

Organizations and Imagination: The Imaginary Institution of Risk Management

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*How is it with me? Light clouds bear me up –
My ponderous mail becomes a winged robe;
I mount – I fly – back rolls the dwindling earth –
Brief is the sorrow – endless is the joy!*
(Friedrich Schiller, The Maid of Orleans)

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Chapter 1

A big question, a smaller question and other provisions

What is the role of imagination in organizations? This is a simple question, since imagination can be encountered in many domains of human life, from arts to politics (Latimer and Skeggs, 2011), in philosophy and science (Heller, 1989; Weick, 1989). However, this question is broad enough to cause a kind of intellectual uneasiness, especially when we look to the ups and downs of imagination in the history of ideas, sometimes consecrated as a mark of genius, sometimes taken as a sign of wrongdoing in matters of objective knowledge (Daston, 1998). A closer reading of the literature of organization studies shows that this question entails, nonetheless, a genuine inquiry.

Imagination is a key feature of interpretation and action (Ricoeur, 1994), both of which are extensively present in organizations. Much has been said, for example, that organizations are interpretative systems and that people socially construct their reality inside organizations (Daft and Weick, 1984; Weber and Glynn, 2006; Weick et al., 2005). What is more, students of organizations have demonstrated an increasing interest in, just to mention a few, narrative and storytelling, language and discourse, rhetoric and metaphor (Rhodes and Brown, 2005; Czarniawska, 1997; Gabriel, 1995; Boje, 1991; Alvesson and Karreman, 2000; Morgan, 1980; Alvesson, 1993), all of which rely heavily on interpretation processes in organizations. It is thus surprising that in different volumes of organization studies one finds no comprehensive study of imagination, which remains addressed only in an allusive way (e.g. Reed and Hughes, 1992; Boje et al., 1996; Clegg et al., 1996; Tsoukas and Knudsen, 2003; Czarniawska, 2006). Such an omission seems strange and shall be addressed by exploring the question above. In this thesis, this broad question brought me beyond the walls of organization studies.

The fact that imagination remains a residual category in organization studies is a problem of the whole of sociology, which still grapples to develop a theory of creative action (Joas, 1992). The issue descends though into the deep roots of Western thought, for not only Kant has pushed imagination to the realm of aesthetics subsuming it to reason

(Markus, 1994; Rundell, 1994), but a long line of thinkers going through Aristotle, Hegel, and even Freud, has covered up the role of imagination in the creation and transformation of social reality (Castoriadis, 1995). One of the most comprehensive accounts of how acute this issue is for knowledge and social science was given by Cornelius Castoriadis in his book *The Imaginary Institution of Society* (Castoriadis, 1987b). The ideas advanced by him in this and other works are at the core of my thesis. Before explaining how they shall contribute to answering the question above, let me briefly present who this thinker was.

Cornelius Castoriadis was born in Constantinople in 1922. During the turbulent times that marked the emergence of the Turkish state, his family decided to move to Athens. In Athens, the young Castoriadis joined the Athenian Communist Youth, which, after getting in line with Stalinism, led him to drop out and then join the Trotskyist movement. In 1945, after being threaded by Fascists and Stalinists in Greece, Castoriadis departed to Paris where he joined Claude Lefort to found the journal *Socialisme ou Barbarie* (1949-65). This journal is credited to have influenced the student-worker activism that erupted in May 1968 in France. However, the revolutionary thrust of *Socialisme ou Barbarie* was more than a simple critique from the left. Not only capitalism was under its scrutiny, but also Marxism received severe critiques. This undertaking was, for obvious reasons, marginalized in relation to the contemporary dominant discourses (Whitebook, 1998).

Nonetheless, that period yielded a fruitful intellectual debate, in which Castoriadis stands out as a prolific thinker. The many periods of turbulence he experienced, such as the Metaxas dictatorship, the Second World War, the Nazi occupation, Greece's liberation and the Greek communists' *coup d'état* attempt, had certainly marked his thinking about society, politics, democracy, philosophy and science. Above all, those events pushed him to strongly embrace his own project of theorizing forms of autonomy within society. It was in this vein that, in his various theoretical reappraisals, he judged Marxian theory inadequate to explaining the contemporary problems of his time. His claim was that the revolutionary theory was not compatible with Marxism, since Marx incurred in a series of shortcomings in his theory, which is characterized, according to Castoriadis, by a technological determinism and doctrinal economics (Castoriadis, 1984; Castoriadis,

1987b). Accordingly, the scientism and determinism present in Marx's theory precluded individual and collective creativity, action and self-management, which is antithetical to the very revolutionary project proposed by Marx himself.

Despite breaking with Marxism, Castoriadis did not abandon the political project underlying Marx's ideas – that is, the quest for forms of autonomy in society. Yet, this did not lead him to embrace liberalism as the only possible form of government. On the contrary, questioning Marx's ideas took him deeper in his investigations about how society and history have been theorized by well-established traditions of thought. His skeptical eye against false scientism, intrinsic to Marxian accounts of society and economy, extended to other theories within sociology which try to equate 'being' with determinacy, especially represented by structuralism and symbolic-functionalism. On the one hand, he decries structuralism as “an abusive extrapolation of phonology” (Castoriadis, 1987b: 171) that tries to give an exhaustive account of society and history “through the combinatory logic of a finite number of elements and the difference between those elements” (Whitebook, 1998: 145). On the other hand, he was skeptical about theories, which, unable to deal with indeterminacy, transformed the symbolic into something ineffable, such as in the stronger versions of social constructivism present in the many hues of postmodernism.

It was after the dissolution of the group *Socialisme ou Barbarie* in 1965 that Castoriadis started developing his own ideas, which culminated in his major work – *The Imaginary Institution of Society* – originally published in 1975 (Castoriadis, 1987b). He expended a great bulk of his life reevaluating the pillars of western knowledge, in an intellectual journey that involved three main elements: a re-examination of philosophical thinking, particularly Greek philosophy and the philosophy of Enlightenment of Immanuel Kant; an investigation of the problems of language; and a re-examination of Freud's oeuvre and psychoanalytic theory (Klooger, 2009). His studies elucidate what many traditions of thought have distorted and/or hidden, and, as I shall explain next, it shall enlighten important aspects of studying organizations.

The originality of his ideas lies in that they are a genuine alternative in relation to the different intellectual tendencies that had emerged after 1968, such as those advanced by Jacques Derrida and Michel Foucault (e.g. Tovar-Restrepo, 2012), and which gained

acceptance among organization scholars keen to investigate the role of power, politics, language, identity and subjectivity in organizations (Alvesson and Willmott, 1992a; Alvesson and Willmott, 1992b; Alvesson and Sköldbberg, 2000; Clegg, 1989; Chia, 1994). Yet, despite nurturing the same disillusion with modernity, Castoriadis cannot be considered a postmodern thinker, a label he would promptly reject. His undertakings are better described as “a nonstructuralist theory of the sign and of the symbolic” (Joas and Meyer, 1989: 1185). The central element in his accounts is imagination, which he sees as an undeniable ontological dimension of human life and over which he conceptualizes the dynamics of the social imaginary, that is, the role of central significations in the institution and organization of social life.

For Castoriadis imagination and the imaginary are interdependent dimensions of both the individual and the social-historical field. Through his conceptualization of the social imaginary, Castoriadis underscores that social systems (i.e. society or organizations) institute themselves by creating or transgressing social imaginary significations. By saying that significations are imaginary and social, Castoriadis brings forth more than a neologism. He aims to underscore the mode of being of society and the social-historical, which social theories have tried to encapsulate into determinate forms of knowledge. Social imaginary significations are imaginary “for they do not correspond to “real” or “rational” referents and for they are always instituted through creation”. And they are social, “for they only exist while instituted and shared by an impersonal and anonymous collective” (Castoriadis, 1987a: 230). When it comes to organizations, Castoriadis explicitly warned that “[t]he bureaucratic universe is permeated through and through with the imaginary” (Castoriadis, 1987b: 158). He exemplifies the power of such significations when foreseeing that unlike the bureaucracies from the past, which praised for a unified flow of time, contemporary organizations are being increasingly dominated by a systematic desire to anticipate the future. “[T]he phantasy of the organization as a well-oiled machine gives way to the phantasy of the organization as a self-reforming, self-expanding machine” (ibid.). Here we arrive to the empirical object of this thesis, namely, risk management.

Risk management embodies exactly the self-reforming and self-expanding ambition of contemporary organizations described by Castoriadis. So, already in 1975, Castoriadis

had a glimpse of the increasing urgency of contemporary organizations to map and control uncertainties, a desire that would culminate only later, in the 1990s, with the invention and diffusion of the various forms of risk management practices (Power, 2004b; Power, 2007; Power, 2012; Power et al., 2009). Scholars of risk and risk management explain that the rapid diffusion of risk management in the 1990s was motivated, among other factors, by a shift in the understanding of risk, which detached from practices of calculation and applied to other spheres, came to be seen through the general notion of danger (Beck, 1992; Giddens, 1991; Lupton, 1999; Power, 2007; Gephart et al., 2009). That means that risk, nowadays, is assumed as “a manageable factor rather than merely a measurable, quantifiable and calculable entity” (Millo and MacKenzie, 2009: 639). Risk has, therefore, become an institutional resource for organizing processes, practices and people inside organizations. More than that, as a discourse, risk proves to be a powerful resource, for in the intersections of people's imagination and shared images of risk, managers perpetuate an imaginary of risk along its particular demands for action. Risk, therefore, justifies many forms of organizational action.

Risk management has in this way reflexive and constitutive implications for organizations. When turned into an organizational practice, risk management is ‘not only a description of a given reality but includes a prediction and is operated upon as a blueprint for action’ (*ibid.*). Such a practice, or better said set of practices, has a performative role influencing behavior and action within organizations. The effects of the dissemination of risk management practices were already observed along the broad range of organizational activities in both the public and private sectors (Hutter, 2010; Gephart et al., 2009; Hood, 2002; Hood et al., 2001), and, as a practice, risk management was heralded as a cornerstone of modern management control (Bhimani, 2009; Scheytt et al., 2006). Clearly, risk management has been shaping a new moral order within organizations.

One less explored aspect of risk management, however, is that risk management puts in practice particular forms of imagination through predictions, scenarios, maps, and the varieties of techniques used for imagining the future (De Goede, 2008). As a clear practical effect of the ambition of contemporary organizations to systematically anticipate the future, risk management is then the adequate object through which we can search for

answers about the relationship between imagination and organizations. Hence, by breaking that broad question down, the content of this thesis will be concerned with the following investigation: *What is the role of imagination in the practices of risk management?*

My point of departure in this inquiry was a revision of well-established interpretive traditions within organization studies in order to situate and advance a Castoridian framework to address imaginary institutions. This framework was then applied to a multi-case study in a Brazilian conglomerate. This conglomerate, called here Group, was a company exclusively dedicated to the sugarcane and ethanol sector, and since 2008 it has been putting in place series of acquisitions and measures in order to change its identity, that is, it has been putting in place some changes in order to become a major global player in the energy and infrastructure sector. In this change process, risk management has gained traction inside the organizations and it is, until the time of writing, expanding its scope, engulfing, in different extents, people, practices and processes. Thus, this multi-case study highlights the constitutive moments of risk management in this company, whereby it is possible to see how practitioners transform and convert uncertainties into risk objects (Hilgartner, 1992), and, at the same time, how different levels of that organization institutionalize notions of risk and risk management at the core of their organizing processes. The desire to systematic anticipate the future incarnated by risk management practices involves, as the cases show, images of manageability of risk, and ideals of transparency, accountability and auditability (Huber and Scheytt, 2013). The cases present, therefore, the self-expansion and self-reforming ambition of risk management inside that organization. But by interpreting risk management through a Castoridian framework, an important finding emerged.

Despite the self-expansionist and self-reformist mode of being of risk management, I found in that organization not the risk management of everything (Power, 2004b), but rather *the risk imagining of everything*. In all levels investigated managers and analysts were fully aware of the necessity of narrowing down the increasing amount of information and events coming along acquisitions and new businesses. Corporate managers were also under the pressure of the risk committee, who demanded pragmatic representations of risk.

So, managers were not prone to decide and act over every type of event. Yet, paradoxically, by putting the practices of risk management in place, the number of images of risk has increased and risk management has incorporated logics of action not previously planned. Risk management seems then one of those messages shared in the Chinese Whispers' game, in which the more one talks the message to others, the more it spreads and changes. Here lies the crux of the imaginary institution of risk management.

As the contemporary understanding of risk as a manageable factor indicates, the kernel of risk management is the signification of risk as uncertainty. This signification is an imaginary signification *par excellence*, because a risk is never something material until the moment it materializes into damage – the moment when it stops being an uncertainty. This slippery character of risk was already epitomized in Ewald's statement, who says that "[n]othing is a risk in itself; there is no risk in reality. But on the other hand, anything can be a risk; it all depends on how one analyses the danger, considers the event" (Ewald, 1991: 199). However, saying that risk management has at its center the imaginary signification of risk, means not that risk management practices are simply in a Heraclitean flux. On the contrary, the cases in this thesis show that through articulated notions of risk, logics of risk management are been created according to distinct and specific purposes. These logics are routinized and give support to the signification of risk as uncertainty; that is, they provide the material upon which practitioners act on uncertainty, and are thus repeated in the day-to-day interactions. But models, maps, representations, images of risk are incomplete and imperfect, and they motivate new representations of risk that are negotiated and incorporated into the repertoire of practices of risk management. For this reason, through the imaginary signification of risk, managers and analysts of the cases investigated must continually convert the different forms of information, knowledge and events into practices that had to be "tested, challenged, and frequently revised" (Millo and MacKenzie, 2009: 639). That means that inaccurate models are useful to practitioners (*ibid.*); but more than that, it points to the usefulness of the very signification of risk itself, since it underpins the creation of new practices and a new culture inside the organizations.

The asymmetry and ambivalence of risk management – between routines and imperfections of risk objects, and the expansionist character of the imaginary signification

of risk – are not a problem for practitioners in the organization investigated. Rather, asymmetries accommodate the idiosyncrasies of each putting-into-use of the signification of risk as uncertainty through particular logics of language and action. At every signifying process, the imaginary of risk potentially incorporates other elements into the discourses and practices, which challenge the way the very substance of risk management is understood. Thus, as an imaginary signification, risk remains potentially pervasive within the Brazilian conglomerate, defining, therefore, the mode of being of risk management as an imaginary institution, an institution that is not merely a reflex of a super-ordered structure, but flexible enough to be re-created and expanded to the most different purposes, interests and logical uses.

Research question and relevance

What is the role of imagination in the practices of risk management?

The relevance of the answers provided in this thesis to the research question needs to be gradually assessed in the years to come among different researchers and research interests. Here, I can only suggest contributions that come to my mind in a more immediate way. I shall separate them between the two fields or theoretical levels addressed in this thesis: organization studies and risk management literature.

Regarding organization studies, the lack of an organizational approach to risk management (Gephart et al., 2009) engenders the possibility of exploring the role of imagination and the imaginary in the social construction of this phenomenon and its associated practices and objects (Hilgartner, 1992). Three contributions seem to me evident in this case. First, since Berger and Luckmann (1967) and the application of their ideas to the study of organizations (e.g. Meyer and Rowan, 1977), there is a generalized interest, at least from an interpretive perspective, on the socially constructed character of organizations. Nonetheless, much confusion prevails about how this social construction happens and what exactly are meanings in this process. On the one side, there is a tendency to argue that meanings are shaped by high order structures (e.g. Thornton et al., 2012), on

the other, meanings and action are reduced to an individual subjectivism and cognitive scripts (e.g. Weick et al., 2005). The contribution of Castoriadis to this point is that he underscores that meanings are not free from the material objects, practices and tools created by social and organizational actors, what he calls the identitary logics of institutions. In this sense, Castoriadis' works offer an alternative way for organizational scholars interested in, for example, the social studies of science and technology (Callon, 1986), a tradition which takes into consideration the role of objects in action.

A second contribution, attendant to the first, concerns the theory and concepts advanced by Castoriadis, which are well suited to an approach combining agency and structure. The dilemma between agency and structure is, indeed, one of the most acute issues within sociology and organization studies (Reed, 2003), an issue that, far from resolved, has been addressed from a variety of angles (Weber and Glynn, 2006; Barley and Tolbert, 1997; Garud et al., 2007; Barley, 2011; Friedland, 2013). Castoriadis adds to this debate with his concept of social imaginary significations, which serve as a kind of bridge between, on the one side, the representations dispersed within the societal level and, on the other side, the action and signifying processes taking place at the organizational level. Imaginary significations have, therefore, a similar function to what Giddens defined as a modality, a "type of resource on which actors draw as they go about doing their lives collectively" (in Barley, 2011: 201) and which lies between systems of signification (institution) and communication (interaction).

A third contribution of this thesis is to the themes of politics and contradictions in organizations. The assumptions advanced by Castoriadis show that rather than logics being a central mechanism of organizing (Thornton et al., 2012), organizations have at their core sets of imaginary significations enabling particular logics. That brings forth a different understanding of institutionalization. Instead of addressing organizations as a reflection of particular institutional logics, a Castoridian view underscores that organizations bring themselves into being through social imaginary significations that they articulate within practices (Hasselbladh and Theodoridis, 1998; Adams, 2005). From this perspective, "there are no "exogenous" sources of determination of organizational action and change. What exists are the effects in the real produced by a multiple set of imaginary significations"

(Hasselbladh and Theodoridis, 1998: 64). This view challenges the dominant understanding that institutional logics shape action in organizational fields, because logics stem, in this case, from imaginary institutions.

Regarding the risk management literature, Castoriadis' theory is compatible with the socio-cultural approaches and governmentality traditions (Lupton, 1999), in the sense that it accounts for the social constructed character of the world through its significations and their performative role – in this thesis risk as uncertainty. The thesis advanced here adds to these traditions in two ways. First, in spite of the many insights offered by the socio-cultural tradition advanced by Mary Douglas, her approach tends to be “somewhat static” (Lupton, 1999: 51) and therefore not provides a good basis for explaining change. A Castoridian account of the cultural underpinnings of risk shows that, while enacted by domains of practice, risk is necessarily deferred within discourses and practices. It is this deferral – that is, the impossibility of resolving risk once-for-all and the necessity of constantly reassess risk objects – what renders risk strongly adherent to organizational practices. But it is also through this deferral that the imaginary of risk incorporates novel and unpredicted elements into itself, contributing to change the very way risk is understood and, along that, the practices of risk management.

Second, with regard to the governmentality school of risk, the Castoridian depiction of risk assumes a less monolithic aspect. Indeed, the cases investigated show that people are caught up in the imaginary of risk, since they are constructing different logics of action in the name of it. Yet, rather than having their subjectivities determined by risk management, managers show relative discretion in the use risk management according to different purposes, even to the point of perverting it to, in fact, exercising cultural change and control. As I will show, the managers and analysts of that organization are not being colonized by risk (Rothstein et al., 2006), but rather they are colonizing *through* and *within* risk.

Method

This thesis was based on a qualitative research strategy. The main method was interpretative. From the outset, however, I was aware that interpretative methods are not free from ontological and epistemological underpinnings. As a researcher I knew that theoretical choices constitute the way I could question and describe the phenomenon I was about to investigate. So, as Denzin and Lincoln (2000: 19) stress, “each interpretative paradigm makes particular demands on the researcher, including the questions he or she asks and the interpretations the researcher brings to them”. However, during the field-work and the interpretation of the empirical material, I have tried to adopt the principles of a reflexive methodology (Alvesson and Sköldbberg, 2000). That is, I adopted a skeptical stance to seemingly unproblematic and superficial notions of risk and risk management, but I kept the “the belief that the study of suitable (well thought out) excerpts from [that] reality [could] provide an important basis for a generation of knowledge that opens up rather than closes, and furnishes opportunities for understanding rather than establishes ‘truths’” (Alvesson and Sköldbberg, 2000: 9). That said, I shall explain the details of my inquiry.

The field work was conducted in a Brazilian conglomerate in three periods: March 2012, December 2012 and February 2013. The reasons for choosing this specific company was motivated by the series of transformations that it has been putting in place in order to change its identity, a process in which risk management started to gain relevance inside the organization. With a long tradition in the sugar-ethanol sector, this company has been diversifying its business in order to position itself as a global player in the energy and infra-structure sector. The firm has more than 40000 employees and its activities include the production, sale and distribution of ethanol, bio-fuel and sugar, distribution of natural gas, logistics, and agricultural real estate investment. The reasons for diversification, as I will show, involve how notions of risk and opportunity are signified within the company. More specifically, the field work gave possibility to examine risk management in its constitutive and reproductive moments. By constitutive I mean the moments where the signification of risk led practitioners to engage in transforming their own practices; by

reproductive I refer to the routinization and sharing of such practices within the company. These moments were observed in three levels: the corporate level of the Group; in the risk management routines in a business called here Energy; and in the practices of a business called here Land.

The field work has been configured afterwards as a multi-case study according to these respective levels. On the whole, I have conducted 7.5 hours of interviews and 32 hours of participant observation, in which, at each phase, I could gradually learn about their history and cultures and could then achieve a general picture of the organization under the perspective of risk management. A detailed map of the fieldwork is in the table 1 below.

Phase	Period	Type of work + who	Secondary data
1	March 2012	<i>4 Interviews:</i> <ul style="list-style-type: none"> • 3 managers of the corporate level of the Group • CFO Land 	<ul style="list-style-type: none"> • Roadmap used for risk interviews in business lines; • Flowchart risk Management of the Group and subsidiaries; • Risk Management Policy
2	December 2012	<i>3 Interviews:</i> <ul style="list-style-type: none"> • 2 managers of the corporate level; • CFO Land 	<ul style="list-style-type: none"> • Minutes of the meeting of the risk committee; • InCompany training in internal control and compliance • Risk assessment Group: Objective Based • Newspapers and market analysis
3	February 2013	<i>Interview and participant observation (8 people)</i> <ul style="list-style-type: none"> • 4 days in the business Energy • Observation of the internal controls team; • Interview with the internal controls manager. • Individual talking with the internal auditor and 6 analysts • Participation in meetings. 	<ul style="list-style-type: none"> • Templates of KPI's • Crisis Management Manual • Inside magazines • Risk matrices and consolidations • Training material about SOx • Codes of conduct • Learning with controls (Cases) • Emails and internal communication • Templates of business incident report • Newspapers and market analysis

Table 1: Map of the fieldwork.

The result of the fieldwork is a risk management narrative (chapter 4) where I describe the unfolding of the imaginary signification of risk: how it moves through between those levels and how it materializes in their respective practices. Concerning the uses of a narrative method for retelling the stories of the fieldwork, I borrowed inspiration

in the works of Barbara Czarniawska (1997; 2000) and ethnographic traditions (Van Maanen, 2011). From this perspective, the risk management narrative preserves the traces of an ethnographic work, and, as Van Maanen argues, it is “a process that begins before one enters the field and continues long after one leaves it” (Van Maanen, 2011: 117). My starting point was, of course, the research question, from which I had first to delimitate a theoretical background to access the field. However, it remains an open process because other theoretical perspectives, new data or a different reflection than the one advanced here, can bring novel light to the events I have collected and observed. In this sense, I did the reverse path described by Czarniawska (2000). Instead of going from the field of practice (i.e. risk management) to the field of research (i.e. organization theory), I have firstly examined the theoretical possibilities of exploring the research question. My journey can be summarized as follows:

- Organization theory → field of practice → return to risk management theories and organization theory.

Another important point for using a narrative method to present the results of my field work, is that it has enabled me to construct a consistent portrait of the field (a realist tale according to Van Maanen) while preserving the principles of a reflexive methodology previously described (a confessional and critical tale according to Van Maanen). Thus, by observing the material practices and objects constructed around the signification of risk as uncertainty, I tried to, on the one side, preserve the “complex specificness” and circumstantialities of the cases (Geertz, 1973: 23), and on the other side, to demonstrate that through their complex specificness, the cases highlight symptoms of something more general going on in organizations, namely, the institutional aspects of risk management and their relation with imagination. By using this method, it was possible to generalize *within* the cases, as Geertz suggests (1973).

Finally, it is worth noting that the risk management narrative is the product of my own interpretation of that reality according to the theoretical background I brought forth in this thesis. Hence, by saying that I am trying to give a consistent account of risk

management in that organization, I am not assuming that it is possible to reflect that reality in its whole complexity. The practices and actions observed in the Brazilian conglomerate are much fuzzier than what is possible to write down in ordered words. When it comes to interpretation, the amount of data is simply bigger than what is possible to report. Cuts and adjustments are necessary, in order to the narrative can make sense and that interesting aspects concerning the research question emerge. Likewise, it is unlikely that those practitioners would have told the events in the same way I did. This problem, nonetheless, cuts across the whole issue of methods of researching organizations, where it is already known that the conceptual vocabulary of the researcher is not the same of the actors whom he observes and interviews, once these vocabularies apply for distinguished audiences with different knowledge applications and interests (Czarniawska, 1999). The choices I made in this thesis are, therefore, justified in terms of the targeted audience (students of organizations and risk management), the method and theory best suited to the theoretical background here advanced (interpretive and narrative) and the purpose of this thesis (research question).

Guideline

In the next chapter I will start this inquiry reviewing four interpretive approaches and theories within organization studies. These are the following: studies of metaphors; sense-making; the Lacanian imaginary; and the institutional logics perspective. Opting for these interpretive theories among many other possibilities was based on two reasons. First, because during the conversations and presentations I held about the possibilities of exploring Castoriadis within organization studies¹, these were the theories that immediately came to people's mind. I was faced with questions such as: What is the difference between Castoriadis notion of image and that of metaphors? Is Castoriadis' theory not the same as sense-making? What are the differences between Castoriadis and Lacan's concept of the imaginary? What Castoriadis adds to our understanding of

¹ These presentations were held at the Doctoral Consortium of the 7th Critical Management Studies Conference in 2011, at the CMS-Critical Management Studies in Lund in 2012, at the Egos Conference in Helsinki in 2012, and also within my group at the Helmut Schmidt University.

institutions? Second, I have opted for addressing these theories, because they are well established interpretative approaches within organization studies which, in spite of gesturing towards imagination, do not face this phenomenon directly. The main thrust of this first chapter is, thus, to show that important interpretative traditions of organizational research have veiled the role of imagination as an important element of thinking and acting in organizations.

In the chapter 3 I shall present Castoriadis' theory of the social imaginary. In this chapter I will offer an excursion of how imagination and imaginary have been treated by philosophical thinking along the history. Then, I will introduce the ontological foundations of the imagination and imaginary in Castoriadis' concepts of individual and social-historical. Next, I will present important concepts of Castoriadis understanding of imaginary institutions, and then advance to developing a framework of studying imaginary institutions.

Chapter 4 presents the risk management narrative developed according to the fieldwork. This narrative is divided into three parts. The first one introduces the history and context of activities of the Brazilian conglomerate called here Group. In this stage, the discourses of risk and opportunity are fleshed out according to the changes the company is putting in place; the risk objects and practices that are being created therein are described accordingly. The second part follows the imaginary signification of risk and its materializations in a business line called here Energy. This business is a recent joint venture of the Group with a foreign partner. Carried on to diversify the Group's portfolio, Energy has mitigated primary risks of the Group and has been developing many initiatives in terms of risk management. The third part of the narrative accounts for risk management practices in a business of agricultural real estate investment – Land –, a business recently created by the Group. In Land risk management practices go beyond compliance with corporate codes or risk management frameworks. Practices in Land have a sense-making approach to risk, whereby the imaginary signification of risk take shape through the technological tools used to monitor agricultural investments and the experience of managers. An important moment in this third part of the narrative is the constitutive creation of reputational risk, which is being transformed into a practice inside this business

(reputational risk assessment) and which starts to challenge established notions of risk management at the corporate level.

In chapter 5 I will present the findings and implications of the research according to the literature of risk management and organization studies. In addition, in this chapter I will distil the main components of the imaginary institution of risk management from the narrative in order to draw further generalizations in respect of risk management.

Chapter 6 closes this thesis with remarks about what was learned by applying Castoriadis to exploring the role of imagination within risk management practices. This chapter also explores how the generalizations advanced in this thesis can help us to elucidate the role of imagination in organizations.

Chapter 2

Organizational Reveries

We believe the 9/11 attacks revealed four kinds of failures: in imagination, policy, capabilities, and management.

The 9/11 Commission Report (2004: 339)

So in summary, Your Majesty, the failure to foresee the timing, extent and severity of the crisis and to head it off, while it had many causes, was principally a failure of the collective imagination of many bright people, both in this country and internationally, to understand the risks to the system as a whole.

Letter to Her Majesty the Queen (Besley and Hennessey, 2009)

I read. I imagine. I write. I edit. Whatever I read becomes a frame, a 'discipline', a gestalt, within which I start associating and connecting. Those are moves of the imagination working within soft constraints.

Karl Weick (in Mezias, 2003)

When it comes to risk management it has been usual for specialists to attribute the grounds of failures and catastrophes to a lack of people's imagination. This is blatant in the analysis of terrorist attacks as well as in the explanations of why a major economic failure, such as the financial crisis of 2007, took shape largely unnoticed. Suggestions and recommendations are timely documented. While the London report calls for 'imaginative ways' to increase intelligence-gathering, to map terrorist associations and to assess the development of future plots (see De Goede, 2008), the 09/11 Commission has issued a recommendation to find ways of 'routinizing, even bureaucratizing, the exercise of imagination' (9/11-Report, 2004: 361). As an organizational scholar one immediately muses how are organizations supposed to 'routinize' imagination. More than that, one wonders what, in the first place, is meant by imagination.

A closer look at those hasty claims shows that they depict only a single facet of the complex intersections between imagination and organizing processes. As a matter of fact, in social and organizational settings imagination is ubiquitous. It points to at least three different situations, as suggested by common usages of the term (Brito, 2007). Take for example, the following statements: What a lack of imagination! You have been imagining things! Can you imagine what will happen!? In the first case, the term conveys a positive

value, referring to an enlarged capacity to think, to find clever solutions to problems or to guess the meaning of something not promptly evident. In the second usage, the term bears a negative tone, anchoring imagination into something unreal, often related to some sort of exaggeration or excess in the stories shared by people, or in the lies they tell. The third example presumes a kind of projective faculty or ability to predict future events, to imagine what might or could happen, attitudes as those demanded in the claims for imagination in context of the ‘war on terror’. Given that imagination can be easily mean different things, my interest is to address it, in this first moment, beyond the ex post fact justifications of risk management failures. In this first chapter, I will cast light on the different ways through which organizational research has left imagination under-theorized, while at the same time – and this is important – it has been upholding particular assumptions of this phenomenon.

It is worth noting, however, that imagination is also an inescapable part of academic work, as the comments of Weick above bespeak. It is through reveries that theories of organizations take shape. Reveries in the sense of what the philosopher Gaston Bachelard calls “differential ontology” (Bachelard, 1969: 167), whereby the apprehension of phenomena occurs by the interpenetration of subject (i.e. scholar) and object (i.e. organization). The title of this chapter aims, therefore, to convey a position assumed throughout this thesis, namely, that not only are organizations socially constructed (Brunsson and Sahlin-Andersson, 2000), but also the theories casting light to them (Astley, 1985). Theories of organization result, according to this view, from the interpenetration of researchers and their research object through different reveries in a Bachelardian sense, reveries that imply ways of representing organization and comprehending imagination in organizational action.

In the following I will explore four interpretive traditions of organizational research and their respective reveries, which are particularly relevant to unearthing the role of imagination in organizations. These traditions are the following: research on metaphors; sense making studies; Lacan’s concept of imaginary; and the institutional logics perspective. These approaches point out tangentially to imagination when theorizing about the processes through which people create, maintain and change significations, meanings

and beliefs in organizations. Thus, the chapter's overall thrust is to present and explore the problems accompanying the lack of explicit theories of imagination in organizational research. The chapter ends up with an account of the main assumptions of imagination underpinning interpretative research in organization studies. This shall prepare the ground for the second chapter, in which I will advance a framework for accounting for the imaginary institution of risk management. In the next section I flesh out the debate about the role of metaphors within organization studies, showing how these studies have focused on language despite a respective absence of in depth discussions of the role of imagination in the formation, use and transformation of metaphors.

Metaphors and tropes: Images of organizations

What the concepts of organizational learning, organizational identity and organizational culture have in common? They are all metaphors explaining different phenomena within organizations. Such concepts, expressed in metaphorical language, are used to structure theoretical and practical knowledge. These and other tropes², though ubiquitous in communication processes, have not always had the attention of organization scholars. The study of metaphorical language as an explanatory feature in fields such as philosophy, psychology and cognitive science gained prominence in the mid-80s onwards. Before that, metaphors were treated as a form of deviant or secondary language (Ortony, 1979), a perspective that is now commonly regarded as an objectivist view of language and meaning, in which metaphors are seen as cognitively reducible to literal propositions. This objectivist or literal understanding of metaphors can be found among different accounts within organization studies (Haslam et al., 2003; Tsoukas, 1991; Pinder and Bourgeois, 1982). However, an increasing number of studies have been giving a more privileged role to metaphors and other tropes in the production of knowledge within organization studies. On the one hand, these studies highlight the hidden assumptions of different theories of organization; on the other hand, they aim to explore the role of different tropes in

² Tropes are figures of speech used to convey other than literal sense to things or situations. Beyond metaphor, there are many forms of figurative representation, such as irony, metonymy, synecdoche, and oxymoron.

knowledge generation. At a deeper level, however, metaphors point to imagination as a central mechanism of production and alteration of these images. Imagination remains, however under theorized by the literature on organizations and metaphors.

This is especially true if we take into consideration the typical explanation of metaphors among organization scholars. Metaphors have been commonly studied for their function and their potential of creative and generative knowledge (Cornelissen, 2006; Oswick et al., 2002). Arguments are that metaphors enable grasping complexity within different phenomena at a cognitive behavioral and emotional level (Davidson, 2001; Sackmann, 1989), or that they make information memorable through the use of images which facilitates the expression of inexpressible knowledge (Ortony, 1975). Addressing their function, Pablo and Hardy (2009) describe three important points. First, metaphors serve as bridges or constructors of new connections; and here we see the issue of imagination emerging through the idea of creativity and creation of meanings. Second, it is said that metaphors help to “transfer ideas from one domain to another: from the known to unknown, from the concrete to the abstract, and from the material to the immaterial” (Ortony, 1975, in Pablo and Hardy: 823). Third, metaphors are constructive of reality in the sense they help to forge meanings. Again, imagination is tangentially addressed by the idea that individuals indeed craft new meanings through images. More generally, it is said that organizations and organization studies alike are shaped by metaphors (Morgan, 1980). Accounts of organizations through the uses of metaphors can be found, for example, in the analysis of multinational corporations (Oswick and Montgomery, 1999), in its use in the World Wide Web (Pablo and Hardy, 2009), or in the evaluation of the sustainability trend within business (Milne et al., 2002).

However, despite extant research has given considerable emphasis to the uses, functions and effects of metaphors on organizational behavior and within organization studies, in no place one finds an account of imagination. It seems odd, then, that a theories dealing with the creative properties of metaphor and tropes lack a comprehensive account of imagination.

This lack can be indeed tracked in the work of one of the pioneers of studies of metaphors in organizational theory, Gareth Morgan. Through different articles (Morgan,

1980; Morgan, 1983) and his bestseller *Images of Organization* (1986) Morgan exposed the pervasiveness of metaphors to the understanding of organizational phenomena, with the aim of freeing organization theory from its metaphorical imprisonment (Morgan, 1980). His studies cast light on metaphor as a central feature to the formation of assertions about organizations and to the development of knowledge within paradigmatic boundaries. Morgan's contribution was, primarily, the questioning of the researcher's reflexivity regarding choices of language and paradigms when developing theory. Critiques against the strictly cognitive level of Morgan's approach argue that his view conceal the contextual, political and moral component behind processes of constructing these images. Before addressing these critiques, I will briefly review the main ideas worked out by Morgan.

According to Morgan (1980), organizational studies are based on a series of metaphors, which reflect and refer to their very basic assumptions. In the orthodox version of organization studies, some metaphors bring to light the assumptions underlying the functionalist paradigm. For example, the machine and organism metaphors are two strong representatives of this process. The machine metaphor underlies the works of the classical management theory and bureaucracy (Taylor, 1911; Fayol, 1949; Weber, 1946). "Machines are rationally devised for performing work in pursuit of pre-specified ends; the machine metaphor in organization theory expresses these ends as goals and the means-ends relationship as purposive rationality" (Morgan, 1980: 613). This 'image' unfolds into other concepts, which resemble mechanical attributes, such as the idea of structure, technology and efficiency as features or 'components' of organizations. Through its metaphorical apparatus, orthodox functionalism sought to depict and literally design organizations in a mechanical way. This understanding reflects upon notions of human 'nature' that lie at the centre of mainstream organizational and economic theories. "Taylor's conception of economic man and Weber's concept of the faceless bureaucrat", for instance, "extend the principles of the machine metaphor to define the view of human nature which best suits the organizational machine" (Morgan, 1980: 614).

Another important metaphor used to understanding organizations is that of the organism. Through the organism metaphor, an organization is seen as a "living entity in

constant flux and change, interacting with its environment in an attempt to satisfy its needs” (ibid). The “image” of organism makes use of a terminology mainly borrowed from biology, such as the idea of differentiation, integration, adaptation, survival and environment. Emphasis is, then, placed “upon the idea that the organization has needs or imperative functions, which must be satisfied for the organization to achieve this relationship with the environment” (ibid). According to Morgan, the Hawthorne studies (Roethlisberger and Dickson, 1939), the structural functionalism of Philip Selznick (1948) and Talcott Parsons (1956), the socio-technical approach (Trist and Bamforth, 1951), the general systems approach (Katz and Kahn, 1966), and the contingency theory (Burns and Stalker, 1961) are all based upon the development of the organism metaphor. Thus, while the machine metaphor comes up with organization as rather static and closed phenomenon, the organism metaphor enhances organization as a kind of living entity, constantly changing, interacting with the environment in an attempt to satisfy needs and adapt to ‘environmental’ demands.

Clearly, then, that while being source of many insights, metaphorical language produces at the same time limitations, because it constrains alternative views of organizational phenomena that can be out of the reach by the use of one particular metaphor. For this reason, many other metaphors emerge in order to describe and theorize organizations, and they are gradually increasing the repertoire of how organizations are discoursed and theorized. It is possible to see different metaphors in ideas such as those produced by cybernetic systems, loosely coupled systems, ecological systems, theaters, cultures, political systems, language games, texts, accomplishments, enactments, psychic prisons and many others, which “add rich and creative dimensions to organization theory” (Morgan, 1980: 615).

Morgan’s contribution was undoubtedly path-breaking. However, his work has received some critiques. A first critique is that his approach bears a static view of metaphors. Cornelissen (2006) explains that Morgan focuses more on explaining similarities between words than in explaining the process of designing and developing new meanings triggered by metaphors. According to Cornelissen, “instead of a simple substitutive process with the source or vehicle concept acting as a lens for seeing and

considering the target concept, a metaphor sets up intricate sets of relationships between two concepts which are then actively elaborated upon into a new emergent meaning” (Cornelissen, 2006: 701). With a similar argument, Oswick and colleagues claim that Morgan addresses a single way of thinking about metaphors, constraining their function to a “cognitively prescriptive rather than liberating” role (Oswick et al., 2002: 298). These scholars argue that Morgan’s approach deflects attention from alternative readings and ambiguities inherent in the interpretive process of metaphors. That is to say, metaphors promote more than singular interpretations (Cornelissen, 2006; Milne et al., 2002) even though the production of metaphors often seeks a reductionist and rational understanding omitting questions about power and politics involved in the emergence and establishment of a metaphor (Inns, 2002). Another critique concerns the privileged focus on metaphors despite the importance of other tropes. Oswick and colleagues (2002) suggest that metaphor is only one trope among others, which stands in what they call ‘cognitive comfort zone’. They claim that other widely used tropes based on dissimilarity, such as anomaly, paradox and irony, “open up genuine alternative possibilities, and, analogically, provide a more fruitful source of knowledge generation” (Oswick et. al., 2002: 294).

In spite of these critiques, Morgan was indeed a pioneer of studying metaphors within organization studies, writing in a time that addressing such issues was considered eccentric. What I want to stress here is that studies on metaphors, as well as on other tropes, point to something beyond the linguistic aspect of these elements. Tropes are mediators of a deeper level of subjective and inter-subjective processes of meaning formation. These processes are by essence uncontrollable, because both intellectual and practical sphere are permeated by significations that can be enacted in unpredictable ways. As products of a creative imagination, metaphors convey meanings indefinitely in social and organizational fields according to context, purpose or even as a form of perversion, such as the images played by many dictatorial and totalitarian regimes. The performative role of images stem, it is important to note, not from tropes themselves, but from individual imagination within the interaction of people: tropes are always enacted in a contextual and idiosyncratic manner by people, sometimes consciously, sometimes not.

Metaphors can be, therefore, interpreted in a variety of ways, as many accounts have been demonstrating. Take, for example, the “organization identity” metaphor. Cornelissen (2006) has shown that this concept has different meanings within the academic community, varying according to the tradition to which it binds, generating different results in the production of knowledge. The interpretation of this metaphor, a process which we may see as kind of distorted iteration of this image occurs idiosyncratically and contextually. This imaginative process is explained by Cornelissen (2006: 691) through what he calls the “dynamic and contextual nature of metaphorical interpretation”. Such interpretation is never a natural act, however. Rather, it is a struggle between many interpretations. Thus, theoretical schema and categorization of metaphors always ends up reducing the content and complexity behind the process of putting the metaphor into use. This is, indeed, acknowledged by Cornelissen.

Metaphorical images, and the image-schematic projections that constitutes them, are embodied imaginative structures of human understanding that give coherent, meaningful structure to our experience at a preconceptual level [...], although indeed, within our theorizing endeavours, we often proceed with discussing them in the abstract and reducing and explicating them in propositional terms. (Cornelissen, 2006: 689)

It is important to add to the arguments of Cornelissen that interpretation processes are embodied in individuals and their interactions within practices, technologies and objects. These different components of interpretations intertwine while shaping the way people see such images and produce other images. This point shall become clear in the risk management narrative in chapter 4. For now, the point I want to highlight is that while suggesting inexplicitly that imagination is a source of interpretive processes, Cornelissen (2006) leaves this ontology untouched and do not theorizes about it. He gestures towards imagination when speaking of the ability of metaphors “to create stronger and more meaningful imagery”. The undeniable role of imagination in producing the transient and contested character of metaphorical images is not theorized by extant research. So, in no moment one finds an explicit and direct treatment of imagination and organizations.

Another point to observe is that metaphors are constructs endowed with historicity, which means that metaphors emerge or disappear according to criteria difficult to predict. For example, there are evidence of decrease in interest in the use of military metaphors

(e.g. Weick, 1979), of family metaphors (e.g. Davidson, 1993) and of gardening metaphors (e.g. Axley, 2002; Thompson and Sanders, 1997). Such changes in the use of metaphors, both by scholars and within organizations, indicate that the organizational imaginary and imagination therein evolves interdependently with a broader social realm. Interpretations are, indeed, always enacted by certain groups, which pursue different interests. Thus, for example, the image of organization as a machine might serve to call for efficiency as well as to justify calls for humanist work, depending on the way it is used. It may also be said that machine-like organizations are outdated and now they shall be aligned to environmental causes, or be more flexible, or bear network- and brain-like characteristics. My contention is that metaphors construct behind which one will find struggles over significations and the ways practitioners signify and act within their local reality. Metaphors are not at the center of the social construction of reality, but coadjutants in this process. At the center of social construction is imagination, a component inherent to social and organizational interactions, whereby people put to work new images and through which unexpected meanings can emerge in organizational settings. Hence, if it is plausible to argue that we cannot control tropes (Morgan, 1983), it is equally reasonable to add that we cannot control imagination. The former refers to language use and its effects on organizations, the latter points to action and the disputes over meaning.

Metaphors are, therefore, unstable constructs, because ubiquitous communicative and interpretative processes are based on imagination and on social imaginary significations. If metaphors are seen as “a way of thinking and a way of seeing” (Morgan, 1986: 12), it is important to inquire the underlying motivations of such thoughts and views to better understand which contingencies led to the establishment of certain images in spite of others. This inquiry would underscore the political and moral underpinnings of metaphors and processes of organizing. Images always take place in a contested ground, whereby groups interact and struggle over significations in complex ways. If on the one hand, some meanings stand as determinants of organizational behavior, on the other, the plasticity of individual imagination provides ruptures with established ways of seeing and new significations might be formed, enabling therefore new ways of seeing, thinking and

doing. Organizations are, according to this view, highly dependent on the struggles over significations in a much broader way than analytical and functional forms of language use.

Not only does the managerial bureaucracy that runs business firms have imperfect information and entertain criteria that most of time are false, but neither does it make its decisions as a conclusion based upon some sort of “rational” procedure; *it arrives at those decisions at the end of a struggle among cliques and clans that are propelled by a series of motivations, only one of which is the maximization of the firm’s profits, and that one is not always the most important.* (Castoriadis, 1997c: 100 emphasis added)

Such agonistic view is at the core of Castoriadis’ philosophy of the imaginary institution of society, which I shall tackle in detail in the next chapter. For now, the different perspectives on metaphors and images within organization studies point us to the following reasoning: the elaboration of tropes is part of language, and language, as a shifting social phenomenon, is part of a broader process of social construction; this whole process involves the interpretation of significations by individuals and groups who make sense of their particular reality in connection with broader social processes; crosscutting these processes one finds representations, which enable idiosyncratic interpretations to occur in a manifold way and which give shape to organizations. Morgan was indeed aware of the complexities of human interaction beyond language.

Through language, science, art, and myth, for example, humans structure their world in meaningful ways. These attempts to objectify a reality embody subjective intentions in the meanings which underwrite the symbolic constructs which are used. Knowledge and understanding of the world are not given to human beings by external events; humans attempt to objectify the world through means of essentially subjective processes. [...] Words, names, concepts, ideas, facts, observations, etc., do not so much denote external “things”, as conceptions of things activated in the mind by a selective and meaningful form of noticing the world, which may be shared with others. *They are not to be seen as a representation of a reality “out there”, but as tools for capturing and dealing with what is perceived to be “out there”.* (Morgan, 1980: 610 emphasis added)

Again, even after highlighting such a fundamental feature of human beings, Morgan nowhere explicitly address imagination. The same occurs with the critics of Morgan, whom despite offering important insights to understanding organizations do not account for imagination. My argument is that lacking a theory of imagination much confusion prevails within organization studies about what meanings, values and significations are, and how can organizational research account for them. In the next

section I address another well established interpretative tradition of research in organization studies, namely, the sense-making approach. Similarly to the research on metaphors, sense-making approach and theory accounts only indirectly for imagination.

Sense-making and organizing: Imagination within soft constraints

The eye-catcher at the beginning of this chapter is an avatar of the ubiquity of imagination within organization studies and organizations³. Karl Weick talks explicitly about the “moves of the imagination working within soft constraints” within his practice. It must be acknowledged, however, that imagination goes beyond the connotation conveyed by Weick and permeates every particle of the social world. That is, Weick himself imagined through and through his academic *métier*; his reading choices were entangled with the chain of representations he possessed beforehand. His imagination served not only as a selector of topics affecting him aesthetically, morally and politically, but it is an active element in the construction of particular meanings that this researcher wanted to perform. The pervasiveness of imagination extends, in this sense, to the whole practice of theorizing about organizations, the objects and technologies they depend on. If it were otherwise, theoretical choices would be completely random. They are not. Scholars dedicate years of their lives to a subject connected with what they guard in the most intimate of their desires.

Using Karl Weick’s self-reflexive thoughts to open this chapter is then not a random choice. He is one of the forerunners of the perspective of organizations as interpretive systems in constant reproduction. His notion of organizing, widely disseminated within organization studies, partakes of what is commonly called today as process theory (Weber and Glynn, 2006). Along his contribution to the understanding of organizations in constant reproduction, he carved a very influential concept within interpretive studies, that of sense-making (Daft and Weick, 1984; Weick et al., 2005). Sense-making refers to the process in which a situation or circumstance is understood in words (Weick et al., 2005); that is to say, it refers to “processes of interpretation and meaning production whereby individuals and groups interpret and reflect on phenomena”

³ I take here scholarly work as an organizational practice too.

(Brown et al., 2008: 1038). Accordingly, sense making processes and organizations constitute one another in an ongoing flux, an organizing process. From this perspective an organization is “an attempt to order intrinsic flux of human action, to channel it toward certain ends, to give it a particular shape, through generalizing and institutionalizing particular meanings and rules” (Tsoukas and Chia, 2002: 570). Sense-making and organizing are indeed significant contributions to understanding the fluidity of organizations and the processes of interpretation taken place within them. However, this view overlooks social and political dimensions involved in the social construction of reality within organizations. Before addressing this point and its relation to the thesis here proposed, I will disentangle some of the ideas and critiques revolving around the sense-making approach.

Two points seem to be relevant in the use of sensemaking within organizational studies: its level of analysis and its cognitive view. First, sensemaking differs from a decision making analysis, because its focus is directed upon the interpretive aspects of action, during which the potential factors that led the actors to act in a certain way are fleshed out⁴. Therefore, the interpretative processes held by people during and after events is the core phenomenon investigated, rather than an analysis of the choices made by them in this process (Weick et al., 2005). Research on sense-making addresses then the micro-local actions and subjective processes in organizations. Second, Weick supports his theory on cognitive theory, which he differs from harder understandings of cognition. Sense making is based on a view of cognition related to dissonance theory and dual-processing. From this standpoint, sense-making embodies a view of creativity during interpretative processes. That is, sense-making functions as “a kind of *creative authoring* on the part of individuals and groups who *construct meaning*” (Brown et al., 2008: 1038 emphasis added). Again we see the issue of creation of meanings emerging; yet, it one finds not a respective theory of imagination. In this case, the mechanisms of sense-making are

⁴ It is important to note, however, that decision making involves sense-making, as it is demonstrated by Weick in events of crisis. See Weick, K. E. (1993) ‘The collapse of sensemaking in organizations: The Mann Gulch disaster’, *Administrative Science Quarterly* 38:(4): 628-652..

grounded in a cognitive view of individuals, which gives primacy to frames and scripts in organizational action.

[...] sensemaking is *retrospective* and driven by *extracted cues* and *plausibility* (Weick 1995). Embedded in these properties is a dual-processing model that distinguishes near-automatic perceptual processes of action formation from more deliberate reasoning processes (see also Endsley 1995; Kahneman 2003; Klein 1998). Much action is triggered by perceptual cues that evoke certain identities, frames and corresponding performance scripts without much deliberate thought. (Weber and Glynn, 2006: 1646 emphasis in the original)

It is important to distinguish, however, the views of cognition underpinning sense-making and institutional approaches, the latter more fond to harder versions of cognitive theory. According to Weber and Glynn (2006), two points are important with regard to Weick's position. First, by considering sense-making within institutional norms – that means, tightly cognitive constrains – one still needs to consider to which identity and frame norms are perceptually activated in a situation; here lies the importance of local contexts in observations focused by sense-making studies. Second, in sense-making readiness to act is more important than accuracy or close adherence to norms and expectations, the latter typically theorized by institutionalism. Therefore, “discrepancies invariably arise and post hoc justifications are needed to make sense of what has already happened. [...] The process is thus neither one of preclusive cognitive constraint nor one of deliberate rule following (deducing action from rules)” (Weber and Glynn, 2006: 1647). Thus, what differentiates sense-making from institutional analysis is its level of analysis and its understanding of retrospective meaning's construction.

Now, in spite of the emphasis on creative aspects of interpretive processes, the lack of an account of imagination by sense-making theory is surprising. This is especially visible in the choices Weick makes when adopting an evolutionary view of organizations. He explains, for instance, that sense-making “can be treated as reciprocal exchanges between actors (Enactment) and their environments (Ecological Change) that are made meaningful (Selection) and preserved (Retention)” (Weick et al., 2005: 413). Enactment is, thus, pivotal to the theory developed by Weick, an idea which he uses to denote that organizational phenomena, and indeed organizations, are created by being talked about.

The uniqueness of this concept lies on the way it preserves the idiosyncrasies present in meaning's construction, thereby differentiating Weick's approach from other conceptualizations of organizations as open systems.

Enactment thus sits in sharp contrast to the more commonly held view in which organizations are distinct and separate from their environments, and the ensuing prescription that those in organizations should direct their energies towards assessing and responding to what is 'out there'. (Maitlis and Sonenshein, 2010: 553)

Accordingly, it is through action and sense-making that "managers construct, rearrange, single out, and demolish many 'objective' features of their surroundings. When people act they unrandomize variables, insert vestiges of orderliness, and literally create their own constraints" (Weick, 1979: 243). In fact, this view could be seen as a constructivist view of organizations. Yet, the implicit choices therein point to important provisos that must be considered when interpreting organizational phenomena. Two limitations stem from the focus on communication processes and the vocabulary developed by Weick.

First, by focusing on the micro-relations, sense-making research overlooks⁵ contextual and historical aspects influencing organizational behavior (Brown et.al. 2008). Second, the notions of enactment, selection and retention turn interpretation processes more automatic and natural than they actually are, covering thereby political struggles within these very processes. Take, for instance, the three main aspects of sense-making according to Weick et.al. (2005). First, it is argued that sense-making happens when situations or circumstances are transformed into words and "salient categories"; second, organizing itself is embodied in written and spoken texts; and third, reading, writing, conversing, and editing are crucial actions that serve as the media through which the invisible hand of institutions shapes conduct. Hence, while highlighting local interpretive processes, the evolutionary view chosen by Weick still lacks a connection with the societal levels and an explanation of the political underpinnings within sense-making.

Indeed, sense-making theorizes the ways people organize the flux of chaotic events by describing properties of action that are crucial to the materialization of societal levels in organizational practices. Thus, sense-making is about noticing and bracketing, it's about

⁵ For an exception see Weber and Glynn (2006), which try to connect sense-making with institutional processes.

labeling, it's retrospective, it's about connecting the abstract to concrete; it's social and systemic; and finally and paramount, it's about action (Weick et al., 2005). However, a key point of what Weick and colleagues call "functional deployment in labeling, the noticing and bracketing, and the retrospective principle" (Weick et al., 2005: 411) bears largely a structural and functional view of language at the micro level, even when it takes into account the ability of individuals to create sense retrospectively. As we will see in the next chapter, this functional deployment is similar with what Castoriadis calls the identity logics of language and technique, dimensions that function as supports for interpretative processes, but which do not constrain and determinate the constitutive properties of these very processes.

Taking into consideration what have been said in the last section about metaphors, we must acknowledge that people engage with significations in more than retrospective or structured ways. This thesis assumes that meanings are enacted in a relationship between the psyche and the social-historical, whereby the process of creating meanings is less consensually constructed as assumed by Weick and colleagues. In disputes for assuring which meaning or meanings shall prevail an element of indeterminacy is always independent. One must consider, therefore, that different sense-makings collide in organizing processes. What is more, rather than exclusively retrospective, imagination points to the projective capacities of organizational actors, the way their expectations intertwine with their experience in order to act in the present. In this process, political struggles over significations add a permanent tension to sense-making. This political element might be even latent in many occasions, but it is always there. Indeed, some studies have been addressing how such tensions take place within interpretative processes (Dougherty, 1996; Weber and Glynn, 2006; Brown et al., 2008; Maitlis and Sonenshein, 2010; Munro and Huber, 2012).

Accordingly, Brown et al. (2008) have shown, for example, that sense-making occurs in a less homogeneous fashion than most accounts suggest. Asking the question "to what an extent is the sensemaking of members of a project team shared, and how can we explain discrepancies in participants' understandings?" (Brown et al., 2008: 1035), they have demonstrated what they call 'discrepant sensemaking'. Discrepant sensemaking

means that organized activities emerge from dissensus, disagreement and ambiguity. They observed this process in a company of software creation, in which they monitored the activities of a team involved in the development of a game for mobile phones. They analyzed different narratives during the development of the project under the following aspects a) project goal; b) main problems and their causes; c) solutions and their sources; d) evaluation; e) learning. Results show that different actors constructed narratives reflecting different strategies of self-construction and position according to other team members. Discrepant sense-making emerge in the idiosyncrasies carried on by individual interpretations. These are depicted in a series of team members' interpretations. For example:

Alf claimed credit for the initial good 'look' of the game and blamed Gayle for her lack of commitment to the project and poor quality final artwork. Gayle said that she had produced high quality artwork for the game but that this was not used because of problems caused (or not dealt with effectively) by the others. Don claimed to have provided Gayle with the best possible platform to produce her artwork, but that unforeseen (and possibly unforeseeable) problems then arose which necessitated compromises which negatively affected the product. Andy argued that 'Revolution' had been adapted from his code, that he had given Don invaluable assistance throughout the project, and that it was his decision to implement special effects animation. While he did consider that he might have been more involved in the game design process, his view was that the game's limitations reflected Don's shortcomings as a Java programmer. (Brown et al., 2008: 1053)

Discrepant sense-making show that rather than sharing meanings, team members create their own versions of facts. What is more, they construct meaning through disputes within interpretations, whereby power is manifested through a subjective realm. Individual actors have, in this sense, leeway to subtly introduce their personal subjectivities. In fact, similar signifying processes can be found in several studies (e.g. Seo and Creed, 2002; Engeström, 1987; Blackler, 1993) which point that shared meanings are hardly the rule in organizations. For Weber and Glynn (2006) a dialectical tension occurs in the process of creating meanings, as typified identities and situations are "always selective and incomplete ways to access actor and situation-specific flows of experience" (Weber and Glynn, 2006: 1654). Other evidences of discrepant sense-making can be tracked in studies of theater (different understandings within directors, dramatists, actors and drama teachers), in accounts of the medical field (different conceptualizations of work between doctors), and in investigations of universities (different understandings of outputs e.g. the job market, new technologies or managerial knowledge and innovation) (See Blackler,

1993). Indeed, as emphasized by Maitlis and Sonenshein (2010), researchers have turned their attention to how different actors enact meanings differently, which implies a different view on how change in organizations occurs.

