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How Competing Logics Arise and Shape Organizational Processes and Outcomes During Scale-up

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in a theoretical and empirical manner.

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Abstract

In order to scale, entrepreneurial ventures (younger, growth oriented and innovative firms) often have to change the market they operate in. For example, going from an early scientific market to a mainstream one. These different markets work with different logics; what is valuable to the early market is not as valuable to the mainstream one and vice versa. When scaling up, the venture can encounter institutional complexity, that is when it faces both logics at the same time. This thesis investigates how a scaling venture encounters this institutional complexity. The thesis focuses on how these macro-level changes affect the internal processes and outcomes on the micro-level in the venture.

The thesis consists of four papers. The first paper reviews the core theoretical literature of institutional logics that the thesis builds upon. The second and third paper rely on the longitudinal, qualitative data collected from a venture. The second paper investigates how a new logic is adopted on the micro-level and the consequence for the venture. The third follows this paper in time and investigates how the firm's strategy of catering to two different logics incurred a trade-off in accessing resources and legitimacy from both sources and having internal coherence, as the logics was used by each group differently and thus two sets of beliefs, ways of working and rules were present. The fourth paper builds a theoretical argument on how organizations respond to institutional change. This paper argues that working in peripheral organizations incurs that managers have more unencumbered ways of thinking and therefore are more able to embrace institutional change compared to managers in embedded organizations.

The overarching contribution of this thesis is to illustrate and analyze how competing logics influence and hinder the scale-up of entrepreneurial ventures. This analysis contributes to the institutional logics literature, especially the one on hybrid organizations and institutional complexity, by providing insights into the micro-level mechanisms of the logics, which has been lacking in development in some areas. The findings provide practical insights into the challenges that ventures face in their internal organization as they scale. Thereby, thesis seeks to help out on this societal important issue of boosting the growth of, and in, new and innovative firms.

Resume

For at skalere må venturevirksomheder (yngre, vækstorienterede og innovative virksomheder) ofte ændre det marked de opererer på. For eksempel må de gå fra et tidligt videnskabeligt teknologimarked til et mainstreammarked. Disse markeder opererer ofte med forskellige logikker; hvad der er værdifuldt på det tidlige marked, er ikke lige så værdifuldt på mainstreammarkedet og vice versa. Når ventures skalerer op, så de kan de møde institutionel kompleksitet, det er når de står overfor begge logikker på samme tid. Denne afhandling undersøger hvordan en venturevirksomhed der skalerer møder denne institutionelle kompleksitet. Afhandlingen fokuserer på hvordan disse makroniveau ændringer påvirker de indre processer og resultater på mikroniveau inden i virksomheden.

Afhandlingen består af fire artikler. Den første artikel gennemgår den kernelitteratur om institutional logics som afhandlingen bygger på. Den anden og tredje artikel bygger på et længerevarende, kvalitativ data indsamlet i en venturevirksomhed. Den anden artikel undersøger hvordan en ny logik bliver inkorporeret på mikroniveau og hvad konsekvensen er for virksomheden. Den tredje artikel følger den foregående artikel i tid og undersøger hvordan virksomhedens strategi med at imødekomme begge logikker skabte et trade-off mellem at få adgang til resurser og legitimitet fra begge kilder og have intern sammenhæng, fordi logikkerne blev brugt af hver gruppe forskellige, og derved opstod der to tankesæt, to måder at arbejde på og to spilleregler. Den fjerde artikel bygger et teoretisk argument om hvordan organisationer modsvarer institutionelle forandringer. Artiklen argumenterer at arbejde i perifere organisationer gør at lederne har mere frie måder at tænke på og derfor er bedre til at imødegå institutionelle forandringer, sammenlignet med leder i forankrede organisationer.

Denne afhandlings hovedbidrag er at illustrere og analysere hvordan modstridende logikker influerer og hindrer skalering af venturevirksomheder. Denne analyse bidrager til litteraturen om institutional logics, særligt den om hybridorganisationer og institutionel kompleksitet, ved at bidrage med indsigt om de mikroniveau mekanismer som de her logikker indeholder og influerer, et felt som mangler udvikling på visse områder. Afhandlingen giver praktisk indsigt i de udfordringer som venturevirksomheder har i deres interne organisation når de skalerer. Derved, søger afhandlingen at afhjælpe på dette samfundsmæssige vigtige områder om at øge væksten af, og i, nye og innovative virksomheder.

Contents

Chapter 1

Introduction

This thesis primarily analyzes the dynamics of institutional logics in organizations with an empirical focus on entrepreneurial ventures[1] during scale-up. The core interest of this thesis is how and why different socially constructed macro-level patterns of action, beliefs, values, rules, and norms—what scholars call "institutional logics" (Thornton et al. 2012)—affect micro-level processes and outcomes, mainly in entrepreneurial ventures, but also extendable to other organizations. These processes and outcomes are framing, collaboration, use of structures and practices, conflict, and decision-making. The thesis will focus on how different institutional logics impact within the organization, which has not received too much attention (Greenwood et al., 2014). I will argue that encountering different logics is particularly an issue for entrepreneurial ventures that during scale-up would often face the need to cater to new and different demands, such as increasing profitability and bringing in people who fit the preconception of what it takes requires to grow these ventures further (Fisher et al., 2016). These changes result in dual institutional logics that compete in forming organizational action, processes, and structures. This competition may provide barriers to organizational performance and success (Besharov & Smith, 2014).

Entrepreneurial ventures are often founded on a logic that differs from larger corporations' logic. For example, ventures may often be founded as a result of applied science (Powell & Sandholtz, 2012). Powell and Sandholtz (2012) found that such ventures often were tightly knitted to academia and graft important ideas on about how to organize from here. However, in a scale-up process from startup to corporation, ventures will naturally run into a market and corporate logic. Ventures face demands to accommodate this logic by changing personnel and structures; however, in this phase, organizational culture and structures may become contested between founders and joiners, which could instigate repercussions for the venture (Desantola & Gulati; 2017 Sutton &

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[1] An entrepreneurial venture is a young, growth-oriented company engaging in innovative behavior (Desantola & Gulati, 2017 p. 640).

Rao, 2014). This thesis therefore investigates: *"How do multiple institutional logics influence successful scaling of entrepreneurial ventures?"*

This line of research is crucial because the ventures often fail during the scale-up stage (Desantola & Gulati, 2017; Sutton & Rao, 2014). Scale-up is seen as a "black art," and little is known about internal organization during this scale-up phase (Desantola & Gulati, 2017 p. 641). While the scholarship on entrepreneurs is increasing rapidly, there is a lack of research on how the internal organization is affected by growth (Desantola & Gulati, 2017; McMullen & Dimov, 2013; Wright & Stigliani, 2012). This absence poses a problem, because internal organization is crucial to the scaling endeavor (Desantola & Gulati, 2017). Moreover, economists have found that scaling is lagging behind, despite the increased number of high-potential start-ups that exist (Guzman & Stern, 2016). Simply put; creative ventures with potential are flourishing, but the fulfillment of their potential is not. Guzman and Stern (2016 p. 40) state:"

"While the supply of new high-potential-growth startups appears to be growing, the ability of U.S. high-growth-potential startups to commercialize and scale seems to be facing continuing stagnation."

The lack of new ventures scaling-up is not just a problem in the US but is a fundamental issue globally. It is also a problem in Denmark, where, according to a report by the Danish business agency ("Erhvervsstyrelsen"), scaling is correspondingly sluggish. Although many barriers to scale-up may stem from economic institutions, a shortage of skilled people, and a lack of dynamism in markets, etc. And, while these barriers deserve attention, this thesis merely focuses on the barriers regarding the internal organization as it is affected by multiple institutional logics. It concentrates on internal organization because that factor is likely affected by a venture's pluralistic environment, which induces changes to organizational identity and overall goals (Fisher et al., 2016).

The thesis consists of four papers, a review on the relevant institutional logics literature that the thesis draws upon. A second paper, the first empirical one, deals with how new logics are adopted by the organization and its members as a new cognitive frame that come to clash with the existing one over time. The third paper, and second empirical paper, builds on the first by looking at why such frames would exist, why individuals motivated are to retain conflicting logics, and how they avoid blending logics, while the venture is seeking to become hybrid. The final part of the thesis

comprises a theoretical paper on how organizational position and history affects managers' ability to respond to changes in logics. The papers hereby produce both theoretical and practical contributions that I will list and discuss in the section on contributions.

The introduction to thesis continues as follows; first, I will shortly introduce the basis of the research design and context.

Second, I will discuss this thesis placement in the institutional logics literature on hybrid organizations and institutional complexity, which is the sub-field of the institutional logics literature that this thesis directly contributes to.

Third, I will discuss the deeper theoretical placement in institutional theory, this is done because the thesis places itself closer to ideas from economics, similar to the work of James Coleman, than most work on institutional logics.

I will discuss where this fits in, why it does, and why my perspective can bridge schools of thought. My thesis places itself in economic sociology, where I am focusing on economic action but emphasize social and culture concerns rather than the neoclassical economical concerns (Granovetter, 2017). I engage the philosophical background of this thesis and it relates to the institutional logics perspective. This is done because this thesis takes a micro-foundational approach in which individuals create institutions, carry their logics in mind, and are the drivers behind change, not the institutions themselves enact this work. As such, the thesis takes a different approach than many institutionalists, who focus on the collective constructs of institutions as drivers of change. I therefore contend that a micro-foundational perspective is necessary and how it may participate in prevailing institutional literature.

Fourth, I will discuss the contributions that each paper makes to the literature on institutional logics, especially in regards to the literature on hybrid organizations, institutional complexity, and broader entrepreneurship literature. I will also tie the papers together to demonstrate that they cover different aspects to form a whole thesis.

Research design and context
The thesis mainly consists of a longitudinal ethnographic case study of an entrepreneurial venture during its crucial scale-up phase as the company grew from 120 employees in Denmark to over 300 employees across several countries, a result of both organic and inorganic scale-up. I visited the company regularly over a two-year period and conducted participant observations, interviews,

and relied on archival data. The case company, to which I hereinafter refer pseudonymously as "Supertech," operates in the photonics industry. This industry is optimal for studying how a venture faces scale-up challenges because the market is very complex. From IT to windmill sensing and medical instruments, the market is spread over many different sectors and uses. It is also characterized by a lot of different players, mostly smaller start-ups, but a few are major firms. Finally, according to a report by the German Ministry of Education and Research, the market will nearly double in size between 2011–2020: from €350 billion to €615 billion. Supertech was not a start-up when the study began: it had already reached a mature market and made over €40 million in revenue. Yet, it was not a mature corporation because it did not make a profit.

The research context therefore pertains to many small- and medium-sized firms that seek to scale-up to make money for investors and owners. This context is especially interesting because young high-growth firms are increasingly rare (Decker et al., 2016). Research has shown that the scale-up of ventures, which occurs primarily in job creation, is declining (Decker et al., 2016; Haltiwanger et al., 2017; Guzman & Stern, 2016). Therefore, looking inside a venture as it scales is instructive. What are the reasons that the scaling process is so difficult and seemingly often fails? Here, the context is also interesting because Supertech is a firm with a high level of research: it operates in a fast-growing market and enjoys backing from an owner. Thus, Supertech had the foundations that is normally assumed to be crucial for venture growth, such as venture capital, high level of technology and a fast-growing market. Therefore, it is interesting to see the influence of competing logics; could they derail such a high potential venture?

The research design is an inductive case study. It relies on a broad set of qualitative data coded according to grounded theory methods, which have become the "boilerplate" of qualitative data handling in management research. As I began collecting data immediately after commencing my PhD, data were initially gathered without a literature-based research question. The overall research question and sub-questions for each paper emerged from initial data collection and analysis. These questions then provided a research design focused on capturing institutional logics and their interplay at the micro-level, which centered on capturing how employees framed their role and actions in the organization.

The in-depth discussion of methods and analysis strategy are found in both empirical papers; therefore, this introduction will not repeat it.

Placement in theory: Institutional Complexity and hybrid organizations

The main theoretical stream of this thesis is institutional logics. The core idea of this stream is that institutions have a certain logic: a set of practices, beliefs, norms, and values (Friedland & Alford, 1991; Thornton et al., 2012). For example, the court system has a certain logic on what a fair trial is, such as having a trained lawyer and what constitutes evidence. For example, a forced confession was for a very long time considered valid evidence, but not anymore.

This thesis's papers contribute to the institutional logics literature, and, more precisely, the sub-field that focuses on institutional complexity and hybrid organizations. Here, I especially concentrate on the micro-level to expand our understanding of the micro-foundations within this literature.

The idea of institutional complexity goes back to Friedland and Alford's (1991) original conceptualization of logics, where they argue that the main logics of the West—state, religion, democracy, and family—often overlap and carry contradictions that individuals may exploit for change. This foundational paper has led to a large stream of literature focusing on how (mostly) organizations experience and cope with this complexity. Greenwood et al. (2011 p. 318), in their review, describe the literature in the following way:

"Organizations face institutional complexity whenever they confront incompatible prescriptions from multiple institutional logics. Institutional logics are overarching sets of principles that prescribe how to interpret organizational reality, what constitutes appropriate behaviour, and how to succeed."

Market and profession commonly intersect in this clash of incompatible prescriptions; studies in healthcare, for example, show this occurrence (Reay & Hinings, 2009). Another clash arises between science and care in medical education (Dunn & Jones, 2010). The largest stream of literature is possibly found on social enterprises, which must couple a community or professional social work logic with a market logic (Battilana & Dorado, 2010; Battilana & Lee, 2014; Pache & Santos, 2013b).

Recent literature has provided a new perspective on institutional complexity; instead of being incompatible prescriptions that invariably clash, scholarship has increasingly focused on organizations that successfully blend these prescriptions, the so-called hybrid organizations (Battilana & Dorado, 2010; Battilana & Lee, 2014; Pache & Santos, 2013b; Smets & Jarzabkowski, 2013; Smets et al., 2015; Smith & Besharov, 2017). This writing originated in the

study of social enterprises, but, lately, scholars have argued that all organizations are essentially hybrids that have successfully settled these incompatible logics (Ocasio & Radoynovska, 2016; Schildt & Perkmann, 2017). The ways this is accomplished is often based on strategic organizational responses (Ocasio & Radoynovska, 2016; Oliver, 1991; Pache & Santos, 2010). For example, fitting business and governance models to the complexity can settle incompatible logics (Ocasio & Radoynovska, 2016). Managers, who are able to handle the paradox, can establish "guardrails" among formal structures and stakeholder relationships, thereby similarly mitigating possible conflicts (Smith & Besharov, 2017). From a perspective where institutional complexity was a hindrance and threat, researchers are now more likely to view such complexity as an opportunity to act strategically to secure organizational success and survival (Ocasio & Radoynovska, 2016; Vermeulen et al., 2016).

This development is where it becomes interesting for entrepreneurial ventures, because these ventures often confront two logics: a science one and a business one (Powell & Sandholtz, 2012).[2] How ventures thus respond to this complexity, and whether they can incorporate it as hybrids, is likely crucial to their survival and success (Schildt & Perkmann, 2017). Responses are decisive because stretching across fields allows the venture to obtain resources from multiple sources (e.g., funding for scientific endeavors as well as funding from venture capitalists).

An issue with the literature is that it often focuses on the external fit (how the organization's activities fit the environment) and less on the internal fit (the fit between internal activities) (Siggelkow, 2001). To many institutional scholars this imbalance is quite natural, because—since Meyer and Rowan's (1977) seminal paper—they have argued that ceremonial performances for an external audience are crucial in a way that real efficiency and effectiveness is not. However, the institutional logics perspective does not share this bleaker view of organizations and it has (a recent) stronger emphasis on micro-foundations, hence how people join practices, identities and goals from different logic on the "coalface" is crucial for achieving hybridity (Barley, 2008, Thornton et al. 2012). Most research, however, has focused on organizational-level dynamics (Smith & Besharov, 2017), which has left the micro-level underdeveloped (Jarvis, 2017; Pache & Santos, 2013a; Schilke, 2017; Smets & Jarzabkowski, 2013; Voronov & Yorks, 2015).

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[2] Annoyingly scholars tend to call the logic for business, market or corporate. They are essentially all the same; firms that focus on increasing profits and share price, which is the way businesses gain legitimacy. "The business of business is business" as Milton Friedman saw it.

