one fails. For Law (1994), the different, incompatible, and coexisting distributions should not necessarily be seen as a problem. As he later noted (2002, p. 126), the interferences of different modes of ordering "may represent a source of strength rather than of weakness: where one distribution seems uncertain, there is displacement into another." Mol (1999, p. 85) delineates the diagnoses of anemia in clinical, statistical and pathophysiological forms in a somewhat similar vein. These various anemias

are not simply opposed to, or outside, one another. One may follow the other, stand-in for the other, and, the most surprising image, one may include the other. This means that alternative realities don't simply coexist side by side, but are also found inside one another.

The diagnoses of anemia thus enacted multiple body: the body multiple.

Whereas Law (1994) focused on the multiplicity of ordering and Mol (1999) on the multiplicity of objects, I will address the multiplicity of reality. My study shows how the reality—that accounting is constitutive of and constituted by—is multiple. Ontologically, defining an object (e.g., Mol, 1999) or an order (e.g., Law, 1994) as multiple is defining the reality as multiple, therefore arguing for the reality multiple is not the purpose of this paper because the task has been completed. The main contribution of this paper is to superimpose the multiple reality in the same "Euclidean space" (Law & Singleton, 2005, p. 335), which shows not only an order or an object is multiple, but also actors, representations, and configurations of the network are multiple. However, unlike Law (1994), I find this multiplicity does not necessarily enhance stability, for actors' interests may contradict each other in different realities. As well, noncoherent interests do not necessarily undermine stability. As Law (2002, p. 202) comments on Latour's (1988) story of colonialism, the merchants, bureaucrats, soldiers, cartographers, priests, hacienda owners, and engineers resented and despised each other, yet colonialism as a whole was not undermined. Partial connections between different groups operated to perform an established disorder that oscillated between singularity and multiplicity. However, noncoherent interests across multiple reality can complicate the enrolment and mobilization of allies; these multiple versions of reality are irreducible to one another (Law, 2009, p. 152) and they dilute persuasion and negotiation efforts. Multiple reality also complicates what stability means because an unaccomplished network in one reality may be considered a success in another.

2.2 Representativity and Persuasion

The stabilization and success of an accounting system does not depend on anyone's judgment about its technical or representational capabilities, but rather on the creation of a network of allies' support (Robson & Bottausci, 2018, p. 70). To create such networks of support, fact-builders need to translate others' interests. Translation is "the interpretation given by the fact-builders of their interests and that of the people they enrol" (Latour, 1987, p. 108). The fact-builders persuade (Chua, 1995; Preston et al., 1992) others that fulfilling the fact-

builders' goals would also contribute to fulfilling the goals of the others (Latour, 1987, pp. 108–121), thereby establishing themselves as the "representatives" of, or "spokesmen" for (Callon, 1984; Latour, 1987), the others. The reality is then "a result of the generalized negotiation about the representativity of the spokesmen" (Callon, 1984, p. 218). Although clothed in the discourse of neutral and technical endeavours (Robson, 1991, p. 550), the practices of both science and accounting are highly political and rhetorical, and both are dependent on and produce various representations of the different objects (Justesen & Mouritsen, 2011, p. 168; Robson, 1991).

Even though the representation and inscription of complex and distant relations has always been ANT's central focus (Robson & Bottausci, 2018, p. 61), "the possibility for accounting to represent" has been relatively unexplored to date (Robson & Bottausci, 2018, p. 72). Nevertheless, when the stability of a network depends upon the validity or legitimacy of representation, the question becomes: how does one examine such validity? Take Callon (1984), as an example: in their project of domesticating scallops at St. Brieuc Bay, three French scientists tried to represent the fishermen, the scallop larvae, and other scientists. When dissidence and betrayals resulted, we know that one or more of the following representations were not valid: the representation of the fishing community by their few representatives; the representation of the fishermen's representatives by the three scientists; the representation of all larvae by the anchored larvae; the representation of the anchored larvae by the three scientists; etc. When subsequent larvae collection apparatuses were found to be empty and a horde of fishermen fished the scallops under study at the bottom of the bay, the actors were "betrayed by those they were thought to represent" (p. 220). For Callon (1984), determining the validity of representations "is a practical and not a theoretical question" (p. 219). Although we can describe what went wrong when it went wrong, we cannot exactly explain why. Unless tautological, any explanation would invoke some sort of social determinism that ANT is averse to (Baxter & Chua, 2017, p. 444). Perhaps after all, we must describe cases, case-by-case (Law, 2009, p. 148), as long as the new descriptions and/or the new cases brings new insights. Indeed, for ANT scholars, providing a social explanation does not refer to anything "social" in the conventional sense, but rather to aspects of the "relative solidity of associations" (Latour, 1987, p. 256, emphasis in original). As such, sociology becomes "slowciology" (Latour, 2005, p. 122, emphasis in original) that traces various associations with "endless redefinitions and reconfigurations" (Callon, 2010, p. 165).

In line with such a "slowciological" rationale, in my field study I observed the processes of translation through which representations were established. I describe the ways in which the consultants established themselves as "spokesmen" for others through translations that were enabled and facilitated by accounting devices. Actors form associations because of a convergence of interests (Baxter & Chua, 2017, p. 444) and fact-builders need to persuade others to converge their interests. Thus, representation may also be a practice of persuasion, or the "Machiavellian" (Latour, 1987, p. 125) enrolment or establishment of an "obligatory passage point" (Callon, 1984; Ezzamel & Xiao, 2015; Latour, 1987). To enroll is often to persuade, and indeed, a number of accounting studies have demonstrated diverse techniques of persuasion (e.g., Chua, 1995; Preston et al., 1992). Notwithstanding, these studies tend to be networks of success, at least temporarily, whereas I will show some failures that may help us understand the difference between the ones who can be persuaded and the ones who cannot. Although interests are "multiple, shifting and diverse" (Baxter & Chua, 2017, p. 444), I found persuasion done by sophistry is more transient than those accomplished through solidarity. It proffers one explanation on the reason why some networks are more stable than others, albeit another tautological one, because it implies that in a stronger network, whoever is enrolled already shared the same interests, consciously or unconsciously. Such ontological questions have been discussed among ANT scholars in STS. As Mialet (2017) puts it, "is everything already there potentially present inside us from the start?" (p. 324). What is suggested here is not that it is impossible to enroll actors with diametrically different interests. Rather, whether the enrolment is achieved through radical Machiavellian strategies or smooth solidarity contributes to "weaker or stronger associations" (Latour, 1987, p. 136).

If we strictly follow ANT's generalized symmetry principle (Baxter & Chua, 2017; Callon, 1984; Chapman, Chua, & Mahama, 2015) when examining representation and persuasion, we will approach non-human actors in the same manner as human actors. ANT does not celebrate the idea that there is a difference in kind between people and objects (Law, 1992, p. 383). According to Latour (1987), it is no more nor less difficult to interest a group of people than to interest the wind: people are "kept in line *just as much* as the wind is" (p. 129, emphasis in original). However, this principle of ANT probably suffers the most criticism (e.g., Amsterdamska, 1990; Collins & Yearley, 1992; Lee & Brown, 1994). Generalized symmetry was a revolutionary approach when initiated, because cognitive explanations of science and

technology were then dominant (Latour, 1987, p. 247). Consequently, Latour called for "a tenyear moratorium" on such discourse (p. 247) arguing that by suspending human cognitive abilities, we can better understand science in the making. Over three decades later, now that ANT has become mainstream in STS and popularized in accounting, I suggest we might lift this moratorium for a moment and consider what we have missed by jettisoning cognition.

Notwithstanding ANT's call to suspend cognition, accounting scholars do discuss human cognition, sentience, and intentions (e.g., Baxter, Carlsson-Wall, Chua, & Kraus, 2019; Boedker & Chua, 2013; Quattrone, 2009), because non-human actors do not have intentions as human agents do (Baxter & Chua, 2017, p. 445). In accounting, humans are often actors who persuade and negotiate with each other in order to make allies, who then are tied together "with non-human resources" (Latour, 1987, p. 207). These non-human resources—or "devices of *interessement*" (Callon, 1984, p. 206)—configure how allies are locked into place and ultimately produce machines and mechanisms. Machiavellian fact-builders sometimes target the cognitive and sentient aspects of humans. Boedker and Chua (2013, p. 247) have thus proposed that accounting is an affective technology that can generate multiple meaning and entice actors into emotive imagining, thereby construct a wide range of possible futures. In addition, Boedker and Chua found instances where organizational members mimicked certain behaviours and emotive responses, in order to be accepted by other network members, be well-regarded by others, achieve recognition, and not risk dismissal (p. 248). Non-sentient actors would not conform to certain activities just to be accepted by other members.

This tendency of conforming one's behaviour to the organizational norm has another implication: when allies are initially formed, humans may pretend their interests in dramaturgical acts (Goffman, 1959). This may explain why, later, actors can suddenly start to act in unpredictable ways (e.g., Callon, 1984; Chua & Mahama, 2007): the representations are flawed in the first place. If humans are like the Trisolarans in Liu Cixin's Hugo Award-winning science-fiction novel, *The Three-Body Problem* (2014), scholars could probably approach them as we do non-humans. Trisolarans communicate via patterns of electromagnetic waves produced directly by their brains as they think, thus rendering speech and thought synonymous. Because no ally would be "fake" in the Trisolaran world, Trisolarans would likely be incapable of living in multiple reality. Indeed, recognizing this dramaturgical difference between humans and non-humans is crucial to my study, where human actors perform multiple reality.

2.3 Subjectivity and Attachments

Mialet's (2017) ethnography about Stephen Hawking offers a different insight into how the tension between ANT and cognition might be reconciled. Her study demonstrated how the subject is constructed through diverse attachments, albeit resisted at the centre, and thus becomes "a distributed-centered subject" (p. 321). This insight is pertinent to both my study and the notion of representation discussed above, for, in Mialet, cognition is "distributed" rather than jettisoned. In my study, amongst the ways in which the consultants established themselves as spokesmen for others, wherein the stability of the network is related to how much translations drift, one of them is constituting "subject" for each employee in the firm by constructing "attachments" (Quattrone & Hopper, 2005) through creating performance measurements for the employees. As Latour (2005) has noted, an actor-network is made to exist by its many ties where "attachments are first, actors are second" (p. 217).

Constructing subjectivity through material arrangements is certainly not a new idea in ANT. For instance, writing on her experience of serving as a consumer representative on the intrauterine device (IUD) subcommittee of the Australian government's Therapeutic Goods Administration (TGA), Dugdale (1999) observed how a multitude of materials—"air tickets, cab charge vouchers, buildings, letterheads, claim forms, arrangements of locked doors, rooms, schedules of reimbursements, the list of subcommittee members" (p. 118)—acted to translate the pre-existing individual identities of all members of the committee into the identity of a TGA committee member. The participants' subjectivities were produced through these material arrangements—even before any spoken performances occurred.

Accounting literature has long studied the persuasive power of non-human resources such as visual inscriptions (Busco & Quattrone, 2015; Chua, 1995, p. 116; Mouritsen et al., 2001; Quattrone, 2009). Accounting functions as an infrastructure of codes of standardization, comparability, calculation, and text (Robson & Bottausci, 2018, p. 72) that enables the chain of transformation (Latour, 1999b, p. 70). The material arrangements and practices in which accounting is embedded co-construct actors' assessments of their interests (Robson & Bottausci, 2018, p. 65). Such co-construction is evident in my study wherein the employees' interests would have been best served by not having the new PMS; nonetheless, if there *was* to be a new PMS, they wanted it to align with their interests—interests that had not, in fact, existed

previously. Therefore, accounting inscriptions created new spaces of representation that regulated and transformed the organization's practices (Robson & Bottausci, 2018, p. 68). Human agents/actors in the organization then had to accommodate, if not incorporate (Carter, Spence, & McKinlay, 2020, p. 82), multiple accounting devices such as linguistic tags (Martinez & Cooper, 2019), cells (Quattrone, 2009), and calculation (Preston, Chua, & Neu, 1997)—all of which co-produced the distributed-centred subject.

Compared to the literature on accounting's construction of subjectivity, this study focuses on the multiplicity of the subjectivity created. Martinez and Cooper (2019, p. 18) called for future studies to explore how users of PMSs develop attachments from perspectives that give more centrality to users' regimes and cognitive processes. While I do not directly engage with cognitive processes, the actors' navigation around multiple reality highlights their consciousness about the attachments created as their distributed subjects. Accounting devices and discourses enabled the consultants to produce multiple distributed subjects for each individual in the field. The subjects that were created combined traits described in modern, Western management instruments (such as KPI) with SOE traits. The actors struggled between the different positions and reproduced themselves in their individual and multiple subjectivities (Dugdale, 1999, p. 122). Such an interpretation, however, is neither a retreat to the micro nor a denial of the macro (ibid); it is still located in ANT's epistemological realm.

3. Methodology

Because theory, method, methodology, and knowledge gained in qualitative field studies are intertwined (Ahrens & Chapman, 2006), a mutually-enabling assemblage of methods, methodology, and theories is crucial to my study. The ethnography was conducted in China for two-and-a-half months in 2016. Access was facilitated by my personal contacts and granted by both the consultants and Z-Corp (the SOE subsidiary). During this period, I lived in the so-called "tribal village" as an observer (Latour & Woolgar, 1986), without other commitments, and stayed in the same hotel (adjacent to Z-Corp) as the two consultants.

During weekdays, I was in Z-Corp from 9:00 a.m. to 5:00 p.m., observing the development of the PMS. I also spent each evening and weekend with the two consultants, either casually discussing their work experiences (at Z-Corp and in general) or following them back to Z-Corp to observe their after-hours work. My extensive field notes record observations of formal

meetings and workplace discussions and notes on daily encounters, including snatches of conversations at benches, in the lobby, and at lunch. These notes also include records of timings, gestures, intonation, and various unguarded behaviours (Latour & Woolgar, 1986, pp. 153–154). In addition to recording the observations, the process of taking field notes enabled a deepening of interpretation (Van Maanen, 2011, p. 118). *In situ* interpretation allowed me to reflect on the observations as first presented in their full dimensions. By following early periods of fact construction at Z-Corp, I observed how actors transformed one another's statements, and this offered rich material that led me to my analysis (Latour, 1987, p. 25). In the heat of controversy, the actors also explained to me why their opponents thought in contrary ways. As Latour (1987) observed, "when we approach a controversy more closely, half of the job of interpreting the reasons behind the beliefs is already done!" (pp. 25–26).

Although audio recording was not always possible, a total of 62 hours of meetings, negotiations, and discussions about the project were recorded with consent. This allowed further off-site analysis. Moreover, after the completion of the consulting project, I followed up with the two consultants and some Z-Corp employees through casual conversations online for another two years. To guarantee the privacy and confidentiality of all participants (as they preferred), all individuals and the names of the SOE and the consulting firm themselves have been assigned pseudonyms, and the exact date of the project has not been revealed.

3.1 "What does it mean to be ethnographic?"

The above question is taken from (Latour & Woolgar, 1986) postscript to the second edition of *Laboratory Life: The Construction of Scientific Facts*. Here, Latour and Woolgar (1986) stress that the ethnographer should maintain analytic distance by adopting a stranger's perspective, where the sense made of an alien culture can provide insights into those aspects of culture taken for granted by its members (p. 278). This *etic* approach (Headland, Pike, & Harris, 1990) was appropriate in Latour' and Woolgar's work, because the tribe under investigation—the scientific—is often the taken-for-granted. However, my study was of the Chinese SOE context, where the outside—the modern managerial and the Western academic—is the taken-for-granted—along with their post-colonial implications. I thus adopted a combination of *etic* and *emic* methods; in other words, in addition to relying on my perspective as a stranger, I also learned from the participants' interpretations of the reality.

With a few years of training in anthropology, I am well aware of what it means to claim to do ethnography. Methodologically, my study sits somewhere between an ethnography in anthropology and what, in qualitative accounting research, is known as a longitudinal field or case study—while being closer to the former. What we understand as an in-depth, longitudinal case study in accounting research often combines work with archival documents (such as company documents), interviews (e.g., Martinez & Cooper, 2019; Quattrone & Hopper, 2005), and, in some cases, observation of meetings and workshops (e.g., Boedker & Chua, 2013; Jordan & Messner, 2012). Observations—participant or nonparticipant—generally involve intermittent visits often spanning a period of multiple years (e.g., Boedker & Chua, 2013; Busco & Quattrone, 2015; Grisard, Annisette, & Graham, 2020). Studies self-identifying as field studies or using a fieldwork approach usually employ a similar collection of interviews, documents, and meeting observations (e.g., Ahrens & Chapman, 2004, 2007; Andon et al., 2007; Neu, 2019; Yu & Mouritsen, 2020). Occasionally, studies sharing the above features self-identify as ethnography (e.g., Skærbæk & Tryggestad, 2010)—a result of the authors' preference—but are also subject to the readers' discretion.

Common understandings of participant observation, case study, and longitudinal field study methodology in accounting research generally do not involve "living in the village"—i.e., living in the organization (e.g., Efferin & Hopper, 2007; Preston, 1986). Nevertheless, in anthropology, the criteria for ethnographies are more involved: i.e., "long-term, face-to-face, holistic, . . . in a small community" (Robben, 2007, p. 331). While I tried to maintain ethnographic sensitivity while conducting and writing up this study, its duration of two-and-a-half months may appear to fall short of an avowed ethnographic approach. For many anthropologists, at least a full year is required to study an entire culture and social life, for by living in a village for at least twelve months, a researcher is able to make observations during all seasons (Hannerz, 2007, p. 363). However, management practices in a modern organization may have different cycles, and I chose to observe a cycle of translation of the PMS devices in Z-Corp—from beginning to end.

Latour and Woolgar (1986, p. 282) have noted that *in situ* observation rather than interviews provide more direct access to events. However, the assumption that observations rather than interviews will yield a more "accurate" picture is both arrogant and misleading: this presumes that the real truth will eventually emerge as the result of closer and more detailed

observation, whereas ANT is averse to the very presupposition that there is a truth out there (Latour, 1987; Law, 2004, 2007). Thus, by stressing ethnography's importance in my study, I do not mean to suggest I got closer to the truth. Instead, ethnographic sensitivity is crucial to this study and its theorization, because it enabled me to unfold the multiple reality. Some of these coexisting realities were "public secrets" (Radcliffe, 2008, 2011; Taussig, 1999) generally known, but rarely articulated or spoken (Radcliffe, 2008, p. 103), by the actors I studied in the field—at least in formal settings where participants were "guarded" (Efferin & Hopper, 2007, p. 233). Ethnographic intimacy and immersion thus enabled me to establish trust and confidence with the participants (Efferin & Hopper, 2007, p. 234) and learn their public secrets.

Different circumstances and means of communication yield different realities in the field. In general, the formal encounters I observed generally presented the reality that the PMS project was developed to advance management and improve the competitiveness of Z-Corp: I characterize this as *aspiration*. This was the reality also presented in the documents and in my initial conversations with participants. Indeed, researchers should be cautious about relying on a single source such as files (Hull, 2012, p. 118)—not because documents do not reflect any reality, but because documents may not reflect the full reality. If one assumes they do, interpretations will be based on this incorrect view. This error can be seen in the case of Western scholars' research in the nineteenth century of Indian Buddhism, where they drew the conclusion that monks did not own personal property simply because rules in the texts prohibited it (Schopen, 2007).

After I spent considerable time in the organization and bonded with the consultants and other participants, I was able to observe an increasing number of unguarded encounters and gain a better understanding of embedded institutional relationships. I was exposed to more versions of reality: *decoration* wherein the PMS was a token deployed to resonate the SOE-reform discourse of the Xi Jinping administration; *justification* wherein the PMS was for changing the organization's flat compensation structure into a more vertically dispersed one; *segregation* which degraded the support departments and created conflict between the business departments and the support departments; and *provocation* that circulated anxiety and altered expectations. The ontology that reality is multiple prevents us from reducing the reality into one. It is not about debunking the real truth behind the scene or underneath the surface (Justesen & Mouritsen, 2011, p. 164; Latour & Woolgar, 1986, p. 282), because the multiple realities enacted by accounting

are irreducible to one another. Thus, in describing the multiple reality, I do not mean to depict "what really happened" (Latour & Woolgar, 1986, p. 275) or which reality is truer, but to "provide a narrative that helps us make theoretical points" (Martinez & Cooper, 2019, p. 5).

3.2 "Making a Mess with Method"

The above heading, borrowed from the title of Law's chapter in *The Sage Handbook of Social Science Methodology* (2007), suggests that contemporary social science methods are hopelessly poor at developing knowledge of the largely messy world (p. 595). Dominant social scientific approaches repress the possibility of mess, rather than know mess—"except in their aporias, as they try to make the world clean and neat" (ibid). Such "obsession with clarity" (ibid) contradicts the very purpose of ethnography. As Van Maanen (2011, p. 118) has stated:

Theoretical abstractions will not allow a fieldworker to get to the so-called heart of a culture any more quickly or better than natives do. Culture is not to be found in some discrete set of observations that can somehow be summed up numerically and organized narratively to provide full understanding.

All descriptions, interpretations, or theorizations are reductions and reproductions of messy worlds, and such representations are never neutral. Indeed, ethnographic writers bear a rather serious intellectual and moral responsibility; they can and do inform human conduct and judgment in innumerable ways by "pointing to the choices and restrictions that reside at the very heart of social life" (Van Maanen, 2011, p. 1). Such ethnographic reflexivity (Woolgar, 1981) pertains to the earlier discussion of ontological politics—when our writings make realities, the "only question is: what kind of difference do we want to make?" (Law, 2009, p. 154).

My ideal approach would be to avoid judging messy and heterogeneous practices as bad organization, and I would not ask reality to adjust itself so that it can be properly mapped by our theoretical frameworks (Law, 2007, p. 598). By jettisoning the "managerialist" (Law & Singleton, 2005) assumption that things should be clear and neat, I acknowledge that "things are at least sometimes vague and can only be known vaguely" (Law, 2007, p. 599). This vagueness is reflected in my representation of the fieldwork, and thus I must "offer the reader," as Armstrong (2008, p. 877) put it, "the means with which to remain unconvinced."

Providing a clear account of multiple reality is challenging. I first tried to write a chronological account, but I had not witnessed a linearity of time and evolution in the field

(Quattrone & Hopper, 2006, p. 222). I also tried to structure the narrative according to different groups of actors, but I then faced a challenge when I tried to capture interactions across groups. Moreover, no group was a monolith and subjects were distributed. Over the write-up phase spanning much of four years, I finally realized that even if I wanted to, I would not be able to depict a straightforward narrative (Martinez & Cooper, 2019, p. 4). In the end, I found the clearest—albeit still messy—narrative was one that presented the five identified realities one by one (i.e., what I term *aspiration*, *decoration*, *justification*, *provocation*, and *segregation*), notwithstanding the fact that multiple reality often populated the same space and that no scenario belonged to a single reality. To address the overlapping realities in one scenario, the depiction of the five realities is followed by two "snapshots" (Martinez & Cooper, 2019, p. 4) or "patchwork image[s]" (Mol, 2002, p. 151) wherein accounting performed and was performed by multiple realities.

4. Performing Multiple Reality

Z-Corp is a third-tier subsidiary of a centrally-controlled SOE. The parent—in fact, the "great-grandparent"—firm was referred to as the "conglomerate" by the participants. It was listed in the Fortune Global 500 and was primarily a firm that traded merchandise between China and a few African countries in support of its parent firm's construction business; however, Z-Corp's business also encompassed logistics, transportation, and the trade of commodity derivatives pertaining to its primary line of business. It had about 150 employees, and a management structure is illustrated in Figure 1 below.

[Insert Figure 1 about here]

The personnel can be broken down into five bureaucratic levels. The top level was comprised of the party secretary, the president, and the union secretary. The president was equivalent to a private firm's chief executive officer (CEO). The Chinese Communist Party (CCP) committee secretary was as powerful as the firm's president in terms of making crucial decisions, although the president ran the general administration itself. On the other hand, the union secretary—albeit at the top level of the organizational structure—was more of a "workfare" position without any power or duties beyond attending executive and symbolic union

meetings. There were four vice presidents (VPs) at the second bureaucratic level, each responsible for one or two departments. The third level was comprised of the department heads, who were accountable to their corresponding VPs. Depending on each department's size, 0-2 deputy department heads constituted the fourth management level, and the fifth level consisted of the employees.

The two consultants were from BetaConsulting, one of the largest native consulting firms in China: Chief Guang,⁶ who managed this project, and Mr. Hao. The knowledge and instruments the consultants practiced were adopted from the Big Four and global consulting giants such as McKinsey & Company and the Boston Consulting Group. Indeed, it is common for founders of local Chinese consulting firms to have work experience with large multinational consulting firms.

The PMS project had three phases: Phase 1 (initial investigation and benchmarking), Phase 2 (setting the objectives and evaluation measurements for each department and position), and Phase 3 (position evaluation and salary setting). Table 1 provides details of the work of each phase. Throughout all three phases, management accounting devices—benchmarking, performance measurements, IPE, etc.—were enacted to construct distributed subjects and perform multiple reality. It is worth noting that Z-Corp followed the typical SOE structure and did not have the types of responsibility centers—cost centers, revenue centers, profit centers, and investment centers—as in Western firms. The consultants did not attempt to introduce the responsibility centers either.

[Insert Table 1 about here]

4.1 Aspiration

What I call the reality of *aspiration* was presented in the official documents pertaining to the PMS project (such as the contract signed with BetaConsulting and the reports produced by the consultants) and the discourses used in formal settings. Until recent years, Z-Corp always had a compensation system based on job-based salaries, that was considered unfair and invoked

⁶ Chief (*zŏng*), derived from the term for chief manager (*zŏng jīngli*), is a common title prefixing surnames and is used to refer to firm managers and owners in general.

internal conflicts because employees on the same position were paid the same regardless of their performance. Z-Corp, therefore, had subsequently changed to a performance management system based on "virtue, ability, diligence, performance, and integrity" (Central Committee of the Communist Party of China, 2002)—criteria which were, and still are, the standards used to evaluate CCP leaders and government officials (Central Committee of the Communist Party of China, 2019). However, evaluations based on these standards had not brought much change to Z-Corp: the year-end assessment results were almost all "excellent," the employees had low regard for the assessment results, and the distribution of bonuses was largely based on position levels. Eventually, all employees had become indifferent to this assessment. Nevertheless, due to external economic shocks, business changes, and a decline in revenues, Z-Corp was faced with the urgent task of business transformation and the development of new markets. Consequently, the SOE needed to reform its PMS in order to "stimulate the enthusiasm" of its employees through performance management, guide business development, enforce the fairness of internal bonus distribution, eliminate internal conflicts, and ultimately promote the company's transformation and development, as well as complete the goals of the conglomerate. The consultants were brought in to achieve these aspirations.

A few months before this firm-wide PMS reform, there had already been a pilot PMS reform in the Commodities Trading Department (CTD)—a newer department whose job was trading commodity derivatives. Compared to personnel in other departments, employees in the CTD possessed more non-substitutable professional expertise. Because they had the skills required for derivative trading, they could access better-paid positions in multinational or private firms than employees at the same level in Z-Corp's other departments. Thus, the SOE model of "internal recruitment" and "assigned salaries" could not compensate for the expertise of staff in the CTD. Also, compared to the relatively stable profits generated in Z-Corp's regular trading business, profits in this department were much more variable, and thus Z-Corp could benefit from a more "scientific" PMS that rewarded performance. This pilot project was also contracted to BetaConsulting, but different consultants conducted it. I did not have the opportunity to observe the pilot project, but I later learned some details from the participants. A reformed PMS had been implemented in the CTD, consisting of a re-structured compensation system with negotiated salaries comparable to market wages, rather than assigned salaries and a PMS that rewarded the derivative traders if they generated more profits.

With a different PMS structure, the CTD seemed to be organized outside of the firm's SOE system. Because the top management team (TMT) wanted the CTD's success to be repeated in other departments, they again hired BetaConsulting for a second PMS project. Z-Corps' goals were to improve the PMS so as to better motivate all its employees, and also to make the firm competitive with its rivals. However, unlike the pilot project in CTD, Z-Corp did not implement the new PMS in the end, and the consultants did not receive the second half of their commission (the first half was received before the start of the project). In ANT language, I observed an unsuccessful fact-building experience, or an unsuccessful network.

Accounting change is a process of fabrication (Chua, 1995; Pinch, Mulkay, & Ashmore, 1989; Preston et al., 1992) that constructs individual and group interests in accounting techniques (Robson, 1991, p. 550). In order to construct these interests, the consultants mobilized accounting devices which, in turn, created subjectivity. During Phase 1, the processes of interviewing people, reviewing positions, and benchmarking problematized individuals as slackers and lacking motivation. When the consultants learned about the employees' everyday work, they made comments to the interviewees such as "It is relatively light, but don't worry; we'll adjust that." Later, the consultants used a range of graphic inscriptions such as slideshows, flowcharts, and column, pie, and bar charts in order to be more persuasive (Busco & Quattrone, 2015; Qu & Cooper, 2011; Quattrone, 2009). Such inscriptions "have an effect even when the data in them are subjective, qualitative, or imaginary" (Myers, 1988, p. 248). Conversely, in Phase 2, the consultants constructed a diligent and self-motivated subject with the performance measures they developed, thus meeting both global—that is, Anglo-American—standards as well as the SOE's expectations. For example, regardless of their level, the managers were assigned 80% results-based measures in their performance evaluation, and the remaining 20% was put to "capability and attitude." The former were quantified measures stressing efficiency and productivity, whereas the latter resonated with the CCP's "virtue, ability, diligence, performance, and integrity" standard. Similarly, the evaluation of non-management employees was based on 70% results-based, quantitative measures, and 30% "work attitude" (see Table 2 for an example). "Work attitude" included obedience, responsibility, cooperation, initiative, and discipline, which preserved the SOE identity that would be eradicated by the Anglo-American system. The consultants shared with the me performance measures that they had developed in the past for

private firms; such measures were completely results-based and did not include any attitudinal measures.

[Insert Table 2 about here]

To establish themselves as spokesmen for other actors, the consultants recruited managers from all levels to participate in designing the PMS. They structured the performance evaluation spreadsheets and tentatively filled in the cells before calling each department head and deputy to the "centre of calculation" (Latour, 1987), i.e., their office. This office was a small conference room with a racetrack conference table sitting six to eight people. Only one or two people were invited to the office at a time. The consultants would then use their laptops to project their spreadsheets onto the white wall, discussing and inscribing each cell with the department heads. The heads' and deputies' suggestions were then directly translated into items on the evaluation form, which were simultaneously projected in front of them on the wall. This allowed the managers to be actively involved in constructing performance measures (Townley, Cooper, & Oakes, 2003) and therefore to become "committed to their own designs" (Martinez & Cooper, 2019, p. 3). After developing the performance measures with the department heads, the consultants made appointments to seek input from the corresponding VPs and, in turn, the president and party secretary in their respective offices. Therefore, all the central actors were involved in the process of constructing identities for themselves, their departments, and employees.

While constructing subjects for the potential allies that the consultants were trying to represent, accounting also enacted the consultants' own subjectivity. When the I asked about the consultants' work on their first day, Chief Guang lectured me on "the value of consulting"—a lecture he seemed to have delivered many times. He said its value had four aspects: it disseminates advanced management concepts, provides methodology, develops customized management plans, and guides the implementation of those plans. This discourse reaffirmed the consultants' identity as professional expert and was sustained in this project in the reality of aspiration. By contrast to the professional image, the consultants also acted as both a mouthpiece for top management who used them to send bad news to the employees, and persons who did tedious paperwork just for the sake of producing documents. The consultants' aspiration thus

aligned with the firms' aspiration and the former tended to direct reality back to *aspiration* while navigating through other realities.

As noted earlier, the validity of representation is a practical question (Callon, 1984, p. 219) and, in this reality, the practical result was a failure. Notwithstanding the consultants' endeavours to persuade and enrol actors, something went wrong with the legitimacy of representation. Law (2002) reminds us to look for what is absent. Despite the efforts made by the consultants, two groups of actors were not recruited: the conglomerate and the bottom-level employees. These two groups, located at the periphery (McNamara, Baxter, & Chua, 2004; Quattrone & Hopper, 2005), eventually played decisive roles.

On some occasions, the bottom-level employees were not present when, as prescribed by standard consulting practice, they were supposed to be. For instance, in Phase 3, the International Position Evaluation System (IPE) developed by Mercer (an American human resources consulting firm) was to be used in the crucial step of defining salaries for individual positions. In theory, there should have been employees from all levels of the firm on the expert adjudication committee. However, the committee was composed of all the top- and mid-level managers, and the requisite two employees on the committee were two individuals who were about to be promoted to the deputy level in their departments. As a result, 19 out of the 20 grading experts were "reconstituted organizational agents" (Hopwood, 1987, p. 229) who had been enrolled in the centre of calculation in the project's second phase. In this process, the "circulating reference" (Latour, 1999a, p. 23) was flawed: the IPE was not properly represented by either the consultants or the expert adjudication committee, and the bottom-level employees were not properly represented by their "representatives" on the committee. Moreover, at the conclusion of the project, the recommendations should have, in theory, been approved at a union meeting with all employees invited, yet the consultants did not expect Z-Corp to conduct such a meeting. The chains of translation were again broken. Eventually, the project was "disapproved" by the conglomerate, without explicit reasons given, a few weeks after Chief Guang and the General Service Department⁷ head presented it at the conglomerate.

Be it successful, failed, or otherwise, *aspiration* was the only reality presented in official discourses and reflected in all inscriptions. This reality was also the premise of other realities. If PMS for *aspiration* had not been real, there would not have been a need to use it as *decoration*.