This move is critical as it suggests potentially competing enactments of an organizational change. For example, since employees develop their own sense of a change that can deviate from managers' in dramatic ways (Bartunek et al., 2006; Sonenshein, forthcoming), employees may essentially be enacting a type of change that differs from those of top managers. What might be a strategic change to top managers can be a change that has strong ethical, social, or emotional overtones for employees (Sonenshein, 2009), something that may result in different pockets of shared meanings and subsequently divergent actions among these different groups. In looking across all three categories of focal actors, it is evident that change is a multi-vocal process, in which groups of members advance potentially discordant interpretations about their organizations (Dawson and Buchanan, 2005: 559). (Maitlis and Sonenshein, 2010: 559)

Divergent sense-making might happen vertically and horizontally within organizations. What these recent studies are pointing to is the different possibilities of interpretation within social and historical processes as a whole, highlighting the politics of meaning in the social construction of reality (Munro and Huber, 2012; Maitlis and Sonenshein, 2010; Brown et al., 2008). From this perspective, research on sense-making should address not only how meanings are selected, legitimized, encoded, and institutionalized in organizations, but also the discrepancies and alternative versions developing and undergirding new significations. After all, if organizations are constructed on "speech", as Weick suggests, words exchanged in the past project themselves into the future, and when incorporated in new contexts, they take on different significance, according to an imaginary already at play. The question of why certain significations and meanings gain traction and certain "realities" evolve in organizations is still a blind spot in enactment theory. This, of course, does not diminish its importance as an approach for assessing local actions and interpretations. However, this points to the moral, political and ideological aspects competing within signifying processes.

The concept of the imaginary advanced in the next chapter will seek to advance in this aspect by elucidating the dialectic tension between social-historical contexts and individual psyche beyond scripts and routines. The thrust is to show that organizational actors are not only story-tellers (Brown et al., 2008), but also story-creators in the full sense of an ongoing imaginative power that recasts and distorts the same story and

significations in different ways. Sometimes significations can be defended by a status quo or disrupted by unexpected events and interpretations. In the next section I will review the notion of imaginary in Lacan and its use in organization studies. Lacan offers an understanding of organizations beyond the cognitive view of individuals. However, as I will show, his concept of the imaginary differs from that of Castoriadis having implications to the understanding of inter-subjective processes.

Lacan's concept of the imaginary: The delusional organization

While imagination remains a loose concept in organization studies, imaginary has received relative recognition through the works of Jacques Lacan (Roberts, 2005). The use of Lacan's psychoanalytical concepts to the study of organizational phenomena serves to address the relationship between power, language and the subject in organizations. Studies applying his ideas can be found in a special edition that celebrates "the late arrival of Jacques Lacan" into the field (Contu et al., 2010: 307), a celebration that should be received with enthusiasm. However, it is worth noting that Castoriadis was already strongly engaged with Lacanism in the 1960s, and that he produced important critique against it.

If Lacan was preoccupied with the elevation of psychoanalysis as a science, as showed by his liaison with Sassurean structuralism, Castoriadis tried to avoid deterministic tendencies that he considered a threat to autonomy and authenticity of individual agency. An extensive dialogue between these two intellectuals was, however, always difficult, since debates were often marked by the hostility with which Castoriadis addressed the theory of Lacan (Stavarakakis, 2007). Instead of focusing on the details of this acid debate (Fel, 1993; Whitebook, 1998; Urribarri, 2002; Elliott, 2002; Stavarakakis, 2007), this section will flesh out Lacan's understanding of imaginary and some of its use within organization studies. This will be used to differentiate Castoriadis' view of the imaginary, which will be presented in detail in the next chapter.

An exemplary application of the Lacanian concept of the imaginary in organization studies is that of Roberts (2005). Roberts explains that the imaginary in Lacan, along with

the symbolic and real, is one of the three registers of experience. While the symbolic is the domain of speech and language, through which the subject is constituted, the imaginary refers to “the ways that the subject is constituted through images and the identifications, real and imagined, that they offer” (Roberts, 2005: 261). The imaginary order for Lacan, defined lately in his thinking as the mirror stage, has, then, straight relationship with delusion, or as explained by Roberts (2005), the imaginary relates to the way this realm acts as a lure or a trap. The mirror stage concept can be understood in two ways.

On the one hand, it is an account of the foundation of a humanist, interiorized self; of a sense of self as a discrete, autonomous, independent entity. On the other hand, it is an account of the illusions or misunderstandings of the humanist conception of the self. (Roberts, 2005: 627)

It refers, first of all, to the constitutive formation of the self, because the mirror stage allows the child to recognize and define itself in relation to his experiences. It comprises a paradox, however. Though being a constitutive moment – creative, because it creates the self and the world around it – this is a moment of alienation. Lacan explains this paradox as “the fateful ‘*meconnaissance*’ or misrecognition that founds the ego in a ‘fictional direction’ (in Roberts, 2005: 628). Accordingly, this state of alienation is never subdued, for the child after passing through the Oedipus complex comes into contact with the language, which subsequently constrains and helps to shape its world of meanings. The constraining effects of language are an acute issue in sociology and organization studies regarding the agency and structure (see for example, Garud et al., 2007). Here it can be summarized by the following question: If the baby, after passing the Oedipus complex, gets in contact with a language that was already in place, how to explain that it can develop and define its own interests and identities? To put in another words, the initial state of alienation of the baby is only solved with more alienation.

Castoriadis and Lacan seem to have similar understandings regarding this aspect. However, they diverge fundamentally with regard to the degree of determination of the subject; and such differences imply different lenses through which we can see the organizational phenomena. As was pointed out, the Lacanian imaginary is used by organization scholars to reveal the deceptive dynamics that actors find themselves trapped, highlighting the alienating effects of language. While not denying that language can

produce alienation, Castoriadis' critique suggests that Lacan reduces social phenomena and historical accounts to structural and linguistic terms. These critiques are commented by Whitebook, for example, who underscores that Lacan has hypostatized the determinative powers of language, when addressing language as "machine-like circuit" and when he disregarded the historical aspects involved in the formation of the subject, thereby equating his accounts to the biologism of Freud (Whitebook, 1998: 153). Organizational scholars using Lacan alleviate such critiques. Contu et. al. (2010: 312) says, for instance, that the application of Lacan's ideas to the study of organizations intends not to put him in a vulgar view "of psychoanalysis which still bares the uncomfortable traces of Freud's realist, even empiricist beginning with his attention to scientific Discovery of the unconscious and the specific psychic instances and mechanisms". Yet, despite such circumventing maneuvers, scholars outside organization studies confirm Lacan's desire to embrace the 'scientific' project of Freud (Fel, 1993; Urribarri, 2002; Stavrakakis, 2007).

The criticisms of Castoriadis against Lacan certainly prevented a fruitful dialogue between these two scholars. Nonetheless, it seems that the creative and constitutive role of imagination, defended by Castoriadis, is not entirely antithetical to Lacan's understanding. According to Stavrakakis (2007), the concept of lack in Lacan distinguishes Lacanian theory to typical accounts of structuralism. For Lacan the symbolic realm is not a closed circuit, but rather characterized by an "always lacking and incomplete ensemble" (Stavrakakis, 2007: 40). It "is this lacking character of sedimented meaning that makes possible the emergence of the subject and the continuous (partial) recreation of identity (individual or collective) through new identification acts" (ibid.). Stavrakakis argues then, that through the convergence of Lacan and Castoriadis, it is possible to interrogate the creative and respective ethic-political implications of signifying processes, while accounting for the limits of imagination, that is, the alienating side of human constructions and institutions. However, Stavrakakis contends that this alienating dimension of imagination is downgraded by Castoriadis. This is not the case, as I will show in the next

chapter. Castoriadis was in fact well aware of the limits of imagination and the imaginary, limits which are reflected into his notions of the instituted imaginary and heteronomy⁶.

What these commentators point to is that Castoriadis and Lacan have similar ideas on how social reality is constructed. Yet, their conclusions diverge. “Castoriadis is led to celebrate the *creativity* of the human subject and human society, while Lacan is led to stress the constitutive *alienation* of human experience” (Stavrakakis, 2007: 47-48). This difference in emphasis is particularly important. Considering that the concept of imaginary incorporated by organization studies, namely, regarding its reproductive and delusive power (Roberts, 2005), the differences between Lacan and Castoriadis are crucial in especially one particular point: how to recognize if the imaginary is of a creative or deceptive type? This question becomes even more complicated if we consider that the imaginary can be both creative and deceptive. Reflecting upon these differences demonstrates the ambiguous nature of imagination and imaginary, an ambiguity indeed recognized by both Lacan and Castoriadis. Such ambiguity of the imaginary is largely unaccounted by organization studies, in a way that the work of Castoriadis might be of help.

Castoriadis worked extensively this ambiguity by providing a more diverse conceptual apparatus to tackle the distinctions within the imaginary. I shall treat this point in detail in the next chapter, but two points can be briefly raised here. First, Castoriadis differentiates imagination from the imaginary; the former term refers to the individual level and the latter to the social level. These levels are closely related, though. Standing in contrast with this view, the imaginary in Lacan is undifferentiated with regard to social and individual levels. In Roberts (2005), for example, the imaginary is centered on the individual, and used to explain identification processes in organizations. Hence, while the concept might encompass social contexts, the two levels collapse in one in the Lacanian imaginary. Castoriadis concept of the imaginary, in turn, detaches the signification

⁶ The argument of Stavrakakis that Castoriadis bears a romantic view of creativity is unsound; Castoriadis makes no normative claim for creativity. On the contrary, he explicitly acknowledges that imagination may lead to terrible creations. See Castoriadis, C. (1997a) ‘Done and To Be Done’, In: David Ames Curtis (ed) *The Castoriadis Reader*. Oxford: Oxford University Press, 361-417. Thus, despite Stavrakakis (2007) has sought to reconcile Lacan and Castoriadis, he ends up his account giving prevalence to Lacan. This is, of course, consistent with the project pursued in his book.

processes from an exclusively individual level (through individual imagination) accounting for the traffic of social imaginary significations. It is through the enactment of such significations that the constitution of individual and social takes place. Hence, Castoriadis understanding of the social imaginary provides a bridge between the individual, organizational and societal level.

A second important point is that in Lacan's view of the imaginary, the processes through which different meanings and interpretations collide might become blurred. The Lacanian imaginary bears a strong sense of alienation, giving greater emphasis to the fictional aspects of signifying. This fictitious or misleading aspect of the imaginary is not screened out by Castoriadis, who, nevertheless, does not regard it as exclusive. Castoriadis conception of the imaginary shows not only that signification processes are partially determined, but also eminently open to new re-significations and especially important to the creation of new significations.

The agonistic relationship within the social imaginary of Castoriadis highlights then the political underpinnings of symbolic processes. This is visible in the way certain meanings are defended or suppressed, where different imaginaries struggle to define which will prevail. At the organizational level such contradictions may be traced in the way organizations constantly reinvent or pervert concepts and significations, creating new ways to operate, to organize and to understand their reality. This is especially true for risk management practices, as we will see in the risk management narrative in the chapter 4. Subtleties in creative/delusion understandings of imaginary could therefore be important to the analysis one takes. The notions of creativity/delusion shall be enriched by the concepts worked out by Castoriadis in the next chapter.

The last step of this revision is a reappraisal of the institutional logics perspective within organization studies. Since a long time, institutional theory has as a primary assumption the social construction of reality (Berger and Luckmann, 1967; Meyer and Rowan, 1977). However, its recent developments reflected on institutional logics within organization studies show that it still prevails a misunderstanding about the role of meanings, values and logics within institutions. In fact, this points to a sharply different conceptualization of institutions than the one defended by Castoriadis, and which will be

pursued in this thesis. Hence, in the next section I will critically review the institutional logics perspective, clarifying its understanding of institutions and the assumptions about logics, meanings and values underpinning it.

Institutions: logics, meanings, values-substances

In the last three decades new institutionalism has exerted a substantial influence over the contours of organization studies⁷. Seminal articles such as those of Meyer and Rowan (1977), Zucker (1991) and DiMaggio and Powell (1983) contributed to central concepts of this current and to a re-emergence of institutional analysis within organization studies. Meyer and Rowan (1977), as well as Zucker (1977), gave special attention to the role of culture and cognition in institutionalization processes addressing social phenomena from a macro and micro perspective respectively. DiMaggio and Powell (1983), from another angle, extended the insights of Meyer and Rowan (1977) from the societal level to the analysis of organizational fields. It is perhaps their success, considering the voluminous references to their work, which made greater impact to the study of organizations through an institutional perspective, whereby concepts such as institutional field and isomorphism – processes through which organizations seek to emulate themselves in their fields – levered a series of empirical studies.

Initially, then, new institutionalists focused on how organizations tend to become similar in organizational fields, institutional environments, and societal sectors (DiMaggio and Powell, 1983; Meyer et al., 1987; Scott and Meyer, 1991), emphasizing in their research agenda legitimacy and isomorphism as vital factors to the survival of organizations (Perrow, 1986). However, it is now largely recognized that the emphasis placed on organizational constraints by those works left little space for theorizing action, limiting the role of power, politics, strategy and change in organizations (Zucker, 1991; Greenwood et al., 2008; Clegg, 2010). As a way of overcoming these shortcomings, scholars started looking for alternatives to reconcile action with institutions (Hirsch and

⁷ A shorter version of this section is reproduced in my paper *Bringing Values Back In: The limitations of institutional logics and the relevance of dialectical phenomenology*, *Organization* (forthcoming).

Lounsbury, 1997; Barley and Tolbert, 1997). Efforts made in this direction can be found in approaches such as institutional work (Lawrence et al., 2011), institutional entrepreneurship (Leca et al., 2008) and the Scandinavian tradition of institutionalism (Czarniawska and Sevón, 1996), all of which incorporate, in one way or another, the role of actors in transforming and creating institutions (Hardy and Maguire, 2008).

The institutional logics perspective is another effort to reconcile action and politics with institutional analysis, offering an approach that allegedly bridge institutions with local action, or structure with agency (Thornton et al., 2012; Thornton and Ocasio, 2008). Research on institutional logics has made its thrust into organization studies by addressing potentially contradictory institutional orders. That is, studies within this tradition interpret and describe how individuals and organizations often engage in contradictory practices and multiple logics, thereby shaping organizational heterogeneity and change. Friedland and Alford (1991), considered to be the pioneers of this approach, view institutions as rooted in material practices and symbolic systems whereby social actors produce and reproduce their experiences. They argue that each institutional order of society – the market, the state, family, democracy and religion – has a central logic that both constrains action and constitutes organizations. Contradictions between these different logics, as the argument goes, enable action, politics and change. The conceptual apparatus behind institutional logics makes a compelling framework for the study of organizations for three reasons. First, it provides a link between macro and micro processes, linking structure to action⁸. Second, the approach underscores power and politics that emerge from contradictory logics. Third, it reintroduces elements of wider societal realms into organizational analysis, such as family, religion, the state and the market.

⁸ The agency/structure dilemma is one of the acutest debates in organization studies in particular and sociology in general (see Reed, M. (2003) 'The Agency/Structure Dilemma in Organization Theory', In: H. Tsoukas and C. Knudsen (eds) *The Oxford Handbook of Organization Theory: Meta-Theoretical Perspectives*. Oxford: Oxford University Press.). A succinct explanation of the paradox of embedded agency is given by following theoretical puzzle: "if actors are embedded in an institutional field and subject to regulative, normative and cognitive processes that structure their cognitions, define their interests and produce their identities [...], how are they able to envision new practices and then subsequently get others to adopt them?", p.961 in: Garud, R., Hardy, C. and Maguire, S. (2007) 'Institutional entrepreneurship as embedded agency: An introduction to the special issue', *Organization Studies* 28:(7): 957-969..

Hence, the institutional logics perspective, introduced by Friedland and Alford (1991), laid out an important claim for bringing society back into institutional analysis, taking into account the different and often contradictory societal spheres – the market, religion, family, the state and the corporation. With a particular view of institutions, institutional logics would provide a method and a theory for tackling social and organizational phenomena in a non-determinist and non-functionalist way (Friedland and Alford, 1991; Thornton and Ocasio, 2008). Hence, despite having been conceived alongside seminal studies of the new institutionalism (DiMaggio and Powell, 1991), this perspective differs from them in significant ways (Thornton et al., 2012). Instead of focusing on isomorphism or legitimacy, researchers of institutional logics investigate the effects of different regimes of practice on individuals and organizations, working this task out with a conceptual apparatus crafted to address politics and power, agency and change (Friedland and Alford, 1991; Friedland, 2009). The landmark application of institutional logics in organization studies is Thornton and Ocasio's account of change in the publishing industry, which describes the transition from an editorial logic to a market logic (Thornton and Ocasio, 1999). After their work others followed suit, and related studies have ranged from the study of colleges and universities (Gumpert, 2000), to the analysis of mutual funds and accounting firms (Lounsbury, 2002; Lounsbury, 2007; Thornton et al., 2005) to the interpretation of change in the French gastronomy (Rao et al., 2003); and the list continues to grow (Thornton and Ocasio, 2008).

Without doubt the institutional logics approach has gathered the attention of organization scholars because while theorizing heterogeneity, it restates the centrality of conflicting meanings within institutions, making it a sensitive theory in matters of power and politics. Yet, in its new habitat, institutional logics have taken a different slant from that of Friedland and Alford (1991), diverging in important ways from their original form.

In their seminal essay Friedland and Alford put forth a particular view of institutions. They conceive institutions 'as *both* supraorganizational patterns of activity through which humans conduct their material life in time and space, and symbolic systems through which they categorize that activity and infuse it with meaning' (Friedland and Alford, 1991: 232 emphasis added). (Note the interplay of symbolic and material, a central

understanding to institutional logics). Institutions are therein both material and ideal systems; they are ‘supraorganizational patterns of human activity by which individuals and organizations *produce* and *reproduce* their material subsistence and organize time and space. They are also symbolic systems, ways of ordering reality, and thereby *rendering experience* of time and space meaningful’ (Friedland and Alford, 1991: 243 emphasis added). The material and ideal converge here, they interact and enmesh in their understanding. Within institutional logics, Friedland says (2013: 7), ‘identities of subjects, material practices, and valued objects are co-implicated, as in the linkage of owners, market exchange and property [the market]; representatives, border defense and sovereignty [the state]; congregants, prayer and divinity [religion]; or scientists, replicable representation and knowledge [science]’. It is precisely the co-implication of identity, material practices and values what makes an institutional logic ‘real, available, good to think and act with’ (ibid). This reasoning gives originality to Friedland and Alford’s proposal; and it also distinguishes their view from that of institutional logics advanced by organization scholars.

The main difference between Friedland and Alford’s original proposal and later works in institutional logics lies in the weight and understanding of values in each perspective: intrinsic and constitutive in Friedland and Alford, extrinsic and modular in Thornton and Ocasio (these terms shall be clarified soon). Friedland has recently exposed this divergence by highlighting values, which he relabelled institutional substances, as the core of his understanding of institutional logics (Friedland, 2009; Friedland, 2012; Friedland, 2013). In his words, ‘[i]nstitutional logics are founded neither in subjects nor objects, neither in the will or reason of a subject, nor the material constraints of objects and tools, but metaphysically in what I have referred to not as value, but through the category of institutional substance’ (Friedland, 2013: 2). Friedland purposefully uses the Aristotelian concept of substance instead of value to underscore the ordinary role of metaphysics within institutions. That is, metaphysics “constitute before they legitimate; they are the ground, not the reflection of, instrumental action which substantiates them in practice through one’s relationships with objects and other people. Their ability to constitute is the basis of their capacity to legitimate” (Friedland, 2013: 2). The

contradistinction between substances and practices points out to two realms converging conceptually in Friedland's idea of logics: material and immaterial, or immanence and transcendence. Crucial in his view of institutional logics is that practices can hardly be separated from the substances they derive from, which means that practices are themselves symbolic manifestations of substances.

Therefore, the concept of institutional substance yields a relational view of the material and symbolic. Friedland gives the institution of law as an example. Justice is a transcendent substance of the practices of law. It is justice that grounds 'the elaboration and application of the structural code of legal and non-legal by which new categories of action are produced' (Friedland, 2009: 67). Justice – a value, a substance – is in this way 'an absent presence which is forever deferred in practice, but must be cited and believed in for law not only to be justifiable, but to be actionable' (ibid). Substances such as justice, democracy, property, god and love must be signified through practice, that is, through juridical practices and legal codes, through electoral representation and participation, through the production and exchange of priced commodities, through the rituals of the church and practices of piety, and through marriage, cohabitation and reproduction (Friedland, 2013). Substances must be then ritualized in material practices and talked by people, whereby they can be recognizable. Institutional substances are, in this sense, enacted by actors who temporalize them in determined practices and objects.

It is important to note that Friedland carefully avoids the pitfalls of the materialist-idealist divide, withdrawing from the Parsonian value consensus while also rejecting the view that values are completely disconnected from individuals and practices as if they were externalized sources of legitimacy⁹. Substances, he argues, 'are not objects, but they depend on them' (Friedland, 2013: 5), and though represented through material practices, values imply some kind of individual commitment to their absent presence, so reflexive agency can take place. 'Just as one "has" the divine through material rite, one "has"

⁹ As a matter of fact, the avoidance of the Parsonian value consensus was the reason for the lack of a theory of agency in those seminal studies of new institutionalism. See Friedland, R. (2012) 'Book Review: The Institutional Logics Perspective: A new approach to Culture, Structure, and Process. Patricia H. Thornton, William Ocasio & Michael Lounsbury', *M@n@gement* 15:(5): 582-595. See also Hirsch, P. M. and Lounsbury, M. (1997) 'Ending the family quarrel: Toward a reconciliation of 'old' and 'new' institutionalisms', *American Behavioral Scientist* 40:(406).

property as a deed or contract, knowledge as a represented result, sovereignty as the defence of a border or the institution of a law' (Friedland, 2013: 5). Now, let us see how organization scholars have been describing institutional logics.

In organizational institutionalism, a variety of accounts suggest that logics influence action, provide meaning and content for institutions, and shape action in organizational fields (DiMaggio, 1997; Thornton and Ocasio, 1999; Thornton and Ocasio, 2008). Indeed, according to Greenwood et al. (2010), the very idea that logics shape practices is one of the core propositions of the institutional logics perspective. For instance, Thornton and Ocasio state that 'assumptions, values, beliefs, and rules that comprise institutional logics *determine* what answers and solutions are available and appropriate in controlling economic and political activity in organizations' (1999: 806 emphasis added). From this follows a general notion of logics as 'broader cultural beliefs and rules that *structures* cognition and *guide* decision making in a field' (Lounsbury, 2007: 289 emphasis added). Moorman (2002: 154) argues that the term 'logic' is used to 'describe the institutional environment's impact on what is considered meaningful, appropriate and comprehensible'. Greenwood et al. (2010), suppressing the difference between ideal and material espoused by Friedland and Alford, define institutional logics as the 'symbolic systems, ways of ordering reality, and thereby rendering experience of time and space meaningful' (Greenwood et al., 2010: 522). To summarize, these definitions blur the relational dynamic between symbolic and material, resulting in an excessive emphasis in how logics organize and even determine social reality. Such a conception of logics stems, I argue, from a conflated view of meanings and logics under the same conceptual umbrella, which makes a clearer understanding of the role of the substances rather difficult and leads to a depiction of meanings as if they were autonomous objects hovering over organizational fields, waiting to be carried out by some institutional or cultural entrepreneur. Probably rooted in the fear of the Parsonian internalization of values, this is a mistaken view.

The metaphor underpinning this misconception of the nature of meaning is that of a 'conduit' (Sinha, 1999: 224). In a conduit, meanings are viewed as objects transacted within organizational fields, be they in our heads, in society, in linguistic differences or in

higher-order realms. According to Sinha (1999), the conduit metaphor reflects the dogma of the autonomy of meaning; that is, the wrong idea that ‘linguistic meaning is autonomous from the material world existing in the realm of “mental objects” (mental representations), or in the realm of Durkheimian “social facts,” or in the realm of ideal, Platonic and Fregean “senses”’ (Sinha, 1999: 224). The top-down view of meanings stemming from logics is, in this sense, antithetical to the very notion of institution Friedland defended. To him, institutions are ‘themselves practical regimes of valuation in the sense that they constitute institutional objects of value’ (Friedland, 2009: 50), an understanding indeed congruent with the Latin root of the word ‘institution’, which originally meant an ‘intentional act of creating and enacting some type of collective practice’ (Czarniawska, 2008: 79). Definitions imply theoretical choices. Thus, the arguments made so far call for attention to more than a simple flawed terminology. They point to divergent ways of addressing and interpreting values, meanings and change.

As argued previously, the main difference between Friedland's conceive of institutional logics and the Thorntonian rubric is the weight given to and the understanding of substances in each perspective: intrinsic and constitutive in the former, extrinsic and modular in the latter. Friedland's intrinsic and constitutive perspective shall be more or less clear already. Substances are constitutive; they are the metaphysical bind of practices; they are neither subjects nor objects; they can rarely be separated from the practices through which they must be repeatedly enacted.

The extrinsic and modular view of value held by Thornton and colleagues can be seen in the mechanisms they deploy to tackle heterogeneity and change. According to Thornton et al. (2012), the nearly decomposable capacity of an institutional logic's components – its identities, values, practices – enables institutional or cultural entrepreneurs to segregate, transpose and combine them. Their view of values as more or less autonomous and externalized elements renders logics a coercive strength (logics provide, determine, structure etc.) because logics are available out there to entrepreneurs, who instrumentally access them, recombining or blending their modular elements. As in the conduit metaphor, ‘it appears as though institutional logics are located at the level of

language, as though symbol and category float free from materiality' (Friedland, 2012: 149).

The point is not to deny that cultural or institutional entrepreneurs might introduce innovations leading to change (they certainly do), but rather to expose the reduced and therefore flawed view of change as a matter of 'different recombinant types' (Thornton et al., 2012: 118). If institutional change is a matter of recombination of available elements, how can new values and/or new institutional logics be explained? As Friedland argues, '[i]dentifying the decomposable, and hence mobile, elements of an institutional logic is related to explaining their configurational plasticity, that is, understanding *the limited variety of institutional formations that obtain, what logics co-exist, complement or contradict, hybridize or displace in which fields of activity*' (Friedland, 2012: 588 emphasis added). Transposition and recombination, not the social construction of values, are what the organizational rubric of institutional logics seeks to explain. And here we feel the bumps of the toothless cogwheel, once, in organizational research, logics suddenly switch position after periods of relative stability. In short, the mechanical view of institutional logics within organization studies posits serious limitations on explaining how the new takes place within institutions.

As espoused by Friedland, values-substances are the key to identify and qualify institutional logics. Friedland brings the notion of values and meanings to the ground, closer to the practices and objects surrounding them. He gives, however, fewer clues about how we can account for substances or even how changes within these very substances might happen, limiting himself to describing the core values-substances of those institutions already outlined. Castoriadis' philosophy can help to account for this deficiency. His ideas about the social imaginary are consistent with the understanding that meanings always result from an investment¹⁰, a signifying process, that is, that meanings are acts 'continuous with (not separate from) the material world in which other (non-

¹⁰ Investment is used here in the psychoanalytical sense of cathexis (*Besetzung*). It refers basically to the psychic energy connected to a representational flux (a group of ideas, a body part, an object, a fantasy, etc.). Castoriadis develops this concept in relation to the idea of sublimation, pushing Freudian theory further in this respect, whereby he contends that the source of drive (intentions/orientations/desires) might originate either in the psyche or in society. For a more thorough discussion, see p.127, Klooger, J. (2009) *Castoriadis: Psyche, Society, Autonomy*, Leiden: Brill.

discursive) human activities are carried out' (Sinha, 1999: 232). In the next chapter I will flesh out Castoriadis' theory of the social imaginary in order to explore how it can contribute to a novel understanding of institutions, logics, meanings and values-substances. His phenomenology will be then a springboard to account for risk management as an imaginary institution. Before advancing to the next chapter, I shall close this one with an overview of what has been said until now.

Taking stock: assumptions of imagination in organization studies

What do the gestures towards imagination of the previously reviewed theories lead us to conclude? The philosopher Paul Ricoeur can be of help here. Investigating how imagination have been commonly addressed in discourse and action, Ricoeur asked the following question: "Does the term 'imagination' designate a single, coherent phenomenon or a collection of experiences only distantly related?" (Ricoeur, 1994: 119). He concluded that the term conveys at least four uses. First, as an "arbitrary evocation of things" which despite being absent exist elsewhere (Ricoeur, 1994: 119). Second, the term designates something which 'takes the place of' other thing, such as in portraits, paintings, drawings, diagrams, language, and so on; this refers basically to different forms of representation. Third, imagination is the faculty of bringing non-existent things to mind; fiction, ranging from dreams to inventions, such as those present in dramas and novels, is positioned here. Fourth, the term is applied to the domain of illusion, that is, imagination refers to representations which are addressed to absent or non-existent things, but which call for belief in the reality of them, that is, people suspect from their supposed existence.

According to these uses, Ricoeur contends that theories tend to adopt univocal and rival ways of addressing the phenomenon of imagination. Such variation, he explains, is distributed along two different axes and its opposing views: the first axis refers to the object of imagination (image), and its spectrum varies according to the level of presence and absence of the object. "At one end the image is referred to perception of which it is merely the trace, in a sense of lesser presence"(Ricoeur, 1994: 120). At the other end of this first axis, the image refers essentially to absence; as in the fictions produced by

individuals, in which imagination refers to other-than-present or to a fundamental otherness. Hume and Sartre are, respectively, two examples of these opposing views in matters of the object of imagination. At the second axis one finds the subject's type of consciousness with regard to the extent of its capability of distinguishing between real and imaginary; the spectrum of this second axis ranges from the fascinated consciousness to the critical consciousness of the subject. By fascinated consciousness Ricoeur refers to a complete lack of critical awareness concerning the uses of imagination, whereby the image is confused and taken for the real. Spinoza's 'imaginatio' is a representative of this view. And by critical consciousness, he refers to the critical distance of the self, while imagination functions "as an instrument of the critique of reality" (ibid). Husserl's notion of transcendental reduction exemplifies this point.

Despite not theorizing about imagination, the theories and approaches previously reviewed seem to have, indeed, rival assumptions of the phenomenon imagination. In order to cast light on these assumptions, I have produced a graphic representation of the two axes described by Ricoeur (figure 1 next page). To that matter, I positioned inside this matrix the four traditions of organizational research previously reviewed. The quadrants are ideal types, therefore, theories do not fit therein in a clear cut way. As I will show, some assumptions shift quadrants according to understandings of individuals and organizations promoted by those theories, depending on how they define meaning and value, and how they theorize action and interpretation in organizations. Let me briefly sketch what each quadrant represents.

Quadrant 1 – The theories in this quadrant assume that individuals share meanings in a relatively homogenous way, producing regularities of behavior within the systems they inhabit. Scholars investigating such regularities are concerned with accumulation of knowledge about interpretative structures in organizations, and organization theory is viewed thereby as a matter of progressive discoveries. Here we see theories strongly preoccupied to naturalize the concepts they use to explain organizational phenomena. New institutionalism in its earlier stages, with its ideas about myths of rationality, cultural persistence, shared meanings, taken-for-granted knowledge and isomorphism (Meyer and

Rowan, 1977; Zucker, 1991; DiMaggio and Powell, 1983) can be included in this quadrant, because it aims to explain how individuals produce their own reality despite not being aware of it. Imagination of the subject is, according to this view, assumed as a reminiscent trace of perception, and interpretation is strictly theorized through its reproductive effects. Assumptions of determinacy underpin such theories, since there is no tension or conflict within the interpretative processes and interactions taking place.

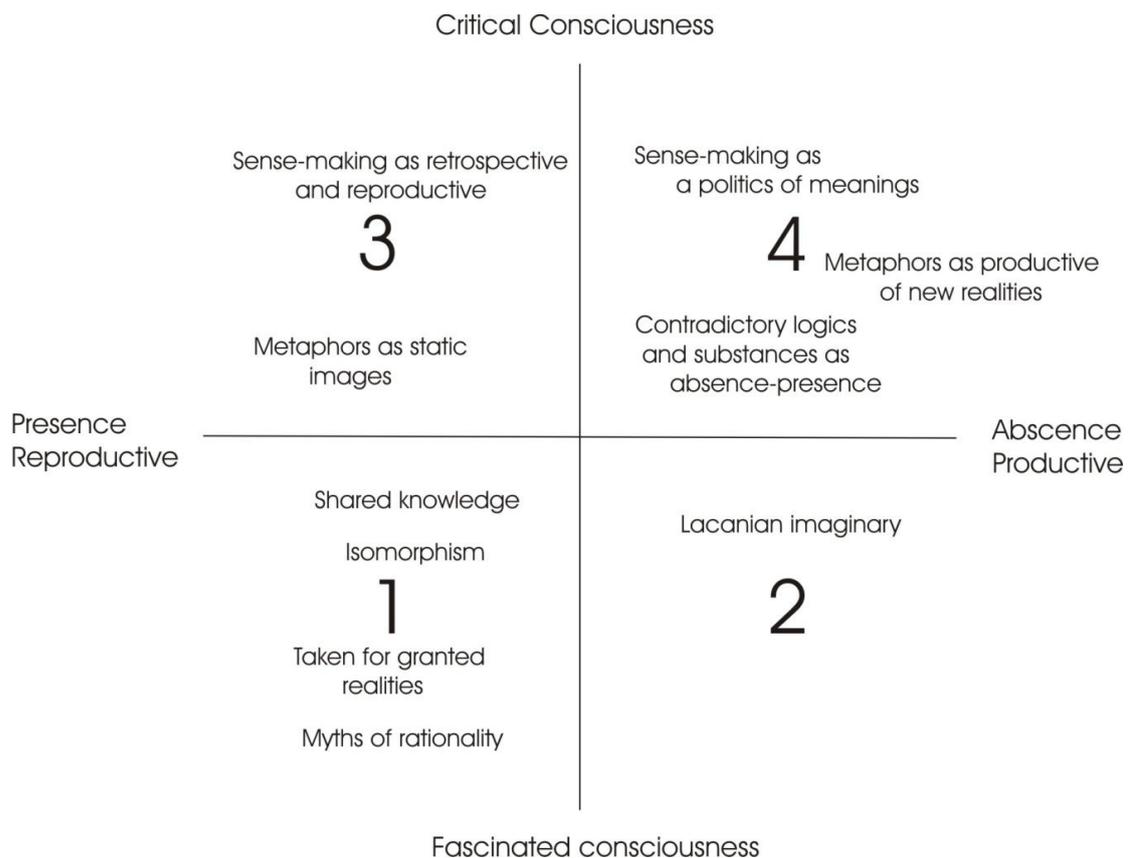


Fig.1: Assumptions of imagination in organization studies. Adapted from Ricoeur (1994)

Quadrant 2 – The accounts in this quadrant deal with some form of subject’s alienation (i.e. fascinated consciousness and absence of the object of imagination). The Lacanian concept of the imaginary fits in this quadrant. The imaginary in Lacan refers to the lures and delusions produced by the psyche; and in spite of alienation being a theme slightly touched by, for example, myths of rationality, in this second quadrant imagination tends to bear the aspects of a fictional faculty of individuals, whom produce objects that despite of being absent or other-than-present reality are held without critical awareness and are,

therefore, taken for the real. Thus, interpretive studies with assumptions of imagination in this quadrant will likely deny any relation of imagination beyond that of its relations with illusions, dreams or fictions.

Quadrant 3 – In the third quadrant one finds the accounts offering or exhibiting to their subjects, a certain level of critical awareness of how organizations as well as knowledge about organizations are socially constructed. Sensemaking and research on metaphors, as primarily addressed by Weick and Morgan respectively, have assumptions fitting in this quadrant. Both shift the problem of imagination from perception to an issue of the uses of communication and language. Creativity within interpretative processes is a theme addressed by these theories. Yet, some problems remain acute. If metaphors are seen simply as a matter of overlapping words, images convey a rather static view of organizations. That is, images serve to bring forth information, to connect different domains or/and to transfer ideas between domains, but their dynamic and disputable meaning within organizational practices remains unnoticeable. To some extent, imagination refers here to semantic innovation, but still in a rather narrow and tangential sense. Studies bearing a static view of metaphors do not tackle interaction and contradictions within metaphors, leaving unexplored how differences between same images operate or how new images beyond overlapping of the existing ones could be formed. Sensemaking, in its turn, is a sensitive approach in matters of interaction and how individuals creatively make sense of situations. However, its focus is retrospective and not projective interpretation, leaving unaccounted how imagination relates to productive forms of interpretation in signifying processes. Prospective interpretation is especially relevant in risk management assessments, in which techniques of premediation play an increasing role (De Goede, 2008). Sense-making research also struggle to tackle how local interpretative processes connect to institutional or societal levels.

Quadrant 4 – In the fourth quadrant one find studies explaining how individuals use metaphors or tropes within the struggles of local interpretation. Images bear, here, a creative and generative function, being capable of forging new meanings and therefore

new organizational realities. Accordingly, sense-making takes into consideration the politics of meaning, because individuals hardly share meanings in a homogenous way within interpretative processes. From a societal and organizational level contradictions between logics shape action and politics inside organizations. Values and meanings are viewed as incarnated in practices and identities, but are constantly re-signified according to renewed commitments. Rather than theorizing meanings as a ‘thing’, meanings are depicted as an absence/presence through which actors engage in practices and construct their identities (e.g. Friedland, 2013). In this quadrant imagining comprises the disruptions of the imagined object resulting in the restructuration of ‘semantic fields’ (Ricoeur, 1994: 122).

The matrix above offers a brief sketch of how those interpretive approaches have positioned themselves according to their latent assumptions about imagination. What follows in the next chapter is an attempt to go beyond these traditional views of imagination, exploring the social dimension of imagination. In the next chapter I will present the ideas of Cornelius Castoriadis about the imaginary institution of society. On the one hand, his works on the social imaginary address imagination as that of productive type represented in the fourth quadrant, without neglecting the illusory and sometimes deceptive role of imagination. On the other hand, his understanding of institutions and social imaginary significations offers us a bridge between the representations at the societal level and action at the organizational level. A Castoriadian perspective of imaginary institutions shall enable us to investigate how institutions communicate with regard to signifying processes, an acute issue among organization scholars as recently expressed (Lammers, 2011; Barley, 2011). What is more, his phenomenology will highlight the inherently political element within the symbolic realm of institutions, providing concepts and ideas to address institutions in a novel way.

Chapter 3

Social Imaginary and imaginary institutions

Nothing is more fundamental in setting our research agenda and informing our research methods than our view of the nature of the human beings whose behavior we are studying (Simon, 1985: 303)

Herbert Simon correctly asserts that our view of the human nature fundamentally informs our research about organizations. This underscores even more the strange fact that imagination remains a neglected phenomenon within organization studies. The lack of a theory of imagination shall be seen with astonishment, because imagination is indeed a fundamental part of human life, being easily praised when it comes to innovation and creativity. But more than that, imagination is indubitably part of how humans signify the world. This chapter explores how imagination and imaginary, as concepts and phenomena, are addressed by the phenomenology of Cornelius Castoriadis. His ideas will be used to advance a framework for the study of the imaginary within institutions, more generally, and in the investigation of risk management as an imaginary institution more specifically.

This chapter presents, according to this aim, key concepts of Castoriadis' theory and philosophy. The thrust here is to achieve a synthesis of his thoughts, from which I will develop a framework to be applied in the empirical part of this thesis – the investigation of risk management as an imaginary institution. Following this rationale, this chapter is divided in four sections. The first section explores the way traditional forms of knowledge have addressed imagination and imaginary. The second section introduces the concept of individual and social-historical in Castoriadis' works, which shall explain how Castoriadis understands the relationship between the individual and social. The third section addresses key concepts of Castoriadis theory that will be used to describe and qualify imaginary institutions. And finally, in the fourth section I will advance an approach to the analysis of institutions based on the concepts previously presented, before concluding this chapter with some remarks.

Imagination and imaginary: the inherited thought

After what has been exposed in the first chapter, one question remains acute: Why organization studies have so far neglected imagination? Answers to this question shall be pursued beyond the boundaries of organization studies. As a matter of fact, the seeds of this neglect are rooted in a long tradition of thought. As Castoriadis explains (1987b; 1994; 1995), along 25 centuries imagination has been discovered and at the same time resigned in the writings of central thinkers of Western thought. All the way through modernity, imagination's creative property remained related to an inferior, secondary and instrumental role (Perrusi, 1999). Thus, it has never received a proper place which should be central to a philosophy of the subject (Castoriadis, 1994). I will explore next how and why imagination and imaginary have been covered up by a long tradition of philosophical thought. This shall pave the way to Castoriadis' account of society, of being and of institutions in the subsequent sections.

The first thinker to explicitly address imagination was Aristotle (Castoriadis, 1994). Imagination, as treated by Aristotle, can be divided into two different ideas. On the one side, it concerns the imitative or reproductive process. On the other, Aristotle asserted that there can be no thought without *phantasia*, and furthermore, that all thought is preceded by *phantasia*. Castoriadis calls this second property described by Aristotle primary imagination, which corresponds approximately to what he labels radical imagination: It refers to the individual faculty of creating significations through imagination. However, Aristotle did not seriously pursue any further relationship between imagination (*phantasia*) and creation (*poiesis*). This was because, as Castoriadis puts it, philosophy since its conception has concerned itself with the search for truth as opposed to mere opinion, and truth is therein strongly related to reason, whatever the name used to designate it (e.g. *logos*, *nous*, *Ratio*, Reason, *Verstand* and *Vernunft*). What is more, despite Greek thinkers were aware of the very capacity of societies to transcend their own institutions, taking their own history as an example with the introduction of philosophy, politics and democracy, there was an urge to establish these new institutions as an, paradoxically as it may sounds, unquestionable foundation.

When tradition and/or religion stopped supplying an indisputable source and formulation for the Law and for the meaning of the world, philosophy rushed in to take its place. For it had to find a *fundamentum inconcussum*, an unshakeable foundation, which was to be Reason. (Castoriadis, 1994: 320)

Thus, while philosophy adhered to reason as a foundation in its search for truth, a project applied by extension to scientific thought, imagination was neatly separated from reason and it was regarded mostly as a problematic element in the access of knowledge. Empiricists and intellectualists alike account for imagination as a weakened form of perception (Brito, 2007). In other words, while empiricists regard imagination as a reflection of mental perceptions, intellectualists takes it as a cause of errors and distortions of reality. Therefore, imagination, a distinctly human trait, was in various ways hidden or neglected by different thinkers throughout history. Castoriadis (1995) traces this process back in the works of Kant, Hegel, Marx and Freud. According to Castoriadis, Kant discovers and conceals the role of creative imagination (transcendental imagination) on three different occasions (in the two editions of the *Critique of Pure Reason* and in the *Critique of Judgment*). Hegel and Marx, in turn, after unveiling the fundamental dynamics of society and history, had to transgress what they thought about being and thinking forcing society to conform into a system that could not contain this very dynamics. And finally Freud, who despite addressing the unconscious and its incompatibility with diurnal logic and ontology, had to make use of “all the machinery of the psychical apparatus, agencies, places, forces, causes and ends in order to manage to conceal its indetermination as radical imagination” (Castoriadis, 1987b: 175). In fact, following Castoriadis (1995), checking the general index of Freud’s works for references to the German word imagination (*Einbildung*), one will find the term only twice and exclusively related to the imaginings of the neurotic. *Phantasie* and *phantasieren* appear more frequently, but within narrow connotations. Everything in fantasy is a matter of reproducing what was perceived beforehand, a rather different understanding than that of Aristotle’s notion of creative imagination.

Having in mind a project for a scientific psychology (see Freud, 1985), Freud found his own motivations to cover up the creative and radical role of imagination. He is indeed explicit about his view of the “God Logos”, when he speaks about the march of “reason

and experience” (Lear, 2005: 213). The veiling of imagination was clearly the same made by Aristotle and Kant¹¹, which gave imagination a secondary role, namely, subordinated to reason (Castoriadis, 1994). However, subordinated to reason imagination produces always the same forms, and “forms that are valid only in so far as they perform determined functions in and for knowledge of given data” (Castoriadis, 1987b: 198-199). As a diminished form of sensation, and therefore having less importance for knowledge, imagination remained strongly vulgarized, what undermined a comprehensive and critical account of it.

Investigating the uses of the word imaginary, one sees a similar tendency to the one previously described. According to Barbier (1994), three phases in the understanding of the imaginary can be identified from Greek antiquity to the present day: the succession phase, the subversive phase and the authorization phase. The succession phase is characterized by the dualism between the real and imaginary as worked at length by the ancient Greek philosophy. On the one hand, there were the conducts adapted to reality, such as sensation and perception. On the other hand, there was the realm of the imaginary, which was associated with fantasy, dream, fable and art. These separate domains did not interact with each other. During the Renaissance, the need for knowledge was revived, although the right method for accessing it still needed to be found. In this context, Descartes became recognized as the founder of modern rationalism and a model of intellectual rigour. The scientific method Descartes developed became a standard to be followed, and the imaginary dimension, in turn, came to be judged more harshly. The gap between the two domains became even clearer, and every creative act was or should have been analysed solely in terms of the real because the imaginary was viewed as an obstacle to knowledge, and the real and imaginary could not have a positive relationship.

In the subversive phase, an updating of the understanding of the imaginary through the Romantic Movement in the 19th century occurred. Because of the impossibility of

¹¹ Kant’s vacillation might be seen in the first edition of his Critique of Pure Reason where he defined the productive imagination (*productive Einbildungskraft*) near to the centre of the faculties, but which in the second edition of this book he subordinated to understanding. According to Castoriadis, Kant repeats this move three times (in the two editions of the Critique of Pure Reason and in the Critique of Judgment) where he discovers and conceals the role of what he calls the transcendental imagination. In Castoriadis, C. (1987b) *The Imaginary Institution of Society*, Cambridge: MIT Press., pp. 174-175.

divesting the imaginary, its value was recognized. Yet, the pendulum swayed forcefully to the subjective side, and the imaginary became “the only reality, and imagination, the path of realization” (Barbier, 1994: 17). The surrealist movement headed by Andre Breton, as well as the *Strum und Drang* movement in Germany, are exponents of that time. From a social perspective, the imaginary remained potentially subversive to the contemporaneous discourse and, at the same time, wilfully ignored.

While not overcoming the dualism between imaginary and rational, there is a tendency by some thinkers to accept the imaginary as a complement of the real/rational in the authorization phase. One of the exponents of this phase is Gaston Bachelard, who tackles imagination from an innovative perspective. Bachelard (1969) adopts an aesthetic focus, whereby the image is not perceived as a sensory-intellectual subjective construction, a mental representation, or a fantasmatic residuum, but as an objective event, element of an imagery or language event. Accordingly, imagination is “the faculty of *deforming* the images offered by perception, of freeing ourselves from the immediate images; it is especially the faculty of *changing* images” (Bachelard, 1969: 19, italics in the original). Bachelard’s works are mainly used by literary critics interested in studying the archetypal imagery of writers (Kaplan, 1972).

Although other authors’ ideas have been attributed to the authorization phase –e.g. Gilbert Durand – the works of Cornelius Castoriadis are considered the most fruitful oeuvre of this phase. Imagination, as Castoriadis tackles it, is responsible for the creation of forms in a broad sense of language; that is, imagination creates meanings through social imaginary significations. Castoriadis’ reflections on imaginary significations converge with Friedland’s conceive of institutional substances presented in the first chapter. Both are constitutive elements of practices and identities within social systems, they are world creators, the *raison d’être* of social institutions. What is more, social imaginary significations are the connection between the individual psyche and the societal level, what Castoriadis call the social-historical. I will explain next, how Castoriadis grounds and theorizes the relationship between individuals and the social-historical.

Individual and social-historical: psyche and society as open-ended systems

When Aristotle said that out of the *polis* there are no men, but savage beasts or Gods, he recognized that human beings are chiefly socialized *in* and *through* the *polis* (Castoriadis, 1988). He recognized the irreducibility between individual and society. This might be, in fact, one of the first assumptions about the social construction of reality, long before it had been explicitly theorized by sociologists (Berger and Luckmann, 1967). It means that for human beings there is no other reality than a social reality, or in other words, that there is never any other reality than the socially instituted reality. It is by the emergence of human intersubjectivity that the connection between individual (psyche) and society is established, making them interdependent dimensions in matter of meanings. According to Castoriadis, this process occurs in a twofold way. On the one side, it corresponds to a changing process of the psyche (its stratification) and its respective opening to the social-historical world, which depends on its own creativity and work. On the other side, it concerns the imposition of history, language and social doing in the psyche, once the psyche alone could not create and generate the social individual. This section addresses how this process of socialization of the psyche takes place, a process that renders individual and society intrinsically interdependent in the social construction of reality.

Having in mind the dual process explained above, the construction of human intersubjectivity implies the acquisition of meanings and the development of the psyche's capacity to signify, that is, its capacity to represent. For Castoriadis, representation does not mean 'imitation' or 'copying' of a world in the mind of the subject. Rather, it is the capacity to see in something that which is not there (Elliott, 2002) or represent. Before that, however, a process of sublimation must take place in the psyche. Sublimation is the process whereby the psyche exchanges its own object of cathexis for objects which exist and have value in and through the social-historical field and thereby makes them causes, means or supports of pleasure (Castoriadis, 1987b; Castoriadis, 1995). It is through sublimation, thus, that human traits emerge, namely, the replacement of organ pleasure for representational pleasure. In turn, it is through the representational process that the

‘invisible objects’ come into existence, what Castoriadis calls social imaginary significations. Such representational flux, triggered by the sublimation of the psyche, is a spontaneous flux, not being subordinated to a specific or universal purpose, unlike with animals which attach the representation to a biological function (e.g. reproductive needs and survival of the specie). Humans are, from this perspective, essentially creators of significations and meanings (*noēmatopoiios*).

However, during its socialization the psyche comes into contact with significations already available in the social-historical. This does not diminish its capacity to recreate and reinterpret such significations, and it is this possibility of absorbing such significations without being definitely constrained by these, the key to understand meaning as the result of a permanent struggle between psyche and society. On the one side, this underscores the positive role of society. That is, the social-historical provides significations that give shape to the psyche, without which the emergence of social individuals would be clearly impossible. On the other side, the struggle between psyche and social-historical points to the primary capacity of the psyche to transcend inherited social imaginary significations, that is, to alter them and even to create new ones. The indeterminacy posited by such antagonistic and agonistic relationship renders indeed the very possibility of action and history.

What is human life? What’s at issue there? Satisfaction of the drives? That’s only a tiny part of human life. The human is defined by the predominance of representational pleasure over organ pleasure, over simple satisfaction of the drives. I define as sublimated activity everything that involves a cathexis of objects that are not directly or indirectly — that is to say, immediately or in a mediated way — drive objects. A condition, a fulcrum, for sublimated activity is the psyche’s capacity to feel pleasure through representation. Of course, representational pleasure is also at issue in phantasms and in waking phantasying, but the basic difference is that, in the case of sublimation, it’s a matter of *cathecting socially valued objects*. (Castoriadis, 1996: 373)

Castoriadis provides reinterpretation of sublimation processes, extending Freudian theory to the point that individual and society are viewed as complementary strata and not exclusively determined (Furth, 1996; Urribarri, 2002; Klooger, 2009). Sublimation is, then, the inalienable requirement for the emergence of social institutions, a process that starts after the psyche underwent its stratification. According to Castoriadis (1996), it is in this stratification that the psyche develops its capacity to create representations. The whole

process is not a sequence canceling out prior stages, but one in which these stages coexist antagonistically. Basically, the social individual emerges after three stages: 1) psychical monad, 2) triadic phase, 3) oedipal phase.

In the earlier stage of psyche, or rather before the constitution of a psyche with its different instances – Ego, Super-Ego, Ideal Ego – there is what Castoriadis calls psychical monad (Castoriadis, 1987b; Castoriadis, 1994; Castoriadis, 1995; Castoriadis, 1996). At this moment there is not yet an individual and even ‘reality’ like distinctly separated objects (i.e. a reified reality). In this phase the fetus is immersed in a state of full satisfaction, of absolute and pure pleasure. There is no distinction between representation and desire, desire and the object or between objects. Representation, affect, and desire are united in an indissociable way. During the birth, however, the first contact with the outside world occurs. This first contact is marked by a moment of violence, whereby feelings of physical discomfort are generated, leading to the disruption of the psychic isolation in which the baby was immersed¹². From this point onwards the defunctionalization of animal instincts and its transformation into representational drives takes place, consequently enabling the humanization and socialization of the newborn. At this stage “feeding, reproduction, self-preservation and even respiration become endowed with representational meanings” (Tauro et al., 2008: 9). Little by little the individual is constituted as a subject divided between the monadic pole and the organized and integrated parts imposed upon its psyche (Castoriadis, 1996). Such violent rupture is never entirely surpassed, however. The tension between the monadic pole and the integrated part of the psyche accompanies the social individual throughout its whole life. Yet, after this first rupture there is still not a socialized individual. The infant needs to pass through, as Castoriadis explains, the encounter with the other (the triadic phase) and the others (Oedipal phase).

The triadic phase corresponds to the relationship between infant (subject), mother (other) and the breast (object). At the moment that the breast is given to the baby (good

¹² It is worth adding Hans Furth’s words about the relationship between childhood and society: “That the child is alive in the adult has been generally accepted since the revolutionary insights of Freud, just as Marx has made evident that historical institutions of the past live on long after they have outlived their functional purpose. But what has not been well understood – precisely because it is difficult to envisage children growing into society in any other than a largely passive, receiving way – is that the child is alive in adult society”. In p. 209, Furth, H. (1996) *Desire for Society: Children’s Knowledge as Social Imagination*, London: Plenum Press.

breast) and removed (bad breast), projection and introjections processes take place, which assist the infant in the separation of what is inside and what is outside. Projections and introjections are, thus, channels through which the psyche relates itself to the 'outside world'. These processes are essential for socialization to occur, since communication between subjects involves the ability to receive and incorporate words, meanings and significations that come from the 'other'. Yet, it is only when the breast is fully attributed to someone outside (i.e. the integration between good and bad breast) that the other appears before the baby and, in this way, the constitution of external objects becomes possible. The other carries then the object of satisfaction and discomfort of the baby, and becomes for him an omnipotent figure. What was once an omnipotent state of isolation (i.e. I am the breast, *Ich bin die Brust*) is now placed outside, reflected in this first moment upon the mother.

Socialization commences during the triadic phase because it's the mother who first says 'No' to the infans. In this way the mother is constructed simultaneously as omnipotence, recognizing for her an existence and a desire or a will that are foreign to the infans and that the infans doesn't dominate. And that obliges the infans to recognize her as separate. (Castoriadis, 1996: 370)

The last phase in the construction of the social individual is the Oedipus complex, the opening of the child's universe to the father, others and, especially, to the social-historical. To the complete separation between subject and object, the child must see the other (i.e. mother) as an autonomous subject. It is through the Oedipus complex that the baby gradually removes the mother from her omnipotent state. She starts to be recognized by the child as incomplete, because the mother has her own desire which is also directed to the father (others). It is in this moment that social institutions begin to be reified in the child's psyche and from this point onwards, the libido will be directed to outside world elements. The infant begins, then, to recognize a world inhabited by others, which are autonomous, i.e., they have their own desires. The result is the emergence of individuals and things in a place where there used to be subject and object. The Oedipal complex sets before the child the "fact of the institution as the ground of signification" (Castoriadis, 1987b: 310).

It is worth noting, however, that a universe of significations precede the child's birth, once they were available at the time of its birth. The infant is to a great extent

obliged to consent to these significations. Hence, things or words do not mean what the subject wants, but what was set by another, others and in a broader sense, by one particular society. What happens, however, is that the infant also invests these significations with meanings in unpredictable ways through its own representational flux (i.e. cathexis). In the representational flux creativity arises as the primary psyche's characteristic. It is by representing that meanings are generated and shaped, because representation produces and organizes meaning (Urribarri, 2002). This flux allows the psyche to imagine, to see something where there is nothing, and it is an essential condition and means through which symbolization occurs. According to Urribarri (2002: 44), it is thanks to the representation that "the drive can be translated and expressed psychically".

By highlighting the representational flux, Castoriadis does not argue that everything in the social-historical is an ongoing flux. On the contrary, he explains that in this ceaseless flow there is a part which needs to be fixed, crystallized in abstract material supports: the signs, without which there would be no thought. To designate the on-going flux of representations on the macro social level, Castoriadis uses the notion of *magma*. Magma, a metaphor brought from geology, describes the social imaginary as instituted facet of society (in solid and materialized meanings) and, at the same time, the potential transcendence of its own forms (through new or emergent meanings).

In this magma, there are flows that are denser, nodal points, clearer or darker areas, bits of rock caught in the whole. But the magma never ceases to move, to swell and to subside, to liquefy what was solid and to solidify what was almost inexistent. And it is because the magma is such, that man can move himself and create in and through language, that he is not pinned down once and forever by the set and univocal signified of the words he uses – in other words, that language is language. (Castoriadis, 1987b: , p. 243f)

These crystallizations are absorbed by the child from the moment it begins to speak, because it uses these very signs to communicate through the first social institution available, namely, language. Language and social doing are in this sense essential for sublimation to occur, that is, the libido must be invested in an external object. The psyche develops the ability to grasp objects of the social world and turn them into representation. These representations will become, in turn, signs, whose meaning is agreed upon and shared by other members of society. Thought, therefore, occurs since the representative

flux is opened to the signs, a process in which the first logical operations are formed. These signs become the content of human thought from the simplest to the profoundest forms (Tauro et al., 2008).