We know little about how complexity arises in an organization like a venture: how does it first experience the need for hybridity and are managers even aware of the change? Moreover, what is the consequence of suddenly having to adopt a new logic? These questions are important for understanding how logics come into an organization, and the status of those logics is crucial for how they are handled (Pache & Santos, 2010). This lacuna I strive to fill in the first empirical paper, where I analyze how the adoption of a new logic takes the form of new frame of action on the micro-level.

A second element is that, because the literature has moved away from seeing logics as incompatible, studies nearly always show successful integration of logics, and has led some scholars to talk about "institutional ambidexterity" (Jarzabkowski et al. 2013). Here, researchers have focused on hybridity as a strategy (Durand et al. 2013, Greenwood et al. 2011), where the organization deliberately tries to access a greater set of resources and legitimacy by catering to a complex set of stakeholders. This stream of literature has received generous attention recently (e.g. Ocasio & Radoynovska, 2016, Pache & Santos, 2013b, Schildt & Perkmann, 2017, Smith & Besharov, 2017). However, an important gap in the idea that organizations can be "ambidextrous" and pursue legitimacy across the board is that it does not explain why employees, embedded within each logic, would follow such a hybrid strategy and blend their logics. The second empirical paper investigates this trade-off between a hybrid strategy that allows for a broader set of resources and legitimacy while having employees who may not buy into this strategy. It tracks employees who, instead, use the ambiguous nature of the environment to form their own frame and disrupt the organization using different processes and structures that are legitimate exactly because the complex environment allows for competing processes and structures.

Finally, I deal with the notion of strategic organizational responses to institutional change complexity in the fourth paper, which is conceptual. The notion of organizational responses to institutional change, especially in regards to the rise of competing logics ("institutional complexity") has developed into a wealth of literature (Greenwood et al., 2011) that explains many nuances of the issues that organizations face when dealing with a changing and complex environment. Yet, the literature rarely looks at the managers in charge to explain organizational responses. In short, the micro-foundations of an organization's decision-making have not been scrutinized. Managers must differ across organizations because there would be no difference in responses otherwise, and we know from the behavioral theory literature that managers differ in their decision-making (Gavetti, 2012). Here, I apply the micro-foundations of institutional logics

from Thornton et al. (2012) to managerial decision making to analyze how organizational responses differ.

Phenomenon	Literature	Gaps in the literature	Research objective
Hybrid organizations	Well-developed literature on the possible conflicts of hybrids (Battilana & Dorado, 2010), the benefits of hybrids (Jay, 2013), and how complexity is made to work in practice (Smets et al., 2015). Briefly, the research has focused on how hybrid organizations successfully persist and gain resources across complex stakeholders. Most research has shown that organizations are successful in this endeavor.	The literature has almost exclusively dealt with organizations that are facing complex logics and must be hybrid to survive, such as social enterprises. Research on how organizations act when they enter into a complex field has not received the same attention, despite the notion that most organizations will enter a complex field at some point (Schildt & Perkmann, 2017). Another issue is that the literature has not explained the nature of conflict, for example how do conflicts affect collaborations and organizational performance?	The first empirical paper seeks to amend these gaps by asking how logics are adopted by an organization and what its consequences are.
Hybrid Strategy	Literature has increasingly argued that organizations can strategically seek out multiple stakeholder or use the complexity in their environment (Durand et al. 2013; Jarzabkowski et al., 2013; Ocasio &	The literature has almost exclusively focused on the organizational level, on managers who formulate different strategies to pursue hybridity. Few publications focus on how organizations	The second empirical paper investigates the barriers on the micro-level in pursuing a hybrid strategy. For example, are employees motivated to implement the strategy? How might they disrupt this

	Radoynovska; 2016, Pache & Santos, 2013b).	become hybrid in daily practice on the ground floor of the organization. How does a hybrid strategy translate into actual action?	strategy if they are unmotivated?
Organizational responses to institutional change and complexity	A well-developed literature has focused on how organizations respond to institutional change and complexity (Greenwood et al., 2011). For example, organizations could choose an offensive strategy, such as mixing logics or embracing change wholeheartedly, or they could choose a more defensive response (Oliver, 1991, Pache & Santos, 2010).	While this literature is well established it rarely focuses on the micro-foundations of institutional logics; how do logics shape decision-making? This is crucial to understand how organizations respond. If we want to understand responses we need to understand how decisions are shaped by the logics to which they are responding. Another possibility here is to link institutional logics with the behavioral theory of the firm (Gavetti et al. 2012).	My conceptual paper develops propositions on how decision makers are shaped by the organization in which they are employed. For example, embedded and central organizations would likely have a different set of decision-makers than an organization working on the fringes of fields. The paper here also tries to link macro-determinants of decision-making, such as institutional logics with the micro-determinants of the behavioral theory of the firm as suggested by Gavetti et al. (2012).

Table 1 Overview over current literature, gaps and contributions

As my first paper is a review paper that goes more in depth with the literature, I will not conduct a classic literature review in the introduction. Instead, I will take a look at the deeper theoretical placement, because the views the thesis takes are somewhat different than current institutional lenses. I will explain the reasons and how they fit with the literature.

Placement and perspective in accordance to the overall new institutional perspective

Placement within the new institutional literature

Institutions and their norms, rules, values, and practices have long been seen as crucial for economic processes and outcomes (Hayek, 1948; Granovetter, 2017; Smith, 2003). However, in the study of economics and economic organizations this view has taken a backseat to other explanations. Economists have increasingly relied on the notion of bounded rationality (Kahneman, 2003, Simon, 1947). This trend has spilled over to the study of economic organization, where assumptions often rely on bounded rationality and opportunism, which relegates institutions to the role of enforcing co-operation (Williamson, 1981, 2000). The common economic organization perspective lacks a desire to explain economic organization from a broad institutional perspective, where institutions are "thick" and consist of norms and values (Granovetter, 2017). On the other side, sociologists have placed great emphasis on institutions and their roles when explaining the form of organizations (most well-known are DiMaggio and Powell in 1983 and Meyer and Rowan in 1977). Yet, sociologists often eschew studying economic process and outcomes in favor of comparative, historical, and macro-level explanations that seldom explore the individual level of economic action (Granovetter, 2017). From the viewpoint of the most social constructivist side of the so-called new institutionalism, economic action is nothing more than social construction, because there is no objective reality, only rationalized myths (Bromley & Powell, 2015, Edelman et al. 1999; Meyer, 2010, Meyer & Rowan, 1977). Each side naturally blames the other for being unscientific or narrow-minded, as nature would have it with academics with similar interests but different worldviews[3]

As a result of this hostility, we often see very large differences in perspectives and interests. Most institutional sociologists are not very interested in organizations per se (Greenwood et al. 2014); they are interested in how institutions evolve and shape individual and societal action.

Sociological interests lie in the evolution of institutions and logics, and not in how they shape economic outcomes and processes; the latter is the domain of classically oriented economists (Boettke & Candela, 2015; Hayek, 1948; Smith, 2003). As mentioned, the literature on economic organization disregards broader and informal institutional impacts (Granovetter, 2017). This thesis places itself in a bit of a gap in the literature, because most institutional sociologists overlook economic organization and performance. For example, I realized in my review of the literature that few scholars deal with for-profit organization, which is insight others have also

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[3] Jepperson and Meyer's publication (2011) is a particular aggressive example. They ascribe the other side's view and focus on micro-foundations as a result of "liberal folk theories," not honest intellectual endeavors. Jepperson and Meyer (2011) claim their work offers a "more robust" view in contrast to the other side, which, for them, offers an ideological blind doctrine.

noted (Greenwood et al., 2014). Moreover, sociologists rarely mention economic performance. On the other hand, organizational economists seldom work with socially constructed and informal institutions (Granovetter, 2017). Their interest, rather, is how institutions curb opportunism (Williamson, 1993). And, if the scholars in question are institutional economists like Acemoglu and Robinson (2012), they will likely care about curbing opportunism on a societal level (i.e., investigating how institutions make sure most people can be involved in economic activity without being exploited by powerful political and economic actors). If one is an organizational economist, one's attention is with how contracts are upheld to minimize opportunism and hold-ups (Williamson, 1985, 1993). Whether institutions are socially constructed and have a "thick" and nuanced impact on people, organizations, and society is not interesting to organizational economists (Williamson, 2000).

The interest of this thesis is explaining institutional impacts *inside* organizations, which is often ignored by the institutional literature (Greenwood, Hinings & Whetten, 2014). Scholars have given more and more focus to the notion that institutions are not holistic devices, but there are different institutions at play with competing logics (Friedland & Alford, 1991). This theoretical notion has not found pervasive application to the organizational level and the micro-level of individuals and groups inside an organization (Greenwood et al., 2014). Moreover, most research eschews for-profit organizations (Greenwood et al., 2014). This situation means that we do not know much about individual firms from this perspective, including how a firm handles its changing environment on the micro-level.

This thesis provides a new lens on the well-known phenomenon of firm growth as it forays into new markets. Most technology-based firms at some point change from creating radical technology to more incremental innovation for a mainstream market, but the literature is thin on the nature of this transition and its challenges (Truelove & Kellogg, 2016). I apply the institutional logics lens to flesh out this transition as a change between logics: a professional science-based logic and a market-and-corporation-based logic. By scrutinizing the micro-level, I try to explain why high-tech entrepreneurial ventures may succeed and fail in their scale-up stage. I will argue that the competition between the science that founded the venture and the new demands of the market, together with the new employees hired to cater to the new market, may in some circumstances severely hamper the organization. Other factors play into the success or failure of a venture (e.g., willing investors or a particularly lucrative market), but I believe that the competition between

new and old ideas is crucial to how well an organization's scale-up unfolds, whether it reaches adequate size, and if it becomes sustainable over time.

Why Institutions and logics?

I focus on the notion of institutional logics: the idea that institutions have a central logic that consists of socially constructed values, practices, rules, and norms (Friedland & Alford, 1991; Thornton, Ocasio & Lounsbury, 2012). Institutional logics not as much reward and punish, as they provide repertoires of behavior and justification (Thornton et al., 2012). In other words, they shape behavior into coherent and meaningful forms. Logics help fallible individuals create social processes that provide their particular part of the world with meaning and value (Boltanski & Thévenot, 2006; Granovetter, 2017; Thornton et al., 2012). Logics affect economic processes and outcomes by shaping processes according to legitimate practices and results toward certain worlds of worth (Boltanski & Thévenot, 2006). They form the way organizations create value and for whom they create value. Therefore, Institutional logics is an interesting perspective to apply to the micro-level of economic processes, because most studies focus on the macro-level (Granovetter, 2017; Jarvis, 2017).

This is where institutional logics appears useful, as the logics take institutions from high above and into the micro-level of how behavior is shaped and carried out (DiMaggio, 1997; Thornton et al., 2012). Logics are not purely macro-level but may take different forms at different levels (Friedland & Alford, 1991; Pache & Santos, 2013a). The logics perspective enables me to analyze deeper and closer how norms, values, and practices shape economic processes like collaboration, transactions, and decision-making (processes which, in turn, effect economic and social outcomes). As such my thesis places itself in the mainline school of economic thought, where institutional filters are seen as crucial (Boettke & Candela, 2015), I amend its focus away from institutions as mere upholders of law to attend to the ways institutions enact "softer" sets of norms and values that shape cognition (DiMaggio, 1997). As such the mix of sociology and focus on economic outcomes positions the thesis in economic sociology.

Placement within New Institutionalism

John Meyer articulates a typology of the different theories in new institutionalism, which I will use to locate my thesis within the literature. Meyer, who ignited the new institutional paradigm, divides the literature into the following box,[4] which I adapt slightly. Meyer places a "red line" between what he considers the social constructivist (or "phenomenological" in his words) and the more realist (or positivist) oriented scholars.

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[4] I witnessed John Meyer presenting his views and this box during my stay at Stanford University.

	Constructivist/relativist			Realist/Positivist
	Meyer's red line			
Macro	Bromley & Meyer 2015			Acemoglu & Robinson 2012
	Meyer & Rowan 1977			North 1990
	DiMaggio & Powell 1983			Williamson 2000
	Thornton et al. 2012			
Meso		Coleman 1990		
	Boltanski & Thevénot 2006			
	Nils Brunsson			
Micro	Barbara Czarniawska	Ann Swidler	*This Thesis*	Rational choice, e.g. Peter Leeson
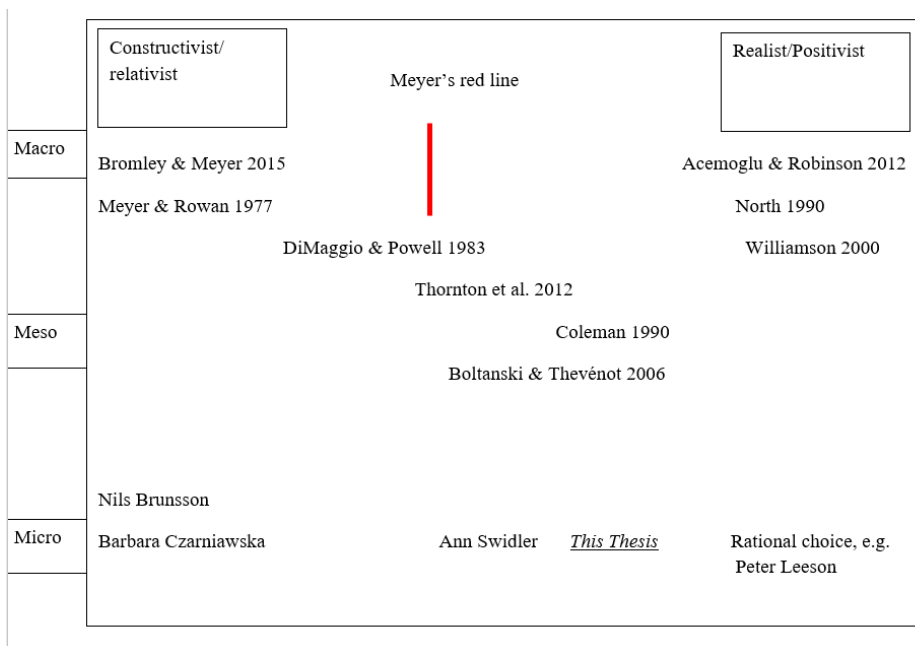
Figure 1. Meyer's "Institutional box," adopted with some additions.

Constructivist/Phenomenological View

⬇

Institutional Level:
"Thick", socially constructed institutions. E.g. logic or myth of a profession

⬇

Individual Level:
Socially constructed actor with high levels of internalization.
"Reflexive Behavior"

Realist/Positivist view

⬇

Institutional Level:
"Thin", rationally constructed institutions. E.g. property rights

⬇

Individual Level:
Rational Choice agent, acting under institutional constraints.
"Purposeful behavior"

Figure 2 Macro and micro link both perspectives adapted from John Meyer

The view in this thesis
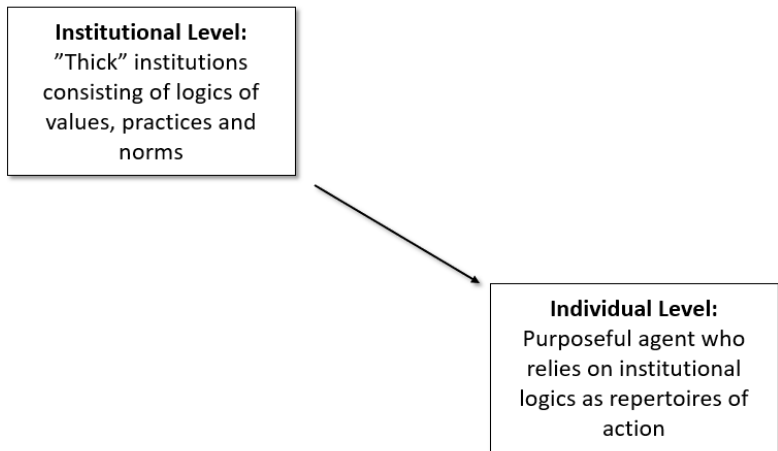
Figure 3 Macro and micro link in this thesis

The view established in Figure 3 may raise some red flags for organizational sociologists and new institutionalists, because it signals methodological individualism. Institutional sociologists often disregard (and dislike) methodological individualism (Jepperson & Meyer, 2011). Some institutionalists may fear that the position for which I am arguing will reduce individuals to rational actors in accordance with neoclassical economic models. On the other hand, some economists may fear that the position will embrace radical constructivism. Neither is the case. Figure 3 illustrates a reasonable perspective that includes purposeful agents—which is a mainstay in many institutionalist accounts (e.g., Coleman, 1990; Swidler, 1986, 2001)—as well as a social constructivist account of institutions that one would be able to find in economics (e.g., Williamson, 2000). The perspective interprets the institutional logics perspective by building on its core ideas while approaching them from an angle that is more James Coleman than John Meyer.