⁷ The literal translation of this department is the Colligation (or Comprehensive) Department.

In the reality of *justification*, the very reason that PMS could be translated in the attempt to justify a change of pay structure was that it was perceived as a modern scientific, advanced practice that fulfilled aspirations. Indeed, as I will discuss below, the reason for a network's success in one reality may lie in another reality.

4.2 Decoration

In November 2012, Xi Jinping became the "paramount leader" of China (i.e., General Secretary of the Communist Party of China Central Committee, President, and Chairman of the Central Military Commission). Shortly after he took power, the national reform of SOEs (in terms of organizational efficiency and management structure) was identified as an essential step in the structural transformation of China's economy. The "Guiding Opinions of the Communist Party of the China Central Committee and the State Council on Deepening the Reform of State-Owned Enterprises" (Central Committee of the Communist Party of China & State Council of China, 2015) was promulgated in September 2015 and was followed by a series of detailed statutory interpretations. SOE reform was an urgent priority for the Xi Jinping administration. As Leutert explained in 2016:

Economically, Beijing aims to decrease the drag on domestic growth and increase the overseas competitiveness of its largest firms known as $y\bar{a}ngq\bar{i}$,[8] long plagued by declining performance, rising debt, and serious corruption. Politically, the Chinese Communist Party wants to reinforce state ownership as a pillar of domestic stability at home and increased influence abroad. (p. 85)

In order for SOEs to play a leading role in China's supply-side structural reform, Xi called for the establishment of a modern corporate governance system, advanced industrial structure adjustment, and innovation-driven development ("Xi Urges Unswerving Efforts to Deepen SOE Reform," 2016). Premier Li Keqiang also instructed that "SOEs should enhance their competitiveness and efficiency through market-oriented reforms and reduce excess and backward production capacity" (ibid). Although the reforms reflected some neoliberal market qualities, they were not a result of a move towards neoliberalism. Instead of calling for a move towards privatization, at a national meeting for SOE leaders in 2016, Xi called for strengthening

⁸ *Yāngqǐ* means centrally-controlled SOEs. There are about 100 big centrally-controlled SOE groups among all the SOEs, and more than 90 are listed in the Fortune Global 500.

and improving Communist Party leadership within SOEs ("Xi Stresses CPC Leadership of State-Owned Enterprises," 2016). Xi also sent out a strong message that SOEs must deepen their reforms in order to "become important forces to implement the decisions of the party" (Zhao, 2016).

Since the enactment of "Guiding Opinions," many SOEs, including Z-Corp, hired consulting firms to reform their management structures. My field study of Z-Corp is also an instance of this larger political terrain wherein specific SOEs adopt modern Western management practices. Nevertheless, it is somewhat paradoxical to aim to both strengthen CCP leadership while promoting a competitive market demanding innovation and creativity. Compared to the first reality, the PMS reform was a perfunctory means of responding to the national SOE reform campaign, rather than an aspiration to improve human resources management. In other words, it was developed to serve as *decoration*—or a "corporate badge" (Cooper et al., 2019, p. 472)—for jumping on the somewhat mandatory bandwagon. This reality was visible in the scenarios where the form was more important than content. Through producing the new PMS documents, Z-Corp was "playing the game of speaking the language" (ibid) that the state preferred to hear.

There were occasions where things were more perfunctory than aspirational. In developing performance measures for each position, some department heads and deputies questioned the feasibility of specific measures. After running out of persuasive rhetoric, the consultants would simply respond, "It just has to be there. Don't worry, you can change it later." After an individual meeting with the consultants, one department head, Head Wan, asked the consultants about what percentage of salary would be performance pay. Consultant Hao replied that this was to be decided by the president: unlike private firms where normally performance pay was about 60%, SOEs were different. He added that he guessed that performance pay would not be more than 30% in Z-Corp. Head Wan replied that, in this case, the PMS would not achieve the purpose of motivating employees. He noted that although there were some disparities between the employees' performances, the impact on their final salaries would be minimal if performance pay was to contribute less than 30%: "In the end, the pay difference between the best and the worst performing employee is probably less than 1000 yuan⁹ per month." Wan

⁹ About \$200 CAD.

suggested that this system would not motivate his employees unless both the percentage of performance pay in the salary and the workload weight in the performance evaluation were increased. He explained that the young employees who were "allocated" to the firm were rich: "You don't see what cars they are driving!" (Indeed, based on my conversations with other participants, it was common knowledge that many of the entry-level employees were "internally" recruited through their families' social connections and these families tended to be rich.) The consultants did not plan to bring this concern to the TMT because the TMT—and particularly the party secretary—were concerned about the firm's stability. Being "too harsh" on the bottom-level employees could potentially upset their family members who were higher-up in the SOE system, and this could, in turn, jeopardize the PMS project.

In this reality, the fact-builders were successful in building the PMS network because the documents and the process itself served the purpose of *decoration*.

4.3 Justification

After the I had spent substantial time in the field and built-up trust with the consultants, the consultants provided other background about the project. "Our main goal in these projects is to solve the 'salary upside down' issue," said Chief Guang. In the past year, the consultants had been on a few of these projects for the subsidiaries of SOEs. They explained that after President Xi Jinping took office and initiated the anti-corruption movement, the SOEs had to limit their managers' pay hierarchically. The hierarchy was explained as follows: for the first-tier subsidiaries of an SOE, the president's pay could not exceed 6-8 times that of the bottom-level employees. Then, the vice-president's pay was 30-40% lower than that of the president, and was at the same level as the president of the second-tier subsidiary's pay. However, when it came to third-tier subsidiaries, the president's pay was about twice that of their bottom-level employees. This "salary upside down" problem—i.e., top managers paid too low whereas bottom-level employees paid too high, comparatively—could not be solved without justification. As a subsidiary of a conglomerate, Z-Corp had a fixed pool of collective salaries; hence, in order to raise pay for the TMT, it had to reduce the pay of lower-level employees. To address these "legitimation pressures" and to stress conformity and obscure conflict (Cooper et al., 2019, p. 479), the managers hired the consultants to justify the salary change making it appear to be a move towards more advanced management. The consultants thus were natural spokesmen for the TMT. The spokesmen had to be external because, as Guang put it, "foreign monks are better at chanting sutras."

At the meeting to report the Phase 1 results, all top- and mid-level managers were present. Chief Guang reported on the review of positions in Z-Corp and the benchmarking results. The first finding concerned salaries: the entry-level employees' salary was in the 99th percentile and double the market average; the department heads' salary was at the 85th percentile, whereas the president's pay was in the first quartile. According to the consultants, Z-Corp's fundamental problem was its flat pay distribution structure. The second finding concerned workload, which in some departments was below the benchmark. For example, some positions in the Accounting and Legal Departments did not reach their full capacity. Similarly, there was a position in the Enterprise Management Department (EMD), which was responsible for workplace safety in the firm. According to Guang, such safety monitoring did not require a full position. After Guang's report, Mr. Hao provided suggestions on setting jobs and roles. These included conducting periodic employee evaluations and sending individuals who did not meet standards to a training centre. After the meeting, I asked the consultants how the training centre would be established and if it was possible to dismiss excess individuals in Z-Corp. Hao explained that workloads were problematized only as a justification for changing salaries, and that no one would build any training centre.

The reality of *justification* was partially built on the realities of *aspiration* and *decoration*. In order to justify any changes in compensation, the PMS itself had to be an unproblematic, "blackboxed" device. Such unproblematic-ness was partially warranted by the reality of *aspiration* because the PMS had already withstood a "long list of trials" (Latour, 1987, p. 88) as an "aspirational" device globally. The reality of *decoration* also contributed to the unproblematic-ness of the PMS because the practices were endorsed by the government in this reality. Nevertheless, when the PMS itself was black-boxed, inscription and the representational validity of the consultants as spokesmen were questioned instead. For instance, at the above-mentioned meeting, one VP questioned the location of the firms used for benchmarks. Guang appeared the doubt by replying that the benchmarks were located either in the same metropolitan area or another equivalent one.

Although the bottom-level employees were again "absent" (Law, 2002; Law & Singleton, 2005) in this reality, this does not mean that they did not play a role. They were the ones whom

the consultants needed to persuade the most. The general understanding was that the higher one's position was in the firm, the more likely one's salary would be increased, whereas the lower one's position was, the more likely one's pay would be decreased. However, in this reality, it was challenging for a consultant to convince employees that "I want what you want" (Latour, 1987, p. 108), and even a "detour" (Latour, 1987, p. 111) failed to work. This detour lay in the reality of aspiration: if the firm could be more efficient and profitable as a whole after adopting the PMS, in the long run, the employee would be better off. However, such a detour was not within an "acceptable length" (Latour, 1987, p. 113), as it was unclear when the employees would become better off—i.e., their salaries become higher than the current without adopting the PMS—nor was the main road clearly cut off such that adopting the detour was the only option (Latour, 1987, pp. 111–112). The challenge of enlisting the employees directly in the reality of justification eroded the reality of aspiration. In aspiration, after the consultants created attachments for employees' subjects through accounting inscriptions or "the devices of 'interessement'" (Callon, 1984, p. 206), they could not circulate the reference back (Latour, 1999a, p. 23) to those they meant to represent because no reference was established in the first place.

Nonetheless, the absent actors played an essential role because the TMT's concern with organizational stability mainly pertained to them. The absent actors thus did not have to make an utterance to be active. The TMT advised the consultants that changes could not be too radical, in which case the employees would easily escape the *interessement*. If we judge success by the results achieved, in this reality, accounting was not successful in achieving justification because the PMS was not adopted, and in the end, the salaries were not changed.

4.4 Provocation

There was, nevertheless, another reality in which success was not judged by whether or not the PMS was adopted. Guang left consultancy a year after completing this PMS project, joining a manufacturing firm close to his hometown. Later he explained, the consulting work was "meaningless," and he was also tired of being away from home all the time. Hao continued to work at BetaConsulting and conducted a few other projects similar to the one at Z-Corp. Almost two years after the PMS project, I asked Hao why TMTs in SOEs kept hiring consultants to justify salary structure change when they knew such a change was difficult to implement. Hao

said that whether or not the salary structure changed, the process was meaningful because it was about lowering expectations so that in the future, such a salary change would not surprise anyone.

Boedker and Chua (2013) suggest that accounting is an affective technology that circulates affects such as hope, desire, passion, fear, and anxiety. Through the circulation of affect, accounting images and templates act as centres of calculation that make people's feelings amenable to intervention. Anxiety started to circulate in Z-Corp when the consultants initially came in. When they conducted interviews to learn about the daily work of each employee, participants were generally defensive. The interviews were mostly between the consultants and the individual department heads, and the employees who were not part of the process were eager to learn exactly what was happening. Multiple reality seemed to be the main source of anxiety for the participants, because it meant uncertainty. Unless they knew what reality they were living in—aspiration, decoration, or justification—they could not envisage any strategy. As a result, on the one hand, participants tried to learn which reality was truer and, on the other hand, they had to assume that all realities were true and therefore try to tackle all at the same time. Individuals always tried to clarify the details which the consultants purposely obscured or kept vague: When was the new PMS to be implemented? Would the salary be changed? What would be the composition of the salary? How often would the performance evaluation be conducted? etc. Because they could never be sure which reality was being enacted, they were generally defensive when answering the consultants' questions, attending meetings, and negotiating performance measures.

For example, when developing performance measures for the strategic planning position, the consultants proposed, as a financial indicator, including "clearing up" accounts payable (AP) and accounts receivable (AR) for the subsidiary, because managing the subsidiary's AP and AR was a vital task of this position. This provoked anxiety for Head Sui of the EMD (spokesman for the strategic planner) because including such a measure could negatively impact the strategic planner's performance pay in the realities of *aspiration* and *justification*. He thus resisted the attachment (Mialet, 2017) and retorted, "There's nothing you can do if they just can't get the money." The consultants explained that they just needed a quantifiable, objective indicator to measure performance because it was impossible to measure the quality of strategic reports and plans. While the consultants tried to push the reality towards *decoration*, where any quantitative

and objective measures would perfunctorily serve the purpose, Head Sui continued to resist quantitative measurement of the position. They finally agreed to use the "timeliness" of the strategic plan, report, and evaluation as classified indicators for measuring the quality of strategic planning, leaving the EMD to define "timeliness" (see Table 2 for the performance evaluation form for the strategic planning position). And instead of clearing up the subsidiary's AP and AR, timely disposal of the subsidiary's assets was included. The consultants then tried another provocation for the restrictive indicators. They wanted to include cooperation with other departments and approval of strategic planning as performance measures for the position, which again provoked anxiety and defensiveness because these were "out of the control" of the strategic planner. The consultants then switched to the *decoration* mode and assured Head Sui that the EMD would specify the details and provide the data: therefore, the department would be in control. At this point, all the indicators were in the EMD's control, and they would be able to do a perfect job as long as they completed their jobs according to the measurements thus far.

Although in Boedker and Chua (2013), actors wholeheartedly committed to the "wider range of possible futures" that accounting enticed them into imagining and constructing (p. 263), such commitment was not the case in the PMS project. This may have been due to the conflict between realities. Accounting can provide synergy, but persuasion cannot be achieved if the multiple realities contradict themselves while being multiple. *Provocation* works against *decoration* when it comes to provoking anxieties; I thus observed that the consultants were constantly shifting strategies between provoking and pacifying. In the above example of the EMD, the consultants were not able to inscribe any *aspirational* measures that could improve quality or efficiency. However, the process itself involved "the essence of affective technology: the ability to entice and seduce actors to make imagined (and often ambiguous) futures a reality" (Boedker & Chua, 2013, p. 263).

4.5 Segregation

The reality of *segregation*—between the business and the support departments—was probably not anticipated but was enacted precisely through accounting. Z-Corp had seven departments and a subsidiary logistics firm that operated, for the most part, independently. Of the seven departments, three were so-called "business" departments—two trading departments and the CTD—and four "functioning" or support departments—the General Service Department

9GSD), the Accounting Department, the Legal Department, and the EMD. Traditionally, in SOEs, salaries and promotions were based on seniority and hierarchy, and professional skills were not as appreciated as they were in private firms. However, when positions in Z-Corp were evaluated through benchmarking and IPE, and performance measures were developed, some positions in GSD and EMD were degraded by the accounting instruments used. During Phase 1's benchmarking, the positions with "unsaturated" workloads were all in the four support departments. Some functions of these departments also overlapped, and some were obscure.

Struggles, biases, and discrimination continued to grow in Phase 2, with work on the development of departmental KPIs, including financial indicators, classified indicators, and restrictive indicators (see Table 3 for an exemplar list for the Accounting Department). Every support department head had issues with including the firm's total profit as one of their financial indicators. In the cases of the Accounting, Legal, and the General Service departments, 10% of their total departmental performance evaluation was to be determined by the firm's total profit, and in the case of the EMD, this was 20%. The department heads argued that they had no control over the firm's profit, and thus it was unfair to be evaluated on this indicator. The consultants' first-round persuasion was typically two-fold: "Every department belongs to the same firm, and the firm performs better when everyone does a better job." . . . "Every department more or less carries total profit as part of their KPI, more for the business departments, less for functioning departments." One department head was persuaded by these statements and did not raise further questions. For those who continued to believe this was unfair, the consultants' second-round persuasion was "This is actually a good thing because your department will share the bonus when the firm is doing better. Just think about the case where the firm achieves a higher profit, yet your department can't share the bonus just because you didn't include it as a KPI." The latter argument largely convinced these department heads.

[Insert Table 3 about here]

The deputy head of the GSD, however, raised a further issue: "The trading departments are taking advantage of us because 30% of their KPI is total profit, which means they're only evaluated on the 70%." This complaint was valid in the sense that as a trading firm mainly supporting the parent firm's construction business, both procurement and selling prices were

largely set by the parent firm, along with the number of goods traded. There was not much room for the trading departments to "perform." The consultants knew this argument was valid, but they could not verbally acknowledge it because that would jeopardize the reality of *aspiration* (which the reality of *justification* relied on). Guang thus used the flip side of the earlier argument and said, "Well, the trading department will suffer the most when the firm is not doing so well."

At its peak, during and after the IPE, *segregation* involved heated exchanges. I will return to this in the IPE snapshot (Section 4.7). Overall, *segregation* was inside both *justification* and *provocation*. It was an unintended consequence of *justification*, which perpetuated *provocation*.

4.6 Snapshot 1: A KPI

Here I present a snapshot in which the development of a KPI enacted the realities of aspiration and decoration at the same time. As introduced in Section 4.5 above, some performance measures were heterogeneous from the characteristics of Z-Corp's business because many elements of the workplace's outcomes were predetermined. It was not appropriate to use negotiated prices or attracting new customers as performance measures when the number of products and trading price were all set by the parent firm. However, the obsession with quantifying performance persisted in the PMS project, even when in many cases it was not feasible. Designing the KPI for the procurement positions in the two trading departments was one such example. The consultants held three individual meetings to discuss the KPI for this position: one with Head Luo of Trade Department I (with three procurement positions), one with Head Wan of Trade Department II (with four procurement positions), and the third one with both Luo and Wan. Both the department heads worked with their employees in an open office filled with semi-transparent cubicle-style workstations. As a result of the close proximity of the workstations, the department heads were able to oversee the procurement personnel's daily activities. Thus, merely by watching, they had a good idea about who was working the hardest and doing the best job. However, the PMS required them to translate job quantity and quality into a quantitatively measurable form. During the initial meeting, Head Luo complained about having to develop a quantifiable evaluation for the procurement position because, in her opinion, there were no fair quantitative measurements. The consultants then met with Head Wan and started the conversation by acknowledging the unfairness of using the number of the contracts signed, the price of the contracts, or any other such measures. Consultant Hao then presented a

newly devised plan: a multivariate indicator which included multiple variables (i.e., the number of contracts, the price of contracts, the number of products in a single contract, the types of products in a contract, and the means of procurement (i.e., single-supply, bidding, and competitive negotiations). They proposed that the sum workload of all employees in procurement positions would be calculated using all these variables, and individual performances would be compared to the average workload. However, Hao acknowledged that this plan was challenging to implement because KPIs in Z-Corp were not computed by machine, and the data would need to be collected and calculated by hand. Head Wan agreed that this approach would be a lot of work and would not be approved.

Both the consultants and the department heads were performing the realities of *aspiration* and *decoration* at the same time. They all agreed that quantifying the measure was not the best way to evaluate procurement positions, which result in the quantification practice as *decoration*. Nonetheless, they were also concerned about the fairness and feasibility of implementing the measure, which enacted the reality of *aspiration*.

The consultants again brought Head Luo and Head Wan together to try to resolve the issue in another meeting that lasted for two-and-a-half hours. In the end, they devised a plan, as shown in Table 4. Luo and Wan first agreed that multiple factors were needed for measurements to be fair, but they needed to simplify the consultants' plan. Hao agreed: "We can develop whatever plan for the purpose of the paperwork, but we don't want it to be too complicated for you to use. So, we'll see what's the best under the premise of keeping it simple." Luo and Wan then suggested that the price of contracts was not relevant to workload, and that the means of procurement was the more relevant factor (since a bidding process required much more work than a single-supplier procurement). Wan suggested that another variable should be the categories of products, including spare parts, and equipment and materials. Head Luo added miscellaneous hardware to the category. Their proposal took as its baseline the number of contracts signed, which was then to be multiplied by the coefficient of the means of procurement, which in turn was to be multiplied by the coefficient of the categories of product procured. They then reflected upon the feasibility and appropriateness of the measurements. Luo suggested that while the number of products might not be relevant, the number of items (i.e., the number of types of unique commodities) should be included. Hao suggested combining the number of items with the product categories' measurement, so that the number of variables

might be reduced. If any procurement batch had more than 100 items, it would be considered as miscellaneous hardware. Wan agreed that they should limit the variables to two because they would not be able to calculate anything if it was more complicated. Luo and Wan continued to suggest changes, including changing the coefficient into a higher or a lower number, adding the request for quotation (RFQ) to the means of procurement categories, and shifting the rankings. While Luo and Wan were coming up with new items and changes, Hao modified the form on his laptop, which was simultaneously projected on the wall. Changes were thus immediately inscribed.

[Insert Table 4 about here]

All appeared to be content with the designed evaluation as *decoration*, and the meeting was about to be adjourned when Head Wan said, "We have to test it and see if it works." Head Luo agreed and copied to Hao's laptop the past six months of contracts signed by the three Trading Department I employees. They then checked the evaluation results. First, they categorized each contract, making some adjustments to the categorizations as they went along. When they came to the lathe, Luo thought it was inappropriate to categorize it under general equipment because the procedure involved was more complicated. Wan then suggested reorganizing equipment and raw materials into the following two categories: general equipment and general materials (with a coefficient of 1.1), and large equipment and large raw materials (with a coefficient of 1.2). Other ambiguous items such as valves, chemical materials, and work clothes were difficult to categorize. Hao suggested categorizing them based on the difficulty of procurement rather than on the products themselves. "This sounds like it all depends on a hunch," complained Wan. While Luo was busy categorizing the contracts, Wan exclaimed, "This [categorizing the contracts] is a lot of work! What are we gonna do with 500 contracts a year?" Hao answered that they need only categorize the contracts once, and subsequently, the procurement employees should keep their own records.

When the test results were ready, Head Luo was surprised at the large disparity between the employees, and she was worried that this would significantly affect the employees' pay. Hao assured her that this was just the performance pay, which made up a small portion of the entire salary, and thus relieved Luo of her fear that there would be a great change for her employees. Hao then asked her whether the test results represented the employees' workload in her mind, and she replied "yes": the one who scored the highest was the one she believed worked the most. Nevertheless, Luo was still unsure about the plan's fairness: she asked the consultants how many single-supplier contracts would be equivalent to a bidding-based hardware miscellaneous contract. When she found that three of the most straightforward contracts were almost equal to two of the most difficult contracts under this plan, she raised this as a problem: "I think it still hasn't shown the importance of bidding." Hao explained: "This plan is definitely not final. You can modify the coefficient when you use it, give it three months of trial and error; it should all make sense after that." Luo replied, "I should post all the coefficients on the wall when things are settled—otherwise, they'll argue with me." Wan said, "Now they'll fight for more work." "That'll be so good," Luo replied. Wan then commented, "If it works this way, I'll just post the contracts on the wall when they come in every month, and let them [the employees] fight for the ones that they want." Head Luo laughed: "Don't you feel like a manager now?"

In the above scenario, all actors were relieved to find that the results calculated according to the proposed plan reflected Head Luo's impressions, because her impressions were considered to be the more accurate performance evaluation; therefore, KPI was enacted as *decoration*. Another enactment of *decoration* was that the consultants tried to conclude the paperwork while Head Luo still hoped to further refine the measures. On the other hand, the reality of *aspiration* was enacted when everyone collaborated to make the KPI fair and feasible and agreed that it would motivate the employees.

4.7 Snapshot 2: The IPE

This snapshot illustrates the interplay of the five realities in the application of Mercer's International Position Evaluation System. The IPE exercise included all positions except those in the CTD, which had already undergone this exercise in their pilot project. This grading event started with a 30-minute training session, during which Chief Guang introduced the seven perspectives of the evaluation: impact on the firm, monitoring and management, scale of responsibility, communication skills, working credentials, problem-solving competence, and working conditions. There were multiple dimensions and scales within each perspective. Guang stressed that the evaluation was about the positions in the firm, not the people in these positions. The expert adjudication committee, comprised mainly of managers (as introduced in Section

4.1), was asked by the consultants to conduct a 15-minute trial evaluation session of three sample positions. The consultants then reported the standard deviation for each of these: 4% for the president, 7% for the head of Trade Department I, and 13% for the bookkeeper. With the deviations determined to be acceptable, the consultants left it with the committee to grade the remaining 40 or so positions. Some committee members only took 10 minutes to grade all the positions (which was less time than it had taken to grade just the three sample positions). Most completed the evaluation within 30 to 40 minutes. After half the committee had left, the party secretary came up to Guang and whispered that she too would leave now and send her evaluation to him later. After acquiring all data, the consultants found the standard deviations were mostly within 15%; only the driver and clerical secretary positions were over 20%.

Both the managers and employees in Z-Corp appeared quite anxious after the evaluation, and many made inquiries of the consultants—either implicitly or explicitly—regarding the results. Even though they had not participated in the IPE process directly, bottom-level employees also sensed the circulating anxiety. Some asked the me in the washroom or hallways about whether any information could be shared and the answer was no. While not being able to reveal the results to most, the consultants assured the inquirers that both the process and the results were fair. Only three managers were entitled to see the results: the president (Chief Yu), the party secretary (Secretary Yang), and the head of the GSD (Chief Hu). The results shown to these three were the calculated results, and only the consultants could see the grades that each committee member produced. The final results for each position were calculated on an average of all grades produced by the committee members, barring the highest and lowest ones to avoid outliers caused by bias. Among the employee positions, the procurement position in the trading departments scored the highest, whereas the driver in GSD scored the lowest. This difference in score would translate into a 40,000-yuan difference in annual salary. When the scores were translated into salaries, the president, who scored highest in the firm, would have a salary of about four times that of the driver.

It was evident that the support department managers tended to assign relatively higher grades to positions in the support departments, and the business managers did the same with positions in the business departments. When Hao examined the initial uncalculated results, he noticed that the president had graded positions in the business departments much higher than the support departments. Guang commented, "Well, the lowest grade for a position is going to be

deleted anyway, but you should know what leads to follow." The final results aligned with the president's grading (i.e., where the business department positions scored higher than the support departments.) Hao commented that it seemed that there would be no problem in gaining approval for the results because they fell in line with the president's preference.

However, the segregation between the business and the support departments led to a backlash from Chief Hu. He initiated a two-hour negotiation with the consultants. He first argued that the standards for position evaluations were not appropriate, and that the perspectives and dimensions were vague and arbitrary. Guang replied that the evaluation was quantitative, and had objective and concrete standpoints. "It would be perfect if the results could make everyone happy," he said, "but this would not always be the case." Chief Hu then questioned the attitudes of the committee members. He insisted that the results were completely random because the score for the procurement position was too high. Guang addressed this point by stating, "We, as a third party, are here to ensure procedural justice. The scores were produced by people who serve and know this firm, so they are fair. And we are just here to facilitate the procedure." Hao added: "This is a group decision-making process, which is not going to be the same as each individual's decision." However, Hu went on to argue "You tell me that the procurement positions are important, but don't you think people in our general service department are more important? My people watch fixed assets. Every department uses our service! Without the watch of my people, desks and computers could be stolen." Guang explained that, of course, every position is important. They all play indispensable roles in this firm. "However," he emphasized, "we need to consider the experience and expertise required when evaluating each position." Chief Hu was still not satisfied with the discussion and expressed his intent to change the final evaluation results. Guang initially implied that the results could not be changed. Nevertheless, he went on to suggest that Chief Hu could be ranked as an associate VP in the IPE, which ranks higher than other department heads and immediately below the VPs. Originally only the head of the CTD was ranked as an associate VP, but because Chief Hu served as an acting manager for Z-Corp's general operation, he should be entitled to the rank. This suggestion seemed to partially alleviate Chief Hu's anger.

The IPE provoked Chief Hu's anger and anxiety about the evaluation scores, the ranking, and, essentially, his own salary and that of his department members. In other words, the reality of *provocation* was a consequence of the reality of *justification*. Nevertheless, Hu translated his

interests into arguments in the realities of *segregation* and *aspiration*: the segregated scores between the business departments and support departments were unacceptable because the departments had equal value; the IPE was not adequately translated into practice because the committee members did not treat it seriously; and the IPE was itself not an aspirational practice because it was perceived as "vague and arbitrary."

The consultants ranked all the positions based on the IPE results and then used the rankings to benchmark the positions with market salaries. If they followed the benchmarks' median, the president's pay would be doubled, whereas the driver's pay would be cut in half. In the reality of aspiration, the consultants would adopt this plan because it reflected market salaries and would stimulate competition as well as motivate the employees. However, in line with Secretary Yang's stability concern, the results were not able to be enacted in the realities of justification and decoration—where a more uncontroversial plan was needed. Thus, the consultants needed to tinker with either the IPE results or the benchmarking so that the change would not be too radical. After negotiating with the TMT, the final plan was that the top managers would take the first quartile of the benchmark, mid-level managers would receive the median, and the employees would take the third quartile. Under this plan, the top managers' pay would be raised and the bottom-level employees' pay would be reduced, but not as radically as in the consultants' original plan based on the IPE results.

5. Discussion

I have presented five coexisting realities in the previous section. An essentialist view would generate alternative theorization whereby only one reality would be real, and multiple realities would become frontstage, backstage, and off-stage (Goffman, 1959). However, ANT's ontology prohibits us from being referees for multiple reality because there is no distinction between fact and artifact, and "reality [is] the *consequence* of the settlement of a dispute rather than its *cause*" (Latour & Woolgar, 1986, p. 236, emphasis in original). Might we reduce the number of realties to less than five? Perhaps, because some realities share common elements. For example, accounting invoked struggles in both *segregation* and *provocation*. However, I prefer to keep the realities irreducible to each other—not because they were different "matter of facts" but because they represented different "matters of concerns" (Latour, 2004). Multiple reality always coexisted in the field. In the event of IPE, we can see *aspiration* when the consultants

made efforts to carry out the accounting practice as properly as possible. They conducted a trial evaluation of three positions beforehand, and stressed that the evaluation was about positions rather than the people in those positions. However, we can also see things that were not as aspirational: some committee members spent less than 10 minutes on all evaluations, and thus it was unlikely that the evaluation schemes were carefully referred to. This perfunctory practice enacted the reality of *decoration*. Subsequent struggles of the IPE also enacted the realities of *justification*, *provocation*, and *segregation*. The coexisting multiple reality could be inside one another, rely on one another, or undermine one another. If, as Roberts and Scapens (1985) advised, "the only way to understand accounting practice is through an understanding of the organisational reality which is the context of accounting, and which is the reality that the accounting systems are designed to account for" (p. 444), then we ought to reconsider translation, persuasion, representation, and the stability of an actor-network when the reality is multiple.

In an ANT worldview, accounting—or any other fact and artifact—is formed through translation rather than diffusion (Latour, 1987). In accounting practice, translation is the process through which often pre-existing accounting techniques, and their associated roles, are articulated discursively, in ways that construct the individuals' and groups' "interest" in those techniques, and may subsequently provide motives for producing accounting change. (Robson, 1991, p. 550)

The consultants indeed tried to construct the individual and group interests with accounting technologies. They used benchmarks, rankings, calculations, and cells as inscription devices. As a visual technology often used by accounting and performance measurement devices, cells provided demarcated spaces and linguistic labels where knowledge could then be disposed (Lynch, 1988, p. 209; Martinez & Cooper, 2019, p. 17; Quattrone, 2009, p. 97). With the cells and linguistic labels, the consultants constructed attachments for individuals, groups, and departments, which in turn fabricated subjects. During all meetings (including brief and individual ones), they amplified the visual technology's visibility by projecting inscriptions on the wall. Notwithstanding the consultants' efforts in translation and fabrication, the organization did not change from one stable state to another (Quattrone & Hopper, 2001, p. 408), nor did it "drift" (Quattrone & Hopper, 2001, p. 426) visibly to achieve temporary success.

The PMS in Z-Corp was a failed network in the conventional sense because it did not bring about explicit change. Such a failed network of accounting inscriptions can help us to understand how accounting "represent[s]' and 'intervene[s]'" (Robson & Bottausci, 2018, p. 72), as well as to understand how some networks are more stable than others. Such an "understanding of durability and flux is central to ANT" (Baxter & Chua, 2017, p. 447). But, how do we explain successes and failures? Callon (1984) believed his "symmetrical and tolerant description of a complex process [...] permit[ted] an explanation of how a few obtain the right to express and to represent the many silent actors" (p. 224). While this explanation "links with the notion of the political economy of power proposed by Foucault (1976)" (Callon, 1984, p. 230), ANT avowedly devalues "a particular 'sociological' interpretation" (Callon, 1984, p. 221) and the reduction of society "to a balance of power or to a series of conditions" (Callon, 1984, p. 222). The "pick and mix" (Whittle & Spicer, 2008, p. 624) approach combining ANT and Foucault's historiography has led to "bristling criticism" (Baxter & Chua, 2017, p. 447; Tinker, 2005). As Baxter and Chua (2017) have stated:

ANT does not encourage the types of histories that have distinguished Marxist-influenced accounting research (Tinker, Merino, & Neimark, 1982), or even postmodern narratives detailing the conditions of possibility enabling the emergence of particular programmatic discourses and their emblematic practices (Burchell, Clubb, & Hopwood, 1985; Loft, 1986; Miller & O'Leary, 2007). (p. 447)

The question then becomes: how can we explain network stability and representational validity without invoking "macroinstitutional factors" (Latour & Woolgar, 1986, p. 152; Rose & Rose, 1976)?

Latour (1987) outlines several strategies that lead to a successful network: mustering more resources (p. 62), getting there earlier (p. 82), and the Machiavellian translation of others' interests to establish oneself as a spokesman (pp. 108–121). In so far as translation "emphasizes the continuity of the displacements and transformations" (Callon, 1984, p. 223), such "displacements" cannot be too radical. Like "the building of a stone hut; each stone must go further than the one before. If it goes too far, the whole vault falls down; if not far enough, there will be no vault at all!" (Latour, 1987, p. 52). The stability of the network is thus related to how much translations drift. It is common to see synergy in stable networks where interests align well, requiring minimal displacement. For example, in Jeacle's (2003) study about the

construction of a standard body size for ready-made garments in the early twentieth century, the standard reduced the alteration costs for stores, limited returns of poorly fitting garments to manufacturers, as well as improved customers' shopping experience. It was a win-win-win situation, and, not surprisingly, the network has been stable and the standard has become a black box.