Here lies the crux which explains the irreducibility between individual and social-historical. Being language the social representation of thought and a socio-historical creation it is impossible to understand thought as solely exclusive of the subject, rejecting its social dimension¹³. “The language renders the possibility of communication between one and other psyche, but, likewise between the psyche itself and its own contents (conscious) – the represented images are now perceived as distinct from each other” (Tauro et al., 2008: 16) . Such crystallizations, signs and language, can be seen in how we conceptualize the world around us. For humans, representations rest essentially on words, on signs and on language in a broad sense.

A dog probably does not have what we call the concept of a rabbit, yet it knows quite well that it is the same rabbit that it is chasing along a trajectory (which is, moreover, the solution to a differential equation, that of the curve of pursuit, which minimizes at each instant the space which remains to be covered in relation to the moving prey). This sameness of the representation through the successive acts of the subject must lean on something, and this can only be the ‘image’ or the representation as *generic*, namely the capacity of the subject – whoever or whatever it may be here, whether man or even animal – to see, in this changing representation within the Heraclitean flux of the given, *the same*. [...] But for us others, as waking and speaking human beings, this is the sign – the word. Without words, how could I assure myself of the *sameness* of the concept? [...] Consciousness of sameness leaning on signs or words is what is proper to the human psyche. (Castoriadis, 1995: 26-27 italics in the original)

Words and linguistic expressions provide therefore support for thought to exist. Expressions, however, do not correspond to what philosophers call concepts (Castoriadis, 1995). Their meanings, according to Castoriadis (*ibid*), are vague and approximate, and above all, co-determined by the meanings imposed at each time for each particular society. This is especially true, as we will see further, to the uses of the word risk along history (see Douglas, 1966; Douglas and Wildavsky, 1982; Douglas, 1992). For now, the point I want to make is that leaning of the psyche on signs and words presupposes something that neither the psyche nor any other transcendental subject is capable of producing alone: language as the *locus* of creation and reproduction of social imaginary significations.

¹³ It is important to note that Castoriadis, who follows Freud’s understanding, argues that the unconscious content are made by images and not by language as claimed by Lacan.

Hence, once the entree into the social world occurs, individual and society are constantly opened to significations and meanings, that means, it is opened both to the already available as well as to the possibility of creating new ones. This is the key role of imagination as the primary function of psyche and the social-historical, i.e. the ability to see one thing into another in which there is no direct relationship with what it represents; something that is not in nature but which is created mainly through the relationship of images. This capability, above any other, enables society to establish itself as a symbolic realm, as well as allowing itself to transcend such realm by the crafting of new significations. In the next section I will present central concepts of Castoriadis philosophy, which will be subsequently developed into a framework to studying institutions.

Imaginary institutions

Defending the irreducibility of the interdependence between the individual psyche and social-historical, Castoriadis raises serious concerns about how traditional theories have addressed social phenomena¹⁴. In his book *The Imaginary Institution of Society* (Castoriadis, 1987b) he argues that traditional ontology has neglected such a view of indeterminacy (*apeiron*) in its accounts, either by overlooking or subsuming it to determination (*peras*). That is to say, traditional theories have always relied on logical and/or mathematical principles (identity, non-contradiction, the excluded third, etc.) to explain social phenomena. Castoriadis does not deny the determinate and logical underpinnings of society. However, he argues that this cannot be taken as the sole constitutive principle of being and society. To tackle this conundrum, he developed two conceptual ideas: magmas and ensembles. As previously espoused, magmas refer to indeterminacy as a particular mode of social–historical domains. Ensembles refer to the determinate and logical strata underpinning social phenomena. In this section I will present key concepts of this ontology reflected in Castoriadis’ notions of institution, the imaginary, and the identitary logics of language and technique. With this I shall provide a

¹⁴ This and the next sections of this chapter appear in my paper *Bringing Values Back In: The limitations of institutional logics and the relevance of dialectical phenomenology*, Organization, (forthcoming).

clearer understanding of the role of logics and the imaginary within institutions in contradistinction with the institutional logics perspective reviewed in the first chapter. In addition, these concepts will be used to advance a framework for accounting for what Friedland calls institutional substances.

Castoriadis defines an institution as “a socially sanctioned, symbolic network in which a functional component and an imaginary component are combined in variable proportions and relations” (Castoriadis, 1987b: 132). Like Friedland and Alford (1991), addressed in the chapter one, he intertwines the material and symbolic in his understanding of institutions. However, from his perspective, logics refer not to an overall category encompassing both the material and ideal, but rather to a kind of support through which significant processes occur. This detached, albeit interdependent, view of logics and the imaginary gives to the latter a privileged role in the constitution of social phenomena, or in Castoriadis’ terms, it underscores the self-institution of society where psyche and social-historical are the interdependent parts of this processes. It is through the social imaginary, says Castoriadis, that actors invest the material bringing identity (logics) into existence with particular values, meanings, assumptions and beliefs. It is then through signifying processes that societies, and here we can add organizations, potentially transcend their logics and forms through perverting, suppressing or transforming significations, or even by positing new imaginary significations (e.g. by creating new institutional substances using Friedland’s concept). From this perspective, institutions are active processes of bringing the functional into being through imaginary significations, rather than merely reflective, reproductive and regulative stances of society, as defended by new institutionalism in its earlier forms (e.g. DiMaggio and Powell, 1983).

This notion of institution renders society a self-creative capacity, indeed the major claim of Castoriadis stemming from his investigation of the phenomenon of sublimation. By concluding that radical imagination, the creative property of imagination, is the distinguishing trait of humans in the defunctionalisation of the psyche, Castoriadis characterizes the human mind as a continuous representational flux capable of creating semantic relationships between previously disconnected elements. For example, consider the word ‘tree’. On the one hand, ‘tree’ brings forth the whole image, composed of twigs,

leaves, trunk, etc. On the other hand, one can visualize the whole (a tree) from its parts (leaf or twig, for example). The representational flux exceeds, however, the identity-materiality of ‘things’ investing objects (i.e. values, symbols, significations) without necessarily any physical referent, objects that become to some extent autonomized within social and organizational reality. Such autonomization of representations can be seen in the biblical myths of the ‘tree of life’, whose fruit gives everlasting life, and of ‘the tree of knowledge of good and evil’, whose fruit is forbidden. These representations transcend the functional identity of the tree and remain alive in the Christian imaginary *within* and *through* its rituals.

Thus, the rupture of imagination in the psyche is the very prerequisite for the invention of language and for the crafting of imaginary significations. And “the domination of representational pleasure over organ pleasure is the precondition for the learning and use of language, since it requires that language itself becomes a source of pleasure and an object of desire” (Klooger, 2009: 129). Here lies the contribution of Castoriadis of an extension of the concept of sublimation into the social realm. That is, imaginary significations function as links between the defunctionalized psyche and the social–historical domain, a relationship marked by contradictions, ruptures, paradoxes and creation, indeed, the distinctive feature of significations such as freedom, justice and God throughout millennia.

A caveat is necessary here. It is worth noting that when talking of an autonomization of representations in society this process is only partial. Domains of practice must constantly re-engage imaginary significations within actual circumstances – *within and through* discursive fields, practices and objects – which do not simply inherit values or meanings, but have rather a material identity supporting the instantiation of representational chains. Practices are, in this sense, not simply reflections of transmitted significations (or institutional substances), but emerge from *within* the activation of imaginary significations in combination with their material identity. In other words, to exist, imaginary significations must be put to work through practices, while at the same time, practices are themselves symbolic manifestations of the representational flux. According to this view, organizational fields might be better described as objectified-

constituted within discursive practices articulated around imaginary significations (Hasselbladh and Theodoridis, 1998).

Similarities between the Castoriadian notion of institutions and the imaginary (social imaginary significations), and Friedland's concept of institutional substances previously presented are evident at this point. Castoriadis, however, adds two other notions in his view of the imaginary: the instituted and instituting imaginary (Castoriadis, 1997b: 269). The instituted imaginary refers to potentially established significations¹⁵; that is, the more or less unquestioned significations within a discursive field. Progress and freedom are such imaginary significations through which societies have been organizing themselves in quite normalizing ways in matters of the institution of democracy. Yet, it must be observed that discursive fields are frictional fields, and then imaginary significations can vanish, change or emerge from these frictions. Castoriadis calls this impending process of re-signification in the social field the instituting imaginary. The antagonistic relationship between the instituted and instituting imaginary puts the political at the centre of his view of the symbolic component of institutions. Through this agonistic tension, society potentially re-signifies its practices or even creates new institutions with significations that might not have yet a well-formed material identity. Also, this agonistic view of the symbolic points to a wider range of imaginary significations that might question established ones, and highlights that values or substances can be questioned in themselves, changing their supposed 'nature'. This observation expands the range of institutional substances underpinning the central institutions explored by Friedland and Alford in their seminal paper (Friedland and Alford, 1991). For example, what other values-substances counteract freedom, justice, property, love or God today? What are freedom, justice, property, love or God today?

I have spoken so far of Castoriadis' notion of institution and the imaginary component, both important features for addressing institutional substances in a new light. But also of equal concern is Castoriadis' discussion of the identitary logics, which contribute to a more on-the-ground perspective of logics as a distinct yet interdependent element *vis-à-vis* the imaginary. I turn now to this element.

¹⁵ Significations are not to be confused with meanings because meanings result from signifying processes.

Castoriadis argues that society has a logical and determinate stratum offering supports, stimulus and obstacles to the imaginary dimension. To address this determinate stratum, he uses a concept he calls identitary logics (also ensidic or ensemblistic logics), a notion he derives from the theory of ensembles developed by Georg Cantor. According to Castoriadis's reading of Cantor, an ensemble might be composed of any kind of object: numbers, people, objects, other combinations etc. The essential feature of the ensemble theory is its "objective reflexivity" (Castoriadis, 1987b: 266). In other words, it is the loose definition of terms of an ensemble or set, its circularity and its naïve formulation that shows precisely the generalist character of mathematical logic that can be seen in all social activity. According to this view, the social is only viable insofar as some logic manifests itself, whereby identity and consistency render communication and action possible.

To articulate his idea of logics, Castoriadis uses two concepts: *legein* and *teukhein*. *Legein* is the identitary dimension of social designating/saying¹⁶ (i.e. language as a code) and its operators are the following: distinguishing, choosing, positing, assembling, counting and speaking. *Teukhein* is the identitary dimension of social doing (i.e. technique as a code) and its logical operators are the following: assembling, adjusting, constructing and making. First, let us see how *legein* works.

Language, commonly viewed as a requisite for socialization, has a dual role. On the one hand, it is *langue*, a system with a signifying capacity. On the other hand, it is code serving for the organization of the social in an identitary way; that is to say, it is a system of ensembles or relationships that can become ensembles. According to this view, social reality presupposes the logical mechanisms of distinguishing and defining objects, objects that can be collected together to form wholes. These objects or elements can be composed and decomposed, and are defined in terms of certain properties, serving in turn as the basis for the definition of these very properties. Designation is a pivotal mechanism in this process, for it assigns identity to the social sphere, and it "does this in and through *figures*" (Castoriadis, 1987b: 245, italics in the original), establishing, therefore, a logical identitary

¹⁶ The English translation of *The Imaginary Institution of Society* refers to this concept as representing/saying (Castoriadis, 1987). However, to avoid misinterpretations with the psychoanalytic notion of representation, the word 'representing' was substituted by 'designating', as it was adopted by Furth (1996).

relationship between one and other *eidōs* (image, form, shape), and to a plurality of interweaving relationships ('a' is different from 'b' which is different from 'c' and so on). For example, one can see the mechanisms of *legein* in a set of cities: Our city is the one we belong to, and we differentiate it from others, distinguishing, choosing, positing, counting and assembling cities in relation to each other. From this perspective, anything can form a set; union and separation might be indefinitely repeated (iteration), allowing the possibility of forming new sets based on elements or sets already available. Language as a code is then a precondition for social and organizational forms to exist. "In order to speak of a set or an ensemble, or to think of one, we must be able to distinguish-choose-posit-assemble-count-say objects. The nature of these objects is of little matter, universality is here" (Castoriadis, 1987b: 223). Let us now consider the identitary logic of social doing (*teukhein*).

Social doing has the following logical operators: to assemble, to adjust, to fabricate and to construct. The central schema for *teukhein* includes the following: union and separation, contingency (*with respect to-*), value as a utility or instrument (values as standing for and serving for), equivalence and possible use, iteration and order. To create a tool is, in this sense, to create "an *eidōs*, a form, whose concrete instances or exemplaries *have the same value* as instances of this *eidōs*, which allows its own indefinite reproduction. And these tools *stand for* tools to the extent that they *serve for* doing what it is they permit to be done" (Castoriadis, 1987b: 267 emphasis in the original). For example, the modern organization can be seen as a *tool* of the capitalist expansion *serving for* the indefinite reproduction of the capitalist system, *divided* and *assembled* into industries, fields, technologies and markets. Yet, even individuals must somehow be 'fabricated' in terms of *standing for* other individuals and *serving for* certain roles, functions and places. Hence, technique or social doing (*teukhein*) exposes the inherent instrumentality of social and organizational forms, for tools, objects, procedures, devices, etc., have a production or transformation function. They are constructed with a purpose of producing, transforming and thereby reproducing indefinitely.

Castoriadis argues that the functional properties of *legein* (language) and *teukhein* (technique) are undeniable aspects of social systems. Yet, he also considers that language

and technique cannot be reduced to their respective functional-instrumental sides. Techniques are attached to signifying processes that render these very techniques values and meanings. That is, techniques, tools, instruments and practices mingle into a network of imaginary significations, significations from which they derive or which they foster or complement. To summarize, language (*legein*) and technique (*teukhein*) are logical elements of institutions through which society designates and creates itself, making significations and meanings actionable within and through practices and discourses. These logics enable the diffusion of practices and knowledge through the recombination and transposition of elements of sets. However, underpinning the identitary logics one finds the agonistic processes within the social imaginary, which underscores the political, creative and innovative potential of signifying processes. In the next section I will flesh out how the concepts presented above can contribute to an approach of studying imaginary institutions.

Towards a dialectical phenomenological approach to institutions

By building on the Castoridian view of institutions and the concepts previously presented, this section advances an approach to the study of imaginary institutions. However, before presenting the details of this approach, it is important at this point to situate the Castoridian view among other interpretive traditions within organization studies. The Castoridian view of institution bears comparison with hermeneutical and phenomenological traditions. However, the assumptions underlying his works are different from these traditions in important ways. One central feature of his philosophy is the anchoring of signifying processes simultaneously in individuals and at the societal level through the representational pleasure, as explained earlier, an extended account of the Freudian concept of sublimation. For Castoriadis, “sublimation is the adoption of new drives by the psyche, drives which are created by society to be re-created in/by the psyche” (Klooger, 2009: 131). Two points stand out from this view. First, his conceive of the imaginary is chiefly magmatic in the sense that significations are tension-laden and open to change and creation, and this distinguishes his work from cognitive approaches such as

Garfinkel's ethnomethodology (Garfinkel, 1967) or Berger and Luckmann's social constructionism (Berger and Luckmann, 1967)¹⁷. Unlike many versions of social constructivism, however, Castoriadis does not reduce social phenomena to a state of on-going flux, especially so because he accounts for the functional and determinate stratum of society (the logics of language and technique). The second important point, where Castoriadis distinguishes himself from interpretive traditions such as symbolic interactionism and hermeneutics, is that in his account of the imaginary, he highlights the creative component of institutions rather than placing exclusive emphasis on how meanings are reproduced within social phenomena¹⁸. Such views have implications for the debate on whether or not values are internalized by individuals, and indeed for the very understanding of what values, or institutional substances, are.

The ontological status given to imagination led Castoriadis to reject perspectives in which an individual is a "blank slate on which are inscribed codes of culture, structures of language or the effects of power relations" (Kalyvas, 1998: 169). With this claim, he is not saying that significations or substances are external objects, lying on what he calls the first natural stratum. Rather, substances result from an interdependent relationship between the psyche and the social–historical. They are social creations, and as social creations, they are neither external nor internal but driving forces through which individuals engage with the social–historical. Such an interdependent relationship between the psyche and the social–historical through imaginary significations comprises a creative potential because new significations might emerge from this flux or established significations might be questioned, hampered, perverted and/or casted away. It is important to note that Castoriadis makes no normative claim for creativity. On the contrary, he explicitly acknowledges that radical imagination – the instituting component of the imaginary – may

¹⁷ For example, Barley points out that ethnomethodologists investigate replication rather than change, and that Berger and Luckmann's notions of reification, objectification and sedimentation make it easier to view institutions as stable constraints. See Barley, S. R. (2008) 'Coalface Institutionalism', In: Royston Greenwood, Christine Oliver, Roy Suddaby, et al. (eds) *The Sage Handbook of Organizational Institutionalism*. London: Sage, 491-518.

¹⁸ It is not my intention to place Castoriadis under any label. For a detailed account of symbolic interactionist views within institutionalism, see Barley (ibid.). Regarding hermeneutics, Castoriadis diverges, for example, from Paul Ricouer, who was concerned with the production of meanings in society as a synthesis of new configurations (based on an unpublished discussion between Castoriadis and Ricouer reported by Adams (2005)).

indeed lead to terrible creations (Castoriadis, 1997a). However, by highlighting the ontological status of the imagination, he brings politics and ethics into the enquiry of institutional creations (e.g. What new institutions are underway? Which significations underpin these new institutions? What are the consequences of such creations?).

All in all, it is the idea of a social imaginary articulated through imaginary significations that is Castoriadis' most important contribution to the understanding of values-substances, a core issue in the oscillations of the institutional logics perspective in the agency/structure debate (Friedland, 2012; 2013). In bringing the notions of imaginary significations and institutional substances closer to each other, I avoid merging them. Both understandings indicate the constitutive underpinnings of institutions. Yet, they differ with regard to their position vis-à-vis that of logics. While for Friedland a substance is a core value of institutional logics, for Castoriadis imaginary significations are not subsumed by logics, but rather interrelated to them. Thus, Castoriadis concept of the imaginary offers a bridge between individual and societal levels, adding up to a phenomenology of institutions and contributing thereby in a novel way to understanding logics and values-substances within institutions. I shall sketch next how this approach might work; but first, let me recall some previous arguments that will be important in contrasting the institutional logics research on organizations with what will be here advanced.

As described in the first chapter, organizational research on institutional logics has obliterated the role of what Friedland has recently called institutional substances. The misunderstanding of the nature of values and meanings has rendered logics an all-encompassing force within organization studies, where notions such as high-order logics seems to reflect the assumptions of the inherited thought attacked by Castoriadis when it subsumes indeterminacy to determinacy. By conflating meanings and logics, organizational research on institutional logics have tended to obscure how symbolic orders are socially constructed. As a result, this perspective has placed stronger emphasis on causal explanations through chronological accounts, as exemplified by Thornton and Ocasio (1999), whereby institutional shifts are viewed "as period effects that segregate one relatively stable period of beliefs and activities from another" (Lounsbury, 2007: 289). In many accounts, exogenous sources are the reasons for change, such as the emergence of

new sources of capital and resource competition (Thornton and Ocasio, 1999), pressure for costs and performance (Lounsbury, 2007) or legislation and market exigencies (Greenwood et al., 2010). In other explanations, the ad hoc solution of the cultural or institutional entrepreneur is put to work to explain how recombinant types of institutional logics are handed out by this figure, thereby enabling organizational variation. These explanations have their merit. However, the misleading view of value as external and modular narrows down the possibility of accounting for how these very substances are constructed in the first place, reducing change to a matter of recombinant schema. In short, in its machine-like guise organizational research on institutional logics became blind to a greater variety of significations and/or emergent values and remains silent when it comes to the constitutive aspects of institutions. It is in this sense that Castoriadis' ideas might be of help.

The different but complementary modes of the being and society Castoriadis describes, – magma and ensembles – allow for a more clear-cut conceptual framework for tackling both the reproductive and constitutive aspects of institutions. On the one hand, one might address the reproductive aspects of institutions through the mechanisms of identity logics, which are basically described as the distinguishing, choosing, positing, assembling, counting and saying of objects (i.e. language as a code), and as the assembling, adjusting, constructing and making of tools (i.e. technique as a code). Through these mechanisms, institutions not only achieve certain regularities that make action possible, but they also enable the modularity of elements organized in sets. Theories, cognitive frames, codes, scripts and categories are all part of different sets, elements that can be transposed and/or recombined from one set to another in order to form new sets. Such set-like logics and their mechanisms are present, for example, in the transposition of codes of practice within different spheres and organizations (e.g. from international standardization bodies to local organizations around the globe), in the internal organization of laws and the recombination or blending of its elements (e.g. constitutions and jurisdictions) and in the specialization and differentiation of science and related transfer of technological knowledge between fields. In these examples, sets interrelate with each other, creating boundaries between them and generating logical identities for different actors and practices (institutions, field

and organizational; global, national and local; science, knowledge and practice). Logics of language and technique provide, so to say, the venues through which elements transit and combine and recombine, forming new sets and providing vocabularies and tools for action.

Hence, the identitary logics stand for the reproductive aspects of social phenomena whereby diffusion of practices within organizations and organizational fields occurs. It enables communication and production through the organization, distribution and recombination of elements of sets. However, the identitary logics are not ends in themselves, and society cannot be reduced to the already-given elements of the logics of language and technique. Undergirding these logics rests the constitutive part of institutions – the imaginary – responsible for signifying established logics and/or for bringing into being new logics or forms.

On the constitutive side of institutions is the imaginary, defined as the dialectical relationship between the radical imagination (the individual psyche) and the social imaginary (the realm of imaginary significations). Here, the concept of imaginary significations enlarges the notion of institutional substances of Friedland while remaining consistent with it. Imaginary significations are social and imaginary, imaginary “for they do not correspond to “real” or “rational” referents and for they are always instituted through creation”. They are social, “for they only exist while instituted and shared by an impersonal and anonymous collective” (Castoriadis, 1987a: 230). For example, freedom, justice and God are imaginary significations, and as with the institutional substances described by Friedland, they provide a metaphysical bind for material practices, something to be believed in and enacted by people.

However, for Castoriadis, the dialectics within the imaginary are pivotal for how disruptions within institutions might happen. The dialectics between imaginary significations and the individual psyche bring forth categories, symbols, forms, etc. reproducing social and organizational forms in a more or less identitary and logical way (the code side of language and technique). At the same time, through these dialectics, society and organizations potentially add up to the social imaginary, transforming or positing other significations into the discursive realm. So, on a societal or organizational level, an antagonistic relationship between the instituted and instituting imaginary occurs,

that is, a relationship between the established significations and impending ones taking shape.

This last assumption is, in fact, what the institutional logics approach lacks more generally when treating value as a recombinant type or transposing element (see Thornton et al., 2012). The instituting imaginary is an essential feature of change, both in terms of how values-substances are challenged to incorporate other meanings and forms, as well as how new substances can be formed. The instituting imaginary is the “positing or presenting oneself with things and relations that do not exist, in the form of representation (things and relations that are not or have never been given in perception)” (Castoriadis 1987, 127). Through this dialectical movement, society does not pin down significations or substances definitely. Rather, people act in the world through significations while simultaneously deferring these very significations or substances to be re-enacted and actualized by different domains of practice in different times and spaces. The figure 2 below illustrates the concepts discussed here.

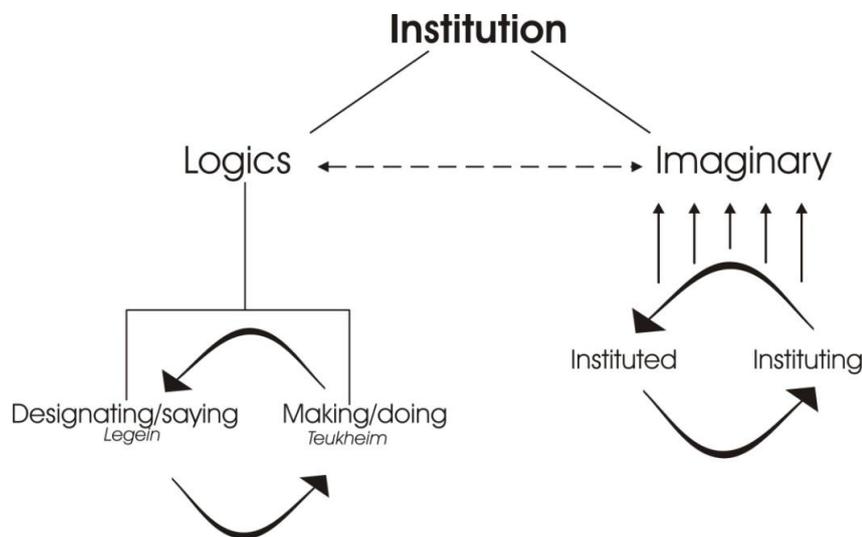


Fig.2: A Castoridian view of institutions.

This framework will be used in the investigation of risk management practice in the next part of this thesis. In order to introducing what will come, I shall briefly sketch how one can address organizational phenomena in both their reproductive and constitutive aspects, using preliminary ideas about risk management.

Preliminary thoughts on the imaginary institution of risk management

At this point, I am shifting my investigation from the theoretical level (i.e. organization theory) to the field of practice (i.e. risk management), as was described at the beginning. My aim here is to explore the possible connections between Castoriadis' theory of imaginary institutions and risk management, before presenting the data collected in the fieldwork.

As already largely debated, risk has become a core signification in late modern societies (Beck, 1992; Giddens, 1991; Lupton, 1999). Risk management throughout these different societies can be described as an institution once it has created moral orders underlying political debate and processes of organizing (Gephart et al., 2009). In organizations, this institution can be traced in the creation of new departments going through the establishment of professional roles (Power, 2007). Now, upon examining the practical requirements of risk management, one can identify the mechanisms of the identitary logics of language and technique in many situations. For example, one can find the set-like logics in devices used to designate this practice, such as the COSO Framework, The Sarbanes-Oxley Act of 2002, the Basel II and III Accords and the ISO 31000, all of which lay down different elements of risk management by distinguishing, choosing, positing, assembling, counting and speaking risk categories as well as establishing the tools of risk management which enable assembling, adjusting, constructing and making risk through different techniques. These tools and language have been crafting vocabularies of risk into decomposable sets comprising categories and distinct applications, enabling this vocabulary to spread to different and sometimes new domains such as with the invention of operational, reputational and fraud risk (Power, 2007; Power et al., 2009; Power, 2012). This diffusion can be found in financial regulation (e.g. the Basel treaties and the Sarbanes Oxley Act), in international standards for internal control (e.g. the COSO framework, ISO 31000 and Turnbull report) and in public governance regulations (e.g. in British universities and in European food regulation). The codification of risk management is, without doubt, ubiquitous. These are, nevertheless, the most salient aspects of this institution, because they provide the means through which organizations *reproduce* risk

management indefinitely. That is, these aspects correspond to the *logics of saying and doing risk management*.

At a deepest level, however, a new moral order of risk management had to be crafted into a discourse and, indeed, into people's very beliefs. Here, the insights of the sociocultural approaches to risk are important. Mary Douglas, the anthropologist who wrote extensively about the cultural underpinnings of risk, says that risk has suffered a transformation in its meaning throughout the last three centuries, from the meaning of risk as a result of probability and outcome to the contemporary understanding of risk as danger (Douglas, 1992). This ideological change has a constitutive character because new forms for dealing with danger were created. At the core of this constitutive process, one finds an imaginary signification or the substance of risk management. This is the notion of 'risk as uncertainty', an imaginary signification *par excellence* once a risk is never something material until the moment it materializes into damage – the moment when it stops being an uncertainty.

The imaginary aspect of risk as uncertainty – the representational flux attached to it – brings into existence its functionality (its codes, frames, categories, laws, tools and techniques, etc.), which at the same time provide the means through which this signification can diffuse through practice and can be made actionable. Yet, risk as uncertainty is an absent/present around which rituals of risk management are organized, rituals from where one can derive two processes taking place: On the one side, political struggles over the imaginary of risk might synthesize agonistic tensions through the instituted and instituting dynamics described above. Douglas and Wildavsky, for instance, have documented how competing views of technological and environmental risks gravitate around political struggles and different claims about risk, therefore confirming that contests over power give rise to a variety of opinions about risk (Douglas and Wildavsky, 1982). On the other side, through the rituals around the absent/present nature of risk, it is possible to see that the management of risk itself occurs only *within* and *through* its vocabularies and tools, which in turn have their very existence grounded in the signification of risk as uncertainty. This means that the logics of saying and doing risk management are likely to reinforce the establishment of 'risk as uncertainty' in the

discourse; this also highlights that institutional substances, as Friedland argues, can only be derived from the practices around them. To what extent practices constrain the imaginary component of risk and vice-versa, or how risk as uncertainty relates to other significations, are empirical questions that shall be pursued within different domains of risk management practices. However, an important point is that as an imaginary signification, risk as uncertainty remains potentially pervasive within discourse.

Despite Douglas' many insights about risk, her approach tends to be "somewhat static" (Lupton, 1999: 51) and still does not provide a good basis for explaining change. My contention is that institutional substances, in the present case "risk as uncertainty", must be enacted by domains of practice while being deferred within discourse and practice. This deferral is indeed what gives imaginary significations strong adherence to practices and discourses, thereby allowing its pervasiveness into the most remote domains. At every signifying process, the imaginary of risk as uncertainty potentially incorporates other elements changing the discourse and practices, and the way the very substance is understood. This point will become more evident in risk management narrative to be presented next. Before advancing, I would like to finish this chapter with some remarks about what has been said.

Taking stock: the transubstantiation of values-substances

Castoriadis provides useful concepts to distinguish between, on the one hand, the social constructs available at societal level, on the other, the politics of meaning taking place at the level of organizational action. Bringing his conceive of imaginary institutions in contrast with the matrix of imagination presented in the previous chapter, the Castoriadian view takes into account both the understanding of the conditioning power of imagination at the social level (i.e. the instituted imaginary) and its creative and transformative role (i.e. the instituting imaginary). A key point contribution, nonetheless, is the notion of social imaginary significations, which allows researchers to investigate the inter-relationship between the individual, organizational and societal levels, or more simply, between practices and institutions. Imaginary significations are part of what

Anthony Giddens calls modality, the connection between social structures, on the one hand, and the ongoing flow of everyday action, on the other (in Barley, 2011). Following this view, I would like to elaborate upon the notion of institutional substance proposed by Friedland, in order to better understanding the relationship between technique, language and social imaginary significations.

It is my contention that the Castoridian reading of institutions contributes to a dynamic view of Friedland's notion of institutional substance. According to the dialectics of the imaginary, it is not possible to conceive substances as being simply enacted within organizational fields, for there are no substances *per se* in the social and organizational world. Thus, I would like to carry on with Friedland's understanding of institutional fields as religious orders (Friedland, 2013), offering the argument that substances only exist through acts of transubstantiation. The notion of transubstantiation is consistent with Friedland's view while also comprising the dialectics of the social imaginary previously outlined.

The term transubstantiation is used in the rites of the Eucharist of the Catholic Church. From the 12th century on, the theology of the Eucharist was explained by the language of substance and accident, wherein the doctrine of transubstantiation was adopted by ecumenical councils including the Fourth Council of the Lateran (1215) and the Council of Lyons (1274). In the Eucharist, transubstantiation refers to the *conversion* of the substance of bread and wine into the substance of the Body and Blood of Christ, respectively. While the bread and wine appear the same as before, their substance has changed. In more general terms, to substantiate means to give form or substance. Transubstantiation, however, means to give substance to something, despite it remains apparently unchanged. Thus, it refers to conversion (*conversio*) rather than change (*mutatio*). Like the idea of translation (Czarniawska and Sevón, 1996), transubstantiation is also a performative process that renders similarities within superficial appearances while being heterogeneous within actions. Transubstantiation, however, underscores not the travelling of ideas or different translator objects such as books, models or presentations (Czarniawska and Sevón, 2005), but rather the process of converting material events into

particular institutional substances. Risk management provides again support for this argument.

Mary Douglas has described that the contemporary notions of risk are rooted in the rituals of blame and purification (Douglas, 1966; Douglas, 1985; Douglas, 1992). In her works, she fleshes out the relationship between taboos and sins in primitive societies and risk in modern ones. Douglas presents several cases in which taboos or sins have played a central role in defining and explaining the dangers in primitive societies. For example, she cites the Hima people of Uganda, where contact between women and cattle would result in cattle becoming sick and dying, or the blaming of Jews in the fourteenth century Europe for poisoning well water, and many other examples (Douglas and Wildavsky, 1982; Douglas, 1992). The point she stresses is that the whole process of assessing and evaluating dangers comprises disputes over the allocation of blame, disputes underpinned by the interactional context in which judgments take place. In short, blame systems are moral and political systems.

In the modern era, risk has seemingly “replaced older ideas about the cause of misfortune” (Lupton, 1999: 46), once the term acquired a forensic utility and perpetuated itself through a “sanitized discourse” allegedly free from political or moral biases (Douglas, 1992: 24). The word ‘risk’ fits perfectly, says Douglas, with the individualist culture of modernity, and the contemporary blaming system we are in is one where actions should be taken promptly to find the causes and apply the charges to misdeeds, catastrophes, crisis and other dangers. However, despite this apparent change, Douglas argues that risk has somehow become a reinterpretation of sin because the term has surpassed its roots in probability theory to convey the more generalist notion of danger. So, if the previous examples seem distant from our modern way of thinking, Douglas remembers that since the discovery of the HIV virus in the 1980s, the issue was strongly linked to a stigmatization of individuals carrying this disease, even “to the extent that one would have to assume that the virus was capable of making a moral judgment” (Tansey and O’Riordan, 1999: 74; Douglas, 1992). This means that the modern discourse of risk functions as a moral discourse, in many ways similar as that of sin in primitive societies (Lupton, 1999).

One important point Douglas raises, and here I make the first connection with the transubstantiation of risk, is that sin and risk are both terms oriented towards the future. “The very name of the sin is often a prophecy, a prediction of trouble” (Douglas, 1992: 27). In the same way, as I have argued, risk as uncertainty is never material until the moment it materializes into damage. Thus, both notions function as a kind of springboard through which political struggles over danger occur (e.g. What are the dangers? How are we supposed to deal with them?) and specific morals are incarnated in material practices. Furthermore, even if risk and sin have different uses in different times, “people may sometimes be blamed for being ‘at risk’ just as they were once blamed for being ‘in sin’” (Lupton, 1999: 42). Thus, the rituals of risk management work in an analogous way to the rhetoric of Salvation and purification of the Eucharist because these rituals involve accounting for blame and purification. Risk management aims to purify what seems to be deviant; it aims to expunge sins, and in its most extreme manifestations, it aims to eliminate the very possibility of incurring sin (see Radcliffe, 1997; Hood, 2002; Power, 2004b; Linsley and Shrives, 2009). This is a process underpinned by risk as uncertainty, the driving force aiming to perpetuate risk discourses and practices. The fact that risk as uncertainty is an imaginary signification gives it the power to create worlds according to its image; as an imaginary signification risk perpetuate itself within practices and discourse and even extend itself to new domains through the embodiment of other substances. To be enacted, risk must take into itself material events signified as risks. These events must be converted into risk issues; they must be transubstantiated.

Domains of practice must give actuality to risk as uncertainty. It is through transubstantiation that such actuality takes place because risk as uncertainty faces continuous conversions *within* and *through* domains of practices and knowledge, which define what will be risky and how it will be dealt with. Dangers must be “selected for public concern according to the strength and direction of social criticism” (Douglas and Wildavsky, 1982: 7), and beyond that, they must enter into the field of representations and discourse and must be talked about and believed. As an absent present (Friedland, 2009), risk as uncertainty must be constantly re-enacted. At each new crisis, dangerous event or organizational failure, new stock is incorporated by practitioners through the substantiation

of ‘risk as uncertainty’. An unnoticed global financial crisis, a nuclear catastrophe that escalates to unexpected events, an unlikely climate change affecting crop prices, social unrest in response to austerity programs and a global espionage scandal triggering political debate are all material stock through which new substances are *converted* into the notion of ‘risk as uncertainty’, pushing it to new territories and giving it new materialities and forms. What determines if different forms of risk management will emerge is how (and if) new situations and events are being converted into risk issues, which might add up to the substance of risk as uncertainty or even shift the signification away from its contemporary outlook.

In the next chapter I will follow the signification of risk as uncertainty in the Brazilian conglomerate called here Group. By doing that I shall investigate the materialities produced through the notion of risk in that organization. As I said before, my contention is that this substance of ‘risk as uncertainty’ must be enacted by practices which constantly convert events into risk objects, while at the same time these practices defer the imaginary signification of risk within discourse. Hence, my initial focus on presenting the risk management narrative will be to identify the risk objects (Hilgartner, 1992) produced by actors through signifying processes, as well as to track how this signification unfolds in different parts and levels of this organization.

Chapter 4

A risk management narrative

Impressions from the field

My destination is the Faria Lima Avenue, São Paulo. The route is marked by a mixture of smells and images which become more enjoyable as I drive from the periphery to the center. São Paulo has 20 million people, considering its metropolitan area; 19,223,897 to be more exact, but everyone around here says 20 million, giving the impression that a few hundreds of thousands more makes hardly any difference to the established hive. In such a big city, accustomed with throngs, different sensations abound throughout the day, especially for those facing a daily routine of switching public transports. Hosted in the northeast part of the city, and not knowing well how the public transport works, I was suggested to go to the Paulista Avenue and from there to get a taxi to my final destination. So did I, but it took me at least an hour and a half to get to the Paulista due to heavy traffic jams. Already on the Paulista Avenue I stretch my hand out and a taxi promptly stops. I say my final destination and we move on. Talking to the taxi driver I find out that people in São Paulo call my destination under the sobriquet of New Paulista, as a reference to the economic role granted to the Paulista Avenue in the past. Entering into the New Paulista's area I see why. In many new skyscrapers, which share the landscape with construction sites, national and international companies have their headquarters installed in, making this region the most expensive square meter in the town. Some say this is the new financial center of Sao Paulo, and I think to myself: "If it's here that the bulk of financial activities of São Paulo is concentrated, it's no exaggeration to say that this is the epicenter of Brazilian economy". Passing in front of a traditional Brazilian bank, the driver says: "This guy has money!", referring to the owner of the bank, I think. We arrive at my stop, and when I get out of the taxi I see myself walled by buildings with mirrored windows. That gives me an odd sensation, since this image is a nice and indeed solid representation of the mundane vanity tied to money. I head to the lobby of one of these buildings, a large white marble hall with a desk reception and some electronic turnstiles on its side; I make my registration, get a badge from the attendants, and take the lift to the floor where my contact works. Getting there I find another reception; this time of the company I shall visit. The attendant confirms my meeting with the controller of the company, and leads me to a meeting room located just behind the reception. I wait for a while, a few minutes passed, and my contact arrives with a colleague. In a very friendly tone but also quite assertive, typical of the profession I think, he introduces himself and his colleague telling me of their respective positions in the company and highlighting their experience as former Big Four's. They give me business cards, and the controller starts his presentation of the company and their respective responsibilities, the point which I asked for permission to record the interview.

The excerpt above was taken from my fieldwork notes, and it sets the tone of important aspects of interpreting risk management within the company called here as Group¹⁹. It shall enliven aspects such as where those people came from, what they do, how they talk, what stories they nurture, what kinds of gossips they have, and many others. Historical specificities of this company, its owner's visions, desires and latent intentions,

¹⁹ Other excerpts like this will be presented along this chapter. The interpretations represents of course my own view, what leaves those practitioners, interviewed or observed, free from any commitment to them. The pseudonym Group refers to the conglomerate, which is also used interchangeably with company. Business units are described as business, enterprise, their respective pseudonyms, and occasionally as company depending on the context. Capitalized letters shall make it easier to identify these different nuances.

its cultural, economic and political aspects will be presented along the narrative of risk management which has been developed according to the data collected within this Brazilian conglomerate. The focal point will be the series of acquisitions the company made and the respective changes in matters of risk management within the company. From these acquisitions on, the Group, which was originally dedicated exclusively to the sugarcane sector, has started to position itself as a player in the infrastructure and energy sector. Its change and expansion – sometimes interpreted as risk diversification, sometimes interpreted as a way to generate synergy within the conglomerate – shows an intriguing point: through the binomial risk/opportunity, the signification of risk has become increasingly central in the *modus operandi* of the conglomerate and its businesses. Accordingly, the narrative shall present the unfolding of risk in its uncertainty characteristic as an imaginary signification through which processes of organizing are triggered.

Risk management in this company led, however, to more than just the simple diffusion of techniques. As I will show, while material practices of risk management spin around the imaginary signification of risk, risk as uncertainty is displaced and deferred in the discourse and new risk objects are enacted by those practitioners. The following cases will illustrate, therefore, the mode of being of the imaginary institution of risk management, that is, its self-expanding and self-reforming thrust. In the next section I will present the history of the company as well as its explicit and latent strategy according to past and recent moves. Then the narrative traces the imaginary of risk on three different levels: the first one is the Group's corporate level and their view of risk management; the second level presents an account of risk management in the business called here Energy; and the third level addresses the imaginary of risk in the business unit named Land.

The Group's History and context

The Group is well recognized among market analysts and its executives as a story of change and success. Rooted in a traditional family company of the sugar ethanol branch,

it began its activities in the mid-1930s with one factory for milling sugar cane. Over five decades the company concentrated its production in this one factory. In the mid 1980s, however, it started to buy other plants in order to expand its capacity. Whereas this move has brought the company a recognition as an important global player, its production was, until that moment, basically concentrated on one issue: transforming – and selling – sugarcane in sugar and ethanol form. From 2008 on the Group started to realign its strategic interests, a process still happening at the time I write, and which is marked by series of acquisitions that aim to transform and consolidate the Group as an important player in the infrastructure and energy sector.

Looking at the bold measures put in place by the conglomerate in these last five years, market analysts underscore them as an aggressive move and signaled yellow on several occasions to the actions undertaken by the company, especially with regard to the leverage assumed by the company in order to carry on acquisitions and investments. Testimonials inside the company, in turn, describe such decisions as right and relative secure steps taken to realize the company's plans, justifying them by the results obtained in the recent years and by the strategic re-alignment the company aims at. The sum of money²⁰ invested in acquisitions and investments in new businesses in the last five years seeks therefore to reinvigorate the conglomerate, minimizing its exposure to historical instabilities of the sugar ethanol segment. The historical instability of this sector in Brazil can be seen as one of the main drivers of change for the company. However, this is neither exclusive for the company, nor, over all, free of controversy. Indeed, the many crises plaguing the Brazilian sugarcane and ethanol sector in the past 30 years are well known, and can here be summarized as three major events: a) a first event happened in 1985, when oil prices fell down knocking ethanol prices due to competition with gasoline; b) a second one was in 1989, when crop failures severely compromised the ethanol production; c) and the most recent one happened in 2008, when the credit market dried up and several plants went into liquidation. It is the 1989 crisis that was an important turning point in the expansion, professionalization and diversification of the Brazilian conglomerate.

²⁰ Disguised to preserve the Group's identity.

In the 90s several ethanol mills were in a quite critical debt situation, owing more than their annual turnover. The founder of the Group, aware of this situation, devised a plan to create a single group to gain efficiency in scale and resource optimization, minimizing thereby the ups and downs of the industry. He began to acquire other mills that were, in many cases, depreciated because of the financial problems caused by the crisis. These acquisitions gained epic contours and became stories passed among people in the market and among the employees of the conglomerate, remaining alive until the present day. One of these stories is that the new plants were largely owned by other members of the founders' family, against which he fought on the courts, from where he returned as a winner, cementing the first step to create the company he had envisioned²¹. Looking back to his own history, the founder commented in a magazine: "I'm persistent. It took me ten years to buy one of these plants. I just rest when I bought it." Or, in another example: "They've said I was going to bankrupt, that I was in debt, but they didn't reckon how much my costs fell". So, after purchasing other mills one of the initiatives taken by the Group was to expand the contribution of the cogeneration of energy to its cash-flows, which served as a hedge to downturns in the production of sugarcane.

Energy cogeneration brought some cash stability through long-term contracts with the government. However, the revenues still did not fully meet the company's expectations of growth. At the same time, it still left the Group largely exposed to economic and environmental uncertainties related to the company's main products. The next step taken, some years later, was a round of acquisitions carried out under the now well recognized aggressive style of the founder²². With already high levels of debt, the founder had to find a way to raise funds to put his plan in practice. He used, then, a rather unusual mechanism

²¹ I am focusing here less on the accuracy of such episodes (history), than on their cultural roles as myths shaping the ethos of the company (story). For example, such stories recounted by market analysts and insiders highlight the aggressive entrepreneurial personality of the founder, and lead people inside the company to depict him as "differentiated", or to the view that he demands from his executives to be "differentiated" too. In the media, some adjectives attached to his personality are 'bold', 'aggressive', and 'sometimes reckless'.

²² The mythological effect of the founder's aggressive attributes was confirmed by informants inside the company. In a mixture of respect, admiration, and fear, this mythology is transmitted through storytelling among employees, such as the fight with his family to build the company, his paternalistic and centralizing character, sudden encounters with him in his non-announced visits to plants, and eccentric cases, such as one testimony of the gestalt of his office, which is covered with a dark velvet all over its walls and its "kind of" vault door; according to the informant, the elements of his office conveyed the environment an "air of power".

according to the rules of good governance in Brazil. Since a new issue of shares in the Brazilian market would imply his loss of control, the founder created an overseas company to maintain the control in his hands, issuing there a special class of shares with 10 times power of vote than the previously existing classes²³. This time his fight was against the minority shareholders. But the founder's justification for using such a measure was that his company was at the risk of suffering a take-over. In his own words: "In a short time I'd have lost everything. What did they want me to do, leave the company to a take-over? That would be to underestimate my intelligence. I wasn't born yesterday. In our sector, who doesn't have 51% tight, loses the control of the company. Especially because I have my eyes wide open. If some business is good and the guy who runs it slips up, I snatch it". His tactic was, again, effective, and the new holding controlling the company raised enough money to fund its change and expansion plan. Since 2008 the Group has acquired or created businesses ranging from logistics, energy, agricultural real estate investment, and gas and fuel distribution. In terms of risk portfolio, the share of sugar and ethanol, which accounted for almost 100% of its Ebitda in 2008, has gradually decreased with estimates to reach something around 30% in 2013.

The question that emerges at this point is the following: Is the conglomerate changing its strategic focus for reasons of risk diversification? Answering 'yes' seems very compelling after what has been exposed. Yet, there is no simple answer to this question, since the company would not go into business which did not bring, according to their eyes, real profit to the Group. That is why inside testimonials emphasize that acquisitions and new business aim to generate synergy within the conglomerate, highlighting, therefore, a close tie between notions of risk and opportunity inside the company. To have a deeper understanding of the motives and the type of change undertaken by the company, it is important to reconstruct the discourse in the economic and political scene in Brazil before 2008.

²³ This practice falls entirely apart from the principles of governance established in the *Novo Mercado* code (New Market), and the requirements of the Brazilian Law and CVM rules (Brazilian Securities and Exchange Commission). See, <http://www.bmfbovespa.com.br/en-us/markets/equities/companies/corporate-governance.aspx?idioma=en-us>).

Having a long tradition in sugar cane cultivation Brazil is considered the main producer of sugar and alcohol in the world, with the lowest production costs²⁴. In Brazil, sugar and ethanol market has been state-controlled during the XX century, where the Pro Alcohol²⁵ stands as a national touchstone for the heating of this market in the 1970s. The deregulation came after the extinction of the Institute of Sugar and Alcohol (IAA)²⁶ in 1990, which pressured producers to rationalize their processes, due to the opening of the market to other investors. In this context, the integration and modernization of the Group's mills aligns to thrusts to professionalize and rationalize operations of a sector commonly associated with terrible working conditions, such as those represented by the figure of the *Bóias-Frias*²⁷, and in which public subventions resulted in a negative public opinion. The consolidation of the Group's mills was, then, seen as a landmark, as it generated scale, efficiency and professionalization not found in that industry, which was managed, until that point, rudimentarily. As the demand for renewable fuels in the world grew, the accumulated expertise with respect to the cultivation and production of sugar cane and ethanol, and the sign that the industry was modernizing itself raised the importance of ethanol in the public discourse²⁸.

Political discourse reinforced the image of a “green hope” associated with ethanol, harmonizing sustainability ideals with economic opportunity. Ethanol was featured in testimonials of the highest echelons of government, an euphoria epitomized by of the then president Luiz Inácio Lula da Silva in the media: “We are giving a signal to the world that, in a very near future, oil will not be the reason for war in the world or for a consumer

²⁴ Sugar cane was introduced in Brazil in 1532. From it sugar, alcohol, anhydrous (additive for gasoline) and hydrated alcohol are produced.

²⁵ The National Alcohol Program (1975), or *Pró-Alcool*, was a response of the Brazilian government to the 1973 oil crisis. Its aim was to promote bioethanol fuel within the country.

²⁶ The Institute of Sugar and Alcohol (IAA) was created as a protectionist measure of the sugar cane industry in Brazil in 1933, following the impact of the global crisis in 1929. Operating until 1990 it maintained exports under central control, granting subsidies to producers.

²⁷ *Bóias-Frias* (cold-meal) refer to workers on coffee, sugar cane and cotton farms. They earned this sobriquet because of carrying their own food to the rural area, and normally eating it cold. *Bóias-Frias* are transported in trucks from the city to their respective rural areas, and returned to the city at the end of the day. They earn very low wages, and have few, if any, opportunity for advancement.

²⁸ In Brazil, this growth in the demand of ethanol is especially significant since 2003, when flex-fuel vehicles started to be marketed.

country to invade a producer country”²⁹. In another famous passage, Lula extols a new image to producers: “The mill owners, who until a decade ago were considered bandits of the agribusiness in this country, are becoming national and world heroes”. Such testimonials sent strong signals to the market, which amid this euphoria started to receive foreign investments to build mills³⁰. However, at the end of 2008 this euphoria ended up in an ironic way. Along the financial crisis that shook the finances of many plants, new discoveries in the pre-salt layer turned oil from a villain into a hero, using the words of the former President Lula. Since the ethanol and gasoline markets are both highly regulated by the government, with the pre-salt discoveries priorities began to change. The government froze gasoline prices, thereby creating problems to the sugar ethanol sector to transfer increases on production costs, shrinking their profit margins to critical levels³¹. To cement the crisis the sugar ethanol industry has suffered a series of crop failures in the triennium 2009-2011 causing plants to drastically reduce their production. This resulted in a highly indebted industry with withering productivity levels³².

In such a scenario of political and economic uncertainties, described by the founder as a “roller coaster”, change seems the only possible way out of the ongoing ups and downs. With new businesses under its control, risks are now distributed within a larger portfolio. Yet, acquisitions and new ventures aim at more than simple diversification of risks. They are part of a strategy unfolding on two fronts. At a first front it seeks to minimize cash flow fluctuations through gains of synergy in the production chain; and here boundaries between risks and opportunities quickly efface. At a second front the strategy aims to position the company in a global market in process of maturing. Acquisitions and new businesses point to a transformation of a company, which still bears traces of its

²⁹ Speech at a plant’s opening. (Biodiesel evitará guerra por petróleo, diz Lula, Folha de São Paulo – 25/03/2005).

³⁰ See “A BP começou a investir na produção de etanol no sul de Goiás” (Folha de São Paulo, 25.4.2008) and “A Toyota mostrou interesse em explorar o mercado dos combustíveis alternativos” (Eubrasil, 5.8.2008).

³¹ This situation persists until the moment I write (see, *Brazil to the rescue of the sugar-ethanol industry with lower taxes and soft credit*, MercoPress, April 24th, 2013).

³² Numbers show an increase of the total debt of the sector from around US\$ 7 billion in 2006 to circa of US\$ 23 billion in 2011. Productivity fell 20% during the biennium 2010-2011. See Kfoury, G. *A Sweet and Sour Tale*, Platts Insight Magazine, December, 2012; See also *Brazil: Debt rising for mills in centre-south bank says*, in Sugaronline.com published 05/31/2013; and also *Setor sucroalcooleiro chegará ao fundo do poço em 2014*, in novaCana.com, 20/11/2012.

familiar tradition, into a global conglomerate active throughout and beyond its production chain.

What is more, Brazilian demands for infrastructure are notorious and the company has invested in several projects in this sector, availing of its interests to generate cost efficiency (i.e. in the founder's words: "they didn't account how much my costs fell"). In addition, the instability of the industry does not change the economic prospects of ethanol, which remains a promising renewable fuel in a maturing market. In spite of Brazil being already a well established market, with an internal demand boosted by flex-fuel vehicles³³ and high percentage of blending of ethanol in gasoline (25%), other countries have not yet fully incorporated these technologies. For matters of comparison, the European Union blending of ethanol and gasoline is around 5% (EN 228); and ongoing discussions are taking place about allowing an increase of this blending³⁴. Certain disbelief on the ethanol produced from sugarcane remains, however, stringent in the discourse. This can be seen from two perspectives. First, as a misunderstanding between the peculiarities of sugarcane ethanol with soy-based biodiesel, the latter considered harmful to the ecological balance. Second, as a protectionist measure against sugarcane ethanol, or as described by Brazilian producers as an "eco-colonialist" maneuver from developed countries³⁵. In any extent, Brazilian producers strive forward to transform ethanol into a global commodity; and technological and research investments, such as those behind the second (2G) and third generation ethanol (3G)³⁶, point to this direction.

Considering the perspectives of the ethanol market, the changes put in place by the Group highlight steps of rationalization to achieve desired goals and profit within this market, rather than a simple abandonment of the sugar-alcohol sector. On the one side, despite the company's interest to decrease its exposition to risks attached to commodities, its business of ethanol, sugar and bio-fuel (named here Energy) still keeps buying mills and

³³ Flex-Fuel Vehicle (FFV) can run on gasoline, ethanol, or a combination of the two, so drivers can benefit from price oscillations. This technology boosted the popularity of FFV's in Brazil, expected to be the predominant vehicle there within the next decade. In 2012, for instance, more than 85% of new sold vehicles were FFV (see, Brazilian Automotive Industry Yearbook, 2012).

³⁴ Some countries have already started to offer a higher percentage of blending in their gas stations (Finland and Germany with 10%, Sweden and Holland with 15%).

³⁵ See, Gerd Kohlhepp, *Análise da situação da produção de etanol e biodiesel no Brasil*, Estudos Avançados, 24 (68), 2010.

³⁶ Second and third generation ethanol can increase production without increasing land use.

improving its internal processes. On the other side, whistle blowers and gossips say that the founder keeps buying productive land in Brazil, especially sugar cane farms, taking advantage of financial problems these have suffered in the last years. That would give him substantial control over the main feedstock used in the production of ethanol and sugar. Controversies make the real strategy of the Group unresolved, as any strategy indeed is. For the present case, these controversies serve as a backcloth to the narrative of risk management that follows.

Talking risks and opportunities at the corporate Level

Strategic risk management is considered a fundamental part of integrated risk management (Mikes, 2009; Mikes, 2011). It refers basically to the processes used to manage uncertainties that could inhibit an organization to achieve its goals. Strategic risks are, however, difficult to quantify and the management of such risks is commonly attached to general ideals connected with value creation. Surrounded by ambiguity, and with an all encompassing aim, strategic risk management inserts a new morality inside organizations (Power, 2007); it sets organizations and management in a ‘risk thinking mood’. This morale is tracked in testimonials of managers within the Group and its businesses. Yet, by following the interviews, there is no clear-cut separation between risks and opportunities³⁷. The interplay between risks and opportunities highlights, therefore, a ‘muddling through’ approach to strategic risk management; if the Group had mitigated some risks, it still has to learn and deal with unknown threats. Risks are grasped and managed on the go, while the company integrates new business firstly seen as opportunities. That is to say, when it comes to the risks coming along new ventures, managers first fly by their seats trying to instinctively apprehend the tradeoffs of the opportunities. According to this blurring of boundaries between notions of risk and opportunities, this section will show how managers

³⁷ This problem is purposefully circumvented by the COSO framework when it concluded that “adding the concept of opportunity would cloud the concepts and make communication difficult” (COSO ERM Framework). It is not necessary to dwell here to explain that such prescription creates a rather narrow understanding of risk.

displace risk management materialities³⁸ within the Group, while the imaginary signification of ‘risk as uncertainty’ is deferred in this particular organization.

The changes and acquisitions put in place by the company indicate a wish to flee from market instabilities stemming from the sugar and ethanol sector’s uncertainties. Many of the executive’s concerns are consistent with such a view. These concerns are represented in their discourse in how new ventures have helped to generate a stable cash flow; in how acquisitions have helped to improve the image of the company within the market, and thereby eased the access to credit and to a lengthening of payment periods of the company’s debt; and in how the company has been gradually professionalizing and rationalizing its management. What is more, expansion through aggressive acquisitions seems to be seen as a solution to gain scale and competitiveness, bypassing Brazilian economic and structural problems. These changes, however, cannot be understood exclusively from an angle of diversification of risks. There is a difficulty in drawing an exact line between risk and opportunity, as it is manifested by the CEO (according to one business unit CFO), during a periodic meeting between him and executives of all businesses.