Other institutional literature often takes the opposite perspective, but both can be found within the institutional logics perspective. The next section outlines the view adopted in this thesis.

The view of institutions and individuals in this thesis

The perspective I lay forward follows the definition of institutional logics: "*the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality*" (Thornton & Ocasio, 2008, p.4). Importantly, this definition puts the individual very much in focus and gives her or him the ability to change and affect institutions and their logics (Thornton et al., 2012). An important interpretation of logics that Thornton et al. (2012) use is that logics are a cultural toolkit (Swidler, 1986). Using this terminology naturally demands purposeful individuals, because tools are something people use, not the other way around.

This individual perspective bears several consequences. First, the notion of "logics" and the link between culture and cognition exposes how institutions do not exist outside of the minds of people. People possess logics: the buildings of a judicial system, for example, do not have logics. This acknowledgement is important and represents a crucial difference between Durkheim and other new institutionalists who place institutions outside of the mind of people as social facts that order people (Searle, 2006).

Second, the focus on individuals as the producers of institutional logics brings about the question of why they are created. John Searle (2010 p.105–106) explains: *"Some social theorists have seen institutional facts as essentially constraining. That is a very big mistake. There is indeed an element of constraint in social institutions. For example, you cannot be president unless you get elected, you cannot spend money you do not have, and in baseball, you cannot have four strikes. But the very institutions of money and baseball increase our powers."*

The reason for the production of logics is therefore simple: it is in an individual's interest to create institutional facts (as Searle calls them) or logics (as sociologists call them). For example, why have individuals created professional associations, such as the ones in academia? Is it not because these associations order relations, purposes, and practices? While individuals create institutions

and their logics, it does not necessarily follow that an individual or group can change these institutional logics. For example, many academics are probably quite displeased with the for-profit journal and peer-review systems, but that does not mean these systems are easily transformable. A young academic is likely dependent on his or her supervisors' good graces, as a deluge of horror stories on the wide web demonstrates. Individuals and groups are therefore not at liberty to behave as they please or change systems at will. They are embedded within social relations and cultural norms that shape their future and they behavior. Overall, this thesis sees institutions as socially constructed through human action by individuals, which entails the use of speech to assign status functions that then create institutional facts that differ from brute facts[5] (Searle, 1995, 2010). Because institutions are "logical" and do not consist of brute facts, they only exist in the mind of individuals (Searle, 1995, 2010). Institutions mostly enable individuals to pursue their goals and order their social world, but they do contain an element of constraint.

Embedded agency

A key term in economic sociology and institutional logics is that of embedded agency. Thornton et al. (2012 p.4) define it as follows:

"...institutional logics shape individual preferences, organizational interests, and the categories and repertoires of actions to attain those interests and preferences. Dominant institutional logics become taken for granted (Zucker 1977), not by providing specific scripts for action, à la DiMaggio and Powell's (1991) position, but by establishing core principles for organizing activities and channeling interests. This view of how institutional logics shape action has become known as embedded agency, or social action that is culturally embedded in institutional logics."

The above definition reveals that individual preferences and interests are not identical. It is widely recognized that institutions shape preferences, even when one takes a similar view to Oliver Williamson (where institutions—especially on contract-level—enforce certain behavior). For example, even if one's employees are self-interested it is possible to guide their behavior away from this self-interest using contracts that change their behavior from fitting their own end to fit that of the firm. From an institutional logics perspective, being embedded shapes preferences because agents cannot perform actions outside of social, political, and cultural structures. For

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[5] Brute fact: there is a landmass we call the United States of America. Institutional fact: that landmass is a set of united states governed by a representative democracy and a president (Searle, 1995).

example, an academic inclined person undertaking a PhD would likely have his or her preferences geared toward publishing in a very narrowly specified set of journals because of a desire for professional recognition and secure employment.

The example does not determine that action is scripted, individuals are aware of the repertoires of action upon which they behave. The point is not that they cannot see alternatives and are socialized into taken-for-granted beliefs but that acquiring and using cultural toolkits are important to individuals (Swidler, 2008). For example, if one learns advanced statistical methods during PhD training, she or he would disfavor an innovation or turn in their scientific field that excludes her or his expertise because of the sense of lost years spent learning those methods. Here, Oliver (1997) points out that we face a cognitive sunk cost fallacy.

In any scenario, one uses only a portion of available tools. We engage with much less culture than what we could know (DiMaggio, 1997; Swidler, 1986). The reason for this is cognitive limitations. We cannot grasp all kinds of culture, but, instead, learn to deploy a carefully curated set (Swidler, 2008). Hence, agents may follow institutional logics for two reasons: it may be in one's continued interest to do so, or one may feel the cognitive cost already invested is too great to abandon. As Oliver (1997) succinctly points out, in institutional theory the cost is cognitive. It is difficult and costly to give up learned skills, since it takes time and effort to acquire new skills and habits that make one operational in a new field (Swidler, 2008). Simply put, the reason why people keep following a logic that may not be in their best interest is the same reason that people do not get divorced: abandoning ingrained habits and modes of being is too costly, and people possess limited willpower and cognitive resources to attempt it. The term "bounded intentionality" describes how individuals rely on a frame of action and belief that tends to eliminate information (Thornton et al., 2012). To make the world meaningful, individuals must have these bounds in identities and goals: it is impossible to process all possibilities and all information (Thornton et al., 2012). Here Thornton et al (2012) tie into the growing literature on cultural-cognitive sociology (Cerulo, 2010; DiMaggio, 1997; Levi-Martin 2009; Vaisey, 2009). Because culture is so complex and interwoven, it cannot simultaneously script people. As Levi-Martin (2009 p. 229) writes: "*If one wants to define culture as something complex, then it is not going to be inside of people (see Swidler, 2000), because people are extremely simple.*" The macro-cosmos of culture simply does not fit into our (pin)heads. If we view culture as complex and clashing, then we should

work with the assumption that individuals pick out and have picked up cultural elements to help provide meaning to everyday life.

In this broader theoretical and philosophical placement, I have discussed two elements important to my thesis: cognition and self-interest. The cognition element elucidates how individuals are reliant on frames that help provide meaning and a repertoire of everyday action. These frames differ in strengths of availability, accessibility, and activation (Pache & Santos, 2013a). Papers two and four in this thesis especially draw on the cultural-cognitive link. The second element is self-interest. In my view we need a better understanding of self-interest or, more broadly, "motivations," as modern scholars use it (Gottschlag & Zollo, 2007). If individuals pursuing their interests produce institutions, then we need to understand such interests and how they operate in institutional environments. I am especially concerned with "motivations" in my third paper. However, I do not go into how individuals build new institutions, only how they shape their own organization. Thornton et al. (2012) produce a set of micro-foundations, where the macro-macro link is between institutional logics and organizational practices and identity; hence, we need to apprehend how these organizational elements manifest and aggregate across organizations if we want to understand these micro-foundations. This is what I strive to contribute to by focusing on the context of an entrepreneurial venture trying to achieve hybridity.

Contributions to the institutional logics literature

All of my papers focus on a subfield of institutional logics, namely institutional complexity and hybrid organizations.

The thesis starts with a literature review, *"Institutional logics as an organization and management theory: a review of empirical research and future directions,"* which contributes by creating an overview of the institutional logics literature and by arguing for new possibilities and research directions that could enrich the literature. The literature review aims to carve out new research directions in management and organization theory, where institutional logics are often used but

(according to recent critiques of new institutional theory) still lacks a clearer focus on the micro-foundations and explaining processes in an organization. In my review, I find that while recent scholarship has gone more into the micro-level some elements are still lacking, especially with regard to the organizations studied and explanations of organizational features and design. The logics perspective could be enriched by coupling it to other theories and broadening its scope. Lastly, the micro-foundations that have received an increasing amount of theoretical focus lack empirical grounding. The paper therefore suggests four elements to enrich the perspective: 1) the sample of organizations studied, 2) organizational features such as design and performance, 3) coupling to other organizational theories, and 4) stronger empirical grounding of the micro-foundations.

The second paper, *"Adoption of logics in entrepreneurial ventures: how logics are brought in, activated and conflict inside the organization,"* focuses on how a new logic enters an entrepreneurial venture. In this study, I find that logics are first adopted as a result of external demands on the organization to be more effective from owners and customers (i.e., that it can mimic the lean practices of its largest customer). At first the new market/corporation logic fit with the existing logic of professional science, which was still dominant and able to pick out the elements useful for the objectives of the scientists, such as securing more consistent quality of products. However, this adoption was not static: as the joiners activated their frame more clearly and put it into practice and the market increasingly viewed the company as a real firm and not as a science start-up. As it gained power from the outside, the joiners were able to challenge the existing frame, leading to a frame conflict that made it difficult for the parties to collaborate.

The paper contributes to the literature on organizational responses to institutional complexity (Pache & Santos, 2010, 2013b; Smith & Besharov, 2017). It strives to shift discussion from a focus on how managers control logics around and in an organization by using structures (Smith & Tracey, 2016) toward a focus on adoption as an iterative process between micro-level interactions and actions that tie into macro-level changes occurring during scale-up. This process means that logics are dynamic and not fully in the hands of managers, who can be surprised by the change "beneath them." I show that the adoption process is not in the hands of managers, who underestimate the consequence on organizational processes and performance of new hires' infusing some change into an organization.

The third paper, *"Getting the best of both worlds: the hybridity challenge of entrepreneurial ventures during scale-up,"* takes off where the second paper (first empirical paper) ends. I analyze why the two different frames discussed in the previous paper persist: why do individuals maintain differences, what is their motivation, and how do they do it? I investigate the barriers to hybridity: why is a firm unable to solve the incompatibility so many other papers have found? While my paper uses the same data, it takes a different approach and perspective on the data. I look to why individuals stick to incompatible frames and maintain conflict over long periods of time. I find that individuals have different motivations to use logics. For example, scientists gained freedom and impact by adhering to a science logic. In essence, they sought the reproduction of this institutional logic in the organization because it fitted their intrinsic motivation. Reciprocally, the production engineers were motivated by organization and order, cleaning up waste, and setting up a lean regime. Moreover, they had a different extrinsic motivation than the scientists (who received professional recognition for their skill when the firm operated according to a science logic, for example by participating in awards). Changing to a market/corporation logic seemed to threaten this, as a corporation logic focusing on reducing waste and increasing profits, was likely to move the power and status to the operations members. Motivations to change the organization to fit a particular logic was thus different in each group. Because of this, R&D grafted in practices from academia and sought to enforce them, while operations took in practices and structures from nearby corporations.

The paper contributes to the hybrid organization literature by looking at individuals' motivation to pursue or to not pursue hybridity. Although hybridity is often a beneficial strategy for a venture trying to maximize resources and legitimacy, I show that it may not be a motivation that employees share: instead, they may go with either side.

The fourth and final paper is a theoretical paper, *"Seeing Institutional Change as a Strategic Opportunity: linking managerial decisions with institutional logics."* In this paper, I seek to link institutional logics, as a macro-determinant, with decision making on the micro-level. The argument is this: decision makers in organizations are shaped by the field in which they operate their organization. When working in an organization that is central and embedded, managers come to see current arrangements as conventional and taken-for-granted because the logics in the field shape their schemata, their informational representational and processing mechanisms. Conversely, managers in peripheral organizations, and/or organizations that bridge to other fields, are freer and less encumbered because they are not as tied to conventional wisdom. Repercussions

follow when the field faces an institutional change. Because one group—managers in the embedded and central organization—have schemata more tightly coupled to the existing (or now past) arrangements, they are likelier to frame change in a negative light and choose a defensive response, seeking to maintain the status quo. Managers in peripheral organizations are less tightly coupled and are more likely to see the change as an opportunity to unseat an incumbent. Thus, organizational responses are not just dependent on institutional conditions, such as the amount of pressure, as others have argued, but also on differences in decision-makers. By linking logics to schemata from the macro to the micro level, I also include Behavioral Theory of the Firm considerations—such as individual cognitive abilities and group level dynamics—to explain organizational responses. The paper expands on the explanatory power we possess to describe these responses. This paper does not explicitly deal with ventures, as the mechanisms are not limited to them. But the arguments are relevant to ventures because they are liable to face institutional change and complexity. Understanding the prerequisites for their responses to such processes are crucial.

Contributions to the literature on entrepreneurial ventures

Although not much literature exists concerning scale-up of entrepreneurial ventures, a recent review by Desantola & Gulati (2017) mentions two overarching narratives about ventures (and similar organizations). The first is an endurance narrative, where the organizational design, employees, and culture created by the founders of the venture remains. The second is a change narrative, where the same elements undergo a significant transformation. I point out a middle ground between these two narratives, where a part of the organization may follow the endurance narrative and another part follows the change narrative. Therefore, it is not an orderly process of either or, but a messy process where the outcome balances between these two outcomes. Organizations may initially change before the endurance perspective reinforces itself. The venture may swing between looking backwards and maintaining their original DNA, and drastic change towards new frontiers.

The overall longitudinal story of the thesis contributes to our understanding of the internal development of entrepreneurial ventures during scale-up, which is poorly understood at present

(Desantola & Gulati, 2017). The thesis especially points out that logics take forms of incompatible frames, which makes collaborations and transactions more challenging. A related problem is that individuals' framing—their interpretation of the environment—is remarkably stable: individuals are motivated to retain their logic and use structures and processes to do so. However, the fallout is that the organization is disrupted because of the multiple sources from which structures and processes arrive, and because managers lack control of these structures and processes.

While contemporary literature addresses the macro-level of how organizational forms arise in venturing industries (see Pahnke et al., 2015; Powell & Sandholtz, 2012), we know little about this on the micro-level. We know that "amphibious scientists"—scientists who bring academic logics to business—are one important type of venture creation (Powell & Sandholtz, 2012). But we do not know how this works in practice; how does one organizational form (e.g., the scientific) arise when there are other alternatives, e.g. the "science for business" form (Powell & Sandholtz, 2012)? We know that these forms exist, but not why one arises over the other when looking internally on the organization. Here I demonstrate that an internal conflict shapes the organization and much of its internal power. Interestingly, the firm did not change to a clear "science for business" form by letting finance or production people run the company, instead, it acquired smaller firms and "talked the talk" in external communication. This allowed it to appear as a "science for business" firm to outsiders but still be run by amphibious scientists. Given that any organization may face internal issues while needing to put up the right façade, this behavior is quite rational.

Practical and managerial implications

Increasing the number of entrepreneurial ventures is socially important and strongly in the interest of the managers running these ventures. This overlap in interest has led to several recent books and articles that target the practitioners in charge of these ventures (e.g., Gulati & Desantola, 2016; Sutton & Rao, 2014). The key message of these works is that a venture must sustain its culture and spread that mindset across the organization as it scales (Gulati & Desantola, 2016; Sutton & Rao, 2014). This thesis challenges this assumption. First, the power of a new culture brought in by new people hired to cater to changing external demands is not a stable entity. In my

study, I found that the influx of new culture initially complemented the existing culture because it was brought in to solve a problem and was subservient to the existing culture. Problems arise when the continuous change of the market favors the new culture and this culture's activation in the organization. Managers who expect immediate problems are caught inattentive to the slower development of troubles.

Second, both the practical management and the institutional logics literature suffers from a belief in managers' ability to carve up responses to the competing external demands without giving much thought to the members of the organizations and their desires. A major problem for the technology and science-based venture is finding the right internal mixture between science or business practices, where fault lines may emerge between groups promoting one view. Not only do managers have to pay attention and chose the right strategy to cater to external demands, but they also have to focus on their organization.

A practitioner's classic in entrepreneurial marketing is Geoffrey Moore's "Crossing the Chasm" (Moore, 1991). Moore portrays a chasm between an early market and a mainstream market, a notion that has become accepted wisdom for entrepreneurs in my case. It makes good sense to heed the market and work hard to break through; however, another chasm may arise in the organization as it transitions from its early market to a mature one. Here, there is much less attention and knowledge about how to handle this rift.

Attending to the market-transition chasm is important because ventures are often loosely organized with few formal structures, and its employees may be in close contact with the environment (e.g., through open innovation and by customizing orders). Individuals and groups with differing interpretations of what the company should be like can prove detrimental, especially when the firm is dependent on these groups working together. Here, the thesis contributes to understanding the development and nature of these conflicts, which I find to be based in different "cultural framings" (ways to see the world based on one's experience). Different framings make it difficult to collaborate and transact because they create costly misunderstandings over, for example, what it means that a product is mature, complex, or is "short time to market." Such categories may have different meanings to a development engineer and to a production engineer.