Such a win-win situation was not the case in most of the realities in my study. In the reality of *justification*, it was not possible to translate the interest of the GSD's driver into a reduction of his salary by half. The stone would have gone too far in such translation, such that "the whole vault [would have fallen] down" (Latour, 1987, p. 52). In such a situation, fact-builders need to be more Machiavellian in their persuasion and use more robust *interessement* devices to lock actors in. Yet, it is common to find that the harder the fact-builders try, the more likely it is that other actors will escape, because the level of difficulty persuasion involves represents the heterogeneity of interests. While interests are not always "explicit" (Latour, 1987, p. 108), the difficulty of enrolment may be more easily observed; furthermore, because a winwin game likely yields stability, we may cautiously predict that more Machiavellian translation is negatively associated with stability. And, as Latour (1987) has noted, a chain of translation is "only as strong as its weakest link no matter how grandiose some of its elements may be" (Latour, 1987, p. 124).

The negative association between Machiavellian translation and stability may not hold where multiple reality is concerned. For instance, Boedker and Chua (2013) present a paradox where what "may seem like a disciplinary mechanism that further limited people's choices and freedom, was by local actors perceived to provide relief from having to make decisions themselves" (p. 260). This paradox may be more comprehensible if we examine at it in multiple realities. In Boadker and Chua's study, in one reality, the local actors had faith in the corporation's values, whereas in another reality, they adopted new mental models in order to become members of the Senior Leadership Team. (Indeed, those who did not express strong devotion would soon find themselves leaving the organization.) Thus, interests that do not appear to align in one reality may very well align in another. Although this could indeed be explained by power and coercion if I used other theoretical lenses, in ANT ontology, the reality is the consequence, rather than the cause, of disputes.

It seems impossible to theoretically discuss representation validity because it is a practical question rather than a theoretical one (Callon, 1984, p. 219). Representations are reified when they successfully resist "trials of strength" (Latour, 1987, pp. 74–79), but how do we explain such success? The answer is through a "circulating reference" (Latour, 1999a, p. 23) whereby a "legit" representation should be able to be traced back and forth. Yet, such "representation is always partial in that representation is always produced in the absence of its referent" (Robson, 1991, p. 551). My study provides a new approach to locating the "absent referents": they can be in other realities. For instance, the consultants created aspirational attachments for the employees in order to align interests in the reality of *justification*, yet the referent of such represented employees lay in the reality of *aspiration*.

This cross-reality representation has another significance: if we look more closely, the reason for a network's success in one reality may lie in another reality. *Aspiration* failed because the conglomerate did not approve the plan, but the conglomerate's interests should not have conflicted with the PMS project in the reality of *aspiration* wherein Z-Corp would envisage better management and better-motivated employees. However, in the realities of *justification*, *segregation*, and *provocation*, the consultants could not legitimately represent the conglomerate's interests nor those of the bottom-level employees. The fact that the referent and reasons for stability may lie in other realities may also explain Mol's (1999) remark that there seem to be options everywhere, but they always end up seeming elsewhere (p. 80).

While fact-builders fabricated absent referents in their representation, the consequence of such Machiavellian "rhetoric" (Preston et al., 1992, p. 563) was that multiple realities were enacted. This move towards multiplicity, then, was away from epistemology because "epistemology is concerned with reference: it asks whether representations of reality are accurate" (Mol, 2002, p. vii). Whether a network is successful or stable and whether a representation is valid would no longer be the question; a network can be stable and unstable at the same time, and a representation can be valid and invalid at the same time.

Subjectivity is also multiple, while multiple reality "redistribute[s] subjective quality outside" (Latour, 1999a, p. 23). The consultants constructed their own subjects while creating attachments for others. Both management (e.g., Kosmala & Herrbach, 2006) and accounting (e.g., Dirsmith & Covaleski, 1985) literature has shown that cynicism results from the discrepancy between knowledge and reality, which in turn gives rise to a gap between individual

and professional selves. This gap can be understood as distributed subjects in multiple realities, where the consultants' interests shift between spreading knowledge and making a living.

A field study has closure, but such closure does not imply the stability of a single outcome (Dugdale, 1999, p. 132). According to Dugdale (1999), to make a single is to make multiple, and if any decision, subject, or indeed object, form a coherence, this is because "they are both singular and multiple" (p. 132). In such a view, the reality is lived and performed rather than perceived. Deciding which reality actors live in at any given moment is akin to quantum mechanics where "the reality in question is taken to be closely related to any attempt to measure it" (Law, 2004, p. 24).

6. Conclusion

This study has highlighted how the reality—that accounting is constitutive of and constituted by—is multiple. The performative nature of accounting implies that accounting performs multiple reality. Multiple reality enacted by accounting were inside and outside one another; as well, they coexisted, relied upon, and eroded one another. Stability is not linear in the reality multiple because an actor-network can be a failure in some realities while a success in others. Similarly, representativity crosses multiple realities when the representation is in one reality, and the referent is in another. As such, a failed actor-network in one reality may be caused by flawed representation in another reality.

This study has been an exercise in post-ANT thinking on the reality multiple, with attention paid to "possible new formulations [... that] may be relevant for accounting research" (Justesen & Mouritsen, 2011, p. 162). While the focus on accounting practices as inscriptions and inscription devices in processes of translation still forms a core component of ANT-inspired accounting research (Robson & Bottausci, 2018, p. 61), I propose a new perspective whereby the ontological consequences of inscriptions are explained. This can provide insights into how accounting inscriptions perform multiple reality, and consequently, how representation in, and stability of, a network traverse multiple reality.

We, accounting scholars, endeavour to investigate stability even though "disorder" or "entropy" (Latour, 1987, p. 244) is our destiny because such investigation helps us to understand how accounting performs. Nonetheless, stability may not always be the objective, such as in the

reality of *provocation*; this shows that sometimes temporary oscillation is needed to prepare the environment for future organizational change.

This study also sheds light on other topics of management and control practices. For instance, in recent years, there has been an increasing interest in studying multiple management control devices such as the system or package (e.g., Cooper et al., 2019; Henri & Wouters, 2019; Malmi et al., 2020; Malmi & Brown, 2008; Masschelein & Moers, 2020; Mundy, 2010). Cooper et al. (2019, p. 481) have proposed a set of metaphors for the relations between multiple PMSs in an organization: they can "connect directly (system), connect intermittently (loose coupling), overlap (redundancy), and be drawn upon differentially by different organizational actors (bricolage)." However, all these relationships coexist simultaneously within the multiple reality performed by the PMSs in this study. The roles that the PMSs played in Z-Corp were, at the same time, both "substantive (decision making/control/learning) and symbolic (legitimacy)" (Cooper et al., 2019). Multiple PMSs—benchmarking, KPI, IPE, etc.—connected directly and played substantive roles in the reality of *aspiration*, whereas they connected only intermittently and played symbolic roles in the realities of *decoration* and *justification*.

Last, but not least, I hope to have a degree of "reflexivity" (Latour & Woolgar, 1986, p. 278). In so far as the ethnographic approach exposed us to five coexisting reality, there might have been more. Further, as the I spent most of my time with the consultants, it is unlikely that other participants took the me into the same level of confidence as the consultants did. Also, ethnography does not render me ubiquitous. Hence, even if I had the confidence of every participant, observing everyone at any time was not possible, nor was it the purpose. As discussed in the methodology section, I am not interested in uncovering more truths or a truer truth because such an essentialist view of reality opposes the ANT ontology. Instead, my observations allow me to problematize how accounting enacts multiple reality, how multiple realities interplay with one another, and how stability and representation can be understood differently in multiple reality.

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Figure 1 Structure of Management in Z-Corp

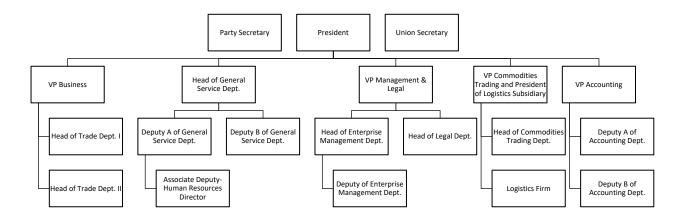


Table 1 Outline of the Project

Phase 1 Investigation and Benchmarking	Phase 2 Setting Objectives and Measurements	Phase 3 Position Evaluation and Salary Setting
 Review job positions Interview employees Benchmark with firms in the same industry Set up jobs and roles Hold management meeting to report results of Phase 1 	 Set objectives according to the parent conglomerate's guide Develop KPI for each department and position based on responsibilities Discuss objectives and KPI with department heads Report objectives and measurements to VPs Report objectives and measurements to the president 	 Hold IPE training session Collect IPE score produced by the evaluation committee Rank jobs according to IPE score Benchmark with market salary Set the plan for the new salary structure Report to, and discuss with, the president and party secretary Report to the parent conglomerate

Table 2 Performance Evaluation Form of the Strategic Planning Position (Fragment)

Key Performance Indicators (70%)							
Indicator	Weight	Evaluation Standar	rd	Objective	Data Source		
1. Timeliness of strategic planning breakdown	25%	implemented within the requirements will be deducted for ea incompleteness; 25 points will	red time. 2 ch l be	100%	EMD		
2. Timely releasing the evaluation of strategy implementation results	25%	implementation is completed required time. 2 points will be for each incompleteness; 25 p be recorded if the objective is	within the e deducted oints will reached.	0 time	EMD		
3. Timeliness of project report submission	25%	Project reports completed within the required time. 2 points will be deducted for each incompleteness; 25 points will be recorded if the objective is reached.			EMD		
4. Timeliness of completion of benchmarking	15%	The benchmarking work is completed within the required time. 2 points will be deducted for each incompleteness; 15 points will be recorded if the objective is reached.			EMD		
5. Timeliness of subsidiary asset disposal	10%	Complete the disposal of subsidiary assets within the time requirements of the company. 2 points will be deducted for each incompleteness; 10 points will be recorded if the objective is reached.			Subsidiary		
1. Internal cooperation		2 points will be deducted for each internal negative feedback during the assessment period; maximum deduction is 5 points.			EMD		
2. Major business plan rejected		5 points will be deducted for each major formulated business plan being rejected by company management during the assessment period; maximum deduction is 10 points.			EMD		
Work Attitude (30%)							
Indicators		Dimensions	Weight				
Work attitude							
		1 7					
		1					
				20%			
	1. Timeliness of strategic planning breakdown 2. Timely releasing the evaluation of strategy implementation results 3. Timeliness of project report submission 4. Timeliness of completion of benchmarking 5. Timeliness of subsidiary asset disposal 1. Internal cooperation 2. Major business plan rejected dicators	1. Timeliness of strategic planning breakdown 2. Timely releasing the evaluation of strategy implementation results 3. Timeliness of project report submission 4. Timeliness of completion of benchmarking 5. Timeliness of subsidiary asset disposal 1. Internal cooperation 2. Major business plan rejected dicators	1. Timeliness of strategic planning breakdown 2. Timely releasing the evaluation of strategy implementation results 3. Timeliness of project report submission 4. Timeliness of completion of benchmarking 5. Timeliness of subsidiary asset disposal 1. Internal cooperation 2. Major business plan rejected 3. Dimensions 4. Attitude 2. Major business plan rejected 3. Dimensions 4. Devaluation of the strategy implementation is completed required time. 2 points will be for each incomplete with required time. 2 points will be recorded if the objective is assets within the time required the company. 2 points will be for each incompleteness; 10 p be recorded if the objective is assessment period; maximum is 5 points. 3. Timeliness of complete the disposal of subsidence assessment period; maximum is 5 points. 4. Timeliness of subsidiary asset disposal 4. Timeliness of subsidiary asset disposal 5. Timeliness of subsidiary asset disposal 6. Timeliness of subsidiary asset disposal 7. Timeliness of subsidiary asset disposal 8. Timeliness of subsidiary asset disposal beingonis will be deducted for on internal negative feedback durassessment period; maximum is 5 points. 5. points will be deducted for on formulated business plan beingonis by company management durassessment period; maximum is 10 points. 8. Dimensions 9. Obedience 8. Responsibility Cooperation Initiative	1. Timeliness of strategic planning breakdown 2. Timely releasing the evaluation of strategy implementation results 3. Timeliness of project report submission 4. Timeliness of completion of benchmarking 5. Timeliness of subsidiary asset disposal 6. Timeliness of subsidiary asset disposal 1. Internal cooperation 2. Major business plan rejected 2. Major discators 1. Internal cooperation 2. Major business plan rejected 2. Major business plan rejected 2. Major business plan rejected 2. Timeliness of strategy implementation is completed within the required time. 2 points will be deducted for each incompleteness; 25 points will be recorded if the objective is reached. 2. The evaluation of the strategy implementation is completed within the required time. 2 points will be deducted for each incompleteness; 25 points will be recorded if the objective is reached. 3. Timeliness of completion of benchmarking 4. Timeliness of completion of benchmarking work is completed within the required time. 2 points will be deducted for each incompleteness; 15 points will be recorded if the objective is reached. 2. Complete the disposal of subsidiary assets within the time requirements of the company. 2 points will be deducted for each incompleteness; 10 points will be recorded if the objective is reached. 3. Timeliness of complete the disposal of subsidiary assets within the time requirements of the company. 2 points will be deducted for each internal negative feedback during the assessment period; maximum deduction is 5 points. 4. Timeliness of subsidiary assessment period; maximum deduction is 10 points. 4. Timeliness of subsidiary assessment period; maximum deduction is 10 points. 4. Timeliness of subsidiary assessment period; maximum deduction is 10 points.	1. Timeliness of strategic planning breakdown 2. Timely releasing the evaluation of strategy implementation results 3. 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Timeliness of subsidiary assets within the time requirements of the company. 2 points will be deducted for each internal negative feedback during the assessment period; maximum deduction is 5 points. 9. Timeliness of subsidiary assets within the time requirements of the objective is reached. 9. Timeliness of subsidiary assets within the time requirements of the objective is reached. 9. Timeliness of subsidiary assets within the time requirements of the objective is reached. 9. Timeliness of subsidiary assets within the time requirements of the objective is reached. 9. Timeliness of subsidiary assets within the time requirements of the objective is reached. 9. Timeliness of subsidiary asset within the required		

Table 3 Performance Evaluation Form of the Accounting Department (Fragment)

Indicator		***	
classification	Indicator	Weight	Evaluation Standard
Financial Indicators	1. Total profit	10%	Total profit = operating income - operating costs - three major expenses - business tax and surcharge. Score 10 points for achieving the target; for each 1% above/below target, add/deduct 1 point.
	2. Receivables	10%	Supervise the business segment to meet the requirements of the conglomerate, reduce the accounts receivable. Score 10 points for achieving the target; for each 1% above/below target, add/deduct 0.5 point.
	3. Financing	15%	Complete the financing task according to the business needs. Score 15 points for achieving the target; for each 1% above/below target, add/deduct 1 point.
	4. Business hospitality	5%	Controllable management fees, etc. Score 15 points for achieving the target; for each 1% above/below target, add/deduct 1 point.
Classified Indicators	5.Number of accounting errors	20%	The number of errors in accounting documents, accounting processes, etc. Score 20 points for achieving the target; for each error, deduct 2 points.
	6. Financial analysis report	15%	Not meeting expectations (0-59 points), partially meeting expectations (60-80 points), meeting expectations (81-100 points), exceeding expectations (101-120 points). Evaluation score needs to be divisible by 10, i.e., 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120 points.
	7. Comprehensive budget management	10%	Complete the adjustment and reporting of the comprehensive budget plan within the specified time. Score 10 points for achieving the target, and deduct 1 point for each day of delay.
	8. Export tax rebate cycle	15%	The export tax rebate will be completed within the specified time (from the date of shipment of the goods to the tax refund) according to the requirements. Score 10 points for achieving the target, and deduct 1 point for each delay of batch goods.
Restrictive Indicators	1. Cash concentration ratio		The cash concentration ratio should reach or exceed 85%. Deduct 2 points if not reaching 85%; otherwise, no deduction.
	2.Controllable administrative expenses		Regularly analyze administrative expenses and provide early warning. Deduct 3 points if not completed; otherwise, no deduction.
	3. Pay tax on time		No overdue tax payment, no overdue fine is incurred (subject to the tax bureau's taxation penalty). Deduct 0.5 points for every 1000 yuan of loss caused by the Accounting Department.
	4. Foreign exchange policy implementation		Implementing foreign exchange policy and maintaining relations with the foreign exchange bureau. If any downgrade of the firm is caused by the Accounting Department and affects the regular operation of foreign trade business, 5-20 points to be deducted according to the severity of the situation. 2 points are granted if no incident occurs during on-site auditing for 4 consecutive quarters.
	5. Salary calculation		No error in the salary calculation. For every 1 error, 1 point is deducted, up to 3 points of deduction.
	6. Performance contracts signed on time		Whether the performance contract was signed on time. 2 points deducted for not completing on time.
	7. Departmental training		Complete internal department training as required, deduct 1 point for missing one time, up to 3 points of deduction.

Table 4 Performance Evaluation for the Procurement Position

Means of Procurement				
Single supplier	×1			
Request for Quotation (RFQ)	×1.1			
competitive negotiation	×1.2			
biding	×1.3			
Category of Product Procured				
1-10 items; spare parts	×1			
10-50 items; General equipment and general materials	×1.1			
50-100 items; Large equipment and sizeable raw material	×1.2			
Over 100 items; Hardware Miscellaneous	×1.3			
Final indicator for workload=Number of Contracts × Means of Procurement coefficient				
× Category of Product coefficient				

CHAPTER 3: PERFORMANCE MANAGEMENT SYSTEM IN CONTEXT: WHEN FLAT-EARTHERS ENCOUNTER HIGH-RISE STRUCTURES

Performance Management System in Context: When Flat-earthers Encounter High-rise Structures

Highlights

- Institutionalized context is irreducible to micro-interactions and material arrangements.
- Context can be black boxes used to build larger networks in the punctualization process.
- Context can be used as discursive resources and devices of *interessement*.
- Contexts are performative actors.

Abstract

Bruno Latour envisages scholars of actor-network theory (ANT) to be "flat-earthers" who perceive the world as assemblages of "2-D," "flat" interactions and material arrangements. They do not recognize any institutions, which are merely flat slices piled onto one another. This "flat ontology" poses a theoretical and methodological dilemma when a network of accounting practice under investigation involves multiple institutionalized contexts: ignoring the contexts denies their performative potentials; using the same flat approach for both the micro and the macro contexts is methodological reductionism and liable to miss the transmutation between quantity and quality; and empirically, the astronomical number of flat slices constituting the context may deflect the focus of the investigation. This ethnographic field study on the translation of a performance management system in a Chinese state-owned enterprise (SOE) encounters such a dilemma. It thus discusses the ways in which accounting scholars can approach it with the vocabulary of ANT. Through examining the roles that SOE context plays in the translation processes of accounting technology, I identify context's roles in the actor-network as black boxes, discursive resources, devices of interessement, and performative actors. This paper highlights where context fits theoretically in ANT, thereby extends the ways in which ANT can be mobilized for interpretive accounting research.

Keywords: Actor-Network Theory (ANT); Context; Performance Management System (PMS); Black Box; Discursive Resource

1. Introduction

Actor-Network Theory (ANT) (Callon, 1984; Latour, 1987; Law, 1994) has been inspiring "ethnographic or interpretive accounting research studies (EARS)" (Jönsson & Macintosh, 1997, p. 367) since the late 1980s and early 1990s (e.g., Hines, 1988; Robson, 1991), shortly after the publication of Latour's (1987) seminal work *Science in Action*. At the advent of ANT, both the studies of science, technology and society (STS) and the alternative accounting research communities were dominated by types of social determinist discourses (Callon, 1984, pp. 197–200; Justesen & Mouritsen, 2011, p. 161; Latour, 1987, p. 141). In contrast, ANT urged us to step back from such "social" explanations of things and provided the approach of following heterogeneous chains of associations in order to understand science, technology, or accounting in the making (Latour, 1987). Various types of accounting practices are hence conceptualized as inscription (Chua, 1995; Corvellec, Ek, Zapata, & Zapata Campos, 2018) and calculative devices (Mouritsen, Hansen, & Hansen, 2009) that are constitutive of and constituted by networks of human and non-human actors. Accounting, once a secondary phenomenon "to be explained through reference to macro conditions or personal sensemaking" (Justesen & Mouritsen, 2011, p. 163), has now become a protagonist.

Antithetical to traditional sociology's acceptance of "the essential transcendence of society and its *sui generis* origin" (Latour, 1996b, pp. xi–xii), Latour (1987, 1996b, 2005) envisages scholars of ANT to be "flat-earthers" who perceive the world as assemblages of "2-D," "flat" interactions and material arrangements. They do not recognize any institutions because institutions are merely flat slices of interactions piled onto one another (Latour, 1996b, p. xi). ANT, along with ethnomethodology and post-structuralism (Reed, 1997, p. 23), has avoided the analytical distinctions between high-level structures and low-level actions (Ahrens & Chapman, 2007, pp. 1–2). Such coalescence of the macro and micro has, on the one hand, eschewed macrosocial determinist interpretations, and on the other, corrected the simplifications in functionalist studies (Ahrens & Chapman, 2007, p. 2). Nevertheless, this coalescence has also created a peculiar phenomenon in ANT-inspired accounting research. While aspects of context are indispensable in accounting practice (Burchell et al., 1985; Hopwood, 1989; Hopwood, 1983; Laughlin, 1987; Roberts & Scapens, 1985), scholars of EARS need to refrain from referencing

the institutionalized¹⁰—macro or meso—context while applying ANT, because referencing macro conditions implies a macrosocial determinist narrative that is opposed to the "recursive process" (Chapman, Chua, & Mahama, 2015, p. 269).

While ANT is averse to metanarratives (Baxter & Chua, 2017, p. 444) or any type of social determinism, context—cultural, political, institutional, or otherwise—becomes an irreconcilable object in this approach. Such flat ontology that replaces social structures and institutions with the concept of heterogeneous networks (Ahrens & Chapman, 2007, p. 6) is burdened with criticism that ANT's micro-descriptions are ignorant of social structures (Harbers, 1995; Hopper & Bui, 2016, p. 23; McLean & Hassard, 2004; Reed, 1997; Walsham, 1997; Winner, 1993). To address such criticism, Latour (1990b) explains that it is possible for ANT to move between the macro level and the micro-level such that the high-level structures can be investigated with the same conceptual framework as micro-structures. While some scholars remained unconvinced (Reed, 1995; Walsham, 1997), Latour's coalescence of social structure and detailed activities into "a metaphor of connections" (Latour, 1996c, p. 371) also poses a theoretical and methodological dilemma when a network under investigation involves multiple high-rise structures, or contexts: ignoring the contexts denies their performative potentials; using the same flat approach for both the micro and the macro context is methodological reductionism and liable to miss the transmutation between quantity and quality; and empirically, the astronomical number of flat slices constituting the context may deflect the focus of the investigation.¹¹ I encountered such a dilemma in this ethnographic field study on the "translation" (Callon, 1980, 1984; Latour, 1987) of a performance management system (PMS) by a team of two consultants in a subsidiary of a Chinese state-owned enterprise (SOE), where the macro context was pervasive and constantly referred to by the actors. I am thereby interested in the ways in which context plays a recursive and indeterminate (Callon & Law, 1982; Chapman et al., 2015) role in accounting practice. Through examining the roles that SOE context¹² plays in the translation processes of accounting technology, I identify the context's

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¹⁰ "Institutionalized" here refers to the meaning in the Merriam-Webster's Dictionary—established as a common and accepted part of a system or culture. Such a system can be political, economic, cultural, or technological (Ahrens & Chapman, 2007, p. 4; Ortner, 1984). Institutionalized context in this paper is not the same as institutional context as in institutional theory (Scott, 2008).

¹¹ I will discuss these three points in more details in sections 2 and 3.

¹² By SOE context I mean the specific ways of doing and perceiving things in Chinese SOEs. In addition to the institutionalized context mentioned earlier, it also relates to social context—the specific setting in which social

roles in the actor-network as black boxes, discursive resources, devices of *interessement*, and performative actors. This paper highlights where context fits theoretically in ANT, thereby extends the ways in which ANT can be mobilized for EARS.

Accounting is a socially and institutionally embedded practice (Hopwood & Miller, 1994), and EARS in the past decades have studied the "contextualization" (Ahrens 2008, p. 294) of management accounting in action in various ways. Context plays a more important role in management control systems (MCS) compared to machine production technology because MCSs are more complexly bound up with issues such as hierarchy (Ahrens & Chapman, 2004, p. 297). For PMS studies specifically, Dambrin and Robson (2011, p. 430) critique the assumption in many studies that PMSs are implemented homogenously within invariant organizational contexts and encourage the considerations of environmental or technological contingencies. Such contingencies are the specific context in organizations, such as "spaces for action and mediation" (Quattrone, Puyou, McLean, & Thrift, 2012, p. 6) and local knowledge (Qu & Cooper, 2011).

In so far as context is important for management accounting practice, it has been in a rather peripheral position in ANT-inspired accounting research. The aversion to metanarratives discussed above explains the reason why higher-level context is excluded in ANT. Nevertheless, lower-level, micro context has not been the focus in previous studies either, which is likely due to the "heroic" (Law, 1990) nature of ANT. ANT is criticized for being favourable of some social interests while exclusive of others" (Winner, 1993, p. 370), and the arbitrary selection of actors stupefy the analytic process (Button, 1993, p. 23). It is common to see ANT accounts focus on winning stories, such as the stories of gaining power, establishing authority, and stabilizing institutions (Engeström & Escalante, 1996, p. 340; Shapin, 1988). The capacity to shape translation in actor-networks is unequally distributed and thus brings a bias towards the victors (Whittle & Spicer, 2008, p. 622). In accounting studies, specifically, narratives tend to center on the managers, consultants, and other "prominent proponents" (Preston, Cooper, & Coombs, 1992, p. 564) of the accounting system being developed. These key actors use rhetorical strategies to persuade others, fabricate facts, and dominate the account of practice (Alcadipani & Hassard, 2010). Albeit ANT was meant to redress the privileging of formal

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interaction takes place, including specific, often unique meanings and interpretations assigned by people within the given group (Given, 2008, p. 820); and cultural context—consisting of "the broad background of beliefs and practices that guide the behaviors of both the researcher and research participants" (Given, 2008, p. 181).

objectives because the formal objectives were only a network effect and a fabrication (Ahrens & Chapman, 2007, p. 7), there always seem to be a privileged formal objective in our investigations whereby "particular accounting techniques come to be constructed as 'problems' and others emerge as their 'solutions'" (Robson & Bottausci, 2018, p. 68).

Notwithstanding the dialectical relationship between accounting and its context, it is natural for accounting researchers to follow accounting rather than the context in the field. Nevertheless, following different constituents of a network can produce quite different narratives (Mol & Mesman, 1996) and focusing on the proponents of accounting practice likely generate a narrative that is "smoother" and "less discontinuous" (Law & Singleton, 2005, p. 348). Such a focus, however, may lead to the obliviousness of the "realities that are necessarily absent" (Law & Singleton, 2005, p. 342, emphasis in original). Such "absent presences" were not seen well by early ANT (Law & Singleton, 2005, p. 343). If we, researchers, always follow the powerful actors, we will see the world only through their eyes (Law, 1990, p. 11) and "succumb to the perils of managerialism" (Law, 1990, p. 13). In such cases, the issue becomes strategies and resources rather than heterogeneous engineering, because "by and large, managers expect to succeed. By and large they are *right* to expect to succeed" (ibid, emphasis in original). On the other hand, by and large, "dissenters" (Latour, 1987) of an accounting technology are expected to be persuaded, represented, and enrolled by managers and consultants. This field study, conversely, yields an unorthodox opportunity wherein the context equipped dissenters with so many resources and strategies that they threatened the managers' and consultants' expectations to succeed.

Albeit ANT pays scant attention to the periphery of networks (Clarke, 2002), it has no intrinsic predisposition to focus on victors (Baxter & Chua, 2017, p. 446). Law (1990, pp. 12–13) identifies two reasons for ANT to focus on those who are big and powerful: firstly, heroes are selected for deconstruction—they are not different in kind from us; and secondly, all else being equal, the big and the powerful shape much more about the heterogeneous networks than do the unsuccessful. These two reasons also explain why most ANT-inspired accounting studies are also "hero sociology" (Ahrens & Chapman, 2007, p. 7). On the one hand, deconstruction of the big and powerful has been the preoccupation of accounting scholars of ANT (Justesen & Mouritsen, 2011, p.181), and on the other hand, the non-heroes—such as context—likely did not play a significant role in previous studies. Scholars follow controversies with the ANT approach

and examine where the controversies lead them. It is thus sensible to not open the black boxes (Latour, 1987; Latour & Woolgar, 1986) of institutionalized context—the relatively enduring aspects of organizations (Ahrens & Chapman, 2007, p. 11)—if such contexts are not in the "the knots and the nodes" of the network where resources are concentrated (Latour, 1987, p. 180). There are rare cases where macro contexts are in the knots and the nodes of the networks and are thus documented by observers. For instance, the local context of Chinese characteristics was predominant in Ezzamel and Xiao's (2015) study on the development of accounting regulations for foreign-invested firms in China and the authors subsequently theorize the Chinese characteristics as a discursive "obligatory passage point" (OPP) (Callon, 1984; Latour, 1987) in the actor-network. To some extent, the Chinese characteristics described by Ezzamel and Xiao are the national-level equivalent of the idiosyncratic organizational-level SOE context in my study. Like their national-level counterparts in Ezzamel and Xiao (2015), the SOE context in this PMS study also plays important roles from an "a-centred" (Quattrone & Hopper, 2001) position of an actor-network. This study presents a "decentered" (Law, 2002) network wherein the proponents of accounting are not the only heroes. The SOE context and the PMS were two sets of black boxes in the field that battled to reopen one another.

My engagement with local social context also addresses the tendency of ANT to colonize or homogenize the "Other" (Lee & Brown, 1994). In early ANT's flat ontology, it does not matter whether a story is in Europe or in America, in an SOE or a non-SOE, the researcher only needs to follow the "heterogeneous engineers" (Law, 1987) and observe the "site-specific translations" (Bloomfield, Coombs, Cooper, & Rea, 1992, p. 210). Recognizing the agency of local context thus has a post-colonialist implication. Latour (1990a) explains that the difference between the West and the Rest is not caused by the Otherness; rather, it is because the West has accumulated a variety of small and practical techniques that perpetuates cumulative advantage. While the Western management technologies are "immutable mobiles" (Latour, 1987, 1990a) that travel through space and time and allow the West to homogenize the Rest, this paper highlights the resilience and resistance of local context in countering the "fact-building" process (Latour, 1987, p. 114).

Acknowledging the performativity of the local context does not mean violating the "radical indeterminacy" (Callon, 1999, p. 181) principle of ANT. This paper seeks to discuss the indeterminate roles of institutionalized context. Rather than privilege the higher-level

aggregations above practices, this paper recognizes the higher-level aggregation also as arrangements—material or ethereal. It may sound paradoxical to amalgamate the macro with practice, but scholars of EARS have been practicing this type of hybridity. For example, Ahrens and Chapman (2007) combine the structure of intentionality in governmentality and the heterogeneous network in ANT to demonstrate that functionality is inherently practical. In Jones and Dugdale's (2002) study of building the activity-based costing bandwagon, they integrate ANT's detailed analysis and structuration theory's discussion on the dynamics of modernity. After all, neither the objective system nor the aggregation of individual actions could solely determine and explain social phenomena (Ahrens & Chapman, 2007, p. 4).

The remainder of this paper is structured as follows. I first discuss in section 2 the theoretical hurdles of approaching context in ANT and propose considerations on how these hurdles could be resolved. This is followed by an introduction to the research methods in section 3. From section 4 to section 7, I present the ways of theorizing context in ANT through my field study, where context can be black boxes, discursive resources, *interessement* devices, and performative actors. I discuss and conclude the contributions of this paper in the final section.

2. Theoretical Considerations

There are a number of ontological challenges with approaching institutionalized context in ANT. I categorize them into the problems with the macro-structure and those with the intangibility. I propose that the macro-structures can be treated as black boxes and *interessement* devices in the actor-network. Furthermore, despite their intangible nature in many instantiations, the context is performative and can also be mustered as discursive resources.

2.1 The Macrosocial

From ANT's constructivist perspective, accounting changes are the outcome of historical, contingent processes in which new accounting constellations (Miller, 1991) appear when heterogeneous human and non-human actors are linked together in a network. Because heterogeneous elements are only linked temporarily at a particular moment in time, ANT's constructivist approach poses a challenge to perspectives like agency, functionalism, Marxism, interpretivism, and contingency (Justesen & Mouritsen, 2011, p. 164). Both the radical

indeterminacy and generalized symmetry (Callon, 1984) principles in ANT have served the purpose of EARS. The former has rescued accounting from being marginalized and subordinated to conditions like the material, ideological, professional and political (Justesen & Mouritsen, 2011, p. 161), while the latter gives agency to non-humans (Latour, 2005), including accounting technology so that it can play a central role in accounting studies.