...if you take a close look all businesses are connected, they all are conditioned upon the same variables. So they are not so diversified as it might appear. It [the company], on the contrary, it’s exploring a chain in various directions...businesses in where it can add value, be it because of synergies with existing businesses or because of installed capacities it can leverage. So, for example, investments in ports, the Group purchased the One³⁹ and with it came a port. The port was one of the pillars for starting a railway logistics company. [...] The Group purchased the Two because it’s in several places of the energy chain. So it’s in renewable energy with sugar cane and it’s in the oil with the participation of the Foreign in the Energy and it’s in the gas, which is another extremely important source of energy. [...] It’s on land business because it was part of the agribusiness production chain with the mills, now part of the Energy, but the Land is connected to it, because it knew more about land and it had knowledge. It is...the purchase of X, it was giving a step forward in the chain in terms of...I’m talking about upstream, which is the production of..ethanol [...] with the purchase of X it was not possible to separate the lubricant business, nor even the aviation one. Both came together, aviation didn’t match with anything else and was then sold. [...] So, the strategy is not to diversify. The strategy, I think, is to search for correlations with existing business, or in which the Group can be a winner, and it ends up with some level of diversification as a consequence [...] it’s expanding within a

³⁸ Materialities mean here the practical effects of risk management in terms of organizing rather than losses resulting from materialization of risks. Risk materialities includes the risk objects described by Hilgartner (1992). According to him, “[c]onstructing risk objects is a two-way process, propelled by efforts to emplace risk objects within, and displace them from, sociotechnical networks. To emplace a risk object means to make the object, and its risks, into significant actors in a sociotechnical network”. Displacement happens by deconstruction of the risk object or its expelling out of the system. See p.49 Hilgartner, S. (1992) ‘The social construction of risk objects: or, how to pry open networks of risk’, In: James F. Short and Lee Clarke (eds) *Organizations, Uncertainties, and Risk*. Boulder, CO: Westview Press.

³⁹ Names disguised.

network in which it thinks it can have gains and in which it can add more than others, and some diversification results of that. But the reason is not to diversify. If you ask about a great risk diversification, that was the contribution [displacement] of assets of sugar, ethanol, and mainly the agricultural part, to Energy, and from thereon it started walking on the chain. It's like being throughout the chain, rather than simply a sugar mill company [...] and that was indeed a big change, diversification. Now, the new...acquisitions, I think they are natural consequences of being throughout the chain, you know? (CFO Business Land)

Following comments of the CFO, the company adopted an incremental strategy with the aim of “walking throughout the chain”. It also shows that notions of risk and opportunity are interspersed in the discourse, making it difficult to define precisely the risk management strategy of the corporation. Has the company diversified to mitigate risks? Or, has it seen opportunities, grabbed them, and then risks became more diversified? Testimonials from inside the company comprise both, ideal and pragmatic notions of risks and opportunities. The CFO says that on the one hand new business added value or synergy to the company, on the other hand some degree of diversification occurred. In fact, regarding the assets mentioned – sugar and ethanol – risks were mitigated, since prior to the acquisitions and new businesses 100% of its efforts were oriented towards this production. In this sense, a pragmatic answer is that main risks connected to these assets were too high, and change in terms of diversification was necessary.

...sugar volatility is fifty percent. In my professional life, I think I saw such a great volatility just in nickel. And this, depending on the type of operation you have in your company, can bankrupt the company... if you hedge the cash flow in an adjustment, when there is a peak of VOL [volatility][...] when a certain price level is disrupted, you must make an adjustment. [...] In the recent past of the Group, it has taken money, sometimes you had to raise resources in the market just to pay such an adjustment. (Corporate Treasurer)

The Treasurer goes pragmatically to the point: “A company goes bankrupt mainly because of liquidity, it derives from other risks, but at the end of the day it is cash, because it has an inability to finance itself; either it has money to pay or it has not” (Corporate Treasurer). From a pragmatic view, acquisitions and new business gave cash flow stability to the company's balance. New business, according to the Treasurer, despite the apparent low adherence to core business, aimed primarily to offset volatility of cash, a volatility deriving mainly from the sugar ethanol uncertainties. Yet, risk and opportunity still remain closely intertwined here, for ideal notions of opportunity permeate this view, too. New ventures are described as potential ways to explore the production chain. Gains of scale and

improvement of cost competitiveness by integration of stages of the productive chain are part of a vision of future that shifts the emphasis from ‘risk as uncertainty’ to possibilities and expectations. And despite of yet unknown threats, such opportunities indeed hedge the company from old ghosts, at least in the short term.

Vitor: Can we say that these acquisitions are controlled risks?

James: Yes, it is well controlled, right? For example, the actual business of Gas⁴⁰...this is the kind of information which investors have only afterwards. For example: “Oh, to buy a company of X point Y bi!?”... Okay, but this company generates Z point Y point bi of cash. It generates an X flat, you know? So, this is money...it’s cash coming in. And this company has Z percent of Brazilian market share. [...] It only serves seventy municipalities. So I have more... if nothing changes, I still have over a hundred and ten, so I have, I have at least the capacity to double my turnover, huh? Without going into any greater risky action and without any need for greater detail, because once you have the concession, it’s simply an analysis of risk and return. (Head of GRC)

Pragmatic and ideals notions mesh in the discourse. New or unknown threats of new businesses are minimized by the potential of cash generation in the short term. This shows a kind of entrepreneur experimentalism in the integration of new ventures, and even if risk thinking is present in their thought and analysis, it does not prevent the company to perform maneuvers considered risky by market analysts. As already pointed out, market analysts signaled yellow to some of the company’s undertakings. Executives seems to be used to such criticism, saying that analysts do not follow exactly the company’s strategy at each ‘great’ decision, and since the company has been delivering the promised results, the market calmed down after some time.

Changes imply also a transition in matters of organizational identity. New businesses are viewed by managers as transformational changes, since what was seen before as a focus on the product seems to give place to a focus on performance.

...all the deals the Group made after the sugar and ethanol mills were transformational [...] the Group has been consistently showing that a combination of internal factors, of management, of strategy, of risk identification, and of creation of value has attracted the market...I think that, today, the name Group is much stronger for its performance than because of its products. So, you can say “What’s the Group’s product?” You can’t identify it. But by the financial results, because of the company and its management, it is quite known in the market. (Corporate Treasurer)

⁴⁰ Name and numbers disguised.

The focus on performance reflects especially on risk management practices within the Group. To the extent that new businesses enter the portfolio, the level of abstraction in terms of risk representation increases⁴¹. Thus, stemming from this shift, a new conceptual separation between strategic and operational levels of risk management was generated. This happened since managers are faced to possible new risk events, many of which are still unknown and needed to be seized, increasing therefore the complexity of risk management, for it demands new forms of representations (e.g. indicators) of risks to senior managers. Again, a pragmatic tone is claimed in the risk committee, where ongoing discussions take place to define the “appropriate” reporting dynamics.

We had a very important discussion and a clear perception of the CEO that: “Look, I don’t want to discuss here risk under the philosophical point of view, from the point of view... what the...” If you go to an executive and ask him what risk is, he will take out of the hat a million of things that for him...he doesn’t necessarily deal with that, but he can say: “No, risk is my competitor because he has a production capacity, because he will sell cheaper than I, he will cut down my profits, etc.” But this is not the concept of risk we have to be monitoring in this forum. Because this is business, this is the day to day business, he has to deal with that in a natural way, you know? It’s still risk, but it’s not the kind of risk that have to be [discussed] in a risk committee, where we’ll meet, we’ll gather hefty folks to discuss important topics and issues that must somehow be monitored. (Corporate Controller)

Here we see the politics of meaning and its impact on the imaginary signification of risk. Risk objects have to be negotiated between managers through notions of uncertainty, and these risk objects, in turn, are likely to define the substance of risk, that is, how it will be seen, perceived and managed. Hence, managers at the top level draw lines of action through the imaginary signification of risk as uncertainty. Risk can be a ‘million of things’, as the controller says, but most of these things are ‘day to day business’ and are supposed to be handled ‘naturally’ by business lines. Risk as uncertainty shows its elusive face, it slides if those managers try to fix it in absolute terms. At the same time, the signification shows its force, since it pushes management to organize its practices in the name of risk. Thus, risk as uncertainty demands an arbitrary conceptualization, which takes place according to the local interests, interactions and discussions. In this case it is the corporate level that substantiates the signification of risk, filling it with the meanings that shall be

⁴¹ Abstraction means the derivation processes of concrete to supra categorical terms, which at the corporate level include arrangements of events within risk categories, indicators, control mechanisms, policies, etc., used to control and organize risks. Examples of risk representations at the corporate level that emerged from the interviews are: allocation of cash flow within different business units, control of contingent liabilities, use of working capital, exposure to foreign currency, and access to corporate credit institutions.

negotiated and agreed upon. Discussions about risk at the committee has as a result to tackle just high level risks, that is, risk events that might severely compromise the company in the short and long term, and which are primarily represented in matters of big numbers. However, this decision is far from being self evident and demands a lot of risk talk within the committee, who pushes the discussions according to needs for objectivity.

...this is for us a very clear directive coming from the highest authority of the organization, clearly stating that: “Look, when we sit here to discuss risks, doesn’t mean that we have to discuss, at that forum, all the actions taken within the company to somehow mitigate risk, to manage risk, or to monitor controls within the company. It’s not that that we want to see. We want to see things that are really relevant, which bring in some way an exposure to the company that we, either quantitatively or qualitatively, want to monitor and want to give visibility to senior executives”. It has to be clean and it has to be an objective thing, you know? (Corporate Controller)

The pragmatic tone from top is quite adamant. Yet, difficulties to assess risks and represent them to the board are still imposing, whereby it was said that they already “bang their heads against the wall sometimes trying to define what the board wants in matters of risks discussions”. Controllers are faced with the challenge of dealing with new information coming in from new businesses, information that needs to be encoded in risk language. Thus, at the strategic level a new construction of risk objects has taken place in terms of signification of risk as uncertainty, as well as the materiality of such risk objects. I shall address this process in detail in the next section. Before that I shall draw some final preliminary comments.

The practical consequences brought in by the series of acquisitions taking place involve a new design of risk management at the corporate level. This process is still occurring at the time of writing. Yet, it is already possible to identify that such changes demand from controllers to set a new *modus pensandi* of risks involved in the activities of the company, because new businesses add new variables that have to be accessed, measured, represented, and managed throughout the company. The turning point of this transition was 2011.

...up to 2009 we were basically a sugar alcohol company. In late 2009, we purchased a business of fuels and lubricants distribution, [...] and the company began to significantly change at that time. The sugar and ethanol business continued to grow, but we’ve incorporated an entirely different business, with a different culture, with controls, with processes coming from a multinational very divergent from what we’ve had before. Last year [2011], we’ve formed the JV [joint venture],[...] which today is the Energy. Until that moment we had a perception of risk here... until then I say it is up to the go

live [operational launch] of Energy [...] Until that moment we had weekly meetings with the risk committee, where every week what was discussed was basically price and currency, sugar prices and currency, discussions about exchange rates and sugar prices. That was the risk, whereby sat around one table every week the CEO, the CFO, the director of operations of sugar area, the commercial director, me - who was the controller - and the people I had at that time to monitor this process. At that time, what was risk to the company, and what the company was looking at and what was discussed every week, and took a...what was decided upon, was sugar price and exchange rate. From one moment to another, it's turned. This all continues to exist, but it left the organization Group and went to the organization Energy, because it is now responsible for the business of sugar and alcohol. (Corporate Controller)

2011 marks the beginning of the process of what I termed before as the transubstantiation of risk as uncertainty, or the conversion of new issues into risk objects in that company. As I have previously espoused, transubstantiation happens when something is taken for one thing that we in fact know to be something different, but we still believe in it and take it as it was taken at first. Risk management is still believed in and taken in its forms by the Group managers (through frameworks, COSO, procedures, cycles of control, development of RPI's, etc.). This process underscores the power of the imaginary institution of risk management. Yet, though viewed as risk management it is also understood that it is not risk management as it was before. Being still risk management, but different, new events need to be converted and encapsulated into the language and technique of risk management in order to become risk objects enabling, thereby, risk to be managed. Hence, with the displacement of the management of sugar prices and currency issues, a kind of vacuum is created at the corporate level in terms of risk management, whereby the members of the committee struggle politically and technically to construct new objects of risk management. Practical effects stem from such discussions on risk by the corporate level in terms to restructure the risk committee, as well as other mechanisms to set the *logics of saying and doing risk management* at the corporate level and throughout the company. The next section describes how ensembles of risk are being created therein.

Ensembling risks at the corporate level

Looking closer to whether the Group has been consolidating new businesses to diversify risks or rather if it is expanding and therefore risks are becoming diversified, exposes the faltering line between risks and opportunities at the strategic level. From the

practitioner's point of view both cases are valid – the pragmatic (e.g. less cash flow volatility) and ideal (e.g. generating synergy by 'walking through' the value chain). These views resemble risk management as an agonistic process, that is to say, as the politics of managing uncertainty. This politics lies in the tensions between the risk committee to set the appropriate logics of risk management (i.e. the pragmatic demand from the CEO against the volume of information coming in) as well as in the process of aligning entrant businesses to the risk strategy defined by the corporate level. Yet, from a technical and pragmatic view ambiguities must be trimmed, a view perfectly aligned to the practitioner demands in the organization here studied.

Lunch time...

I walk down to the building's hall and meet with James, who's already talking to someone who seems to be another executive of the company, judging by his business attire. James introduces me to Jorge, and I discover that he's actually a provider of IT solutions for risk management. We chat while waiting for Bob, and James asked me if I knew any victim of the fire accident in a nightclub in south Brazil. I say no, and he replies that he knew a guy who knows someone, explaining how shocked he was about the accident, because it had been an "announced tragedy", which he justifies by the amount of irregularities discovered in the club. He tells us stories about other accidents, talking of sequence of events that led to these tragedies, indicating, as I understand it, that such disasters could have been avoided if the elements of the chain of events had been well thought out. Bob shows up, he's introduced to Jorge, and we head to a restaurant nearby. The lunch talks revolve initially around the integration of the audit sector of a newly acquired business into the audit sector of the Group; James says the integration will save more than X million, as a structure of 15 persons will be reduced to 10. Jorge and Bob show some skepticism about the integration, due to role conflicts that might exist because of the shareholdings of each company. James explains that it'll happen anyway, for someone in a meeting had categorically decided and commented: "there's no downsizing without head cuts". Conversations shift to the difficulties in working with the cultural background of sugar mill owners. James talks about deals which lacked proper investment analyses, such as an acquisition of a plant which they're still paying liabilities unknown at the time of the acquisition. This calls forth the story of how the founder acquired his first mills when they were in financial trouble, buying them by the most affordable prices. Comments are also vented about the government decision to freeze gasoline prices, and that recent increases shall favors the company, since this will make ethanol more attractive. James replies that in any case it's a win-win situation, because the company is well positioned in both markets. We finish lunch, go to a coffee in a place beside the restaurant, and talks are interspersed between jokes, good coffee, and criticism of the government policies. Bob says cheerfully to the others to stop criticizing, otherwise I'll decide not coming back to Brazil.

Difficulties abound, however. As new businesses come in, the risk management team at the corporate level has to learn and interpret data gathered from executive's experiences, transforming these data into risk language. The team at the corporate level must convert new issues giving substance to risk as uncertainty, constructing, therefore,

risk management anew. To do that, they have to create a risk mentality within business units aligning them with the strategic goals at the corporate level. And they must be pragmatic in terms of risk re-presentation, a demand coming directly from the CEO. So, while boundaries of risk/opportunity float at the strategic level, risk management practices deployed by managers have a rationalizing ambition. They aim to narrow down the field.

In this section I will show that the tools and protocols of risk management in the Group are based broadly on the two mechanisms of the identitary logics described in the last chapter: (1) language as the logics of designating and saying risks, and (2) technique as the logics of doing risk management. The interplay between these mechanisms serves to create risk ensembles, through which risk objects are constructed into a discourse.

I shall discuss first aspects of the risk committee and the methods used for risk assessment in the Group. Let me start with the risk committee.

As I told you, until that point [2011], the risk concerns have always been located here [points to a organogram], focused in this business, and specifically dealing with sugar prices and exchange rates; not only sugar, because we sold most of the sugar to export and sell in dollars, but also taking into account the cash flow of debts, etc.. So the risk monitoring has always been quite good here. Well, from the formation of this business here, the Energy, it started to have a fully independent management. We participate as advisors in some forums here, we participate in some committees, but managing this issue now is Energy's responsibility. So we started to discussing: "Well, what now?". The Group has other businesses, it has the One, the Two, it has the Three⁴² – which is a logistics company – and it has a business of land investment...it has these four business here. Well, how we will start looking at risk here now, right? [...] Less than two weeks ago we had a meeting with the CFO, to discuss a little this issue and, for example, what we determined that we will look at is: "Well, what are the risks that could steal our sleep? What I think could be a risk that I want to bring to a risk committee meeting and that I want start tracking?" Ah, risk on working capital, I can miss a hand in working capital here and use unnecessary capital and have losses in my margin, I can start having a negative margin depending on the decisions that I made here. So ok, we'll define some KPI's [key performance indicators] and begin to monitor and with a frequency to be set, that will be not anymore weekly monitoring, because it does not require the frequency it had before. We'll begin to monitor and feed this discussion in this committee, with the President, with the CFO, but in a much more focused way according to the risks we decided to monitor. So we're going to look at this, we're going to look to the risks of default in the receivables in these businesses, because there are some risks that we want to monitor. And we want to understand, for example, the risk of pricing in this business here. It has a product here where the margin is very tight and we want to follow it, for example, what is the exposure to risks of losses in the margin of this product and what are the actions that we will take to prevent this to become a ... that it won't materialize as loss, you understand? So we started to discuss it, we're structuring at this moment. (Corporate Controller)

To structure a new form of risk management, managers engage in imaginative experiments (What are the risks that could steal our sleep?) as well as practical experiments (We'll

⁴² Names disguised.

define some KPIs and begin to monitor). Indeed, as Michael Power argues “[m]easurement and countability can be, and often are, imagined before the availability of reliable instrumentation” (Power, 2004a: 768). At this first phase of experimentation, then, the imaginary signification of risk acts like an antenna through which managers try to capture events from their context and convert them into risk objects, searching for differences and similarities between them and loosely establishing chains of causation. Learning is an important feature in this experimental phase too. Managers differentiate the many risks perceived within new business (e.g. lubricants, food, logistics, land are businesses with different peculiarities and risky events). At the same time, boundaries are drawn and interrelations between new businesses are established (e.g. which business are exposed to risks of currency, which business are exposed to pricing problems). Establishing boundaries, relationships and links of causation are the first steps of constructing risk objects (see also Hilgartner, 1992; Power, 2004a). But before that, as we can see, managers had to imagine which events could ‘take their sleep’. That is, they had to posit to themselves a re-presentation of risk. In the following excerpts, another manager explains how these experiments unfold and are discussed in the committee.

...we’re setting the model, so how does it work? The department of audit and compliance department gathers the data and monitors, it makes the KPI’s (Key Performance Indicators) right, based on these KPI’s we take to the risk committee, shows these data and these it’s defined how to manage it, for example, I’m seeing that I’m having a very high allocation of working capi...capital in stock of basic oil... then it is defined in the risk committee, “well, ok, I’ll take that risk” right? Or “I want to set a...a threshold to that risk”, right, for example, the business line can use only thirty percent of working capital to stock up, over that point it needs the approval of the CFO. (Head of GRC)

...so I got there on a number of risks, for example: contingent liability, we elected, there were seven risks at the time, two of the business X, but X is no longer part of the company, and we have risks there such as control of the contingent liability because the quite relevant amount, ... allocation of... is...cash flow, right...use of working capital in the business, right? At what level they use it because, for example, I have the case, the business Y today is ... we’re talking about items that are, for example, basic oil, these are items quoted in US dollars. So we have to have a very strong control over what kind of use of working capital is being done, how much is being allocated to oil in stock, if it’s some use of hedging [...] these are the main ones ok, for example, the case of business Z, we have a contract with G that is the main... is the main supplier of Z, and G has a problem... that’s a little chronic, that is to comply with contractual clauses, so for example: it committed itself to provide x number of transport wagons, x number of compositions of transport per month, but then it fails, and there is a contractual penalty. But often it doesn’t pay this contractual penalty...we make a risk analysis...and these are relevant numbers, and then we make an analysis of risk of how is my actual receivables, and how much effectively, how much should it really be and how much I actually received...to see how big this gap is, and to check if it’s worth taking a stronger measure on G. (Head of GRC)

The pragmatic approach demanded by the CEO implies the construction of threshold lines in terms of economic relevance of the risk events discussed in the committee. As a manager says, just “high level” risks would come in a discussion within the risk committee. In his words: “when I speak of contingent liability⁴³ of the Group, which is this risk at the corporate level, just to give you an idea of magnitude, it’s an account of one point six billion”. Lines drawn between business and risks categories, threshold of relevance, and focus on a particular frequencies (e.g. short-term risks) are documented in minutes of the committee meetings. A risk policy is also settled comprising distinct categories and actions to managing risks. Risks are differentiated therein as strategic, operational, reporting, compliance, and actions to mitigate such risks are to avoid, to reduce, to share, or to accept. The risk policy reflects verbatim the categories described by the COSO ERM approach⁴⁴. One typical explanation for the use of COSO framework would be that the Group seeks legitimacy through isomorphism (Meyer and Rowan, 1977; DiMaggio and Powell, 1983). However, this view does not sufficiently account for the power of such tool in the hands of controllers. The acts and roles undertaken by the risk management team before the eyes of the CEO and the board acquire significance through the uses of a common language of risk. Not without controversy though, once that within the risk committee a politics of meaning in matters of which events should be controlled takes place. Beyond an external legitimizing role and an internal role as a tool for bargaining risk management practices and issues, the COSO framework aims to the codification of the imaginary signification of risk, reducing complexities into a common language. From this angle, such instruments are, indeed, very compelling to those managers who need something to act upon.

⁴³ Contingent liabilities are liabilities that may be incurred by the organization depending on the outcome of a future event. Such liabilities result of past events and their existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not entirely in the control of the company. This risk object is a full expression of the imaginary signification of risk as uncertainty.

⁴⁴ COSO Enterprise Risk Management is a framework developed by the Committee of Sponsoring Organizations of the Treadway Commission. It describes generic methods and processes for risk management integrating internal control and strategic planning. I review the historical settling of COSO in the next chapter.

In a more general way, this code, as well as many others, aims to give identity to risk. And it does that through the mechanisms of the identity logics of language and technique. Through the COSO ERM framework risks are distinguished-chosen-posed-assembled-counted-spoken and risk objects are deployed into the risk management discourse. These events, now called risks, are then organized in ensembles (strategic, operational, report, compliance). Defined by a corporate policy, risk ensembles forge ways of talking risks (*legein*) and doing risk management (*teukhein*). So, categories work as filters of 'events', where the filtered outcome is a grammar of risks. This process coheres the identity logics of language (i.e. which functions to communicate risks) with its technical purpose (i.e. which craft events into risk objects indefinitely). On the whole, this processes and mechanisms gives identity to risk objects, they bring risk into being in form of objects.

Through the identity logics of saying and doing risk, managers design a particular cartography of risks⁴⁵, which in turn becomes another tool of risk talking and representation within the company. However, the coding of risk language and technique does not eliminate ambiguities. Deciding what makes an event to be seen as negative or positive according to the company's strategy remains an issue of the politics of meaning around risk as uncertainty. Conversions of events into risk depend on the commitments of action undertaken by practitioners. An example of it is when the Group was criticized by market analysts about its leverage ratio, which was increased in order to put through its acquisitions plan. Commenting on this issue, the founder confirms his adamant wishes to put forth his plans: "If I'm supposed to run the company by the wishes of the market, you better put an analyst in my place". All the interviewees also understand that the increased leverage ratio was a calculated risk, justifying it by cash-flow stability. The point is, 'scientific' or rational analysis of risks is not a rule here⁴⁶, especially because managers have to learn with new organizational realities and understand unexpected events stemming from acquired business. To put that metaphorically, the risk cartography

⁴⁵ The company calls this tool a "dictionary of risks" (appendix). I use the metaphor of cartography to represent this tool as something used by managers to point which dangers stand in the way of the company's strategic objectives.

⁴⁶ It is not the rule in other organizations too, see March, J. and Shapira, Z. (1987) 'Managerial perspectives on risk and risk taking', *Management Science* 13:(11): 1404-1418.

deployed by risk managers is useful to navigate, but navigating depends on observing winds and tides. So, this cartography might change conforming new seas are reached, and changes are inevitably negotiated between the company's CEO, its specialists (the controller and risk manager), and business units executives.

However, even being well versed in the language and technique of risk management, specialists must face lots of risk talks to assess unknown events. They use two kinds of assessments in this case.

For audit purposes, we make the diagnosis; we devise an audit plan based on a risk assessment. So to this diagnosis, we make an *interview with all heads of business lines*, with the CEO, CFO and even the founder, for example, the president of the Council. And this, this is an input to the issue of risk is...we would always stay in a rather strategic level, right? And then we have *an interview with managers*, which is done via, via questionnaire, [...] and based on the answers we define the risk rating ranging from one, less risk ... ranging from zero, lower risk, to five, very high risk. Based on that we define the audit plan, okay, that is ... we focus on where the company has ... might have higher exposure (Head of the GRC, italics mine)

Among the two tools described – face-to-face interview and structured questionnaire –, the manager distinguishes the first as paramount. He says that “the best place to collect risks is face-to-face with the executive”, where the proper method for doing it is “to sit, interview and talk to understand which risks are really in there”. Yet, most of the executives from business lines have no training in the vocabulary of risk, and view potential negative events as ‘business as usual’. For example, in a conversation I had with a CFO in one business unit, he warned me that he would talk the problems of his business, and that I should fit these events according to risk categories, once he was no specialist⁴⁷. Thus the bottleneck of how events are converted into risks occurs in the interrelationship between strategic and operational levels of diagnosis, levels established with the purpose of creating lines between what is “outside” and “inside” the range of risk management. The metaphor of “hunting” emerges in the discourse, whereby risks are seen as “captured” and “isolated”.

⁴⁷ This lack of indoctrination was in fact confirmed by the controller, as previously exposed. According to him “If you go to an executive and ask him what are the risks, he’ll take from his hat millions of things he’s not necessarily addressing, but he can speak: There is risk... risk is my competitor because he has a production capacity, because he can sell cheaper than I and get my margin, etc.”. (Corporate Controller)

When I use the questionnaire [2], I'm going to the operational level. Therein I'm tackling the process level. So I want to know the risk of port operations, the risk of the operation inside the terminal, the risk of treasury operation here of, the closing transaction accounting, purchasing, payables account [...] Because all these are somehow linked to strategic risk, right? Why? It is ... if I have a strategic risk [...] I have an operational risk too, it ends enhancing and vice versa, right? Then the strategic, by definition, will be always relevant, but when I work on the basis it ends up that I contribute to mitigate this strategic risk, right? So for example, if I say that I have a strategic risk facing the internationalization of a business, that would be the devaluation of the Real [Brazilian currency], for example, this will always be a risk. Because my business is to buy basic oil out and sell it outside the country, right? [...] In this level of response to risk, when I go to the operational level, I have there, ok, my risk is internationalization, is the devaluation of the exchange rate, but otherwise we have the operations, like cash working running properly, it reduces slightly that risk. Get it? Because *I managed to capture adequately how much exposure I'm putting myself on buying foreign currency...* how robust is the process [resilience] to hedge. *So I started to isolate this risk.* So what would be the risk? That would be a macro economic scenario...*outside; a blast that devalue the exchange rate but that has nothing to do with my internal environment* [...] So far I have a *robust internal process that handles with it, which can capture a...this info...this information*, regarding hedge, for example, *I can capture and treat it appropriately and generate suitable outputs...I begin to isolate the risk*, then, I will always have an impact, which is to wake up in a moment and see that the currency went to...two point eighty against the US dollar, for example, understand? Because this is a macro economic risk, and it doesn't have...I'm not exactly having signs, right? Otherwise, no one would lose money ... Then there are risks that always...will always be there, and I don't have, I can't take a direct action upon them, understand? So I need to have the structure inside...corrected. For example, a process of robust hedge, a diagnostic process of risk, how much I'm exposed with my stock, how much I'm buying of foreign currency... So all of these, you see...imagine that tomorrow the real was devalued...that happened what nobody wanted... my impact is reduced, right? (Head of the GRC)

The risk cartography gives, thus, visibility to potentially negative events, which are catalogued and labeled under the different categories of risk (i.e. emplacing risks). This process enables managers to talk about them, and to act and take decisions that eventually displace some risk objects of their current "location", externalizing or isolating them (i.e. displacing risks). Language and technique transforms events into images of risk, images which in turn make part of an instrument of dealing with particular uncertainties. Designed by the risk management team, the dictionary of risks (Appendix) serves to organize risks in ensemblizable relations. Yet, beyond that, this instrument is part of a rhetoric, which is complemented by analogies such as "assessment", "lines of defense", "capturing and isolating risks". Here we see the imaginary signification of risk as uncertainty in its full force, as an axis around which managers symbolically organize their practices. The construction of risk images, figures, and objects through rhetorical devices aim to set the *pathos* whereby the company can navigate through the cartography designed by risk managers.

Imprinting such *pathos* is, of course, crucial to the construction of risk objects, a process that does not happen automatically. If events are to be comprehended as risks,

other executives must buy and absorb the language and tools with which they can see their activities through the eyes of risk management⁴⁸. In the ERM vocabulary “risk alignment”, for example, stands for the way strategy, objectives and risk appetite converge. It points, more generally, to the need of risk managers to channel information from businesses units to the corporate level, and from there back to the creation of a culture of risk management. As an imaginary signification, risk always slips away, fleeing from tentative definitions and remaining, therefore, deferred in the discourse. At the same time, the imaginary of risk expands, swallowing everything that can be described as risk, once its objects, which have been figured in the form of risk, increase in number. That demands counter-actions from managers, in order to turn risk as uncertainty manageable.

...today, if I'm going to make a diagnosis of risks in the Group, strategic, operational, reporting, compliance, I'll easily find a thousand of risks; how I'm going to bring that to the committee? So, this is the issue, we try to create that culture of trying...we'll begin to create this culture, we're aligning the presidents of the businesses, we'll start training people, because I think this is the key part of the process, the person in a governance structure so there you have: control processes and systems and people, ok, the person is the primary concern. If you don't sensitize people, you know, you don't, you don't reach the goal. (Head of the GRC).

Activities cited for creating a culture of risk management include in-company trainings, whereby aspects of classifications, risk categorization, dictionary of risks, history and stories of risk management in the world, and compliance aspects are shared among executives. This enables communication in terms of a common risk language; but it also poses limitations. Two limitations are immediate. First, every way of seeing is a way of not seeing; thinking of risks within categories or framing it without its opportunity nuances might create anxiety and paralysis. Second, the insistence on creating a risk management culture might foster an overt use of risk management, or the risk management of everything (Power, 2004b). On the one hand, the demand for objectivity by the CEO pushes the team to a stronger narrowing of risk issues, imposing limitations on what can be talked on the risk committee. On the other hand, acculturation in the risk language makes executives sensitive to potential uncertainties revolving around the notion of risk as

⁴⁸ The COSO ERM framework uses the jargon “risk management philosophy”. I would simply describe it as risk socialization.

uncertainty, showing signs of dysfunctional risk management. The next excerpts offer examples of this point.

...we have a meeting, we have a breakfast with the president, that kind of thing, and we talk a lot with Jack, who is the chief executive officer, so we ask questions directly to him coming from many areas, ...so, I see it very clearly, not only in him, but we the corporate executives and the heads of the businesses, this concern with risk, right? I think that this ...this is present in the discourse, right? So, for example, sometimes I see the head of one business concerned with...he wants to know how much he has to make a...he has to make an insurance of his stock, and he asks how much has to be the coverage...so he's already thinking about risk, right? For example, we have the plant X [Lubricants], which is a world class plant, it's sixteen years without accident and the head is thinking to contract an insurance to cover for fire, right ... so you see. This is thinking about risk because if the plant is sixteen years without an accident, right? In a rather reactive profile, one would say: "Well, sixteen years without an accident it will never happen". Then, that's where the risk begins, you understand? This, this is quite tricky right? You...by standing in a good situation, you begin impoverishing the control environment, this preventive vision, and then you incur into a disability, you put yourself in trouble. (Head of the GRC)

Manager: ...once we encourage this risk talk, to understanding risks, we arrive at a point that the heads of the business themselves start looking for us with questions related to risks, right? "Look, I have such and such a process that I think I can have a problem". So, this is already thinking in risk, right?

Vitor: And in terms of management, do you think this change their approach?

Manager: I think it changes because it ends up...ends up acculturating them, let's, let's say, it becomes part of the DNA of the executive, right? Then he...he stops seeing exclusively the value...what I say...financially that business, and he starts looking to environments, right? "What is the impact; I'll have, political, macroeconomic, other factors, right?" So he starts to analyze the whole scenario to conclude whether it is one, it's a business that bring benefits or if it's a business that carries risks that won't turn to opportunities, right?

In terms of representation, a fire accident in that plant was a missing image in the imagination of the head of that business, and insurance for fire was an absent risk object. Risk talking and trainings bring the signification of risk as uncertainty to the conceptual repertoire of managers from different businesses. Such socialization is both necessary and troublesome. Necessary, since it is the only way to establish a communication in terms of risks, in order that events can be managed through clear channels and well-defined risk ensembles. Yet, it is troublesome, because the imaginary signification of risk as uncertainty operates *ad infinitum*. To what extent other images can be triggered by this very signification is a subjective and contextual issue, which recalls me the conversation of Alice with the White Queen in Lewis Carroll's novel.

...how old are you?' [White Queen]
'I'm seven and a half, exactly.'

'You needn't say "exactly",' the Queen remarked. 'I can believe it without that. Now I'll give you something to believe. I'm just one hundred and one, five months and a day.'
'I can't believe that!' said Alice.
'Can't you?' the Queen said in a pitying tone. 'Try again: draw a long breath, and shut your eyes.'
Alice laughed. 'There's no use trying,' she said 'one can't believe impossible things.'
'I daresay you haven't had much practice,' said the Queen. 'When I was your age, I always did it for half-an-hour a day. Why, sometimes I've believed as many as six impossible things before breakfast.'

A fire in that plant is, of course, not impossible, even though it can be considered unlikely according to probabilities. But what then defines impossible? Would a plane crash over a plant of this very business be impossible? Or, would an explosion of a gas cylinder in its cafeteria be impossible? How possible is an internal fraud due to collusion between third parties and employees? Or how possible is a crisis in the macroeconomic scenario that results in a higher impact on the company's assets? Indeed, the management of low probability and high impact events has been the kernel of much controversy around the usefulness of risk quantification (Douglas, 1992). The point is that risk management practices are underpinned by an imaginary signification – the institutional substance of the institution of risk management. Hence, such practices are all dependent on the crafting of a risk consciousness, that is, a belief on risk⁴⁹. Thus, the socialization of managers in risk management matters exceeds technical or scientific claims – sometimes it even puts these in check –, and shows that the social construction of risk objects relies on the projective and representative capacity of managers. That is to say, it relies on their imagination and how it unfolds into risk images (i.e. figures, objects, maps, etc.). Socialization in risk aims then to address the emotional level of managers, as the rhetoric of risk described above points to. Indeed, it is already well known by cognitive researchers that the role of emotions is central to risk perception (Slovic, 2010).

Cognitive scientists describe two modes of thinking about risks: the experiential and the analytical. Experiential relates to our living experiences, where we handle risks in a quasi automatic way (e.g. the mental experiments of the committee or the pragmatic view of the Treasurer). Analytical refers to the procedures of minute analysis based on facts and

⁴⁹ The practitioner's literature is well aware of it. See for example, p.38 Diederichs, M. (2012) *Risikomanagement und Risikocontrolling*, München: Franz Vahlen. "Der Erfolg ist dabei in besonderem Maße vom Risikobewusstsein der Mitarbeiter abhängig". Translated by me as "The success [of risk identification] depends on a great extent on the risk consciousness of the staff".

evidence (e.g. probability, analysis of past scenarios, etc.). These modes, however, cannot be clearly separated. Living experiences might well become part of the analytical thought (and vice versa), as the “fear of fire” by the CEO bespeaks it. The image of fire unfolds into a risk object upon which management pursue strategies to monitor and control it, just as the ‘imaginative experiments’ within the risk committee ignite the crafting of KPI’s to test, monitor and control certain processes and events.

Like with Alice in Lewis Carroll story, managers from business units “haven’t had much practice” in thinking and assessing risks. They even haven’t had the vocabulary and tools to do it. Thus, the crafting of a risk imaginary is the very seed of an all-encompassing control environment. What is more, through risk materialities and risk objects, controllers subtly introduce forms of self-control (Power, 2007), because within risk management the languages of accounting and management merge; this then turns risk into a ‘problem’ of the whole organization. Certainly, events will be filtered by the risk management team at the corporate level. Nonetheless, ensembles of risks, a policy of risk, a dictionary and rhetoric of risks, questionnaires and risk talking, the development of a mindset of risk and a risk culture, all converge to the design of risk re-presentations of unknown future events, encoded as objects. Such representations are shorthand images for situations, abstracted events pertaining to the daily business activities. They animate past situations and project visions of future.

Since a myriad of images of risk (unlikely or impossible) might become accessible to risk consciousness, the imaginary signification of risk is underpinned by indeterminacy stemming from the external environment, and also from individual imagination. However, ensembling is a universal mechanism of narrowing down. Through the identitary logics of language and technique, events now attached with a signification of risk, are materialized into practices and objects (e.g. a risk committee and a risk policy, a vocabulary of risks, ensembles of risks, risk responses, a risk talking and culture, etc.). Ensembling risks means therefore the instrumentalization of risk imaginaries, trimming ambiguities and making the field of intervention bearable and manageable. It brings comfort to desires for certainty in

an uncertain world⁵⁰. What I term the transubstantiation of the substance ‘risk as uncertainty’ – the conversion of varied events into risk issues – rely on the differentiation of risks (e.g. dictionaries, vocabulary, ensembles, techniques), and on the constant displacement of potential negative events (isolation, transference, mitigation), and ultimately it implies the deferral of risk as uncertainty within that organization.

In what follows, I will track the unfolding of the imaginary signification of risk since its displacement to the business Energy. Energy is a joint venture created as part of a threefold strategy. First, the business is a way of lessen the conglomerate’s high level of debt, since it was partly assumed by the foreign partner. Second, by establishing shared management in ethanol and sugar operations, this business should contain the owner’s aggressive and sometimes reckless character. Third, the joint venture shall grant other accesses to the conglomerate in a global market. In effect, this new business has pushed the conglomerate to diversify and to mitigate those risks involved in the historical instabilities of the sugar ethanol sector.

⁵⁰ Prioritization, ordering of components and cycles of verification are indeed main characteristics of risk frameworks. See, Mikes, A. (2005) ‘Enterprise risk management in action’. ESCR Centre for Analysis of Risk and Regulation.

Energy

Headquarter in São Paulo...

My arrival at the business unit Energy was less anxious than the last time I visited the corporate level. Not less exciting, I would say. There's always a kind of excitement about the rituals to be followed and the latent rules that must be promptly perceived in a field work. I decided to visit this business, because, according to one of the corporate managers, Energy is more intensively engaged in risk management practices than the corporate level, which tends to have an auditing role. My visit was scheduled for 9 a.m.; already at the company's headquarters, located in the same building of the Group's corporate offices, I head to the lobby and introduce myself to the attendants, who after calling my contact ask me to wait for a minute. I sit and observe around. This reception follows similar patterns to other businesses that I visited: a smoked-glass door separates the hall; two elegantly dressed young secretaries are behind a high counter, which is built of dark wood giving a sober tone to the environment, but which is mitigated by orchids on it; the floors are in marble and a set of chairs sits on the corner waiting for visitors. While the attendants receive some people, I see above the wall, right on the side of the entrance door, the vision, mission and values of this business. Behind the counter I see the company name stamped in large letters, and alongside it, a great logo that seems to me an adaptation between the male symbol and letters that compose the name of the company; maybe it seeks to reflect the well recognized aggressive culture of the Group. A few minutes later, while I'm taking notes, my contact arrives, presents himself politely and we head to a meeting room. Already there, he asks me to make a short presentation of myself, what gives me that feeling of job interview, but which I soon understand to be necessary to align expectations of both sides. My expectations, regarding the access I'll have, and his expectations, concerning the purposes of my visit and eventual problems of disclosure of confidential information. I introduce myself and put in general details what's my research about, a bit of my life story, how I got to Germany, and how I came to them. My contact, likewise, tells me of his career in finance in another large company, of his time living abroad and working with other companies, and about his return to Brazil, this time, taken up the challenge in the area of corporate internal controls of Energy. After our conversation, my contact, who I call here Bob, asks me to sign a term of non-disclosure saying in a jest tone that if they don't ask that from me I would see that they are doing wrong since the outset. For about two hours he explains to me the structure of the business's corporate governance, how its committees are organized and positioned, how the team is composed, the key tools of risk management, and the distribution of work among the team. Throughout the conversation I take notes, trying to make sense of the volume of information.

Energy started its operations around 2011. It was also in this year that risk management of sugar prices and currency were handed over from the corporate level of the Group to this newly formed joint venture. While on the corporate level the relevance of these risk issues declined, for Energy mapping and controlling these and other risks is part of its daily practices and business. Managers of Energy view risk management as a central feature to the realization of opportunities. Since 2011, the company is struggling to posit itself as a major player in the global market of ethanol and energy, participating in what they see as “green redesign” of the chain of production and distribution of fuels. The metaphor – green redesign – translates the desire for a production model where ethanol and

oil products are complementary, what in the end would minimize environmental impacts from fossil fuels. This view comes along with the envisioned opportunities of the Brazilian ethanol market previously described. In this scenario, an association between Brazilian know-how in ethanol production and distribution with a multinational partner brings clear advantages to this business, which operates throughout the production chain: from planting the sugarcane, through production of sugar, ethanol and cogenerated energy, and finally distributing ethanol and sugar to end consumers. Its ambition, however, is even greater. According to the CEO, their plan is to establish ethanol from sugar cane as a commodity on the global market.

Risk emerges in their discourse as pivotal to the way the enterprise pursues this strategy. Since the displacement of those risks at the corporate level, the team of corporate internal controls of Energy has been working on the implementation of tools for signaling and controlling risks, as well as in the consolidation of a culture of control. These tools, and a risk language, have a purpose similar to the ensembling of risks explained in the last section. However, here the scope broadens, because their target of control comprises plantations, mills and distribution activities. The team describes this challenge especially in terms of cultural assimilation since three different cultures were brought under the same roof; in addition the team faces problems in changing the view within the businesses where control systems are understood as a kind of “punishment”, to an understanding of control systems as a support to decision making. In this context, their challenge is – according to their testimonials – to effectively create a culture of risk management.

Three distinct cultures are getting integrated: the first one is a culture of mill owners, the oldest and biggest one; the second one arises from an acquisition of a business of lubricant distribution; and a third one the culture of the foreign partner in the joint venture, a global player with tradition in the production and distribution of fuels. Informants say that the mill owners culture is the one which needs most attention, because of the huge size of the ‘target audience’ (tens of thousands), and also because its tradition of running the business in a more loose way compared to the experiences of the incorporated business and the foreign partner. Testimonials about difficulties of integration

point both to behavioral and practical issues. Examples of such difficulties are the different HR policies that the three companies had, the different SAP systems that need to be integrated, unaccounted or non-optimized expenses (e.g. taxi expenses of employees in the plants were not optimized or even recorded, the real need of some expenses were not investigated, people took vacations and remained in effective work). According to informants, before the joint venture there were no “process owners”⁵¹ responsible for observing such aspects, a problem originating partly in the abundance of resources, partly in the overall lack of a culture of control.

In general terms, the three cultures were described as follows: the business purchased by the Group prior to the joint venture was described as methodical and rigid. In this unit, even the color of a pen was chosen for signing documents; it also had a customized version of SAP, and it had employees that did not easily accept changes. The foreign partner in the joint venture was described as endowed with well-established processes; as a business where people seeks to understand these processes and their practical effects; and as having an employee culture flexible in accepting changes when these are aligned to the strategic objectives. Thirdly, the culture inherited from the Group’s mills was described as a family business in transition to professionalism; with centralist and paternalistic management (one informant said that the founder personally approved purchase orders); with abundance of resources and lack of controls (i.e. controls averse mentality); with rather old employees (e.g. informants said that some employees were born on the sugarcane farms and worked for the company their entire lives; some are still there); and finally, with a culture shaped by a founder who demands preferably to be called under the sobriquet “doctor”. To this last aspect, I heard a funny but enlightening comment: one informant commented that once she and a colleague went to the founder’s office, which occupies half-floor, and one of them began to fondle the walls impressed because they are

⁵¹ In mainstream control theory jargon a process owner is a person designated responsible for a specific process in the company. (See, for example, the prescriptions of the Sarbanes-Oxley Act Section 404: Practical Guidance for Management, PriceWaterHouseCoopers, 2004, p.53). The testimonials show a culture of control that reflects the vocabulary of such standards and which aims at disseminating such notions throughout their processes.

all lined in dark-brown velvet. At this moment, the secretary came and scolded: “Dr. Jack doesn’t like people touching these walls!” The founder’s office conveys, in the words of this informant, an image of power with its dark brown velvet walls and its safe-like door.

The combination of these three cultures is of course not just the sum of their individual characteristics. What emerges is a new culture, still in formation, with the challenges that originate in such an integration of this size.

A brief view of the internal controls environment in São Paulo

... the internal controls’ team at the corporate headquarters of Energy comprises the manager Bob, two analysts and one internal manager, all with a background in management; other members are at the operational base located in another city, which is situated nearby the company’s plants. The office in São Paulo: The room is a rectangular block on the seventh floor of the building, each floor in the building is divided into two office blocks that comprise sections or departments. There are no walls, except some that separate meeting rooms, and the one separating the reception from the offices; the corporate internal controls share this block room with other departments such as finance and strategy; the room has several workbenches with four bays on each side, so 8 persons can work on these. Such workbenches are aligned perpendicularly across the room. Managers have tables alongside these benches with their backs turned to the window; Bob, for instance, sits just in front of his team bench. The costumes: men are dressed with slacks and shirt without tie most of the time; women show more variation, some wearing jackets and slacks, others wearing long skirts, others shorts or something alike. In both cases, there is a variation in colors, showing a certain freedom in the dress code, and giving a lighter tone compared to the traditional, austere cliché attached to accountants. Yet, from time to time, dark-suited men roam to and fro through the halls. I wonder if they are customers or managers of the Group’s corporate level where this austere image was more evident.

After two years from the launching of the joint venture, the internal controls’ team says that many aspects of the integration have been put in place, especially regarding the implementation of control mechanisms. Yet, they also understand that the processes and tools devised to manage risks are being constructed along the definition of this new culture. Bob explains: “Our strategy is making that a control mindset will be shared as soon as possible within the organization.” In the next section, I shall present the governance structure of Energy, and after that, some of the key practices of the internal controls related to risk management. The focus now shifts to the details of how events are converted into risk through the language and tools used.

Governance: risk as a key dimension of organizing

The creation of the joint venture called for the establishment of a governance structure where corporate controls, and therein risk management, are seen as central mechanisms of management. Below I present a graphic description of how this structure is organized in Energy.

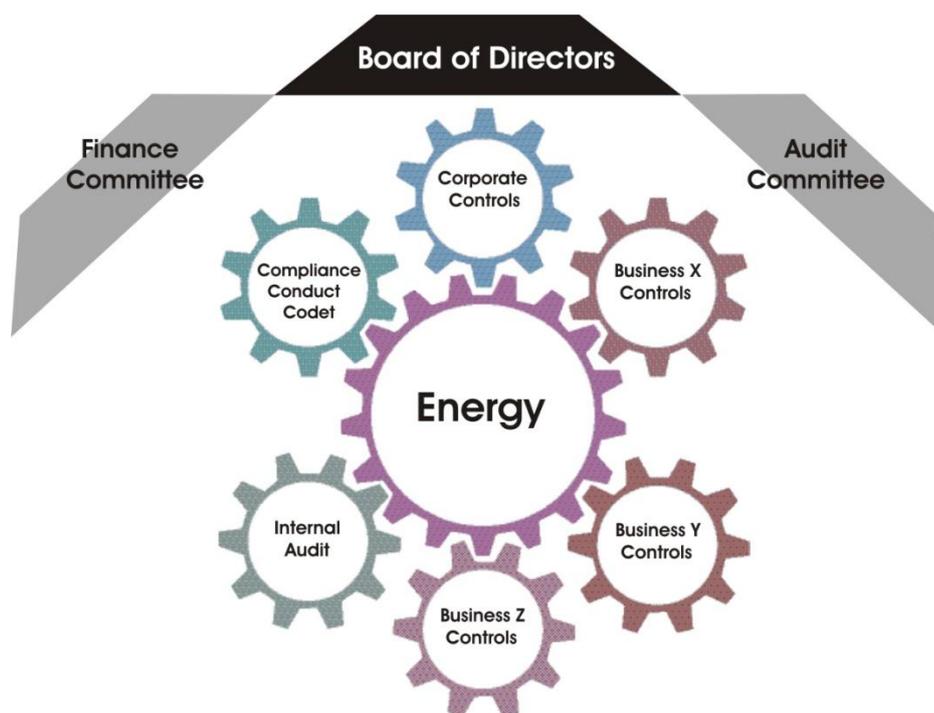


Fig. 3: Energy's governance structure. Source: Adapted from the company's intranet.

The figure above is a reproduction of what appears on the enterprise's intranet. It was also the starting point of the presentation on risk management in their activities the manager of the internal controls gave. Depicting controls like gears has close relationship with their self-understanding of control as a process-oriented activity. This process, however, is understood as not only dependent on the activities of the sector, but as mainly influenced by the absorption of control practices by different areas of the enterprise. Here, the signification of risk as uncertainty serves as a touchstone of how the whole process is defined. A conversation with the manager of internal controls exemplifies this point.

Vitor: What I see is that internal controls already existed in companies in the past and that now risk management seems to overlap this area...to some extent risk is an exacerbation of internal controls from the strategy's point of view.

Bob: It's rather strategic, exactly. What was the view we had in the past of internal controls, and there you can draw a timeline...I understand that at some point there was a structure of O&M right [organization and methods]...that was an area that would organize the company, right? With policies and procedures, etc.. Over time you saw a trend of companies understanding that an area cannot be responsible for directing the entire work of the entire company, so it didn't have this expertise, it would never have, right? And then I think there was a migration, you know, over time, of these controls' activities related to purchases areas, where in fact it is pertinent they to reside... where control actually must be located. Because, again, it's in that presentation I showed you, control is nothing more than one of the components of a process, and if you are responsible for the process, right from end to end and even for the results, right, you're responsible for safeguarding your best result, you need to take control actions for not incurring in risks of...that your goals are not being achieved. So it's all concatenated, and then it makes no sense to look at controls out of the process, right, or outside of who manages the process, okay, so historically you see this ... the logic that controls must be in the areas...that happened over the time. And that reflects in the organization of internal controls right, where you still had a lot of working to check how controls are being made in the areas, you know, and I think the next step we're beginning to ... and here I'm not talking only of Energy, but as business management more generally, I see more and more people viewing control from a more strategic point of view, and therein we're talking precisely about risk management, right? So as I mentioned to you, control is the result, right, control is the last step, it's not the goal to have a control, right? It's the last step, then you must first look at the risk, knowing and understanding what the risks you have, knowing what you will do with them, right? And there you have the whole story of risk appetite or not, right? And as you make the decision that you don't want to take a particular risk, that you want to mitigate it, right, then you insert the control. So, not the opposite view, ok? Such as what are the controls you want or need; [...] you don't have necessarily to have controls, you need first to understand the risks, then you know what to do.

Vitor: ... this change of mindset you're talking about, is it a cultural change too? Is it reflected only from the point of view of control or you see it in other executives and managers?

Bob: It must necessarily happen in the company as a whole, right? It's not the area of controls that can be making this change, right? It's management as a whole, the company, right? Because the time you pass this assignment, right, explains, makes clear that strategic allocation to each manager of process that ends up ... it depends on them starting to absorb this logic, right? So, it's not only spreading, right, but it depends on the quality they're going to understand this logic and if they will apply it. And then controls becomes much more...less prescriptive right, but much more constructive. That is the concept...

Vitor: ...a sort of counseling...

Bob: ...yes, exactly. So it's an area that will have the expertise to understand more broadly the processes within the organization and that can...makes consulting in relation to risk management.

Risk, according to the manager, ignites the process of control. That is to say, instead of designing controls to prevent risk, risk thinking and mapping are used to design control. If the imaginary of risk (logic according to the manager) is to be incorporated throughout the company, the internal controls department must work constructively as a consultant, designing the language and tools and reviewing its application, but mostly by assuring that these new practices are being absorbed. The view that risk is the focal point of the control process is also shared by the internal auditor, who gives another explanation

of its reasons. According to him, to the extent that companies experienced several reengineering processes, the high costs of internal control became evident, and companies started to look for an evolution in a way that they could make sure that their strategies were being pursued and that at the same time fraud, errors or omissions could be avoided. In this “evolution”, according to the auditor, risk came to the center of the stage, because this notion enables companies to run the controls focused on priority threats rather than with an eye on all kinds of control. “Control should serve to neutralize obstacles and must not be done just by doing,” says the auditor. From this angle, he comments that in recent years there has been a change of the auditors’ role and perception, which turned to risk as the focal point of the audit process. Yet, in reference to the COSO framework, the auditor says to be a “non-Cosist”⁵². In his words, “COSO is too much by the book, a reflection of the pragmatic American culture”. He understands COSO as a result of demands for more control, but at the same time sees it as a utopian demand, because, according to him, it is not possible to control everything. He accepts the COSO framework, for the awareness it brought to the importance of internal controls, but which is too costly in its implementation by the book.

The testimonies above suggest that the dominance of notions of risk over control satisfies demands for prioritization, a process that can be viewed here as the rationalization of internal controls practices. The signification of risk as uncertainty establishes, then, a bridge between ideals of control and the practice of management, since, married to the rhetoric of strategy, risk management ‘speaks a language’ most likely to be absorbed by different areas within the company. However, priorities only become clear to the extent that the internal control team can map the processes relevant to the achievement of its strategic objectives, what occurs within each functional area. Regarding the mapping processes, the auditor’s comments are enlightening with regard to the starting point in the construction of risk objects. According to him, a risk analysis is the result of a good assessment of the obstacles: “obstacles to business’ strategy are the risks; obstacles are risks or threats, it’s already mapped it’s a risk, it’s not mapped it’s a threat” (internal

⁵² The auditor employs a neologism in Portuguese which explains that he is not an enthusiast of Coso (*não cosista*).

auditor). Hence, the signification of risk works as the focal point for designing controls, and the mapping of events is an essential feature in the conversion of threats or events (i.e. loosely or not connected to the strategic narrative) into risk objects (i.e. events positioned within the risk cartography and the strategic narrative). According to the auditor, the risk matrix feeds then the entire audit process, which includes conducting tests on an ongoing basis in order to check for the effectiveness of processes in relation to the company's strategy. Such tests include interviews with people involved in the processes, reviews of documents, work through analysis, systems analysis, sampling of transactions, etc. These tests unfold into action plans, which shall be developed by managers and team members.

Risk is, according to the internal auditor, "important to our [their] business". Likewise, the risk matrix is central to the conversion of events into risks. Bringing forth threatening events into images, the risk matrix is used throughout the organization urging risk talking and decision making. The practices undertaken to map risks influence the routines of internal controls, internal audit, and functional areas. A whole bulk of routines must be established, such as meetings with the managers of vice-presidencies, risk talking, action plans with deadlines and appointed responsibilities, cycles of verification, brainstorming of risks, etc. Risk mapping aims, therefore, to transform uncertainty into something fungible, something upon which managers can act. Such fungible uncertainties are watched and eventually handled through mitigation, isolation or displacement. Yet, despite acting upon uncertainties, managers keep tracking future events through the imaginary signification of risk as uncertainty. And this is precisely what makes this practice to be reproduced in that organization. In the following section I present some of the main tools the internal control team uses to map and control risks.

Mapping and Controlling Risks

Risk matrices, as well as other instruments, are part of the language and technique of doing and talking about risk management at the Energy. By themselves, however, these tools do not convert obstacles into risks. To be seen as obstacles to the strategy, and subsequently become prioritized as risks in a consolidated image (that is, in a matrix), the

substance of such events need to be prepared and discussed. During the preparation of these events, now called ‘risks’, occurs then a delimitation of a control environment⁵³, and effectively its creation. This “environment” emerges when the designation and tooling of risks are put into action, that is to say, there is no control environment apart from the language and techniques employed to describe and instrumentalize its practices. Several processes and elements contribute to the delimitation of this environment. At Energy I observed the following ones: policies, manual of conduct, manual of crisis management, manual of authorities, incident control report, risk matrices, communication and training, magazines, audit processes, and the elaboration of cases for learning control. These describe, instrumentalize, communicate, and reinforce the imaginary signification of risk and risk management in that business.

The first issue I have noticed was how the work is distributed and organized within the internal controls’ team itself. During the fieldwork I got access to an excel worksheet with responsibilities of each member according to different areas and functions within the business. This rather colorful worksheet visually shows who is responsible for which processes, assigning “owner of processes” (they call it “leader of initiatives”). Such assignment of roles seeks then to remedy the lack of controls inherited from the Group’s culture, when there was no one responsible for controlling processes, but it also aims to give visibility to reporting channels, facilitating the supervision of the activities of the team by the internal controls’ manager. There is also a backup for each process owner, and assigned people in the target areas/divisions where interventions are performed (the team calls them focal points). Circa 19 activities are mapped and distributed among the internal control’s team. I will present next the most relevant to risk management, as indicated by the informants.