These different interpretations lead employees to "meddle" with organizational structures and to create their own goals for the organization, often legitimized by the institutional logics of the customer demands (e.g., "we need basic research to solve this customers problem" or "we need

an ISO certificate to sell to this customer"). A disjointed goal motivation results within the firm. In short, people pursue individual or group goals, not organizational ones.

The thesis does not offer a direct toolkit to solve these issues, but there are tools to alleviate the issues found in my study. The job of the managers is not just to pick a strategy but also to secure buy-in among employees. Buy-in is crucial because ventures are often driven by highly trained and valuable employees upon which they depend; for example, in my case many of the employees pursued their own projects and held patents. Buy-in can be created by a team and task design that fits the desires of the employees (Lindenberg & Foss, 2011). Furthermore, employee inclusion in strategy formulation and settling incompatible interpretations before they become rampant in everyday life should improve the internal organization and advance the scale-up process.

It is crucial for managers to focus on the internal organization and the daily work on the floor. Changing people who are embedded into a certain set of logics is difficult, but the literature does suggest that socialization can move people (Battilana & Dorado, 2010; Pache & Santos, 2013a). Similarly, Glaser et al. (2016) argue that cues can change behavior. Managers likely face a challenge to manage their symbolic and recognition-based management systems to send out such cues and to secure socialization, for example by encouraging people from opposite logics to meet and interact. I cannot demonstrate that this works, but can only speculate, given the literature, that this could be a way forward.

Conclusion on introduction

My thesis sets out to expand our knowledge about the scale-up of entrepreneurial ventures by utilizing an institutional logics approach as a tool to understand the competing mindsets that arise in an organization. The thesis contributes to (currently lacking) empirical knowledge of how institutional complexity can make or break scale-up. In my papers, I find that complexity is more subtle and harder to manage than previously expected. First, complexity is slowly adopted by an organization as a competing frame: rather than bursting in, it is adopted to solve problems for incumbents encountered from market changes. Therefore, managers who may fear an immediate reaction can find themselves blindsided when they suddenly face a framing conflict inside the organization. Second, the literature has not thoroughly explained the different motivations

individuals may have: why should one want to blend logics even when beneficial for the venture? For example, scientists deem research sacred, and will not surrender it to a corporation logic without persuasion or a fight. Such conflict could threaten to derail the venture in its scale-up phase. As Sutton and Rao (2014 p. 7) claim, shared convictions are key to effective scaling. Institutional complexity may spoil shared convictions and, as a result, scaling. The thesis provides insight into how internal problems occur in a venture during scaling, the nature of the conflict, and the drivers behind it. As literature is still nascent on this topic, the thesis contributes by specifying a problem. Future research is needed to clarify possible solutions and to assess how ventures survive complexity.

I hope that by identifying a hitherto undeveloped issue—how ventures face complex logics internally during scale-up—future research will concentrate on the organization of ventures and provide insight into how high-potential ventures secure scale-up.

References

Acemoglu, D. & Robinson, J. 2012. Why Nations Fail. Crown Business

Battilana, J., & Lee, M. 2014. Advancing Research on Hybrid Organizing - Insights from the Study of Social Enterprises. *Academy of Management Annals*, *8*(1), 397–441.

Boettke, P. & Candela, R. 2015. Rational Choice as if choosers were Human. George Mason University working papers.

Boltanski, L., & Thévenot, L. 2006. On justification: Economies of worth. Princeton, NJ: Princeton University Press.

Bromley, P. & Meyer, J.W. 2015. Hyper Organization. Oxford University press.
Coleman, J. S.1990. Foundations of Social Theory. The Belknapp Press of Harvard University Press

Decker, R. A., Haltiwanger, J., Jarmin, R. S., & Miranda, J. 2016. Where has all the skewness gone? The decline in high-growth (young) firms in the U.S. European Economic Review, 86,

Desantola, A. & Gulati, R. 2017 Scaling: Organizing and Growth in Entrepreneurial Ventures. Academy of Management Annals 2017, Vol. 11, No. 2, 640–668

DiMaggio, P. J.1997. Culture & Cognition. Annual Review of Sociology, Vol. 23 (1997), pp. 263-287

DiMaggio, P.J. & Powell, W.W. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields American Sociological Review 48 2., 147-160

Dunn, M.B., & Jones, C. 2010. Institutional logics and institutional pluralism: The contestation of care and science logics in medical education, 1967–2005. Administrative Science Quarterly, 55, 114–149.

Durand. R., Szostak, B., Jourdan. J. & Thornton, P.H. 2013. Institutional Logics as Strategic Resources. Institutional Logics in Action, Part A Research in the Sociology of Organizations, Volume 39A, 165–201

Edelman, L. Uggen, C. and Erlanger, H. S. 1999. The endogeneity of legal regulation: Grievance procedures as rational myth. American Journal of Sociology 105: 406-454.

Friedland, R. & Alford, R.R.1991. Bringing society back in: Symbols, Practices and Institutional Contradictions. The New Institutionalism in Organizational Analysis. University of Chicago Press

Glaser, V. L., Fast, N. J., Harmon, D. J. & Green Jr., S.E.2016. Institutional Frame Switching: How Institutional Logics Shape Individual Action. Research in the Sociology of Organizations, Vol. 48A p. 37-69

Granovetter M. 1985. Economic Action and Social Structure: The Problem of Embeddedness. American Journal of Sociology, Vol. 91, No. 3 (Nov., 1985), pp. 481-510

Granovetter, M. 2017.Society and Economy. The Belknap Press of Harvard University Press.

Greenwood, R., Hinings, C.R. & Whetten, D. 2014. Rethinking Institutions and Organizations Journal of Management Studies 51:7 November 2014

Gulati, R. & Desantola, A. 2016. Start-ups that last. Harvard Business Review March 2016

Guzman, J & Stern, S. 2016. The State of American Entrepreneurship. MIT working paper

Haltiwanger, J., Jarmin, R., Kulick, R., & Miranda, J. 2014. High Growth Young Firms: Contribution to Job Growth, Revenue Growth and Productivity. *Measuring Entrepreneurial Businesses: Current Knowledge and Challenges*, (December).

Heugens, P. P. M. A. R., & Lander, M. W. 2009. Structure! agency! (and other quarrels): A meta-analysis of institutional theories of organization. *Academy of Management Journal*, *52*(1), 61–85.

Jarvis, L.C.2017. Feigned vs. Felt: Feigning Behaviors and the Dynamics of Institutional logics. Academy of Management Review vol. 42 nr. 2 p. 306-333.

Kahneman, D.2003.Maps of Bounded Rationality. The American Economic Review, Vol. 93, No. 5 (Dec., 2003), pp. 1449-1475

Lindenberg, S., & Foss, N. J.2011. Managing Joint Production Motivation: The role of Goal Framing and Governance Mechanisms. Academy of Management Review, 2011 vol. 36 no.3 500-525

Martin, J. L. 2009. Life's a beach but you're an ant, and other unwelcome news for the sociology of culture. *Poetics*, *38*(2), 229–244.

Mcmullen, J. S., & Dimov, D. 2013. Time and the entrepreneurial journey: The problems and promise of studying entrepreneurship as a process. *Journal of Management Studies*, *50*(8),

Meyer. J.W. 2010. World Society, Institutional Theories, and the Actor. Annual Review of Sociology 36. 1-20.

Meyer, J. W. & Rowan, B.1977. Institutionalized Organizations: Formal Structure as Myth and Ceremony. American Journal of Sociology, Vol. 83, No. 2 .Sep., 1977., pp. 340-363

Moore, G. 1991. Crossing the Chasm. Harper Business Essentials.

North, D.C. 1990. Institutions, Institutional Change and Economic Performance. Cambridge University Press

Oliver, C. 1997. Sustainable Competitive Advantage: Combining Institutional and Resource-Based Views. Strategic Management Journal vol. 18 no. 9 p. 697-713

Pache, A., & Santos, F.2010. When Worlds Collide: The Internal Dynamics of Organizational Responses to Conflicting Institutional Demands. Academy of Management Review July 1, 2010 vol. 35 no. 3 455-476

Pache, A. & Santos, F.2013a. Embedded in Hybrid Contexts: How Individuals in Organizations Respond to Competing Institutional Logics. Institutional Logics in Action, Part B, Research in the Sociology of Organizations, Volume 39B, 3–35

Pache, A., & Santos, F.2013b. Inside the hybrid organization: Selective coupling as a response to conflicting institutional logics. Academy of Management Journal,56: 972–1001.

Pahnke, E. C., Katila, R., & Eisenhardt, K. M. 2015. Who Takes You to the Dance? How Partners' Institutional Logics Influence Innovation in Young Firms. *Administrative Science Quarterly*, *60*(4), 596–633.

Powell, W.W. & Sandholtz, K.W. 2012. Amphibious Entrepreneurs and the Emergence of Organizational Forms. Strat. Entrepreneurship J., 6: 94–115 (2012)

Schilke, O. 2017. A Micro-Institutional Inquiry into Resistance to Environmental Pressures. Forthcoming Academy of Management Journal

Searle, J.R 1995. The Social Construction of Reality. The Free Press

Searle, J. R. 2006. Searle versus Durkheim and the waves of thought. Anthropological Theory *6*(1), 57–69.

Searle, J.R 2010. Making the Social World. Oxford University Press

Simon, H.A.1947. Administrative Behavior: a study of decision making processes in administrative organizations. MacMillan

Smith, V.L. 2003. Ecological and Constructivist Rationality in Economics. American economic review 93 (3), 465-508

Smith, W. K., & Besharov, M. L. 2017. Bowing before Dual Gods: How Structured Flexibility Sustains Organizational Hybridity. Administrative Science Quarterly. Online Version.

Smith, W.K & Tracey, P.2016. Institutional complexity and paradox theory: Complementarities of competing demands. Strategic Organization vol. 14(4) p. 455-466.

Sutton, R.I & Rao, H. 2014. Scaling up Excellence: Getting More Without Settling For Less. Crown Business New York.

Swidler, A.1986. Culture in Action: Symbols and Strategies.   American Sociological Review, Vol. 51,
No. 2 .Apr., 1986., pp. 273-286

Swidler, A. 2001. Talk of Love. University of Chicago Press

Swidler, A.2008. Comment on Stephen Vaisey's ''Socrates, Skinner, and Aristotle: Three Ways of Thinking About Culture in Action'' Sociological Forum.Vol. 23, No. 3, September 2008

Thornton, P. H. & Ocasio, W.2008. Institutional Logics. in Sage Handbook of Organizational Institutionalism Sage 2008.

Thornton P. H., Ocasio, W. & Lounsbury, M. 2012. The Institutional Logics Perspective. Oxford University Press

Truelove, E., & Kellogg, K. C.2016. The Radical Flank Effect and Cross-occupational Collaboration for Technology Development during a Power Shift. Administrative Science Quarterly, 61(4), 662–701.

Vaisey, S. 2008. Socrates, skinner, and Aristotle: Three ways of thinking about culture in action. Sociological Forum, 23(3), 603–613.

Vaisey, S.2009. Motivation and Justification: A dual process model of culture in action. American Journal of Sociology, Volume 114 Number 2009.: 1675–1715

Williamson, O. E. 1981.The economics of organization: The transaction cost approach. American Journal of Sociology 87: 548-577.

Williamson, O. E. 1993 Opportunism and Its critics. *14*(2), 97–107. Managerial and Decision Economics, Vol. 14, No. 2, Special Issue: Transactions Cost Economics (Mar. -Apr. 1993), pp. 97-107

Williamson, O.E. 2000. The New Institutional Economics; Taking stock and looking ahead. Journal of Economic Literature Vol. 38, No. 3 .Sep., 2000., pp. 595-613

Wright. M & Stigliani, I. 2012. Entrepreneurship and Growth. International Small Business Journal
31(1) 3–22

Chapter 2

Institutional logics as an organization and management theory: a review of empirical research and future directions

Abstract

Institutional logics have grown from a subfield of institutional theory to a recognized domain in organizational theory. Despite this growth, no review has been dedicated to this burgeoning field. This paper proposes to review the nature of the empirical literature of this field. It analyzes 76 studies from top journals in management. Based on usual critique levied at institutional theory, the paper divides the publications into levels and field of study to investigate whether the logics perspective suffers from similar issues. Despite a richness and depth both in method and quality of these studies, the paper does find underdeveloped areas for expansion. Institutional logics has predominantly focused on the field level, neglecting the individual and organizational level; similarly, it prefers public and social service organizations to corporations. The paper therefore suggests four elements where the perspective could be enriched: 1) the sample of organizations studied, 2) organizational features such as design and performance, 3) coupling to other organizational theories, and 4) a stronger empirical grounding of micro-foundations. These recommendations could usher a sturdier organizational perspective into the institutional logics literature.

Introduction

New institutional theory (NIT) is one of the dominant perspectives in organizational theory (Lounsbury 2008). Several offshoots of this theory have appeared, such as institutional entrepreneurship and institutional work (Greenwood & Suddaby 2006; Lawrence & Suddaby 2008). The institutional logics perspective is likely the largest, which grew as an independent field of thought from NIT during the late 1990s and early 2000s. Institutional logics represent a new perspective that is progressively growing in influence in NIT. Institutional logics are defined as "*socially constructed sets of material practices, assumptions, values, and beliefs that shape cognition and behavior"* (Thornton, Ocasio & Lounsbury 2012 p. 51). The theory of institutional logics provides a different institutional perspective, because it moves away from isomorphism to focus more on the pluralism, contestation, and complementarity that shape logics as tools for institutional transformation (Glynn 2013). Although Thornton, Ocasio, and Lounsbury's book on the subject, "The Institutional Logics Perspective," has garnered over 1,500 citations in just over five years, a theoretical review summing up the empirical developments or possible paths forward remains absent. The closest relative is Greenwood, Raynard, Kodeih, Micelotta, and Lounsbury's (2011) review of institutional complexity, which, albeit not strictly concerning logics, primarily reviews papers that contain logics. Because the goal of that review was not institutional logics, it cannot be used to assess the institutional logics literature per se.

The popularity of institutional logics warrants an overview of research uncovering its strengths, weaknesses, and possible ways forward in order to develop its use in organization and management studies. My paper contributes by reviewing recent empirical studies of institutional logics in top management journals, such as *Academy of Management Journal*, *Administrative Science Quarterly*, *Organization Science*, *Organization Studies*, *Human Relations*, and *Journal of Management Studies*. This review resulted in 76 publications mostly coalescing in the period 2012–2017 but reaching back to Thornton (2002). This chapter does not perform a full bibliometric search, but focuses instead on the quality outlets of institutional logics research where empirical studies are most likely advance the theory. In order to investigate possible gaps, I divide these 76 papers according to the level on which each one focuses as well as by the type of organization studied. Subsequent analysis reveals gaps in the empirical literature on institutional logics and possibilities for future research. Because this paper investigates avenues for

organizational and management theory, it focuses on the logics in an organization and less on field-level developments.

This is chosen because new institutional theory, which institutional logics is a part of, have received a critique for ignoring the life inside organizations. This is curious since the institutional logics perspective is more popular in organization and management theory rather than sociology or political science[6]. Hence, looking at institutional logics as an organization and management theory is warranted in order to analyze the strengths, weaknesses and new directions going forward in using the institutional logics perspective in organization and management theory.

New institutional theory is a dominant line of research in organizational theory as well as in strategic management, international business, and several other fields. Because of NIT's sheer size, several subfields have emerged, such institutional work, institutional complexity, and institutional logics. The logics perspective is most dominant and is also used throughout the other subfields. Although research is often of high quality, elements appear to be missing. Suddaby, Elsbach, Greenwood, Meyer, and Zilber (2010), for example, point out that "actorhood" (i.e., how actors think and behave) is not well understood, that scholars often treat organizations as an unexplained dependent variable, and that some types of organizations, primarily corporations, are ignored. Others have echoed these claims: Greenwood, Hinings, and Whetten (2014) scold institutional theory for ignoring organizations, and they call for putting the organization back in focus. Finally, several recent theory papers have argued that the understanding of agency and individual emotions in institutional contexts are underdeveloped and not well understood (Jarvis 2017; Voronov & Yorks 2015). Many of these claims are directed at institutional theory in general; therefore, this paper asks whether these claims are fairly directed at the institutional logics literature. The question is relevant, because institutional logics is often seen as a realm of theory that offers remedy to the difficulties of understanding the link between agents' cognition and culture (DiMaggio 1997) and to the study of organizations (Greenwood et al. 2014). Have institutional logics fulfilled such aspirations, or can research be developed further to meet them?