ANT was coined in STS for the same purpose that it was concerned with the micro-processes whereby facts are socially constructed. The term "social" here refers to phenomena rather than "the obvious influence of ideology (Forman, 1971), scandal (Lecourt, 1976), or macro institutional factors (Rose & Rose, 1976)" (Latour & Woolgar, 1986, p. 152). However, if we were to trace ANT's aversion to the macrosocial, it seems the predisposition to excluding institutionalized context was because those factors were not as important in the field of STS. As Latour and Woolgar (1986) explained,

Such factors scarcely exhaust the social character of science. Moreover, there is a danger that whenever these kinds of social factors are not immediately apparent, certain sociologists of science might conclude that the activity they observe does *not* fall within their domain of competence. For example, the history of TRF presented in the last chapter only once revealed the influence of ideology (p. 123); there was evidence only of the indirect influence of career determination (p. 119); and only on three occasions was there any evidence of the influence of institutional factors (e.g., p. 139). (p. 152, emphasis in original)

This quotation shows that the exclusion of the macrosocial in ANT should not be taken-for-granted. Such propensity emerged in a specific field—STS—and during a specific time period—when "a ten-year moratorium" on cognitive explanations of science and technology was needed (Latour, 1987, p. 247). Similarly, ANT avoids the distinction between the "social" and the "technical" because the work in the laboratory that Latour and Woolgar (1986) observed constituted normal science which was "relatively free from obvious sociological events" (Latour & Woolgar, 1986, p. 31).

Whilst macro, social, and institutional factors may not play a significant role in STS, this is hardly the case in management and organization research. This means certain adaptations are needed if ANT is to be mobilized in fields other than STS. In fact, if there are no modifications to ANT as it traverses different disciplines, "the model of translation" would become "the model

of diffusion" (Latour, 1987, p. 132), which would be antithetical to ANT's own ontology because the central concept of ANT—translation (Callon, 1980; Latour, 1987)—is about "displacement, drift, invention, mediation, the creation of a link that did not exist before" (Latour, 1999, p. 179). A salient problem of invariantly applying ANT in the study of management control is the conflict between "the principle of symmetry" (Latour, 1996a, p. ix) that seeks to treat the powerful—managers and accounting system designers, for example—just like anyone (and anything) else and the fact that "in a management context those who are designing, reading, and interpreting management control systems are in fact a priori privileged" (Ahrens & Chapman, 2007, p. 7). Ahrens and Chapman (2007, p. 7) use the example of Mouritsen (1999) to illustrate that accounting researchers tend to follow managers and MCS designers—in other words, the powerful—in the network, along with their capabilities, interests, and objectives. Even though sometimes the outcome drift away from the powerful actors' intention, this does not invalidate their power or thwart their subsequent efforts to assume greater control. Management does not need to be omnipotent for the distribution of power to be sufficiently skewed towards them and for the attention of management control research to be paid to them. Albeit the commitment to a heroic theory of agency (Law, 1990, p. 14) is not the reason for ANT's propensity "to be biased towards the point of view of the victors (or management)" (McLean & Hassard, 2004, p. 501), such tendency nonetheless leads it to managerialism.

Another problem of ANT's flat ontology in management research is that while the macro, social, and institutional is not the concern in early ANT studies of STS, it is likely more important in management studies where the institution is often the subject of study. Harbers (1995, p. 273) criticizes Latour's (1993) asymmetrical understanding of the mediation process to be overly oriented toward the contribution of micro, material production of social order and neglecting the reverse—the sociality of the stability of things. As mentioned in the introduction section, in responding to the criticism that ANT ignores the social structures that influence the course of local history and contingencies, Latour (1990b) suggests investigating the macrostructures with the same methodological tools as micro-structures, because "the macro-structure of society is made of the same stuff as the microstructure" (p. 118).

For Latour (1996c, p. 371), the notion of network enables the dissolution of the micromacro distinction. As a result, the metaphor of scales going from the individual to the nation-

state, through family, groups, institutions etc., is replaced by a metaphor of connections. Both the macro and the micro are networks with neither bigger than the other. Rather, some networks are simply longer or more intensely connected. Latour (2005, p. 167) warns us that referencing context can be an excuse for "jumping" instead of carefully following associations in a network. Approaching institutionalized context in the same way as micro contingencies is coherent with Latour's (2005) methodological advice of "go slow," "don't jump," and "keep everything flat" (p. 190), an approach that he refers to as "*slow*ciology" (p. 122, emphasis in original). This approach of tackling the macro can also be used reversely: as Latour (1990b) argues, if we can represent a progressive change of scale from micro to macro with the inclusion of greater and greater numbers of black boxes, we can use the same tool to document "the progressive reopening, dispersion, and disbanding of actors passing from the macro level to the micro level" (p. 119).

Latour's (1990b) solution of using the same flat approach for both the micro and the macro context, however, has a problem—methodological reductionism or the ignorance of emergent properties (Clayton & Davies, 2006), or in Law's (1990, pp. 13–15) words, missing the fact that quantitative differences may turn into qualitative differences. Excluding the macrosocial may also lead to missing out on the ways in which the great distributions are laid down and sustained, which has always been driving sociology (Law, 1990). Though the macro is quantitatively different from the micro, they are more than quantitatively different (Law, 1990, p. 14). Law (1990, pp. 13–14) notes one does not need to enter into the classic form of dialectical materialism debate to note that quantitative differences may transmute into qualitative differences because endless examples are in the social literature (e.g., Douglas & Isherwood, 1996; Lave, 1984; Star, 1990).

Law's (1990) transmutation between quantitative and qualitative differences pertains to the debate of emergence in philosophy, which was grown out of the scientific quest for reduction: whether psychology can be reduced to biology, biology to chemistry, and chemistry to physics (Clayton & Davies, 2006). Ontological reductionism asserts that objects and processes at a higher level (e.g., biology) can be reduced to a lower level (e.g., chemistry). Latour's (1996b, p. xi) view that institution is nothing but "buildings, doors, desks, forms, pens, in-trays, out-trays, organigrams, charts," etc. is similar to ontological reductionism that humans are nothing but a collection of atoms. While ontological reductionism is widely accepted, emergentists largely

disagree with epistemic or explanatory reductionism, which states that the properties of one level need to be explained as the effects of the processes at the next level down. That is, psychology ought to be explained by biology and biology by chemistry. Ultimately, with explanatory reductionism, human cognition can be explained by physics. This explanatory reductionism resonates with Latour's view that institutions ought to be explained by micro-processes. Moreover, similar to explanatory reductionists who ignore emergent properties in higher-level sciences (Clayton, 2006), Latour's flat ontology also ignores the emergent properties of higher-level social structures. Paradoxically, Latour writes, in his Electronic mail to Graham Harman (Harman, 2009, p. 12), that any argument about his philosophy has to start with *Irreductions* (Latour, 1988a) where he argues that "Nothing can be reduced to anything else" (Latour, 1988a, p. 163). However, if we cannot reduce micro-practices into macrosocial explanations, why can we reduce higher-level structures into the micros processes?

This limitation of ignoring emerging qualitative differences, as Law (1990, p. 15) notes, is reparable, if we, ANT scholars, think not only about heroes but also of "victims" as well as the differences between their fates. Furthermore, we need to be more sensitive to the ways in which differences may be turned into "great distributions," in the way that the quantitative may be turned into the qualitative. ANT researchers in both STS and accounting have sought such repairment. Star (1990) uses her experience of allergy to onions, along with other discussions, to demonstrate how the networks of the powerful discriminate against various underprivileged groups, such as women, people of colour, and those who do not conform to the standard conventions. Skaerbaek and Tryggestad (2010) document how a group of Danish mariners challenged the calculative devices promoted by managers and consultants and thus draw our attention to the periphery of networks. Quattrone and Hopper (2005) contest the way in which the Latourian concept of "action at a distance" (Latour, 1987) is often understood and used in the accounting literature, and thereby propose multiple centres and multiple peripheries.

Latour's later works resonate with these arguments, as discussed by Justesen and Mouritsen (2011). Latour (2004b) proposes a realism dealing with "matters of concern" as opposed to "matters of fact" (p. 231). Compared to the matters-of-fact approach as exemplified in *Science in Action* (Latour, 1987) that a heroic "fact-builder" (Latour, 1987) drives the translation process by persuading, representing, enrolling, and mobilizing human and non-human actors, the matters-of-concern approach is rather "a-centred" (Quattrone & Hopper, 2001).

Instead of focusing on fact-builders' translation strategies and rhetoric in Latour (1987), Latour's (2005) later writing displaces the focus from actors to "attachments" (Latour, 2004b, 2004a, 2005, 2013) and brings attention to context and programs.

This study adopts this a-centred approach whereby I trace the "trails" (Latour, 2005) rather than follow key actors, and thereby provide a different account from the studies that focus on the proponents and designers of MCSs (e.g., Lowe, 1997; Preston et al., 1992; Qu & Cooper, 2011; Robson, 1991), because "every choice of a departure point will lead to the drawing of a completely different animal, fully incommensurable with the others" (Latour, 2005, p. 36). Following Law's (1990) suggestion to think not only about heroes but also of victims, this paper explores the SOE context, which was the victim of the PMS, and was also where the "trails" led me. Whether the SOE context is a victim, however, depends on the perspective. When looking at the SOE alone, the macrosocial context there seemed to be the powerful that sustained time and space, but when looking at it at the global level, the SOE context was the victim to be homogenized by the global force of Western management. The immutable mobile PMS remained the hero because this is an accounting study/story, yet this idiosyncratic field provided the opportunity to observe a battle against the hero.

The SOE context was "laid down and sustained" (Law, 1990, p. 14) as black boxes for decades. A black box is a taken-for-granted fact, machine, system, or practice. When facts, machines, systems, and practices become black boxes, "all the intermediary steps which made its production possible are forgotten" (Latour & Woolgar, 1986, p. 63) "no matter how controversial their history, how complex their inner workings, how large the commercial or academic networks that hold them in place, only their input and output count" (Latour, 1987, p. 3). The SOE context in this study were black boxes that I could choose to deconstruct, but that is not my purpose. I am interested in the roles that these black boxes play during the process of translating the PMS. Acknowledging that quantitative differences can transmute into qualitative means that we should treat these macrosocial black boxes differently. I therefore will only open the black boxes and trace how they came about to the necessary extent, and not let them distract me from my focus on the translation of the PMS. Section 4 will discuss the SOE context as black boxes and trace the national, historical source.

Essentially, being black boxes is not a role that SOE context plays. It is rather a form of existence, and this form of existence can play various roles. Black boxes are immutable mobiles

that can be extended into longer networks. Such process of converting an entire network into a single point or node in another network is referred to as punctualization (Callon, 1990, p. 153). On the other hand, "arrays of stacked black boxes" can also be used as resources mustered by actors to build other facts (Latour, 1987, p. 58). Justesen and Mouritsen (2011, p. 180) suggest that contrary to the institutional theory whereby the institutional environment is central in determining the particular format of accounting systems, the environment has to be invited into the setting via some kind of mechanism in ANT. The SOE context, as the environment in this study, was constantly invited by various actors. Like accounting technologies, the invited SOE context can also be used as *interessement* devices (Callon, 1984; Ezzamel, 1994; Jeacle, 2003; Mouritsen, Larsen, & Bukh, 2001; Skærbæk, 2009), which will be discussed in section 5.

2.2 The Intangible

The aversion to metanarratives is not the only challenge that context faces in ANT; another hurdle is that the "ethereal" or non-material objects are difficult, if not insurmountable, to trace. ANT-inspired research suggests that we should only take into account entities that exist, and if context exists, it would be difficult to locate (Justesen & Mouritsen, 2011, p. 181). Contrary to accounting technologies that have diverse forms of material incarnations, such as calculative devices, slideshows, forms, cells, multifarious charts, reports, and so on, the SOE context often lacked material substance. Notwithstanding the absence of material incarnations, the SOE context was not absent from interactions. However, instantiation in practice alone is not enough to claim the existence of the SOE context. As Latour (2005, p. 117) argues, once *a priori* assumptions are made about the world, it is too easy to find so many representations of what the world is like. Justesen and Mouritsen (2011, p. 181) make a similar point that structures in structuration theory exist as instantiations but never as objects *per se*.

What defines existence then? The term "visible" is mentioned over a hundred times in Latour (2005). If the object is not visible itself, at least it is "transported by vehicles which should be empirically visible" (Latour, 2005, p. 83). Indeed, a key reason why inscriptions have been essential in ANT-inspired accounting research is that they help convert intangible accounting practices and consulting services into tangible, visible, durable, and stable outputs (Armstrong, 2002; McNamara, Baxter, & Chua, 2004, p. 72; Qu & Cooper, 2011, p. 353). In approaching affect, Boedker and Chua (2013) suggest that accounting is an affective technology

that circulates hope, desire, enjoyment, excitement, sadness, shame, distress, passion, fear, anxiety, etc., and that calculative devices and technologies can both be generated by and aid the circulation these affects in organizational networks. Affect is probably more "mysterious" (Latour, 2005, p. 103) than the SOE context in this study, for the latter were manifested in bureaucratic structures (Jones & Dugdale, 2002), routines (van der Steen, 2011), and rules of conduct (Mouritsen, 1999; Quattrone, 2009). Nevertheless, affect is circulated and modulated via accounting (Boedker & Chua, 2013, p. 262). In other words, as long as the intangibles are transported by tangibles vehicles, they should be approachable in ANT.

What defines tangible vehicles, then? The SOE context was circulated, reified, and modulated via bureaucratic structures, routines, and rules of conduct, but I encountered another form of vehicle more frequently, which was utterance. If visibility yields existence, so should audibility. Similar to Free (2008) that describes how trust was deployed largely as a "discursive resource" ultimately destroying trust and fostering cynicism, SOE context was also mustered as a verbal discursive resource that was mostly employed to resist the PMS. Baxter and Chua (2017, pp. 446–447) contend that ideals of resistance and change "do have a home in ANT" and that detailed descriptions of ANT allow us to understand how participants achieve their interests with available resources. Whilst the proponents of accounting practices muster accounting technologies as resources for their fact-building, the opponents in this study muster the SOE context as discursive resources for resistance. ANT researchers need to turn the focus away from the proponents to be able to observe context as discursive resources, because proponents tend to avow universality for their promoted technology and circumvent the feasibility issues in a specific context. This field study proffers a unique empirical setting to investigate context as discursive resources because two diametrically different cultures were brought into a single network where the proponents and opponents mustered different sets of resources. Section 6 will present the ways in which SOE context was used as discursive resources for resistance.

Resources mustered by actors are still passive objects, and I would like to take a step further and discuss whether the SOE context can be non-human actors. In other words, can they have agency (Latour, 2005); or can they be performative (Callon, 1998b, 2007; MacKenzie & Millo, 2003; Miller & O'Leary, 2007)? It is paradoxical to claim in ANT that institutionalized, intangible context is performative, but it is justifiable with later ANT writings. Callon (1998a) argues that "economics, in the broad sense of the term, *performs*, *shapes* and *formats* the

economy, rather than observing how it functions" (p. 2, emphasis added). Like intangible economics performs and shapes the economy, the SOE context also performed practices in the SOE and perpetuated the context's own existence. Recognizing the performativity of the SOE context is consistent with generalized symmetry (Callon, 1984; Chapman et al., 2015) if we can overcome their macrosocial and intangible nature. The macrosocial is approachable in a changed topography wherein we "replace some mysterious structure by fully visible and empirically traceable sites" (Latour, 2005, p. 179). Lowe (2001, p. 344) observes that the relationship between human and nonhuman actors in ANT is similar to the structure/agency argument except that for ANT, the structure is provided by technological objects rather than relatively hard social roles and institutions (Giddens, 1984). Lowe's comparison between ANT and structuration theory may be controversial, but the structure, as Giddens (1984) defines, is also "recursively organized" (p. 25).

Nevertheless, visible arrangements and objects were not always available for the SOE context, just like Giddens' (1984) structure—"as recursively organized sets of rules and resources, is out of time and space, save in its instantiations and co-ordination as memory traces and, is marked by an 'absence of the subject'" (p. 25). In defending ANT against the criticism that it dismisses the influence of social structures on micro events and processes, Law (1990) notes that social structures do not simply reside in the actions of people or in "memory traces" (Giddens, 1984), but in a network of heterogeneous material arrangements (p. 16). Walsham (1997), however, makes the counter-argument that we need to analyze not only the material arrangements but also the memory traces and their implicit social structures. I believe that acknowledging the performativity of the intangible components of the SOE context is helpful in addressing Walsham's (1997) criticism. Further, investigating the performativity of the SOE context also helps to answer the questions raised by Law (1992, p. 380): How some kinds of interactions more or less succeed in stabilizing and reproducing themselves? How did they overcome resistance and seem to become macrosocial? How is it that they seem to generate the effects such as power, size, scope, or organization? Such concerns on the stability or durability of networks are called for recently in accounting research (Baxter & Chua, 2017, p. 447; Robson & Bottausci, 2018, pp. 71–72).

While technology is society made durable (Latour, 1990b), it is arguably not the only way that society is made durable. Intangible context that makes the society durable in other

theories—culture, conventions, norms, language, local knowledge, public secrets (Radcliffe, 2008, 2011; Taussig, 1999), and the like—are controversial to discuss in ANT, which is likely the reason why ANT is used in a "pick and mix" fashion (Whittle & Spicer, 2008, p. 624) and combined with other social theories, such as Foucauldian theory (Fox, 2000; Newton, 2002), structuration theory (Jones & Dugdale, 2002), feminist theory (Singleton, 1996), and symbolic interactionism (Star, 1990). Ahrens and Chapman (2007, p. 8) are unsatisfied with ANT's rejection of structures of intentionality, thereby employ Schatzki's (2002) practice theory that shares with ANT an interest in the heterogeneous networks of humans and non-humans whereby accounting is fabricated and with governmentality studies an interest in the conditions that render accounting operable in certain modes. This theoretical choice enables Ahrens and Chapman (2007) to understand how enduring aspects of the organization were played out through management control systems. Such a conceptual combination of ANT and governmentality also makes it possible to discuss the intangible context because "the set of actions that composes a practice is organized by three phenomena: understandings of how to do things, rules, ¹³ and teleoaffective structure¹⁴" (Schatzki, 2005, p. 471), which are mostly intangible and invisible. ANT-inspired accounting studies also discuss intangible context implicitly without combining it with another theoretical framework. For example, in their study about accounting as an affective technology, Boedker and Chua (2013) document instances where human actors mimicked certain behaviours and emotive responses in order to be accepted by other members in the network, to achieve regard and recognition, and to not risk dismissal (p. 248). The understanding that certain behaviours and emotive responses were acceptable while others not falls precisely into the domain of institutionalized context in this paper.

ANT scholars in STS also remark implicitly on intangible contexts such as culture and conventions. For Hacking (1992), the "laboratory" (Latour & Woolgar, 1986) is a "cultural institution with a history (or rather histories)" (p. 33). When examining network externalities and barriers to entry, Star (1990) discusses both the physical and the cultural and notes that one of the interesting analytic features "the question of the *distribution of the conventional*" (p. 43, emphasis in original). In addition, she refers to language and expression as technology, thereby

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¹³ Rules are "explicit formulations that prescribe, require, or instruct that such and such be done, said, or the case" (Schatzki, 2005, p. 471).

¹⁴ A teleoaffective structure is "an array of ends, projects, uses (of things), and even emotions that are acceptable or prescribed for participants in the practice" (Schatzki, 2005, pp. 471–472).

discusses them the same way as other technologies in ANT (ibid). Latour, the key proponent of ANT's flat ontology, also suggests one of the strategies to reverse the outcome of trials in irrationality is to "invoke the *context*" (1987, p. 190, emphasis in original).

The point here is that no matter where the SOE context resided—in actions, in memory traces, or in material arrangements—, they perpetuated themselves as performative non-human actors. They were not tangible matters, but they were matters of concern (Latour, 2005). Section 7 will present the SOE context as resilient performative actors that were capable of inscribing themselves in the PMS as local knowledge (McNamara et al., 2004; Qu & Cooper, 2011) and perpetuating themselves in an intangible form as conventions.

3. Research Methods and the Field

The initial process of forming and reforming an accounting object is frequently filled with struggles, tensions, and resistance, and it is rarely possible to "witness the birth pains of a newly emergent accounting" (Hopwood, 1987, p. 214). Notwithstanding, such "birth pains" is not so rare in ANT studies because, as Justesen and Mouritsen (2011, p. 170) summarize, methodologically, the main idea for ANT is to arrive at the empirical scene "before the controversies involved in its fabrication are closed, before the complexities in the formation of management budgeting, are forgotten of its inner working are taken-for-granted and before the patterns of organizational power and influence, instrumental or rationalized" (Preston et al., 1992, p. 564). That is before the new accounting system has been turned into a black box and passes as undisputed and acts as an integrated whole. In this study, I arrived before the PMS was fixed and unproblematic, albeit the success was very transient given their "turbulent making and heterogeneous, network-like composition" (Justesen & Mouritsen, 2011, p. 170). Not only was I there in time to observe the birth pain of the PMS, but I also had observed its entire lifespan, because, pardon the creepiness of the language, it died right after its birth. A few weeks after the consultants' exit from the SOE, it looked like no PMS black box was ever there. This responds to Robson and Bottausci's (2018, p. 72) call to study how and where chains or networks of accounting inscriptions fail in order to better understand the stability of accounting inscriptions.

The ethnographic field study was conducted in China for two and a half months in 2016. Access was obtained through personal contacts and granted by both the consultants and the SOE subsidiary—Z-Corp. I was the "observer" (Latour & Woolgar, 1986) who lived in the "tribal"

village" for 2.5 months without any other commitment. She stayed in the same hotel as the consultants, which was adjacent to Z-Corp. During the weekday, the observer was in Z-Corp from nine to five, observing the development of the PMS. She also spent all evenings and weekends with the two consultants, either discussed their work experiences casually or followed them to Z-Corp, observing them working extra hours. I followed Dugdale's (1999) ANT suggestion that "we need to attend to each snippet of talk as an arrangement of words and silences" (p. 124). Extensive field notes were taken, which included observations on formal meetings, daily encounters, working discussions, snatches of conversations at benches, in the lobby and at lunch, along with gestures, intonation, and a variety of unguarded behaviour (Latour & Woolgar, 1986, pp. 153–154). In addition to recording the observations, taking field notes was also a deepening interpretive process (Van Maanen, 2011, p. 118). In situ interpretation allowed me to appreciate the observations when they were presented in full dimensions. Following the controversies on-site also allow actors to interpret the reasons behind the beliefs for the researchers (Latour, 1987, pp. 25–26). Audio recording was not always possible, albeit 62 hours of meetings, negotiations, and discussions about the project were taken with consent, which allows further off-site analysis. I followed up with the two consultants and some employees in Z-Corp through casual conversations for another two years after the consulting project was completed. All names—including the name of the SOE and consulting firm—are pseudonyms for confidential purposes.

Z-Corp was a third-tier subsidiary of a centrally controlled SOE. ¹⁵ The parent firm—referred to as the "conglomerate" by the participants—was listed in the Fortune Global 500. Z-Corp was primarily a trading firm for general merchandise between China and a few African countries supporting its parent firm's construction business, but its business also included logistics, transportation, and commodity derivatives trading pertaining to their main line of business. It had about 150 employees, and the personnel is broken down into five bureaucratic levels. At the top level were the party secretary, the president, and the union secretary. The president was equivalent to a private firm's chief executive officer (CEO). The Chinese Communist Party (CCP) committee secretary was as powerful as the president of the firm in making crucial decisions, although the general operation was run by the president. The union

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¹⁵ Centrally controlled SOEs, or $y\bar{a}ngq\bar{i}$, are controlled by the central government. There are about 100 centrally controlled SOE groups among all the SOEs, more than 90 of which are listed in the Fortune Global 500.

secretary, on the other hand, was not quite involved in the firm's operation. On the second bureaucratic level, there were four vice presidents (VP), each responsible for one or two departments. The third level of the structure contained the department heads, who were accountable to their corresponding VPs. Depending on the size of each department, there were from no to two deputy department heads that constituted the fourth management level. The fifth level consisted of the employees.

The two consultants, Chief Guang¹⁶—the consultant who managed this project—and Mr. Hao, were from BetaConsulting, one of the largest native consulting firms in China, notwithstanding the knowledge and instruments they practice were adopted from global consulting giants such as the Big Four, McKinsey & Company, and The Boston Consulting Group. It was common that founders of local Chinese consulting firms had work experience in the big multinational consulting firms. The project had three phases. Phase 1 was the initial investigation and benchmarking, which involved reviewing job positions, interviewing employees, benchmarking with firms in the same industry, setting up jobs and roles, and holding a firm-wide management meeting to report the result of Phase 1. Phase 2 was about setting the objectives and evaluation measurements for each department and position. During this phase, the consultants set objectives according to the guide from the parent conglomerate, developed key performance indicators (KPI) for each department and position based on their responsibilities, discussed objectives and KPI with department heads, and reported objectives and measurements to VPs, the party secretary, and the president. Phase 3 was the position evaluation and salary setting phase. Details of the work in this phase included holding international position evaluation (IPE) training session, collecting IPE score produced by the evaluation committee, ranking jobs with the IPE score, benchmarking with market salary, set the plan for the new salary structure, report to and discuss with the president and party secretary, and finally, reporting to the conglomerate. Throughout the three phases, management accounting devices—benchmarking, performance measurements, IPE, etc.—were enacted to construct distributed subjects and perform multiple reality.

PMS was the fact-in-the-making in this field study, but the SOE context was not. The black boxes of the SOE context were closed decades before I entered Z-Corp. We know more

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¹⁶ Chief $(z\check{o}ng)$ is derived from the term for chief manager $(z\check{o}ng\ j\bar{\imath}ngl\check{\imath})$, which is a common title prefixing last names to refer to firm managers and owners in general.

from ANT studies about how things turned into a black box than how a black box is opened. In rebuttal of Hopper and Bui's (2016) criticism that ANT does not explain the formation of networks, Baxter and Chua (2017, p. 447) note that ANT studies facts-in-the-making or the problematization of taken-for-granted facts rather than ready-made facts. The question I ask in this paper, however, is whether "ready-made facts" (SOE context) play a role in "facts-in-the-making" (PMS)? And if they do, what are they in the network? The articulated SOE context was blackboxed as "immutable mobiles" long before I started to observe, but they were facts-in-the-making at one historical point. Should we open every black box and trace them down so they would also be facts-in-the-making? Is this possible? Or can we assume a time zero for some black boxes where they are just intermediaries?

Some historical accounting studies show how ANT is used for "the unravelling of the 'blackbox'" (Mueller & Carter, 2007, p. 189). In their study on the formulation of intellectual capital statements, Mouritsen and Larsen (2005) use the firm Coloplast's intellectual capital statement to illustrate the 2nd wave of knowledge management. The 1st wave, however, was in the 1950s, and the authors use previous literature for their analysis. Llewellynn and Northcott's (2005) study on hospital cost benchmarking approaches both "talk" and "text" through critical discourse analysis (Titscher, Meyer, Wodak, & Vetter, 2000; Wodak & Meyer, 2001). Similarly, in *Science in Action*, Latour (1987) was not present in most of the anecdotes that he uses to illustrate ANT; rather, he relied on other anthropologists' and historians' accounts. Following these previous studies, I collected archival sources and oral history in order to trace the closed black boxes—the SOE context. Oral history was narrated by participants in the field, while archival sources included documents in Z-Corp and BetaConsulting, government policy, archives, news, and previous literature pertaining to SOEs.

There, however, remains the epistemological and methodological challenge regarding where is the end when we open the black boxes, because there are always more black boxes inside the black boxes. This, unfortunately (or fortunately depending on how readers would like to view it), is the authors' choice on how we would like to follow the controversies. Just as every choice of a departure point will lead to the drawing of a completely different animal (Latour, 2005, p. 36), every choice of terminal point would also yield a different account. Nevertheless, as Ahrens and Chapman (2007, p. 23) suggest, the textual representation of my field material can only be suggestive of actual ongoing practice because the activity can never be reduced to

description, and description can only illuminate activity. Further, my purpose of the narrative, rather than documenting "what really happened" (Latour & Woolgar, 1986, p. 275), is to help me make theoretical points (Martinez & Cooper, 2019, p. 5).

4. Context as Black Boxes

This section traces the SOE context, their origin and history, and how the PMS was invited to open the black boxes of the SOE context. This account also introduces the broader background of the PMS project. From a macro perspective, using modern, Western management technology to open the black boxes of the SOE context was part of the SOE reform on a national scale.

4.1 The Structural Reform towards Advanced Management

Shortly after Xi Jinping became the paramount leader of China¹⁷ in November 2012, he identified the reform of SOEs as an essential step in the structural transformation of China's economy. The "Guiding Opinions of the Communist Party of the China Central Committee and the State Council on Deepening the Reform of State-Owned Enterprises" (Central Committee of the Communist Party of China & State Council of China, 2015) was promulgated in September 2015 and was followed by a series of detailed guidelines. This SOE reform was an urgent priority for the Xi Jinping administration because, as the largest firms in the country, the centrally controlled SOEs had been long plagued by declining performance, rising debt, and serious corruption (Leutert, 2016, p. 85). Increasing the overseas competitiveness of these firms would decrease their drag on China's domestic growth. Xi called for the establishment of a modern corporate governance system, advanced industrial structure adjustment, and innovationdriven development so that SOEs could play a leading role in China's supply-side structural reform ("Xi Urges Unswerving Efforts to Deepen SOE Reform," 2016). SOEs started to hire consulting firms to reform their management structures since the enactment of the "Guiding Opinions," and this field study was an instance of this national scale reform where SOEs adopt modern Western management practices. The reform aims to make the SOEs more internationally

¹⁷ The paramount leader of China is the General Secretary of the Communist Party of China Central Committee, the President, and the Chairman of the Central Military Commission.

competitive, to improve the management structure, and to better motivate innovation and creativity.

Leutert (2016) identifies three main challenges for the reform: "determining how and when to grant market forces a greater role, especially for SOEs designated as commercial; aligning managerial incentives with firm performance and corporate governance priorities; and overcoming company-level obstacles" (p. 86). Many central SOEs were monopolies who occupied public resources and enjoyed an astronomical amount of profits without taking market risks. The SOE reform was about increasing the competitiveness and efficiency of SOEs, yet restrictions on competition in protected sectors provide relevant SOEs with no incentive. Such a national-level context was manifested as in Z-Corp, thus mediated the translation of the PMS project. Without the role of the market, when market share, clients, and other aspects of business in Z-Corp were pre-determined, PMS made little sense in the field. However, performance concerns, as Leutert (2016) states, "are a lesser priority for SOEs in strategic industries, where political rather than market logic remains paramount" (p. 86). The dislocation between the SOE context and the implementation of the PMS can be traced to a broader national and historical context.

On the national level, the political and cultural context in China is often referred to as the "Chinese characteristics" (Dai, Tan, Tang, & Xiao, 2017; Ezzamel & Xiao, 2015). These Chinese characteristics have been the dominant ideology and state guidance for Chinese economic reform, of which SOE reform is a fundamental and essential part. "Chinese characteristics" (中国特色 zhōngguó tèsè) is also translated as "the Chinese way," "Chinese-style," "in the Chinese context," "China's identity," "China-specific," "with Chinese features," and so on (Ding, 2006). The concept originated during the Mao era (ca. 1949-1978) when Mao conceived the concept of the "primary stage of socialism" (Choi, 2011; Hu, 2019). During Deng's era (ca. 1978-1989), Deng and his fellows put forth the idea of building "socialism with Chinese characteristics," thereby introduced economic reforms. Henceforward these Chinese characteristics were reified as the official ideology of the CCP (Li, 1995) and had been invoked in discourses on Chinese economic reform. The Chinese discourse on "socialism with Chinese characteristics" was intended to mediate the heterogeneities between the foreign, capitalist entities and traditional or communist Chinese values and institutions (Warner, 2008, p. 772). This reconciliation connects opposing ideological values and coalesces these varied

"individualist/foreign" and "collectivist/Chinese" values into something coherent (Ezzamel & Xiao, 2015, p. 63; Warner, 2008, p. 772). For example, without the qualification of the Chinese characteristics, it would be both politically and technically challenging to discuss concepts such as "capital" in official discourses (Ezzamel & Xiao, 2015, p. 67). Ezzamel and Xiao (2015) cite works in political science and explain that the Chinese government made the decision based on three underpinning values: economic development, socialist values, and Chinese culture (Ogden, 1995). These values include specific factors: Confucianism, guanxi, 18 civil service examinations and scholarly rules are identified as cultural values; the CCP cadre, ¹⁹ work units, and equity as socialist values; and China's size, poverty and education levels as economic development values (Aufrecht & Bun, 1995). Ezzamel and Xiao (2015) draw on ANT for their theoretical framing while invoking these macrosocial factors, which may seem a violation of ANT's ontology. However, their analysis "is not intended to directly tap these factors, but rather seeks to trace shifts in meaning in the discourse on Chinese characteristics that impacted accounting regulations" (p. 63). In other words, Chinese characteristics are black boxes "punctualized" (Callon, 1990) into a longer network or being used for extending other networks, rather than a macro-structure that shapes accounting practices. This is also the approach of this study on their organizational level manifestation: the SOE context.

Historically, it took decades for the SOE context to turn into black boxes, which the state has constantly been trying to re-open. The People's Republic of China installed a planned economy after World War II and the Chinese Civil War. This planned economy had a rationing system that controlled the distribution and production of goods (McMillan & Naughton, 1992), as well as the allocation of urban jobs (Bian, 1994). For example, a common practice in the planned economy is that children took over their parents' jobs when the parent retired (Bian, 1994, p. 977). Other indirect hiring practices included internal hiring, whereby employees would be children or relatives of the manager or current employees. This type of practice was officially terminated in 1986 (ibid), but its legacy has carried on to the present day. The terminology and

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¹⁸ Referring to relationships that individuals cultivate with other individuals that would invoke favors and obligations (Gold, Guthrie, & Wank, 2002). This paper includes all the tones of Chinese words because they are indispensable parts of the Chinese words. However, the word guanxi is so commonly used in English that it has been included in the Oxford dictionary. As such, I treat guanxi as a loan word in English from Chinese.