⁵³ COSO defines this environment – internal environment – as one of the main components of Enterprise Risk Management (ERM).

In a far away building, but not so much: Energy's back office

I get up at 4:30 am to catch a minibus bound for the countryside of São Paulo where it is located Energy's operational office. Bob said to visit this office at least once a week, because the meetings and other activities he has with the team there. After two hours traveling I arrive at the building, a large complex with circa 2000 people distributed among many areas within the company. Just at the entrance I present myself to the attendant at the reception desk, which checks my visit in a computer while I see the company's values printed at one wall in the hall. Again, I see the logo that reminds me of the male symbol. After a few minutes, Grace, the team coordinator, greets me and while we walk upstairs she asks for the reasons of my visit. As we walk in the corridor, towards the room where the rest of the team is, I explain her my research. Getting there, a large and busy operating room, she introduces me to the other three members, all young people aging between 20 to 30 years, I guess, and all of them with working experience at one or more of the Big4, according to what they themselves informed later (Funny, I didn't ask them about that, as I didn't ask the controller and his manager at the corporate level; this seem to be, however, an important credential to be carried and used by their control culture). Grace says that in terms of knowledge everyone knows what the other does, but roles are segregated for reasons of assignment of responsibility. She explains then that I will talk individually with each of them, and that they will present the tasks, tools and activities involved in risk management. Grace also commented that risks are discussed with managers of each area, and then taken to the vice-presidents for approval via committee of governance. She shows me the internal audit team, and says that it is rather small compared with those of other companies, but explains that it is so because they are still in the process of developing the service. While waiting to talk to the team members I take a look around their environment. The room is quite big and busy, quite different from the corporate area in São Paulo. I imagine that more than 150 people work only in this room, which is decorated with carpet, with bays such the ones I saw in São Paulo, and with large windows turned to a bucolic green landscape. At the end of this room is a large monitor displaying statistics and deadlines. Next to the monitor, I see again the company logo, which now sticks to my mind as an adaptation of the male symbol. In another corner of the room I see one of the company's values written on the wall: "Our energy generates a better future". In the bay made available to me, I find reminders in the form of 10 commandments: 1) Sense of urgency; 2) Constant alignment; 3) Anticipate demands; 4) Have passion in everything you do; 5) Make more and better every day; 6) Think 80/20; 7) Value the customer; 8) Exercise discipline with flexibility; 9) Individual search for technical improvement; 10) Act ethically and with respect. I take note.

○ **Complying with SOx**

SOx is an acronym for Sarbanes Oxley or The Public Company Accounting Reform and Investor Protection Act, an act enacted in July 30th, 2002, under the sponsoring of US Senator Paul Sarbanes and US Representative Michael Oxley. The act aims to certify the accuracy of and reliability on financial statements of companies listed in the US market. Its nobler purpose would be to restore public trust in the capital markets and accounting profession after several accounting frauds became public⁵⁴ (see Sarbanes Oxley

⁵⁴ Some companies involved in frauds are: Arthur Andersen, Enron, Halliburton, WorldCom, Xerox, Adelphia, Tyco and Parmalat. Since scandals keep happening after SOx has been put in use (see AIG 2005, Lehman Brothers 2008, Bernie Madoff 2008, and Groupon 2012), its effectiveness with regard to its goals and noble purpose remains questionable.

Act: Section 404 Practical Guidance for Management; also Conference Report, 107-610, 2002). Energy is not listed on stock exchanges in the US. However, since it represents a big share of the whole Group's portfolio, which is listed, it must comply with Sox. The managers I talked to understand Sox as a good practice of governance, but also gave critical comments on its usefulness. I will address these critiques soon; first let us have an overview of what a project Sox consists of.

The section 404 of the SOx brings forth very general requirements for the implementation of internal control systems inside companies. In practice, according to the informants, the systems are designed according to templates produced by accounting firms, in their case one of the Big4, which offers the parameters to be followed when implementing a SOx project. According to one typical template, a project SOx consists then of different phases to deal with the assessment of internal controls. Management, according to it, should prepare a report where it analyses the adequacy of the internal controls on financial reporting. Its implementation stages are summarized as follows: scoping and planning, understanding the process, tests of design, tests of effectiveness and remediation, and, finally, conclusion. The first two stages contain important aspects related to constructing risk objects, that is, it is in these first stages that analysts define tracks through which they search for incongruities.

In the first phase – scoping and planning – the internal controls try to ensure that significant accounts are assessed and included in monitoring with regard to their reliability. At this stage, analysts classify processes, sub-processes and entities within the company, mapping the accounts and breaking them down from the financial statements. In their practice, this activity is undertaken through an Excel spreadsheet that shows the accounts and their outspreads through the use of different colors, starting with individual accounts, which are chosen by a materiality criterion⁵⁵, and going down to the sub-cycles at the end of each process. The use of colors is more than a triviality. A comment was raised in this

⁵⁵ The materiality is defined as 5% of the income before taxes, or 0.5% of the total assets or net operating revenues. I did not find any comprehensive explanation about the reasons of using these figures, besides the justification that this is the regular practice of auditing firms. It seems that 5 is another kind of “magical number”, such as the number 8 defined as a capital adequacy ratio in Banks. See, for example, Pelzer, P. and Case, P. (2008) ‘The displaced world of risk management: covert enchantment in a calculative world’, In: Monika Kostera (ed) *Mythical Inspirations for Organizational Realities*. New York: Palgrave Macmillan, 100-110.

respect during a team's meeting in São Paulo, where the manager asked why the analyst responsible for the SOx's routines used different colors from the ones they had set. During my visit to the operational office, while I talked with the respective analyst, Bob passed by us, jesting about the colorful spreadsheet that the analyst was working with. Aesthetics seem, therefore, to be important in giving visibility to risk objects' and in controlling processes, more generally⁵⁶.

Indeed, the use of colors is a quite usual prescription of many frameworks in vogue. In the COSO ERM, for instance, one finds in its section "Application Techniques" that the use of colors serves to map risks (see the "heat map" at p.47, but also p.8, p.78, p. 79). The point here is not to inquire the effectiveness of such practice, since colors might be of less use when things get turbulent. Rather, it shows that while depicting what is "heat" (normally red) or "cold" (normally black or grey), the internal controls' team and managers are tackling an aesthetic aspect of risk management. Colorful spreadsheets or images are part of what the philosopher Vilém Flusser calls technical image (Flusser, 2000). A technical image signifies concepts, says Flusser; and in this case they signify risks and controls. These images "abstract from texts [like COSO and SOx] which abstract from traditional images [threats, dangers, obstacles] which themselves abstract from the concrete world [events]" (Flusser, 2000: 14). Technical images such as risk matrices and colorful spreadsheets "appear to be on the same level of reality as their significance. What one sees on them therefore does not appear to be symbols that one has to decode but symptoms of the world through which, even if indirectly, it is to be perceived" (Flusser, 2000: 15). The imaginary signification of risk shows, thus, an undeniable aesthetical aspect influencing actions taken by managers. The fact that mapped obstacles point towards the future does not mean that they represent a one-to-one reality. They stand for a probability and, in some cases, a quite feeble probability, once sometimes they demand data not yet available and in

⁵⁶ That is also acknowledged by the practitioner's literature. See Diederichs (2012: 64): "Die Prozessbäume können anhand der zusammengetragenen Erkenntnisse grafisch aufbereitet werden. So lassen sich zum Beispiel risikobehaftete Prozessschritte durch farbliche Markierungen hervorheben. Die Aussagekraft der Prozessdokumentation wird damit erheblich erhöht, da die Risikoquellen sofort deutlich werden". Loose translation: "On the basis on the carried knowledge, the process trees can be displayed graphically. Hence, one can distinguish the risky process actions through colorful markings. The meaningfulness of the documentation process will thereby enhanced, because the source of risks will be immediately clear".

other times low probability and high impact events might be neglected. I will come back to this point later. For now let's come back to the Sox project.

In a SOx project the internal controls team creates ensembles which comprise accounts, processes, sub-processes, entities etc. These ensembles are pivotal to the whole project. They are described by SOx's prescriptions as the foundation of the whole implementation project:

...business processes/cycles are the foundation for the internal control assessment. By understanding and documenting the business processes/cycles, management is able to identify the control activities that address the information processing objectives/CAVR (completeness, accuracy, validity, and restricted access), as well as potential "gaps" in the controls (i.e., information processing objectives for which control activities are not in place) (PricewaterhouseCoopers, 2004: 14).

Processes and sub-processes are documented, as well as risks and controls related therein, and included into the understanding process phase. In this second phase, analysts take interviews with owners of processes to discuss the potential risks involved in their activities and possible controls. During this exchange an "accounting focus" develops and general questions about the process are made. The results are documented according pre-defined rules and templates. Mapping significant accounts means that they are tracked, linked to processes and sub-process along the company, and routinely checked. To make them visible, in a colorful spreadsheet or in an ordered classification⁵⁷, gives shape to ensembles of distinguished-chosen-assembled accounts. This technique provides managers with tracks (i.e. logics of doing) to look at for eventual misalignments (i.e. risks).

Now, the risks documented in a SOx project are basically derived from possible misstatements in the company financial statements. They are important primarily for the reputation of the company and for decision making.

... actually, there are two issues here, right? SOx mitigate risks of incorrect disclosures of the company, ok? But this is a limited risk, it does not minimize other risks, such as risks of performance, which is what I commented to you. [...] So when we detect in a SOx's test, for example, that a reconciliation is not being made, you know, when one of the controls was to reconcile one system with another, to check if I'm with a reliable information, right? If that control has failed, I'm incurring the risk of doing an inadequate accounting, okay? So in that respect the SOx covers the risk that you're not properly accounting and thus generating an exposure, the main risk is to generate ... there are two, right? First risk, the risk of you ... reputational risk, you're

⁵⁷ See Appendix I, III and IV of the Sarbanes-Oxley in PricewaterhouseCoopers. (2004) *Sarbanes-Oxley Act: Section 404, Practical Guidance for Management*.

reporting something to the market that is not what's being reflected within the company, right? And there is the risk of inadequate decision making, you know, so you ... sometimes you might have some kind of problem, and when you look at the statements they're not being reflected therein, and then you will make a wrong decision, inadequate. (Manager of Corporate Internal Controls)

Hence, compliance to SOx routines deals with aspects of transparency regarding the company's disclosures. Meeting this demand for transparency is what prevails in the discourse of managers and analysts of internal controls. However, SOx's routines demand from the team to understand a series of business processes while tracking events (e.g. misstatements, frauds, errors etc.). Putting in place cycles of verification, the SOx project creates therefore a mindset of risk, because it amplifies risk talk in different entities within Energy. Yet, this tool has limitations, because it can be seen as one more bureaucratic rule with which the company (especially other areas) must comply. The internal auditor underscores this point, for example, when he says that SOx is perfect for control, but not for generating results. He said the act had an important role in raising awareness of the need for effective controls and also with respect to the accountability of senior management for errors, fraud and others, but if taken literally it can derail the business. He cites some examples of companies that have delisted from the US market due to the high costs of SOx implementation. Consistent or not with its official purposes, the SOx distills risk as uncertainty within the organization; and it does so primarily through the liability and accountability of top executives, a key step for such a mindset to be distributed throughout the organization.

Risk as uncertainty exceeds, however, the construction of accounting tracks. According to an informant, the board decided that the company should create controls to cover risks beyond those demanded by SOx, because SOx's routines do not cover performance measures.

- **Key Performance Indicators: going beyond SOx**

According to the view that SOx controls did not cover performance aspects of the business, the board demanded from the internal controls team to check what other non-SOx

controls were in place, in order to define which of them are essential and/or which must be added to implement effective performance indicators. The following points were defined:

- In order to enhance Energy's Control Framework, a comprehensive list of key performance controls are [sic] to be defined and assessed periodically.
- Performance controls are "non-SOx" related mechanisms but critical to ensure the company's best performance.
- The sources that will be used to create the Performance Controls Data Base are:
 - Policies and Procedures in place
 - Controls identified through Risk Matrix, Audits and Controls incident reports
 - [The foreign partner's] Finance Control Management (FCM)
 - Out-puts from SOx design review
 - External benchmark lists of non-SOx Controls
 - Brainstorming with business/function areas
- Final Data Base will be tailor made to meet Energy business needs.
- Focus on process simplification and value added controls (no bureaucracy).

Based on these directives, the internal controls began to talk with managers of different areas to check non-SOx's controls already in place. About 90 controls were mapped, in contrast to circa 380 SOx. Here an exception of risk management emerges – from the perspective that control starts with knowing the risks, as described by the manager Bob. According to informants, not all of these controls are linked to risk. The reason they give is that there are controls already in use, different from a new design of controls having risks as the starting point. An important routine of mapping controls are the self-assessments. Self-assessments are made with a spreadsheet, in which users (i.e. focal point) answer structured questions developed by the internal controls team. The next page shows a reproduction of this worksheet (table 2).

If the control is identified as incorrectly described or if it is not being carried out according to its description, the spreadsheet will open two fields where the user must formalize a new description or a respective action plan to correct the control. Once filled out, the worksheets are saved and sent to an analyst in the corporate controls department. This exercise occurs on a quarterly basis, when a sample of the controls is selected to be tested by corporate/business controls areas. Annually the corporate controls department reviews the database. There are, however, possibilities of occasional interventions to add or adjust controls when in need.

Area: <i>Human Resources</i>		
Focal Point: <i>Mark</i>		
Description of control: Monthly, the DAP Senior Analyst calculates the figures for the current balance of overtime and informs the controllership for the provision, with the validation of both VP and HR. Both the monthly provision reckoning, as well as the period's reckoning, is validated by the responsible coordinator and authorized in the payroll.		
Frequency: <i>Monthly</i>		
Self-assessment	Answer	
	Responsible For the Control	
	Comply?	Comments
1- Is the control written in the way it happens, considering the following assumptions: 'when', 'how', 'what', 'who'?		
2- Is the control being carried out in accordance with its description and its frequency?		

Tab. 2: Self-assessment of controls at Energy. Source: Adapted from the data from field work.

Self-assessments meet functional and cultural requirements of the department of internal controls. As a tool, self-assessment spreadsheets establish communication channels (control analyst, focal point, responsible for controls), they help to organize controls and eventually risk objects by areas; they make visible and homogeneous an identity of controls and risks, imprinting a routine of verification and validation. But an important and perhaps less explicit aim self-assessments have is to force areas to talk and act upon their activities in accordance to a language of control, that is, in terms of frequency, description and responsibilities – when, how, what, who. When putting in place a routine of ongoing checks, the internal controls department standardizes reporting channels, and establishes an official and formalized talk between sectors in terms of controls. This depersonalized way of talking and doing control is perceived as important by one analyst I talked to, who confided that the self-assessment tool aims to shift the responsibility of control from the personal communications between departments they used

to have in the past to the commitments established between management and directors. What is more, by giving the internal controls department access to information from other sectors, in formalized and official ways, routines of verification settle the internal controls as the unit bearing the expertise in risk management and control across the enterprise. And who holds information, holds power. In their testimonies, however, the interference of the internal controls in other areas happens in terms of consultation, alignment and cultivation of a culture of control.

In the case of performance controls self-assessment addresses risk only indirectly, since it does not enumerate risks but aligns information about the controls. Another tool that seeks to detail risks more specifically is what they call Control Incident Reports.

Lunch time

Arriving at the canteen I see the place decorated with carnival colors and theme. In a cheerful tone someone says: “Hey guys, we have ice cream as dessert today”. Another tells me I should not fool myself, it’s not always as such. The internal control team at the operational office goes for lunch together with the manager. I think that happens since the manager visits this office once a week – twice in special cases –, so this contact is important for exchanging information. In the lunch line we meet a former intern, who announces he leaving Energy to work for Ernst & Young. They congratulate him and make jokes about the heavy work he will have there, and exchange experiences about the pranks they went through when they were themselves trainees. One guy advises the novice in an unusual way: “The guys will put you under a lot of pressure to the point you’ll wish to cry, but look man, when you feel like crying, when you can’t handle it anymore, just hold the cry, don’t give them this chance”. Bob, the manager, confirms the jokes, and congratulates the young saying that it is important that he get this opportunity to learn, and that, despite the hard work, he will get out very gratified with the experiences he will have. Cheerful jokes continue for a while and I realize that some of them called the intern ‘woodpecker’. After lunch, when coming back to the office, I ask them why woodpecker: they say that a trainee of internal controls is a woodpecker, because he is the one who constantly hammers people from other areas requesting information.

○ **Control Incident Reports**

V: I was talking to Andre, you know, he was showing me some of the tools of control, and even the dynamic you use them with regard to the language to address precisely the point to say so, this is not a Control Incident Report it is a possible CIR...is this part of the process of acculturation?

M: Yes, and then you see...and that is what I mentioned to you, that Energy is composed of two very distinct cultures, right? [actually three] If you could see the environment in the Foreign, right, and this is one of the instruments that existed in the Foreign back there...over the time it has become rooted in the culture of this organization that it was indeed a learning tool and that it was important to avoid errors over the time, okay? And then what Andre passed to you was that, in fact, in Energy, we’re still in a process of maturation of this issue. So, not everyone understands the processes, how processes for continuous improvement work. And the first step in a process of continuous improvement is to accept your mistakes. If you do not accept that you can do better,

you will not manage to get continuous improvement. So this process of acceptance is the first step. And because of differences in culture, it's a process that requires acculturation over the time.

According to the excerpt above, a culture that admits errors and learns from them takes time to build. It seems, however, that the tools and language used in the controlling processes affects how such acculturation occurs in practice as routines are established.

The internal controls team defines that a control incident report must document the following situations: events or chain of events that happened at odds with the disclosed policies and procedures; events or chain of events that have resulted or could have resulted in a monetary loss or a loss in terms of reputation; events or chain of events that could have been prevented if the process was supported by effective controls; and events or chain of events that may interfere or actually damage the organization's ability to achieve its objectives. As a technique, this tool is designed as a form with general and specific fields to be filled out. In the header, in addition to the general data, such as sector or department of origin, responsible, etc. the user must fill in the following: title of the incident, the main reason, estimated financial impact and criticality (low, medium, high). In the body of this form, specific data about the incident should be presented, such as: 1) description of the event – describe what and how the event was identified and who is responsible for it, 2) description of the impact, 3) Causes of the incident and detected vulnerabilities in controls; 4) a question: Were the financial losses possible to be recovered? 5) An action plan/proposal must be described including the proposed action, the name of the person responsible for it, the area of responsibility, the estimated date of implementation, and finally 6) Key lessons from the incident.

Parameterization goes beyond simple purposes of order. On the one side, it gives identity to risk at the moment when incidents are cataloged, that is to say, at the moment when events are built into ensembles, giving the signification of risk a material target, namely, a risk object. On the other side, according to the analyst responsible, parameterization makes risk objects to be taken seriously by the users, because it constrains them to be aware of the problems they themselves face He cites especially the field 6 of the form – key lessons from the incident –, which he says is a field designed to stimulate self-reflection, since it forces the user to admit the mistake or problem through

written words, and therefore incorporating such reflexivity in their individual learning. This ‘documented mistake’ also enables the internal to communicate such experiences to other areas and employees.

After being filled out, reports are sent to the internal controls’ department, which organizes the incidents according to the following categories and reporting lines:

Incident	Estimated impact	Relevance	Minimal level of reporting
Business Control Incident	2M to 10M	Low	Governance Committee
	10M to 30m	Medium	Audit Committee
	>30M	High	Board of Directors and Shareholders

Tab.3: Categories of incidents and reporting lines.

In biweekly meetings analysts present a report of incidents to directors and area managers. In these meetings fifteen minutes are spent to discuss such incidents. Checking cycles seek to align directors, managers and focal points: departments that have established action plans receive emails prior to the deadline, with a copy to its superiors. A point commented by one analyst is that in this process of acculturation every type of event has been documented by other areas, which generates a huge rework effort to see which of these really have to do with incidents; here we see the effects of a social amplification of the imaginary signification of risk (e.g. Kasperson et al., 1988). The analyst said, however, that he prefers that incidents are being reported and users are coming to him with questions about them, because, to be incorporated by other areas, the tool requires a learning stage. In addition to this learning process, the internal controls defined that incidents with impact inferior to 2M will be used as learning exercises within the areas involved. They call these exercises as *learning with controls* (next page), which in practice is an e-mail, directed to the area where the incident occurred (and in some cases to other areas). In such e-mails, the internal controls team retells the incident in form of storytelling.

LEARNING WITH CONTROLS

Dear employee,

In the Learning with Controls this month we will talk about an issue of utmost importance: **the Access Profile to the Systems** of Energy.

Access control aims to prevent access by unauthorized users to the system, thus ensuring accuracy and confidentiality of the information stored in the system.

One of the biggest challenges is to maintain an effective control of accesses' rights necessary that users can perform their tasks. The solution recommended, according to good practices, it is the use of profiles or roles that are linked to the function performed by a person in the organization.

Case:

Charles worked in the payroll, but sought an opportunity in the supply area where he felt he could contribute with his ideas due to his talent as a negotiator. Lucia, his manager in the payroll department, knew about Charles' desire and permanently monitored possible opportunities.

Then the big chance that Charles sought came, the long dreamed and awaited vacancy in the supplies was available and his interview with the manager was authorized. Not different than expected, Charles got the position and was transferred to supplies.

Charles did everything as it must be; he trained another person in his tasks and then immediately assumed his new role. Meanwhile, Rafael, his new manager in supplies, asked the IT department all necessary accesses that Charles could run his activities in Supplies. Finally, accesses were released and Charles was able to perform his new role.

Completed the transition to Supplies, however, Charles kept still all the old accesses permissions of the payroll department. Lucia had been concerned with the substitution of Charles for a new employee, but forgot to ask for the cancellation of Charles access permission to in the Accounts Payable.

So, old access' permissions to the system have not been canceled and to further complicate the situation, this failure was not even detected in the semiannual verification of profiles made by the "owner" of the process Accounts Payable.

Therefore, Charles could negotiate merchandise, placing purchase orders and with the old access permits still in force, he could make payments in the name of the company, causing the company to be exposed to undue losses, fraud, and conflicts of interest.

Causes of the incident:

- 1) Lack of control by the manager during the transfer and removal of employee accesses permits.
- 2) Semiannually conference of access profiles not carried out efficiently.

Consequences of the Incident:

- 1) Possibility of exposure to fraud by the lack of segregation of profiles.
- 2) Exposure of sensitive data traveling between areas.

Learning for everyone:

- ✓ **It is important to know and comply with the POLICY OF INFORMATION SECURITY OF Energy. All managers should be aware of their responsibility in the process of granting and cancelling the access of his employees. Process' owners should run their semiannual controls timely and with quality.**

Carried out monthly, the "learning with controls" exercise aims at institutionalizing a control environment in the organization, as a way to remember and reflexively learn from

previous problems or incidents through storytelling. Such rhetorical resource is, in fact, what the Greeks called apologue (i.e. an account or statement), a brief and allegorical story highlighting specific details through which moral doctrines or useful lessons might be pleasantly delivered. In most of the time the moral is not explicit, remaining but implied. And even being possible to translate the heading “Learning for everyone” as “Moral of the Story”, the whole exercise aims at establishing a mindset oriented to controls, a process distilling the imaginary signification of risk as uncertainty through rhetorical devices (e.g. “causing the company to be exposed to undue losses, fraud, and conflicts of interest”). The persuasiveness of this exercise is subtle, yet effective, and despite the informants have commented that the goal is not a punishment or reprimand, in its jest tone, this activity still bear disciplinary purposes: it aims to change behavior.

By creating a “catalog of errors” the internal controls’ team wishes to institutionalize the process of continuous improvement, and the exercise learning with controls might help in the “acceptance of error”, as the manager Bob says. Their ambition is, however, to make the Control Incident Report broader in scope, since they plan to use it as a database that will feed risk matrices in terms of likelihood and impact.

Bob: actually, we want to use the concept of probability and impact, and apply it within the CIRs [control incidents report], okay? So, I will not necessarily be in an extreme end... at the moment I have a database, a wide mass of data, right, collected from several years, eventually I’ll be able to use the CIRs as something to feed...which can feed my matrix, or some components of my risk matrix, in fact, right? Today the goal is much more to identify, to have an idea, within the parameters of CIR, which are the major impacts, which are the events that caused great impacts and in which frequency we’re having them.

V: It tends then to become more quantitative than qualitative, because of...

M: Exactly, we will transfer to a matrix, like it was really a risk matrix; we’ll make a risk matrix of CIRs, right? And we’ll begin to check...some given area, the freight area, we’re always having problems you know, for example, we’re always having problems of accounting. Then, when it had happened three, four CIR’s a year, so this caused...because I have a higher frequency, and values are very high, so it’s an area that I have to give more attention...

V: ...it’s a key to make a...

M: ... to review processes, to be able to highlight the importance of controls.

Control incident reports record past events, mapping events already materialized, from the less relevant, such as the example of the story above, to the most impacting ones.

Yet, though grounded in past events, this tool has impacts in the present decision making, through the desire to influence the future. This is indeed the goal of learning, or continuous improvement. Here we see the manifestation of the imaginary signification of risk as uncertainty incarnated into the notion of a project. A project is, from the outset, an idea pointing to the future. Control incident reports, and learning with controls are projects in the sense they aim to prevent incidents in the future. In fact, all the tools presented so far incorporate, in varying degrees and intensities, the notion of risk as uncertainty as a project. As a Janus Face – one side turned to the past, the other to the future – the imaginary of risk incites decisions in the present. This interplay between past and future depicts largely what management means all about: to carve out the present while grappling with future uncertainties.

- **Risk matrices: ensembles and narratives, guardians and traffic lights**

Risk matrixes are the climax of aesthetics of threat in organizations. Energy organizes risky events into priorities in a map, whereby objects such ensembles, narratives, guardians, and traffic lights help managers to steer action plans. About 120 risks are distributed in sub-matrices according to seven vice presidencies or functional areas. These risks are consolidated in 20 events which comprise the major risks in the final matrix. The preparation of such data is done through self-assessments by managers of these different functional areas and which are subsequently validated by the controller and the respective vice-presidents.

In this exercise, called this way by the manager, risks are assessed qualitatively according to the expertise of each area. Risk is defined by the internal control team as “an event that can deviate the area/organization from its business goals”. This quite encompassing definition, demands a routine of constant alignment – as it prescribed by most manuals of risk management. In practice, areas or vice-presidencies, repeat risk assessments every six months, reviewing risks events mapped, including new ones or excluding those not relevant anymore, and devising action plans. Action plans have a cycle of implementation and checking points. During the assessment, the internal controls

team functions, in the words of an analyst, as a “spark”, sensitizing managers about the correlation of events they raise or questioning them about the existence of other events that might have been ignored. Sensitizing “like a spark” aims, the analyst says, at letting the areas or vice presidencies themselves to decide about the inclusion, correlation, impact and likelihood of events, an approach that seems indeed in line with the self-understanding of the internal controls department as a consultancy sector. In what follows, I present how this process unfolds in representations/images used to manage risky events. In the figure 4 below is one of the about twenty strategic risks identified by the business in its consolidated risk matrix.

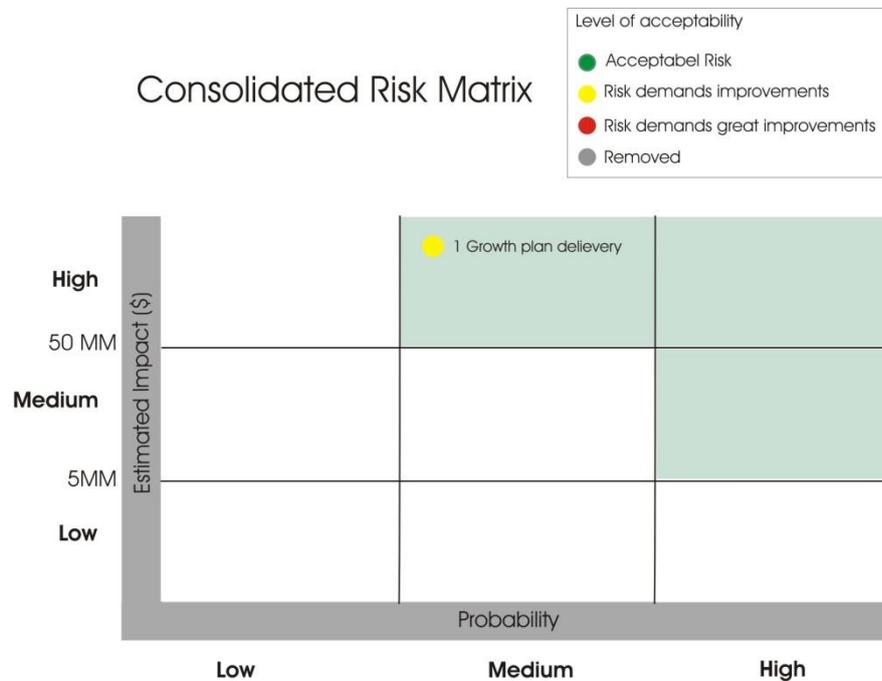


Fig.4 Consolidated Risk Matrix at Energy.

We see, again, the use of “traffic light” colors indicating, according to their documents, the maturity of controls. This matrix unfolds into different matrices which treat risks individually. Below is an example of how the strategic risk “Growth plan delivery” unfolds into two commercial risks.

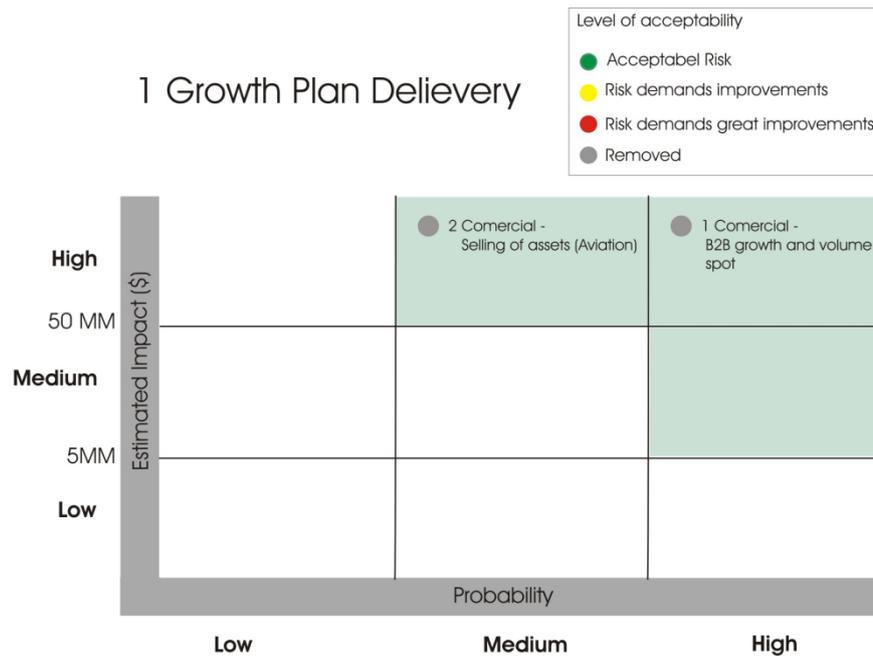


Fig.5: Risk matrix of individualized risks at Energy.

Now, as it is possible to see, the events described in these matrices do not represent in a direct way threatens. They were converted into risks because they were framed within the traffic lights indicating that they must posit some danger. Growth plan delivery does not mean much by itself, since it can be an opportunity or an obstacle; and the same goes to its unfolding in the commercial area. Two points stand out here. The first one concerns the arbitrary nature of encapsulating events under the label of risk. This arbitrariness is about the naming of events, which despite being normal events of day-to-day activities, are placed under the category of risk and start bearing higher relevance in the discourse, and therefore, in action and decision making processes. Here lies the role of this tool as it gives substance to the imaginary signification of risk and creates thereby a morale by its implementation and use. For example, one informant said that the matrices were in former times called control matrices and just later on they were named risk matrixes; in his words, this change of names aims to “indirectly indoctrinate people to think about risk and not in terms of control”. By labeling these maps risk matrices the internal controls team raises up the notion of risk as uncertainty over the notion of control, the latter a rather unappreciated term within managers not keen to controllership practices. So naming matrices as risk matrices influences the absorption of control practices in a language in accordance with

more general managerial practices, and also a language more “threatening” in terms of strategic thinking.

A second point refers to how the conversion of an event into a risk object inevitably needs some narrative content. Narratives provide the substance to these events, so that they can be perceived as risks. Take, for example, the narrative underlying the event “Growth delivery plan”:

Energy strategic plan includes constant market monitoring for acquisition opportunities and also development of new areas. The delivery of this growth plan may be compromised by the lack of sugar cane availability (weather condition, competition for raw material, etc), M&A/Greenfields projects costs and Bio-energy expansion constraints. Bonsucro certification and land availability to expand production are two important areas impacting Growth plan delivery as well (both covered at “Sustainable Development” risk).

[Risk register – details of the risk]

Narratives such the one above are provided are provided as tables containing what they call risks registers, a document attached to individual matrices. The table includes 16 parameters, including the listing of risks, the description of those responsible for implementing action plans, the deadlines for implementation, the parameters of impact, probability and level of acceptability, and others. Thus, each risk has an associated “register”, in which narratives provide a detailed account of events, without which they would be hardly grasped as threats to the strategy. Let’s take a look at five of these fields deriving from the unfolding of the event Growth plan delivery:

Area/VP	Risk	Description of the risk	Risk Guardian
Comercial	Growth B2B e volume spot (B2B)	Risk of not achieving the planned volume growth in the B2B segment (with contract)	Name
Comercial	Selling of Assets (Aviation)	Risk of losing personal Risk of losing customers	Name

Tab.4 Example of risk registers

Continue in the next page...

Area/VP	Risk	Action Plans
Comercial	Growth B2B e volume spot (B2B)	1) Implementation of a pipeline of growth focused on contracting with B2B customers; 2) Release time Sales migration of the portfolio of distributors for 1 GT; 3) Request for additional funding for contracting through Capex and financial concession.
Comercial	Selling of Assets (Aviation)	1) Develop a retention package to avoid losing talents; 2) Anticipate renewal of contracts, focusing on the most profitable customers due to the entering of a new player.

Tab.4 Example of risk registers.

Parameters link events together and at the same time establish priorities (impact, probability, traffic lights). This process creates ensembles assigning “guardians” to track the progress and implementation of action plans accordingly. It gives identity to risk objects through logical relationships: “Growth Plan delivery” comprises “Growth and B2B spot volume” and “Selling of Assets”, both of which are part of the ensemble commercial. Distinguishing-choosing-positing-assembling-counting-speaking events into ensembles give logical identity to risk as uncertainty; and it gives it identity not only by providing ways of talking risk objects, but also by crafting a logic of doing risk management. For example, identity emerges through technique too: matrices assemble-adjust-construct-make events into risks through prioritization (low and high), acceptability (“traffic lights”), economic importance, and risk registers. However, it is again worth noting that events must be supported by narratives, which give substance and meaning to such events.

The functionality of the risk management does not enclose the imaginary content of risk as uncertainty, a content that exceeds logical uses of language and technique. Risk as uncertainty remains a lens through which these tools are applied to events once in need of attention (colorful lights), but which can also be removed (gray) and or substituted. Sooner or later other events come into play, for analysts and managers keep tracking new possible obstacles to the business strategy, at the same time they spread the logics of saying and doing risk management within the enterprise. This diffusion of risk management occurs by routine verifications, by training in different aspects of risk, and by official documents, in

which the notion of risk comes in different nuances. I will now discuss some aspects of the communication of risk.

- **Communication of risk**

I observed three forms of communication contributing to design a control environment and which foster the imaginary signification of risk as uncertainty within Energy. These were the code of conduct, the crisis management manual, and emails and images of risk transmitted by workshops.

The code of conduct has as an explicit intention “to provide greater clarity on the standards that employees must follow and the behavior they should adopt”. In the document several principles are designed. The topics include the economic principle of competition, business integrity, political activities, health safety security environment (HSSE), local communities, communication and engagement and compliance, along with disciplinary measures listed for such principles. Each principle prescribes what should be followed, and underscores “the requirements and guidance for all employees of Energy in a number of areas of risk across the organization”.

As crucial part of how risk objects are created within the organization, the conduct code serves primarily to the characterization of the control environment. This happens in terms of description of actors/components of this environment (i.e. company, competitors, employees, contractors, customers, economy, health, safety and the environment, communities, etc.), as well as in terms of prescriptions of the behavior profile expected from each of these actors (i.e. which values should be followed and the implications of not complying with these principles). Here we see the *logics of talking risk management* in full expression of giving identity to risk objects, that is, an identity that is formed by the distinguishing, choosing, positing, assembling, and speaking of risk objects. In this characterization risk is interpreted as a secondary perspective (Power, 2004b; Power, 2007; Power et al., 2009), that is, risk is associated with the company’s reputation, which is justified in terms of direct economic losses (e.g. fines) or indirect harms (e.g. falls in the share price; or falls in sales due to boycott). The language used therein exhibits logical

functionality, grouping and describing communication channels, featuring actors/components and their interdependencies, delineating boundaries of compliance (internal and external), and interconnecting a set of values and principles.

By conveying risk objects in a logical identity way the code of conduct build ensembles through which the signification of risk as uncertainty is carried over within the organization. The document instills then a morale by addressing risk images. For example, it mentions issues on money laundering (e.g. “processes to hide criminal origins of money or equivalent”; “use of money of illicit origin to support terrorism”) as a way to raise criminal, and therefore undesired, behavior and actions; it also give details how assets are supposed to be guarded by employee conduct (e.g. “employees are responsible for protecting the assets against waste, loss, damage, misuse, theft, misappropriation or infringement and for using these resources responsibly”); and it bring forth images of bribery and corruption, forgery, fraud, use of drugs or other illicit substances or alcohol abuse. The logics of risk language are, thus, underpinned by series of well-known, but therein detailed organized imaginary. To craft a moral order is, indeed, the main reason for drawing up such a document, for it aims not only to communicate the requirements of a particular way of conduct, but majorly to craft this very conduct.

A second way of instilling risk as uncertainty occurs through the crisis management manual. Management of uncertainties that stem from crises is as comprehensive as the practices developed to build risk matrices. Yet, in crisis management losses or the economic reason to its existence relates to reputational issues. Thus, events are viewed through their indirect causes. This increased uncertainty is tackled by an all-encompassing *modus pensandi* that can be seen in the outline of the document. That is, the crisis management manual says that its principles should be used “not only in cases of installed Crisis [sic], but also in situations that can develop into a crisis and that must be monitored”. It describes crisis management as an ongoing activity as well as a pro-active exercise, in which we see, again, the notion of risk as uncertainty incorporating the concept of a project. As with risk registers used in the risk matrices, the document offers narratives to define crisis.

“Crisis is when the event occurred can have a negative impact on the corporate image, can compromise the business and/or generate significant financial losses to shareholders. Crisis situations are characterized by attracting public attention, media coverage and national and international attention from important stakeholders. They can be caused by severe injuries resulting from abnormalities in internal operations or from external factors, intentional or not.”

The concept of ‘Crisis’ is further instrumentalized by the description and hierarchical organization of types of events or occurrences (i.e. “accident, emergency, disaster, and other situations”). Similar to the risk matrix, risk events are graded according to degrees of severity (see tab. 5 below).

Severity	Scope/Repercussion	People	Assets	Enviroment	Reputation
1	Limited effect - an event known to the public, but that does not arouse interest and generally does not go beyond internal boundaries of the company	Mild injury or effect on health	Mild Impact	Mild damage	Mild impact or none
2	Local repercussion – involves some public interest by authorities and local media, with little impact to the company’s reputation.	Middle injury or effect on health	Little Damage	Little Damage	Little Impact
3	Regional repercussion – it is a medium impact situation arising great interest from media, communities, NGOs, and local and regional authorities.	Serious injury or effect on health	Moderate Damage	Moderate Damage	Moderate Impact
4	National repercussion – high impact situation on reputation involving media, public attention, and national authorities, which can result in restrictive measures against the company's businesses.	Total disability or permanent or up to 3 fatalities	Great Damage	Great Effect	Great Impact
5	International repercussion – extremely serious situation in that businesses and the company’s image are seriously threatened nationally and internationally. It involves national and international public attention, media coverage, and involves national and international authorities.	More than 3 fatalities	Very large Damage	Very large Effect	Very large impact

Tab.5: Classificatory matrix for crisis management.

Here we see how the internal controls team uses the logics of *doing risk management* to endow risk objects with identity; and through this mechanism they do that by assembling, constructing and making ensembles upon which management can decide and act. Rules are devised from this tool; for example, it is up to the board of the affected area, together with the manager of crises and risks and external relations, to install a crisis

committee if they understand the situation has achieved severity 4 or 5, according to the severity and classification matrix. From this perspective, attention of managers and directors is directed to a whole range of events, because according to the manual a situation of mild severity may develop into a crisis.

However, such classification needs more substance in order to events can be better identified according to its severity. Narrative clues are offered by descriptions of each level of severity. For example, the severity grade 5 has the following clues: “actions from various sources, which interfere in the chain of cultivation, processing and export of ethanol”; “damage to the environment, with fatalities or serious injuries, which exceed the limits of the company and meet the community”; “several large-scale accidents with fatalities or serious injuries”. Such clues make the notion of crisis vivid through the use of images, enabling the framing of events in a severity scale, and lifting up the significance of crisis.

As the conduct code, the crisis management manual aims to discipline behavior. It offers prescriptions for how and when to set up a crisis management committee, of the required roles of each member of this committee, and the necessary documentation of the events and the behavior of the spokespersons before public opinion after the installation of a crisis. Prescriptions of behavior while commenting media or public opinions are designed in detail, going from the suggestion of mapping the various audiences interested in the issue, through the development of strategies for a successful relationship with such actors (e.g. “do not smile in front of the camera because it may demonstrate little respect with the situation”).

In addition to these two documents, the internal controls team uses e-mails to communicate learning initiatives, and other information about concepts and tools of control. In the next page is an example of such emails, in which the team explains the differences between goals and risks. As in the cases of the exercise learning with controls, the statements of this e-mail are intended to instill a moral of risk management, in which risk and goals are placed in contradistinction alluding to the rhetoric of strategy. It appeals

to a common imaginary within management rhetoric, giving ordinary examples to suggest a prescription (e.g. “protect the goals of potential risks”).

To sustain the size and yearnings of Energy, it is essential to cultivate a culture of controls to ensure better management of risk and the maximization of the company’s results. [...] It is common, however, that people misunderstand controls as complexity or unnecessary effort. This happens whenever we analyze controls isolated, without clearly understanding other two key components of this process: goal and risks.

Goal and risks

All proceedings – not only in our professional and personal lives – always have a **goal**. When we decide to buy a car, for example, we generally aim to ‘pay the best price’.

However, there may be **risk** situations that compromise or deviate from the initial goals. In the case of purchasing a car, in getting in contact with the seller, you may not receive the best offer and thus you cannot ‘pay the best price’.

Controls

Only after understanding the objectives of the process and the risks involved, it is possible to speak of controls. **Controls have as a mission, to protect the goals of possible risks.** In our example, making several quotes and compare prices between retailers would certainly help in the negotiation process. The control of ‘quotations’, therefore, would contribute to the goal of ‘paying the best price’ getting achieved successfully.

There is a plethora of examples for the application of controls in our day to day: checking your bank statement regularly, carefully reading a lease, having health insurance for the family, the shopping list on the market, insuring the car, going to a specialist if you have questions on income taxes, etc..

In this context, in the same way that is easy to understand the importance of controls in our personal lives, it is essential to cultivate a similar culture within the organization. Only with the commitment of everyone it is possible to ensure an environment of efficient Governance.

The internal controls team also has other ways of capturing the imagination of employees around the signification of risk as uncertainty. In a workshop on “Developing Business Continuity Plans”, v various images were used to explain the financial consequences of materialization of uncertainties and risk management, among them: the attack of the twin towers on 9/11/2001; declines in stock prices after the crash of a TAM aircraft in Brazil in July 2007 and of GOL in September 2006, all of them depicted with colored correlation graphs; the Amazon Cloud Downtime with the heading: “Clouds also fall!”; floods in Rio de Janeiro between 5th January and 6th April 2010, and others.

The factuality of such incidents exemplified in the workshop is undeniable. However, these images and stories⁵⁸ lift up risk as uncertainty in the discourse of Energy through series of indirect associations, adding up to the flux of representations of managers regarding risk as uncertainty. This time, the signification of risk comprises aspects of discontinuance of business' activities, whereby such images give substance for this relationship to be consistent and give shape to risk. The plan itself exemplifies discontinuities such as strikes, failure of suppliers, frauds compromising the continuity of the business, failures in critical equipment to the processes, explosions or fires, floods, landslide, power failures, etc. That is, chains of associations, not practical examples of their own reality and experience, socially amplify risk as uncertainty through dramatization and symbolic connotation (Kasperson et al., 1988). These images give centrality to risk in the discourse and set the tone for thinking alternative plans and deploying those risk objects already cited.

Communication aspects of risk are the last part of the presentation of the main tools and documents I observed the internal controls team uses to define and control risks in the enterprise called here Energy. The risk narrative I started with at the corporate level does not end here, however. Making ethanol a global commodity is part of the vision of Energy to consolidate itself as a global player, and this business accounts for a considerable share of the Group's performance (around 32% of its EBITDA at the time I write). A debate directly affecting the production of biofuels concerns the decrease of land fertility for food production, since the land producing ethanol could be used for cultivating grains. This debate has raised doubts about the potential of clean energy ethanol yields. Yet, researchers have working to optimize the land usage. A study of the University of Michigan, USA, pointed out that marginal land – land that is not suitable for the production of food – can be used to produce alternative energy sources⁵⁹. The study demonstrates that a planting area of 11 million hectares of marginal land could yield about

⁵⁸ I use story here instead of history because in Energy the details of how such events unfolded are not important. Rather, these events are used as rhetorical devices to lift up the imagination of managers (e.g. Can you imagine what will happen?).

⁵⁹ See article in the *Globo Amanhã* “*Mais Energia Menos Espaço*” 19.02.2013

21 billion liters of ethanol per year. Under these conditions the Brazilian territory has a strategic dimension for the Group, a country that has about 140 million hectares of abandoned land, an area equivalent of twice the size of France⁶⁰.

From this perspective, monitoring potentially productive land is a key factor in the race for competitive positions in the global ethanol market. In this aspect Energy has accumulated technical know-how. The company controls their land usage through satellite images crossed with compiled database collected over a long time by the Group's experimentation with its own farms in the past. With the formation of the joint venture Energy, this activity still happens (one day an informant pointed to a group of people looking at big monitors and said they were looking at plantations). In recent years, however, along the series of acquisitions and transformations the Group has been undertaking, this know-how was used to create a new business of investments in agricultural land. It is in this new business that I will further track the imaginary signification of risk, to see what importance it has gained and how it materializes in practices.

⁶⁰ According to the Department of Forests of Ministry of Environment. See also "*Brasil tem o equivalente a duas França em áreas degradadas*", in: Agência Brasil 12/07/2012.

Land

Arriving at Land for the interview with its CFO I got a little confused. I don't find a reception as with the other businesses I visited. I go one floor down where I meet one of my contacts, who leads me to the office of the CFO. Peter introduces me in a quite relaxed and cheerful way to the CFO: "Hey man, this is the guy I told who's doing a Ph.D. in Germany. He said you guys have an appointment today, is that so?"; John says: "Yeah, sure, we've talked by email!"; we exchange greetings and he asks me to wait while he finishes a meeting with someone else already in his office. Meanwhile I observe their office. This business, which operates in agricultural real estate investments, occupies the whole middle floor in the same building where the corporate level of the Group is located. 20 people work in this room, looking attentively at their computer screens. Silence predominates, being broken just by low talks between workers and telephone calls. Facing the larger room, where the staff is, are the CEO's and CFO's offices, and a meeting room; they are divided by windows and doors are kept open, what seems to facilitate communication. While I wait, I see the CEO making a few phone calls, asking some questions to the CFO, who replies from his office. After a few minutes, John invites me to come in. We introduce each other more calmly this time, and during our conversation he gives me an overview of their business: "*Land is just what you're seeing here, only this office here. We're twenty people and it's a business formed in 2008. We had back then a business plan to use knowledge and technology in agronomy to find land, and to monitor the land the Group owns, and which is unique, because no other company in the world, and that we can tell you for sure, no another company is responsible for monitoring 700 and a few thousand acres of land as the Group, now Energy, does it. So the Group has developed a lot of technology to monitor and identify lands. This technology could be useful to identify land that could be bought, farmland, not only for sugarcane and ... lands that have potential for value increases, or that are underutilized, or that are in areas that will be the future for some logistics or climatic reason...or regarding the expansion of production, to where this production is going to. [...] So this is a company whose core business is real estate assets, but which has as core competence agronomic and technological knowledge, market knowledge at a deep level. That's why it looks like an investment fund, because it's very small in structure. We can do [it] here with those two screens, those pairs of screens you're seeing there, which seems like Bloomberg, but are actually satellites; they're looking at several satellites all the time*". We keep talking, while, from time to time, I watch those people staring at computer screens.

Land results from the accumulated know-how of the Group in valuation and control of agricultural farms (i.e. sugarcane farms) combined with foreign capital. As part of the changes the Group is undertaking, this new business can be seen as part of the strategy of bringing more cash stability to the Group. When the partnership with its foreign investor was launched, the Group had less than 20% of this business. Shortly thereafter, the Group contributed a volume of land left off the joint venture Energy and became the main controller of Land, pointing its officers. By having the right of subscription, the Group also has the possibility to increase its share in the future.

Access to resources has always been central to the success of any venture, and it is even more evident in the kind of activities undertaken by the Group. Land usage is central to the planned growth of bio-ethanol production. What is more, the combination of capital and experience resulting from this new venture provides advantages for the whole

conglomerate, in general, and to the founder, specifically. Described by market analysts as a high-tech agricultural estate, Land works with a database crossed with satellite images through which it manages investments in large extensions of land throughout the Brazilian territory. Internal gossips suggest that the business was created to control the founder's land and farms; whistleblowers on the internet comment that, despite the testimonies of the founder that he is getting out of the sugarcane culture, he continues to benefit from the fall in land prices acquiring farmlands at lower prices. Regardless of the vested interests of the founder, Land means undoubtedly a step further in the specialization that the Group has been undertaking within its production chain.

As an agricultural investment venture, this business has no agricultural operations. Its goal is basically to buy, rent and sell farms or large parts of land which have agricultural potential. For this purpose the company applies a technology of mapping, developed to identify, evaluate and control land extensions throughout the Brazilian territory, and to acquire land or farms that it keeps in its portfolio “until the moment it makes sense” (CFO), eventually selling them and making money from it. The business has been expanding with success, increasing its market value and the amount of land under its control (market estimates say that increases of value of its portfolio were 93% in 2011 against 56% of the land market as a whole⁶¹). In this business, risk management yields idiosyncrasies regarding the representation of uncertainties, which I will describe next.

Brazilian context and risks in agricultural real estate investment

Brazil has its own peculiarities imposing demands in terms of structure and approach of risk management. In the business of investment in agricultural real estate, these demands, and the structure built to deal with such idiosyncrasies, serve as catalysts of the signification of risk as uncertainty. By the same token the structure built to evaluate and control land investments functions as the mean through which risk objects are gradually transformed into opportunity, depending on the information gathered regarding such risk objects. From this perspective it is possible to suspend the notion of risk, since

⁶¹ Source omitted to protect the identity of the firm.

almost all events to be reported below can be seen from a practical point of view, as analogous to any daily business activity. That is to say, businesses involve certain situations, events or variables that lead people to make decisions and to problematize them, elements that do not necessarily have to be named risks, but indicate degrees of uncertainty to be acted and decided upon. In the present case, for example, when interviewing the CFO he argued that it would be difficult for him to frame the events of his business into the traditional risk categories – strategic, operational, financial, compliance – and that he would leave that to me to decide how to fit them best. Yet, he still uses risk as a label to describe the events involved in their activities. Let's see how he does it.

According to him, their business has inherent risks and risks associated with peculiarities of Brazil, both of which require planned actions in order to mitigate such negative events. One of the major events concerns the ownership of land, where idiosyncrasies of the business and the country mingle, in order to form notions of risk.

...a serious risk in Brazil is property ownership. So property ownership is a problem. If you have no idea who was the owner of this property...today you can buy a license [i.e. the property] in which you look at the last owner of it, as you do with an apartment, an urban property, you can check two, or three steps back and you'll find who built the house at the most...with a rural property it's different. So, to give you an idea, we investigate property's certificates of real estate that we're considering to buy, along its 100 years! We already had a case, not something we ended up buying, but which we didn't buy because it was in dispute, because someone claimed to be the owner, questioning it, and saying that: "Look, a testament from 1920 was fake, and my great grandfather was the heir, I have rights here!". That guy can, by inefficiency of notaries, sometimes by dishonesty in public offices, a person who has received something illegal... some encouragement, something like that, and which can hamper the deal...[that guy] can prevent this asset to be given in guarantee... can contest and challenge its ownership. Another thing, notaries in Brazil are not integrated, they're not computerized. In São Paulo if you'll go to buy a property – you should have had this experience – you ask for a certificate by e-mail, pay it by internet and then you get the certificate of the house or apartment you want to buy. [...] There are many notaries, mainly in the Northeast part of the country, they're running on paper, they're not computerized, and records are often quite precarious, they're handmade, and these are farms that have a register originated in a chain of ownership that nobody knows where it comes from, so this is a serious risk. (CFO Land)

Chain of ownership is a risk object upon which management establishes action routines. Difficulties in the investigation of ownership's origins demand from them to dedicate a team of lawyers to study such chains of ownership. These lawyers visit registrars where the potential investment has records and they make copies of documents for archiving and further studying them. In addition to that, they document with photos the precarious conditions in which many documents and registries are, and these photos are

used, according to the CFO, to “educate investors” about why they have such a big legal team, as well as to explain why they spend money with outside firms assisting in these evaluations. Another particularity of the investment in agricultural real estate is what the CFO called “risk of domain”.

Leaving a property unoccupied – agricultural land – implies that it could be invaded by someone else, who can claim the rights over such lands after some time⁶². In Brazil threats of invasion are very present and may occur by groups of the Landless Workers’ Movement, a quite active social movement in conflicts over land, but also by other individual claimers. Another point is that leaving the land without use involves financial losses, since unproductive lands are exposed to exponential incidence of taxes over time. Thus, according to the CFO, “leasing a farm is not only important to generate cash flow, because of the gains with renting it, but it is also important to ensure the possession, the dominion, and it is important to protect it against the tax, ITR⁶³, because such a tax grows exponentially if we don’t use the land”. So, the “risk of domain” consolidates understandings of events stemming from the social sphere (e.g. land issues within social movements), the legal sphere (e.g. loss of rights over land due to acquiescence), and the economic sphere (e.g. incidence of taxes on unproductive land).

Another variable, less manageable compared with the previous ones, but not less important, is the climatic variable. Climatic changes influence the valuation of a land, and contribute to shape notions of risk arising from it.

...this [climatic variation] is a business variable, because one degree in ten years, our properties will still be there in ten years, and it’s very likely that this company will be there too, even more since you have long-term options. Half a degree can have a big impact on the productivity of a certain crop culture, and it has a very large impact on revenues. On the other hand, half degree can eliminate, for example, a second harvest in particular regions of the country. I’ll give you an example: you plant soybeans which have the harvest in May, and you have a period from May to October to prepare... from May to September, for the preparation of the soil and for planting again during the rainy season, so you’ll reap it again in May in the next year. In some regions with good weather patterns, you can get in the middle of this period here, in the intercrop period; you can get an additional crop of cotton, for example, a little harvest, or a second crop. This is a significant source of revenue, it’s like you could plant one hundred thirty percent of a farm every twelve

⁶² Acquisitive prescription is the legal term defining such situation. In Portuguese the term inherited the Latin root *usucapio*, and it is defined as *usucapião*. This prescription refers to the ownership of a property which can be claimed possession within a lapse of time (acquiescence). In Brazil the acquisitive prescription is guaranteed by the Civil Code (*Lei 10.406 de 10 de Janeiro de 2002*), and by the Brazilian Constitution of 1988.

⁶³ In Portuguese: *Imposto Territorial Rural* (Rural Land Tax).

months. You can plant all of it in twelve months and have another income in that piece that you planted in these interlude one more thing. If you think, in twelve months you've planted one hundred and twenty percent, one hundred thirty percent of it. Half a degree in ten years can eliminate this second ... or may require a new soybean variety that can withstand this half degree, or this one extra degree.

Now, the variables ownership, dominion, and climatic variation can be seen from the perspective of both risk and opportunity, depending on what stage the deal is and the conditions under which the lands are assessed. However, the analysts of Land assume as a starting point that these issues impact negatively on deals or assets, and they work to collect information during the process of valuation of investments in order to minimize the uncertainties stemming from these issues. From this perspective, these variables are risk objects that managers try to transform into opportunities by securing new information and handling the problem from different perspectives. As in the study of March and Shapira (1987), analysts and managers at Land “try to change the odds” not by probability quantification, but with qualitative adjustments of the available information. Here we see the *conversion* of events into risk objects working backwards: what was firstly settled as a risk object – ownership, dominion, weather – can be gradually viewed as investment opportunities depending on the information collected and worked out. The qualitative assessments the business put in place are, therefore, central to the construction of logics of saying risk and to assembling these events in order that analysts can perform an ongoing tracking of information. Yet, another tool plays a central role in assessing and controlling risks in Land. The business uses radar mapping technology crossed with data to catalog properties and document how these areas are affected by different variables.