This paper evaluates whether the mentioned challenges are relevant for the growing subfield of institutional logics. The goal of this review is to provide an overview and status of the research

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[6] The most cited papers using the institutional logics perspective the last 5 years are predominantly in organization theory, a few in political science journals and none in sociology journals.

on some overall levels. The paper therefore analyzes the levels studied in the 76 empirical papers, as well as the organizations they study. The measurements chosen do not reveal the overall depth and breadth of the research but do orientate its tendencies and possible blind spots. Tracking the levels and organizations these publications studied provides contrast with existing critiques and theoretical developments, and offers new paths of research from an empirical point of view. This analysis brings in relevant theoretical perspectives from institutional logics and other literature to argue for possible empirical areas requiring research (either to nourish the theory or to highlight societal trends it might assist). Furthermore, I argue for new theoretical perspectives to pursue and for new combinations empirically assessable that may build novel theory and knowledge. The main contribution of this paper is not to exhibit the institutional perspective archive but to locate new directions where scholars could expand and enrich it. I propose that institutional logics could develop and refine its focus on the individual (micro) level as well as on the structures and design of organizations. Achieving these improvements would enable scholars to link the theory with other perspectives and, overall, to bring focus back on the organization.

Background story of the institutional logics perspective

The institutional logics perspective originates from the NIT paradigm, which kicked off by Meyer and Rowan's (1977) and DiMaggio and Powell's (1983) seminal papers on organizational rationality and isomorphism sparked. New institutional theory began as an American phenomenon, originating in Thorstein Veblen's works on institutionalism (Veblen 2007). Veblen was the first to argue that rationalized myths, or ceremonies, affected economic behavior, which represents the key turn in NIT when compared to the dominant economics approach to organizations. Institutional logics developed from Friedland and Alford's 1991 paper, which reflected a different approach, perhaps more European in tradition than the American heritage of NIT. The logics perspective promotes an inter-institutional system of state, market, family, religion, and profession (Friedland & Alford 1991; Thornton et al. 2012). Friedland and Alford (1991) argued that these core institutions shape individual preferences and organizational interests, and that provide a repertoire of behavior. For example, doctors are shaped by logics of their profession like the Hippocratic Oath. On the other hand, corporate managers are seen as adhering to a market logic. The most popular are the market and the profession logics, which have been elaborated and manipulated to fit many different contexts: from insurance underwriting in an institution like Lloyd's (Smets, Jarzabowski, Burke & Spee 2015) to healthcare (Reay & Hinings 2009). The dominant theme in institutional logics research is the clash between different

logics (e.g., Reay and Hinings's (2009) study of the clash between medicine as a profession carried out by physicians and healthcare as a public service operating on market conditions). Institutional logics are an analytical tool to understand frictions between different cultural understandings, proclivities, and actions. Scholars have used this tool to understand how macro determinants affect individual action. For example, how does the membership of professions shape action? Or, conversely, how does the demand for shareholder value shape managerial action? Scholars have also turned the tool around and delved into how individual practices constitute a field (e.g., Smets, Morris & Greenwood 2012).

For all its beneficial applications, the institutional logics perspective and NIT have received criticism: unclear actorhood/agency[7] (Jarvis 2017; Suddaby et al. 2010), a lack of focus on organizations (Greenwood et al. 2014, Schilke, 2017, Suddaby et al. 2010), and for privileging particular types of organizations over others (Suddaby et al. 2010). This critique was levied against NIT in general and not institutional logics in particular; however, because of their relationship and the idea that institutional logics should solve the issues mentioned, it is important to determine whether the logics perspective overcomes these deficits. To provide a foundation for exercise, I analyzed papers in top management journals where institutional logics are prominent.

Methodology

The purview of the literature review involves empirical studies in top management journals where institutional logics are the main theoretical construct. I focused on empirical papers because the critique levied against NIT targets the empirical material in the literature and not the theory per se. Therefore, the crucial analytical task is to ascertain whether institutional logics literature overcomes the previously mentioned lacunae empirically. This literature review is based on searches in *Academy of Management Journal*, *Administrative Science Quarterly*, *Journal of Management Studies*, *Organization Studies*, *Organization Science*, and *Human Relations*. These journals were chosen based on the ABS ranking system and the FT 50. To narrow the search, only 4- and 4*-ranked journals were selected. This criterion was introduced because a journal's impact factor alone may fluctuate too greatly over time, which risks rendering attempts to measure quality

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[7] Some scholars, especially John Meyer, use the term "actor"; others, such as Thornton et al. (2012), use "agent" and "embedded agency." There are some underlying ontological reasons for this terminological disparity, such as how much persons are shaped and constrained by institutions. Fully analyzing these differences is beyond the scope of this paper.

somewhat inconsistent.[8] Ranking reflects impact factor but also takes into consideration a journal's history and standing in the field. Paper impact factor, too, was disregarded out of a desire to include new papers, which naturally have fewer citations.

Pouring over *Journal of Management* and *Strategic Management Journal*, I found only two papers mentioning institutional logics. I excluded these papers because they did not focus on institutional logics as a central theoretical construct. Given that neither *Journal of Management* and *Strategic Management Journal* are more driven by strategic management theories, my exclusions are not surprising. An organization theory like institutional logics does not enjoy much editorial focus in these journals or interest with its readership. The journals I selected are natural outlets for scholars wishing to publish high-quality work in the institutional logics field, because they are "big tent" journals focusing on organization and management theories in a broader perspective.

Keywords and assessments of whether institutional logics primarily drove theoretical concerns informed determinations about each paper's inclusion in this analysis. Searching through these five journals using the criteria mentioned yielded a list of 76 papers from 2002–2017. Most were recent publications: 39 papers were published after 2011, nine in 2016, and seven in 2017.

In order to test the criticism of institutional theory and the logics perspective—that it tends to disregard individual and organizational levels and fails to focus on particular types of organizations—I divided the papers by level: field (macro), organizational (meso), and individual (micro). Topic and method informed this judgment (e.g., large quantitative analysis is often on the field level, case studies are often organizational, and use of personal interviews and observations is often micro). The most important criteria for determining the level to which a study belonged were its views on agency and who acted in the studies. Sometimes, studies claim to be about actors but actually "black box" actorhood and focus instead on the developments of institutional elements (Suddaby et al. 2010). Such papers are in my review seen as field level because what they seek to explain is not individual behavior but more so evolution in institutional arrangements and logics.

I also divided the papers by organization studied: public/social service,[9] service, manufacturing, hybrid, and other/non-organizational. I use the term manufacturing to describe anything from the

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[8] For example, *Organization Science* is considered a premier organization theory journal; however, its impact factor for 2017 is just 2.691.
[9] I conjoined this category to solve the fact that scholars may study organizations that are public in one country, a private service in another, or, even more confusingly, both at the same time (e.g., education in the US). I was not

classic corporation to an SME, and the term covers whether a physical good was produced. Hybrid organizations are a mix of organizations doing community work while also seeking a profit (e.g., several microfinance organizations) (Battilana & Dorado 2010). Other/non-organizational refers to when the study does not clearly deal with an organization; for example, it may deal with stakeholders or investors (e.g., Joseph, Ocasio & McDonnell 2014).

These two divisions are shown in following tables:
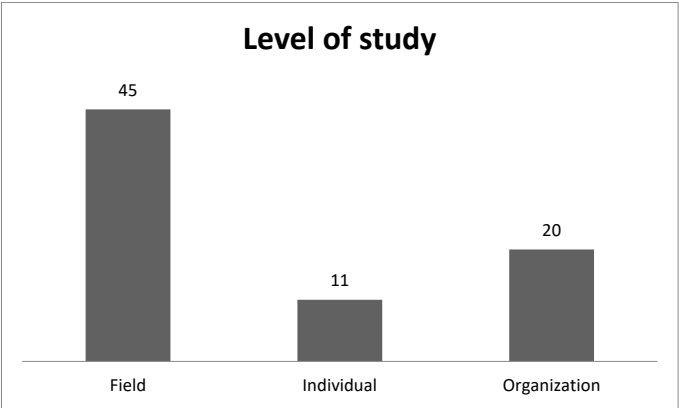
Table 1.1 Level of study.
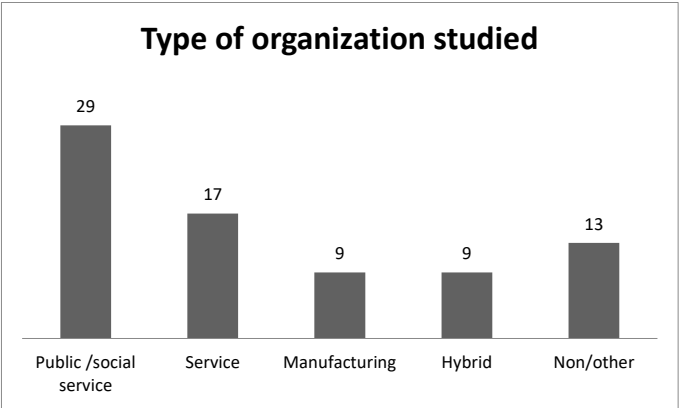
Table 2.1 Type of organization studied.

To add to this empirical review, I also looked through the theoretical literature (only on institutional logics) in these journals. Four pieces in *Academy of Management Review*, three pieces in *Organization Studies*, and one in *Human Relations* deal primarily with the multi-level issues in institutional logics (Besharov & Smith 2014; Ocasio, Loewenstein & Nigam 2015), and especially the micro-level (Delbridge & Edwards 2013; Friedland 2017; Jarvis 2017). Both the numbers of papers at each level and the theoretical contemplations demonstrate that greater analytical focus on multiple levels and on the micro-level is warranted.

Status and strengths in the literature

The breadth and depth of much of the research in institutional logics is impressive, which explains why the theory often shows up in top management journals. Research methods range from longitudinal archival methods, such as Thornton (2002), to going deep into a chosen organization and scouring the qualitative capturing logics at play, such as Tracey, Phillips and Jarvis (2011). The knowledge of how public/social service and hybrid organizations experience different logics is well developed. Numerous papers have undertaken in-depth studies to investigate this experiential difference. They ask, for example, how micro-finance serves both a commercial and a community logic (Battilana & Dorado 2010), or how social enterprises connect welfare for the unemployed poor with a market logic (Pache & Santos 2013b). Researchers have also covered how actors experience and handle logics in their everyday life. In this vein, Smets and Jarzabkowski (2013) provided an interesting study of how employees in a multinational law firm experienced institutional complexity. On the macro-level, we have studies of market changes (Thornton 2002) and of how state logics affect whole industries (Greve & Zhang 2017). An important development is papers that strive to move between levels; here, Smets et al. (2012) is exemplary. In their paper, Smets et al. (2012) built a multilevel model from the level of practices all the way to the institutional level. A few recent papers strive for a similar approach and build individual practices or emotions into macro-level logics. For example, Kyratsis et al. (2017) looked at how post-Soviet Union physicians had to reconstruct their identity as their logic changed from one type of state-driven professional logic to another as the Soviet Union crashed and

professional identities tied to the state transformed. The physicians' reconstruction of their identity and reframing of their work played an important role in the change of logics. Even though the dramatic institutional change naturally forced an adjustment, the resulting alteration still relied on the acceptance and cooperation of the physicians.

The institutional logics perspective has become pervasive. Scholars have identified it across the board from hospitals (Reay & Hinings 2009) to religious movements (Quattrone 2015). Hybrid organizations—i.e., organizations that work by combining logics—have drawn particular interest in recent years (Battilana & Lee 2014). Tracey, Phillips, and Jarvis (2011) showed how hybrid organizations emerge through a special kind of institutional work. In their study, they combined institutional logics with institutional entrepreneurship to demonstrate how agents can create a hybrid organization by drawing on aspects from already established logics. A particular strength of literature exists here, as the logics perspective has provided new insights into the duality of organizations with regard to managing different demands, prescriptions for actions, and identities (Smith & Besharov 2017). As organizations are increasingly seen as burdened with dualistic elements, this strain of research is extremely relevant theoretically and practically.

Research in hybrid organizations has provided some influential papers. For example, Pache and Santos's (2013b) paper on social enterprises showed that organizations do not necessarily decouple or deceive when facing competing logics; instead, agents in the organization strategically combined elements to gain legitimacy. Moreover, Pache and Santos (2013b) also found that organizations not embedded in the social welfare logic overcompensated to negate perceptions of illegitimacy. This finding is noteworthy because it shows that agents do not mindlessly following logics, they are not ends, but tools to achieve goals. Organizations can act very flexibly and use logics as cultural toolkits to achieve goals (Pache & Santos 2013b); therefore, more often than previously thought, organizations will incorporate multiple logics in order to serve different stakeholders. As a result, institutional pluralism may not be a fleeting instance but a permanent feature of many organizations (Pache & Santos 2013b; Schildt & Perkmann 2017).

The notion that organizations (nearly) always consist of competing and complementary logics has inspired an intriguing new line of research on how an organization accomplishes combining them. Battilana and Dorado's (2010) study of microfinance illustrated that opposing logics can apparently be combined. The community logic of caring for one's community and making money

through a market logic found co-existence (Battilana & Dorado 2010). In this vein, Smets et al. (2015) provided an in-depth study of underwriters in Lloyd's. Their study indicates that individuals ensure the combination of competing logics by employing three strategies: demarcating, segmenting, and bridging. Smets et al. (2015) showed that competing logics persist because agents adjust their practices to cope. Mangen and Brivot (2015) nuanced this perspective by arguing that agents may face institutional threats to their identity and that institutional logics challenge power relations in an organization. Other studies have contributed to how organizations and individuals inhabit multiple logics, here Currie and Spyronidis (2016) showed that agents could interpret multiple logics and use them to consolidate their status.

Further papers have revealed that institutional agency may be very free and tactical. McPherson and Sauder (2013) showed, in their analysis of drug courts, that agents might pick up or play around with logics to achieve their goals. McPherson and Sauder's (2013) study is an excellent representation of the toolkit approach to institutional logics (Thornton et al. 2012). There, logics were not values themselves but ways of action and justification that enabled an agent to reach a goal (Swidler 1986). In McPherson and Sauder's (2013) case, agents may draw on the logics of criminal punishment to incarcerate someone, or, alternatively, draw on the logic of rehabilitation to reduce a sentence. Their study expresses how logics are not necessarily internalized structures of behavior but may form uses of reflexive discourse. It inspires one to ask: what are agents' connections to logics? Friedland (2012, 2017) argued that connections are not solely cognitive links but emotional associations as well. In other words, meaning and emotional wellbeing drive people to use and to identify with logics.

Toubiana and Zietsma (2017) provided relevant insights into how emotions play into the dynamics of institutional complexity. In their study of a medical non-profit supporting people with a degenerative disease, they found that an organization often incurred angry backslash from social media when an it provided rational research-based responses, because the public expected to encounter caring and emotionally oriented responses. Their paper provides understanding of the dynamics of social media outrage that many organizations fall into. Here Toubiana and Zietsma's (2017) key findings are both practical and theoretical. The practical finding for organizations is to understand their stakeholder's logics and tailor their responses. For scholars, it pressures the existing cognitive understanding of institutional complexity: Toubiana and Zietsma (2017) show that the emotions in play drive such complexity. This study exposes that the nature of complexity when caring for victims and relatives while also possessing a rational medical focus was extremely

difficult because the disease awakened strong emotions in victims and relatives, who sometimes felt that the only logic that mattered was care. The emotions threatened to destabilize the organization, as stakeholders would shame and shun them, when relatives felt that the organization did not live up to their expectation of compassion (Toubiana & Zietsma 2017). The notion of emotions has received more attention lately. For example, Tracey (2016) presented a study of how agents are persuaded to convert to certain logics. Tracey (2016) was also one of few papers that focused solely on the micro-level, and it illuminates interesting micro-foundations about how logics are communicated with passion on the individual level.