¹⁹ Those who work in different ranks in the party, government, the military, and social, economic and educational institutions. (Aufrecht & Bun, 1995, p. 176; Ezzamel & Xiao, 2015, p. 63)

practices of allocated jobs and assigned positions were often mentioned by the participants when discussing the personnel in Z-Corp.

The shift from the planned economy to the market economy began after Deng took power in the late 1970s, and it has been through four phases to date. The first phase was between 1978 and 1984, when SOEs were allowed to sell products above the planned quota. Commodities began to be sold at both planned and market prices during this period. The second phase was between 1984 and 1993, when the state allowed private sectors to grow as a complement to the SOEs. During the third phase, between 1993 and 2005, domestic private sectors continued to develop and first exceeded 50% of China's gross domestic product (GDP) in 2005 (Brandt & Rawski, 2008). From 2005 onwards, the more conservative Hu-Wen Administration began to reverse some of Deng's reforms and privileged the state sector again. The Xi Jinping Administration, while committed to deepening the reform of SOEs, has increased control over SOEs by the Communist Party (Lam, 2017). Although the contemporary Chinese economy is no longer planned, some of the practices remained immutable, extended through time and space, and were found in Z-Corp in my field study. For example, as a trading firm, procurement and selling prices were both set by their parent firm, along with some of the numbers of goods sold. This was an obstacle to developing a proper PMS because individual employees had little room to perform.

If we read the history of SOE reform as attempts to re-open the black boxes of the SOE context, these black boxes must have had a high "degree of irreversibility" (Callon, 1990, p. 149). Callon (1990) suggests that the degree of irreversibility of a particular element of a network depends on the extent to which it is subsequently impossible to go back to a point where alternative possibilities exist, and the extent to which the black box shapes and determines subsequent inscriptions. The SOE context displays strong properties of irreversibility and is mobile across time and space.

4.2 The Salary Reform of TMT in Central SOEs

In addition to moving towards more effective management, a salary reform to the Top Management Team (TMT) in Central SOEs was also introduced by the central government, which was another pertinent organizational background that motivated the PMS project. On August 29, 2014, the Political Bureau of the CCP Central Committee approved the "Plan to

Reform the Salary System for TMTs in Central SOEs" ("The Salary Reform of TMT in Central SOEs Approved by the Central Political Bureau," 2014). The regulation stipulates that the salaries of TMT consist of three parts—a basic annual salary, a performance-based salary, and bonus incentives. The basic salary should be two times the employees' average salary in the previous year. After implementing the reform, the salary level of TMT in the Central SOEs cannot exceed seven to eight times the salary level of an employee (Jin, Nan, & Qiong, 2015). The performance-based salary, determined by the comprehensive evaluation of the TMT's performance in the past year considering the situation in the industry, should not exceed two times the basic salary. The bonus incentives should be no more than 30 percent of the TMT's average salary during their tenure (Liu, 2015).

Central SOEs, Z-Corp's parent firm included, subsequently implemented the required change in late 2014 and 2015 ("State-Owned Enterprises in 25 Provinces Limit Salaries," 2016). As a third-tier subsidiary of a central SOE, Z-Corp also enacted the change. At the time, a common approach was to reduce TMT's salaries in subsidiaries so that they would not exceed a certain percentage of their parent firm's TMT's. As such, the TMT's salaries were reduced drastically because Z-Corp was lower in the organizational hierarchy of their conglomerate. The president of Z-Corp had an annual salary about twice as much as their bottom-level employees'. This created a "salary upside down" issue as referred to by the consultants, as in some cases, non-TMT employees were paid more than their bosses. This "salary upside down" phenomenon generated the counteraction of TMTs in subsidiaries. Many hired consultants to conduct a reform on the performance evaluation and salary system in order to reverse some of their lost salaries. Guang and Hao, the two consultants in this study, said they had solved a few of these upsidedown problems before this PMS project at Z-Corp.

Non-TMT employees were not immune from the process, although their salaries had not been changed. On the one hand, some were guilty of taking more than their bosses ("Employees of Central SOEs Worry about Salary Cuts with Executives: The Guilt to Get More than Leaders," 2014) and thus expected some change to happen, whereas others were anxious that the recovery of the TMT's salary would be taken directly from theirs because the subsidiary had a fixed amount of funding for compensation from the conglomerate. I observed that the lower an employee was in Z-Corp's bureaucratic hierarchy, the more defensive the person would be towards the consultants and the PMS. This was consistent with the consultants' findings from the

benchmarking of jobs and roles: the entry-level employee's salary was in the 99th percentile of the benchmark and doubled the market average; the department heads' salary was at the 85th percentile, whereas the president's pay was in the first quartile. This means if the final plan was to match with the benchmark or the market average, lower-level employees would be affected much more than the relatively higher-level employees, although experts had warned in the media that SOEs should not use ordinary employees for salary cuts (Li, 2015).

If the structural reform in section 4.1 was about inviting external human and nonhuman actors to open the black boxes of the SOE context, the salary reform motivated the mustering of these black boxes as resources—such as discursive resources (section 5) and *interessement* devices (section 6)—to resist the PMS from turning into a black box.

5. Context as Discursive Resources

It is not surprising that ANT studies focus on the material aspects of practices and pay less attention to the rest because the former is its strength. Discourse rarely appears in ANT-inspired accounting research, perhaps with the exception of van der Steen (2011), which is not a conventional ANT study because it focuses on routines as in institutional theory. However, discourse—textual or conversational—was never an exclusion of ANT. Several early ANT studies in STS have shown how fact construction is affected by discourses. In their first section of Chapter 4, Latour and Woolgar (1986) examine the ways in which facts can "be created or destroyed during relatively brief conversational exchanges" (p. 154). Callon (1984) shows how text and conversations lured the concerned actors to follow the three researchers' project (p. 211). Conversations were a primary form of existence for the SOE context in this study.

The dissenters of the PMS almost unanimously chose the SOE context as a discursive resource for their resistance because they had limited choices. For the PMS to serve as a building block of a new network, it had to be an unquestioned black box itself, and something withstood a "long list of trials" (Latour, 1987, p. 88). A newly introduced object is normally questioned in the process of recruiting new allies (ibid), but Z-Corp employees rarely questioned the appearance of the consultants and the PMS as an advanced technology. There were two layers in not questioning the necessity of hiring the consultants and the advancement of the PMS: the fact that the instrument was—at least ostensibly—accepted as a black box had a post-colonialist implication that the Western technology was modern, global, and advanced by default; there was

also institutional coercion because the state called for the reform and the TMT needed them to justify a salary adjustment. The PMS instrument itself was thus treated as a black box, but dissenters could question the specific inscriptions of the PMS, the "intermediate" readings that compose the instrument (Latour, 1987, p. 68), as well as how the consultants—the spokesperson for the PMS—represent the technology. For example, when presented the benchmarking result for positions and salaries, dissenters questioned how the consultants chose the benchmarks. When inscribing performance measures, actors question the rationale behind the measures. The consultants could easily handle these questions, and they also strengthened their arguments with visualized aids, such as slideshows, flowcharts, column charts, pie charts, and bar charts (Busco & Quattrone, 2015; Mouritsen et al., 2001; Quattrone, 2009), which was a rare demonstration of power whereby the doubter sees, hears, and touches the inscriptions (Latour, 1987, p. 74). At this point, the dissenters started "borrowing more black boxes" (Latour, 1987, p. 79)—the SOE context into the controversy. It was not proper to argue that the PMS was not advanced, but the dissenters could say that the PMS did suit their context. The context was a valid argument also because it was the exact factor that benchmarking ignores as the assumption for benchmarking was that the same standard applies to different organizations.

The meeting for phase 1's reporting was the first time that all top and mid-level managers were present, and conflict and backlash took place during this meeting. At the beginning of the meeting, Consultant Chief Guang reported the review of positions in Z-Corp and the results of the benchmarking on jobs and roles. There were two main findings. The first, as mentioned earlier, was that the pay distribution structure was too flat in Z-Corp, whereby the TMT were paid too little, and the employees were paid too much compared to the benchmarks. The second finding was that the workload in some departments was below the benchmarks, and certain positions in the firm did not reach their full capacity, especially with the support departments—the General Service Department (GSD), the Accounting Department, the Legal Department, and the Enterprise Management Department (EMD). The consultants proposed two measures to improve the current performance management structure, including conducting periodic evaluations of the employees and sending those who do not meet standards to a training centre.

Dissenters mustered some specific factors from the SOE context as their discursive resource. The first one was about their personnel and their specific ways of recruitment. Chief Sui, head of the EMD, commented that their personnel operated differently from the benchmark

companies. Recruits in that department were university graduates who were "allocated" to them, and the skills and experience of these new recruits were different from the benchmarking companies. The term "allocation" regarding job assignment was inherited from the planned economy, which was put to an end decades ago. It was a surprise for the observer to hear allocated or assigned jobs being discussed in a formal meeting in 2016, but the observer soon realized that actors used the terminology to indicate guanxi-based, non-external hiring. The accounting department deputy followed Sui's arguments and suggested that the employees allocated were much different from the benchmarks in terms of their credentials and work experience. Therefore, conducting benchmarking was problematic. Some other actors also made the point that with the allocated personnel they had, quite a few would not meet the benchmark standard, and soon there would be no one to do any work since everyone was sent to the training centre.

A PMS reform would not be the right solution if the real problem was the means of recruitment rather than performance management. Some actors, such as Head Wan of Trade department II, thus suggested that the consultants' plan could be made more flexible, considering their specific conditions. He said that Z-Corp had performed external recruitment in the past, and the company could probably recruit externally should anything change in the future and the company need extra hands. Two of the four VPs were proponents of the PMS. VP Fan said that he believed that there were more people than was necessary for the two departments that he supervised (Legal and EMD). He suggested that the firm needed to be aware of everyone's responsibilities, and that there should not be any problems if the information flow were welldesigned. VP Jiao, the supervisor of the Commodities Trading Department (CTD) and the Logistics Subsidiary, also said that he thought there were more than enough people. However, he said there should be plans for any unforeseen problems, such as the ability to recruit externally [as opposed to accepting employees who are allocated to them] on his department's own volition. Till this point, the dissenters successfully used the SOE context as a discursive resource in turning the problem from a flat pay structure and low workload as proposed by the consultants into internal versus external recruitment.

Another piece of SOE context mustered as a discursive resource to refute the low workload was the sharing of human resources between parent firms and subsidiaries.

Subsidiaries in SOEs were not as independent entities as they legally appear. Z-Corp's business,

personnel, and operations were largely planned by the conglomerate, which was another legacy from the planned economy and rationing system. In responding to the low workload suggested by the consultants, Head Chai of the Legal Department softly agreed with the consultants and said that there were enough people in her department if they did not do any work for the subsidiaries of Z-Corp. VP Hou, who supervised the Accounting Department, brought up the problem that sometimes the Accounting Department would lend people to the parent conglomerate. She also raised the issue of maternal leave, which would also lead to a shortage of people. VP Business, Chief Niu went on to question what Z-Corp would do with the vacancies when people would be sent to the training centre, as the two trading departments he supervised had exchange programs with their overseas businesses, and would need to leave surplus staff to ensure the continuity of their work.

There was also a third SOE context invoked to argue against the suggested changes when the discussion turned slightly to external hiring. Chief Sui of EMD mustered the value of collectivism and kinship and argued that "we should solve the problem with our own personnel, we should raise our own people." VP Hou also suggested that the firm should take care of its own people, and it should be the current employees who enjoy the fruit of the firm's better performance. She raised the question that "since our management is being improved, shouldn't we also raise the pay?" This discourse that put people's benefit before the firm's efficiency successfully diverged from the PMS rationale.

To some extent, the SOE context as discursive resources turned the meeting into a conversation in circles. Each finding and suggestion proposed by the PMS project would be circulated in the space and turned into some kind of SOE context that the PMS could not pass. We can treat any part of the circle as the beginning. For example, if we assume a problem started with recruitments, when new employees entered the firm through social networks and internal appointments, the SOE system paid more, although these new graduates did not excel in their jobs. The proposed solution was to enforce performance evaluation, yet the performance evaluation would not work because they did not have the right personnel to begin with for the evaluation. These circular conversational exchanges were concluded by the party secretary and president. With one of her most important roles being maintaining the political stability of the firm, Secretary Yang first acknowledged all the concerns raised by the department heads and VPs, saying, "after all we are SOEs, we need to take consideration of our greater context. There

shouldn't be any problem if the quality of our personnel and the capacity of individuals reach the standards. If not, [it is important to figure out] what we do with the vacant positions when people are sent to the training centre." After acknowledging the backlash, she pointed out that in the long term, with a developing perspective, the plan was feasible. At the moment, there were some difficulties that the organization needed to overcome.

While Secretary Yang described the SOE context as difficulties that Z-Corp and their employees needed to overcome, President Yu, the key proponent of the PMS, was aware that most people in Z-Corp did not want to overcome such difficulties and the PMS was not powerful enough to convince them. When the discursive space was filled with the SOE context, it thereby took the SOE context to battle the SOE context. With a rather infuriated tone that displaced bureaucratical and hierarchical power, President Yu stated that "the reformation we are conducting is precisely about "breaking the big pot." It is for the sake of long-term development. Reformation always irritates the interests of some people. However, our structure is a waste of human resources. We need to dig the potential." President Yu was the one who would be benefited the most from the compensation change, and he also appeared to be a manager with an interest in improving the firm's efficiency. Both of his interests led towards his confrontational attitude and expressions, and the blame he laid upon the SOE context was an opposite way of using the SOE context as discursive resources. The term "big pot" is derived from the term "eating from one big pot" (吃大锅饭 chī dàguōfàn), a slang term implying that there are no employee incentives in the ration system because everyone eats from the same pot regardless of their contributions. It was the practice in the planned economy and was constantly being criticized in the discourses of each SOE reform in the past decades. The negative connotation behind the term big pot was a powerful rebuttal against the SOE context with positive connotations, such as taking care of their own people.

6. Context as Devices of Interessement

SOE context existed not only in conversations but also in everyday practices. It can function as a device of *interessement* that locks actors in. *Interessement* is the second of the four "moments" of translation—problematization, *interessement*, enrolment, and mobilization—as defined by Callon (1984). According to Callon, it is through these moments that primary actors impose themselves and their definitions of a situation on others. After the initial problematization

moment when primary actors seek to become indispensable to other actors by defining the nature and the problems, *interessement* was when primary actors seek to lock other actors into the roles that have been proposed for them. The devices of *interessement* are the tools to lock potential allies into place. In Callon (1984), the devices to lock the scallop larvae were the towlines immersed in St. Brieuc Bay, while the devices to lock fellow researchers were texts and conversations (p. 211). Accounting instruments are often theorized as *interessement* devices (Ezzamel, 1994; Jeacle, 2003; Mouritsen et al., 2001; Skærbæk, 2009). For instance, Corvellec et al. (2018) demonstrate how invoices contribute to the *interessement* of people in the sorting and reduction of their waste. It is common to see in both STS and accounting that *interessement* devices are used by fact-builders rather than dissenters. The SOE context in this study shows how *interessement* devices were against the fact-building process of the PMS.

A key aspect of the SOE context that continuously contributes to the *interessement* of people in their roles and the stability of the SOE network was guanxi. The issue of recruitment discussed in the previous section was only one of the many aspects that guanxi played a role in. Guanxi could lock management and compensation structure in a relatively stable standing once the personnel in the firm were pervasively guanxi-based. An immediate aspect pertaining to the PMS project was the pay-structure. According to the findings from benchmarking during Stage 1 and results of IPE in Stage 3, the salaries of the bottom-level employees should be reduced significantly. However, Secretary Yang told the consultants such a dramatic change would not be an option because they needed to keep things stable. The consultants explained to the observer that by virtue of the guanxi-based personnel, there was a good chance for a bottom level employee to be family and friend with someone higher-up in the SOE system, and it would be risky for the TMT to make decisions that had a big negative impact on these employees.

A second aspect that guanxi performed as *interessement* devices for the SOE context and against the PMS was with jobs and roles proposed by the consultants. While evaluating the positions in Z-Corp and the skills required to fulfill the jobs, the consultant suggested that employees rotate their roles within the department in order to acquire the full set of skills for each position. This was quickly dismissed by the managers whom the consultants had discussed with. The reason was that it was always easy to move someone from a less-desired position to a better one, but not the other way around. One department head made the comment that he once needed to send an employee to Africa for a few months for some work, but it was challenging for

him to find someone. This was not because there was no one who was capable of the job. Rather, he knew that if he gave notice to the person he had in mind, he would receive a phone call that night from someone higher-up saying, "you're not sending my nephew to Africa." The department head then said, "See, this is why we need external hires."

A third aspect where the PMS was impeded by the guanxi-implicated *interessement* devices was the performance evaluation. Developing performance measurements such as the KPI was the main task during Stage 2 of this PMS project, and it was meant to motivate better performance and promote efficiency. Nevertheless, there were two main controversies that hindered the PMS from achieving such aspirations. On the one hand, the consultants envisaged the proportion of performance pay within the entire compensation would not exceed 30% in Z-Corp, and likely even lower, whereas they would normally propose about 60% of performance pay for private firms. This was because performance pay was an unstable factor that was not welcomed in the SOE context. On the other hand, with a performance pay that was lower than 30%, it would be almost impossible to motivate employees because of not only the tended low deviation between different employees in the performance evaluation result of an SOE, but also the relatively high economic status of the employees' family, according to a department head.

Interessement devices are often material objects, such as alternation costs (Jeacle, 2003) and invoices (Corvellec et al., 2018), but they can also be intangible objects with practical implications, such as technical, knowledge-based discourse (Ezzamel, 1994) and conversations (Callon, 1984). Guanxi, as one aspect of the SOE context, was among the latter type. It was immaterial, but the intangible arrangements not only locked the actors in Z-Corp into their roles, but also locked the imaginations that the consultants could have about the PMS.

7. Context as Performative Actors

I use the term actor rather than actant to describe the SOE context in order to emphasize its performativity. Most accounting literature does not define the difference between actors and actants when both terms are used (e.g., Chua, 2007; Dambrin & Robson, 2011). The two terms are sometimes used interchangeably (e.g., Bruce & Nyland, 2011; Hopper & Bui, 2016); whereas in some studies, actor is used for human actor while actant for non-human actor (e.g., Christensen & Skærbæk, 2010; Cooper, Ezzamel, & Qu, 2017; Ezzamel & Xiao, 2015, p. 62). I follow Latour (1987) who proposes "to call whoever and whatever is represented actant" (p. 84).

Representation is one of the key notions in ANT because translation is about fact-builders establishing themselves as the "representatives" or "spokesmen" for others (Callon, 1984; Latour, 1987, pp. 108–121) and "reality is a result of the generalized negotiation about the representativity of the spokesmen" (Callon, 1984, p. 218). It is thus important to distinguish between actor and actant because I am interested in who represented whom between SOE context and the PMS. In other words, who was the spokesperson and who was the actant.

The PMS—involving accounting numbers (Jørgensen & Messner, 2010; Vollmer, 2007), calculations (MacKenzie, 2006; Mouritsen et al., 2009; Power, 2004; Revellino & Mouritsen, 2015), and inscriptions (Ezzamel, Willmott, & Worthington, 2004; Qu & Cooper, 2011; Robson, 1991, 1992)—is performative, but performativity is not limited to objects like calculative devices. Literature has also documented the performativity of abstract objects—routines (D'Adderio, 2008) and academic disciplines such as economics (Callon, 1998a). These monsters, either material or intangible, once created, are in the business of perpetuate themselves and no longer in their creators' control. Such is also true for the SOE context, and this section presents the ways in which the SOE context was performative: through embedding itself into the PMS as local knowledge and through perpetuating "culture" (Latour, 1987, pp. 180–213).

7.1 Embedding local knowledge

Translation is a process wherein "a dispersed array of sites, activities and interactions are tied through a network, such that they come to be represented by a single entity, which can, in itself, be an individual calculation, text or another network" (Robson & Bottausci, 2018, p. 61). In this PMS project, the task for the consultants was to translate the practices in Z-Corp, including its employees and SOE contexts, into the single entity of the PMS so that it would represent the entire performance evaluation management and compensation system. All the arrays of activities and interactions were supposed to be reduced into inscriptions into the PMS. Nevertheless, the enrolment of other actors is only achieved when actors "accept a network's problematization as their own and embrace the roles defined for them during interessement" (Dambrin & Robson, 2011, p. 432). In other words, the operation of translation consists is to combine different interests to form a single composite goal (Latour, 1999, p. 88). Such aligning of interests was a challenging task for the consultants in this study because of the heterogeneities in the field. To address such challenges, the consultants prolonged the moments of translation by

turning their office into the centre of calculation (Latour, 1987) and completed the inscription of performance measurement together with the representatives of each department. This was a process of reduction from the local knowledge and amplification of the circulating reference towards the universal (Dambrin & Robson, 2011, p. 433; Latour, 1999, p. 71). Inscriptions were combined with both PMS and the SOE context. The flexible or combinable approach contributed to a more enabling rather than coercive perception of the PMS (Adler & Borys, 1996; Ahrens & Chapman, 2004; Jordan & Messner, 2012) and the proponents of the PMS thereby hoped the dissenters to be more likely to believe that their interests were also inscribed into the final product. "Filling gaps and constructing meanings through the use of local knowledge" (Martinez & Cooper, 2019) is a common persuading strategy during the translation of accounting technology because it offers a sense of engagement (Busco & Quattrone, 2015; Czarniawska, 1998; Qu & Cooper, 2011).

The head of the Accounting Department was vacant during the time of the PMS project, and the consultants discussed with two deputies of the department, respectively, about the performance measurements for their department. Like with all other departments, the consultants projected their tentative performance evaluation form to the white wall in their office, explained each cell while seeking the opinion and approval from the representatives. They needed to modify content in most of the cells based according to the SOE context. For example, they proposed to set a maximum amount of cost for business hospitality, the cost for hosting clients, potential clients, or other stakeholders, but Deputy Pang of Accounting said this was not something that they could control and thus not fair to include it as part of their evaluation. The consultants explained that the department could set their own target of controlling cost based on the number from previous years, and the goal can be achieving a certain percentage of that target, which should not be a problem to achieve. Deputy Pang argued that it was 380,000 yuan in the previous year, but if the TMT like, they could easily spend over 480,000 yuan this year, which would easily exceed the allowed deviation. The consultants then suggested changing the evaluation from controlling hospitality cost into advising the TMT to limit their cost to a certain amount. "That's nonsense," said Deputy Pang, "the TMT would just do whatever they want after I advise." With no better solution, the consultants and Deputy Pang agreed to put in the cell a vague description—control the controllable costs.

They subsequently discussed some other items. The issuance of invoices was one of the performance indicators that the consultants had for the Accounting Department, but Deputy Pang noted that in Z-Corp, the invoices were issued by the trade departments directly because they had specially made invoices. Another controversial issue was with the accounts receivable. The consultants intended to include the collection of receivables as part of the evaluation, but Deputy Pang argued again that their department had no control over whether the receivables could be collected because those were the sales' task. The consultants then suggested changing the collection of receivables into supervising the collection of receivables. Deputy Pang said that was no different because there was nothing that the Accounting Department could do if the sales just say that they could not collect the money. "The only thing that we can do," said Pang, "is telling them how much they need to collect." The consultants noted that accounts receivable were one of the key duties of the Accounting Department, and they had to include it in the performance measures; the question is how. They then suggest that the Accounting Department should supervise the collection, but the department could set its own target, and they also changed the deduction of point for not meeting the target from 1 to 0.5.

The controversies were normally generated by the fact that the consultants took the standard performance measures from the template for the same industry, yet as a subsidiary of a central SOE, Z-Corp had specific contexts that many of the standard measures did not apply. Similar discussions also occurred during the negotiation of performance evaluation with the Trade Departments. Table 1 below is a fragment of the performance evaluation form for Trade Department I, which includes financial indicators, classified indicators, and restrictive indicators. According to the standard of the trading industry, logistics cost—of which mainly was shipping—should be part of the evaluation for the Trading Department. Albeit, in SOEs, especially central SOEs, the business partners were parent firms, subsidiaries, or "cousins" that belonged to the same central conglomerate. For Z-Corp, the logistics firm was a subsidiary of their own. Head Luo of Trade Department I told the consultants that the logistics cost, as well as the profit of the logistic subsidiary, were defined by the TMT, and thus it made no sense if the department was evaluated on it.

[Insert Table 1 about here]

The consultants put 30% of the department's evaluation as the firm's total profit, which Head Luo considered not fair because a low profit could only represent the fact that their clients—associated with the same conglomerate—had a hard time, which the Trade Department could do nothing about. "The clients were assigned to us, and we just do what we were told," said Luo. The consultants then suggested that while the clients and the business were assigned, so was the target, which was defined based on the business assigned; therefore, there should be no problem for the Trade Department to meet the target. Head Luo then pointed out that the receivables were out of their control because there was nothing that they could do if the clients did not pay. The consultants said it had to be someone's duty. The Accounting Department was not the one who collected, and they said it should be the sales in the Trade Department who complete this task. Notwithstanding, as a goodwill gesture, the consultants changed the weight of receivables from 10% to 5% and relocated the 5% difference to customer satisfaction. Customer satisfaction thus was increased from 10% to 15%, and Chief Guang said this was an easy mark because the clients were mostly connected in the SOE system and they would always give a high evaluation. Another interesting KPI included was the "concentration" of procurement, which was defined as the proportion of the procurement made through the Conglomerate's online platform. This worth 15% of the performance evaluation, yet it would prevent the department from looking for better quality or lower-priced goods.

While the financial indicators and classified indicators constituted 100% of the evaluation, there was also the restrictive indicators for bonus or penalty of points. Head Luo said they needed to come up with some bonus indicators when she noticed that there were only penalty indicators. After some brainstorming, Head Luo brought forth new clients and new suppliers. The consultants laughed and said, "didn't you say the clients and suppliers were assigned to you? You didn't want to be held accountable, but now you're taking the credit." Nonetheless, they typed in the two restrictive indicators while asking the question. They then said, "how about new internationally renowned suppliers because getting a new supplier is just too easy." Head Luo, while laughed about the irony in her request, said, of course, internationally renowned suppliers made more sense.

Through the inscription process, the SOE context was gradually embedded into the PMS devices. The PMS became "accreted infrastructures" (Power, 2015) embedded in other structures, social arrangements, and technologies, learned as part of membership, linked with

conventions of practice, built on an installed base, and visible upon breakdown (Star, 2010, p. 611). The intangible SOE context subsequently became material arrangements and could be circulated by those arrangements (Dugdale, 1999, p. 121). The translation process was meant for the PMS to represent the SOE context. However, if the PMS was populated with SOE context, was the former still representing the latter? When the PMS became the sheer form, and SOE context was the content, which was the spokesperson, and which was the actant?

7.2 Perpetuating the Culture

While subsection 7.1 above has demonstrated how SOE context was embedded into the PMS and depriving the evaluation and motivation purpose, this subsection shows how the SOE context perpetuated itself as a culture.

In Chapter 5: Tribunals of Reason of Science in Action, Latour (1987) describes the ways in which actors who belong to different networks have different beliefs and knowledge systems. According to Latour (1987), what we call culture, structure of language, taxonomy, paradigm, or society, only possess precise meanings when there is a dispute whereby their strengths were exerted by dissenters. In other words, no one lives in a culture, shares a paradigm, or belongs to a society before he or she clashes with others (p. 201). In this sense, the existence of the SOE context was in actions rather than in memory traces. This existence relied on the SOE context's clashes with conflicting networks like the PMS. The SOE context became a culture that "is the set of elements that appear to be tied together when, and only when, we try to deny a claim or to shake an association" (Latour, 1987, p. 201). The consultants in this study, like the little girl, Bulmer, and Ostrom in Latour's examples who dissent or come from the outside of a culture, "confronted by a choice about which group to belong to or which world to live in" (ibid). They could either redefine SOE context to extend the PMS network, or redefine the PMS to extend the network of SOE context. It is an empirical question rather than a theoretical one because either is possible in Latour's examples. In this case, the consultants chose the latter, which was not a difficult choice.

When their proposals were constantly denied or modified towards a non-aspirational direction, the consultants acknowledged that this was due to the SOE culture. They started to tell the observer that they just needed a proposal that could pass, and let the employees know that they were not "eating from the big pot." "As long as there is a PMS plan," said Chief Guang, "it

can be picked up any time." When performance measures were configured by the SOE context in the way that the measures were perfunctory, the consultants commented privately that the PMS might not be a great instrument for every firm. For example, Sony was struck down by performance evaluation because the quantitative performance measures made the firm focus on the quantifiable performance and neglect innovation, which was difficult to measure quantitatively.

The consultants commented that the SOE reform was essentially about replacing power with institutions, but ironically, those in power would not allow institutions to grow bigger than their power. In Latour's discussion about outsiders of a culture, the outsiders would have "prejudices" (Latour, 1987, p. 183) towards the culture and have their own beliefs about what is rational (ibid). This "lack of familiarity" (Latour, 1987, p. 194) was not an issue for the consultants as they had done similar work for other SOEs. The TMT in SOEs, according to the consultants, tended to communicate more implicitly, and the consultants often had to decipher what they wanted, but the consultants normally had confidence in their guesses while discussing with each other. The consultants were likely not the only group who chose SOE context over the PMS' aspiration. According to the proposed PMS plan, a "360-degree feedback" to the employees should be conducted annually, which included evaluation from external experts. The observer asked how external experts would be selected. The consultants explained that it would not matter much because the external experts all knew how to read the air, and they would go along with the TMT's preferences.

The consultants had a challenging task resolving the controversies between the PMS and the SOE context; they mustered visual materials, verbal discourses, and inscription devices to try to establish the PMS as an obligatory passage point and to persuade the dissenters. Yet, the PMS turned out to be "a non-obligatory passage point" (Latour, 1987, p. 150) that not everyone needed to pass through (Latour, 1987, pp. 151–152). They also tried to muster the SOE context as their own resources from time to time because actants can "change camps and two spokesmen are supported at once" (Latour, 1987, p. 84). However, the successful luring of allies (SOE context) away from their spokespersons (dissenters of the PMS) would require the consultants serving the interests of the SOE context better than the dissenters of the PMS, which was hardly the case. Eventually, despite their exhortation and compromise with the SOE context, the fact-building still failed. The project was disapproved by the conglomerate a few weeks after Chief

Guang and the head of the General Service Department presented it at the conglomerate. No explicit reason was provided by the conglomerate, nor by Z-Corp. The consultants did not receive their second half of payment for the project due to the disapproval. They told the observer that they expected that such a result could happen with SOEs, which was the reason why their priority was to get the project passed when developing the PMS, but they knew that many things were not in their control.

8. Discussion and Conclusion: Context as a Rival Protagonist

While most ANT-inspired accounting studies focus on the proponents of accounting technology, I have presented a story of the "dissenters" (Latour, 1987) who use the SOE context to build "counter-laboratories" (Latour, 1987, p. 79). The SOE contexts were black boxes that traversed through time and space. They were discursive resources mustered by the dissenters to dispute against the PMS. They were also *interessement* devices that locked the actors in certain ways of practice. Further, they were performative actors that embedded themselves into inscriptions and perpetuated themselves as a culture. The SOE context, as macrosocial structure, may seem to be an inappropriate subject to discuss within ANT's flat ontology. However, the SOE context is not more macro than the Portuguese maritime network as in Law (1987). Macro itself does not have to be an issue in ANT, as long as the macro is within the network rather than defining the network.

8.1 Empirical Insights

This paper is theoretically oriented, and the previous four sections have discussed where context fits theoretically in ANT while illustrating with my fieldwork. Thus, instead of reiterating what I have already discussed, I will highlight some other insights that this study proffers in this final section, of which two points are empirical and two are theoretical.

Firstly, I have demonstrated a different way of resistance. Previous literature has shown that resistance does not necessarily preclude organizational changes. Several studies on accounting change, such as Laughlin (1987) and Preston et al. (1992), demonstrate that organizational changes are closely related to groups exercising skepticism and resistance to change. As such, resistance is "both a threat to the stability of potential changes and an

opportunity for innovation proponents to redefine the change" (Christensen & Skærbæk, 2007, p. 524). Andon, Baxter, and Chua (2007) illustrate that the resistance of call centre staff shifted their focus from the quality of customer service offered to a question of efficiency, as resistance to the performance measurements. This resulted in a revision of performance measures by management. In this study, the resistance was not only raised by individuals and groups in Z-Corp who muster the SOE context as their resources, but also by the SOE context as a non-human actor. The SOE context was able to inscribe itself into the PMS, thereby making the PMS a sheer form without intended content.