Before presenting this technology, there are two other variables influencing the transformation of the imaginary signification of risk into a risk object within the activities of Land. These are the political and structural deficiencies of the Brazilian public bureaucracy. The CFO said that the purchase of large extents of land in Brazil – over five hundred acres – must be geo-referenced, “where all the bordering farms’ owners sign a map with coordinates measured by GPS of your farm. So, your neighbor has to say: no, your fence finishes here, in such latitude and longitude...and all your neighbors [sign], and you sign it”. This geo-referencing process, the CFO explains, in spite of not solving

conflicts of ownership, is an initiative to resolve the problems of overlapping areas (when different records intersect), which has been indeed generating legal disputes over farms between different states. The problem is that the geo-referencing, according to the CFO, needs to be realized by a company certified by the Government and requires a longer time than desired.

So, we have time-consuming deals, we have to explain a lot to my investor why I bought a farm, the cash got out of my pocket, my pocket as a company I mean, the farm was recorded in my assets, hundred percent, that I have already the ownership and use, it's already leased, but in its register it's not in my name yet [the company's]. Why? Because I'm waiting for the Government. So, we have to interact a lot with...with government agencies. (CFO)

Regulation plays also a role in how notions of risk and/or opportunity take form. The CFO cites an event on the publication of an opinion of the General Attorney's Office (GAO) that suggested banning sales of land in Brazil for companies with foreign capital. The intention of this opinion was to warn the federal government about the issue of sovereign governments or NGOs buying up large extents of land in Brazil, which, according to the interpretation of General Attorney, is a threat to national sovereignty. Although opinions publicized by the GAO do not have force of law, the CFO said that it had indeed an impact on many deals, because notaries homogeneously applied the restriction.

This has generated a big panic, because ... panic among investors who put money in Brazil, and panic of Brazilians who need foreign capital to fund their operations, to sell properties, to give them as collateral to raise loans to operate, right...to develop new areas. [...] We saw this news, for example, the market here, people said: "this is a leftist movement, it's a movement that borders with socialism... they said: oh no! They'll expropriate lands from foreigners, it might end up in trouble"; they got scared: Is the Government being populist?" ...and it was a pleasant surprise that it was not; actually the government said, look, let's open the doors to receive representatives of professional associations to discuss the impacts. Then it opened there a discussion group with representatives from the forest, one of the agricultural sector of grains, a representative of the sugarcane sector, we participated in the sugarcane as the Group, to discuss: "look, this region yes, this type of investment no, productive investment yes, sovereign investment no". So, we had people from our office, lawyers, our own...our CEO had several audiences with government representatives to discuss it, to articulate the needs of the sector, and say: "look, this region needs to develop and there's no capital there, long-term investment, is this case possible?". (CFO Land)

This incident shows how the signification of risk must be negotiated within many spheres (the politics of meaning) and how impending re-presentations of risk stemming from these spheres (the instituting component of the imaginary) can provoke subtle shifts in notions of risk and practices. Concerning Land, the incident regarding the prohibition of

foreign investments in agricultural real estate, as reported by the CFO, was first interpreted as a threat and afterwards came to be seen as an opportunity. While other competitors were prevented from making deals, Land continued making its deals as usual. “When it happened I said my God, it’s a risk. Then we looked at the way we were structured, I said: No, it’s actually going to turn into an opportunity” (CFO).

Specificities of the Brazilian context lead the organization to structure itself to tackle those issues at the same time that this structure reinforces and delineates risk objects through different dimensions. The daily practices of the business serve to protect potential events to materialize, but also practices make clear the “major risks” their business revolves around. These practices include, according to the CFO, legal and environmental due diligence to evaluate potential investments, projections of the production of agricultural areas, monitoring and prognosis of commodity prices, prospection and evaluation of potential leaseholders, protections against acts of corruption (internally: approval levels, callback in financial operations, SAP controls, audit SOx, etc.), monitoring of climatic variation and its impacts on agricultural production, monitoring of new technologies of grains, etc.. However, by the very use of these tools and language they foster risk as uncertainty in their culture, that is, by deferring the imaginary significance of risk to be indefinitely actualized according new situations.

Routines do not limit the company to track for emerging threatening events, but they largely delimitate the priority threats as risk objects. Hence, when an event out of the hermeneutic boundaries of this business emerges (e.g. as the opinion published by the General Attorney), it is necessary time and interpretation to define and encapsulate such events as a risk or opportunity⁶⁴. It is through the logics of language and technique that the imaginary signification of risk earns an identity or identities at Land, but such logics, however, do not prevent the spreading of risk as uncertainty within the businesses. As previously espoused, an important technological component in the construction of risk objects involves the techniques for the controlling of lands at distance that were developed by the company.

⁶⁴ Hilgartner calls this process as the emplacement and/or displacement of risk objects. See Hilgartner, S. (1992) ‘The social construction of risk objects: or, how to pry open networks of risk’, In: James F. Short and Lee Clarke (eds) *Organizations, Uncertainties, and Risk*. Boulder, CO: Westview Press.

Prospection and control of lands are largely based in São Paulo through satellites images crossed with a database. In this process of controlling at distance, risk is represented through the abstraction of onsite events (i.e. in the land or in farms) in form of images. A synthesis of on-site observation and control at distance gives shape to notions of risk, which appear in the discourse as “size and shape of farms”, “types of vegetation or soil”, “overlapping areas on the map”, “margins of preservation”, and “variations of pixels ‘colors on a screen’”.

Vitor: Is there any historic of these risks you told that materialized in practice?

CFO: Yes, I'll give you an example: we have distant farms...when I say distant I mean in the Northeast, or in *Mato Grosso* [the CFO is in São Paulo, so distances range from 1000 to 3000 km], and these are soy farms, square, large and contiguous areas. And they don't have any problems. Why? They have the percentage of legal reserves they must have. So, for example, in *Mato Grosso*, it has 35% of legal reserve, own property or endorsed on in its register, but within the same state. The forest code will change that, perhaps within the state, but some rules will change. But today it's like that. So we can here, with those two screens, those pairs of screen you're seeing there, they seem Bloomberg but they're actually satellites, they're looking satellites all the time. The point is: we don't use technology just to assess what we'll buy, these things are there to monitor the farms. Every month or every ... depending on the region, they look at ... it's not a Google image, it's a much more complex image than Google, it's an image crossed with a software called GIS, which is a type of software...there is also the MICS, which are softwares that can transform into data, which can better measure, saying what kind of vegetation is there. So, for example, if a farm disregards its legal reserve, and cut more trees than it should or exceed its plantation limits, for example, of soy over a preservation area, not only an area of reserve but an area it can be an APP, which is an Area of Permanent Preservation, which is in a riverbank, for example, 50 meters, or 100 meters in some cases...if a soybean plantation goes over this area, we have to discover it here, because the liability lies with the company, the owner, not with the leaseholder, I mean it's also the planter's liability, but the problem lies with the owner of the land that didn't control it.

Satellite images crossed with data are used to form ensembles that can be controlled and acted upon (e.g. ensemble 1 = Brazil, States, Cities, Areas, Solo, Relief, Climate, etc.; Ensemble 2 = Areas under control, types of soil of this area, climatic variation in this area, margins preservation of this area, leaseholder data, etc..). These ensembles serve to monitor land in the portfolio, as well as for prospecting new investments throughout the Brazilian territory; they enable a control at distance, continuously fed with data extracted locally and manipulated at distance. In the next section I present the role of this tool (part of the *teukhein*) in building risk objects, and its relationship in constructing notions of risk and opportunity.

The Many Shades of a Map: Controlling Risks at Distance

Satellite images play an essential role in Land's investments. Enthusiastically, the CFO says that the combination of information and technology adds value to their business. Such images represent, in a synthetic form, events and variables involved in land purchasing. At the same time, these images and data result in imperfect abstractions, a simulacra, because dynamic phenomena such as climate, soil, vegetation, relief, borders, etc. depend on the capture of several variables abstracted from the 'real' world, demanding thereby constant alignment. This synthetic form of representation is central to the *logics of doing risk management* within Land. However, it also informs the way risk is talked about, represented and reproduced as an object within the organization. Like in the example given by the CFO – “larger and contiguous areas” are easier to monitor than smaller and more complex mosaics – lines drawn on a map bring in contrast different situations and problems.

...you can't have a large square of 30.000 hectares in São Paulo, there are several little farms, mainly sugarcane, so the relief of São Paulo is much more...there are several conditions that contribute to the conditions in São Paulo; it has smaller properties and these are mixed with urban centers, which were only properties, but then cities have grown or you have colonies, and sometimes you have highways passing through the middle of a farm; so the farm has parts on both sides... and in these farms there are micro issues, so for example, only in Sao Paulo we have employees who live in the farms, because he has to daily monitor it, running by car on the farms. Because it happens a lot of issues, of someone stopping a car there and cutting some trees, or to put a horse to live there, and the next day it has two horses, on the third day the guy has a ranch. Then you have the environmental risk of this guy cutting trees there, you have the civil risk, because this guy can be hit by a machine, can be reached by fire, may die in there, can catch a disease there, can contaminate the water you have nearby... not to talk of the environmental liability that is having a guy in an area that he's not allowed to be. [...] So, we have a proactive monitoring of this environmental risk and of ownership in these, these two different ways right ...because the satellite will not catch someone cutting five trees.

The “two different ways” commented by the CFO are the control by satellite and the local control of smaller issues, in areas difficult to monitor through satellite images. We see then a combination of experience and technology making up risk management. These different ways point, however, to a particular way of seeing and doing risk management, molding how risks are objectified. First, data are transformed into information (i.e. research on climatic variation, soil, vegetation, relief etc.). These information, in turn, are transformed into data again (i.e. feeding the software), and in the software these data are

transformed into pixels, and pixels are grouped forming images (i.e. maps), which are recursively fed by new collections of data (i.e. new research on climate, new soil information, new technologies of crops, etc.). It is this process of *conversion*⁶⁵ of data into image and risk objects what makes this technology so central to the prospection and control of land in this organization: satellite images are accessible knowledge to any company; but the information continuously documented and accumulated is property of the company.

...the images in this software are purchased, then you have, for example, Landsat that is a provider of satellite images each...we have a periodicity when they're bought... RapidEye which is a German company by the way...it's also a provider of images, anyone can buy it. The software M[disguised] is quite expensive, very specific and demands a super machine, I'll show you there [...] So there is a specific structure, but it's nothing proprietary, what's proprietary? These are all the databases that are crossed with those pictures... and this is property of the Group, and the knowledge of the staff. So, for example, historical data of rainfall in the last fifty years in Brazil, *this is not information that you can download; you have to tabulate it, to literally build it.* The equation of soybean productivity, or of sugarcane adjusted to, ah...several factors of earth, so, for example, soybean productivity is a function of several variables crossed with *an information that the image gives you, at one moment in history a pixel image got dark, and at this point an employee went there and found that this is a thing, that kind of color change was a type of plague X, and then he registered and fed the system back with it.* (CFO, italics mine)

Colors play, again, a role for identifying risky events (e.g. “a plague” = a darkest pixel) or situations without risk (e.g. productive areas without plague = a lighter pixel). Varied hues give form to an image, through which analysts control, monitor and value lands in different parts of the Brazilian territory. In this case the aesthetics of risk is more dynamic, because such images are linked to the data fed into the software, which the company periodically re-assesses and realigns. Satellite images are inaccurate, but nonetheless useful to give shape to risk images and objects⁶⁶. For example, with regard to the climate variable, the business has a long-term contract with a researcher in order to update their database and re-calibrate their model.

...at least every six months I review my long-term projections. And that takes into account what he says [the climate expert]. So by the time I'm going to calibrate my model that will tell me, look, I'm going to put a layer of images...actually behind these images there are data, right, numbers that are actually, in black...it seems a grayscale, but every shade of gray is a number, so black is ten, nine...is...

⁶⁵ The transubstantiation of the imaginary signification of risk, enabled by this technique, unifies epistemology with ontology. That is, the events that these practitioners transform into knowledge about risks turn to be what they believe risks are.

⁶⁶ Regarding the usefulness of inaccurate models see Millo, Y. and MacKenzie, D. (2009) ‘The usefulness of inaccurate models: Towards an understanding of the emergence of financial risk management’, *Accounting, Organizations and Society* 34: 638-653.

there is a lot number there. You know that cotton needs a certain altitude, certain temperature, certain type of soil, and certain level of rainfall during the year, you put it, not an equation as we know in Excel or programming or arithmetic we saw in school, this is behind the equation, but it is translated into images. Then you put the image, layers of declivity, of altitude, of temperature, of rain and then the result is, for example, a gray area with a black area around it. This grey area might be cotton, for example. The research of this professor tells me how I calibrate my model, because in...today it may be feasible, this grey area, but it can only be that size here...in ten years from now with this new climate variables that this guy gives me... So that farm is only viable in the next twelve years for producing cotton...twelve others, the other five, it might not be. [...] So it determines [the climate variable] ...it, it comes to restrict areas [black areas], at the same way it can make feasible potential areas [grey areas]. (CFO)

Images are anchored in databases enabling the company to quickly respond to , for example, the emergence of new technologies – new varieties of grains – or to make decisions according to climate changes impacting on the productivity of agricultural land. In terms of possible deals, the company manages to cross all the information it needs almost automatically, saying what percentage of an area can be mechanized, what events affect its productivity, what are the prospects of yield for a particular region according to historical data, and so on. Some information, however, depend on further analysis, as the analysis of certificates (i.e. chain of property ownership), legal analyzes, currency rate projections, commodities, analyzes of particularities of soils, etc. On the average, including these longer analyses, deals demand no longer than one month; “on site analysis, financial analysis and legal analysis we can do in two more weeks, so any deal that has a chance of happening, we can close it in less than a month”(CFO). By aggregating information over the risk objects and images produced by its logics of saying and doing risk management, risks are transformed into opportunities.

CFO: So through this process we create value, you have the information and technology that will...

Vitor: In this case risks become opportunities...

CFO: Exactly... So it has varieties in logistics, for example, it's everything okay, productivity is good...the weather is good, but the farm has very bad logistics, then the price of soybeans today is half that it was in a...let me check the PAC [Brazilian government's investment program], let's see what are the projects that the Government has in this region, a railway, a waterway, a new road can change that.

Through detailed data and a comprehensive aesthetical re-presentation of events, risk objects are re-signified as opportunities. Equations translated into images compose a map of Brazil formed by various layers of information. The conversion of concepts such as

climate, relief, boundaries, soil, conservation areas etc. into images are characteristics of what Flusser calls technical image. Technical images “translate everything into states of things” (Flusser, 2000: 16). In the case at hand, technical images synthesize events into states of things, namely, the data and information about weather, soil, vegetation, which interrelate in complex ways. The ritualization of such calculative and imaginative practice turns satellite images an appealing tool for the logics of doing risk management in this business, because these images alleviate their receivers (e.g. analysts, managers, lawyers) from thinking complexly. From this perspective, technical images exert a kind of magical fascination, like the enthusiasm showed by the CFO when presenting to me this tool during my visits.

It must be noted that the imperfections and transitory role of such images is acknowledged by analysts within Land, who periodically review their models. Nonetheless, despite recognizing that, this information is seen as critical to action and decision making within the organization, and also decisive in order to conduct subsequent analyzes to particular investment opportunities. Thus, such images help to put in practice a control at distance comprising a set of interrelated layers addressing different issues or events.

CFO: ...these are the meteorological stations in the country [he points to areas in a map in his screen], if you buy a farm in *Mato Grosso*, look how ridiculous is the number of meteorological stations there, you don't have information about when it will rain in the state of *Mato Grosso*, the largest soybean producer in the country. So the risk of buying a property...the climate risk of buying a property...you go there...today it's pretty good, but just because the guy decided to sell it in a good year, and the chance of not raining is too big... do you realize how many miles are in here? It must have, no joke, it has about five hundred kilometers from one station to another here. Gee! Within twenty kilometers the amount of rain on a farm may vary, in five kilometers it's possible to have a variation. More than five hundred...five hundred is farther than here and Rio de Janeiro, right? Five hundred you will...you go from Curitiba, which is five hundred down here from São Paulo, right? And you see the climate changes in all regions, so you need a quite large technical intelligence to minimize this risk here. [...] Type of soil, look at the amount of types of soil you have in this country, right? “Ow, Mato Grosso is good!”. It depends, Mato Grosso is good!? Gee! Take a look in the mosaic of soil here, there are gaps in the map, you see? Thirteen percent of São Paulo has...so here are...at an exploratory level, it's been done in the seventies... this map was made by hard work and guts, with people drawing it by hand...so, you have a lot of imprecision in it. There wasn't any satellite reading the type of soil, satellite doesn't dig there to see what it is; it was the Army that opened these places with axes for mapping them. And I doubt they opened everything, right? This here is how much we have of Indian reserves in the country [he adds another layer]. Then, just to give you an idea, the country is beginning constrain areas you cannot deal because they are indigenous areas; then you add preservation areas, then settlements...

Vitor: Wow, is there that much of settlements?

C: Yeah...It's quite scattered...then you add a border area and the Amazon, and a track of hundred and fifty kilometers that you cannot buy land without authorization of the Government, as a matter of national security. The problem is that here in the South... there's a legal fight... because in *Rio Grande do Sul*, you take one hundred and fifty from here and here along the Ocean, and nothing remains of the state [part of Brazil where the east west extension is shorter]. So the rule in the South is a bit different, here in *Rio Grande do Sul*.

Images are incomplete too, as the excerpt above shows. Yet, the layers of information and images provide management with something to work with. This imperfection is inherent to the valuation and control process of land investment, so information needs to be continually checked and updated. That is precisely the reason why risk as uncertainty must incarnate into the routines and practices within the enterprise, while at the same time, by putting these practices in action, risk as an imaginary signification remains deferred in their discourse. Through these processes events are converted into risk objects (e.g. the problem with scattered meteorological stations, soil analysis, etc.). These objects, in turn, anchor the practices of continuously gathering and interpreting information in order to mitigate uncertainties.

From the perspective of the CFO, such routines of analysis are based on a quite strict technical procedure, but he admits an incapability to deal with future uncertainties in a definite way⁶⁷. There is also another aspect that seems to intertwine within the magical fascination on images and the notion of technical analyses. Asking the CFO if such analyzes involve subjective judgments he confirms his understanding of the process as predominantly technical, but says that he feels that certain “subjectivities” could influence important investment decisions.

...we made a valuation of a soy farm, which had great potential, which had a price more or less in accordance with the market, it'd gave us a return we considered mediocre, a return on the average, even a bit below it in a few more conservative scenarios, right. And we didn't close the deal; we set off for an attempt of more evident returns. However, this deal, it had as a leaseholder a major business partner, who is a company we would have much benefit working together with in the future, but this is one thing that...you should have had already the opportunity to experience it, for example, real option, it's a thing that... doing business with that operator in soy could open up some opportunities in the future and being with these guys could leave us in an interesting position in the future to negotiate other areas, but it's difficult to put it in a model and quantify it.

⁶⁷ In his words: “It's a very scientific analysis...we know we'll make mistakes because these are assumptions, these are commodities, markets, things that depend on variables that don't...”

When exclusively tied to technical analysis, opportunities may get lost. Here we see the negative effect of narrowing down the signification of risk. Technical images, be it the satellite images or any other form of trimming conceptual complexities, can sometimes lead to a kind of idolatry that hinder critical thinking and conceptual understanding behind issues and problems involved in situations beyond routine (Flusser, 2000). From this perspective, risk management can bear a dangerous automatism⁶⁸, as it seems to be the case with the idolatry underpinning the models that helped to create the financial crisis of 2007-08. The point is that risk as uncertainty enables heterogeneous actions in the practical field, actions enabled by ways of seeing and not seeing constrained by the identitary logics of risk in place. That is, the signification of risk as uncertainty is highly interdependent with the routines elaborated through language and technique to deal with uncertainties.

What is more, the projective side of risk as uncertainty points to something that by definition aims towards the future, making managers to act in the present through an imaginative interplay between past narratives and future possibilities. For example, the valuation of land depends on expectations that must be anticipated. This projective role of risk was already described by Kant in his Critique of Judgment as the ‘free-play’ of imagination, a projective role involves “from the simple schematization of my [anyone’s] projects, through the figurability of my [anyone’s] desires, to the imaginative variations of the ‘I can’ [possibilities]” (Ricoeur, 1994). The free-play of imagination is arguably a part of risk when it bears the general meaning of danger (see Douglas, 1992; Douglas and Wildavsky, 1982). Thus, the imaginary signification of risk imprints modes of seeing and doing in the practical world that highly depends on a desired future. The dangers of incurring in a risk management of nothing are then evident. Seeing risk management as pure technical activity, only masquerades the moral and political biases influencing perception. I shall return to this argument in the next chapter; for now I keep with the narrative of risk in Land.

⁶⁸ See, for example, Power, M. (2009) ‘The risk management of nothing’, *Accounting, Organizations and Society* 34: 849-855.

As previously argued, the imaginary signification of risk as uncertainty goes beyond routines and risk objects, that is, beyond its logical counterparts, because the signification lengthens itself advancing to new territories. In an interlude of 8 months, between my first and second visit, the CFO said he had the idea of implementing a new type of risk control, a control so far not systematically articulated within his business, specifically, and the company (the Group) more generally. The CFO is putting in place some ideas to develop practices and tools to assess and control reputational risk, of which the details I shall present in the next section.

Reputational Risk: The signification folds back upon itself

Michael Power argues that reputation “has turned the concept of materiality upside down” in organizations, because through it “financially immaterial events may have huge potential significance” (Power, 2004b: 32). According to his view, reputational risks are secondary risks which organizations face while complying with stakeholders, regulators, public bodies, government, etc. Here we see a kind of distortion of the aims of risk management, because instead of tackling primary issues (e.g. financial losses; accidents; pollution), organizations end up giving more importance to public opinion. True, the materiality imposed on companies by immaterial events is ruthless. Organizations find themselves increasingly exposed to public opinion, and a negative opinion reflects, in many cases, negatively into a firm’s balances. Examples of financial losses soured by companies due to problems with reputation make the adherence to this new facet of risk almost inevitable.

In Land, reputation makes the signification of risk to fold over itself, boosting the risk management’s apparatus to deal with uncertainties. Unpredictable⁶⁹ events along with undesired consequences enlarge the notion of risk as uncertainty, which thereby incorporates concepts stemming from domains beyond the routines already in place at

⁶⁹ Ulrich Beck uses the expression unpredictable consumers to underscore the increasing power public perception has in defining liability chains (see, Slater, D. and Ritzer, G. (2001) ‘Interview with Ulrich Beck’, *Journal of Consumer Culture* 1:(2): 261-277.). This term earned prominence in media headlines too (see, for example, “The rise of the unpredictable consumer”, *The New York Times*, 27 May, 2008).

Land. Reputation also enables correlations between investments in agricultural real estate and the image of the Group. And through this correlation management at Land considers the idea to project this signification to other businesses units within the Group.

Three groups of elements contributing to this process were identified: a) practical examples experienced in deals with lands; b) analogies of recognized cases of damage to corporate images and its correlation with the image of the organization itself; c) concepts and instruments borrowed from academic discourse. Let's see the first one.

For example, to invest in areas closer to the Amazon biome...we went through a very clear example of it, now, in October, when we had an excellent property to buy, near to, in the state of Mato Grosso, above Diamantina, which is technically Amazon biome; which was a property that was deforested in the eighties, before the constraints... a hundred percent, a hundred percent... eighty percent productive, sixty-five percent productive and thirty-five percent of reserve...the documents were perfect, dominion was perfect, ownership, all those other risks I told you, perfect, but ... it was Amazon biome. The Amazon biome, it has a moral issue, an emotional issue that involves many things and it's a huge matter of reputation. So, let's say, "Oh, you invest in the Amazon!". I mean...I mean, we have European investors this year, right? I don't know if I told this back then in March, and they said: "Look, I don't care if it's all right [legally], because I don't want to be seen as an investor that supports investment in Amazonia". "But I'm not deforesting the Amazon, the farm's already there, it's technically a biome, but it's a productive farm. One hundred percent legal in the environmental agencies: IBAMA, INCRA, everywhere". "No, I don't want, because I have a reputation, there is the name Amazonia there". So this point...it's a, it's a risk that we started to... and we didn't buy it, ok. We didn't, did not make the deal. [...] We received an express order from our investors not to do it, with an additional complement that we must pay more attention to this type of risk. (CFO)

"Moral" and "emotional" constraints hamper a deal considered perfect according to technical analysis. Management in Land receives an "express order" to not carry out the deal, and the issue takes broader significance from which reputation comes in. Compliance with legal and economic aspects is not the main point at play. Through other significations the practice of investing in land gets in contact with the notion of reputational risk, whereby risk as uncertainty is fed by global discourses (e.g. social responsibility, environment, sustainability). Recognition of reputation as an issue deserving attention, and therefore the construction of its identity, occurs by analogies.

...an *attack* by an activist, for example, an NGO that... and examples that I put there are, for example, Shell Germany was *attacked* because Greenpeace was dissatisfied with the type of disposal that Shell UK would give to a storage tank. This is a classic reputational risk, why? Disposal would be the sink of this steel tank, which would be eroded in the ocean, without generating waste because it was empty, with some environmental impact, but, but minimal, rather than bringing it to shore, with the risk of it falling apart, of bringing pollution to the coast, the risk of people dismounting and carrying all that iron, it would cost much more. In addition that it was costly, it was more dangerous, right? So...

Greenpeace has made an *attack* on Germany Shell because Shell England had popular support to do this. People were in line with this type of disposal. It was more efficient, cheaper, it wouldn't bring garbage to the shore and the oil culture is much stronger in England than in Germany. In Germany, on the other hand, one of the most serious things, you must know the culture, is recycling. Then they went to *attack* on it and ... and the result was, the phone of the CEO of Shell Germany rang and he found out that his revenues fell forty percent within a month, because there was a guy from Greenpeace chained to a gas station, covered with oil, and on the front page of the newspaper, [saying] that Shell doesn't recycle, that Shell would sink a tank of don't know how much tons of metal...so it's a *precise attack, unerring*, where it would really cause the major impact, and ... as this example, there are others who I'll quickly show here, there are several examples of situations in which not only the Land as company of investment in lands, but the Group, as a company of energy and infrastructure, *can be targeted* to reach other causes. (CFO Land, italics mine)

The parts in italics highlight the metaphor of "war" used to signify reputational issues. Examples of companies "under attack" cause the mirroring of the practices of Land with these cases, and along with this the CFO reflects the notion of reputation to the whole conglomerate. Here the notion of reputational risk gives a looping; for while identified in the context of the business Land it now crosses the entire company. In the examples commented by the CFO, well known cases in the literature of reputational risk, the imaginary of risk play with notions of bad and good guys.

...there is another example, where the Citibank was used as, as, as...a victim, actually a villain, right, at the end of the day, to get to the exploration of child labor in Asia. Because someone said, "Look, a company that buys toys made here got or had a loan account at the Citi". How would they find that out? Because if you hit the poor guy over there...the poor devil there is too little...the example of slave labor, using slave labor that was erroneously attributed to the Group [...]. You should have talked with the staff of the Group about it. It was a, it was *an attack*, right. (CFO)

The hesitation in assigning the role of a villain or a victim to the Citibank shows that boundaries between these are not clear, but rather constructed through the narrative process. Such narratives influence their self-understanding and by looking at themselves amplifying risk by including reputation into its substance (e.g. Kaspersen et al., 1988), in this case by bringing the notions of corporate image and economic performance closer to each other. These stories imprint a morality that can be summarized as follows: "you're going to lose money if you don't care about these issues". However, there is an interdependent relationship between social demands imposed by public perception, the practical aspects undertaken within the business, and the economic reasoning. These three components are loosely inter-connected, once unexpected demands outside the company

might impact in the practical aspects and economic reasoning cannot be readily reckoned by the organization.

In addition to practical examples within their business and analogies with stories of reputational risk issues by other companies, the academic discourse adds up to the interrelationship between social context, practical aspects and economic reasoning. The CFO says that the idea of structuring a systematic reputational risk management arose from his contact with the subject in an MBA course held in a distinguished business school.

...I'm developing, this thing that is my initiative, a project to create systems of reputational risk management. [...] I had an intensive course in this topic in my MBA with a professor called Daniel Diermeier, I don't know if you know this guy... I was just now with his number here... look, this guy here, I'm even with the material I was showing to my people. Within a week we saw a lot of things...and he has systems for managing reputational risk, that is to say, how do I measure the severity of an issue with the social importance of it, how do I measure a... what kind of media covers certain types of issues. Let me give an example, so... the issue of regulations for selling land for foreign funds. It's something that the specialized media covers but not an issue of economic value...we have to manage how this information fits in this cycle. Now, Amazonia deforestation, slave labor, these are issues going to the *Jornal Nacional* [a night news of high audience], they'll reach at lot of different types of media. Each one has an impact, either in the share price or the company's image, or in the...appetite of investors to invest more. (CFO)

Reputation as the likelihood to incur in unexpected events is constructed in the discourse. Language reinforces the identity of reputation as a risk object, which begins to gather systematic attention. Attacks, villains and victims, analogies and examples seek to account for issues beyond the realm of their own businesses experiences, as many of the comments cited have indirect relation with what the company does. From the technical point of view, the articulation of tools, in this case stemming from the academic discourse, help to build borders to what reputation actually means (i.e. "economic value" according to "impact" or "audience interest" and "social significance"). With the aim to implement a system for assessing and controlling reputational risks, the CFO brings a framework (figure 6 below) which he got in contact during his MBA. To sell his idea within the company, this tool was presented in a discussion with executives from other business and managers of the corporate level of the Group.



Fig. 6: Reputational risk assessment's framework. Source: Based on Daniel Diermeier (2011), *Reputation Rules: Strategies for Building Your Company's Most Valuable Asset*.

The tool contributes new demarcations of the crossings between risk and reputation, which are brought in contrast with the practices of Land. The framework intends, thus, to guide actions on reputational risk assessment, or in the words of CFO: it is “basically a way for you [they] to try to predict how to react when it happens and how it happens”. So, there is a clear understanding by the CFO, that totally predicting and controlling such “attacks” is impossible, yet the concepts advanced by the framework contribute to signify reputation according to different types of events and the measures they must take in case of “attacks”.

The CFO makes a presentation of this tool for analysts, business executives, and other managers of the Group, highlighting the following goals for implementing it:

- To apply professional and widely adopted frames/practices to Land's and Group's strategy for reputation.
 - Group's and Land's communication and sustainability strategies can benefit from the following frames, to the extent that those frames have been put into practice in global companies, who faced, or were exposed to serious reputational crisis.

- As the disclosure on Land's portfolio (consolidation) increases, and given the importance of land ownership in Brazil, Land's management considers Land and the Group as potential targets to media exposures and activists' attacks.
- Therefore it is recommended the adoption or at least the analysis of the current value chain and business environment from the perspective of building, maintaining and protecting reputation.
- A monitoring-prevention-reaction system, to detect and respond to threats/attacks is also recommended in this project.

In this same presentation issues regarding the daily activities taken within Land were categorized in the framework. In the category "simple reporting" was included the following points: family agriculture versus large land owners; land ownership by foreigners; land grabbing. In the category "mass market coverage" was included: slave-like labor conditions; deforestation. And in the category "extensive reporting" was included: water and air pollution. By using this tool, subjects that were loosely related in the discourse and faintly related to the company's image, began to gain systematic attention. In addition to this tool, the CFO has presented to his team another tool called "trust radar".

CFO: ... here there are a few more things, but this *trust radar* is how to beat the four, the four points at the time of a crisis...then you have to build these four, if you fail in one of these... is ... this has to be show when facing a crisis. And then I.I plotted some issues of Land in this chart, right? So for example, *simple reporting* are more technical things, ok? It's exactly the example I gave here, right? [related to other risks]. What is *mass maket*? It's slave labor-like condition, deforestation, this one is already a...there's always something here...if you have a victim here, for example, man, the poor guy goes to TV saying that that sugarcane plantation is where the Indian smiled for the first time in life...and if we have a victim, we have a villain, then you came to this point here [Drama in the framework].

Vitor: it escalates then huh?

CFO: Exactly...so...and there are NGOs, there are people willing to attack to bring things to this point here. It's... so here is a representation of how Land and the Group...more Land, are behaving in this *trust radar* here, right? We're building, we're building a *buffer of trust* here; this is something rather subjective, but...this was my judgment which I'm refining with the president, with Corine, who is the head of communication, and who's responsible for sustainability in the Group, right? We're refining these...

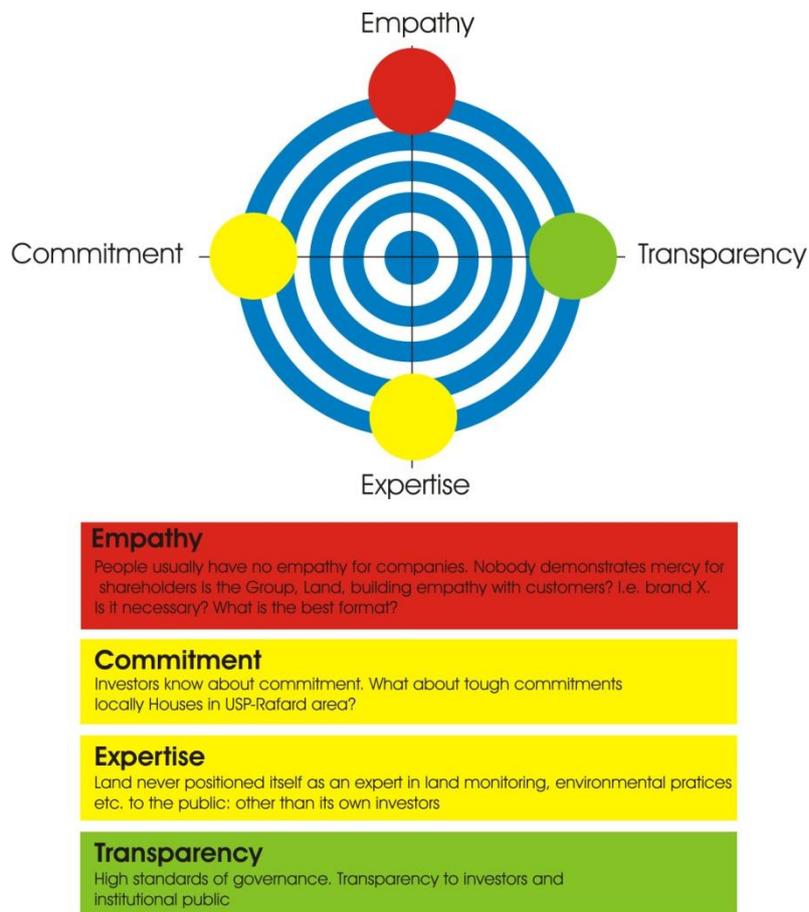


Fig.7: Trust radar. Source: A presentation based on Daniel Diermeier (2011) with the title: *What are the Group and Land doing about the trust radar?*

Reputational risk assessment tools serve to create ensembles of threatening events. We see again the role of the technical image in the construction of an identity of reputational risk, the technical image as a translator of experience, or as a re-presentation how events can be re-signified and, therefore, gather a renewed importance. The tools presented by the CFO are not only ways of doing risk management, but central mechanisms of imprinting a language of reputational risk whereby new terms start to be part of the vocabulary of this organization (e.g. drama, mass market, simple reporting, trust radar, buffer of trust, etc.).

There is a last important movement that I observed in the construction of reputation as a risk object, which shows the expansionist aspect of the imaginary signification of risk as uncertainty and related risk management practices. After gaining visibility through practical examples, analogies, meetings and taking into itself significations

from a broader social context, risk as reputation projected itself to other businesses within the Group. According to the CFO, the idea of developing a reputational risk assessment system was received by other executives with enthusiasm and has potential to be implemented in other businesses within the conglomerate.

So, we have decision making here, that's for sure. There are people making decisions and acting here. And with wide open eyes...but we don't have intelligence behind it, to analyze what is the severity and what is the best way to answer to such a thing. [...] when someone comes here...today it's not going to be here [in the matrix] because nobody took it and said "Look, I'll throw it here and here". This is a pilot, we go, and we're already in phase of...so this is a draft (?), so we're in the process of implementing it in the Land and if it works here, after we have a more practical case, for example, putting names in these boxes here, naming these systems here...creating some processes here, we'll have a reputational risk system, actually a reputational risk assessment, okay? ...and we have already by the way, the business X right, that works with the brand Y, interested in putting something like this there. (CFO)

Reputational risk begins to diffuse within the corporation in a kind of pirouette, because it acquired significance through a business that did not have much relevance in financial terms in the analysis of managers at the risk committee of the Group.

Vitor: In this case it starts crossing... in my view, I don't know if you share this view too, it begins to cross the entire company, right?

CFO: I agree. I think it really crosses. I think, I think it has peculiarities of each business, right? So for example, business of lands... which I think is the example of the secondary targeting there...it's the Land which goes to newspaper reports, but the Group and the Foreign are prone to go. It ...crosses and yes, like you said, I think that is relevant because... if I am, if I were an activist and were going to make a, intelligent, I were going to make an attack...and when I say activists these are NGOs, the guys who want to make noise, they are intelligent, they have financial and intellectual resources to make attacks that are effective...I would go to the news saying that the Group had invested in land in the place X to attack another investor... a farmer who cut the forest or whoever, don't know, it wasn't even the Group...But, the Group is closer to it, so the Group is investing together...but it's not investing with the guy...“No, together because it's a neighbor”. You know? I would attack the Group, if I were a guy like that, smart, and they are. So, it does permeate the company. It permeates because I can use, I Land can be used as a target for the Group. The Group, in the port can be attacked, for example, Eike Batista is in the news today because one of his investments can cause an excess of salt and desertification on an area in Rio de Janeiro. It's in the newspaper today this argument. This is really bad, because from there on to someone talks that investments of Logistics [another business unit of the Group] in the port of Santos can also cause similar damage is a tiny shortcut, and Logistics is the Group which is the Land and my investor will be concerned with his investment in the Land because Logistics was attacked...go away! It was not you know [he knocks on the wooden part of his table⁷⁰].

To what extent the unfolding of the implementation of reputational risk management in Land will influence the repertoire of meanings of risk at the corporate level is a matter

⁷⁰ Knocking on the wood three times is a superstition that supposedly brings luck. This funny gesture shows that despite all the rational apparatuses used to deal with such risky events, some inner sense of magical thinking remains intact in the CFO's imagination.

for further research. At the time of writing, reputation is a sub-category of the category Governance, in the Dictionary of Corporative Risks of the conglomerate (Appendix). If the *logics of saying and doing reputational risk management* diffuse to other businesses, it is likely that this subcategory will gather more importance, or perhaps it will even become a separate category with its own subcategories. For now, however, this view remains in the realm of speculation.

With that I finish the narrative of risk management in the Brazilian conglomerate called here Group. Three perspectives of risk as uncertainty and its objects were addressed: the corporate level, the business called Energy and the business unit Land. In the next chapter I shall present the main findings of these cases in relation to research on risk management and organization studies. I shall also present in more details the main mechanisms of the imaginary institution of risk management. Before that, I offer some concluding comments in the next section.

Taking stock: Dramatis personae, asymmetries and action

Some asymmetries in the narrative previously presented are important to understanding the imaginary institution of risk management in the Group. Such asymmetries are not dysfunctions, but something inherent to organizing processes more generally (see, for example, Brunsson, 1982; Brunsson, 2002). Indeed, asymmetries can be identified in many aspects of life. In design or architecture, nature or biology, asymmetries can be seen as a trait of beauty, elegance, softness, or oddness, but most important, they bring forth uniqueness when taken in conjunct with other symmetrical traits. In the cases presented they serve to accommodate the ambiguities regarding risk as uncertainty and the roles of each actor involved therein. They point to the uniqueness of each case in terms of risk management. What is more, they underscore the elusive and powerful nature of risk as uncertainty: the imaginary signification around which risk objects and material practices are established in the company; the institutional substance through which different events

are converted into risk expanding its very horizon of action; and finally, the signification by which managers establish commitments of action.

In this section, I want to sketch the main meta-themes or logics around which the signification of risk as uncertainty is articulated within the conglomerate and present their peculiarities and asymmetries. These themes or logics are the following: risk management as the exploration and exploitation of new uncertainties; risk management as a cultural collusion; and risk management as a techno-logical production of images.

Risk management as the exploration and exploitation of new uncertainties

The first theme is extracted from the corporate level of the Group. As it was espoused, the question of whether the company is diversifying risks, or if it is going after opportunities and then risks are becoming diversified remains acute. A way of addressing this conundrum is through Frank Knight formulation of the entrepreneurial behavior vis-à-vis the notion of risk as uncertainty. Knight argues that “probabilistic knowledge leaves no place for the entrepreneur, and as a consequence, no place for profit”, because profit is not susceptible to measure *ex ante* (in Stark, 2000: 3). In other words, an entrepreneur is “not rewarded for risk-taking but, instead, is rewarded for an ability to exploit uncertainty” (ibid.). From this perspective, the acquisitions and measures undertaken by the Group to change his position as a sugar and ethanol producer to a global player in the energy and infra-structure sector are manifestations of an entrepreneurial spirit, whereby managing risks appear only in a secondary phase and in which managers must learn with new businesses that have to be integrated.

This is especially true if we look how risk management was introduced in the company. In terms of compliance, risk management came in through the backdoor, just after the founder had put in place his plan for raising funds in the US stock markets. Indeed, according to the controller there was management of risks before, but a practice that was straightly narrowed to the main variables of their product at that moment – sugar prices and currency – not having extensive effects in the whole company in terms of organizing and controllership. From the strategic point of view, risk management derives,

therefore, from the quest for opportunities headed by the founder himself. These quests started because there were risks of not changing (i.e. the sector viewed as a rollercoaster; risks of a takeover; high volatility of sugar prices), but which instead of disappearing, became systematized and internalized within the company at the moment new businesses came in and the Group start 'walking through its value chain'. Here asymmetries emerge. While market analysts regard the acquisitions of the conglomerate as risky, insiders (i.e. controller, treasurer and the head of GRC) consider the measures as planned actions, and justify them by the success that the company has achieved in the integration of new businesses and the performance of the company in the stock market. In fact, critiques of market analysts do not prevent the company to perform maneuvers considered risky by market analysts. On the contrary, the entrepreneur experimentalism pushes the company to explore and exploit new uncertainties, instead of the already well know instabilities of the sector.

To the extent that the company displaces the known risks, other events must be converted and represented as risk at the risk committee level. The increasing number of events coming along the opportunities grabbed by the Group is paradoxically addressed by risk training and the alignment of executives in terms of risk management (e.g. interviews with managers of business units; risk thinking "becomes part of the DNA of the executive"), which leads other executives to think events through the language of risk, expanding thereby, the content of the signification of risk. Risks can be anything and, according to their view, they abound in the organization (e.g. the controller comments about business lines dealing with risks naturally; the manager of GRC talking about thousands of risks). Yet, risks must be tackled in a pragmatic way, a demand coming from the CEO. With a pragmatic view too, the treasurer understands risks as a problem of cash and the economic relevance of events turns risks discussed by the risk committee a matter of big figures. Here I shall take a cynical stance.

On the one side, if the risk management team uncritically accepts what the CEO asks in terms of pragmatism, they will likely end up with an automatized approach to risks, and risk management might become a simply checkbox routine (see, for example, Power, 2009). Following such narrow view, risks are the events defined according to a particular

threshold, and, then, other events, which cannot be promptly measured but which might have impact in the long-term, can be overlooked. On the other side, if managers are unable to narrow down the ever increasing events coming in with regard to risk management, they may end up with the risk management of everything, an equally problematic issue. Such a conundrum underscores the elusiveness of managing uncertainty putting in check, at some moments, the very relevance of risk management.

Apart from claims of relevance, what happens in that particular organization is that risk objects are in fact created by management, objects that circulate within the company, through trainings, discussions and informal talking (e.g. risk committee, breakfast with the president), documents and codes (e.g. COSO, risk policy, risk dictionary), tools and interventions. Uncertainty cannot be completely eliminated, however. On the contrary, the imaginary of risk expands swallowing everything that can be described as risk, because risk objects and material practices incarnate the very mechanisms of producing new identities for risk as uncertainty. From this angle, it is necessary to reformulate the insights of Knight about entrepreneurship, as Stark has claimed. Stark redefines entrepreneurship as *“the ability to keep multiple orders of worth in play and to exploit the resulting ambiguity”* (Stark, 2000: 4 emphasis in the original). The Brazilian conglomerate can be defined as an entrepreneur exploiting the ambiguities stemming from opportunities it looks after. But before exploiting new businesses, the company must explore opportunities in order to leave behind the old uncertainties of the sugar and ethanol sector. Hence, on the one side, the company looks thoroughly after opportunities that can give it more cash stability and that can better posit it according to its new strategic interests. On the other side, this changing process inserts performance as a relevant element of its identity. From the corporate level perspective, risk management can be defined as the practices used to explore and exploit new uncertainties.

Risk management as a cultural collusion

In the business Energy the collision of three cultures posits great challenges of integration. According to collected testimonials, the resulting culture is not just an overlap

of the already well established individual cultures. On the contrary, the result is a culture still in formation. To form a new culture demands, however, that the internal controls team actively campaigns for a cultural transformation in which risk and control comes to the center of stage. Since the displacement of risks of sugar prices and currency from the corporate level of the Group to Energy, risk management has gained systematicity and traction within this branch. At Energy, the internal controls team devises tools and codes, processes and routines, which put them in constant contact with the various areas of the company. These interfaces are established with the aim of opening channels of communication between the internal control team and other areas (e.g. leader of initiatives in the team and focal points in the areas). Risk emerges, according to the testimonials, as substitute for control, because through it they can better prioritize activities. Thus, risk management is held more economically viable in terms of implementation of mechanisms of control (i.e. first check the risks and then implement control). Risk as uncertainty serves for carving logics of risk language and action into material objects (e.g. risk matrices, SOx routines, business incident reports, business continuity plan, learning with controls, etc.). What is more, risk as an imaginary signification inserts a psychology of alertness (e.g. areas communicate more often incidents, which are screened by an analyst).

The discourse promoted by the internal controls regarding risk management is, however, asymmetrical with their praxis. Judging by the whole bunch of activities undertaken at the end of the day those managers and analysts indeed do control, even if they use risk language to do it. As matter of fact, this is one of the explicit goals of the internal control department (i.e. “our strategy is to make that a control mindset will be shared as soon as possible within the organization”). Hence, those practices of risk management are not only a question of implementing routines and indicators, but of creating a culture in which risk and control actually intertwine in the discourse. And they do that by appealing for other executive’s imagination. I remember a video the manager Bob showed me, which transmits in vivid images this desired way-of-feeling control pursued by the team. It is an advertisement of a famous tire company, in which a whole bunch of tires roll down a desert landscape smashing up deadwood, crossing violently water puddles, riding fast uphill, and then again downhill, and suddenly flying over a cliff.

The camera shows the tires falling, it freezes for a second, and moves towards another angle from which we can see a single tire stopped at the margins of the cliff. A message shows up in the screen: “Power is nothing without control”. Bob said that this video is used in meetings and training sections as a way of sensitizing people about the importance of control. This example synthesizes how managers play with the imaginary signification of risk, which is tied to representations of strategy (i.e. running after a goal) and control (i.e. being able to stop).

Another example, which shows that risk and control are closely intertwined in their culture and discourse, comes from an observation I heard in a meeting. The manager Bob questioned one of his analysts about how the visit of an external auditor was. He wanted to know if the external auditor had found something deviant; the analyst said the auditor was young and ok, but still had to finish his work. Bob has then strongly reinforced to this analyst the need of the auditor presenting something new, something they didn’t already know. Such pressures for ‘finding something’, that is, the risks of not finding risks, seems to be present in the audit companies as well. In a conversation I had with a colleague doing an ethnography research inside an audit firm in Brazil, he confided to me that this is actually one of the main pressures within the projects auditors must undertake. Hence the action compromises between external auditing and internal controls mutually reinforce the signification of risk in their discourse.

Saying that internal controls do control is hardly new news. The main responsibility of an internal controls department is in fact doing control. The point is that, at Energy, they use the language and imaginary of risk to do this. The imaginary signification of risk functions as a bridge between ideals of control and the different practices of management because it borrows from the rhetoric of strategy, which is most likely to be absorbed by the enterprise as a whole. Thus, at Energy control turns into risk (e.g. naming control matrices as risk matrices), and risk as uncertainty becomes the signification through which control is accepted by other areas and managed by the internal controls team. Through a cultural collusion the internal controls department subtly introduces mechanisms of control and slowly crafts a new culture in this business, a culture of risk and control.

Risk management as a techno-logical production of images

The word techno derives from the Greek term *tekhne*, which means art, skill, craft, method, system. Its root *tek* means shape, or make. Techno-logy pervades the three cases presented in the narrative of risk, once different methods and systems are used by those practitioners to create risk objects according to their respective local demands. The technological production of images, however, acquires more weight in the constitution of risk management in the business Land. This business carries into its very seeds the notion of risk as uncertainty. The idea of creating an enterprise of agricultural investment real estate stem from the wishes to generate synergy within the conglomerate, an opportunity envisioned from the knowledge and technology already in place used to monitor the Group's sugarcane plantations. Land contributes to bringing cash stability for the Group, and even though this contribution is small compared with other businesses in the portfolio, this contribution steadily increases. But more than that, this business offers precious information about the Brazilian territory and its opportunities of agricultural investment. And here we see risk management as an exploration of new uncertainties trickling down into this business. Land is one of the practical effects taken by the Group to change its identity, a changing process to surpass the already know uncertainties by embracing new ones.

In the words of the CFO, Land results from the Group "walking throughout its value chain", and it is through this movement that risk as uncertainty gains traction and systematicity. At Land, risk management is, therefore, not the effect of compliance; it is not the result of pressures from the top management too. Risk management can be viewed in Land as the risks that must be managed, in the words of the controller, in a "natural way". This shows precisely the expansionist mode of being of the imaginary signification of risk. By revolving around the notion of risk as uncertainty the practices undertaken by Land result on systematic conversions of events into risk objects (e.g. ownership property chains, domain, climatic change). But also, by continuously gathering information and setting particular logics of handling events and situations, this enterprise strives to transforms risk objects into opportunities (e.g. when new technologies of crops can open

new areas of potential investment in the satellites images; or when the risk of prohibition of foreign investment turned to be an opportunity). Technology intertwines with the imaginary of risk. By mapping the Brazilian territory, analysts and managers enhance which areas have more problems than others and which deserve a particular action (e.g. small farms need a proactive monitoring; big areas can be controlled at distance), and which issues have to be included in an analysis of a particular deal. Issues are ordered and routinized, and become part of the repertoire of managing risks at Land. The many conversions of events into risks unifies epistemology with ontology, that is, the events these practitioners transform into knowledge about risks, turn to be what they believe risks are. Two points stem from this observation.

On the one side, risk assessment results from a sensemaking process related to the production of technical images (e.g. satellite images, different layers, gray and black pixels, borders delimitating the territory and possibilities of investment). In this case, the signifying process is retrospective, because managers act and afterwards make sense of what they see in their screens or elaborate on the data they have collected. And from this perspective, the imagination at play is that of reproduction. On the other side, satellite images offer a projective apprehension of risk, because it is through such images that managers generate their expectations of what is possible or not in terms of investment. This happens because images produced are imperfect, and demand supplementary actions. The imagination at play here is of a critical kind (e.g. "...look at the amount of types of soil you have in this country, right? "Ow, Mato Grosso is good!". It depends, Mato Grosso is good!? Gee! Take a look in the mosaic of soil here, there are gaps in the map, you see?"... There wasn't any satellite reading the type of soil, satellite doesn't dig there to see what it is; it was the Army that opened these places with axes for mapping them. And I doubt they opened everything, right?"). Risk as uncertainty serves, thus, to accommodate such imperfections, like a needle stuck in the skin, remembering those managers to collect reliable information that can change the odds.

The techno-logical production of images at Land is what enables those practitioners to realize a control at distance. By ordering images in a logical relationship opportunities and risks emerge. Risk management is then the practice of shaping and making such

images available (e.g. “this is not information that you can download, you have tabulate it, *to literally build it*” CFO). The logics giving identity to risks at Land cannot, however, completely contain the imaginary of risk as uncertainty, which expands and incorporates reputation as a novel issue deserving attention and systematicity. After this new substantiation of risk, that is, risk as reputation, technique comes again into play in order to enable managers to create new risks objects and language. Through this re-presentation of risk the conglomerate is seen then as a potential ‘target of attacks’, and therefore, risk as reputation is likely to become more comprehensively controlled within the conglomerate as a whole.

The three cases presented are connected by the signification of risk as uncertainty. Their uniqueness and asymmetries regarding risk management shows precisely the displacement of risk by its own products that underscore what Castoriadis meant by the instituting imaginary as a contraposition to the instituted imaginary. That is, the logics of saying and doing risk in the three cases cannot hold the self-expansion and self-reforming aspect of the imaginary institution of risk, which occurs through the very practices put in place to deal with risks. However, by saying that the imaginary institution of risk has a self-expansionist and self-reformist mode of being, I am not saying that managers are engaged in the risk management of everything or being colonized by risk (see Power, 2004b; Rothstein et al., 2006). Rather, by stressing the imaginary dimension of risk management it is possible to see the productive role of imagination and the imaginary signification of risk, productive not in the sense of something good or bad, but instead that through risk other representations and practices are produced and therefore changing risk management within the company. In this respect, the three cases show the active use of the imaginary of risk according to specific purposes. Constructing performance as a core element of corporate identity, creating a culture of control, or organizing risk into images to enable a control at distance, show that those managers in the Brazilian conglomerate are engaged in imagining risks according to their local activities. The point to stress is that risk as an imaginary signification is the trigger of series of actions in the different levels observed. Through this signification actors channel the opportunities, constructing their

risk objects and material practices accordingly, as well as reforming them when it is necessary. As O'Malley argues, uncertainty 'is to be the fluid art of the possible. It involves techniques of flexibility and adaptability' (O'Malley, 2004:5). By imaging the signification of risk (transforming it into images) managers of the Brazilian conglomerate have been colonizing their respective organizations *through* and *within* the imaginary signification of risk.

In the next chapter I will discuss this argument in detail, by presenting the findings and implications of this research according to the two fields of knowledge here addressed: risk management and organization studies. I shall also distil there the main components from the risk narrative in order to explicate the mode of being of risk management as an imaginary institution.

Chapter 5

Risk management as an imaginary institution

In the second chapter I have revisited important traditions of research, which, as I have shown, gesture towards – without theorizing about – imagination as an essential component of action and interpretation in organizations. By adopting a Castoriadian approach, I sought, then, to go beyond the implicit assumptions of imagination underpinning those traditions. I applied the ideas of Castoriadis to the study of risk management in a Brazilian conglomerate. It is possible to see in this study how the imaginary institution of risk management displaces itself by its own products at different phases of its enactment within the conglomerate. In this chapter I will distill the main components of this process, which enables me to re-describe risk management as an imaginary institution. In this vein, I shall present the implications of the findings of this thesis to the theoretical fields of risk management and organization theory.

Bearing this in mind, this chapter is organized in the following way: the first section presents a brief account of the history of risk management and the different traditions of theorizing this practice; in this same section I also present the findings of the fieldwork in contrast to theories of risk management and organization studies: in the second section I will return to the meta-theoretical generalizations, according to the Castoriadian framework, presenting the logics of saying and doing risk management in the Group; and in the third section I will flesh out the mode of being of the imaginary institution of risk management.

Back to the blackboard

This section is divided into two subsections. The first subsection presents a brief account of the history of risk management. The second reviews the different ways of theorizing risk management and positions the findings of this thesis according to them as well as to some assumptions made within organization studies.

The Contemporary History of Risk Management

The emergence of risk management is commonly described in the context of the development and transformation of corporate governance occurred in the past 20 years. Scholars observing this process offer arguments and examples that risk management is playing an increasingly central role in organizations (Power, 2007; Miller et al., 2008; Bhimani, 2009; Hutter, 2010; Huber and Scheytt, 2013). Milestones of this process can be tracked in the UK and US writings about corporate governance in the earlier 1990s. In the UK, the first document dealing with the issue was the Report of the Committee on the Financial Aspects of Corporate Governance (1992), a report produced by members of the Financial Reporting Council, the London Stock Exchange and the accountancy profession. In the US, also in 1992, one finds the publication of the Report of the Committee of Sponsoring Organizations of the Treadway Commission, titled *Internal Control – Integrated Framework* (1992). These two documents are today widely known by their nicknames, the Cadbury Report and COSO respectively⁷¹, and they laid down the ground for a series of other initiatives in corporate governance and risk management. Examples of such initiatives are the UK the Greenbury Report (1995), the Turnbull Report (ICAEW, 1999), and the Combined Code (2003), and in the US, the Sarbanes-Oxley Act (2002), which were passed after the Enron and WorldCom scandals. These writings and legal reforms put risk management at the centre stage of organizations, a practice now considered “almost synonymous with ideals of good management” (Miller et al., 2008: 943), being present in both private and public sectors (Hutter, 2010; Gephart et al., 2009) .