These papers display thoughtful scholarship about how individuals and organizations handle competing reasons for action and ways of thinking and justifying those actions. Even so, the institutional logics perspective contains weaknesses. First, the empirical literature tends to only focus on particular organizations, which limits the sample and its generalizability. The institutional logics literature also rarely connects to other organizational theories, which threatens to isolate the theory of institutional logics. Furthermore, the understanding of individual agency is seldom elaborated in depth; for example, we do not understand exactly why people use logics as tools in one instance while maintaining stability in others. There is a schism in the literature between the argument that individuals can freely pick up logics—such as with McPherson and Sauder's (2013) study, while others such as Battilana & Dorado (2010) propose socialization as an explanation, i.e. individuals act because they are socialized into a specific logic that drives their action. Essentially a "Parsonian" view, where logics are values and motivate action, and the view that logics are tools that do not motivate action divides the logics perspective. On top of this division, the micro-level perspective also faces critique for solely relying on cognitive elements (such as attention) as explanatory of action (rather than emotions) (Friedland 2012, 2017; Toubiana & Zietsma 2017). Despite the significant focus on institutional logics and the many influential papers published about it, much potential is still untapped, clarity in constructs and terminology are to be settled, and a deeper understanding the role of logics in organizations can be achieved.

Gaps identified in the review

Table 1.1. displays a clear dominance of field-level studies, accounting for 61% of all analyses and more than twice than the number of studies focusing on the organizational level. Even worse,

few studies deal with individual responses to institutional pressures. This scarcity is not surprising given that micro-foundations are a newer addition (Thornton et al. 2012). Moreover, the supremacy of field-level studies institutional logics and NIT in general is receiving more and more critique (Jarvis 2017). It is quite clear that the individual level is under-researched. One exception is Smets et al.'s (2015) paper on how individuals work through institutional complexity. Yet, this paper, like several others, draws on practice theory, which is neither an individualistic approach nor a completely holistic one but rather an attempt to dissolve the distinction. Since micro-foundations do include such a distinction, practice-theory studies cannot really be considered micro-foundations given the different assumptions about individuals and aggregation. For this reason, these studies do not help us construct micro-foundations despite a micro-level approach.

The micro-foundations perspective, which Thornton et al. (2012) argues for, is seldom operationalized in empirical work. Few papers draw explicitly on micro-foundations. This results in conflicting views about how and why agents use particular logics. For example, Pache and Santos (2013a) promote a view where agents are often in conflict, whereas Schildt and Perkmann (2017) argue that settlement is much more prevalent than conflict. The second table exposes a glut of studies on public organizations, with healthcare and academia most popular. Another popular type of organization is the hybrid organization, where micro-finance and organizations mix social service with profit being of interest (Battilana & Dorado 2010; Pache & Santos 2013b). Hybrid organizations resemble public/social service firms, and existing research deals with that topic: it asks how community or professional logics clash or fit together with market logics. Examples are Reay and Hinings's (2009) work on hospitals and Pache and Santos's (2013b) piece on work enterprises. Another stream is "non-organizational," meaning scholarship does not focus on particular types of organizations but on groups of unorganized agents, such as shareholders, or on institutions not necessarily shaped by the clear boundaries of organizations.

The non-organizational stream deals with elements like stakeholder perception, such as Joseph et al. (2014), or how activities affect firms (Zhung & Luo 2013). Organizations less researched are corporations and manufacturing firms, hence echoing Suddaby et al.'s (2010) critique of NIT as too focused on public- and service-type firms. In fact, I did not come across a single study dedicated to studying a corporation or manufacturing firm on the organizational or individual level (i.e., few researchers have been "inside" such organizations using an institutional perspective). Whereas my review does show an increased interest in the organizational level, Greenwood et al.'s (2014) critique of ignoring organizational differences appears poignant when

taking into consideration the homophily of organization types researchers choose to study. Because of this homophily, organizational differences in structures, practices, management, and so on is seldom brought up. This leaves a gap in the theory, because institutional logics are made up by a set of organizations working in a similar manner. If scholars do not differentiate and compare organizations, it proves difficult to differentiate fields (Greenwood et al. 2014). In their critical review, Greenwood et al. (2014) noted that institutional theory sometimes does not count as an organizational theory because it solely spotlights the institutional level. Field-level analysis tends to leave out characteristics of the organization, such as its management, its design, and so on. While some theoretical papers have strived to overcome this deficiency, such as Ocasio and Radoynovska (2016), few papers go into management and organizational design's impact on logics. This leaves organizations with very little agency, as the logics perspective does not account for the ways an organization can act.

My review exposes simple gaps, such as a too-narrow sample of the organizations researched; however, deeper gaps also emerge, especially in the form of explaining organizational differences in structures, management, and outcomes. Moreover, few papers have a strong connection to other organizational theories, which is an omission that could explain how competing logics affect organizations and how they handle it. Finally, the micro-foundations do not contain a strong empirical basis. The following list summarizes the gap identified:

1. The sample of organizations researched.
2. Features of the organization design and structures, performance, management, and governance.
3. Coupling to other organizational theories to explain organizational differences in unison with institutional logics.
4. Constructing micro-foundations that include both cognition and affection.

Future research directions
The sample researched

My review reveals the particularity of organizations of interest to scholars. Smets et al. (2015 p. 966) write on the nature of work and organizations as seen from an institutional logics perspective:

"We therefore argue that our model is particularly apt for organizations that employ highly autonomous individuals who have to balance competing logics in an ad hoc way due to unpredictable work demands or volatile institutional contexts…We contend that many of the organizations identified as institutionally complex, such as hospitals, universities, public service organizations, or professional service firms, fit this description."

In other words, they identify a specific sample of organizations of special interest to institutional logics scholars. Not surprisingly, I find that these organizations are clearly the ones who have received most attention from researchers.

Fixation impedes what we know about different types of organizations. Corporations differ from universities or social enterprises. The question remains: how might they differ and to what extent? Often, institutional logics scholars argue that the market logic acts as a "master principle" (Smets et al. 2015 p. 934). Therefore, studying corporations is uninteresting, as they are simply governed by a rational-choice-maximizing algorithm aimed at economic outcomes. Ocasio and Radoynovska (2016) argued that this might not be the case: for-profit organizations might also mix different types of logics. While scholars on the fringe of the institutional logics perspective have analyzed firms as they mix market or agency logics with CSR (Ioannou & Serafeim 2015), this has not been of interest to many institutional logics scholars. A promising path of research could investigate how firms handle the dualism between a market and society that, on one hand, demands profitable practices, but, on the other hand, demands social responsibility and "good behavior" from firms. Understanding how that might play out is an important topic for managers and broader society, yet we know little about the ways by which agents inside firms interpret these institutions. The literature is quite clear from the outside, but no studies have been conducted inside of the walls of a firm as it experiences these demands.

It is also not well known if corporations differ. Nearly all major corporations contain CSR departments that promote societal values and HR departments that promote diversity. However, some may carry out these practices with great conviction and endeavor, while other firms may simply use departments as politically correct window-dressing. If corporations differ is something we can only find out by in-depth qualitative studies of how firms enact CSR.

Analysis of the different stages of firm development represents another topic for comparative studies. It is well known in organizational theory that firms change, face different environments,

and develop new structures to cope. For example, Abernathy and Utterback (1978) advise a stage model of development, where the organization and market changes; likewise, Rogers (2003) proposes shifts in market categories. Thornton (2002) recommends that such market changes also affects firms, but how this process takes shape and actors understand it is unknown. Studying and comparing organizations as different stages of development could shed light on how changes in logics affect a firm and how, correspondingly, organizational structures adapt to these changes. Here, longitudinal studies of firms could especially provide new knowledge.

Features of the organization

New institutional theory and institutional logics promote a different and compelling view of organizations and their design and structure: organizations are not only designed to fit technological contingencies, but socio-cultural norms, values, practices, and ideas also affect organizations' design. Even so, the focus on organizational structures and design has been limited. Greenwood et al. (2014) found in their review on NIT that very few papers, including institutional logics ones, touched upon the subject with any depth:

"*Though often fundamentally insightful and theoretically important for the way that they nuance our understanding of diffusion processes, these studies usually lean towards showing and explaining the occurrence and nature of institutional processes, rather than to explaining how organizations are actually designed and managed. Although they touch on organizational design and management, they do so lightly and are intentionally narrow in focus.*" (Greenwood et al. 2014 p. 1209)

In my review, I seldom came across allusions to organizational design and structures. The quote from Smets et al. (2015) I mentioned earlier is one of the few references about contingencies caused by organizational structures and design.

Organizational design and the use of logics

Thornton et al. (2012) propose: "*Overall, from our theoretical perspective, organizational design is important because it filters how institutional logics reach an organization and shapes whether pressures and motivations associated with different logics become encoded in diverse coalitions within an organization, creating or inhibiting conflict over goals and strategies.*" Very few papers have dealt with this call for future research. The reason may result from the epistemological differences between a sociological approach in institutional logics and a "cooler" economic

approach found in the organizational design literature, a divide going back to Granovetter's (1985) critique. Institutional scholars would probably avoid classic organizational economics, because they tend to agree with Granovetter and disagree with the fundamental tenets of organizational economics. Newer organizational design literature, however, could be of interest.

Institutional logics shape what and how events, problems, and solutions receive attention (Thornton et al. 2012). However, organizational design also matters for how attention is shaped (Thornton et al. 2012). Elements, such as forms (e.g., M or U form of organizing), rewards, and promotion systems, could be found to play a role. Several scholars have argued that attention matters for organizational decisions and outcomes (Ocasio 1997); for example, Foss and Weber (2016) argue that different organizational forms shape how attention is fashioned toward different problems and solutions. The idea is that different hierarchical structures affect attention-based decision-making. M, U, and project forms affect cognitive loads and one's attention to problems and solutions (Foss & Weber 2016). These contingencies of design could affect the filtering of logics, as Thornton et al. (2012) propose.

Another research topic that follows from design contingencies is how logics require different design in the form of rewards. This goes back to Thompson's (1967) classic distinction between intensive technology, which is profession-based, and long-linked technology based on being organized. Thompson (1967) argues that each technology requires different types of rewards: for example, intensive technology is more interested in occupational prestige. This insight is not unknown to institutional logics scholars; it is well understood that professions seek personal prestige, whereas actors following the market logics focus on status within hierarchy (Thornton et al. 2012). In this regard, organizational design may promote or demote certain logics.

Institutional logics literature rarely discusses how performance systems are institutional in nature and institutionalized through use. Performance and reward systems are likely to influence behavior and serve as material practices and symbols of logics. A recent example is the Wells Fargo scandal where personal bankers forged signatures and opened accounts without client knowledge. The scam illustrates a behavior driven by a performance rule that compelled every banker to sell eight products to each customer. How such behavior is institutionalized when the market logic hits overdrive is deeply relevant for society; yet, without understanding of the role of organizational design, the institutional logics perspective is limited in helping us to understand such phenomena inside organizations.

Finally, research has pointed to the importance of formal structures (Smith & Besharov 2017), but this remains underdeveloped. The design of formal structures and how this affects the ability to incorporate dual elements is key, and it requires research to improve and broaden our knowledge of how hybridity is institutionalized through such structures in and across organizations.

Performance

While not a particularly popular topic with organizational sociologists, performance is a crucial concept of organization studies. In essence, organizations exist because of their better efficiency and performance than non-organized activities, such as the spontaneous order of the market. Yet, information about how institutional logics affect performance is difficult to uncover. The reason is likely to be the focus on external stakeholders. Siggelkow (2001) terms this the external fit, which defines how well an organization's activities fit its external stakeholders' wants and perceptions of the organization. An internal fit of activities may also be affected by external changes. Siggelkow (2001) determines internal fit as a coherence of how choices are made and action carried out. Since logics carry different attention-shaping mechanisms and rationale for choice and action, it is likely that institutional complexity inside an organization hinders coherence. As internal fit is often considered important for organizational performance (Siggelkow 2001), the rise of new logics inside a firm could negatively affect its performance. Even though many studies find that logics are being fruitfully combined, these studies do not mention organizational performance. An exception is Pache and Santos (2013b), who assert that the combination of logics may increase performance, but their analysis is based on external fit. Furthermore, Pache and Santos (2013b) argue for in-depth studies that exactly focus on performance, and their study is limited in this regard.

Pache and Santos (2013b) propose that hybrid organizations outperform mono-logical organizations. This finding may, however, be contingent on the characteristics of the organization with regard to how well it combines the logics. Smets et al. (2015) propose that flexible organizations with large degrees of individual freedom can achieve this outperformance, but less so for tightly coupled and rigid organizations.

Corporate governance and management

Westphal and Zajac (2013) have already outlined a corporate governance research agenda drawing on the idea of socially constituted agency. Westphal and Zajac (2013) draw on institutional logics in their research on corporate governance. Their example is agency prescriptions, which proclaim that certain incentive schemes should be implemented, such as stock options for CEOs. According to this prescription, incentives make corporate executives behave more "rationally" in regard to utilizing corporate resources and increasing shareholder value. While this rationality may increase legitimacy in the financial community, it may not in fact increase organizational efficiency (Westphal & Zajac 2013). A few papers in my review use the corporate governance angle in connection with institutional logics (e.g., Joseph et al. 2014), but, overall, the angle is not popular. This is surprising, given the clear opening for logics scholars. The cross-fertilization only seems to go one way: from logics to corporate governance and not vice versa. Given rising inequality, especially in the USA, and the ever-widening wage gap between executives and white- and blue-collar workers, ought to render this issue critical. How CEO power rises and how executive salaries are legitimized reflect interesting and relevant topics of study. Yet, without taking corporate governance into account, institutional logics scholars, who otherwise are interested in this societal shift, are left without tools to understand why and how wage gaps are legitimized inside firms, thereby driving the societal shift.

While Westphal, Zajac, and likeminded scholars in corporate governance have formed an interesting research agenda, they rarely look at the societal impact, which has great interest for institutional scholars. In this regard, it is also interesting to witness the corporate response to public outcry over executive salaries. Despite popular outcry, CEO compensation has not fallen. Future research could dig into how firms can (apparently) decouple institutional demands to level CEO pay from overall developments in wages. Management scholars are looking at micro-determinants of action, such as organizational design or cognitive limitations detached from an overall environmental context (Gavetti 2012; Gavetti, Greve Levinthal & Ocasio 2012). These scholars are quite open to exchanging ideas with logics (Gavetti et al. 2012; Powell, Lovallo & Fox 2011), and scholars in the behavioral paradigm call out for a contextual approach to furnish their singular approach on cognition. Gavetti et al. (2012 p. 24) suggest:

"The potential for a fruitful exchange of ideas between the Behavioral Theory of the Firm and institutional theory seems especially high in the new and growing area of work on complex institutional environments (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011)…In such environments, the mapping of the structure of the institutional field onto organizational

structures and behaviors is a result of organizational factors such as identity, governance, and structure Greenwood et al., (2011)., which in turn influence political processes of the kind suggested by Cyert and March (1963)."

Gavetti et al. articulate that political processes—negotiation of CEO salary and other CEO behavior, for example—are influenced by institutional elements. However, I failed to find any papers utilizing such an exchange of ideas, which is discomforting because of the potential for linking ideas like CEO pay and power inside an organization and the greater societal impact. Here, scholars would likely have to draw on elements from both the Behavioral Theory of the Firm and the institutional logics/theory.

More disconcerting, I also failed to find many exchanges with other organizational theories.

Coupling to other organizational theories

Even though scholars in other fields have proposed exchanges between institutional logics and their own theoretical field—for example, linking the Behavioral Theory of the Firm with logics— I did not find many instances where studies coupled logics to other organizational theories.

Without cross-fertilization, the institutional logics perspective may become barren. Scholars have merged NIT with other perspectives, such as the resource-based view (Oliver 1997), transaction-costs economics (Martinez & Dacin 1999), and resource dependency theory (Oliver 1991; Pfeffer & Salancik 1978). These cross-fertilizations allow for explanations about the previously mentioned organizational features. I propose that institutional logics will gain from similar cross-fertilization to expand the theory and to contribute to related theories, and to let those related theories contribute to the institutional logics perspective.

Contingency theory

Smets et al. (2015) is one of the few papers that attempt to connect the institutional logics perspective with other organizational theories when they draw on Thompson's (1967) notion of interdependence. Thompson's (1967) work has been influential for organizational and institutional theories, yet the perspective has slipped out of consciousness. Newer iterations of contingency theory focus on how organizations evolve their internal activities to fit the environment (Siggelkow 2001). Whether organizations respond to external changes depends on

the functioning of their internal fit. Siggelkow (2001) argues that organizations may ignore external demands when internal activities are not affected by external changes. This perspective suggests that organizations can close off from their environment, which, from an institutional logics perspective, is an intriguing idea. One could imagine organizations that act differently in the same field as they each chose different strategies—dependent on their internal characteristics—to deal with external demands, which builds on existing theoretical ideas in institutional theory (Oliver 1991; Pache & Santos 2010).