My second empirical remark pertains to the dynamics that context provides to the understanding of consultancy. Consultancy is a phenomenon often referred to when studying the development, introduction, adaptation, and popularization of accounting technologies (Christensen & Skærbæk, 2010; Chua, 1995; Cooper et al., 2017; Gendron, Cooper, & Townley, 2007; Humphrey, 1994). Recent decades have seen an increase in the "growth, acceptance and pervasiveness of confidence in truth-claims" among management consultants (Christensen & Skærbæk, 2010, p. 524). Many previous studies on the implementation of accounting technology as assisted by consultants have depicted a triangular relationship between accounting, consultants, and clients, whereby accounting technologies and artifacts act upon the consultants and the client, alongside interactions between the consultants and the client in an actor-network (Mueller & Carter, 2007; Qu & Cooper, 2011; Townley, Cooper, & Oakes, 2003). Over the course of this field study, the SOE context emerged as a "token" (Latour, 1987) because of the dynamics created by such context. The SOE context—resembling what Dai et al. (2017) call "state logics" primarily derived from historical legacies and political discourses linked to "Chinese characteristics" (Ezzamel & Xiao, 2015)—became part of the multiplicity in the process of translation and making alliances. This multiplicity, in turn, motivated consultants to develop new strategies for navigating different moments of translation.

8.2 Further Theoretical Remarks

Beyond where context fits conceptually in ANT, one of the other theoretical points that I would like to highlight is about the stability, success, and failure of a network. Baxter and Chua (2017, p. 433) note that ANT encourages us to problematize both the seeming stability of some networks and examining the instability of others (Law, 1992). Why could some networks

overcome resistance and become stable and enduring, while others being transient and dissolving or remaining unsettled and contested? Latour's explanation, other than "weaker or stronger" associations (1987, p. 127) or "just a question of scale" (1987, p. 209), lies in dense descriptions, which is consistent with the ANT ontology that the settlement of a controversy is the cause of Society's stability rather than its consequence (Latour, 1987, p. 144). We, ANT scholars, thus document the settlement of controversies, which provide empirical explanations rather than theoretical ones. Law (2009) suggests that ANT scholars could go beyond descriptions by "exploring the logics of network architecture and looking for configurations that might lead to relative stability" (p. 148). We can probably explain stability and success with various translation strategies and different levels of resistance, but these, again, come down to stronger or weaker associations.

My cynicism, however, is towards the validity of the concepts of success and stability rather than the explanatory power of ANT. The problem for success and stability is that they only have meaning when we can distinguish a single entity to describe. Accounting technology is normally the entity that accounting scholars choose to depict as a protagonist. A successfully installed accounting technology is considered to constitute a stable network, albeit sometimes temporary. Nevertheless, the belief that some practices are problematic and thereby require change while others are invisible and inhabiting the status quo is problematic (Baxter & Chua, 2017, p. 449; Quattrone, 2004). The dissenters who stand in the path of the installation of accounting must be converted into allies when accounting is the hero. Conversely, accounting is considered a failure if the installation does not transpire.

What if we have a rival protagonist and look at the story from a different perspective? Or even multiple protagonists and multiple perspectives? Quattrone and Hopper (2005, p. 760) argue against the idea that there exists a specific center that exerts action at a distance. The idea is based on the modernist presumptions of a dichotomy between the controller and linear and uniform time and space. Instead, they suggest that the *loci* of control constantly change and thereby, multiple centres and multiple peripheries co-exist. We follow this rationale and envisage a-centred, distributed chains and trails instead of a centered network (Justesen & Mouritsen, 2011, p. 182; Latour, 2005). When we took this a-centred perspective, we found no actor should be expected to win or lose, and there would be no winner and no loser if we, observers, do not take sides, to begin with.

Moreover, there was no single, pure (Christensen & Skærbæk, 2010) object at the end of the settlement of controversy for us to define success or failure. Quattrone and Hopper (2001) problematize the notion of organizational change that indicates a linear, ordered shift from a well-defined, stable state to another. They suggest the metaphor of "drift" for unconscious, unexpected, and a-centred transcending to unknown destinations. In this study, both the SOE context and the PMS "accumulate and erode over time and space" (Martinez & Cooper, 2019, p. 16). In the end, they became amalgams, with part of each as the other. The SOE context was embedded into the PMS, but the PMS was also embedded into the SOE context. In this case, we could not discuss why a network is more stable than another when we were not able to disentangle them. This a-centred account also responds to Burchell, Clubb, Hopwood, Hughes and Nahapiet's (1980) call to explore "how the actual practice of accounting can be implicated with the furtherance of *many and very different* sets of human and social ends" (p. 22, emphasis added).

Whilst ANT has been widely used for the deconstructive purpose in accounting and many other fields, Latour's "post-ANT"²⁰ (Law & Singleton, 2005, p. 341) writings remind us of the reversed side of action, which is to "care and caution" rather than to "debunk" because it takes many participants and resources to bring the fabrications into being and maintain their existence (Latour, 2004b, p. 246). Justesen and Mouritsen (2011) adopt the argument and encourage analyses that "pay attention to the continued need for 'fuel' that characterizes any existing order" (p. 183). More ANT-inspired accounting studies have exercised "care and caution" by exploring the multiplicity, fluidity, and heterogeneity of the distributed translation process (Andon et al., 2007; Cooper, Ezzamel, & Robson, 2019; Quattrone & Hopper, 2005; Yu & Mouritsen, 2020). Following this line of reasoning, I would like to extend "care and caution" to other non-heroic components of a network. In this study, both the SOE context and PMS sustained trials of strength. They eroded each other, but also fueled each other. The PMS project could be seen as a failure because it was not installed in the end, but it also eroded the SOE context, which could be a success.

Latour (1987, pp. 38–44) depicts four possible fates for a fact that is built: facts could be criticized, dismantled, ignored, and eroded. Being ignored is considered by Latour a worse fate

²⁰ From the late 1990s onwards, pushing the boundaries of the ANT ontology into different directions drove it into a "diasporic" (Law, 2009) phase, which is referred to as "post-ANT" or "After ANT" (Law, 1999).

compared to other possibilities, which I agree, because, in other possibilities, the fact continues to exist, albeit maybe in other forms, while being ignored means the fact ceases to exist in relationality. When I brought in the SOE context as a rival protagonist, I put the PMS into relation and made its stability, success, and failure all relative. The PMS and the SOE context were similar to the machinery and the social relations in Law's (1994) story of the architecture: "they all perform and embody modes of ordering. They're inextricably entwined. There is no possibility of separating them out at all" (p. 141).

My final remark is about the critical potentials of post-ANT studies. ANT has long suffered criticism for not being critical, and Law (1990) admits that ANT is guilty of the accusation. There are, nevertheless, "multiple versions of ANT" (Lukka & Vinnari, 2017, p. 740), and many post-ANT works opened the possibility to address previously overlooked domains. It is argued in both management (Alcadipani & Hassard, 2010) and accounting (Baxter & Chua, 2017) research that ANT can be critical. Quattrone (2004, p. 236) notes that it is a modernist trap to judge whether a theory is good or bad, and change depends on scholars' solving of problems rather than the nature of the theory. Ahrens and Chapman (2007) observe that accounting researchers have sometimes restrained the "deconstructive impulse of ANT" (p. 7) and that ANT-inspired management control literature "enriched the flat ontology of ANT" by not applying it straightforwardly (p. 8). My focus on context joins these endeavours of enriching ANT's flat ontology, which may sometimes appear as a critique, but I am, in fact, defending ANT's potentials by showing what is achievable.

In principle, ANT might discuss the great distributions— Law's shorthand for social structures (Ahrens & Chapman, 2007, p. 7; Law, 1990), but this kind of discussion tends to be political, which is a subject often avoided in ANT. Post-ANT studies have been bringing politics back in (Alcadipani & Hassard, 2010, p. 422). Interestingly, to some extent, ANT has always been political—

Bruno Latour's powerful aphorism, 'science is politics by other means', coined in the context of his discussion of Pasteur's empire building and fact-creating enterprises has been taken up by most of the research in the new sociology of science, in one form or another (1987). (Star, 1990, p. 28)

It seems that science—the content that ANT studies, rather than ANT itself, is political. However, ANT may not be political, yet scholars are (Mol, 1999). Scholars, while making reality, should care about what kind of difference do we want to make (Law, 2009, p. 154).

ANT has a tendency to colonize or homogenize the Other (Lee & Brown, 1994), which has a post-colonialist implication in this study. While the PMS, black boxes primarily built by the Anglo-American consulting firms, was set to colonize and homogenize the rest of the world, it was also a moral choice for us to focus on the local cultural context in order to unfold the silenced voice. Notwithstanding, other than shifting the focus, I still follow the general ANT principle to look for weaker, rather than stronger, explanations and still would like the weaker accounts to defeat the stronger ones (Latour, 1988b, p. 165).

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Table 1 Performance Evaluation Form of Trade Department I (Fragment)

Indicator classification	Indicator	Weight	Evaluation Standard
Financial Indicators	1. Total profit	30%	Total profit = operating income - operating costs - three major expenses - business tax and surcharge. Score 30 points for achieving the target; For each 1% above/below target, add/deduct 1 point.
	2. Sales revenue	5%	Completed sales revenue/target sales revenue×100%. Score 5 points for achieving the target. For each 1% above/below target, add/deduct 1 point.
	3. Receivables	5%	Receivables received/total receivables×100%. Score 5 points for achieving the target. For each 1% above/below target, add/deduct 1 point.
	4. Logistics cost control	5%	Controllable logistics (shipping) costs. Score 5 points for achieving the target. For each 1% above/below target, add/deduct 1 point.
Classified Indicators	5. Customer satisfaction	15%	Regularly investigate customer satisfaction, calculate the assessment score based on the customer satisfaction survey. Score 15 points for achieving the target, deduct 2 points for every 10% reduction.
	6. Completion rate of cargo concentration	5%	The number of cargo concentration contracts completed/the number of cargo concentration contracts planned×100%. Score 5 points for achieving the target. For each 1% above/below target, add/deduct 1 point.
	7. Cycle of tax refund document authentication	5%	Complete the authentication of tax refund documents within the specified time. Score 5 points for achieving the target, deduct 1 point for each time of delay.
	8. First-time pass ratio of customs declaration	5%	The number of batches passed through customs declaration at 1 time/the number of batches of customs declaration submitted×100%. Score 5 points for achieving the target, add/deduct 1 point for each 1% above/below target.
	9. Supplier evaluation completion rate	10%	Supplier evaluation has been completed/supplier evaluation should be completed×100%. Score 10 points for achieving the target, add/deduct 1 point for each 1% above/below target.
	10. Procurement concentration	15%	Proportion of the procurement made through the Conglomerate's online platform to the total procurement of the department. Score 15 points for achieving the target, add/deduct 1 point for each 1% above/below target.
Restrictive Indicators	1. Procurement process compliance		Deduct 2 point for each time of violating procurement process regulations, up to 5 points of deduction.
	2. Completeness of export tax rebate documents		Deduct 2 point for each missing of export tax rebate documents, up to 5 points of deduction.
	3. Performance contracts signed on time		Whether the performance contract was signed on time. 2 points deduction for not completing on time.
	4. New internationally renowned suppliers		Add 1 point for each new internationally renowned supplier, up to 3 points.
	5. New client 6.Departmental training		Add 1 point for each new client, up to 3 points. Complete internal department training as required, deduct 1 point for missing one time, up to 3 points of deduction.

CHAPTER 4: STRETCHING THE MEANING: LINGUISTI	C
GAPS AND THE INCOMPLETE PERFORMANCE MEASUR	RES

Stretching the Meaning:

Linguistic Gaps and the Incomplete Performance Measures

Highlights

- Cross-language mobilization of management accounting constructs linguistic gaps.
- Speech genre choice in management accounting practice creates linguistic gaps.
- Verbal utterances in management accounting practice constitute linguistic gaps.
- Linguistic gaps contribute to the incompleteness of performance measures.
- Linguistic gaps enable interpretive and performative spaces.

Abstract

Drawing on the Bakhtinian notions of genre and intertextuality, this study examines the role that "linguistic gaps" can play during the introduction and formation of management accounting practices. Specifically, through an ethnographic field study where a team of two consultants developed a performance management system for a subsidiary of a state-owned enterprise in China, I probe the ways in which linguistic gaps mediated the process. These linguistic gaps involve the cross-language gap between different languages, the generic gap between speech genres suitable for particular purposes or communicative situations, and the performative gap between text and verbal performance. These gaps, on the one hand, contribute to the "incompleteness" of performance measures, thereby enabling interpretive and performative spaces; on the other hand, can be mustered as a rhetorical strategy by actors to persuade and recruit others during the formation of accounting objects.

Keywords: Incomplete Performance Measures; Bakhtin; Genre; Intertextuality; Translation; Utterance.

1. Introduction

Over the past two decades, many interpretive accounting scholars on management accounting and control have depicted the performance measurement systems (PMSs) as "intrinsically incomplete practices" (Busco & Quattrone, 2015, p. 1236) of measurement (Chapman, 1997) and accounting inscriptions (Busco & Quattrone, 2015, 2018a, 2018b). This line of literature has, on the one hand, diverged from the literature on PMSs that focuses on the successful implementation of performance measures using transparency and certainty as key features (Dambrin & Robson, 2011, p. 428), and on the other hand, challenged the assumption that incomplete performance measures would drive dysfunctional behaviour (Baxter & Chua, 2017, p. 445). These interpretive studies on the incompleteness of PMSs have demonstrated that incomplete and flawed measures not only function (Dambrin & Robson, 2011), but also help to engage users (Busco & Quattrone, 2015; Martinez & Cooper, 2019), facilitate innovation (Busco & Quattrone, 2015) and productive dialogue and discussion (Chenhall, Hall, & Smith, 2013), as well as promote enabling rather than coercive controls (Wouters & Wilderom, 2008). This paper seeks to contribute to the discussion of the "inherently incomplete" (O'Leary & Smith, 2020, p. 3) accounting representations by linking them to an important yet understudied domain that constitutes the incompleteness—language and translation. Mobilizing Bakhtinian linguistic anthropology and other relevant sociolinguistic works, this study examines the role that "linguistic gaps" can play during the introduction and formation of PMSs. Specifically, through an ethnographic field study where a team of two consultants develop a PMS for a subsidiary of a state-owned enterprise (SOE) in China, I explore how linguistic gaps mediated the process. These linguistic gaps involved the cross-language gap between different languages, the generic gap between speech genres suitable for particular purposes or communicative situations, and the performative gap between text and verbal performance. These gaps, on the one hand, contribute to the "incompleteness" of performance measures, thereby enabling interpretive and performative spaces; on the other hand, can be mustered as a rhetorical strategy by actors to persuade and recruit others during the formation of accounting objects.

In her review about recent intercultural accounting literature on language translation, Evans (2018) observes that the executions of language and translation are socio-cultural, subjective, and ideological processes rather than merely technical. Yet, in contrast to the

translation turn in other disciplines, most qualitative and critical accounting research neglects translation as a methodological and epistemological consideration and as a research opportunity. The limited number of accounting studies taking linguistic perspectives have concentrated on the coordination of the international financial reporting standards (IFRS) between different languages and cultures (Hayoun, 2018, 2019; Kettunen, 2017; Mennicken, 2008; Nobes & Stadler, 2018). The same linguistic attention has not been given to the dissemination of management accounting knowledge and practice, which could result from the epistemological and methodological preferences of studying management accounting and control as actions rather than discourses. The praxeological social theorists have thus been more popular in the study of management accounting and control, such as Bourdieu (Oakes, Townley, & Cooper, 1998), Giddens (Alvesson & Willmott, 2002; Free, 2008), Foucault (Preston, Chua, & Neu, 1997; Spence & Rinaldi, 2014), Latour (Briers & Chua, 2001; Jeacle, 2003; Mouritsen, 1999), Butler (Grisard, Annisette, & Graham, 2020), and Schatzki (Ahrens & Chapman, 2007; Kilfoyle, Richardson, & MacDonald, 2013). Specifically for the management and control research on incompleteness, actor-network theory (ANT) (Callon, 1984, 1990; Latour, 1987, 1988, 2005; Law, 1987, 1994) has been the primary approach that many studies draw on (Dambrin & Robson, 2011; Jordan & Messner, 2012; Quattrone, 2004; Quattrone & Hopper, 2001, 2005, 2006; Yu & Mouritsen, 2020). This theoretical choice may pose ontological and epistemological challenges for discussing the role of language because ANT's principles of generalized symmetry (Callon, 1984; Chapman, Chua, & Mahama, 2015) suspends cognitive explanations (Latour, 1987, p. 247), whereas perceiving and utilizing the nuances of languages require the cognitive capacity of human actors.

While language is not commonly studied under "accounting in action" (Burchell, Clubb, & Hopwood, 1985; Burchell, Clubb, Hopwood, Hughes, & Nahapiet, 1980; Hopwood, 1987), saying, however, is as much of an action as doing. The British philosopher of language, John Langshaw Austin (1957), once discusses what is included under, and what not, the expression "doing an action" or "doing something." His rebuttals against the idea of excluding "saying something" as an action is that doing an action must come down to physical movements with parts of the body, which is as true for saying because saying something must come down to making movements of the tongue (Austin, 1957, p. 4). Bakhtin (1986, p. 60) provocatively argues that "all the diverse areas of human activity involve the use of language" and that the

nature and forms of using language are "just as diverse as are the areas of human activity." Some praxeological social theorists also explicitly include language as practice. For instance, Schatzki (2005) notes that language "is a type of activity (discursive) and hence a practice phenomenon" (p. 12). Notwithstanding the recognition of language as action in some practice-oriented theoretical frameworks, the linguistic perspective is scant in accounting studies about practices.

Thus, in addition to highlighting the role of linguistic gaps on the incompleteness of PMSs, this paper also seeks to make the theoretical contribution of bringing semiotics and linguistic translation to ANT—the widely used approach for deconstructing the taking-forgranted accounting phenomena (Chua, 1995; Jeacle, 2003; Pinch, Mulkay, & Ashmore, 1989; Preston, Cooper, & Coombs, 1992) and for understanding accounting inscriptions (Busco & Quattrone, 2015; Chua, 1995; Ezzamel, Willmott, & Worthington, 2004; Mouritsen, Larsen, & Bukh, 2001; Qu & Cooper, 2011; Quattrone, 2009; Robson, 1991, 1992). To some extent, it is rather peculiar for ANT studies to abandon the linguistic perspectives of practice because the approach was inspired by the concept of translation (Serres, 1974) and ANT is also referred to as the sociology of translation (Callon, 1980, 1984; Latour, 2005) and material semiotics (Law, 2009, 2019), both are metaphoric of linguistics. The Italian "traduttore-traditore" (Callon, 1984, p. 224) and the French "traduction, trahison" puns (Law, 2009, p. 144) are used to explain the key notion of ANT—translation—which is about betrayal or treason. The puns are used for linguistic translation originally because "to translate is to make two words equivalent. But since no two words are equivalent, translation also implies betrayal...So translation is both about making equivalent, and about shifting" (ibid). The notion of translation emphasizes the continuous displacements and transformations of goals, interests, devices, human and nonhuman actors, and inscriptions (Callon, 1984, p. 223). Not surprisingly, linguistic translation has the same characteristics of displacement, if not more, because it is a source of inspiration for ANT. This current study provides a unique opportunity to explore how the sociology of translation is accomplished through linguistic translation. The "black boxes" (Latour, 1987; Latour & Woolgar, 1986) or the "immutable mobiles" (Latour, 1987, 1990) of performance management instruments that brought to Z-Corp—the abovementioned subsidiary of the SOE by the consultants were of English language origins. The contemporary business vocabulary originated in English, often has multiple Chinses translations that manifest different "genres" (Bakhtin, 1981, 1984, 1986). These linguistic gaps between different translations and genres,

along with the linguistic gaps between written texts and verbal performances, were constitutive of the incompleteness of the PMS.

Furthermore, these linguistic gaps provided the consultants with a repertoire of rhetorical strategies to recruit potential allies when navigating in Z-Corp, which addresses another peculiarity of ANT—the lack of linguistic perspective in the art of persuasion. ANT-inspired accounting studies have shown that successful accounting systems depend on the creation of networks of support rather than their judgments about the technical or representational capabilities (Dambrin & Robson, 2011, p. 70). To create such networks of support, fact-builders need to persuade (Chua, 1995; Preston et al., 1992) others through translation, which is "displacement, drift, invention, mediation, the creation of a link that did not exist before" (Latour, 1999, p. 179). The fact-building process, albeit clothed in the discourse of neutral and technical endeavour (Robson, 1991, p. 550), "is a result of the generalized negotiation about the representativity of the spokesmen" (Callon, 1984, p. 218), which is highly political and rhetorical (Justesen & Mouritsen, 2011, p. 168). Language certainly plays an essential role in rhetoric, persuasion, and interpretation; therefore, it is an influencing factor in the fact-building process that has been overlooked.

The remaining of this article is structured as follows. The next section will introduce the rationale for this study. Section 3 explains the methods and presents the site of the ethnographic fieldwork. Section 4 explores the linguistic gaps that constituted the incompleteness of the PMS and the repertoire of rhetoric strategies for the consultants. Section 5 discusses and concludes the paper.

2. Rationale

The rationale of this study lies in semiology and Bakhtin-inspired linguistic anthropology. Both of these frameworks share some ontological and epistemological similarities with ANT, and both complement ANT's lack of sensibility in language usage and intentionality.

2.1 Material Semiotics vis-à-vis Semiology

As Law (2019, p. 1) describes, material semiotics is a set of approaches to social analysis that includes ANT, feminist material semiotics, and a range of related lines of work in disciplines including social and cultural anthropology, cultural studies, postcolonial studies, and geography. This set of approaches and sensibilities are simultaneously semiotic—relational and/or carry meanings—and material—about the physical stuff caught up and shaped in those relations. In contrast with material semiotics is the semiotics in general, or anthroposemiotics—the human understanding and utilization of signs—in contrast to zoösemiotics—studies the use of signs among animals (Deely, 2005; Sebeok, 1986). Both material semiotics and semiotics concern representation, which, in Saussure's (1993, 2006, 2011) semiology, is referred to as the relationality between the signifier, signified and the interpretant.

Semiology is the subset of semiotics that refers to the study of signs developed by Saussure (1993, 2006, 2011), Peirce (1968), and Barthes (1988). Jamani (2011, p. 193) uses a triad in Figure 1 to summarize the different terms by which various philosophers and semioticians (Eco, 1979; Peirce, 1999; Saussure, 1999) used to refer to the signifier/physical sign/representation, its signified/referent/object, and its signification/meaning/interpretant. In Figure 1, the signifier (or the physical sign, *representaman*) can be words, gestures, physical objects, pictures, etc., that signify the signified, which can be an object, event, idea/concept or being (Peirce, 1999; Saussure, 1999). The signified is also referred to as the referent or object (or semiotic object). According to Pierce (1999), the meaning of a sign arises in its interpretation; the process through which signs and interpreters are involved is semiosis. Pierce (1999) refers to the sign's meaning interpreted by the addressee as interpretant.

[Insert Figure 1 about here]

Such a rationale of representation is also the essential concept of ANT. As a type of material-semiotic endeavour, ANT's central focus has always been the ways in which complex and distant relations come through multiple translations to be inscribed and represented (Robson & Bottausci, 2018, p. 61). In ANT, translation is "the interpretation given by the fact-builders of their interests and that of the people they enrol" (Latour, 1987, p. 108), whereby fact-builders

establish themselves as the "representatives" or "spokesmen" (Callon, 1984, p. 218; Latour, 1987, pp. 108–121) for others. The stability of a fact, a black box, or an actor-network relies on its "representational' validity" (Robson & Bottausci, 2018, p. 72). Latour (1987, p. 84) uses the term "actant" to refer to whoever and whatever is represented, equivalent to the signified in semiology. Resonating the triad in semiology, Figure 2 illustrates the triadic relationship between the spokesman, the actant, and the interpretant in ANT. Take Callon (1984) as an example, three French scientists tried to represent the fishermen, the scallop larvae, and other scientists in their project of domesticating scallops at St Brieuc Bay. In this case, the three French scientists were the spokesmen, whereas the scallops, fishermen, and specialists who are all represented by a few spokesmen were the actant. The concept of interpretant is normally missing in ANT's discussion about representation, which led Muniesa and Linhardt (2011, p. 563) to use the semiological concept of referent for lack of an equivalent in ANT. Admittedly, how a representation is interpreted or whether a spokesman is a valid representative is a practical rather than a theoretical question (Callon, 1984, p. 219). Notwithstanding, this missing concept is crucial for linguistic translations to intervene in the sociology of translation and is also a research gap that this paper seeks to probe.

[Insert Figure 2 about here]

Albeit both focusing on representation, accounting literature mobilizing semiology is mostly on financial and other corporate reports (Davison, 2008; Evans, 2004; Hayoun, 2019; Malsch & Gendron, 2009), whereas ANT-inspired accounting research is more commonly found in studying management accounting and control practices (Cooper, Ezzamel, & Qu, 2017; Corvellec, Ek, Zapata, & Zapata Campos, 2018; McNamara, Baxter, & Chua, 2004; Quattrone & Hopper, 2005), likely because it appears that the former domain possesses more discourses whereas the latter more operations. Structural-linguistics-influenced semiology (Arrington & Francis, 1993, p. 114), however, is as important in practice as in discourse. For instance, in Dugdale's (1999) exploration of the policymaking process about the intrauterine contraceptive devices (IUDs) in Australia, she notes that the specificities of the talk and the semiotic move in the ANT program were what made the IUDs multiple (p. 124). Dugdale (1999, pp. 124–125) suggests that rather than thinking of "talk" as describing different perspectives on the same

object, we should approach it as "ontological politics" (Mol, 1999), as "doing" different IUDs. Following such a performative rationale, this paper also approaches "talks" and other linguistic presentations as "doing" the PMS.

The incompleteness of the PMS constituted by linguistic gaps was filled by the consultants through strategically choosing signifiers/representations, thereby manipulating the interpretant. Systematic modern terminologies of management accounting and control have mostly been developed in the English language and translated into other languages when the knowledge is mobilized globally. Linguistic translation thus plays a crucial role in the introduction of accounting knowledge. Language is a carrier of knowledge, yet knowledge can be distorted over the process of translation because exact equivalence in translation is very rare. As such, translation is associated with betrayal for ANT scholars (Callon, 1984, p. 224; Law, 2009, p. 144): "from translation to treason there is only a short step" (Callon, 1986, p.224). In their introduction to Postcolonial Translation, Bassnett and Trivedi (1999, p. 2) state that translation is a multi-stage activity that is highly manipulative rather than innocent and transparent. This transformation process across linguistic and cultural boundaries is rarely, if ever, involves an equal relationship between texts, authors or systems. Furthermore, the meaning of a word is understood in relation to other words in a given language (Saussure, 1993, 2006), and the semiological concepts help demonstrate the ways in which interpretant drift away from the semiotic object by choosing signifiers through strategic translation. As Peirce (1999, p. 72) notes, when a sign addresses somebody, it creates in the mind of the addressee an equivalent sign, or perhaps a more developed sign. The more developed sign, or interpretant, can be displaced from the association with the signified.

In semiology, such displacement is achieved through the relationality among signs. Saussure (2006, 2011) proposes two ways in which one sign can be differentiated from another: one is studying a language in the aggregate, whereby clusters of signs exist in associational relation to each other (the associative or paradigmatic axis); the other is studying it in speech acts, whereby signs exist next to each other in a sequence of signs (the syntagmatic axis). Hayoun (2019) demonstrates that fair value is both market-based and entity-specific by mobilizing the concepts of the associative and syntagmatic axes. In the associative axis, elements in the sign system are grouped (associated) into categories sharing a common feature. For example, the word "education" can be in associative groups with teacher, professor, school,

textbook, college, or tutor. The syntagmatic axis, on the other hand, focuses on the positioning of the element in the specific statement on the co-presence of other elements to form a meaningful whole (the syntagm). The value of a word is impacted by its interrelation with other words in a particular sentence. The semiological value is therefore defined as a product in relation to other values in the system, from which it is differentiated, and from other values in the statement, with which it is interrelated (Hayoun, 2019, p. 72; Saussure, 2006, p. 60).

Both the associative and the syntagmatic axes were executed strategically by the consultants through the processes of introducing and translating the PMS into Z-Corp. On the associative axis, they took advantage of the substitutive nature of signs—in this case, words, expressions, and utterances—within each associate group and maneuvered words for specific contexts. On the syntagmatic axis, they carefully position words with an array of other linguistic elements in a statement, thereby maximizing its persuasive capacity.

2.2 Heteroglossia, Genre, and Intertextuality

Similar to semiology, Bakhtin's (1981, 1984, 1986) notions of dialogism, heteroglossia, and genre, as well as the Bakhtin-inspired concept of intertextuality (Kristeva, 1980), are mostly found in accounting literature about accounting reports and accountability (Brown, 2009; Lupu & Sandu, 2017; Macintosh & Baker, 2002; Neu, Saxton, Everett, & Shiraz, 2020; Neu, Saxton, Rahaman, & Everett, 2019; O'Leary & Smith, 2020). As a philosopher and literary theorist, Bakhtin (1981) coined the concepts of heteroglossia to describe novels wherein both the characters and the authors have their voices, as opposed to the monologic novels where the authors give meaning to all characters. Dostoevsky's works are representative of the presence of these multiple voices (Bakhtin, 1984). Macintosh (2002) applies the concept of heteroglossia to accounting and argues that the current practice of accounting reports strives to produce monologic accounting statements (p. 130). Two major contradictory forces in speech utterances are essential in producing heteroglossia: the centripetal force driving novels towards a unified, central, final meaning, and the decentralizing centrifugal force driving the novel towards contradiction and complexity. Macintosh (2002) highlights that the pursuit for "uniformity, precision, feasibility, objectivity, verifiability, freedom from bias, and so on" (p. 28) in accounting reports exerts overwhelmingly centripetal force and can be achieved only by suppressing other voices (p. 130). He thus proposes the potential and benefits of developing the

"heteroglossic accounting" (pp. 129–134). The concept was subsequently used in the dialogic studies on accounting reports and accountability, especially in the field of social and environmental accounting (Bebbington, Brown, Frame, & Thomson, 2007; O'Leary & Smith, 2020; Smyth, 2012).

Bakhtin shares the ontology with ANT scholars that there is no "out-thereness" (Latour, 1987; Law, 2004, 2007) of the world or reality. For Latour (1987, p. 258), the settlement of controversies is the cause rather than the consequence of nature and society. Similarly, Bakhtin's speech utterances are also performative, as the actions of settling controversies. As Bakhtin (1986) explains, "An utterance is never just a reflection or an expression of something already existing outside it that is given and final. It always creates something that never existed before, something absolutely new and unrepeatable" (pp. 119–120). Macintosh (2002, p. 130) summarizes that an utterance can be any concrete conversation, discourse, thought, or word as it is uttered in social settings. Utterances are two-sided social acts with a speaker on one side and a listener on the other. Meanings are realized through active, responsive, and specific utterances. Words are alive when uttered. Such "unfinalizability" (Bakhtin, 1984) of utterances resonates with ANT's principle of recursivity, indeterminacy, and performativity (Baxter & Chua, 2017, p. 443). The only ANT principle violated by the Bakhtinian framework is the generalized symmetry (Baxter & Chua, 2017, p. 443; Chapman et al., 2015, p. 267). Generalized symmetry discourages the cognitive explanations of science and technology, suspends humans' cognitive abilities, and approaches non-human actors the same way as human actors (Latour, 1987). This principle was widely criticized (e.g., Amsterdamska, 1990; Collins & Yearley, 1992; Lee & Brown, 1994), and one of the main arguments was that humans should be treated as ontologically distinct language carriers (Collins & Yearley, 1992). Engeström and Escalante (1996) cite Bakhtin's (1981) dialogism to criticize ANT's monologic treatment of individual actors' conceptions and interests and the lack of attention on hesitations, dilemmas, and shifts in the actors' voices. Accounting scholars also experience such challenges with ANT. For instance, Ahrens and Chapman (2007) are unsatisfied with ANT's lack of intentionality and "found it useful to build on theories of cognition in practice" because "management control is constituted in cognitive processes that are distributed over people, practices, arrangements, and context" (p. 22). If we acknowledge that humans are carriers of languages, we can almost consider Bakhtin's dialogism and heteroglossia as ANT in the language domain, given the other compatible ontological stances.

If Bakhtin's utterances are the actions of settling disputes in ANT, speech genres (Bakhtin, 1986) are the actor-networks or "immutable mobiles" (Latour, 1987, 1990) in the world of language. Each separate utterance is individual, but "each sphere in which language is used develops its own *relatively stable types* of these utterances. These we may call *speech genres*" (Bakhtin, 1986, p. 60, emphasis in original), which are characterized by somewhat unique subject matters and linguistic styles (Bakhtin, 1986, p. 65; Neu et al., 2020, p. 475). A speaker's speech will is "manifested primarily in the *choice of a particular speech genre*" (Bakhtin, 1986, p. 78, emphasis in original). Accounting scholars have identified different sets of speech genres according to specific contexts. For instance, in studying the articles written by academic researchers and published in the practitioner-oriented journal, Nørreklit and Scapens (2014) classify the persuasive and the authoritative speech genres. Neu et al. (2020) defines politicians, taxes, and facts as the three main speech genres when studying Twitter reactions to the Panama Papers. In this study, the speech genres that were used by the consultants and other actors in Z-Corp can be classified as the technical and the contextual.