Carving risk management into the core of organizations assumes, however, a different bias than that of the practice of risk analysis. Up to the 1990s, risk had always been a subject of financial practice, wherein the quantitative measurement of risk is based on probability theory. A typical distinction scholars use when observing this change comes from Frank Knight (1921) definitions of risk and uncertainty. In his distinction, risk is defined as the product of calculation, whereby outcomes are describable in terms of probabilities based on historical frequency data. Indeed, probabilistic theory and practices

⁷¹ The Basel Accords had a similar role in financial regulation.

were crucial to the emergence of insurance and finance. Yet, this was not only a technology helping practitioners; this was also a discourse giving legitimacy to these very practices (Hacking, 1990; McGoun, 1995). What is more, when associated with the probability of something happening or not, and the respective magnitude of its outcome, risk can be viewed as something ‘good’ or ‘bad’. That means that the chances stemming from probability are presumably neutral and always depend on the contextual interpretation of numbers. To any extent, the probabilistic notion of risk was the dominant meaning of risk until the beginning of the nineteenth century (Lupton, 1999). Yet, at the end of the twentieth century these distinctions got lost. Today, in turn, risk means danger, threat, and/or hazard (Douglas, 1992), what bring us to the notion of uncertainty in Knight.

According to Knight, uncertainty occurs when the conditions for determining a probability calculation cannot be met. This underscores an entirely different concept of risk than the one underscored by the field of probability. In its contemporary forms, risk management has drifted away from its probabilistic core, accentuating its centrality in the managerial discourse, after a series of corporate scandals and subsequent economic turbulences had reached the public’s view. From this point on, the signification of risk increasingly came to include general issues of internal control and policy regulation (Power, 2007). And embraced by organizations in a variegated form, and crossing different boundaries and applications (e.g. strategic, operational, reputational, fraud risk,), risk management can be described as a broader framework composed of several practices of non-calculative and qualitative basis. It is worth noting, however, that even in its hard quantitative versions, such as in finance, notions of risk and probability have always been controversial. McGoun (1995), for example, shows the main shortcomings in the history of probability and how these were forgotten along time⁷². In addition, there is much agreement that the greatest uncertainties organizations face stem from low probability and high impact events, where historical data are often imperfect or even non-existent (Douglas, 1992).

⁷² According to McGoun, three important limitations of relative frequency probabilities are largely neglected by the mainstream literature in economics, finance and accounting: the reference class problem; the law-of-large-numbers problem; the estimation problem.

Regardless of these clear limitations, the signification of risk has taken a central role in managerial discourse. And even given evidence that managers do not think and decide in probabilistic terms (March and Shapira, 1987), the desire to anticipate the future populates people's minds in organizations in increasingly pervasive forms (De Goede, 2008). A direct conclusion we can draw from observing these changes in practices is that 'risk' is historically contingent. That is, risk "does not exist independently of particular practices of 'taming chance'" (Power, 2012: 6). By looking at the contemporary uses of the signification of risk throughout its history, one can arguably reason that risk management concentrates itself on the distribution of "statements about the future into a 'regime of truth'⁷³" (Power, 2012: 6). In other words, behind its pretentious scientific façade, risk management is more adequately defined as a craft than proper a science⁷⁴. Risk, in turn, is the ideal through which organizations put in place certain styles of management (Power, 2004b; Power, 2007; Power, 2012).

It is precisely for this reason that it is accurate to talk of risk management as an institution, or to be more exact, an imaginary institution. Risk management results from the enmeshing of its practices, the identities it fosters and the technologies it puts in practice, which intertwine and support the contemporary imaginary signification of risk as uncertainty. As was presented in the risk narrative, through the imaginary signification of risk, risk management materializes in idiosyncratic practices of doing and talking uncertainty. That is, risk management is a central part in the way the Group and its businesses develop and steer their different strategies. While the signification is shared among practitioners, the practices deployed by them to convert events into risks materialize according different logics: risk management as the exploration and exploitation of new uncertainties, risk management as a cultural collusion, and risk management as a techno-logical production of images. To some extent, these evidences corroborate what

⁷³ Regimes of truth means "the ensemble of rules according to which the true and the false are separated and specific effects of power are attached to the true" (Foucault, 1980, p.132, in Power, M. (2012) 'The apparatus of fraud risk', *Accounting, Organizations and Society* Article in Press.)

⁷⁴ Some practitioners agree that if operational risk management is to be considered a science, it is more correct to think of it as a social science dealing with behavior rather than simply technical factors (e.g. Blunden, T. and Thirwell, J. (2013) *Mastering Operational Risk: A Practical Guide to Understanding Operational Risk and How to Manage it*, London: Financial Times Prentice Hall.).

Michael Power has been describing as the “turning the organization inside out” (Power, 2004b: 24).

Power argues that in the mid-1980s a gradual shift from the practice of external auditing to internal control took place, a change in which internal control “has come to play a very significant external public role” and risk management has gained relevance and weight within managerial practice (Power, 2004b: 24) . He cites the Cadbury Code (1992) as an exemplary of this process, which established the responsabilization of senior executives in the activities of pre-emptive actions against misdeeds. This code was subsequently followed by a shift in the emphasis from internal control to risk-based internal control approaches. The point made by Power is that, in its risk laden guise, internal control functions as a bridge between the many regulations at the institutional level and the actions pursued inside organizations, making possible that risk events could be tracked and audited from outside regulators or according to public interest. This change can be interpreted as a form of legitimacy sought by organizations before other organizations and the market. However, as the cases presented show, in the Group risk management goes beyond its formal and legal arrangements, because ideals of managing uncertainty contaminate the most diverse aspects of organizing, and having often particular effects, as those synthesized in the meta-themes (see also Miller et al., 2008). That is, the risk narrative shows that risk-based internal controls are not simply a reflex action derived from corporate and legal codes, but an idea accepted (in some cases in part) and used actively in the transformation of that organization.

The question is then how can we theorize risk management and risk beyond the boundaries of its formal arrangements or as a simply reflex action of a structure or discourse? Research traditions explaining this phenomenon offer different answers. In the following, I will review these theories in order to posit the findings of this thesis according to them and in order to exploring how can the findings with the Brazilian conglomerate illuminate risk management theory and organization studies respectively.

Theories of risk and risk management: Findings and implications

Research on risk management is distributed into four major traditions: cognitive science approaches; socio-cultural perspectives; the normal accidents approach; and sense-making (Gephart et al., 2009). In more general terms, Lupton (1999) argues that these research traditions are grouped on an epistemological continuum between two contrasting views: the realist and the social constructionist view of risk. The former is largely dominated by cognitive science; the latter includes socio-cultural perspectives of risk, the ‘risk society’ thesis of Ulrich Beck and the structuration theory of Anthony Giddens (Beck, 1992; Giddens, 1991), Mary Douglas’ anthropological approach to risk (Douglas, 1966; Douglas and Wildavsky, 1982; Douglas, 1992), and the governmentality school of risk, an approach based on the writings of Michel Foucault. Sense-making and normal accident studies fit more or less in the weaker form of social constructionist view explained by Lupton.

The realist view is present in fields as diverse as engineering, statistics, accounting, psychology, epidemiology and economics. Underpinning their methods is the notion of risk as the product of probability calculations. Based on a modernist conceive of the world, realists see risk as an objective phenomenon, as something existing in the world demanding that actors act upon these. The ‘reality’ of risk, as the argument goes, “can be assessed by determining the ‘real’ probability of an adverse event multiplied by the true magnitude and severity of consequences. Risks are conceived to pre-exist in nature, to be identifiable through scientific measurement and calculation, and to be controlled using such knowledge” (Gephart et al., 2009: 143). Thus, cognitive research on risk addresses the mental strategies or heuristics of individuals that lead to biases in their judgments with the aim to correct it (Tversky and Kahneman, 1974). That is, while risk is seen as an objective and real event, people’s responses are understood as subjective; the former an independent variable, the latter the dependent one. Typical explanations for biases in judgments are that risks familiar to certain groups are held more “acceptable and less likely to happen than those that are perceived to be new or imposed”; that “people tend to be more risk averse when faced with gains and risk seeking when faced with losses”; that

disasters with a high level of media attention arise “more concern than those that do not, even if they are relatively rare occurrences”; that “dangers which are seen to occur in a cluster are considered more serious than an equivalent number of events that happen over a longer period of times”; and that consequences of catastrophes that occur immediately arise “more concern than those that are delayed” (Lupton, 1999: 20). Encapsulated in a modernist notion of science, the realist view of risk has indeed dominated the field for a long time.

However, the realist perspective overlooks the historical contingencies of risk previously described and the question of how hazards, threats or harmful events are socially constructed as ‘facts’. Lupton (1999) describes four shortcomings of the realist view. First, from a realist perspective of risk, individuals are treated as calculating and emotion-free actors, indeed a rather narrow view of human behavior. Second, realist research on risk, especially the hard versions adopting cognitive analysis, comprises a reduced view of human action, wherein anything outside of what is considered rational behavior is viewed as irrational, and therefore neglected by research. Third, even within the cognitive research itself there is some questioning of the possibility to assess risks; that is, extant research agrees that ‘actual risks’ can only be interpreted as perceptions (see also Kaspersen et al., 1988). And fourth, cognitive research on risk reduces the analytical focus to the individual level, undercutting the role of culture, politics and the creative aspects of social action.

These shortcomings are addressed by research based on the other extremity of the epistemological continuum described by Lupton, the social constructionist view of risk. Lupton divides this perspective in weaker and stronger forms of social constructionism. Weaker forms of socio constructivism are seen in the risk society, normal accidents and sense-making approaches. Studies aligned to the risk society thesis (Beck, 1992) are interested in the macro-social processes of late modern societies and their relation with risk and risk-based regulation. This research argues that technological and scientific advancements have led society and organizations to reflect upon forms of controlling new risks stemming from them. It is argued that though regulatory forms are not something new, risks, in this contemporary stage of society, “are different in type and scale from

those of previous eras and are beyond the control of societal mechanisms” (Rothstein et al., 2006: 94). From this perspective, individuals are seen as incapable of dealing with hazards beyond their control, and consequently, governments and institutional actors have increasingly started to regulate risk issues in societies. Those regulations described in the historical setting of risk management can be described as an effect of a risk society.

Still on the social constructionist side, one finds the weaker forms of social construction: the normal accidents theory (Perrow, 1999) and sense-making research in high reliability organizations (Weick et al., 1999). Perrow’s theory of normal accidents argues that interactive complexity and tight coupling of elements of technological systems enhances the unpredictability of interactions, and therefore accidents are inevitable or ‘normal’. He has investigated complex systems such as nuclear power plants, and his account of the Three Mile Island accident showed how a normal accident evolved as “a small local problem and incorrect mental models that linked actions with defects, resulting in a rapidly emerging crisis that created considerable damage and nearly produced a disastrous off-site release of radiation” (Leveson et al., 2009: 229). In the same vein, the Challenger disaster in 1986 is described as a normalized acceptance of risk leading to catastrophic consequences (Vaughan, 1996).

Dealing with crisis and accidents, but offering a more positive picture, other researchers have been describing organizations such as air traffic controls and aircraft carriers as high reliability organizations, once they had a record of consistent safety over long periods of time. Scholars addressing high reliability organizations use sense-making theory to analyze the interactions of actors in different organizational sets. For example, in his well know account of the Mann Gulch fire disaster, Weick provides an analysis of the sense-making processes of firefighters (Weick, 1993). According to him, as those firefighters were exposed to that event they started behaving in an unexpected manner, losing their group structure and their ability to make sense of the fire, a process that prevented them to surmount the problems they faced. Hence, in an opposite direction of the normal accidents argument, the sense-making research agenda asserts that organizations can become highly reliable and avoid accidents by creating the appropriate behaviors and attitudes (Weick and Roberts, 1993).

Finally, stronger views of social construction are characterized by Lupton by the cultural/symbolic tradition of Mary Douglas and governmentality studies of risk. It is among these traditions that the approach advanced in this thesis can be better situated. Since I already presented Mary Douglas in the chapter 3, I will briefly summarize the main points of the governmentality school before presenting my argument in contradistinction to them regarding the findings of this thesis.

The governmentality school of risk is based on Michel Foucault's work about forms of social regulation and control in modern societies. Researchers using this approach commonly analyze risk in the context of neo-liberalism. Risk is viewed, then, as constructed in the discourses, strategies and practices of institutions developed within this ideology. Governmentality research assumes that governments see their citizens as demanding management to create wealth and social welfare. The contemporary form of this government is manifested by a neo-liberal agenda, which reinforces individual freedom and limits intervention by the state (Gephart et al., 2009: 146; see also Lupton, 1999). Accordingly, risk management is a governmental strategy, through which governments use their "regulatory power to monitor and manage people while pursuing goals of neo-liberalism. [...] Risk becomes a moral technology when particular groups or individuals are identified as being 'at risk', hence amenable to particular knowledge and interventions" (Gephart et al., 2009: 147). A central assumption of this tradition is that risk avoidance becomes a form of self-government through which individuals accept and internalize institutional objectives of government (here one can also theorize organizations as incarnating forms of self-government). Hence, risk management "can then be directed at developing self-regulating citizens [or organizations] and at changing the environment in which individuals operate (Lupton 1999b: 94).

My argument, supported by the risk management narrative previously presented, is that risk management is less monolithic and determinist than the governmentality school suggests. In other words, despite the self-expansionist character of the imaginary

signification of risk, the three manifestations of risk management in the Brazilian conglomerate show that that organization is neither engaged in the risk management of everything (Power, 2004b), nor its managers (interviewed and observed) are being colonized by risk (Rothstein et al., 2006). On the contrary, those organizations investigated were not prone to decide and act over every type of event, even if, paradoxically, by putting the practices of risk management in place, the number of images of risk increases. According to what have been espoused, those managers are colonizing *through* and *within* the imaginary signification of risk as uncertainty. The contrast here is subtle but substantial. Let me try to qualify this argument in details.

Foucault's works are admittedly brilliant contributions to the understanding of how individuals (self) and power relations are constituted through discourse (Newton, 1998; Tovar-Restrepo, 2012). Concerning risk management, Power and colleagues (Power, 2004b; Power, 2007; Power, 2009; Power et al., 2009) reflect this primacy of the discourse and in many of their accounts, the organizational actor (the subject) disappears, giving way to macro social abstractions, among which neo-liberalism is the major representative. From a governmentality perspective, therefore, risk management becomes an effect of discourse and organizational behavior is primarily a derivative of it. The cases investigated in this thesis do not support this primacy of discourse, at least not with the full force that the governmentality school assumes. Despite the Brazilian conglomerate is being to some extent influenced by governance codes, the findings of the fieldwork reveal that those actors use the signification of risk in an active way in order to achieve certain purposes. Those actors have been expanding their domains of management through the imaginary signification of risk, bringing along new practices beyond formal codes of risk management. That is, in the Group and its two businesses investigated not only the inaccurate models of risk are useful (Millo and MacKenzie, 2009), but the very imaginary signification of risk itself serve useful purposes for a particular group.

In the three cases, managers try to steer their activities according to idiosyncratic materializations of risk as uncertainty: at the corporate level routines are devised to deal with risk events with the aim of crafting an identity based on performance (risk management as exploration and exploitation); language is then rhetorically equipped to

fulfill the logics of managing uncertainty, and manuals and policies are deployed to communicate risk across the company. At Energy, a cultural change is pursued in the name of risk (risk management as cultural collusion), whereby seemingly innocent interventions, like the change of the name of “control matrices” to “risk matrices”, underscore how managers consciously play with the signification of risk. At Land, technology is used to construct images of risk (risk management as a techno-logical production of images) while at the same time the signification of risk goes beyond the logics of dealing with risk already in place, leading management to include reputation into its repertoire of risk objects; this newly incorporated risk object must, however, be articulated through tools of reputational risk assessment (a new logic of doing risk management) being shared and developed inside the enterprise, and which is likely to spread to other businesses and the corporate level.

Thus, the constitution of risk management in the Brazilian has an “owner” and a “target”, which the interpretive approach used in this thesis helped to bring to light. (There is always someone who speaks)⁷⁵. By using a Castoriadian approach in the investigation of risk management, I have exposed the identitary logical materiality deriving from the micro-politics surrounding the imaginary signification of risk within that organization. This micro-politics can be seen in how risk representations need to be negotiated between sectors and areas of the conglomerate. At the corporate level, these negotiations take place within the committee as well as in the risk-talk with other executives; at Energy the micro-politics occur in the risk assessments undertaken by the internal control’s team together with functional areas. At Land managers work out interpretations of images and information as well as construct risk objects according to interpretation of the actions of external actors (government and investors).

What is more, the asymmetries and idiosyncrasies consolidated into different macro logics of risk management (exploration and exploitation; cultural collusion; techno-logical production of images) can eventually compete with each other. This seems to be the case,

⁷⁵ “...no one ever speaks in the name of someone else – unless he has been explicitly delegated to do so. At most, others may recognize themselves in what is said – and even this ‘proves’ nothing, for what is said may and sometimes does induce a ‘recognition’ which nothing permit us to assert that it would have existed without this discourse, or that it validates it”, in p.4 Castoriadis, C. (1987b) *The Imaginary Institution of Society*, Cambridge: MIT Press.

for example, in the relationship between the corporate level of the Group and the joint venture Energy. In recent news, the corporate level has announced that it will cut investments in Energy in order to foster its performance. According to the testimonial of manager to media, they will “tighten the belt” of the operation with sugar and ethanol in order to maximize the generation of value. He says that Energy has delivered the agreed goals, but it has underperformed compared to other businesses, so the corporate level is planning to establish “challenging targets” in the next months for this business line. This is though just part of the whole story. This is, however, just part of the whole story. The decision to tighten the belt of Energy can be a plan to accelerate the returns of the joint venture, which might, in a near future, face severe problems. Recent political debates in the US, influenced by an intense lobbying of the oil industry, point to a reduction of level of ethanol use, directly impacting Energy’s⁷⁶. Estimates speak of 68% cut in export volume of Brazilian ethanol to the US market, facing Energy with a rather discouraging future. In the words of one of Energy’s managers: “All our optimism in the past decade that biofuel would be widely used in various countries, now seems a much more distant reality”. Contradictions also emerge between Land and the corporate level concerning the developing of a tool for reputational risk assessment, which questions established notions of risk management at the corporate level. It is likely that reputation becomes a new substance of the imaginary of risk within the conglomerate demanding a more systematic approach and new practices, which will demand discussions and negotiations between these levels to set the appropriate practices.

A caveat is important here. The fact that different logics materialize around the imaginary signification of risk does not assume the same what the institutional logics perspective within organization studies have insistently argued. That is, there is no relative stable period of beliefs and activities segregated from each other as institutional theorists have argued (Thornton and Ocasio, 1999; Thornton et al., 2012). On the contrary, there is always contestation, perversion of beliefs and politics through and through in

⁷⁶ These debates involve the Renewable Fuel Standard (RFS) in the US, and are taking place at The Environmental Protection Agency (EPA). If the proposal of the EPA comes into effect, the level of ethanol use will be reduced to less than 10 percent of total US gasoline consumption. See *Changes to Renewable Fuel Standard Bring Intense Lobbying From Oil and Biofuel Industries*, Reuters, 12/05/2013.

organizations. What is segregated from each other are the logics giving identity to some set of imaginary significations, logics that are chosen by organizational actors according to some interest and purpose. That means that the institutional substance of risk management (Friedland, 2012, 2013) is at the same time alive and questionable through its practices. This argument brings implications to both socio-cultural studies of risk and interpretive approaches in organizational studies, as I shall explain next.

As I said, the chosen approach in this thesis shares the assumptions of the socio-cultural tradition of risk research, in the sense that risk is seen here as socially constructed. However, as already espoused, in spite of the many insights by Mary Douglas, her approach tended to be “somewhat static” (Lupton, 1999: 51) not providing a good basis for explaining change. This might happen because of the confusion which prevails with regard to the concept of value and meaning, not only within social-cultural traditions, but also within interpretive research on organizations. Instead of viewing meanings and values as incarnated in practices and disputed in themselves, it seems to prevail an understanding of meanings and values as ‘objects’ which are transported between fields or organizations⁷⁷. In this sense, the Castoridian concept of social imaginary significations offers a more dynamic view of how signifying processes occur while at the same time pointing to the material objects and logics inscribed in practices⁷⁸.

According to the Castoridian view of institutions, organizational realities are neither relative stable periods segregated from each other, nor are realities constantly shifting. Rather organizations are inscribed in the identitary logics of material practices (here risk practices) that intertwine with the signifying processes (interpretation; politics of meaning) around imaginary significations (here risk as uncertainty). From this perspective, objects and material practices in socio-technical systems come into evidence, because it is through and within these practices and objects that risk comes into being as a belief (institutional substance) and as an object of management. The logics incarnated in these

⁷⁷ I tackled this misconception among the institutional logics perspective in the first chapter and in my paper *Bringing Values Back In: The limitations of institutional logics and the relevance of dialectical phenomenology*, *Organization* (forthcoming).

⁷⁸ The claim that studies of risk using a social constructionist view neglect the materiality of these processes of social construction can be seen in Hilgartner, S. (1992) ‘The social construction of risk objects: or, how to pry open networks of risk’, In: James F. Short and Lee Clarke (eds) *Organizations, Uncertainties, and Risk*. Boulder, CO: Westview Press.

objects constrain and enable risk management. That is, actors are not absolutely constrained by them, but it is through them that they animate the imaginary signification of risk as uncertainty and construct and eventually transform risk management.

Bringing these arguments in relation to those interpretative traditions reviewed in the first chapter, I argue that the actors interviewed and observed in the Brazilian conglomerate do not only produce metaphors and images in the linguistic sense, but constantly negotiate risk images and objects through their material practices in a complex and dynamic way (events are constantly converted into risk, which lead risk management to incorporate new practices and change the very understanding of risk). The cases also show that actors do not make sense of their actions only retrospectively, but also by projecting future expectations justified by a strategic narrative. Also, imagination of individual actors is not simply illusory, but productive in the sense that it constructs and expands the signification of risk and practices. Finally, the idiosyncrasies of the three cases and the self-reformist aspect of risk management underscore that the logics of saying and doing risk derive from the imaginary signification of risk as uncertainty and not the opposite, as the institutional logics perspective argues.

In the next two sections I will drawn further generalizations regarding the imaginary institution of risk management. To do that, I will first synthesize the main logics of saying and doing risk management observed in the risk narrative, before explaining the mode of being of risk management as an imaginary institution.

The logics of saying and doing risk management in the Group

Managers and analysts within the Group and its two businesses have plausible reasons to convert their experiences and events in their context into risk objects. Concerns with sector instabilities reflect upon uncertainties about revenues, and give shape to cash flow volatility as an object of preoccupation and in need of control. This object anchors the actions undertaken at the corporate level to put in practice a strategic change, through which the company shifts its position as a sugar and ethanol producer, to be a player in the energy and infra-structure sector. From this point of view, the company struggles against

historical difficulties of a particular sector, a struggle whereby managers strive to change the odds. Thus, the change promoted within the organization is not only a structural change, but also a change of identity as the treasurer explained: if before the focus was on the product, now it is on the performance. In the same way, on the other two businesses, the aim of establishing ethanol as a global commodity and the understanding that real estate land investment is strategic to the company and/or an activity that can bring cash flow stability into its balances, push managers to carefully map events which threaten their strategic objectives. From the theoretical point of view, the actions undertaken in each level can be described as manifestations of a bounded rationality⁷⁹. That is, those managers act according to available variables in their context and decide within their individual limitations. However, my interest goes beyond the notion of bounded rationality. The focus here is to explicate the actions and mechanisms that give form to the institution of risk management in each instance investigated and according to each idiosyncratic view of risk management synthesized in those meta-themes.

To talk of an institution of risk management, it is necessary to indicate and qualify the structures shared in that reality. Based on the narrative presented, these structures emerge from the mechanisms of language and technique central in the formation of a logical identity, or what Castoriadis calls the identitary logics. In the following, I will flesh out the logics of risk management within the Group and from this on I shall draw theoretical generalizations.

Table 6 offers a summary of the main risk objects and material practices observed within the Group and its two businesses. It is *in* these objects and practices that the logics of risk management are inscribed, be it in the form of language, be it in the form of technique. And it is *within* and *through* this objects and practices that the imaginary signification of risk emerges and is reproduced as a shared signification (belief, value,

⁷⁹ Bounded rationality refers to “behavior that is adaptive within the constraints imposed *both* by the external situation and by the capacities of the decision maker”. In p.294 Simon, H. A. (1985) ‘Human nature in politics: The dialogue of psychology with political science’, *American Political Science Review* 79: 293-304.

substance)⁸⁰ in the conglomerate and its businesses, a signification that demands, indeed, commitments of action.

Level/logics	Logics of saying RM	Logics of doing RM
Corporate level	Risk policy: risk categories Dictionary of risks COSO categories Committee of Risk: threshold	KPI's to address new business (e.g. risks of default in the receivables in business lines; working capital; pricing; margins and exposures; contingency liabilities) Risk policy: actions (avoid, reduce, share or accept) COSO ERM Tools of risk assessment: questionnaire and interviews
Energy	Communication of Risk: Code of conduct; manual of crisis management; Control incident reports: as a vocabulary of risk. Risk matrices: narratives	SOx (auditable tracks) Non-SOx controls Control incident reports: as a tool Risk matrices Manual of Crisis Management
Land	Chain of ownership; Risk of domain (social, economic and legal reasons); Climate changes Reputational risk categories	Satellite images (ensembles of Brazilian territory; layers of data) Reputational risk assessment framework Buffer of Trust

Tab.6: The risk objects and logics of saying and doing risk management in the Group.

First of all, it is worth noting that during my interviews and visits, in no moment I verified the use of sophisticated probabilistic calculation in the creation of content of risk management. On the contrary, new content of risk management is constructed *through* interaction between people, representations of risk already in place and others coming in, and techniques legitimated by local knowledge. An important first step in these construction processes was, according to the controller's testimonial, the displacement of the risk objects 'sugar price and currency' to another business (i.e. Energy). This action

⁸⁰ I shall reinforce that, as Friedland argues, values-substances are absent presences that only exist through the rituals of practice. The notion of imaginary signification shares this view. See Friedland (2012; 2013).

marks the *first displacement of the imaginary signification of risk*⁸¹ within the corporate level, because it opened up a space that had to be filled up. From this point on, meetings at the committee level were carried on with the purpose to set new forms of *saying* and *doing* risk management. The question at the corporate level was how to represent those new events coming in along new businesses into risk objects? And how should they control them? This process begins with imaginative experiments, as well as with practical experiments. In the words of the controller: “we’re going to look to the risks of default in the receivables in these businesses [...] And we want to understand, for example, the risk of pricing in this business here [...] for example, what is the exposure to risks of losses in the margin of this product and what are the actions that we will take to prevent this to become a... that it won’t materialize as loss”. The type of imagination at play here is not of an illusory type, but one in which managers use their perceptual and cognitive content to track and order the events coming in, and in which new representations emerge from negotiations between the risk management team and the board. Such experiments aim, therefore, to organize information in order to produce images of risk that serve to structure risk management anew. To do that managers rely on the mechanisms of the identitary logics. Let’s see how these work.

As previously presented, the identitary logics are based on two mechanisms: the identitary logics of social saying (i.e. *legein* or language as a code) and the identitary logics of social doing (i.e. *teukheim* or technique as a code). While the logics of language serve to distinguishing, choosing, positing, assembling, counting and speaking risk objects, the logics of social doing refers to the mechanisms of assembling, adjusting, constructing and making them. Both mechanisms can be identified in the construction of risk objects and material practices summarized in the table 6 (though not in a clear cut way). For example, risk managers at the corporate level use COSO as a tool to create ensembles of risk management by *assembling* events into categories to form a risk dictionary and to write down a risk policy, by *adjusting* such events when they change and/or when they are not

⁸¹ This moment is an exemplary of what Castoriadis calls the instituting imaginary, that which displaces itself by its own products, and which do it by re-presenting. As I said earlier, such displacement occurs through the very practices of risk management enacted within the Brazilian conglomerate. In this first moment, the decision to mitigate its historical instabilities by forming a joint venture and by diversifying its portfolio.

relevant anymore (i.e. risk assessments emplace and/or displace events), by *constructing* ordered representations of events (e.g. hierarchical categorization of events; risk dictionary), and by *making* risk objects through sets that can be distributed and reproduced within the company. Risk objects are then communicated by the use of diverse documents and media, which include plain talking (e.g. the breakfast meetings with the CEO; the consulting of executives with the head of GRC), in which managers *choose* priorities, *assemble* and *count* events, and *speak* risk representations among their peers (e.g. in workshops presenting the dictionary of risks and meetings within the risk committee; in the communication of risk within Energy as well as the use of risk matrices in routine meetings; in how investments in real state land investment in Brazil are prepared and in the negotiations taking place to build representations of reputational risk). Language and technique blend in many moments, being difficult to distinguish between these in the process of constructing risk objects. This is the case, for example, of the COSO ERM framework at the corporate level, the risk matrices in Energy and the satellite images in Land, which function not only as tools used to create and articulate logics of action, but also serve as the language through which events start being talked about, negotiated and converted into risk objects. Hence, the COSO framework is reflected into the dictionary of risks, risk matrices are part of routine meetings and talking in Energy, and satellite images trigger novel inquiries about different investment opportunities.

Theoretically, the logics of saying and doing risk management within the Group constitute the mechanisms underlying what Kalthoff calls systems of ordering⁸² (Kalthoff, 2005). Systems of ordering give identity to the objects and practices within the conglomerate, because by placing them in common sets (i.e. ensembling), these systems enable managers to construct chains of causation, or, in the words of Castoriadis, they

⁸² Kalthoff offers a perspective very congenial to the one I am advancing here; see Kalthoff, H. (2005) 'Practices of calculation: economic representations and risk management', *Theory, Culture & Society* 22:(2): 69-97. He argues that economic calculation is only possible once individuals write down different representations, so that calculations can be firstly represented and documented within those practices observed by him in the bank industry. The identity logics add to such conceptualization, because it describes the mechanisms within the technique and language themselves. To this last point, the identity logics is a characteristic not only of calculative practices, but of organizations in general, because it is through these logics that practitioners create ensemblizable relationships, and, therefore, chains of causation.

enable managers to construct ensemblizable relationships. It is by the mechanisms of the identitary logics that systems of ordering emerge, enabling thereby action in organizations. In turn, systems of ordering inform cognitive structures by which risks are perceived and objectified. For example, it is possible to identify a typical chain of causation in the testimonial of the Head of the GRC below:

When I use the questionnaire, I'm going to the operational level. Therein I'm tackling the process level. So I want to know the risk of port operations, the risk of the operation inside the terminal, the risk of treasury operation here of, the closing transaction accounting, purchasing, payables account [...] Because all these are somehow linked to strategic risk, right? Why? It is ... if I have a strategic risk [...] I have an operational risk too, it ends enhancing and vice versa, right? Then the strategic, by definition, will be always relevant, but when I work on the basis it ends up that I contribute to mitigate this strategic risk, right?. (Head of GRC)

Chains of causation are not strictly one-to-one relationships, in the sense that managers look for tight ties connecting elements in a set. Rather, these chains are based on loose ties between images, figures and/or elements, which relate to each other through “differences and similarities” (Kalthoff, 2005: 80). These differences and similarities serve to bring the inherent absence of signification of risk as uncertainty into presence. That is, the mechanisms of the identitary logics reveal risk objects in the same way Heidegger understands technology, namely, as the ways of “how something that is absent is brought into existence and presence” (Heidegger 1977, in Kalthoff, 2005: 72).

Language is a crucial feature in this process. The main function of language is obviously to communicate risk objects and images. But in a broader sense, the different media used to share risk objects in the three cases show that documents are used to frame standpoints of the actors within their context of negotiation, “because they are prepared, investigated, discussed and documented. Thus, the speaker is not only an autonomous entity, as conceived by a situationist approach, but also a speaker who is cognitively adjusted and prepared through practices of oral and written documentation” (Kalthoff, 2005: 83). That means that imagining (transforming risk into images) is a social practice in organizations. The construction of figures, images or economic representations of risk depend on people setting such elements into expectation and forming “a judgement with something upon something – activities, in which images, categories and distinctions are

involved” (Kalthoff, 2005: 73). In the narrative of risk presented, it is possible to see that systems of ordering are not only employed simply to enable prioritization and calculation, but they also construct relationships wherein aesthetics plays an important role. The use of colors in the risk matrices and SO_x routines, the representation of climate and geographical phenomena in computer screens through pixels, the use of figurative rhetoric in the corporative level are all examples of how aesthetical representations of risk are put in use by practitioners. In short, the colloquial expression ‘people figure out’ is a simpler way to explicate that those actors find a solution to their problems by *transforming their expectations into figures and images*.

From this perspective, risk management can be arguably described as “a practice of risk description and communication” (Power et al., 2009: 304). Or in the words of Miller, “[i]t seems as if anything can be made into risk by breaking down, rearranging and re-ordering certain elements of reality [...] To manage risk means, above all, to have available set of tools or technologies that allow one to intervene in the name of risk (Miller et al., 2008: 943). In the name of the risk means that practitioners institute identity to risk through the imaginary signification of risk as uncertainty; and they do this “in and through the *figures*” (Castoriadis, 1987b: 245 italics in the original). That is not the entire story though, as I will explain in the next section. But for now let’s keep unveiling the logics of saying and doing risk management in the cases investigated.

So, designation assigns identity to risk as uncertainty, it gives uncertainty a form; and technique, including here the risk frameworks, tools of risk assessment, risk matrices, the conversion of data into satellite images etc., aims to re-produce risk management indefinitely. The mechanisms of the identitary logics gives uncertainty an *eidōs*, which means that risk management emerges as a ‘form’, an ‘essence’. This is exactly what creation means for Castoriadis, that is, the creation of *eidōs*. Yet, “*eidōs*, form, is not to be understood here in the limited sense of a mere blueprint for a possible organisation, but, as Castoriadis puts it, in the full sense of the union of the organisation and the organised” (Klooger, 2009: 44). The mechanisms of the identitary logics identity may be seen in all three cases. However, the logics of saying and doing risk management in the Group vary according to the different local contexts. That is, risk management only happens through

the particular ways that the imaginary signification of risk is put in place. It is the imaginary nature of the signification that allows risk management to bear important and inherent idiosyncrasies at each level of the organization, while unifying different individuals in a common belief, namely, that uncertainty must be managed.

Hence, the logics of saying and doing risk management are not absolute constraints of action. The cases show that there are no higher-order logics of risk as absolute determinants of action. On the contrary, a grammar of risk is a contingent grammar in the sense that it is “activated in a particular setting and is entirely consistent with the freedom of human actors to act strategically” (Power, 2012: 15). The identity logics serve, therefore, as supports, stimulus and obstacles to the imaginary signification of risk. To put in another way, the logics of saying and doing risk management in the Group and its two businesses are not *determined*, but *determinable* within the discursive practices, the local knowledge and the technologies used in each case investigated (see e.g. Hasselbladh and Theodoridis, 1998). Furthermore, these logics are not an abstract entity hovering in the organization, but they are instead inscribed *within* the risk objects and material practices put in place by the practitioners locally. Indeed, some tools and language observed in the narrative stem from external agents, such as the COSO framework and the need to comply with SOx. Yet, according to testimonials, these are not the main reasons why the company adopt risk management practices, especially because in the three levels investigated risk management practices go beyond compliance matters. If there is some deeper motivation for implementing risk management it derives from the belief that risk is something prone to be managed and that it adds value to the company, that is, the belief on the signification of risk as uncertainty as a core concept for organizing practices in that reality. I shall deal in detail with this point in the next section, but I must briefly underscore here the relevance of this argument.

The three cases investigated within the Group and the related meta themes of risk management therein show that there are no logics determining the meaning and content of risk management. Instead, the imaginary signification of risk as uncertainty underpins particular logics of saying and doing risk management in each level observed. This observation shows that the notion of institutional logics defended by extant research within

organization scholars must be thought anew. That is, the signification of risk, not higher order logics, is the link between local practices of risk and societal levels. Logics built into risk objects and routines are the material through which risk as a signification circulates and gains traction within those local practices, but these logics are local and inscribed in practices and objects.

The risk narrative in the Group shows then, that risk management is a compound of practices of description and communication. Yet, such practices, as Power and colleagues argue, can have substantive consequences (Power et al., 2009). Even though action is not entirely constrained by the logics of risk, it must necessarily rely on the mechanisms of the identitary logics. The logics of risk management are thus the conditions for the existence of risk objects, without which the signification of risk would acquire no adherence (e.g. the auditor of Energy said: “it’s already mapped is a risk, it’s not mapped is a threat”). The implications of the ambivalence inherent to this process – the identitary logics give conditions to, but not exhaust risk representations – are twofold. First, by necessarily giving identity to risk objects, managers might confuse the resulting risk objects and images with a ‘reality out there’, instead of seen these images as representations constructed within their chosen practices, technologies and discourses. To this point I refer, once again, to the role of technical images described by Vilém Flusser. Flusser argues that relying on technical images people incur in the dangerous possibility of seen them as ‘windows’ through which the world ‘out there’ is viewed. This is a misleading view, because instead of ‘windows’ technical images are “surfaces that translate everything into states of things; like all images, they have a magical effect; and they entice those receiving them to project this undecoded magic onto the world out there” (Flusser, 2000: 16). The systems of ordering deployed by each level in order to tame uncertainty can become unquestioned objects shared by managers and analysts. If this happens, it is likely that risk objects and practices became a type of idolatry, whereby practitioners “cease to decode the images and instead project them, still encoded, into the world ‘out there’, which meanwhile itself becomes like an image – a context of scenes, of state of things” (Flusser, 2000: 10). The result would be a programmatic execution of risk management in which actors would stop critically assessing the events that might affect their corresponding strategy. Such

ritualization of models leading to idolatry is espoused by Michael Power, when he criticizes the procedural applications of Enterprise Risk Management and the audit logic based in box-ticking (Power, 2009).

Two moments of the narrative of risk in the Group exemplify my argument. At the meetings of the risk committee on the corporate level, such ambivalence seems an acute issue, because managers are under the pressure to produce pragmatic representations of risk, while the variety of entrant businesses add complexity to their practices. To build risk representations at the corporate level is indeed an exercise of building reliable figures. Nonetheless, as second-order measurements⁸³ such figures become “cut off from their original imperfect databases” (Power, 2004a: 772), and pressures for objectivity might lead top management to overlook complexities behind risk events or to become blind to low probability and high impact events. Another example is that of Land, in which the enthusiasm shown by the CFO in relation to the technologies of representation (i.e. satellite images and reputational risk assessment) demonstrates the magical effect that such encoding techniques perform along the imaginary of risk. In this case, however, the practice shows that managers of Land supplement these tools by other types of investigation and assessment of potential threats to their investments (i.e. on loci visits; local control in smaller areas; periodic calibration of the models behind the satellite images, internal lawyers analyzing ownership chains, external legal advisory). That is, the actions undertaken in Land do not assume a supposed ‘reality’ of risk objects and images, but instead an ‘imperfect reality’ that must be constantly handled upon (e.g. the testimonial of the CFO about gaps in the maps).

⁸³ Power differs between first and second-order measurement in the following way: the former relates to the institutions of classification that make counting possible; the latter refers to further aggregation of numbers and creation of ratios and indices via statistical and mathematical operations. See Power, M. (2004a) ‘Counting, control and calculation: Reflections on Measuring and Management’, *Human Relations* 57:(6): 765-783. Another typical practice involving second-order measurement is what is known by ‘making a structure’ in the bank industry. Kalthoff gives an account of it: “...risk analysts transfer figures between the company’s written document and the computer program, which in turn produces a virtual document on the screen...the figures need to be transferred. At the same time, however, by transferring the figures the company’s document loses its significance of being an economic representation and important factor for risk calculation. The original data leave the scene and are kept in files and archives; they do not play any role in the ongoing risk calculation. This leads to the consequence that the concrete company is no longer the direct reference point for risk management. Rather, its references are economic representations and their plausibility, consistency and validity”, in p.76 Kalthoff, H. (2005) ‘Practices of calculation: economic representations and risk management’, *Theory, Culture & Society* 22:(2): 69-97.

A second aspect of the ambivalence of identitary logics is that the logics of saying and doing risk management might generate an amplification of risk perception (Kasperson et al., 1988). The movement is now on the opposite direction: instead of restricting critical imagination by channeling the possibilities of intervention, several associations and excessive possibilities can be created by the various ensembles in place. This issue is especially sensitive at the corporate level, for example, when the Head of GRC said that if it were to take all the risks for the discussion in the risk committee, they would certainly be thousands. The manager says that the solution to this problem is to sensitize people to matters of risk, what leads to a paradox. When the manager says that the company has thousands of risks, he is referring to what they have already mapped; and when he says that it is important to sensitize people to risk, aligning business managers to the strategy, he expects to count on the experiences of the people on the frontline. This second way of addressing risks is indeed sometimes difficult to measure, map or document, but, nevertheless, valuable to those managers in matters of risk management. The problem is still the same, however: How to know which events are relevant to be converted into risk objects? This question is the very crux of risk management, leading managers to a lot of debate to decide which events shall be converted into risk objects.

Even if those practitioners could ensemble the whole range of risk events they face, risk management expands indefinitely and can engulf into itself the most varied range of events or activities. This is in fact, the essence of risk management, its mode of being which has as a core the imaginary signification of risk as uncertainty. This signification must be imaginarily instituted to exist (into figures, images, objects), but it cannot be expunged in a definite way from the beliefs of those practitioners, because it is an absent presence that exceeds the logics of risk established, self-reforming the material practices and its own re-presentation. In the next section I will present the main characteristics and mode of being of the imaginary institution of risk management.

The imaginary institution of risk management

The three manifestations of risk management distilled from the risk narrative – exploring and exploiting new uncertainties, cultural collusion and techno-logical production of images – provide different stances of the same process of instituting risk management in the Group⁸⁴. By now, then, it must be clear that the practices engaged by those people are part of strategies to tame uncertainty. These strategies unfold, however, with different practical results, as the cases themselves show. In the narrative, risk management practices are wide in scope but different in complexion. In other words, as an imaginary signification, risk fosters particular practices at local levels in that organization, while it holds its generalist thrust as a shared belief in the three levels investigated. Risk binds managers in a shared cause – to change the Group and produce synergy while integrating new businesses – and allows them to differentiate risk management locally. Risk is, therefore, not a fact, a simple matter of objective definition. Risk is a belief that matters for action. Behind its routines – the logics of saying and doing risk management – lies the powerful elusiveness of risk as uncertainty, an elusiveness that keeps managers occupied in converting events into risk objects, while expanding indefinitely the imaginary of risk within the company.

Imagination is, therefore, a strong component in the the interpretation and action of involved in risk management. From the point of view of individual action, imagination refers not only to repetition of certain forms of grasping and emplacing events as risk objects (i.e. the mimetic and reproductive function of imagination), but it also underscores the processes of positing images, figures, things and relations – (re)presenting –, which did not exist before and which were absent from perception⁸⁵. Thus, it is possible to say, following Ricoeur (1994), that there is no action without imagination, because the very

⁸⁴ Instead of using the term institutionalization, I use here the Castoridian concept of instituting in order to underscore the always impending element that potentially transforms and changes risk management. It does not mean, however, an ongoing process of social construction, but implies the potentiality of change posited by the indeterminate character of the imaginary signification of risk.

⁸⁵ “Representation is radical imagination. The representative flux is, makes itself, as self-alteration, the incessant emergence of the other in and through the positing (*Vor-stellung*) of images or figures, an imagining which unfolds, brings into being and constantly actualizes what appears retrospectively, to reflective analysis, as the pre-existing conditions of its possibility: temporalization, spatialization, differentiation, alteration” (Castoriadis, 1987b:329). For a comprehensive treatment of the understanding of Castoriadis about representation see *The Individual and Representation in General*, in Castoriadis (1987b: 320).

possibility of individual action comprises the projective function of imagination. “It is...in the anticipatory imagining of action that I [organizational actors] ‘try out’ different possible courses of action and that I ‘play’ – in the literal sense of the word – with practical possibilities” (ibid, p.126). Here, pragmatic play overlaps with narrative play; “the function of the project, turned towards the future, and the function of the narrative, turned towards the past” (ibid.). Putting it in relation to the risk narrative within the Group, the actions undertaken by those managers are oriented towards the future (i.e. their strategies), while the narratives developed accordingly are turned towards the past (i.e. their experiences).

However, saying that individual imagination is pervasive to the practices described in the risk narrative is not the same as viewing it as completely free. Individual imagination, and therefore action, is channeled through the risk objects and material practices previously described, the conditions, stimuli and supports, stops and obstacles that Castoriadis theorizes as the identitary logics of any social system. It is, nonetheless, the enmeshing of risk objects and logics, on the one side, and the individual imagination, on the other, that pushes practitioners to create representational fluxes that did not exist before. For example, at Land, the withdrawal of an investment, because the foreign partner saw problems of reputation attached to Amazon biome, has pushed the CFO and his team to ‘discover’ reputation as a new risk object and, from this point on, to establish analogies with events of reputation and financial losses in other companies. Some of these analogies were loosely connected to the practices undertaken by Land, others more compatible with their activities. In a similar way, the internal controls team at Energy, when advising functional sectors about risk events, act as a “spark” to sensitize managers about correlation of events, which may concoct new causes and effects related to those issues being discussed. And at the corporate level, managers entertain imaginative experiments to set key indicators and check which deserve to be monitored (i.e. practical experiments), and by engaging in risk talking (i.e. stories) they foster new representations of risk among peers, such as for example, a imagined fire in a plant that led a CEO to look for an insurance as a pre-emptive action. These chains of representations are, of course, difficult to predict and control once risk as uncertainty contaminate the minds of a culture in different intensities and directions. The point is that the production of representations are

estimated by actions undertaken in the name of risk. That is, by acting to mitigate events turned into risk, risk as an imaginary signification enables a variegated number of incidents to take form as an image, figure or object.

Such pervasiveness of imagination is, indeed, not restricted to the cases at hand. It is also present in the most quantitative of risk management practices, as the study of Kahltoff in the bank industry shows. He quotes, for example, the testimonial of a senior risk analyst of a merchant bank in Paris.

One can say that figures do speak, that they provoke images. This means that we aren't like robots. Every time I see figures, they provoke images and a certain behaviour. I'll give you an easy example. Let's say we have an enterprise: The margins are not particularly good, the cash flow is not very good, we also have liabilities. I see that immediately, I immediately imagine the workers doing their jobs. I also imagine the problems with the stock, which is very important. I imagine the clients who are not paying their debts on time. All this. I simply have a mechanism, a logic, which starts moving inside my head. What happens is that the figures are a pretext with which you can go further. Therefore, figures do speak. But the figures speak because they make other things speak. (in Kalthoff, 2005: 73)

Figures, images, matrices, satellite images, colorful spreadsheets do speak in the risk narrative in the Group as well as they are a pretext with which managers can go further. However, beyond individual imagination, the risk narrative exemplifies risk management as an institution with organizational purposes. This enables us to extrapolate the typical understanding of imagination depicted in the four quadrants previously described, namely, as exclusively related to individuals. Imagination becomes a social praxis, stimulated by the material objects in organizations and also the constitutive element of new practices. From this perspective, imagination is central to institutions, or as Castoriadis theorizes it, institutions are themselves imaginary. By theorizing the imaginary institution of risk management, it is thus essential to point and elaborate on the constitutive role the central significations that brings into being a host of practices, identities and objects in organizations. This signification, as have been espoused, is risk as uncertainty. That underpins the ontological character of risk management, its inherent indeterminacy and potential self-instituting character.

Central significations are not significations 'of' something – nor are they, except in a second-order sense, significations 'attached' or 'related' to something. They constitute that which, for a given society, brings into being the co-belonging of objects, acts and individuals which, in appearance, are most heterogeneous. They have no 'referent'; they institute a mode of being of things and of individuals which relate to them. In themselves, they are not necessarily explicit for the society that institutes them. They are presentified-figured through the totality of the explicit institutions of society

and the organization of the world as such and of the social world which these institutions serve to instrument. They condition and orient social doing and representing, in and through which they continue as they are themselves altered. (Castoriadis, 1987b: 364)

Risk as uncertainty - the central core of risk management practices – can be identified on the whole risk narrative previously presented. Therefore, by saying that risk management is an imaginary institution, I am underscoring its properties of being an ‘intentional act of creating and enacting some type of collective practice’ (Czarniawska, 2008: 79), and, at the same time, as ‘a socially sanctioned, symbolic network in which a functional component and an imaginary component’ intertwines (Castoriadis, 1987b: 132). As an institution, risk management not only creates risk objects, images and material practices that are logically organized (i.e. as ensembles) and collectively enacted (i.e. within different areas). It also instils the self-perpetuation of the belief of risk as uncertainty, the absent present substance of this institution, which practitioners strive to materialize and tame, but which they cannot get rid of. In short, events of risk must be imaginarily instituted both in form of objects, figures and images, and in form of chains of representations that continuously enable new forms of risk to take place. Let me try to better qualify and specify this process.

In the theoretical setting of this work, I brought forth the concept of transubstantiation to explain that risk as uncertainty only comes into being *within* and *through* material practices. That is, risk exists in a socio-technical system only by the continuous conversions of events into risk. By putting in place systems of order – the logics of saying and doing risk management –, managers and analysts constantly convert issues and events into risk, so they have something to act upon; and it is through these objects, images and practices that risk as uncertainty moves through within the different discourses and cultures observed. Now, that said, I would like to suggest, three other generalizations that stem from the risk management narrative, but which more generally underpin the mode of being of the imaginary institution of risk management. In the following, I will use the terms *differentiation*, *displacement* and *deferment* in order to explain this mode of being.

First, to differentiate risk means that, when complexity increases (i.e. Group's diversification into all manners of businesses within its supply chain), risk perceptions have to be narrowed down and organized. So, while uncertainties of the past have been mitigated, new situations push managers at the corporate level to re-structure the risk approach with the aim of tackling potential losses that might stem from new businesses. In a learning process, managers differentiate risks according to these new 'realities', but also create boundaries and thresholds of action, such as those formalized in the risk policy, the risk dictionary, etc. The same is valid for Energy and Land, which are part of the corporate strategy of exploring and exploiting new uncertainties. Differentiate means, then, that specialization and diversification alternate, because when the Group seeks out opportunities in which he sees affinities with its changing plan, managers have to integrate and rationalize such opportunities into the company's portfolio. This might explain the ambiguity around the issue of diversification.

Second, the *displacement* of risk means that managers act to dislodge risk events from their positions according to the available ensembles and scales of priorities (i.e. they are displaced either within these ensembles or outside of them). Displacements happen through the implementation of actions that mitigate the materialization of some risk event and through new assessments that re-evaluate the priorities established. A first important displacement occurred when the two risk objects – sugar prices and currency – were transferred to the joint venture (Energy), a process that demanded an ersatz substance for the risk management practice at the corporate level. To create a substitute for sugar prices and currency in terms of risk management, managers had to negotiate the appropriate form of representing new events within themselves and in the risk committee. Displacements are also important in Energy where 'risk assessments exercises' base the construction and maintenance of risk matrices; also, by collecting business incidents report managers implement action plans to correct mistakes or deviating behavior. At Land, displacements occur by the transformation of risk objects (i.e. chains of ownership, dominion, weather, satellite images etc.) into secure judgment points, which underpin the decision to go for an investment; that is, managers build information over the risk objects until the moment they feel a particular investment has potential of gains; yet, in the case of reputational risk, the

strategy is to displace events from one part of the framework (e.g. from ‘drama’ or mass market coverage) to another (e.g. simple reporting), or at least to avoid that situations escalate to mass market coverage.

A caveat is necessary here. Displacements are, more generally, part of what sociologists have called translation processes that occur in social fields (Callon, 1986). In his study of the actions of scientists around the causes of the decline in the population of scallops in St. Brieuc Bay, Callon traces series of transformations and metamorphoses that took place through continuous processes of displacements⁸⁶. However, displacement has a different meaning here. When it comes to the imaginary signification of risk, there is no a priori object to be translated. As the now epitomized definition of Ewald conveys, “[n]othing is a risk in itself; there is no risk in reality. But on the other hand, anything can be a risk; it all depends on how one analyses the danger, considers the event” (Ewald, 1991: 199). Thus, what occurs in practices of risk management can be more appropriately defined as the conversion of future events into risk as uncertainty, some of these events already familiar to the organization but scattered within different areas, some of them emergent during the process of putting risk management practices in place. From this perspective, what is displaced is neither something material nor practical (i.e. practices are routinized), but rather the representation of a particular risk. In the risk narrative, managers act in the present upon future expectations, in order to modify such expectations

⁸⁶ “...the notion of translation emphasizes the continuity of the displacements and transformations which occur in this story [scallops in St. Brieuc Bay]: displacements of goals and interests, and also, displacements of devices, human beings, larvae and inscriptions. Displacements occurred at every stage. Some play a more strategic role than others. Displacements during the problematization: instead of pursuing their individual short term interests, the fishermen are invited to change the focus of their preoccupations and their projects in order to follow the investigations of the researchers. Displacements during the stage of intersement: the larvae falling to the sea floor or pushed along by the currents are deflected and intercepted by the nets. Displacements during the stage of enrolment where an agreement is found through mutual concessions: the collectors are moved to a new location to capture the larvae more effectively which have also attracted the researchers to their own terrain. Displacements, and these are essential, during the stage of mobilization: the larvae anchored to the collectors, the fishermen of St. Brieuc Bay, and the colleagues dispersed throughout the world are displaced to Brest after having changed their form and state in order to support the three researchers who claim to be their spokesmen. And finally, displacement during the final stage, that of dissidence: the fishermen penetrate the barriers and, refusing to follow the researchers, devastate the fish reserve; the scallops and their larvae avoid the nets that are meant to anchor them”. In p.222, Callon, M. (1986) ‘Some elements of a sociology of translation: domestication of the scallops and the fishermen of St. Brieuc Bay’, In: J. Law (ed) *Power, action and belief: a new sociology of knowledge?* London: Routledge, 196-223.

– mitigate, eliminate, or somehow change the odds as March and Shapira argue (1987) – and shift them for representations of other future events⁸⁷.

Hence, as Hilgartner argues (1992: 48) constructing risk objects demands “efforts to *emplace* risk objects within, and *displace* them from, sociotechnical networks” (emphasis in the original). At the core of this phenomenon lies the imaginary signification of risk as uncertainty, which has no materiality per se, but comes into existence through the practices and actions undertaken in its name. So long events are continuously converted into risk, managers of the Group postpone the signification of risk as uncertainty indefinitely in their discourse, re-signifying risk according to emergent situations and possibly changing the very substance of risk as uncertainty with its related material practices. That brings us to the third mechanism of the imaginary institution of risk management: the deferment of risk as uncertainty.

Social imaginary significations, according to the definition stated above, “condition and orient social doing and representing, in and through which they *continue as they are themselves altered*” (Castoriadis, 1987b: 364 emphasis added). To better capture the micro-dynamics of the imaginary significations, I have advanced the concept of transubstantiation. The transubstantiation of risk as uncertainty refers to conversion (*conversio*) rather than change (*mutatio*), and to the present case, it refers to the micro-dynamics within which the imaginary signification of risk materializes *in and through* different practices and how such practices are maintained or altered. The notion of conversion is, therefore, appropriate to account for what Friedland calls institutional substances, the God-like elements that ‘must necessarily exceed the ritual practices by which they are recognized or accessed’ (Friedland, 2013: 8-9). Risk as uncertainty is one of such a God-like element in organizational action. It is through the signification of risk that managers of the Group put in place different practices; and it is through these practices that those managers bring this very substance into existence while at the same time deferring it.

⁸⁷ An extreme case of displacements of future expectations is the trading of derivatives in financial markets. See Pelzer, P. and Case, P. (2008) ‘The displaced world of risk management: covert enchantment in a calculative world’, In: Monika Kostera (ed) *Mythical Inspirations for Organizational Realities*. New York: Palgrave Macmillan, 100-110..

To say that risk as uncertainty must be deferred in discourses and practices in order to exist, means that risk management becomes increasingly part of the whole bulk of practices used in organizations to manage the future. Let me better disentangle this argument to explain what deferment is. One of the most conspicuous manifestations of risk management as part of the techniques of imagining the future can be found in the relationship between risk and security in the context of the ‘war on terror’ (De Goede, 2008). De Goede underscores the many claims made by, for example, the 9/11 Commission, and the British Intelligence and Security Committee, who recommended, in different ways, for ‘routinizing, even bureaucratizing, the exercise of imagination’ in mapping and constructing worst case scenarios (9/11 Commission, 2004: 304; quoted in DeGoede, 2008:156). The practices of risk management within the Group are not as extreme as the case of the ‘war on terror’, where people are pressed to imagining the unimaginable. However, risk management in the three cases investigated is pervaded by activities and techniques of imagining the future. From the imaginative experiments at the corporate level, passing through the qualitative assessments in the construction of risk matrices in Energy, coming to the use of analogies to signify reputational risk at Land, concerns with the future pervade the discourses and practices within the Group. From this perspective, risk management comprises practices of premediation that are becoming indeed a central element of risk management.

According to De Goede (2008), premediation comprises the activities or practices of mediating the future, of reporting what happen next. “Premediation simultaneously *deploys and exceeds* the language of risk” (De Goede, 2008: 156 emphasis in the original). Its practices exceed risk calculation and use imagination to construct scenarios, maps, plans etc. The various rhetorical devices and stories intertwined with the logics of saying and doing risk management in the Group are practices of premediation, because they bring forth future expectations into play. It is important to note, however, that premediation is not forecasting. It is not about ‘getting the future right’, but rather ‘about trying to imagine or map out as many possible futures as could plausibly be imagined’ (Grusin, 2004: 28 in De Goede, 2008). As a matter of fact, ‘premediation is not about the future at all, but about enabling action in the present by visualizing and drawing on multiple imagined

futures' (Amoore, 2007b in De Goede, 2008: 158). The paradox is that by acting in the present according to mapped futures, practitioners change the future to come and risk as uncertainty must be re-signified and materialized accordingly (i.e. transformed as a risk object, mapped, organized in ensembles, etc.).