Contingency theory is interesting because it proposes an inherent trade-off between organizations being institutional or technological (Lynn 2005; Thompson 1967). Thompson's (1967) propositions that organizations either try to buffer environmental inputs or level them out is crucial to understand how institutional logics affect organizations. Future research could delve into how organizations balance their structures to either buffer out logics or incorporate them. Moreover, the contingencies of how organizations react and succeed in institutional environments are crucial in order to bring the organization back in (Greenwood et al. 2014). How organizations' reactions differ and what they do is essential to grasp how logics both constrain and create opportunities for change.

Resource Dependency

Resource dependency in all its simplicity suggests that external forces control organizations (Pfeffer & Salancik 1978). In this view, it is not just efficiency or rationality that guides action, but power. When organizations are dependent on another organization or institution they enjoy less autonomy and must abide. But this power dynamic is two-fold: the one holding power is dependent on another entity to control. Resource dependency furnishes propositions concerning how organizations should act to maximize their autonomy. Although some papers have dealt with how organizations manipulate the template of logics, few are concerned with an organization's power relation with another organization/institution.

From an institutional logics perspective, power, resources, *and* legitimacy matter. For example, a buyer may force a supplier into actions that she or he conceives as legitimate, or that buyer may possibly purchase a supplier in order to discipline the supplier into following her or his institutional prescriptions. Large medical firms relying on a supplier located in a different industry demonstrate this point: a medical firm needs a supplier to act legitimately in accordance with the

logics of medicine, but, if the supplier's firm is in another industry and wants to focus more on logics, it may be reasonable for the medical firm to integrate the supplier in order to discipline it to follow the logics of the medical sector.

The resource dependence perspective provides a crucial mix to NIT, where Oliver (1991) used it to open it for up for strategic responses to institutions by relying on Pfeffer and Salancik's (1978) models. However, the massive influence of Oliver's (1991) framework has displaced resource dependency, which is a shame because it offers more than a framework for how organizations respond to external control. For example, the notion of how the environment is known and organizational attention to it (Pfeffer & Salancik 1978) has been under-utilized. Crucially, Pfeffer and Salancik (1978) argue that dependency is based on perception: in other words, organizations may not recognize their dependencies. From a logics perspective, it is an intriguing prospect that organizations may not know demands well enough to abide by them. This idea has been argued on the individual level (Pache & Santos 2013a), but it can be expanded to the organizational level. Organizations may not perceive dependencies because they are in opposition to existing logics. Corporations driven by market logics, for example, may not acknowledge dependencies on societal forces, such as demands for CSR. This perspective is well suited to the attention-based view that resides within the institutional logics perspective.

Overall, some of Pfeffer and Salancik's (1978) arguments have found successful use in NIT, but they are by no means exhausted: there may be many ways to detail and strengthen institutional logics scholarship by drawing on ideas from this line of organizational theory.

Micro-foundations of institutional logics

Micro-foundations are by nature foreign to NIT. The idea behind micro-foundations is that individual choice shapes outcomes (Agassi 1975; Coleman 1990), whereas NIT argues for non-choice behavior like isomorphism[10] (Oliver 1991). Since institutional logics builds on Coleman's model of micro-foundations, they must include purposeful behavior by individual agents as the foundation of institutional logics.

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[10] Insight into this debate can be found in the exchange between Jepperson and Meyer (2011) and Abell, Felin, and Foss (2014). My paper will not go into this debate, but I will point to that micro-foundations need to encompass individual choice based on individual intentionality and institutions and their logics as a result of such choices, in order to fit the definition of micro-foundations (Abell, Felin & Foss 2014; Agassi 1975; Coleman 1990).

Relatively few papers deal with the micro-foundations of institutional logics. Furthermore, those papers that do focus on a micro-level often takes a practice theory approach that blurs the line between individual and collective levels (e.g., Smets et al. 2012, Smets et al. 2015). This is an issue from the micro-foundations perspective, because Coleman's (1990) method requires methodological individualism and the practice perspective disregards an individual perspective altogether (Schatzki 2006). Hence, practice-theory-based papers can never be micro-foundational, because they dispose of the individual agent. Those studies may be micro- and/or multi-level, but they cannot be interpreted as connecting the levels Coleman (1990) intended and outlined in his bathtub model. Crucially, Thornton et al. (2012) rely on the micro-foundational model. The crucial point is whether studies attribute a purposeful agency to agents, and not where agency resides in institutional arrangements.

This leaves only some theoretical works that explicitly deal with micro-foundations, where Pache and Santos's (2013a) paper on individual responses to the institutional environment is one example. Other papers touch upon micro-foundations, but few explicitly mention that fact or argue its contribution to micro-foundational knowledge.[11] The gap in the current literature is noticeable, even as Thornton et al. (2012) dedicate space to how they perceive the micro-foundations of institutional logics. Furthermore, a growing number of theoretical papers provide challenges to empirical research, such as Voronov and Yorks (2015) and Jarvis (2017). Both papers argue for the role of emotions in how logics are seen and used. Friedland (2017) lays out the gaps by mainly relying on an overtly cognitive view of micro-foundations, which eschews the emotional connection to logics as the driver that makes agents act and use logics.

I will outline this debate, the possibility of a future research agenda, and some thoughts on how this reflects in study methodology.

Cognition and affection in institutional logics
Friedland (2017 p.1) surveys the following gap in the micro-foundations of institutional logics:

"Institutional theory, and the institutional logics approach in particular, lacks feeling, the passions and fears that produce, sustain and disrupt institutional practice (Friedland, Mohr, Roose, & Gardinali, 2014b; Voronov, 2014; Voronov & Vince, 2012). This is due in part to rational, instrumental understandings of the individual in practice, and in part to the cognitive

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[11] A search on Scopus revealed that a mere six papers mention institutional logics and micro-foundations. None in my target journals does so.

and linguistic understanding of that practice, sustained by classification, qualification and belief."

Friedland (2017) comments on the view that Thornton et al. (2012) use to build their micro-foundations. The view is too cognitive according to Friedland, because Thornton et al. (2012) focus too much on how logics shape attention and condition our cognition instead of how we are emotionally tied to logics. Rather than seeing people driven only by how institutional logics condition their cognition, Friedland (2017) draws on Boltanski and Thévenot's work in order to argue that interest and motivation of the self-forms the driving force:

"Interest is thus their real motivation, the property of their self that makes them be themselves by wanting to obtain satisfaction. One succeeds through the strength of this desire, because one loves. Real life is what people want to acquire." (Boltanski & Thévenot, 2006 p. 197)

By resourcing Boltanski and Thévenot, Friedland (2017) opens up more agency than most institutional (logics) scholars normally attribute to agents (Cloutier & Langley 2013). This is an important point for future research; while we have previously seen studies attributing considerable agency to individuals (e.g., McPherson & Sauder 2013, Pache & Santos 2013b), we are not quite sure why. The notion of an authenticity seeking and autonomous self lends itself to self-determination theory as a mode of explanation (Ryan & Deci 2000). The connection to a theory of self-determination is natural if we see individuals as autonomous beings in search of an authentic self (Friedland 2017). That is, individuals use logics to "determine themselves," which Friedland (2017) seems to suggest is the case.

Recently, NIT has seen conceptual papers arguing for a stronger focus on the emotional side (Voronov & Weber 2016; Voronov & Yorks 2015). For example, Voronov and Yorks (2015) argue from a cognitive development perspective that agents may not respond to institutional complexity because they have emotionally tethered themselves to a particular logic. Agents can be socialized into institutions, or it could be that their identity is tied to an institution. Jarvis (2017) proposes that agents can have feigned and felt emotions in relation to logics, meaning that sometimes logics invoke deep feelings in people and sometimes people may fake emotions to appear legitimate in light of dominant logics. Future research could draw on what drives agents' motivations and emotional ties to logics; currently, only a few and very recent papers exist (e.g.,

Tracey 2016). If emotional ties matter for agents even as those ties may be complex (as with feigned emotions), then the question of how data can capture those connections remains open to investigation.

Capturing emotions

Vaisey (2008, 2009, 2014) argues that interviews are insufficient to locate the true emotions of people, because agents may be moved in certain directions without being able to narrate why. Vaisey (2014) notes that scholars have reached a consensus that dual processes are at play. For Vaisey, two analytically distinct ways explain how agents embody culture: a propositional, discursive level (system 2), and an intuitive, practical level (system 1) (Vaisey 2009 2014). For this reason, Vaisey (2009) separates knowing culture—where the agent may have a deep knowledge—from caring and use culture, where the agent may only care for the small parts that help him or her express and reach his or her desires and interests. Because of this separation between the discursive and the practical self, Vaisey (2014 p. 5) is critical of interviews:

"I maintain, however, that interviewing is something like being a 'sketch artist.' Sketch artists must use their particular skills to translate one kind of information (verbal) to another (visual) just as interviewers must use their skills to move from one kind of content (explicit talk) to another (implicit cultural content)."

In its place, Vaisey (2009 p. 1688) suggests forced-choice surveys as a better way to capture the culture-action link. This approach has provoked responses. Pugh (2013) argues that interviews can go deep, beyond feigned discursive responses and into the visceral self. The important part we can take from this debate concerns fitting our methodology to the particular question and field (Lamont & Swidler 2014). Institutional logics scholars have often relied on interpretive approaches (e.g., Currie & Spyronidis 2016) and ethnographic approaches (e.g., Jay 2013). And while no studies have applied the dual process method and its forced-survey response method, institutional logics represents a cultural cognitive theory that ought to fit such method.

In order to capture emotions and ties to logics, scholars can rely on two methods: the in-depth interview and the forced-choice survey. The in-depth interpretive interview is well known, but it comes with the caveat that agents may feign emotions (Jarvis 2017). As a result, it is important for a researcher to stay in the field longer and to return to interviewees to ensure that the interviews go beyond "honorable" displays (Pugh 2013). Second, the forced-choice survey method proposes a new line of research in institutional logics, and, as a new method, could inspire new findings.

Conclusion

Institutional logics is a burgeoning field of compelling research. The theoretical perspective has the potential to fill out lacunae in NIT, especially with regard to allowing for agency- and choice-driven behavior. This review was motivated to find out how institutional logics was getting along in this endeavor. I therefore drew on the critique levied at NIT (Greenwood et al. 2014; Suddaby et al. 2010) to determine whether institutional logics shares the same lacunae, and conducted my review in top journals that publish high-quality institutional logics literature. While institutional logics could possess a strong micro-focus, the amount of individual-level studies was few (11 out of 76). This deficiency underscores the need for more empirical research at this level, especially given the active theoretical debate on how agents connect to logics. I did find that the logics literature gave somewhat stronger attention to the organizational level, whereas NIT has been criticized for shunning this level altogether (Greenwood et al. 2014). I also found few papers that dealt with elements like organizational design and performance, despite calls for focusing on (at least) organizational design (Thornton et al. 2012). Missing pieces to the theory, especially on the contingency that organizational structures bring to the ways an organization uses logics, were evident. Moreover, I discovered a tendency to focus on particular types of organizations (service and non-profit, in particular). As a result, some of the gaps found in NIT remained present in institutional logics literature. A particular issue was the often-missing connection to other organizational theories that could help us to understand the motives behind certain structures and contingencies of organizational design. The absence of such links rendered the meso-level of the organization vague. Furthermore, I deduced that a lack of cross-fertilization might reduce the impact and prosperity of the institutional logics perspective.

In terms of future research directions, I advocated for expanding the sample of organizations studied in order to compare their differences. I also proposed more focus on organizational elements like performance and design, because these elements are shaped by logics. As NIT has already done, drawing in other organizational theories might help. Last, I recommended a sharper attention to the micro-foundations to explain these links. In existing studies, the agent's connections and use of logics was debated theoretically but it lacked empirical grounding. To achieve empirical support, I suggested looking at the cultural cognitive debate occurring in

sociology. That debate points to how we should use interpretive, qualitative measures as well as quantitative metrics. Overall, this review opened new paths for scholars embedded or interested in the institutional logics field.

References

Abell, P., Felin, T., & Foss, N. J.2014. Micro-foundations of social theory: A response to Jepperson and Meyer. *Sociologica*, *8*.2.

Adam Cobb, J., Wry, T., & Zhao, E. Y. 2016. Funding financial inclusion: Institutional logics and the contextual contingency of funding for microfinance organizations. *Academy of Management Journal*, *596*., 2103–2131.

Agassi, J. 1975. Institutional Individualism. The British Journal of Sociology, Vol. 26, No. 2 (Jun., 1975), pp. 144-155

Almandoz, J. 2012. Arriving at the starting line: The impact of community and financial logics on new banking ventures. *Academy of Management Journal*, *556*., 1381–1406.

Almandoz, J. 2014. Founding Teams as Carriers of Competing Logics. *Administrative Science Quarterly*, *593*., 442–473.

Ansari, S., Wijen, F., & Gray, B. 2013. Constructing a Climate Change Logic: An Institutional Perspective on the Tragedy of the Commons. *Organization Science*, *244*., 1014–1040.

Battilana, J., & Dorado, S. 2010. Building sustainable hybrid organizations: The case of commercial microfinance organizations. Academy of Management Journal, 53: 1419–1440.

Besharov, M.L. & Smith, W., K. 2014. Multiple Institutional Logics in Orgnizations: Explained Their Varied Nature and Implications Academy of Management Review 2014 vol. 39 no.3 364-381

Bishop, S., & Waring, J.2016. Becoming hybrid: The negotiated order on the front line of public–private partnerships. *Human Relations*, *69*.10., 1937–1958.

Bjerregaard, T., & Jonasson, C. 2014. Managing Unstable Institutional Contradictions: The Work of Becoming. *Organization Studies*, *35*10., 1507–1536.

Boltanski, L., & Thévenot, L. 2006. On justification: Economies of worth. Princeton, NJ: Princeton University Press.

Chung, C.-N., & Luo, X. 2008. Institutional Logics or Agency Costs: The Influence of Corporate Governance Models on Business Group Restructuring in Emerging Economies. *Organization Science*, *19*5., 766–784.

Cloutier, C., & Langley, A.2013. The Logic of Institutional Logics. *Journal of Management Inquiry*, *22*.4., 360–380.

Coleman, J. S.1990. "Foundations of Social Theory" The Belknapp Press of Harvard University Press

Creed, W.E.D., DeJordy, R., & Lok, J. 2010. Being the change: Resolving institutional contradiction through identity work. Academy of Management Journal, 536., 1336–1364.

Currie, G. & Spyridonidis, D. 2016. Interpretation of Multiple Institutional Logics on the Ground: Agents' Position, their Agency and Situational Constraints in Professionalized Contexts Organization Studies 2016, Vol. 371. 77–97

Dalpiaz, E., Rindova, V., & Ravasi, D. 2016. Combining Logics to Transform Organizational Agency. *Administrative Science Quarterly*, *61*3., 347–392.

Davis, G.F. & Powell, W. W. 1992. Organization-environment relations Handbook of Industrial and Organizational Psychology 2. Ed vol. 3 Consulting Psycologists Press

Delbridge, R., & Edwards, T. 2013. Inhabiting Institutions: Critical Realist Refinements to Understanding Institutional Complexity and Change. *Organization Studies*, *34*7., 927–947.

DiMaggio, P. J. 1988. Interest and agency in institutional theory. In L. G. Zucker Ed., Institutional patterns and organizations pp. 3-21. Cambridge, MA: Ballinger

DiMaggio, Paul J. 1991. Constructing an Organizational Field as a Professional Project: U.S. Art Museums, 1920-1940 in The New Institutionalism in Organizational analysis University of Chicago Press

DiMaggio, P.J 1997. Culture and Cognition   Annual Review of Sociology, Vol. 23 1997., pp. 263-287

DiMaggio, P.J. & Powell, W.W. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields AMERICAN SOCIOLOGICAL REVIEW 48 2., 147-160

Dunn, M.B., & Jones, C. 2010. Institutional logics and institutional pluralism: The contestation of care and science logics in medical education, 1967–2005. Administrative Science Quarterly, 55, 114–149.

Durand, R., & Jourdan, J. 2012. Jules or Jim: Alternative Conformity To Minority Logics. *Academy of Management Journal*, *55*6., 1295–1315.

Friedland, R. 2012. The Institutional logics Perspective: A new approach to culture, Structure, and Process. *M@n@gement*, *15*5., 583.