According to Bakhtin (1981), utterances are oriented toward a future answer by provoking it, anticipates it, and structures itself in the answer's direction. The orientation towards an answer is open, blatant and concrete. It is an orientation toward the listener's specific world, through which different points of view, conceptual horizons, systems for providing expressive accents, various social languages come to interact with one another (pp. 279-282). It has been established in literary theory that linguistic units alone are not sufficient to provide a complete definition of a literary genre (Scott, 1965, p. 74) because the distinction between literary genres often depends on external factors, such as belief and function (Dundes, 1964, p. 110). Understanding how meanings derive from their relationality with the structure is the strength of semiology. Kristeva (1980) coined the term "intertextuality," or intertextualité in French, in her attempt to synthesize Saussure's semiology and Bakhtin's dialogism, which incorporates the relationality of meanings in the former and the multiplicity of meanings in the latter. According to Kristeva, the meanings of a text, rather than directly delivered from the writer to the reader, are mediated by other texts. James Joyce's 1922 novel *Ulysses* exemplifies such an intertextual relationship to Homer's *Odyssey*. After its immediate success upon introduction, the term intertextuality was subsequently misunderstood and "abused on both sides of the Atlantic" (Kristeva, 1980, p. 15). Intertextuality has nothing to do with the influence of one writer upon

another. Instead, it is the transposition of one or more systems of signs into another, accompanied by a new articulation of the enunciative and denotative position (ibid).

Kettunen (2017) draws on the notion of intertextuality in her analysis of the translation of IFRS to emphasize the relational nature of the textual meaning. Lupu and Sandu (2017) use critical discourse analysis to analyze the intertextuality between the annual reports, corporate press releases, and relevant media, in order to understand how an organization constructs a sense of legitimacy. Nørreklit (2003) demonstrates the intertextual relationship between Kaplan and Norton's (1996) book *The Balanced Scorecard* and other management literature. Compared to these previous studies focusing on the intertextuality between texts and other texts, this study probes the intertextuality through "verbal performance" (Hanks, 1989).

Briggs and Bauman (1992) criticize the static view of the Bakhtinian concept of genre in linguistic anthropology and suggest genre can be performed and linked to strategies for manipulating "intertextual gaps." Generic framings of texts are often mixed, blurred, ambiguous and contradictory, and generic links produce intertextual gaps. Strategies for constructing intertextual relations can minimize or maximize the gaps, based on actors' ideological motivation and other social, cultural, economic, and historical factors. The analysis of "speech into acts" is an analysis of "speech into instances of genres" (Hymes, 1972, p. 65). In other words, the notion of speech act focuses on speaking in its guise as social action (ibid, p. 48). There thus was a shift in orientation from text to performance (Briggs & Bauman, 1992, p. 146). As Jakobson (1960, pp. 365–366) observes, "there are many performances of the same poem differing among themselves in many ways. A performance is an event, but the poem itself, if there is any poem, must be some kind of enduring object." It means that textuality—"the quality of coherence or connectivity that characterizes text" (Hanks, 1989)—cannot be examined alone, but in the interaction between the organization of the discourse and where the organization is grounded. As the specific cultural and institutional context is involved in the utterances in this study, the genre is more pertinent to be defined as "a system of action that has become institutionalised and is recognizable by repetition" (Czarniawska, 1997, p. 49), or a language game "constituted by specific types of compositions, semantics, grammar, arguments, etc." (Nørreklit & Scapens, 2014, p. 1275), whereby proactive actions are emphasized.

3. Methodology and the Site

This study takes the perspective and methodology of linguistic anthropology. The birth of linguistic anthropology is linked to the gradual discovery of the profound differences among languages. Such differences seem accidental, arbitrary, and inconsequential for some, while reflecting profound intellectual, cultural, and social differences for others (Mithun, 2004). Duranti (2003) classifies linguistic anthropology into three paradigms that emerged sequentially, but all persist today. The first paradigm devotes mostly to the documentation, grammatical description, and classification of languages and focuses more on linguistic relativity. The second paradigm becomes more anthropologically oriented, and examines language usage in context, introduces new units of analysis, such as the speech event. The third paradigm focuses on identity formation, narrativity, and ideology, which constitutes a recent attempt to connect with the rest of anthropology by extending linguistic methods to studying issues previously identified in other (sub)fields. This study should fall between the second and the third paradigms. However, the first paradigm of linguistic anthropology, also referred to as anthropological linguistics, provides attention to the linguistic details needed to understand the cross-language translation gap between English and Chinese and how the gap could be mustered as persuasive strategies. Thus, in addition to the ethnography in Z-Corp that this study is based on, I also collected secondary sources from the literature on the translation from English into Chinese and archival data such as public discussions about such translations on the Internet. In addition, autoethnography is referred to because my personal cross-language experience and reflection are quite relevant to the subject being discussed. Notwithstanding that I am more interested in how strategic utilization of translation plays a role in organizational practices than the process of translation itself, the discussion on the cross-language linguistic gap will perhaps appear to be more linguistic than anthropological, and I will also use instances that were outside of my ethnography.

Following the tradition of linguistic anthropology (Gumperz & Hymes, 1972), the primary method is of this study is ethnography. There are scholarly debates on what is ethnography and what are the criteria for a study to qualify as ethnography. Some common criteria include field-based, personalized, multifactorial, long-term commitment, inductive, dialogic, and holistic. In *Tales of the field: On writing ethnography*, Van Maanen (2011, p. 1) defines ethnography as a written representation of a culture—or selected aspects of a culture—that carries serious intellectual and moral responsibilities because the images of others inscribed

in writing are most assuredly not neutral. The selected aspect of a culture that this study represents is language, a fundamental resource for cultural reproduction (Annisette, 2017, p. 39; Bucholtz & Hall, 2004, p. 382). I focus on the roles of language and translation and their interplays with the incomplete PMS and the rhetoric strategies, with intellectual and moral consciousness and sensitivity in regards to the cultural and postcolonial implications.

The ethnographic field study was conducted in a third-tier subsidiary of Chinese SOE, Z-Corp, where a new PMS was being developed by a team of two external consultants from a consulting firm, BetaConsulting, over 2.5 months in 2016. During the weekdays, I was in Z-Corp from nine to five, observing the development of the PMS. I also spent all evenings and weekends with the two consultants, either discussed their work experiences casually or followed them to Z-Corp to observe them working extra hours. In-depth observation with ethnographic sensitivity was essential to this study, and I made efforts to maintain a strict ethnographic rigour with "painfully focused attention to the micro structure of meanings generated by small routine actions that most people are unaware of most of the time" (Berger, 1986, p. xii). I also attended to "each snippet of talk as an arrangement of words and silences" (Dugdale, 1999, p. 124). Extensive field notes, or "thick descriptions" (Geertz, 2003), were taken, which included observations on formal meetings, daily encounters, working discussions, snatches of conversations at benches, in the lobby and at lunch, along with gestures, intonation, and a variety of unguarded behaviour (Latour & Woolgar, 1986, pp. 153-154). In addition to recording the observations, taking field notes was also a deepening interpretive process (Van Maanen, 2011, p. 118). In situ interpretation allowed me to appreciate the observations when they were presented in full dimensions, which is necessary because, like language itself, paralinguistics and kinesics are also important in communication (Gumperz & Hymes, 1972, p. 543). Audio tape-recordings were not always possible, albeit 62 hours of meetings, negotiations, and discussions about the project were taken with consent, which allows further off-site analysis. I followed up with the two consultants and some employees in Z-Corp through casual conversations for another two years after the consulting project was completed.

During the first week of the fieldwork, both the consultants and Z-Corp managers introduce the PMS project as a reformation to an advanced and modern management system in order to invigorate the organization, motivate employees, and promote innovation and competitiveness. As I spent a long time with the consultants and became more acquainted, they

started to tell me about another background of the project. "Our main goal in these projects is to solve the 'salary upside down' issue," said Chief Guang, the consultant who managed this project. Guang and the other consultant, Hao, told me that they had been on a few of these projects for the subsidiaries of SOEs in the past two years. They explained that after President Xi Jinping took office and initiated the anti-corruption movements, the SOEs had to limit their managers' pay hierarchically. For the first-tier subsidiaries of an SOE, the president's pay cannot exceed six to eight times of the bottom-level employees. The vice-president's pay is 30%-40% lower than the president's and is paid at the same level as the president of the second-tier subsidiary. However, when it comes to the third-tier subsidiary like Z-Corp, the president's pay is about twice as much as their bottom-level employee. They thus referred to this phenomenon as "salary upside down" and said this type of PMS project was to "rectify" it. The parent firm of Z-Corp—referred to as "the Conglomerate" by the participants—had a fixed pool of collective salaries for Z-Corp; therefore, lower-level employees' salaries needed to be reduced in order to increase the salary for the managers.

The PMS project thus had multiple functions. On the one hand, Z-Corp planned to improve its PMS in order to motivate employees better and to make the firm competitive with rival multinational and private firms. On the other hand, the top managers of Z-Corp were interested in changing their rather "flat" pay structure into a more vertically dispersed one and consultants were hired to legitimize this action with accounting instruments and discourses. Skepticism and resistance are common during the introduction of accounting practices and organizational change (Andon, Baxter, & Chua, 2007; Christensen & Skærbæk, 2010; Laughlin, 1987; Preston et al., 1992), especially in this case where the PMS was also used to justify the reduction of many employees' salary. Moreover, the PMS vocabulary was not familiar to many actors in the SOE, which further amplified the resistance because "the limits of my language mean the limits of my world" (Wittgenstein, 2001, p. 68). In this sense, the consultants needed to either expand the boundary of their clients' worlds, or to situate the new terms into the clients' existing world. The consultants' priority, rather than expanding their client's knowledge, was developing a new PMS that could be passed through the necessary hierarchical levels in the organization in order to get paid. In fact, their plan was not passed by the highest level of their client—the Conglomerate, and they did not receive the second half of their payment, which, as the consultants told me, was not uncommon. This explains why the consultants' approach of

strategizing their discourses so that the clients do not ask too many questions or challenge their plans. In the field, Chief Guang advised Hao that rhetoric is crucial in developing the performance management system, and using the right terms is the key.

Z-Corp was primarily a trading firm for general merchandise between China and a few African countries supporting its parent firm's construction business, but Z-Corp's business also included logistics, transportation, and commodity derivatives trading pertaining to their main line of business. It had about 150 employees, and the personnel is broken down into five bureaucratic levels. At the top level was the president, the Chinese Communist Party (CCP) committee secretary, and the union secretary. On the second bureaucratic level, there were four vice presidents (VP), each responsible for one or two departments. The third level of the structure contained the department heads, who were accountable to their corresponding VPs. Depending on each department's size, there were from no to two deputy department heads that constituted the fourth management level. The fifth level consisted of the employees.

The PMS project had three phases. Phase 1 was the initial investigation and benchmarking, which involved reviewing job positions, interviewing employees, benchmarking with firms in the same industry, setting up jobs and roles, and holding a firm-wide management meeting to report the result of Phase 1. Phase 2 was about setting the objectives and evaluation measurements for each department and position. During this phase, the consultants set objectives according to the guide from the Conglomerate, developed key performance indicators (KPI) for each department and position based on their responsibilities, discussed objectives and KPI with department heads, and reported objectives and measurements to VPs, the party secretary, and the president. Phase 3 was the position evaluation and salary setting phase. Details of the work in this phase included holding international position evaluation (IPE) training session, collecting IPE score produced by the evaluation committee, ranking jobs with the IPE score, benchmarking with market salary, set the plan for the new salary structure, report to and discuss with the president and party secretary, and finally, reporting to the Conglomerate.

While this study concerns incompleteness, it is also worth noting that this paper itself is incomplete and simplified. While telling a story about anything is already to simplify it, I try to follow Law's (1994, p. 9) criterion of better sociology, which describes social processes less prone to heroic reductionisms than some. These better descriptions are incomplete not because

the business of sorting out the order of things is unfinished, but rather because it is necessarily that way.

4. Translation Strategies and Linguistic Gaps

The essential differences in the writing system and morphology between English and Chinese leave a dynamic gap for reproduction and recreation when management accounting knowledge is translated from English into Chinese. In general, English, as an alphabetic language, is more adaptable when translating into another alphabetic language, such as French, German, compared to translating into logographic languages, such as Chinese, Japanese, and Luwian (Hoosain, 1995; Liu, 1995; Shakkour, 2014). Even among the logographic languages, Chinese poses more challenges—or provides more opportunities—for creative translations, because, unlike some other logographic languages such as Japanese and Korean that have a standard form of Romanization (Katakana in Japanese and Hangul in Korean), the non-Romanized writing system and the morphology in Chinese mean that there is never a standard translation from English to Chinese.

Through the globalization of management practices, a new wave of terminologies has emerged in the Chinese language in the past decade or so. A large proportion of these terminologies appear as business jargon, and normally only the younger generation and people who are involved in the frontier of new business practices utilize these terms. Some of these terms are newly invented compound words (signifier) with Chinese vocabulary of relevant meanings to represent practices (referent or semiotic object) that are newly introduced; others are terms translated directly using the meaning from other languages—mostly English. Interestingly, some newly emerged Chinese terms in the business context, such as *zhànyì*, *lùyăn*, and *shāngyè móshì*, make little sense to a Chinese native speaker without having been exposed in a relevant context, while these terms make more sense when they are translated back into English as campaign, presentation, and business model as long as the Chinese person has knowledge of the English language.

One reason causing the confusion is that there is rarely one-to-one correspondence in words across different languages. One-to-one correspondence is referred to as bijection in math, and there are three other non-bijection relationships between two sets (Figure 3). Words from different languages sharing similar meanings mostly fall into the non-bijection relationships. For

instance, when I took my first French course ten years ago, I had a monolingual native English speaker classmate who used the French phrase "pays musique" for country music because we just learned that pays meant country. That was the first time this classmate learned the nonbijection relationship across different languages—whereas country means both nation and district outside large cities in English, pays does not share the later meaning. Similarly, when I taught the Chinese language as a teaching assistant during my master's study, a student used the Chinese word *chéngdān* to translate the word assume. She meant to express "to presume," yet *chéngdān* only shares the meaning "to bear" with assume. While the above two instances were considered mistakes for learners of a new language, there are other occasions where words from two different languages gradually form a bijection relationship. In such cases, normally, it is the languages from the Global South that conforms to those of the Global North, or other languages to English. For example, the word menu means both a list of foods at a restaurant and a computing menu (a list from which the user may select an operation to be performed). The Chinese word for the former meaning is *càidān*, which is literally "dish list," and when personal computers were introduced to and popularized in China, instead of inventing a term for the latter meaning of menu, the term *càidān* was assimilated to a bijection relation with menu.

[Insert Figure 3 about here]

While the Chinese "dish list" is widely accepted to be used as menu in computing, the new wave of business terminologies has created interesting chaos because the agreement for the semiological association between the terminologies and the practices they referred to has not been established. In linguistics, the ways in which a sign is interpreted are constrained by pre-existing conventions around those signs, and sign-using agents need to have some type of agreement on the association between signs and objects. The lack of agreement, in this case, has two implications: on the one hand, the newly coined Chinese terms that are used to translate English terms may not be understood as the meaning intended; on the other hand, there can be multiple Chinese terms that are used to translate one English term, and these choices of signifiers can lead to interpretants that belong to different genres.

The consultants' exercising of strategic translation was by virtue of such lack of agreement between the signifier and the signified during a particular time period when new

objects emerge. Some of the consultants' vocabulary was among this new wave of business jargon, and when they introduced new knowledge and practices (signified/referent/object) to Z-Corp, they had a certain freedom to choose one translation (signifier) over others. This freedom proffered them with the opportunity to control the interpretant (the interpreting or decoding of the message sent by an addresser to an addressee) through mobilizing their understanding of the culture and people in the organization. The interpretant could drift away from the signifier in various ways depending on the "citationality" (Nakassis, 2013). In addition, Z-Corp, as an SOE, was the type of organization not familiar with the wave of new terms and practices compared to their multinational and private counterparts, which also contributed to the freedom of "reproductive framing" (Vollmer, 2007, p. 585) by the consultants.

During the PMS project, the consultants needed to negotiate the performance measures of each department and position in Z-Corp with the respective department head and VPs, and these linguistic gaps were rhetoric strategies to convince the actors about the legitimacy of the reformation. Table 1 below is the performance measurement plan for the Accounting Department. Performance measurement plans for other departments were in the same format, with variation within each of the categories. The consultants also developed performance measures for each position in Z-Corp. In order to develop these performance measurements, the consultants first conducted investigations, review each job position, and interview employees. They then went on to design the performance measurements, which was followed by the negotiation process, whereby the consultants introduce the PMS.

[Insert Table 1 about here]

In a typical negotiation process, the consultants first invited department heads, deputy department heads, and associate deputies to their office. During the meeting, the consultants used a projector to show the performance measurement plans (as illustrated in table 1) in an Excel file and made highlights, notes, and changes on their laptops as the meeting carried on. The next step was to get approval from the VPs who were in charge of each of the departments. However, these meetings were more of a formality than negotiating the performance measurements. The consultants would go to the vice presidents' offices and briefly report the performance measurement plans. The vice presidents made very few changes to the plans because, at this

point, the department heads had already gone through the iterative process of negotiation.

Therefore, the negotiation process with the department heads was the ones that we focus on.

There are three main ways of translation from English into Chinese, including copying without translation, translation, semantic translation or free translation (Hu, 2004). The consultants strategically chose one of these ways of translation in their discourse. The first strategy is copying without translation, also referred to as zero translation, such as the abbreviations of CPU, E-mail, and DVD. Hu (2004) notes that "excessive use of such foreign items may create difficulties for ordinary citizens, while language purists complain that the purity and unity of the Chinese language are being affected, even ruined" (p. 35). In fact, Chinese media follow the 2010 notice from the National Radio and Television Administration to avoid English acronyms such as NBA (The National Basketball Association), WTO (The World Trade Organization), and GDP (Gross domestic product) in their formal content (Canaves, 2010). This protection of the "purity" of the Chinese language may seem to be of political or cultural purpose, but there is a fundamental linguistic reason. As mentioned earlier, the Chinese written language is logographic rather than alphabetical, and there is no written system to Romanize English words. In other words, to incorporate copying English terms without translation in the Chinese language appears more abrupt compared to other languages. For instance, Table 2 illustrates the translation of the English sentence "A benchmark is a point of reference by which something can be measured." into French, Japanese, and Chinese, with the term benchmark un-translated. As shown in Table 2, without "translating" the term benchmark, the French sentence remains alphabetical while the Japanese sentence remains logographic. In fact, because of the convenience of writing English words in Japanese Katakana directly, the Japanese language acquires a large amount of English vocabulary without the need of translation, such as business, ビジネス, and performance, パフォーマンス. The Chinese language, on the other hand, does not have the capacity to accommodate English words into its own written system without translation; thereby, the Chinese sentence is the only one where the logographic language was disrupted by an alphabetic word.

[Insert Table 2 about here]

In our field study, the terms KPI (key performance indicator) were often not translated in verbal communications, and there were people talking about KPI without knowing the meaning. Partial translation was also seen in the study. For example, the International Position Evaluation System is referred to as the IPE xìtŏng, wherein only system is translated into xìtŏng. However, such copying without translation both sound and look abrupt because of the inconsistency between the morphology and the non-alphabetic writing system. In the past decade or so, it is quite common as a marketing strategy to use copying without translation to signal a sense of "newness," foreignness (mostly Western), and higher quality. For example, application on a smartphone or a tablet was officially translated as yìngyòng, which literally means application or to utilize. However, more frequently, we see that application is referred to as APP by younger Chinese, which signals a sense of modernity and technological advancement. Interestingly, instead of pronouncing the term as /'æp/ like native English speakers, it is pronounced as /eɪ pi: pi:/ by the Chinese.

These translation strategies are also used by the consultants in this study when they tried to signal the sense of the advancement of accounting technology, which we classify as the technical genre of speech. The consultants applied this copying without translation strategy when they were in more formal situations, such as a big meeting that all managers attended. For example, the terms KPI, IPE 2.0, and 3P (Compensation Management: Pay for Position, Person and Performance) were used in formal occasions, thereby rendered these concepts technical, fashionable, and awe-inspiring. Most of the department heads had limited knowledge of the English language, and they did not know what each of the letters stood for in these terms. They mostly had a vague sense that these were some forms of the so-called advanced management systems that were fashionable to adopt.

The second translation strategy is transliteration, which transfers only the phonetic part of words. A phonetic loanword cannot convey the meaning without a comprehensive explanation. It is thus up to the addressers to explain the meaning and up to the addressees to understand it.

Transliteration is a common way to introduce Western names and terms. As the example in Table 2 demonstrates, there is no way of transferring only the phonetics of English into Chinese

²¹ The use of pinyin, the Romanization of the Chinese characters based on their pronunciation, is for the compatibility with English. It should be noted that these Romanizations only represent the pronunciations of Chinese words. They are not the Chinese written language. For instance, *xìtŏng* is written as 系统 in Chinese.

without involving Chinese characters. The problem with transliteration into Chinese is that the phonemic length of foreign words resulted in the same term being translated in a hundred different ways by a hundred people (Hu, 2004, p. 35; Liang, 1929). Moreover, in order to transliterate English into Chinese, Chinese characters with their own meaning have to be invoked. These involved terms thereby invoke their own intertextual interpretations. For example, the English term hacker was transliterated as $h\bar{e}ik\dot{e}$, with the two chosen Chinese characters meaning "black" and "guest," respectively. This was a good translation because not only the original meanings of the Chinese character are not quite misleading, but they also make some intuitive sense. Conversely, the term robust is transliterated by some as $l\check{u}b\grave{a}ng$, with the two characters literally meaning "rudeness" and "cudgel," which is a confusing translation and makes no intuitive sense. As a result, most people chose to use the semantic translation $w\check{e}nji\grave{a}n$ as a preferred translation.

Like copying without translation, transliteration can also be used in the technical genre to create an awe-inspiring effect. For example, cherries are called *yīngtáo* in Chinese, but more frequently these years, cherries are translated through transliteration as *chēlízǐ* in Chinese supermarkets. The term *chēlizi* is a random combination of syllables that makes no sense in the Chinese language, but the random combination of characters appears as a typical transliteration from a foreign language. It thus appears to be a fancier version of *yīngtáo* that may signal that these cherries are imported, exotic, of higher quality, and more desirable, which can be adopted as a marketing strategy. In the PMS project, the consultants chose to use terms of transliterations more when they need to signal a sense of professionalism. For instance, the term "copy" has a semantic translation, *fùzhì*, that is commonly used, but the transliteration *kǎobèi*, possessing an international connotation derived from the sound, sometimes fit in and strengthened the professional tone of consultancy. Similarly, the term "OPEC" (Organization of the Petroleum Exporting Countries) has a Chinese abbreviation, yóuméng, which literally means "oil union." However, the term ōupèikè was used when a sense of professional and technical knowledge was what needs to be signalled. Another example is the term "niche market," which has the semantic translation whereby "niche" is translated as fèngxì, but the transliteration lìjī when the consultants would like to sound more knowledgeable about cutting-edge, international, management styles.

In addition to the sound of the transliteration, each Romanized Chinese pronunciation is associated with multiple Chinese characters that possess different meanings, which provides further opportunities for strategic translation in oral communication. In our field study, the consultants applied to Z-Corp the International Position Evaluation System (IPE) developed by Mercer Consulting Firm. Mercer was transliterated as *Měishì* in Chinese, where *měi* could literally mean beautiful or America, while *shì* could mean the world or generation. However, another character with the same pronunciation of *shì* means style. As such, the pronunciation of *měishì* can be associated with different Chinese words. It could be the multinational consulting firm Mercer which was not familiar to actors in Z-Corp, or a word of its homophone that literally meant American style, a meaning most actors would perceive. This thus created an interesting misconception about the source of the IPE, yet it was not the consultants' priority to correct the misconception because an evaluation system with "American Style" could potentially provide more legitimacy for the IPE system than a system developed by a consulting firm that most actors in the Z-Corp never heard of.

There were three types of addressees associated with the strategy of using transliteration and copying without translation as the technical genre, depending on the addressees. The first type was the majority. These addressees perceived the sense of advancement in the PMS and coped with it consciously or unconsciously, albeit they did not fully understand the consultants' vocabulary. This second type is exemplified by Head Chang of the Commodities Trading Department, who was referred to as the employee with the highest educational background in Z-Corp because he had a Master's degree in business from the UK. His background was rare in Z-Corp, and he was hired because the job of this relatively newer department was to trade commodity derivatives, which requires professional financial expertise. In contrast, managers in Z-Corp often complained that most employees in Z-Corp had lower educational backgrounds and skill levels compared to non-SOE firms in the industry. Head Chang, along with some other actors who were familiar with the original English terms in the consultants' discourse, were among the ones who were in favour of the PMS reformation. The third type was the cynical addressees who were not willing to agree with the sense of advancement associated with the foreignness, in which case the consultants had to use the contextual genres.

Speech genres could be chosen more freely with the third translation strategy, the semantic translation. It is about translating the meaning from English to Chinese, taking only the

meaning, not the phonetic elements. This type of translation gives the translator a large degree of freedom, and it is also referred to as free translation. On the one hand, the translator can choose from existing words in Chinese. The choice of different terms indicates different modes of discourses, power relationships, and of course, different genres. Some types of discourse are perceived as more sophisticated than others, whereas others may appear more authoritative. A semantic translation in Chinese can misrepresent the original English word because the Chinese characters chosen for the translation are performative. I observed a remarkable example a few years ago through a netnography on Chinese rheumatoid arthritis (RA) patients. The Chinese term for rheumatoid, *lèi fēngshī*, literally means quasi-wind-damp, which made people immediately associate the disease with cold, and this perception was performative. RA patients tended to talk about and follow the rules of dressing warm, avoiding cold food and drink, and it was popular to adopt treatment that expels cold, including moxibustion, hot spring, and burying oneself in the desert.

One of the purposes of consultancy is assisting with the implementation of recommended solutions (Turner, 1982). The Chinese word chosen by the consultancy industry to translate "assisting" was fūdǎo, which is a term associated with the meanings of coaching, tutoring, teaching, and mentoring, rather than assisting. The choice of the term suits the agenda of promoting the "growth, acceptance and pervasiveness of confidence in truth-claims" among management consultants (Christensen & Skærbæk, 2010, p. 524). In Z-Corp, while Chief Guang, the consultant in charge of the PMS project, was addressed as "chief" to indicate his status as a manager, the other consultant was addressed as Teacher Hao. Teacher is an honorific way to address others in East Asian countries where Confucianism is influential. It is common in China, Japan, and Korea to address people who are established in their field as teachers because it is a respectful appellation. The consultants told the observer that consultants would address each other as teachers when they worked in other firms, which was another discourse that fell into the technical genre and a strategy to signal professionalism.

In addition to choosing existing Chinese terms to translate a new concept, new compound words were also invented while new concepts and practices were introduced. As a tonal and logographic language, Chinese utterances have significantly fewer syllables compared to many

²² Chief $(z\check{o}ng)$ is derived from the term for chief manager $(z\check{o}ng\,j\bar{\imath}ngl\check{\imath})$, which is a common title prefixing last names to refer to firm managers and owners in general.

other languages (Hue & Erickson, 1988; Latash, Sun, Latash, & Mikaelian, 2011; Yu, Liu, & Xu, 2011). The Chinese language is often used as an exemplar for monosyllabic language (Goh, 2000; Kennedy, 1951) because Chinese characters are monosyllabic, and each character has its own meaning, which makes it convenient to invent new compound words. This resonates with the fact that most of the Chinese vocabulary is compound lexeme. For example, the Chinese term for the laundry machine, xiyiji, has three characters, which means wash-clothes-machine, respectively. Household ovens only started to become popular in China in the past few years, and the term, $k\bar{a}oxi\bar{a}ng$, is literally baking-container. This explains the reason why it is common in the English language to use existing words for new phenomena, such as shares, futures, and spreads in finance, whereas new terms were coined for these financial items in Chinese as gujen (portion shared, as shares), $q\bar{\imath}hu\dot{o}$ (scheduled time commodity, as futures), and $ji\dot{a}ch\bar{a}$ (price difference, as spreads).

While the compound terms are meant to be simple and descriptive, they can also leave linguistic gaps for language users to exploit. In the PMS project, a number of compound words contain the character $bi\bar{a}o$, which could mean mark, label, target, standard, etc., depending on the context. The term $mùbi\bar{a}o$ (mù means eye or list) was used as goal or objective in the performance evaluation form (Table 1 is an example); $zhibi\bar{a}o$ (zhi means index or finger) was used for performance indicators in the form; whereas $duibi\bar{a}o$ (dui here means to compare with) was the term for benchmarking. Boedker and Chua (2013, p. 249) suggest that accounting is an "affective technology" that circulates "hope, desire, passion, fear, anxiety and the like," so were these performative terminologies. The character $bi\bar{a}o$, often associated with target and standard, invoked and circulated confusion and anxiety in Z-Corp. Actors were defensive against the benchmark because the term $duibi\bar{a}o$ literally meant the practice was compared with the standard. The term $zhibi\bar{a}o$ as indicators invoked the confusion that the indicators themselves were the objectives, or $mùbi\bar{a}o$.

The consultants were not the only actors who exercised the technical speech genre. When a middle-level manager complained to the consultants about quantifying certain performance measures, she used the word *shùzì huà* for quantification. *Shùzì* means numbers, and *huà* means "-rization/-fication." If we do not consider the speech genre of the language, the term may be simply translated as quantification. However, the use of the term contains more information. The standard translation for quantification is actually *liànghuà*, whereas the term *shùzì huà* is for

digitization. If we look into the specific situation of this speech event—negotiating KPI for employees in her department in a semi-formal meeting of negotiation with consultants hired for the project, we can sense that the department manager tried to look for professional terms to support her argument and making up such term when the professional vocabulary was absent. The "-rization/-fication" word provided more sense of formality and management literacy than the expression "using numbers to present."

While the above semantic translations were in the technical genre, the translation of position was a choice between the technical and the contextual genre. Individual job position in Z-Corp could be referred to as either *zhiwèi* or *găngwèi*. While both terms meant positions, they indicated different speech genres. The term zhi is semiologically associated with the term profession, thereby fell into the associative group of professionalism, expertise, and international. It thus belonged to the technical genre. The term găng, on the other hand, is semiologically associated with sentinel, and thus intertextually connected to the SOE context. It is, therefore, an utterance of the contextual genre.

Pertaining to the term găng, the consultants used dinggăng dingbiān for setting jobs and roles. Ding is to decide, to set up; găng was the contextual generic term for position/post/job. Compared to găng, the term biān (to arrange) signals more SOE connotation because of the ways in which the term had been used historically. Biān was intertextually associated with biānzhì (to arrange-institution), loosely translated as "establishment of post" and refers to all positions that have been officially created (Brødsgaard, 2002; Burns, 2003), including administrative positions in the bureaucracy, public institutional²³ position in important sectors such as education, traditional media (television, radio station, and newspapers), medical sectors, SOEs (State Council, 2008) and etc. The biānzhì practice was often compared to the Soviet Union practice of "nomenklatura," but the latter focused more on vetting personnel appointments. Positions with biānzhì were considered desired jobs in China during the period of the planned economy prior to the 1980s and early 1990s when industries were mostly run by the state. Biānzhi continues to be considered by the older generation today as a symbol of job security and social status. Using the term dinggăng dingbiān for setting jobs and roles was thus the consultants' choice of the

²³ Similar to public sector in North America, include municipal services, hospitals, schools, universities, etc., but exclude government sectors (administration, legislation, police, etc.).

contextual speech genre. Translating jobs and roles into this SOE informed term signalled that the "reform" was not substantial and there was no need to resist.

The contextual genre was adopted when the technical genre did not work. Those who did not convince by the technical genre of speech were usually the cynical actors who perceived the strategies of speaking in the technical genre as lack of sincerity. Some of them commented to the consultants, "aren't you just here to help with cutting our salaries, even if you call it reformation of the compensation and the performance management system." In this case, the technical genre of speech was recognized as a manipulative gesture by the addressees because of their individual intertextual background. The consultants thus had to transmute their speech genre from a technical associative group to a contextual associative group of the SOE context to show that there was virtually nothing new to the new system. Switching from the technical to the contextual genre of speech was strategically arranged because the ones who argued against the advancement of modern management knowledge often used the specific historical and social contexts of the SOE as counter-arguments.

5. Discussion and Conclusion

This paper has probed the ways in which language and translation (linguistic) can mediate the negotiation and translation (sociology of) processes of accounting practice.

Language is not often considered as a practice in studying accounting practices. Speaking is a practice, but it is more than a practice. The nuances, such as speech genres, cannot be captured if we treat speech events as any other activities. Rather, specific linguistic frameworks such as semiology and the Bakhtinian notions are required to analyze these subtitles. Similar to Quattrone (2009), the PMS was never complete because the designers were never omniscient, and thus gaps—e.g., between the text and the practice—were always left for the users to appropriate and colonize (p. 104). Actors thus could strategically bridge the linguistic gaps while filling the incompleteness of the PMS. They could appropriate these linguistic gaps through intertextual strategy because "a text is linked to more than one set of generic features, to a genre that is itself mixed, or to both" (Briggs & Bauman, 1992, p. 154). The choices of Chinese words through translation and the choices of genre yielded substantial space for the consultants to interpreted the incomplete PMS. The technical was the first speech genre that the consultants would try to convince the actors in Z-Corp to adopt their PMS plan. The technical genre was

exercised through translation strategies of copying without translation and transliteration, as well as the intertextual strategy to associate free translation terms and freely chosen terms with the associative group of words with technical connotations. When the technical genre of speech was could not persuade the addressees who used the SOE context as discursive resources, the consultants would switch to the contextual genre of speech.

Strategies for minimizing and maximizing intertextual gaps can draw on a broad range of features, and this study shows how linguistic translation and choice of genres can be strategized for such purpose. It demonstrates how different ways of translation had different implications on how an utterance was linked to its generic precedents and on how practitioners connect the new terms to their existing world intertextually. Intertextual gaps were minimized when the consultants intendedly associate the vocabulary of new knowledge with scattered known vocabulary within the audience's cognitive system. On the other hand, intertextual gaps were maximized when the consultants distance the term while translating knowledge, whereby the recipients could embed the knowledge in the known system. The consultants chose their genres of speech strategically based on their audience and the situation.