Premediation was, of course, always part of action and decision making in organizations, especially in businesses with a clear planning agenda. Thus, on the one hand, this observation is not new when it comes to organizations. Since Simon we know that organizations tend to satisfice rather than optimize decision making (Simon, 1947). Managers use the information they have available to decide and not the information they must have, and therefore they act within the contextual imperfections they face. The managers and analysts of the narrative constantly strive to minimize such imperfections present in their models, satellite images, matrices, images, risk ensembles, etc. that support their actions and decisions. They also do not seem to believe that they can predict the future; this is not the point. However, they do imagine and construct “a variety of futures...in order to *enable action in the present*” (De Goede, 2008: 159 emphasis in the original). Hence, it is not a question correcting biases in their interpretation of the ‘real’ risks they face. Managers would be rather unskilled professionals, in the case they don’t play imaginatively with futures and possibilities.

But, on the other hand, looking at premediation as an increasing part of risk management underscores a phenomenon of new proportions. The question is that through the notion of risk as uncertainty, premediation takes broader reach as an organizational practice. Constructing scenarios is part of any strategy, and sometimes this is all what strategy is about. Yet, risk management turns to be the flip-side of the coin of strategy, because it exacerbates the routines of assessing, mapping and controlling events threatening strategic objectives. The appealing role of risk management is therefore almost inevitable, such as the cultural collusion taking place in Energy shows, wherein the discourses of risk and strategy are intertwined to create a culture of control. Nonetheless, the belief that risk management adds value to business appears across the whole risk narrative in different intensities (e.g. the case of reputational risk in Land). Thus, risk management augments the desire of transforming future expectations into risk objects

through which people can act in the present. However, uncertainty cannot be completely eliminated, and practitioners are aware of it. This does not prevent management to differentiating risk as uncertainty and establishing logics of saying and doing risk management, which in the end increases the whole risk cartography.

Here we arrive at the kernel of risk management as an imaginary institution, its very mode of being. This mode of being is what Castoriadis describes as a magma, that is “what gives itself before identitary or ensemblist logic is imposed” (Castoriadis, 1987b: 343).

A magma is that from which one can extract (or in which one can construct) an indefinite number of ensemblist organizations [risk] but which can never be reconstituted (ideally) by a (finite or infinite) ensemblist composition of these organizations. [...] To say that what is given permits us to extract from it (or to construct in it) ensemblist organizations amounts to saying that one can always fix marking terms (whether simple or complex) in what gives itself. (Castoriadis, 1987b: 343)

Even though the Group, and its two businesses, had the capacity to map all existing threats in form of ensembles⁸⁸, the very fact that organizations act-in-the-world makes the positing of new representations of risk an imminent ‘reality’. In other words, while striving to reach strategic objectives, organizations produce new situations, which require an unending effort to tackle with uncertainties. What is more, external changes must be assimilated and converted into risk language, what produces internal adjustments of interests and, thereby, of risk priorities when it comes to which uncertainties are to be explored. Hence, saying that magma is the mode of being of the imaginary institution of risk management serves to underscore that despite organizations can ‘fix marking terms’ in the indeterminacy of events, whether in a simple or complex way, these marks do not exhaust the chain of representations stemming from the imaginary signification of risk. To this argument, it suffices to use economy and its ever precarious attempts to mathematically map the whole of economic behaviour. So, it is by acting-in-the-world, and through the identity logics that risk emerges as something that makes sense in that organization according to its different themes. But it is, paradoxically, within this acting-in-the-world that risk, as an imaginary signification, potentially expands its reach

⁸⁸ To be sure, they can’t map and don’t act towards it, once it would be uneconomically according to their own logics of narrowing down events.

encompassing, and therefore putting into play, an increasing number of future expectations.

Finally, the perfection of risk as uncertainty in sustaining the institution of risk management lies in its dual role. It pushes, on the one hand, managers and analysts, who act with a mixture of anxiety and desire, to develop systems of order by adopting logics of saying and doing risk management, but on the other hand, it enables these managers to preserve the idiosyncrasies of their local realities. Order and singularity coexist within risk management practices, as the three meta-themes show. However, while the signification of risk slides through practices of management towards the future, it leaves footprints wherever it passes. These footprints are the materiality of risk as uncertainty embodied in objects and routines established, the systems of order that are enacted until the point of inadequacy or until new events demand the development of new identities of risk (e.g. reputational risk in Land). Movement is, thus, what makes the imaginary of risk relatively free from its logical counterpart. And an appropriate oxymoron to describe risk management is that of a *permanent move*: the imaginary institution of risk management is permanent because it tends to establish itself through the routinization of practices and creation of risk objects; it is movement because its incompleteness pushes management to constantly convert novel issues in its name, challenging the very nature of the practices of risk management.

Chapter 6

Lessons Learned

*Any genuine philosophy leads to action and from action back
again to wonder, to the enduring fact of mystery.*
(Henry Miller, Tropic of Cancer)

All modern institutions, says Czarniawska (1999), run on fictions. It is the task of the student of organizations, she argues, to study how these fictions are constructed and sustained. In addition to her observation, I must say that imagination is a fundamental feature of fictions, underpinning their creation, maintenance and change. More than that, imagination enables our very capacity to think, act and decide. Ricoeur (1994: 126) makes this point clear, when he cogently argues that imagination provides the “luminous clearing in which we can compare and contrast motives as different as desires and ethical demands, which in turn can range from professional rules to social customs or to strictly personal values”. Yet, despite such influence on action and interpretation, imagination remains largely undertheorized in studies of organizations. Trying to narrow this gap, this thesis explored the ideas of Cornelius Castoriadis in an investigation of the role of imagination in the practices of risk management. More broadly, my inquiry was aimed to search for answers about the relations between imagination and organizations. Looking at the practices of risk management in a Brazilian conglomerate, I found that imagination is a constitutive element of these very practices. In this regard, two general aspects can be theorized.

First, through imagination managers *produce* figural orderings in organizations by putting in place particular practices, language and tools that enable them to organize their local realities according to a set of imaginary significations. By constructing these figural orderings managers establish ratios between events which are expected to influence their strategies. Ratios, here, refer neither to some kind of transcendental rationality nor to a superimposed logic. Rather, ratios refer to accounts (i.e. figures, images, sets, etc.) that are constructed and differentiated in order to give support for action. This argument is consistent with Friedland (2013), who argues that the origins of what today is called

modern rationality roots, in fact, in the practices organized around spatial images (*rationes*), figural orderings and recombination of imaginary locations⁸⁹. This view applies to the different stances of the institution of risk management in the Brazilian conglomerate, in which future events are depicted into images, figures, maps, etc. that are organized as ensembles (identitary logics) and are used as a springboard for action. However, imagination is not just about organizing through the establishment of logical identity to events in organizations.

A second aspect of imagination is that it *provokes* (re)presentations in organizations. Imagination pushes practitioners to constantly re-interpret those images and even to construct other representations beyond available logics underpinning techniques and language already in place. Here lies the genuine contribution of Castoriadis' phenomenology to the understanding of organizations. The self-instituting aspect of institutions theorized by Castoriadis is clearly embodied in the risk management practices, which personify the alterity of the imaginary signification of risk as uncertainty. That is, risk management operates inevitably through the displacement of itself by its own products: once risks are eliminated or mitigated they cease to be risks, therefore new events are converted into risks to the point of challenging the very understanding of the imaginary signification of risk. This leads practices of risk management to be revised, changed or supplemented.

By saying that risk management surpasses itself, I am not saying that it occurs despite people or in an ongoing basis. On the contrary, these findings bring implications to the understanding of action and change within organizations, which I will try to synthesize here. To do that, I will first recur to two icons of sociological and critical thinking, which have been influencing social and philosophical inquiry in many disciplines: Michel Foucault and Jürgen Habermas. These authors represent two extremities of the contemporary intellectual debate over organizations, a debate roughly polarized here as relativism versus realism. I will not tackle the intricacies of this debate; this would

⁸⁹ Friedland bases his argument on Paolo Quattrone's study of the Jesuit's financial accounting practices in the 16th century.

certainly deserve another thesis. Rather, I shall focus on the understanding of normativity⁹⁰ underpinning their theories, an assumption that has importance for our view of practices (praxis), in general, and to theories of management, specifically. My argument is that while Habermas' theory suffers from its excess of normativity, Foucault's theory suffers from its absence of normativity (Tovar-Restrepo, 2012; Elliott, 2002; Whitebook, 1998; Bernstein, 1989). In the middle of these extremes, we find Castoriadis' theory of imaginary institutions. Let me elaborate on this argument.

Foucault's works were undoubtedly important contributions to understanding organizations beyond the modernist and rationalistic perspective inaugurated by Max Weber (Clegg, 1994). Foucault's investigations about the disciplinary effects of discursive practices have helped organization scholars to reappraise organizations as "social machines which produce elaborate discourses of information/knowledge in which subjects are necessary part of the material flow on which the discourses are inscribed" (Cooper and Burrell, 1988: 105). At the basis of Foucauldian theory, we find the abandonment of views of absolute rationality and ideals of a transcendental subjectivity, both understandings that, according to Foucault, have been given to us by the discourses of modernity. Accordingly, Foucault's main preoccupation was to explain how the "subject was formed, reformed, dispersed, and regulated in discursive reality" (Tovar-Restrepo, 2012: 116), casting thereby light on the relational aspects of power and making visible the structures of domination pervading society and organizations.

In his theory, however, Foucault denied any possibility of a general ontology of the human subject (the death of the subject), which led him to leave the extralinguistic dimension of the subject undertheorized. And even if he tried to advance resistance as an understanding of how new forms of subjectivities emerge, Foucault remained inconsistent in his last writings, because resistance was difficult to follow without an elaborated theory of the subject (Tovar-Restrepo, 2012: 121). The lack a theory of the subject led to a view of individuals as destitute from their capacity to argue and act influencing their destinies, a

⁹⁰ I am using normativity in the sense of how individuals differentiate (value) between things, situations and events in order to decide and act.

shortcoming with implications to theories of organization⁹¹. Hence, for Foucault, “all forms of *normativity* are masked forms of *normalization*” (Withebook, n.d. in Tovar-Restrepo, 2012: 129 emphasis in original), a position that condemns individuals as prisoners of the discourse, being all kinds of change the result of reconfigurations in discursive practices.

An alternative critical examination of society is offered by Habermas with his theory of communicative action. Like Foucault, Habermas incorporated in his theory the primacy of language (the linguistic turn) in the constitution and conditioning of the psyche and society. However, he differs substantially from Foucault. As the “last modernist” (Burrell, 1994: 1), Habermas does not abandon the ideal of reason. On the contrary, he wants to provide a correction of it when he theorizes and defends communicative rationality as the necessary norm to society express its political *ethos*. His project is to defend reason from its deformations along history, a problem he sees manifested in the philosophy of Foucault and other ‘postmodernisms’ (Habermas, 1981). Normativity has then a privileged place in Habermas’ theory, which can be summarized by the following questions underpinning his project:

How can we make decisions on how to act in a world where traditional myths, both moral and political, have lost their force and where commonsense approaches to conflict resolution have been undermined by market and administrative structures? How can we save democracy when it seems an unobtainable ideal? How can we create the conditions for democratic participation in everyday life? (Pursey, 1987 in Burrell, 1994).

Solutions to these problems are to be pursued, according to Habermas, by deliberative interaction of individuals, whereby communicative rationality would emerge. By doing that Habermas replaced rationality from the individual level (subjected-centered) to the level of language and inter-subjective processes. Here I shall start contrasting Castoriadis with these two thinkers, in order to draw the implications of this thesis to organization studies.

Many assumptions of Foucault about the social constructivist character of society and the abandonment of ultimate reasons were shared by Castoriadis. Nonetheless, their

⁹¹ The tension created by the lack of a theory of the subject in Foucault’s theory is acute within its uses among organization scholars. See Newton, T. (1998) ‘Theorizing subjectivity in organizations: The failure of Foucauldian studies?’, *Organization Studies* 19:(3): 415-447.

views fundamentally diverged with regard to their understandings of inter-subjectivity. Foucault's lack of a theory of the subject led him to privilege the discourse. Castoriadis, in turn, anchored his ideas in a well developed theory of the subject, in which imagination has a privileged role in the construction and disruption of representations (social imaginary significations). Hence, if it is true that Foucault's genealogy and archeology are methods suited to unveil the insidiousness of power relations, by lacking of a proper theory of subject these methods leave organizational scholars unequipped to theorize agency and change (Newton, 1998)⁹². More severely, Castoriadis rebukes poststructuralists because of their naive relativism, accusing their views of being a deterministic ontology embedded in a political relativism (Tovar-Restrepo, 2012). By theorizing the interdependence of the psyche and the social-historical, Castoriadis wants to surmount absolute deterministic views of humans and society. His theory of the imaginary institution of society provides than a conceptual apparatus to better address the nuances of politics within society, an aspect that brings him, in this regard, closer to Habermas.

However, if Habermas strongly campaigns to set unequivocal fundamentals to politics through communicative action, this campaign is alien to Castoriadis' notion of praxis and his project of autonomy. For Castoriadis, the relation between knowledge and action always entails a nontechnical element, which cannot assume the form of law-like propositions that could be used to realize external and predetermined goals. That is, practitioners don't have theories. Instead, practices are marked by nontechnical action, an action that "bears its end within itself; the knowledge corresponding to it is always fragmentary and must rely on continuous expansion of itself within concrete action, without, however, ever becoming a theory *about* an object" (Joas, 1993: 157 emphasis in the original). This is the reason why the excess of normativity in Habermas' theory is problematic. For it is not possible to describe concept application within the dualism between communicatively rational or irrational acts. "The correctness of an extension of

⁹² To be fair Foucault acknowledges that the "individual's psyche is capable of forming representations in a *quid pro quo* mode through imagination, of representing and projecting beyond present reality, posing new options and ways of being" (Tovar-Restrepo, 2012:118). But he never fully theorized about that aspect. Tovar-Restrepo refers to Foucault's essay about Ludwig Binswanger's *Dreams and Existence*. In: Foucault, M. (1993) 'An introduction to Ludwig Binswanger's 'Dreams and Existence'', In: K. Hoeller (ed) *M. Foucault, and L. Binswanger, Dreams and Existence*. Atlantic Highlands, NJ: Humanities Press International, Inc., 31-81.

conceptual usage is judged at bottom by its fecundity, that is, by the possibilities of succession it opens up” (Bernstein, 1989: 121). In Castoriadis version of praxis normativity derives from the action itself, from “the new *eidos* that emerges” (ibid.). Autonomous activity “aims at self-transformation” (Elliott, 2002: 148) and theorizing about it, in a definite way, is therefore controversial. To put it more plainly, action *is* itself creation, an aspect already described by Marx in his accounts of the ability of humans to produce new objects and new social forms, but which he abandoned when enclosing economy into theoretical determinism (Joas, 1993).

Now, looking at the practices of risk management that are being introduced in the Brazilian conglomerate, the Castoriadian view of praxis is both plausible and relevant to organization studies. As the cases show, risk management has precisely such a non-technical role in the deployment of its practices, a use which only occurs because of the imaginary mode of being of this institution. Had those practitioners had a definite theory of risk management, they would be prevented from acting upon the variety and ongoing emergence of events they face. Furthermore, and more generally, what are organizations, if not compounds of practices aiming at self-transformation? Organizations are themselves projects, and a project is from the outset an idea pointing towards the future. That does not imply self-transformation as something ‘good’ or ‘bad’. But it does imply that people in organizations create objects, language, tools, techniques, etc. that intertwine with the way they relate to (interpret) and change their projects.

Interpretation is not a one-to-one relation between subjects and objects, as if individuals could mirror their ‘realities’. Rather, meanings depend on how imaginary significations are put into use in action, a process that always brings some kind of addition to interpretations and practices. Jacques Derrida, a contemporary of Castoriadis, already denounced this disruptive element in interpretation and language through what he calls the logic of supplement (Derrida, 1976; see also Cooper, 1989; Chia, 1994). For Castoriadis, however, imagination is the driver of the social-historical; it is the core element of how individuals in society and organizations posit to themselves new significations and/or resignify their realities. That may arguably leave us scratching our heads, when we face the vexing question of normativity. If there are no absolute values, substances, reasons, or

subjectivities in organizations and if organizations are not simply an ongoing flux, as the identity logics show, what is then the critical content of a Castoridian view of praxis? What is the contribution of it to our understanding of action and change in organizations? And, ultimately, what is the contribution of this view to theorizing organizations and practices?

For me the critical content of the Castoridian view of praxis, having in mind our role as previously defended, lies in that it enables us to clarify who is producing which discourse and with what interest. It is no longer a matter of simply pointing to the reproduction of ideologies (the instituted imaginary), although that remains an important issue too, but to showing who is responsible for *productively* shaping practical objects for particular ideologies (the instituting imaginary). I am emphasizing productively here, because the production of an ideology is never merely a reflexive action deriving from an omnipotent discourse. Rather, the putting in practice of a particular discourse always contains in itself some element of transgression of its forms, values, beliefs, techniques etc. Furthermore, as Tovar-Restrepo argues, “if it is accepted that power is everywhere”, as Foucault has brilliantly exposed, “then we need to differentiate among possible kinds of power(s) and the way power(s) is inflicted or exercised” (2012: 129). It is in this sense that the concepts and theory advanced in this thesis can help students of organizations to unveil the mutations of different ideologies through the practical effects of imaginary institutions.

The cases presented in this thesis serve as an illustration of this point. As I have shown, those managers are colonizing their respective organizations *through* and *within* the imaginary signification of risk. That organization, better said, its founder and managers, have plausible reasons to engage in change, considering the historical instabilities of the sugar-ethanol sector in Brazil. These instabilities involve not only the contingencies of the sugar ethanol sector in Brazil, but also political struggles in which that organization must take a stand and act. This seems to be the case in the recent debate around the Renewable Fuel Standard in the US. Such instabilities offer enough discourse that push the conglomerate to mobilize projects and actions, among which risk management came in through the back door (through the founder’s unusual plan for raising funds in the US). It is worth noting, that this does not mean that risk management is rational and efficient, or

that risks are ‘hard facts’ and risk management the best way of dealing with them. Rather, I am underscoring that it is according to this discourse and related local discourses (business units) that risk management makes sense to those practitioners, who sometimes build on it (i.e. going beyond compliance codes) and in other times distort it (i.e. using it to do control and cultural change).

Thus, by contributing to seeing risk management in its instituting moments, the Castoriadian approach offers a more dynamic picture of risk as well as a description of its practices under a less monolithic discourse. Risk management only takes place through the organizational uses of the social imaginary signification of risk. It is through this signification that particular groups promote certain actions between the interstices of instituted and instituting imaginary, between what organizations *are* and what they *project* (imagine) to be. In such interstices, what ‘risk’ is must be negotiated, shaped and adapted. We have, in this case, a fragmented discourse (e.g. synergy or diversification?), dependent on the local practices and techniques employed, and the purposes and interests of individuals. Indeed, risk connects those practices to a larger discourse (e.g. corporate governance, performance, transparency, accountability, neo liberalism, etc.). But, it is because risk is inherently a social imaginary signification that practices of risk management can be explored in different ways inside organizations.

The findings of this thesis and the Castoriadian notion of praxis converge in this case; and it is possible to make a reflection about organizations and organization studies. Castoriadis’s notion of praxis underscores the inevitability of imagination in institutions, or praxis as creation. Such praxis is manifested in organizations in a kind of inventive appropriation of imaginary significations through which organizations expand their material practices and the knowledge about their organizational reality. It is important to note that risk is only one signification among the magma of representations described by Castoriadis. Of course, by saying that I am not assuming that practitioners in organizations are simply free to create whatever they want. It also does not mean that creation implies a positive valued change, a romantic view Castoriadis would certainly deny (Castoriadis, 1997a). After all, organizations are not samba schools, as a colleague once reminded me (though samba schools are indeed organizations). But, by saying that institutions are

imaginary, we are brought to acknowledge their inherently contested character. What is more, it pushes us to acknowledge that imagination is embodied in practices, objects and technologies constructed in and for organizations. This brings notions like values, beliefs and meanings closer to the interaction of people, closer to the commitments of action; for there is neither meaning in nature, nor simply in our head. Meanings, values and beliefs – the fictions of institutions commented by Czarniawska – are constructed through practices revolving around imaginary significations. For this reason, it does not suffice to say that organizations are socially constructed through discourses. Organizations are *socially and imaginarily constructed by people* through the putting in place of *particular techniques and languages* (identitary logics), according to interests and projects *which underpin and are underpinned by social imaginary significations*. Change and action are, according to this view, political and creative processes depending on how social imaginary significations are materialized in organizational practices and who are the people involved in such processes.

If we take this argument as plausible, would that mean the abandonment of the rigors of theoretical affairs? Not at all. It means only a change in our engagement with theory. Instead of engaging with it as a quest for laws, or a matter of who has the better picture, we should engage with theory as a project of elucidation. That was, in fact, the sole purpose of Castoriadis, who thought philosophy as an elucidatory project. Elucidation is the standard given from Castoriadis to us. Because lucidity is “the form of cognitive accountability appropriate to subjects whose thinking is entwined with doing, whose thinking is an endlessly reiterated moment within social doing” (Bernstein, 1989: 115). Lucidity is, from this angle, both an intellectual and ethical virtue, because it is a form of thinking that acknowledges indeterminacy and does not poses an end to the questioning of social and organizational life.

Theory as lucidity can assume different forms. It can start from the simplest of questions, from a vision or a dream; it can begin in a conversation, or emerge from a reading of a novel or seeing a piece of art; it can start, indeed, from the most unexpected of events, since thinking *is* indeterminacy. But lucidity demands from us to strive forwards. This thesis took me into the heart of the maelstrom of thinking as indeterminacy, since my

initial plans substantially changed during the process of reading, writing and doing field work. Ideas always take form in an ill defined manner, I must say, and they evolve to something clearer, so long one throws himself into his intellectual journey. My own journey was shaped by an idea and many intuitions, a project and many versions of it, discussions and further readings, more discussions and novel doubts, travels and intellectual crusades. It seems to me then, that the artist and the scholar share, sooner or later, the same fate. Both must dive in the abyss of their minds if they want to give form to their ideas. Most certainly, both must struggle until the end of their lives trying to push the boundaries of the hermeneutic circle in which they themselves find trapped. In this struggle, imagination is not only an undeniable companion of scholars, but also a necessary component of organization theory (see e.g. Heller, 1989).

In my case, imagination enabled me to represent my ideas to myself and then to question my own beliefs and assumptions. That is, it helped me to explore my ideas through associations and connections, as Weick (2003) does with his ideas. This doesn't mean that I was victimized by imagination, or that through it I could find the unshakable foundations that so many theorists eagerly look for. But by opening myself critically to such representational flux, my universe of thought and interpretation evolved. Through imagination I established new relations with the theory and the world. And through this process new questions arise, while the endless mystery of organizational life provocatively beckons ahead. On this issue, I didn't find better words than those of Melville, to define my state of mind during the past four years.

And so, through all the thick mists of the dim doubts in my mind, divine intuitions now and then shoot, enkindling my fog with a heavenly ray. And for this I thank God; for all have doubts; many deny; but doubts or denials, few along with them, have intuitions. Doubts of all things earthly, and intuitions of some things heavenly; this combination makes neither believer nor infidel, but makes a man who regards them both with equal eye.

(Herman Melville, *Moby Dick*)

References

- 9/11-Report. (2004) *Final Report of the National Commission on Terrorist Attacks upon the United States*, Washington, DC: National Commission on Terrorist Attacks.
- Adams, S. (2005) 'Interpreting creation: Castoriadis and the birth of autonomy', *Thesis Eleven* 83: 25-41.
- Alvesson, M. (1993) 'Organizations as rhetoric: knowledge-intensive firms and the struggle with ambiguity', *Journal of Management Studies* 30:(6): 997-1015.
- Alvesson, M. and Karreman, D. (2000) 'Varieties of discourse: On the study of organizations through discourse analysis', *Human Relations* 53:(9): 1125-1149.
- Alvesson, M. and Sköldbberg, K. (2000) *Reflexive Methodology: New Vistas for Qualitative Research* London: Sage.
- Alvesson, M. and Willmott, H. (1992a) *Critical Management Studies*, London: Sage.
- Alvesson, M. and Willmott, H. (1992b) 'On the idea of emancipation in management and organization studies', *Academy of Management Review* 17:(3): 432-464.
- Astley, W. G. (1985) 'Administrative science as socially constructed truth', *Administrative Science Quarterly* 30:(4): 497-513.
- Axley, S. (2002) 'How does your garden grow', *Industrial Management* 44:(5): 19-26.
- Bachelard, G. (1969) *On Poetic Imagination and Reverie*, Connecticut: Spring Publications.
- Barbier, R. (1994) 'Sobre o Imaginário', *Em Aberto* 14:(61): 15-23.
- Barley, S. R. (2008) 'Coalface Institutionalism', In: Royston Greenwood, Christine Oliver, Roy Suddaby, et al. (eds) *The Sage Handbook of Organizational Institutionalism*. London: Sage, 491-518.
- Barley, S. R. (2011) 'Signifying institutions', *Management Communication Quarterly* 25:(1): 200-206.
- Barley, S. R. and Tolbert, P. (1997) 'Institutionalization and structuration: studying the links between action and institution', *Organization Studies* 18:(1): 93-117.
- Beck, U. (1992) *Risk Society: Towards a New Modernity*, London: Sage.
- Berger, P. L. and Luckmann, T. (1967) *The Social Construction of Reality*, New York: Doubleday.
- Bernstein, J. T. (1989) 'Praxis and aporia: Habermas' critique of Castoriadis', *Revue Européenne des Sciences Sociales* 27:(86): 111-123.
- Besley, T. and Hennessey, P. (2009) 'Letter to Her Majesty the Queen, July 22', Retrieved from <http://www.britac.ac.uk/events/archive/forum-economy.cfm>.
- Bhimani, A. (2009) 'Risk management, corporate governance and management accounting: Emerging interdependencies', *Management Accounting Research* 20:(1): 2-5.
- Blackler, F. (1993) 'Knowledge and the theory of organizations: Organizations as activity systems and the reframing of management', *Journal of Management Studies* 30: 863-884.
- Blunden, T. and Thirwell, J. (2013) *Mastering Operational Risk: A Practical Guide to Understanding Operational Risk and How to Manage it*, London: Financial Times Prentice Hall.
- Boje, D. M. (1991) 'The storytelling organization: A study of story performance in an office-supply firm', *Administrative Science Quarterly* 36:(1): 106-126.
- Boje, D. M., Gephart, R. P. and Thatchenkery, T. J. (1996) *Postmodern Management and Organization Theory*, London: Sage Publications.
- Brito, M. H. d. O. (2007) 'A Imaginação: Questões Preliminares', *Fragmentos de Cultura* 17:(1/2): 145-154.
- Brown, A., Stacey, P. and Nandhakumar, J. (2008) 'Making sense of sensemaking narratives', *Human Relations* 61:(8): 1035-1062.
- Brunsson, N. (1982) 'The irrationality of action and action rationality: decisions, ideologies and organizational actions', *Journal of Management Studies* 19:(1).
- Brunsson, N. (2002) *The Organization of Hypocrisy: Talk, Decisions and Action in Organizations*, Oslo: Copenhagen Business School Press.
- Brunsson, N. and Sahlin-Andersson, K. (2000) 'Constructing organizations: The example of public sector reform', *Organization Studies* 21:(4): 721-746.
- Burns, T. and Stalker, G. M. (1961) *The Management of Innovation*, London: Tavistock.
- Burrell, G. (1994) 'Modernism, postmodernism and organizational analysis 4: The contribution of Jürgen Habermas', *Organization Studies* 15:(1): 1-45.
- Cadbury Report. (1992) *Report of the committee on the financial aspects of corporate governance*, London: Committee on the Financial Aspects of Corporate Governance.
- Callon, M. (1986) 'Some elements of a sociology of translation: domestication of the scallops and the fishermen of St. Brieuc Bay', In: J. Law (ed) *Power, action and belief: a new sociology of knowledge?* London: Routledge, 196-223.

- Castoriadis, C. (1984) 'Value, equality, justice, politics: From Marx to Aristotle and from Aristotle to ourselves', *Crossroads in the Labyrinth*. Brighton, UK: The Harvester Press, 260-339.
- Castoriadis, C. (1987a) *Encruzilhadas do Labirinto II - Domínios do Homem*, Rio de Janeiro: Paz e Terra.
- Castoriadis, C. (1987b) *The Imaginary Institution of Society*, Cambridge: MIT Press.
- Castoriadis, C. (1988) 'First Institution of Society and Second-Order Institutions', *Free Associations* 12: 39-51.
- Castoriadis, C. (1994) 'Radical Imagination and the Social Instituting Imaginary', In: Gillian Robinson and John Rundell (eds) *Rethinking Imagination: Culture and Creativity*. London: Routledge.
- Castoriadis, C. (1995) 'Logic, Imagination, Reflection', In: A. Elliott and S. Frosh (eds) *Psychoanalysis in Context: Paths Between Theory and Modern Culture*. London: Routledge.
- Castoriadis, C. (1996) 'Psyche and Society Revisited', *Figures of the Thinkable*. Manuscript available at <http://www.agorainternational.org/englishworks.html>.
- Castoriadis, C. (1997a) 'Done and To Be Done', In: David Ames Curtis (ed) *The Castoriadis Reader*. Oxford: Oxford University Press, 361-417.
- Castoriadis, C. (1997b) 'The Greek Polis and the Creation of Democracy', In: David Ames Curtis (ed) *The Castoriadis Reader*. London: Blackwell.
- Castoriadis, C. (1997c) 'The 'Rationality' of Capitalism', In: translated from the French and edited anonymously as a public service (ed) *Figures of the Thinkable*. downloaded from <http://www.agorainternational.org/englishworks.html>.
- Chia, R. (1994) 'The concept of decision: a deconstructive analysis', *Journal of Management Studies* 31:(6): 781-806.
- Clegg, S. (1989) *Frameworks of Power*, London: Sage.
- Clegg, S. (1994) 'Weber and Foucault: Social theory for the study of organizations', *Organization* 1:(1): 149-178.
- Clegg, S. (2010) 'The State, Power, and Agency: Missing in Action in Institutional Theory?', *Journal of Management Inquiry* 19:(1): 4-13.
- Clegg, S., Hardy, C. and Nord, W. R. (1996) *Handbook of Organization Studies*, CA: Thousand Oaks.
- Combined Code. (2003) *The combined code on corporate governance*, London: Financial Reporting Council.
- Contu, A., Driver, M. and Jones, C. (2010) 'Jacques Lacan with Organization Studies', *Organization* 17:(3): 307-315.
- Cooper, R. (1989) 'Modernism, post modernism and organizational analysis 3: The contribution of Jacques Derrida', *Organization Studies* 10:(4): 479-502.
- Cooper, R. and Burrell, G. (1988) 'Modernism, postmodernism and organizational analysis: An introduction', *Organization Studies* 9:(1): 91-112.
- Cornelissen, J. (2006) 'Metaphor and the dynamics of knowledge in organization theory: A case study of the organizational identity metaphor', *Journal of Management Studies* 43:(4): 683-709.
- COSO. (1992) *Internal control - Integrated framework*, New York: Committee of Sponsoring Organizations of the Treadway Commission.
- Czarniawska, B. (1997) *Narrating the Organization: Dramas of Institutional Identity*, London: The University of Chicago Press.
- Czarniawska, B. (1999) *Writing Management: Organization Theory as a Literary Genre*, Oxford: Oxford University Press.
- Czarniawska, B. (2000) *The Uses of Narrative in Organization Research*, Gothenburg: Report 2000:5 of the Gothenburg Research Institute.
- Czarniawska, B. (2006) *Organization Theory: Central Topics*, UK: Edward Publishing Limited.
- Czarniawska, B. (2008) 'How to misuse institutions and get away with it: some reflections on institutional theory(ies)', In: Royston Greenwood, Christine Oliver, Roy Suddaby, et al. (eds) *The Sage Handbook of Organizational Institutionalism*. London: Sage Publications, 769-782.
- Czarniawska, B. and Sevón, G. (1996) *Translating Organizational Change*, Berlin: De Gruyter.
- Czarniawska, B. and Sevón, G. (2005) *Global Ideas: How Ideas, Objects and Practices Travel in the Global Economy*, Malmö: Copenhagen Business School Press.
- Daft, R. L. and Weick, K. E. (1984) 'Toward a model of organizations as interpretation systems', *The Academy of Management Review* 9:(2): 284-295.
- Daston, L. (1998) 'Fear and loathing of the imagination in science', *Daedalus*:(1): 73-95.
- Davidson, D. (2001) 'Truth and meaning', In: A. P. Martinich (ed) *The Philosophy of Language*. New York: Oxford University Press, 114-124.
- Davidson, P. (1993) 'Organizational dysfunction: A family metaphor', *Leadership and Organization Development Journal* 14:(6): 1-3.
- De Goede, M. (2008) 'Beyond risk: premediation and the post-9/11 security imagination', *Security Dialogue* 39:(2-3): 155-176.

- Denzin, N. K. and Lincoln, Y. S. (2000) *Handbook of Qualitative Research*, Thousand Oaks: Sage Publications, Inc.
- Derrida, J. (1976) *Of Grammatology*, Baltimore: Johns Hopkins University Press.
- Diederichs, M. (2012) *Risikomanagement und Risikocontrolling*, München: Franz Vahlen.
- Diermeier, D. (2011) *Reputation Rules: Strategies for Building your Company's Most Valuable Asset*, New York: McGraw-Hill.
- DiMaggio, P. (1997) 'Culture and cognition', *Annual Review of Sociology* 23: 263-287.
- DiMaggio, P. J. and Powell, W. W. (1983) 'The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields', *American Sociological Review* 48:(2): 147-169.
- DiMaggio, P. J. and Powell, W. W. (1991) *The New Institutionalism in Organizational Analysis*, Chicago: University of Chicago Press.
- Dougherty, D. (1996) 'Organizing for innovation', In: S. Clegg, C. Hardy and W. Nord (eds) *Handbook of Organization Studies*. London: Sage.
- Douglas, M. (1966) *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*, London: Routledge.
- Douglas, M. (1985) *Risk Acceptability According to the Social Sciences*, New York: Russel Sage Foundation.
- Douglas, M. (1992) *Risk and Blame: Essays in Cultural Theory*, London: Routledge.
- Douglas, M. and Wildavsky, A. (1982) *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers*, Berkeley, California: University of California Press.
- Elliott, A. (2002) 'The social imaginary: A critical assessment of Castoriadis's psychoanalytic social theory', *American Imago* 59:(2): 141-170.
- Engeström, Y. (1987) *Learning by expanding: An activity theoretical approach to developmental research*, Helsinki: Orienta-Konsultit.
- Ewald, F. (1991) 'Insurance and risk', In: G. Burchell, C. Gordon and P. Miller (eds) *The Foucault Effect: Studies in Governmentality*. London: Harvester Wheatsheaf, 197-210.
- Fayol, H. (1949) *General and Industrial Management*, London: Pitman.
- Fel, D. (1993) 'The 'real' since Freud: Castoriadis and Lacan on socialization and language', *American Imago* 50:(2): 161-195.
- Flusser, V. (2000) *Towards a Philosophy of Photography*, London: Reaktion Books.
- Foucault, M. (1993) 'An introduction to Ludwig Binswanger's 'Dreams and Existence'', In: K. Hoeller (ed) *M. Foucault, and L. Binswanger, Dreams and Existence*. Atlantic Highlands, NJ: Humanities Press International, Inc., 31-81.
- Freud, S. (1985) *The complete letters of Sigmund Freud to Wilhekm Fliess, 1887-1904*, London: Belknap Press of Harvard University Press.
- Friedland, R. (2009) 'Institution, practice and ontology: towards a religious sociology', In: Renate Meyer, Kerstin Sahlin-Andersson, Marc Ventresca, et al. (eds) *Ideology and Organizational Institutionalism, Research in the Sociology of Organizations*. UK: Emerald Group Publishing.
- Friedland, R. (2012) 'Book Review: The Institutional Logics Perspective: A new approach to Culture, Structure, and Process. Patricia H. Thornton, William Ocasio & Michael Lounsbury', *M@n@gement* 15:(5): 582-595.
- Friedland, R. (2013) 'The Value of Institutional Logics: Exploring the Concept of Institutional Logics in Organization Studies: Critique and Recent Developments'. Cardiff: Paper Presented at the Cardiff Business School.
- Friedland, R. and Alford, R. R. (1991) 'Bringing society back in: symbols, practices, and institutional contradictions', In: Walter W. Powell and Paul J. DiMaggio (eds) *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press, 232-263.
- Furth, H. (1996) *Desire for Society: Children's Knowledge as Social Imagination*, London: Plenum Press.
- Gabriel, Y. (1995) 'The unmanaged organizations: stories, fantasies and subjectivity', *Organization Studies* 16:(3): 477-501.
- Garfinkel, H. (1967) *Studies in Ethnometodology*, Englewood Cliffs, NJ: Prentice Hall.
- Garud, R., Hardy, C. and Maguire, S. (2007) 'Institutional entrepreneurship as embedded agency: An introduction to the special issue', *Organization Studies* 28:(7): 957-969.
- Geertz, C. (1973) *The Interpretation of Cultures*, New York: Basic Books.
- Gephart, R. P., Maanen, J. V. and Oberlechner, T. (2009) 'Organizations and risk in late modernity', *Organization Studies* 30:(02&03): 141-155.
- Giddens, A. (1991) *Modernity and Self-Identity*, Cambridge: Polity Press.
- Greenbury Report. (1995) *Direcor's remuneration: Report of a study group chaired by Sir Richard Greenbury*, London: Confederation of British Industry.
- Greenwood, R., Díaz, A. M., Li, S. X. and Lorente, J. C. (2010) 'The Multiplicity of Institutional Logics and the Heterogeneity of Organizational Responses', *Organization Science* 21:(2): 521-539.

- Greenwood, R., Oliver, C., Sahlin, K. and Suddaby, R. (2008) *The Sage Handbook of Organizational Institutionalism*, London: Sage Publications.
- Gumport, P. (2000) 'Academic restructuring: organizational change and institutional imperatives', *Higher Education* 39:(67-91).
- Habermas, J. (1981) 'Modernity versus postmodernity', *New German Critique* 22: 3-14.
- Hacking, I. (1990) *The Taming of Chance*, Cambridge: Cambridge University Press.
- Hardy, C. and Maguire, S. (2008) 'Institutional entrepreneurship', In: Royston Greenwood, Christine Oliver, Roy Suddaby, et al. (eds) *The Sage Handbook of Organizational Institutionalism*. London: Sage Publications, 198-217.
- Haslam, A. S., Postmes, T. and Ellemers, N. (2003) 'More than a metaphor: Organizational identity makes organizational life possible', *British Journal of Management* 15: 357-369.
- Hasselbladh, H. and Theodoridis, F. (1998) 'Social magmas and the conventional explanatory pyramid', *Scandinavian Journal of Management* 14:(1/2): 53-76.
- Heller, A. (1989) 'From hermeneutics in social science toward hermeneutics of social science', *Theory and Society* 18:(3): 291-322.
- Hilgartner, S. (1992) 'The social construction of risk objects: or, how to pry open networks of risk', In: James F. Short and Lee Clarke (eds) *Organizations, Uncertainties, and Risk*. Boulder, CO: Westview Press.
- Hirsch, P. M. and Lounsbury, M. (1997) 'Ending the family quarrel: Toward a reconciliation of 'old' and 'new' institutionalisms', *American Behavioral Scientist* 40:(406).
- Hood, C. (2002) 'The risk game and the blame game', *Government and Opposition* 37:(1): 15-37.
- Hood, C., Rothstein, H. and Baldwin, R. (2001) *The Government of Risk: Understanding Risk Regulation Regimes*, Oxford: Oxford University Press.
- Huber, C. and Scheytt, T. (2013) 'The dispositif of risk management: reconstructing risk management after the financial crisis', *Management Accounting Research* 24:(2).
- Hutter, B. M. (2010) *Anticipating Risks and Organising Risk Regulation*, Cambridge: Cambridge University Press.
- ICAEW. (1999) 'Internal control: Guidance for directors on the combined code.', *Turnbull Report, Institute of Chartered Accounts in England and Wales* London.
- Inns, D. (2002) 'Metaphor in the literature of organizational analysis: A preliminary taxonomy and a glimpse at a humanities-based perspective', *Organization* 9:(2): 305-330.
- Joas, H. (1992) *Die Kreativität des Handelns*, Frankfurt am Main: Suhrkamp.
- Joas, H. (1993) 'Institutionalization as a Creative Process: The Sociological Importance of Cornelius Castoriadis's Political Philosophy', In: Hans Joas (ed) *Pragmatism and Social Theory*. Chicago: The University of Chicago Press.
- Joas, H. and Meyer, R. (1989) 'Review: Institutionalization as a creative process: The sociological importance of Cornelius Castoriadis's political philosophy', *American Journal of Sociology* 94:(5): 1184-1199.
- Kalthoff, H. (2005) 'Practices of calculation: economic representations and risk management', *Theory, Culture & Society* 22:(2): 69-97.
- Kalyvas, A. (1998) 'Norm and Critique in Castoriadis's Theory of Autonomy', *Constellations* 5:(2): 161-182.
- Kaplan, E. K. (1972) 'Gaston Bachelard's philosophy of imagination: An introduction', *Philosophy and Phenomenological Research* 33:(1): 1-24.
- Kasperson, R. E., Renn, O., Slovic, P., Brown, H. S., Emel, J., Goble, R., Kasperson, J. X. and Ratick, S. (1988) 'The social amplification of risk: A conceptual framework', *Risk Analysis* 8:(2): 177-187.
- Katz, D. and Kahn, R. L. (1966) *The Social Psychology of Organizations*, London: Wiley.
- Klooger, J. (2009) *Castoriadis: Psyche, Society, Autonomy*, Leiden: Brill.
- Knight, F. (1921) *Risk, uncertainty and profit*, Boston: Houghton Mifflin.
- Lammers, J. C. (2011) 'How institutions communicate: Institutional messages, institutional logics, and organizational communication', *Management Communication Quarterly* 25:(1): 154-182.
- Latimer, J. and Skeggs, B. (2011) 'The politics of imagination: Keeping open and critical', *The Sociological Review* 59:(3): 393-410.
- Lawrence, T., Suddaby, R. and Leca, B. (2011) 'Institutional Work: Refocusing Institutional Studies of Organization', *Journal of Management Inquiry* 20:(1): 52-58.
- Lear, J. (2005) *Freud*, London: Routledge.
- Leca, B., Battilana, J. and Boxenbaum, E. (2008) 'Agency and Institutions: A Review of Institutional Entrepreneurship'. Harvard Business School Working Papers, 1-51.

- Leveson, N., Dulac, N., Marias, K. and Carrol, J. (2009) 'Moving beyond normal accidents and high reliability organizations: A systems approach to safety in complex systems', *Organization Studies* 30:(02 & 03): 227-249.
- Linsley, P. M. and Shrivess, P. J. (2009) 'Mary Douglas, risk and accounting failures', *Critical Perspectives on Accounting* 20:(4): 492-508.
- Lounsbury, M. (2002) 'Institutional transformation and status mobility: the professionalization of the field of finance', *Academy of Management Journal* 45: 255-266.
- Lounsbury, M. (2007) 'A tale of two cities: competing logics and practice variation in the professionalizing of mutual funds', *Academy of Management Journal* 50:(2): 289-307.
- Lupton, D. (1999) *Risk*, London: Routledge
- Maitlis, S. and Sonenshein, S. (2010) 'Sensemaking in crisis and change: Inspiration and insights from Weick (1988)', *Journal of Management Studies* 47:(3): 551-580.
- March, J. and Shapira, Z. (1987) 'Managerial perspectives on risk and risk taking', *Management Science* 13:(11): 1404-1418.
- Markus, G. (1994) 'A Society of Culture: The Constitution of Modernity', In: G. Robinson and J. Rundell (eds) *Rethinking Imagination*. London: Routledge, 15-29.
- McGoun, E. G. (1995) 'The history of risk measurement', *Critical Perspectives on Accounting* 6: 511-532.
- Meyer, J. W., Boli, J. and Thomas, G. M. (1987) 'Ontology and Rationalization in the Western Cultural Account', In: George M. Thomas, John W. Meyer, Francisco O. Ramirez, et al. (eds) *Institutional Structure: Constituting State, Society, and the Individual*. CA: Newsbury Park, 12-37.
- Meyer, J. W. and Rowan, B. (1977) 'Institutionalized Organizations: Formal Structure as Myth and Ceremony', *American Journal of Sociology* 83:(2): 340-363.
- Mezias, S. (2003) 'Feature interview with Karl Weick', *MOC Division Newsletter (Academy of Management)*. (accessed August, 2012).
- Mikes, A. (2005) 'Enterprise risk management in action'. ESCR Centre for Analysis of Risk and Regulation.
- Mikes, A. (2009) 'Risk management and calculative cultures', *Management Accounting Research* 20: 18-40.
- Mikes, A. (2011) 'From counting risk to making risk count: Boundary-work in risk management', *Accounting, Organizations and Society* 36:(4-5): 226-245.
- Miller, P., Kurunmäki, L. and O'Leary, T. (2008) 'Accounting hybrids and the management of risk', *Accounting, Organizations and Society* 33: 942-967.
- Millo, Y. and MacKenzie, D. (2009) 'The usefulness of inaccurate models: Towards an understanding of the emergence of financial risk management', *Accounting, Organizations and Society* 34: 638-653.
- Milne, M. J., Kearins, K. and Walton, S. (2002) 'Creating adventures in wonderland: The journey metaphor and environmental sustainability', *Organization* 27:(2): 294-303.
- Moorman, C. (2002) 'Consumer health under the scope', *Journal of Consumer Research* 29: 152-158.
- Morgan, G. (1980) 'Paradigms, metaphors, and puzzle solving in organization theory', *Administrative Science Quarterly* 25:(4): 605-622.
- Morgan, G. (1983) 'More on metaphor: Why we cannot control tropes in administrative science', *Administrative Science Quarterly* 28:(4): 601-607.
- Morgan, G. (1986) *Images of Organization*, Beverly Hills: Sage.
- Munro, I. and Huber, C. (2012) 'Kafka's mythology: Organization, bureaucracy and the limits of sensemaking', *Human Relations* 65:(4): 523-544.
- Newton, T. (1998) 'Theorizing subjectivity in organizations: The failure of Foucauldian studies?', *Organization Studies* 19:(3): 415-447.
- Ortony, A. (1975) 'Why metaphors are necessary and not just nice', *Educational Theory* 25: 45-53.
- Ortony, A. (1979) 'Beyond literal similarity', *Psychological Review* 86: 161-180.
- Oswick, C., Keenoy, T. and Grant, D. (2002) 'Metaphor and analogical reasoning in organization theory: Beyond orthodoxy', *Academy of Management* 27:(2): 294-303.
- Oswick, C. and Montgomery, J. (1999) 'Images of an organisation: The use of metaphor in a multinational company', *Journal of Organizational Change Management* 12:(6): 501-523.
- Pablo, Z. and Hardy, C. (2009) 'Merging, masquerading and morphing: Metaphors and the World Wide Web', *Organization Studies* 30:(8): 821-843.
- Parsons, T. (1956) 'Suggestions for a sociological approach to the theory of organizations', *Administrative Science Quarterly*: 63-85; 225-239.
- Pelzer, P. and Case, P. (2008) 'The displaced world of risk management: covert enchantment in a calculative world', In: Monika Kostera (ed) *Mythical Inspirations for Organizational Realities*. New York: Palgrave Macmillan, 100-110.
- Perrow, C. (1986) *Complex Organizations: A Critical Essay*, New York: McGraw-Hill.
- Perrow, C. (1999) *Normal accidents: Living with high-risk technologies*, Princeton, NJ: Princeton University Press.

- Perrusi, M. S. (1999) 'Aspectos da criação no pensamento de Castoriadis', *Revista SymposiM* Ano 3:(Número Especial).
- Pinder, C. and Bourgeois, V. W. (1982) 'Controlling tropes in administrative science', *Administrative Science Quarterly* 27: 641-652.
- Power, M. (2004a) 'Counting, control and calculation: Reflections on Measuring and Management', *Human Relations* 57:(6): 765-783.
- Power, M. (2004b) *The Risk Management of Everything*, London: Demos.
- Power, M. (2007) *Organized Uncertainty: Designing a World of Risk Management*, Oxford: Oxford University Press.
- Power, M. (2009) 'The risk management of nothing', *Accounting, Organizations and Society* 34: 849-855.
- Power, M. (2012) 'The apparatus of fraud risk', *Accounting, Organizations and Society* Article in Press.
- Power, M., Scheytt, T., Soin, K. and Sahlin, K. (2009) 'Reputational risk as a logic of organizing in late modernity', *Organization Studies* 30:(02&03): 301-324.
- PricewaterhouseCoopers. (2004) *Sarbanes-Oxley Act: Section 404, Practical Guidance for Management*.
- Radcliffe, V. S. (1997) 'Competing rationalities in 'special' government audits: The case of NovAtel', *Critical Perspectives on Accounting* 8:(4): 343-366.
- Rao, H., Monin, P. and Durand, R. (2003) 'Institutional Change in Toque Ville: Nouvelle Cuisine as an Identity Movement in French Gastronomy', *American Journal of Sociology* 108:(4): 795-843.
- Reed, M. (2003) 'The Agency/Structure Dilemma in Organization Theory', In: H. Tsoukas and C. Knudsen (eds) *The Oxford Handbook of Organization Theory: Meta-Theoretical Perspectives*. Oxford: Oxford University Press.
- Reed, M. and Hughes, M. (1992) *Rethinking organization: New directions in organizational theory and analysis*, London: Sage.
- Rhodes, C. and Brown, A. D. (2005) 'Narrative, organizations and research', *International Journal of Management Reviews* 7:(3): 167-188.
- Ricoeur, P. (1994) 'Imagination in discourse and in action', In: G. Robinson and J. Rundell (eds) *Rethinking Imagination*. London: Routledge, 118-135.
- Roberts, J. (2005) 'The power of the 'imaginary' in disciplinary processes', *Organization* 12:(5): 619-642.
- Roethlisberger, F. J. and Dickson, W. J. (1939) *Management and the Worker*, Cambridge, MA: Harvard University Press.
- Rothstein, H., Huber, M. and Gaskell, G. (2006) 'A theory of risk colonization: The spiraling regulatory logics of societal and institutional risk', *Economy and Society* 35:(1): 91-112.
- Rundell, J. (1994) 'Creativity and Judgment: Kant on Reason and Imagination', In: G. Robinson and J. Rundell (eds) *Rethinking Imagination*. London: Routledge, 87-117.
- Sackmann, S. (1989) 'The role of metaphors in organization transformation', *Human Relations* 42:(6): 463-485.
- Scheytt, T., Soin, K., Sahlin-Andersson, K. and Power, M. (2006) 'Introduction: Organizations, risk and regulation, Special research symposium: organizations and the management of risk', *Journal of Management Studies* 43:(6): 1331-1337.
- Scott, W. R. and Meyer, J. W. (1991) 'The Organization of Social Sectors', In: Walter W. Powell and Paul J. DiMaggio (eds) *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press, 108-140.
- Selznick, P. (1948) 'Foundations for the theory of organizations', *American Sociological Review* 5: 25-35.
- Seo, M.-G. and Creed, W. E. (2002) 'Institutional contradictions, praxis, and institutional change: A dialectic perspective', *Academy of Management Review* 27: 222-247.
- Simon, H. A. (1947) *Administrative Behavior: a Study of Decision-Making Processes in Administrative Organization*, New York: Macmillan.
- Simon, H. A. (1985) 'Human nature in politics: The dialogue of psychology with political science', *American Political Science Review* 79: 293-304.
- Sinha, C. (1999) 'Grounding, mapping, and acts of meaning', In: Thedo Janssen and Gisela Redeker (eds) *Cognitive Linguistics: Foundations, Scope, and Methodology*. Berlin: Moutun de Gruyter, 223-255.
- Slater, D. and Ritzer, G. (2001) 'Interview with Ulrich Beck', *Journal of Consumer Culture* 1:(2): 261-277.
- Slovic, P. (2010) *The Feeling of Risk: New Perspectives on Risk Perception*, London: Earthscan.
- SOX. (2002) *Sarbanes-Oxley Act* Washington DC: Government Printing Office.
- Stark, D. (2000) 'For a sociology of worth', *Working Paper Series, Center on Organizational Innovation, Columbia University* Available online at http://www.coi.columbia.edu/pdf/stark_fsw.pdf.
- Stavrakakis, Y. (2007) 'Antinomies of Creativity: Lacan and Castoriadis on Social Construction and the Political', In: Yannis Stavrakakis (ed) *The Lacanian Left: Psychoanalysis, Theory, Politics*. Edinburgh: Edinburgh University Press.
- Tansey, J. and O'Riordan, T. (1999) 'Cultural theory and risk: a review', *Health, Risk & Society* 1:(1): 71-90.

- Tauro, V.-E., Balthazar, F. M. and Furtado, V. C. (2008) 'Algumas contribuições de Cornelius Castoriadis para a psicanálise: da psique monádica ao ser social-histórico', *Mnemosine* 4:(2): 3-19.
- Taylor, F. W. (1911) *The Principles of Scientific Management*, New York: Harper.
- Thompson, J. R. and Sanders, R. P. (1997) 'Strategies for reinventing federal agencies: Gardening versus engineering', *Public Productivity and Management Review* 21:(2): 137-156.
- Thornton, P., Jones, C. and Kury, K. (2005) 'Institutional logics and institutional change: transformation in accounting, architecture, and publishing', In: Candace Jones and Patricia H. Thornton (eds) *Research in the Sociology of Organizations*. London: JAI, 125-170.
- Thornton, P. H., Lounsbury, M. and Ocasio, W. (2012) *The Institutional Logics Perspective: A New Approach to Culture, Structure and Process*, New York: Oxford University Press Inc.
- Thornton, P. H. and Ocasio, W. (1999) 'Institutional logics and the historical contingency of power in organizations: executive succession in the higher education publishing industry, 1958-1990', *American Journal of Sociology* 105:(3): 801-843.
- Thornton, P. H. and Ocasio, W. (2008) 'Institutional logics', In: Royston Greenwood, Christine Oliver, Roy Suddaby, et al. (eds) *The Sage Handbook of Organizational Institutionalism*. London: Sage Publications, 99-129.
- Tovar-Restrepo, M. (2012) *Castoriadis, Foucault, and Autonomy: New Approaches to Subjectivity, Society, and Social Change*, New York: Continuum International Publishing Group.
- Trist, E. L. and Bamforth, K. W. (1951) 'Some social and psychological consequences of the longwall method of coal getting', *Human Relations* 4: 3-38.
- Tsoukas, H. (1991) 'The missing link: A transformational view of metaphors in organizational science', *Academy of Management Review* 16: 566-585.
- Tsoukas, H. and Chia, R. (2002) 'Organizational becoming: Rethinking organizational change', *Organization Science* 13:(5): 567-582.
- Tsoukas, H. and Knudsen, C. (2003) *The Oxford Handbook of Organization Theory: Meta-Theoretical Perspectives*, Oxford: Oxford University Press.
- Tversky, A. and Kahneman, D. (1974) 'Judgment under uncertainty: Heuristics and biases: biases in judgments reveal some heuristics of thinking under uncertainty', *Science* 185: 1124-1131.
- Urribarri, F. (2002) 'Castoriadis: The radical imagination and the post-Lacanian unconscious', *Thesis Eleven* 7: 40-51.
- Van Maanen, J. (2011) *Tales of the Field*, Chicago: The University of Chicago Press.
- Vaughan, D. (1996) *The Challenger Launch Decision*, Chicago: Chicago University Press.
- Weber, K. and Glynn, M. A. (2006) 'Making sense with institutions: Context, thought and action in Karl Weick's theory', *Organization Studies* 27:(11): 1639-1660.
- Weber, M. (1946) *From Max Weber: Essays in sociology*, New York: Oxford University Press.
- Weick, K. (1979) *The Social Psychology of Organizing*, Reading, Mass: Addison-Wesley.
- Weick, K. (1989) 'Theory construction as disciplined imagination', *The Academy of Management Review* 14:(4): 516-531.
- Weick, K. E. (1993) 'The collapse of sensemaking in organizations: The Mann Gulch disaster', *Administrative Science Quarterly* 38:(4): 628-652.
- Weick, K. E. and Roberts, K. H. (1993) 'Collective mind in organizations: Heedful interrelating on flight decks', *Administrative Science Quarterly* 38:(3): 357-381.
- Weick, K. E., Sutcliffe, K. and Obstfeld, D. (1999) 'Organizing for high reliability', *Research in Organizational Behavior* 21: 81-123.
- Weick, K. E., Sutcliffe, K. M. and Obstfeld, D. (2005) 'Organizing and the process of sensemaking', *Organization Science* 16:(4): 409-421.
- Whitebook, J. (1998) 'Requiem for a *Selbstdenker*: Cornelius Castoriadis (1922-1997)', *Constellations* 5:(2): 147-160.
- Zucker, L. G. (1991) 'The Role of Institutionalization in Cultural Persistence', In: W.W. Powell and P. J. DiMaggio (eds) *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press, 83-107.

Appendix