In semiology, signs are only meaningful when they are understood in relation to other signs within the same system. Structural semantics studies the relationships between the meanings of terms within a sentence, as well as the ways in which meanings are aggregated by smaller elements. Smaller structural units aggregate to more substantive meanings through existing knowledge and sign users' practices. In fact, without existing knowledge and sign users' practices, such aggregation will be meaningless. Therefore, studying this aggregation of smaller unities into a larger scale requires the examination of the relations between one smaller unit and another, and the formation of those units into conventions. This characteristic of signs can be used strategically by addressers of utterances if they understand how smaller structural units can aggregate to more substantive meaning in a language. Understanding signs is fundamental to understand how and why meaning gets to make the way it does. We have shown in this study how the consultants used the signs strategically so that they could be associated with a specific speech genre and thereby exploit the incompleteness of PMS. The addressers directed their utterances to certain pools of citationality by choosing a signifier while translating and thus produce a corresponding interpretant.

The main contribution of this study lies in the explication of the role of linguistic analyses in accounting practice. As Zald (1993) argues, "If you believe that organizational behavior and written texts require interpretation and that interpretation requires formal method, then you will have to come to terms with those parts of the human sciences and literary theory that specialize in systematic analysis of meaning" (p. 520). Whereas Zald's conception of linguistic relevance still focuses on philological analyses (the roots, transformation, and alternative usages of terms) and their extensions (the roots, transformation, and alternative usages of practices), this study takes the applications of linguistic analysis beyond just interpretation, expanding the applications to include the reproductive analysis. Peirce (1878) notes that "the opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in this opinion is the real" (p. 407). In this sense, the interpretant is more important in accounting practice rather than what is signified. We learned from previous accounting literature that accounting practices often drift from what is intended when they are introduced into an organization (Miller & Power, 2013, p. 587). This study highlights linguistic gaps as a way of such displacement. As Cooke (1997) describes Habermas's idea in his Language and Reason: A Study in Habermas's Pragmatics, "[Communicative] rationality refers primarily to the use of knowledge in language and action, rather than to a property of knowledge" (p. 38).

As Law (1994), the incompleteness of orders may often be the norm (Quattrone & Hopper, 2005). Accounting inscriptions are always incomplete if we take linguistic gaps into consideration. Nevertheless, linguistic gaps could also provide fluidity for accounting inscriptions. When reviewing early ANT studies in accounting, Justesen and Mouritsen (2011, p. 174) note that fluidity and heterogeneity make the technological objects involved in the management less certain than expected, and technology does not produce stable organizational practices when it is not stable. However, later ANT studies, such as De Laet and Mol (2000), show that fluid technologies not only function, but can also travel further because of the fluidity. Recent studies on PMS have also shown that incomplete PMSs also function (Dambrin & Robson, 2011; Jordan & Messner, 2012). Notwithstanding the functionality of incomplete accounting inscriptions, they may not be as powerful control "at a distance" (Robson, 1992, 1994) as we previously learned, especially with controls involving cross-language, because to

control from a distance, accounting inscriptions need to be "immutable mobiles" (Latour, 1987, 1990), but the pervasive language gaps render inscriptions "mutable."

This "mutability" is referred to as "unfinalizability" in Bakhtin's framework, which is characterized by the unclosedness and indeterminacy of words (Bakhtin, 1984). The concept of unfinalizability echoes ANT's ontological preference of "the model of translation" as opposed to "the model of diffusion" (Latour, 1987, p. 132). The translation model of ANT warrants that accounting phenomena appearing to be identical (immutable mobiles) become different things when they are translated in practice. They are translated rather than diffused when they travel (Justesen & Mouritsen, 2011, p. 172). The translation model also applies to language. In fact, it is so intuitive to language that ANT scholars chose the term translation for their key theoretical notion. According to Bakhtin (1984), "Nothing conclusive has yet taken place in the world, the ultimate word of the world and about the world has not yet been spoken, the world is open and free, everything is still in the future and will always be in the future" (p. 166). This implies that accounting practice, while can be defined and described, cannot be finalized, which is Bakhtin's view of heteroglossia. Specifically, in this study, the PMS format can be prescribed, but the prescriptions would be interpreted and perceived as a variety of different things. Notwithstanding Bakhtin's recognition of the enormous variety, he is able to conclude, unlike Saussure, that the immediate reality of living speech can be studied, for although "each separate utterance is individual...each sphere in which language is used develops its own relatively stable types of these utterances" (Bakhtin, 1986, p. xvi).

Indeed, the role of living speech can be studied through explicit approaches. In their study about assembling performance measurement through engagement, Martinez and Cooper (2019, p. 3) discuss how accounting devices can be embedded in one another through recontextualizing practices. They draw the concepts of decontextualization and recontextualization from Hull (2012) and Goody (1977) that describe how an artifact is decontextualized, disconnected from some of the elements it was associated with, only by being recontextualized, brought into association with other elements. Hull (2012, p. 24) discuss such approach was also used for orally mediated texts by referring to the various dimensions of semiotic transformation—framing, form (from grammar to genre), function, indexical grounding, and translation—that Bauman and Briggs (1990, pp. 75–76) identify. This idea of decontextualizing and recontextualizing elements associations parallels Kristeva's (1980) notion

of intertextuality, and Briggs and Bauman (1992) use intertextuality for a similar argument. Although radically decontextualized or drawn into new associations may undermine bureaucratic ambitions in Hull's (2012) study, such decontextualization could also revive the devices and serve different purposes if what being decontextualized are the linguistic components' associations.

Whilst the approaches of analyzing language and linguistics and approaches of studying practices can sometimes be used interchangeably, intentionality is a necessity if the role of language is concerned. In introducing Schatzki's (2002) practice theory, Ahrens and Chapman (2007) note that social order arises from actors' ongoing efforts at developing their actions as part of the fields' understandings, rules, and engagements. Actors may want their actions to blend in or stand out depending on their judgement of what the situation calls for. The jettison of human cognition means that ANT lacks such attention to understandings, rules, and judgement of what the situation calls for, whereas the consciousness of expecting others to behave in a certain way and perceive certain utterances in a certain way (Barthes, 1988) is essential to understand how and why linguistic gaps are appropriated.

The renewed attention to intentionality and language also opens a new perspective of studying accounting consultancy practice. Consultancy is a phenomenon often referred to when studying the development, introduction, adaptation, and popularization of accounting knowledge and practices (Christensen & Skærbæk, 2010; Chua, 1995; Cooper et al., 2017; Gendron, Cooper, & Townley, 2007; Humphrey, 1994) and we tend to focus on the processes wherein accounting is put into motion and on the consequences and interactions that happen afterwards. This paper, however, takes a step back by examining the moment before accounting comes into existence, i.e., the moment wherein consultants choose the appearance of accounting, which contributes to a more complete understanding of the formation of accounting practices. We thereby "fundamentally extend the analysis of the productive role of management consultants in the translation and diffusion of innovations." (Cooper et al., 2017, p. 993)

There are two more insights that we would like to draw from this study; one of them is regarding a post-colonialist implication. The reason that the copying without translation and transliteration strategy could be used for the technical genre and signal a sense of advanced practice is the common belief that things associated with Western, Anglo-American is better. The direction of how knowledge travel also shows the Anglo-American domination of

management knowledge. Modern Western management knowledge was initially introduced to China during the colonial period in the 19th and early 20th centuries. According to historian David Faure (2006), the adaptation to company law and legal standards of accounting in the 19th century not only facilitated the modernization of Chinese business but also ended the traditional reliance on contracts as well as on ritual propriety, which in turn disintegrated certain cultural and ritual practices. The emergence of the pidgin language of Chinese transliteration of English was also dated from the colonial period. Hóng máo tōngyòng fān huà (The Common Expressions of the Red-Haired People) was dated around 1843, which contained transliterations of English into Chinese characters to be pronounced in the Cantonese dialect. Before this, the Chinese interlanguage was Portuguese (Bolton, 2003; Nakassis, 2013; Simpson, 2017).

Colonialism/imperialism persists today in global management knowledge from different perspectives. For instance, Nkomo (2011) finds the necessity to study African leadership and management with a postcolonial and anti-colonial perspective when she taught management in Africa, but the required textbooks were from the United States.

We have been discussing the roles that language and translation play in accounting practice; our final remark would like to highlight the reverse perspective where accounting practice shapes language and translation. Stalling and Schleifer (2020) propose an Actor-Network Translation Studies (ANTS) based on ANT. They believe the complexity of ANT "distinguishes ANTS from other sociological theories of translation insofar as this term situates translation as a property of larger complex systems made up of translators and organizational institutions that grow out of and govern the situations they work in" (p. 24). Indeed, translation is a collective endeavour rather than only the translators' own work. The consultants in this study did not translate the initial English knowledge of PMS into the Chinese language. Nevertheless, their ways of introducing the knowledge, along with the ways in which other actors perceived and re-produced the translations would recursively shape the future of the pertaining language.

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Table 1. Performance Indicators of the Accounting Department

Performance Indicators of the Accounting Department

File Number:

Firm:	Z-Corp	Department:		Accounting Department		Time:	The Third Quarter	
Key Performance Indicator (100%)								
Indicator classification	Indicator name	Weight	Evaluatio	n Standard	Objec tive	Data source	Actual comple tion	Score
Financial Indicators	1.total profit	10%	three major e business tax Score 10 poin achieving the each 1% abo	expenses - and surcharge. ints for e target; For		Accounting Department		
	2. Receivables	10%	accounts reco	neet the of the e, reduce the eivable. Score achieving the ach 1% target,		Accounting Department		
	3. Financing	15%	Complete the task according business need points for acl target. For each above/below add/deduct 1	e financing ag to the ds. Score 15 hieving the ach 1% target,		Accounting Department		
	4. Business Hospitality	5%	Score 5 point achieving the each 1% abo target, add/de	nent fees, etc. ts for e target. For ve/below educt 1 point.		Accounting Department		
Classified Indicators	5. Number of Accounting Errors	20%	Score 20 point achieving the	ocuments, rocesses, etc.	0 time	Accounting Department		

	6. Financial analysis report	15%	Not meeting expectations (0-59 points), partially meeting expectations (60-80 points), meeting expectations (81-100 points), exceeding expectations (101-120 points). Evaluation score need to be divisible by 10, i.e., 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120 points.		Accounting Department	
	7. Comprehens ive budget management	10%	Complete the adjustment and reporting of the comprehensive budget plan within the specified time. Score 10 points for achieving the target, and deduct 1 point for each day of delay.	0 day	Accounting Department	
	8. Export tax rebate cycle	15%	The export tax rebate will be completed within the specified time (from the date of shipment of the goods to the tax refund) according to the requirements. Score 10 points for achieving the target, and deduct 1 point for each batch goods of delay.	45 days	Accounting Department	
	1. Cash concentratio n ratio		The cash concentration ratio should reach or exceed 85%. Deducted 2 points if not reaching 85%, otherwise no deduction.		Accounting Department	
Restrictive Indicators	2. Controllable administrativ e expenses		Regularly analyze the administrative expenses and provide early warning. Deduct 3 points if not completed, otherwise no deduction.		Accounting Department	
	3. Pay tax on time	_	No overdue tax payment, no overdue fine is incurred (subject to the taxation penalty form of the tax bureau). Deduct 0.5 points for every1000 yuan of loss caused by the Accounting Department.		Accounting Department	

	4. Foreign exchange policy implementati on		Implementing foreign exchange policy and maintaining relations with the foreign exchange bureau. If any downgrade of the firm is caused by the Accounting Department and affects the normal operation of foreign trade business, deducted 5-20 points according to the severity of the situation. 2 points are granted if no incident occurs during onsite auditing for 4 consecutive quarters.		Accounting Department		
	5. Salary calculation		No error in the salary calculation. For every 1 error, 1 point is deducted, up to 3 points of deduction.		Accounting Department		
	6. Performance contracts signed on time		Whether the performance contract was signed on time. 2 points deduction for not completing on time.		General Service Department		
	7. Departmenta l training		Complete internal department training as required, deduct 1 point for missing one time, up to 3 points of deduction.		General Service Department		
	Total score:						
Additional notes from Vice-President in charge:							
Signature Y M D							
Additional notes from President:							

Notes:

Signature

- 1. After the performance evaluation, please attach the relevant data involved in the assessment as an attachment (signed by the information source department or individual), and attach it to this performance evaluation form;
- 2. Quarterly KPI assessment score = \sum KPIi;

Y M D

3. The score of the financial indicators has "no ceiling above no protection below;" If there is too much deduction in a single item and the score is less than 0, record 0 for the item. The score of a single indicator of the Classified Indicator fluctuates within 20%; For Restrictive Indicators, the maximum score is 20 points, and the extra awarded points are no more than 20 points.

Table 2. Copying without translation from English into different languages

English	A benchmark is a point of reference by which something can be measured.
French	Un benchmark est un point de référence par lequel quelque chose peut être mesuré.
Japanese	ベンチマークは、何かを測定できる基準点です。
Chinese	Benchmark是可以测量某些东西的参考点。

Figure 1. The triadic relationship of sign, referent, and meaning (Jamani, 2011, p. 193).

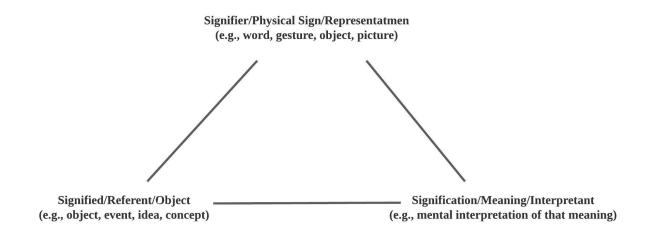


Figure 2. The triadic relationship of spokesman, actant, and interpretant

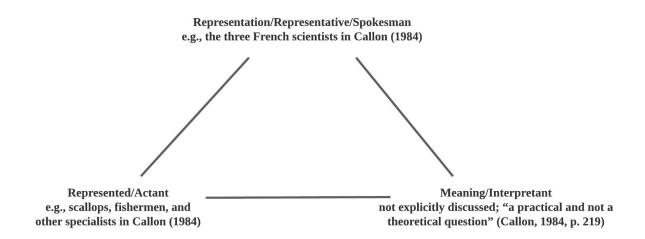
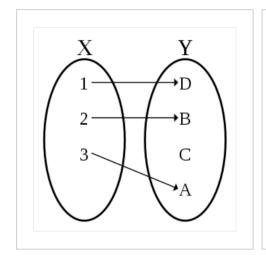
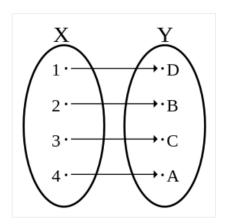


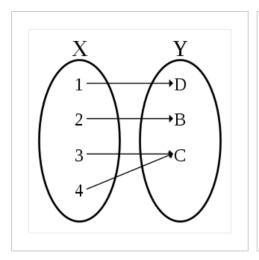
Figure 3. Bijection (one-to-one correspondence) ("Bijection," 2020)

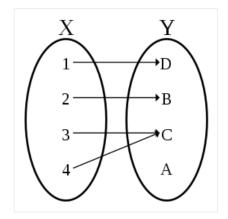




An injective non-surjective function (injection, not a bijection)

An injective surjective function (bijection)





A non-injective surjective function (surjection, not a bijection)

A non-injective non-surjective function (also not a bijection)

CHAPTER 5: DRAWING THINGS TOGETHER

Chapter 5 Drawing Things Together

1. Pushing the Boundaries

This dissertation has undertaken two tasks thus far. The first is to extended actor-network theory (ANT) influenced accounting research by highlighting the multiplicity of reality (Chapter 2), probing the dynamics of stability (Chapters 2 and 3), proposing the significance of language and translation (Chapter 4). The second task is to push the ontological, epistemological, and methodological boundaries of ANT not only for accounting studies but ANT research in general from a variety of perspectives, including the flat ontology (Chapter 3), materiality (Chapter 3), radical symmetry (Chapters 2 and 4), as well as the linguistic perspectives (Chapter 4). In this concluding chapter, I would like to incorporate a degree of "reflexivity" (Latour & Woolgar, 1986, p. 278) by discussing where ANT has taken us and "what is at stake" (Mol, 1999, pp. 81–83). It misses the point to describe ANT abstractly because ANT should be grounded in empirical case studies (Law, 2009, p. 141), but we may need a summary of ANT's ontological standpoints to encapsulate what this dissertation has done in pushing the boundaries of ANT. Baxter and Chua (2017, p. 443) proffer a remarkable summary of ANT's ontology in four principles: generalized symmetry, recursivity, radical indeterminacy, and performativity.

Generalized symmetry means approaching non-human actors the same way as human actors (Callon, 1984; Latour, 1987, 1994), which is also referred to as radical symmetry by some other authors (Brown & Capdevila, 1999, p. 32; Collins & Yearley, 1992, pp. 312–318; Harbers, 1995, p. 274; Whittle & Spicer, 2008, p. 612) to distinguish it from the symmetry in earlier sociology of scientific knowledge (SSK) (Bloor, 1973, 1976). Chapter 2 and Chapter 4 stretch the boundary of this principle in two domains, respectively: cognition and language. Cognitive capacity was required for human actors in Z-Corp to perceive and act according to different realities in Chapter 2. Moreover, subjects were constructed through the construction of performance measurements. The PMS inscriptions were attachments to human actors that were associated with distributed subjects. Human linguistic abilities were essential to both the strategic use and perception of linguistic gaps in Chapter 4. There are, however, more issues with radical symmetry than the cognitive and the linguistic ones addressed in this dissertation, which will be discussed in section 2 of this chapter.

The principles of recursivity and radical indeterminacy were stretched in Chapter 3. Recursivity reflects that ANT "is more concerned with changing recursive *processes* than is usual in writing influenced by structuralism" (Law, 1994, p. 18, emphasis in original). Radical indeterminacy refers to "a more nuanced construction of actors' interests" as opposed to "the result of invariant macro-interests" (Baxter & Chua, 2017, p. 444). Both recursivity and radical indeterminacy are tied to the flat ontology, which hinders the discussion of cultural, political, and institutional contexts. Chapter 3 proposes to treat contexts as punctulization—the process that converts "an entire network into a single point or node in another network" (Callon, 1990, p. 153). However, this process of punctualization and chains of representation may render ANT monadological, which will also be discussed in the next section.

This dissertation does not push the principle of performativity (Callon, 1998; Garcia-Parpet, 2007; MacKenzie & Millo, 2003; Miller & O'Leary, 2007) ontologically. Rather, Chapter 2 explicates the consequence of such performativity—the reality multiple. Mol (1999) argues that if we acknowledge the reality we live is one performed in a variety of practice, it must mean that the reality itself is multiple. Such multiplicity of reality has been discussed in the studies of science, technology and society (STS) (Dugdale, 1999; Law & Singleton, 2005; Mol, 1999), but not yet in accounting. Chapter 2 thus highlight how accounting performs multiple reality and how multiple reality enacted by accounting coexisted, relied on, and opposed to one another.

In addition to pushing the ontological limits of ANT, this dissertation also probes in its empirical settings the issue of stability, which is a topic called for further investigation in both the accounting and STS communities (Baxter & Chua, 2017, p. 447; Law, 2009, p. 148; Robson & Bottausci, 2018, pp. 71–72). Chapter 2 shows that stability is also multiple: an unstable network in one reality may be a stable one in another reality; stability and instability can be caused by representational validity in other realities. In Chapter 3, stability has to do with how contexts perpetuated their existence. In Chapter 4, stability is associated with the Machiavellian translation in bridging linguistic gaps.

The challenges to the ontological boundaries of ANT may be seen as transgressions. Nevertheless, without pushing the boundaries, "we will never do any better" (Latour, 1988, p. 256). This concluding chapter will reflect on two main criticisms about ANT and thus bring in a critical spirit to ANT-inspired accounting research. As Baxter and Chua (2017, p. 445) note, the

awareness of arguments raised against ANT endeavours "may inform a more reflexive application of ANT and developments in critical accounting research."

2. Radical Symmetry, Monadology, and Conservatism

ANT advocates that actors bound together in a heterogeneous network are constituted by their involvement with one another. For us to recognize this co-construction of machines by humans and humans by machines, we must be prepared to grant machines the status of active actors rather than passive objects (Lee & Brown, 1994, p. 775). In justifying the radical symmetry, the key ANT authors often use a discourse of liberal democracy. For example, Latour (1992) uses an anthropomorphic expression to explain the advent of "the missing masses" in sociology:

Here they are, the hidden and despised social masses who make up our morality. They knock at the door of sociology, requesting a place in the accounts of society as stubbornly as the human masses did in the nineteenth century. What our ancestors, the founders of sociology, did a century ago to house the human masses in the fabric of social theory, we should do now to find a place in a new social theory for the nonhuman masses that beg us for understanding. (p. 227)

Law (1990) also makes a liberal democratic argument that "the distribution between people on the one hand, and machines on the other" is a form of speciesism (p. 8):

Most sociologists treat machines (if they see them at all) as second class citizens. They have few rights. They are not allowed to speak. And their actions are derivative, dependent on the operations of human beings.

It is possible to be highly offensive about this failure. It is, for instance, possible to draw analogies between the position of women or blacks, and the position of machines. But the very fact that this is offensive (and I accept that it is) makes my point. It reveals that we are truly speciesist. And that it is improper, obscene even, to draw analogies between people and machines, except as a joke, a slur, or an elaborate metaphorical game. (p. 16)

Comparing the status of machines to those of women or blacks is truly provocative. This liberal-democratic enfranchisement of the non-human, as Lee and Brown (1994, p. 776) comment, is also "rather risky, because if we endorse the principal of equality (and who would dare not to, in

principle), we must then be prepared to apply it without fear or favor, or accept that we are prejudiced." Nevertheless, such ideal universal enfranchisement is neither quite empirically feasible nor as innocent on the theoretical level as it seems.

Empirically, it seems ANT scholars had to rely on human actors' accounts to document the predispositions and actions of non-human actors. Take Callon's (1984) study on the domestication of the scallops and the fishermen of St Brieuc Bay as an example: Callon acquired the knowledge about the scallops from the three French scientists rather than learning directly from the scallops. Collins and Yearley (1992) comment that it is not clear how radical the symmetry is in ANT because it seems that only the vocabulary is radical. They re-write Callon's anthropomorphic account on how scallops "negotiated" with the scientist and "detached" themselves from the researchers' project using the conventional language of the history of science. The two accounts turn out to convey the same information. Bloor (1999) makes a related comment that despite what Latour says, the ANT account is "deeply asymmetrical because it puts all the explanatory weight on society and none on nature" (p. 84).

In addition to relying on the accounts of the human actors in the narratives, another approach often used by ANT scholars to describe how the non-human actors behave is the counterfactual method, which is to imagine other possibilities of non-human actors' behaviour. For example, if we do not fasten the seat belt, the car would not start (Latour, 1992); we would not have a functioning door it was not the hinge, in which case we would have to break part of the wall and rebuilt it each time we pass, or leave a hole where cold winds could enter (Latour & Johnson, 1988). Collins and Yearley (1992) criticized the counterfactual method "as such a rich source of jests precisely because the writer is in complete control over the counterfactual scenario" (p. 319).

According to Collins and Yearley (1992), ANT scholars need to go beyond the history of science and become an authority on the non-human actors—e.g., scallops, doors—rather than merely report the scientists' view on the matter or simply use a counterfactual method, in order to warrant the generalized symmetry that ANT avows. Yet paradoxically, the authorities of non-human actors are the natural scientist, who are symmetrically placed in the narrative by ANT scholars. This comment provides an insight into studying accounting practice because instead of maintaining analytical distance, as Latour and Woolgar (1986) suggest, accounting scholars can be experts on accounting artifacts and practices. The expertise on the non-human actors provides

interpretive accounting scholars with an advantage in conducting ANT-inspired sociological work on accounting practice compared to sociologists.

Apart from the empirical feasibility, there are also theoretical grounds for being suspicious of ANT's universal enfranchisement. Many criticisms about ANT refuse to give non-human actors agency, whereas Lee and Brown (1994, p. 772) bring attention that human is more than agency:

Asking the question of nonhuman agency opens discussion by problematizing the nonhuman and leaving the question of human agency itself unasked. Unfortunately, this presents us with a problem. The question encourages us to accept the axiom "to be human is to possess agency" and then to proceed to discuss the propriety of extending agency to the nonhuman. Thus any definition of agency produced under this rubric and used in ensuing debates should properly have its origin in our understanding of the human as agent.

This dissertation has shown that unlike machines, humans are "held responsible for our actions" (Lee & Brown, 1994, p. 773), are susceptible to "public secrets" (Radcliffe, 2008, 2011; Taussig, 1999), understandings of how to do things, rules,²⁴ teleoaffective structure²⁵ (Schatzki, 2005, p. 471), and speech genres (Bakhtin, 1981, 1984, 1986), and are ontologically distinct language carriers (Collins & Yearley, 1992).

Notwithstanding the reduction of humans to agency, Lee and Brown (1994) consider the bigger risk of ANT is its tendency to colonize or homogenize the "Other." When scientists contrived to become the "obligatory passage point" (Callon, 1984; Ezzamel & Xiao, 2015; Latour, 1987) for the scallops (Callon, 1984), one no longer needs to consult the scallops themselves on any matter concerning their well-being (Lee & Brown, 1994, p. 784). Non-human actants, along with human actants, are represented by representatives. Representatives in one network will then be re-presented in a longer network. Networks are converted into a single point or node in another network, which Callon (1990) refers to as punctualization. Such punctualization creates a network hierarchy that resonates with a striated space, where "All lines (routes, connections) are subordinated to the point, and all points are made to resonate with the

²⁵ A teleoaffective structure is "an array of ends, projects, uses (of things), and even emotions that are acceptable or prescribed for participants in the practice" (Schatzki, 2005, pp. 471–472).

²⁴ Rules are "explicit formulations that prescribe, require, or instruct that such and such be done, said, or the case" (Schatzki, 2005, p. 471).

center" (Lee & Brown, 1994, p. 784). ANT is thus a form of monadology that "gives us a monstrous genesis without offering an exodus" (Lee & Brown, 1994, p. 785). One of the problems caused by such monadology is ANT's "heroism" (Law, 1990, p. 12) that is discussed in Chapter 3. Oxymoronically, this foreclosure on all alternative descriptions of the world is through the assertion of total democracy and complete ontological monadism (Lee & Brown, 1994, p. 781).

Pertaining to monadology, some scholars observe ANT as politically conservative (Bloor; Law & Singleton, 2013; Tinker, 2005). In my view, ANT's conservatism comes from its legitimation of the status quo. The title of this concluding chapter quotes the title of Latour's (1990) book chapter wherein Latour discusses the division between the West and the rest. Consistent with Latour's (1987) argument in Science in Action, this chapter rejects the idea that there was a decisive event that led to the division. Rather, the series of small technologies printing, cartography, visual depiction, etc.—recursively generated manipulable representations, thereby generated centres of control. Latour (1987, p. 258) considers the settlements of controversies to be causes rather than consequences of society. This constructivist view has an implication that the society did not cause the poor to be poor, the dominated to be dominated, and the colonized to be colonized. Rather, the reason why the colonized are colonized is that they did not win the settlements if controversies. If we continue to ask why did they lose the settlement, Latour's explanation would be the stronger or weaker associations between the actors, or the more or fewer resources mustered by the actors to persuade others. ANT contrives to deconstruct the taken-for-granted facts in order to show that the status quo is a random consequence and "life could be otherwise" (Baxter & Chua, 2017, p. 446). This constructivism ought to be deconstructed because the alternative options seemingly being everywhere always end up elsewhere, and there are always other things at stake (Mol, 1999, p. 80).

Law (1990) acknowledges that ANT tends to ignore the fact that quantitative difference can turn into a qualitative difference. To Latour (1990), the difference between the West and Rest is a consequence of the cumulative small technologies. What ANT does not take into account is that such accumulated quantitively difference can turn into a qualitative, exploitative global system as argued by dependency theorists (Caporaso, 1978; Namkoong, 1999; Santos, 1970). Is such a global system natural and innocent if it is recursively developed through series of small technologies (Latour, 1990) and if it is just a "consequence" (Latour, 1987) of the

inability of the Global South to develop technologies? The status quo then becomes legitimate because we cannot blame a consequence and because things could have been otherwise: you had your chance, and it just did not turn out in your favour. The reason for this consequence is the losers did not have more resources and deploy more effective strategies, which assumes resources are neutral and randomly distributed within the society. Such discourse may be good to tame the subaltern and make the lower social class, women, people of colour, the disabled, aged, etc. believe that their fate is consequential of recursive activities, but is conservative indeed for emancipation, progression, and other critical endeavours that require activist worldviews.

The constructivist view of cause and consequence is evocative of the Buddhist concept of karma, which means actions and their effects. The destinies of individuals are the results of their good and bad deeds in the past, in this life or in a previous life. Such a rationale, once internalized, would reduce the possibility of rebellion and revolution because the governed are meant to be governed. Kent (2009, p. 21) draws the parallel between karma and other dominant ideologies that advocate the interests of a ruling elite, which are internalized, appropriated and/or transformed by socially and politically subordinated groups:

Did American slaves internalize the Pauline endorsements of slavery preached to them by their masters (Martin 1998)? Do Muslim women internalize demeaning representations of their supposedly dangerous and uncontrollable sexuality by conservative Muslim clerics? Do Hindu Dalits and members of low castes believe that their social marginalization is deserved as a result of karma earned through the sins of a previous life? Under what conditions do subordinate groups contest the identities ascribed to them and reject the destinies that are assigned to them as a result?

Similarly, do the colonized and the Global South believe the world order to be a consequence of recursive technological development, rather than exploitation?

Society, as a consequence of the settlements of controversies, also has its own consequence. This is the reason why Chapter 4 stresses the awareness of the consequences of institutionalized contexts, even though they are the consequences themselves in the ANT ontology.

3. A More Critical ANT for Accounting

Albeit I promised in Chapter 1 that I am not developing critical theories on ANT with this dissertation, at the end of this journey, I am calling for the combination of accounting and critical theories. Whilst ANT has been a popular theoretical framework and approach in qualitative accounting research, the main criticism it faces in the accounting community is its "uncritical" nature. Critical research, on the other hand, risks becoming "obsessed with and epistemological and ontological dilemmas" (Baxter & Chua, 2017, p. 443). What, then, prevent us from combining the strengths of both strands of research? Is it because of ontology, fidelity, or creativity?

The fact is that ANT is never a monolith, and it is never pure. Law (2009) suggests that actor-networks "can be seen as scaled-down versions of Michel Foucault's discourses or epistemes" (p. 145). Latour observes that we might talk of actant "rhizomes" as in Deleuze and Guattari (1987) instead of actor-networks (ibid). Bourdieu's student Garcia-Parpet's (2007)²⁶ work about the strawberry auction has been considered as an ANT study, although it was independent of ANT and was developed through Bourdieusian material semiotics. To Law (2009), ANT is "an empirical version of poststructuralism" (p. 145). It is not a theory because theories explain why something happens, whereas ANT is descriptive rather than explanatory (p. 141). Thus, a "real" theory is required if we attempt the "why" questions with ANT. ANT diaspora in STS has been engaging with moral issues (Thompson, 2002), feminism (Haraway, 1991) and other progressive endeavours.

Accounting researchers have not been quite in compliance with ANT's ontology since the introduction of ANT to accounting. The early translation of Latour's work into accounting was by "combining some of Latour's concepts with a Foucauldian/institutional conceptual apparatus" (Justesen & Mouritsen, 2011, p. 169) (e.g., Miller, 1990, 1991; Robson, 1991, 1992). Robson (1991) brings the vocabulary of institutional theory into ANT analysis; even the concepts of institutions contradict ANT's flat ontology. Chua (1995) rejects the idea that non-human actors have agency. Accounting researchers have also "sometimes restrained the deconstructive impulse of ANT" (Ahrens & Chapman, 2007, p. 7; e.g., Mouritsen, 1999). In contrast to ANT's monadology that Lee and Brown (1994) criticize, Quattrone and Hopper (2005) propose multiple loci of control.

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²⁶ It was originally published in French as Garcia, M.-F. (1986). "La Construction sociale d'un marché parfait: Le Marché au cadran de Fontaines en Sologne." *Actes de la Recherche en Sciences Sociales*, 65, 2–13.

It is natural for accounting scholars to adapt ANT if we take into account the differences between accounting and technoscience. Undeniably, both accounting and technoscience are constructed, temporary, and fragile. Nevertheless, we may not assume that the extent to which institutionalized context, human cognition, and linguistic perspectives play roles are the same. Even within science, different disciplines suffer from different levels of "methodological horrors" (Woolgar, 1988). A problem may be deemed a problem in psychiatry, but not in medicine (Collins & Yearley, 1992, p. 307). Similarly, it would be naïve to assume that a Chinese SOE needed a PMS in this study as much as the Zimbabwean needed the Bush Pump in de Laet and Mol (2000). Hybridity has been the way of mobilizing ANT by various disciplines, and there should not be a one-size-fits-all prescription. As Latour (1987) notes, texts are to be brought downstream or upstream by other scholars.

Where does it leave us, then? The answer lies in the recurring quote throughout this dissertation: We, as scholars, make realities (Haraway, 1991); the only question is thus what kind of difference do we want to make (Law, 2009, p. 154).

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