Friedland, R.2017. Moving Institutional Logics Forward: Emotion and Meaningful Material Practice. *Organization Studies*, 1–28.

Friedland, R. & Alford, R.R. 1991. Bringing society back in: Symbols, Practices and Institutional Contradictions The New Institutionalism in Organizational Analysis. University of Chicago Press

Galvin, T. L. 2002. Examining Institutional Change : Evidence from the Founding Dynamics of U.S . Health Care Interest Associations. *Academy of Management Journal*, *45*4., 673–696. http

Gavetti, G., Greve, H. R., Levinthal, D.A. & Ocasio, W. 2012. The Behavioral Theory of the Firm: Assessment and Prospects The Academy of Management Annals Volume 6, Issue 1, 2012

Gawer, A., & Phillips, N. 2013. Institutional Work as Logics Shift: The Case of Intel's Transformation to Platform Leader. *Organization Studies*, *34*8., 1035–1071.

Glaser, V. L., Fast, N. J., Harmon, D. J. & Green Jr., S.E. 2016. Institutional Frame Switching: How Institutional Logics Shape Individual Action Research in the Sociology of Organizations, Vol. 48A p. 37-69

Glynn, M. A.2013. Patricia Thornton, William Ocasio, and Michael Lounsbury: The Institutional Logics Perspective: A New Approach to Culture, Structure, and Process. *Administrative Science Quarterly*, *58*.3., 493–495.

Glynn, M.A., & Lounsbury, M. 2005. From the critics' corner: Logic blending, discursive change and authenticity in a cultural production system. Journal of Management Studies, 42, 1031–1055.

Granovetter, M. 1985. Economic Action and Social Structure: The Problem of Embeddedness American Journal of Sociology vol. 91, no.3 p.481-510

Greenwood, R., Magán Diaz, A., Li, S., & Céspedes Lorente, J. 2010. The multiplicity of institutional logics and the heterogeneity of organizational responses. Organization Science, 21: 521–539.

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E.R., & Lounsbury, M. 2011. Institutional Complexity and Organizational Responses The Academy of Management Annals, 5:1, 317-371

Greenwood, R., Hinings, C.R. & Whetten, D. 2014. Rethinking Institutions and Organizations Journal of Management Studies 51:7 November 2014

Gubbi, S. R., Ray, S., & Aulakh, P. S. 2015. International Search Behavior of Business Group Affiliated Firms : Scope of Institutional Changes and Intragroup Heterogeneity. *Organization Science*, *26*5., 1485–1501.

Heinze, K. L., & Weber, K. 2015. Toward Organizational Pluralism: Institutional Intrapreneurship in Integrative Medicine. *Organization Science*, January., orsc.2015.1028.

Ioannou, I., & Serafeim, G,.2015. The Impact of Corporate Social Responsibility on Investment Recommendations: Analysts' Perceptions and Shifting Institutional Logics, *Strategic Management Journal*, 36: 1053–1081

Jarvis, L.C. 2017. Feigned vs. Felt: Feigning Behaviors and the Dynamics of Institutional logics Academy of Management Review vol. 42 nr. 2 p. 306-333.

Jay, J. 2013. Navigating paradox as a mechanism of change and innovation in hybrid organizations. Academy of Management Journal, 56: 137–159.

Jarzabkowski, P., Smets, M., Bednarek, R., Burke, G., Spee, P. 2013.: Institutional Ambidexterity: Leveraging Institutional Complexity in Practice Research in the Sociology of Organizations, Vol. 39 Part B p. 37-61

Jepperson, R., & Meyer, J. W.2011. Multiple levels of analysis and the limitation of methodological individualisms. *Sociological Theory*, *29*.1., 54–73.

Jones, C., Maoret, M., Massa, F. G., & Svejenova, S. 2012. 7. Rebels with a Cause: Formation, Contestation, and Expansion of the De Novo Category Modern Architecture, 1870-1975. *Organization Science*, *23*6., 1523–1545.

Joseph, J., Ocasio, W., & Mcdonnell, M. H. 2014. The structural elaboration of board independence: Executive power, institutional logics, and the adoption of CEO-only board structures in U.S. corporate governance. *Academy of Management Journal*, *57*6., 1834–1858. http://doi.org/10.5465/amj.2012.0253

Kennedy, M., & Fiss, P. 2009. Institutionalization, framing, and diffusion: The logic of TQM adoption and implementation decisions among U.S. Hospitals. *Academy of Management Journal*, *52*5., 897–918.

Kodeih, F., & Greenwood, R. 2014. Responding to Institutional Complexity: The Role of Identity. *Organization Studies*, *35*1., 7–39.

Kitchener, M. 2002. Mobilizing the logic of managerialism in professional fields: The case of academic health centre mergers. Organization Studies, 233.,391–420.

Kyratsis, Y., & Phillips, N. 2017. Health Systems in Transition : Professional Identity Work in the Context of Shifting Institutional Logics. *Academy of Management Journal*, *60*2., 610–641.

Lamont, M. & Swidler, A.2014. Methodological Pluralism and the Possibilities and Limits of Interviewing Qualitative Sociology 37 .2.:153-171.

Lee, M.-D. P., & Lounsbury, M. 2015. Filtering Institutional Logics: Community Logic Variation and Differential Responses to the Institutional Complexity of Toxic Waste. *Organization Science*, *26*3., 847–866.

Leeson, P. T. 2007. An - arrrh - chy: The Law and Economics of Pirate Organization. *Journal of Political Economy*, *115*6., 1049–1094.

Lok, J. 2010. Institutional logics as identity projects. Academy of Management Journal, 536., 1305–1335.

Logue, D. M., Clegg, S., & Gray, J.2016. Social organization, classificatory analogies and institutional logics: Institutional theory revisits Mary Douglas. *Human Relations*, *69*.7., 1587–1609.

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, 289–307.

Lounsbury, M., & Beckman, C. M. 2015. Celebrating organization theory. *Journal of Management Studies*, *52*2., 288–308. http://doi.org/10.1111/joms.12091

Luo, X. 2007. Continuous learning: The influence of national institutional logics on training attitudes. Organization Science, 182., 280–296.

Maguire, S., Hardy, C., & Lawrence, T.B. 2004. Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. Academy of Management Journal, 47, 657–679.

Mair, J., Mayer, J., & Lutz, E. 2015. Navigating Institutional Plurality: Organizational Governance in Hybrid Organizations. *Organization Studies*, *36*6., 713–739.

Mangen, C., & Brivot, M.2015. The challenge of sustaining organizational hybridity: The role of power and agency. *Human Relations*, *68*.4., 659–684.

Martin, G., Currie, G., Weaver, S., Finn, R., & McDonald, R. 2017. Institutional Complexity and Individual Responses: Delineating the Boundaries of Partial Autonomy. *Organization Studies*, *38*1., 103–127.

Marquis, C., & Lounsbury, M. 2007. Vive la re´sistance: Consolidation and the institutional contingency of professional counter-mobilization in U.S. banking. Academy of Management Journal, 504., 799–820.

Meyer, J. W. & Rowan, B. 1977. Institutionalized Organizations: Formal Structure as Myth and Ceremony American Journal of Sociology, Vol. 83, No. 2 Sep., 1977., pp. 340-363

Miller, D., Le Breton-Miller, I., & Lester, R. H. 2011. Family and Lone Founder Ownership and Strategic Behaviour: Social Context, Identity, and Institutional Logics. *Journal of Management Studies*, *48*1., 1–25. http://doi.org/10.1111/j.1467-6486.2009.00896.x

Nigam, A., & Ocasio, W. 2010. Event attention, environmental sensemaking, and change in institutional logics: An inductive analysis of the effects of public attention to Clinton's health care reform initiative. Organization Science, 214., 823–841.

Ocasio, W. 1997. Towards an Attention-Based View of the Firm Strategic Management Journal Vol. 18, Summer 1997 Special Issue: Organizational and Competitive Interactions Jul., 1997., pp. 187-206

Ocasio, W. & Radoynovska, N. 2016. Strategy and commitments to institutional logics: Organizational heterogeneity in business models and governance Strategic Organization 1–23

Ollier-Malaterre, A., McNamara, T., Matz-Costa, C., Pitt-Catsouphes, M., & Valcour, M. 2013. Looking up to regulations, out at peers or down at the bottom line: How institutional logics affect the prevalence of age-related HR practices. *Human Relations*, *66*.10., 1373–1395.

Oliver. C. 1991 Strategic Responses to Institutional Processes. Academy of Management Review, Vol.16 , No .1 Jan.1991 , pp.145-179.

Özen, S. & Akkemi, K. A. 2012. Does Illegitimate Corporate Behaviour Follow the Forms of Polity? The Turkish Experience. Journal of Management Studies 49:3 May 2012

Pache, A., & Santos, F. 2010. When Worlds Collide: The Internal Dynamics of Organizational Responses to Conflicting Institutional Demands ACAD MANAGE REV July 1, 2010 vol. 35 no. 3 455-476

Pache, A., & Santos, F. 2013a. Embedded in Hybrid Contexts: How Individuals in Organizations Respond to Competing Institutional Logics Institutional Logics in Action, Part B, Research in the Sociology of Organizations, Volume 39B, 3–35

Pache, A., & Santos, F. 2013b. Inside the hybrid organization: Selective coupling as a response to conflicting institutional logics. Academy of Management Journal, 56: 972–1001.

Pahnke, E. C., Katila, R., & Eisenhardt, K. M. 2015. Who Takes You to the Dance? How Partners' Institutional Logics Influence Innovation in Young Firms. *Administrative Science Quarterly*, *60*4., 596–633.

Palermo, T., Power, M., & Ashby, S. 2017. Navigating Institutional Complexity: The Production of Risk Culture in the Financial Sector. *Journal of Management Studies*, *54*2., 154–181.

Pallas, J., Fredriksson, M., & Wedlin, L. 2016. Translating Institutional Logics: When the Media Logic Meets Professions. *Organization Studies*, *37*11., 1661–1684.

Pfeffer, J. & Salancik, G.R. 1978. The External Control of Organizations. Harper Row.

Powell, W., W. & Rerup, C. 2017. Opening the Black-box; The micro-foundations of institutions Forthcoming in The Sage Handbook of Organizational Institutionalism, 2ᵈ Edition, Sage Publishers

Pugh, A.J.2013. What good are interviews for thinking about culture? Demystifying interpretive analysis American Journal of Cultural Sociology .2013. 1, 42–68

Purdy, J.M., & Gray, B. 2009. Conflicting logics, mechanisms of diffusion, and multilevel dynamics in emerging institutional fields. Academy of Management Journal, 522., 355–380.

Quattrone, P. 2015. Governing Social Orders, Unfolding Rationality, and Jesuit Accounting Practices. *Administrative Science Quarterly*, *60*3., 411–445.

Ramus, T., Vaccaro, A. & Brusoni, S. 2017. Institutional Complexity in Turbulent times: formalization, Collaboration and The Emergence of Blended Logics. Academy of Management Journal 2017, Vol. 60, No. 4, 1253–1284.

Reay, T., & Hinings, C.R. 2005. The recomposition of an organizational field: Health care in Alberta. Organization Studies, 263., 349–382.

Reay, T., Hinings, C.R. 2009. Managing the Rivalry of Competing Institutional Logics Organization Studies 06/2009; 306.:629-652.

Reay, T., Goodrick, E., Waldorff, S. B., & Casebeer, A. 2017. Getting leopards to change their spots: Co-creating a new professional role identity. *Academy of Management Journal*, *60*3., 1043–1070.

Rogers, E. M. 1962/2003. Diffusion of Innovations Free Press 5th edition 2003

Ryan, R. M. & Deci, E. L. 2000. Intrinsic and Extrinsic Motivations; Classic Definitions and New Directions Contemporary Educational Psychology vol. 25 nr. 1, p.54-67

Sauermann, H., & Stephan, P. 2012. Conflicting Logics? A Multidimensional View of Industrial and Academic Science. *Organization Science*, *24*3., 889–909.

Schatzki, T. R. 2006. On Organizations as they Happen. *Organization Studies*, *27*(12), 1863–1873.

Shipilov, A.V., Greve, H.R., & Rowley, T.J. 2010. When do interlocks matter? Institutional logics and the diffusion of multiple corporate governance practices. Academy of Management Journal, 534., 846–864.

Siggelkow, N. 2001. Change in the presence of Fit; The Rise, the Fall and the Renaissance of Liz Claireborne The Academy of Management Journal vol.44 no.4 pp. 838-857

Smets, M. & Jarzabkowski, P. 2013. Reconstructing Institutional Complexity in Practice Human Relations 6610. 1279–1309

Smets, M., Jarzabkowski, P., Burke, G. & Spee, P. 2015. Reinsurance Trading in Lloyd's of London: Balancing Conflicting-yet-Complementary Logics in Practice Academy of Management Journal 2015, Vol. 58, No. 3, 932–970.

Spicer, A., & Sewell, G. 2010. From national service to global player: Transforming the organizational logic of a public broadcaster. *Journal of Management Studies*, *47*6., 913–943.

Suddaby, R. 2010. Challenges for Institutional Theory Journal of Management Inquiry 191. 14–20

Suddaby, R., Elsbach, K.D., Greenwood, R., Meyer, J.W., and Zilber T. B. 2010. Organzations and their institutional environments – Bridging meaning, values and culture back in: Introduction to the Special Research Forum Academy of Management Journal 2010, Vol. 53, No. 6, 1234-1240.

Swan, J., Bresnen, M., Robertson, M., Newell, S., & Dopson, S. 2010. When Policy meets Practice: Colliding Logics and the Challenges of Mode 2 Initiatives in the Translation of Academic Knowledge. *Organization Studies*, *31*9–10., 1311–1340.

Swidler, A. 1986. Culture in Action: Symbols and Strategices American Sociological Review, Vol. 51, No. 2 Apr., 1986., pp. 273-286

Thompson, J. D. 1967. Organizations in Action New York: McGraw-Hill

Thorén, C., Ågerfalk, P. J., & Rolandsson, B. 2017. Voicing the Puppet: Accommodating Unresolved Institutional Tensions in Digital Open Practices. *Organization Studies*, 17084061769535.

Thornton, P. H. 2001. Personal versus market logics of control: a historically contingent theory of the risk of acquisition. *Organization Science*, *12*3., 294–311.

Thornton, P. H. 2002. The Rise of the Corporation in a Craft Industry: Conflict and Conformity in Institutional Logics Academy of Management Journal 2002, Vol. 45, No. 1, 81-101

Thornton, P.H. & Ocasio, W. 2008. Institutional Logics in Sage Handbook of Organizational Institutionalism Sage 2008.

Thornton P. H., Ocasio, W. & Lounsbury, M., 2012. The Institutional Logics Perspective Oxford University Press

Tobergte, D. R., & Curtis, S. 2015. Institutional complexity in turbulent times: formalization, collaboration and the emergence of blended logics. *Academy of Management Journal*, *60*4., 1253–1284.

Toubiana, M., & Zietsma, C. 2017. The Message is on the Wall ? Emotions , Social Media and the. *Academy of Management Journal*, *60*.3., 922–953.

Townley, B. 2002. The role of competing rationalities in institutional change. Academy of Management Journal, 451., 163–179.

Tracey, P., Phillips, N. & Jarvis, O. 2011. Bridging Institutional Entrepreneurship and the creation of New Organizational Forms: A Multilevel Model Organization Science Vol.22 No. 1 2011 p. 60-80

Tracey, P. 2016. Spreading the Word: The Micro-foundations of Institutional Persuasion and Conversion. *Organization Science*, *27*4., 989–1009.

Vasudeva, G., Alexander, E. A., & Jones, S. L. 2015. Institutional Logics and Interorganizational Learning in Technological Arenas: Evidence from Standard-Setting Organizations in the Mobile Handset Industry. *Organization Science*, *26*3., 830–846.

Vasudeva, G., Zaheer, A., & Hernandez, E. 2013. The Embeddedness of Networks: Institutions, Structural Holes, and Innovativeness in the Fuel Cell Industry. *Organization Science*, *24*3., 645–663.

Vaisey, S. 2009. Motivation and Justification: A dual process model of culture in action. AJS Volume 114 Number 6 May 2009.: 1675–1715

Vaisey, S. 2014. Is Interviewing Compatible with the Dual-Process Model of Culture? American Journal of Cultural Sociology February 2014, Volume 2, Issue 1, pp 150–158

Van Gestel, N., & Hillebrand, B. 2011. Explaining stability and change: The rise and fall of logics in pluralistic fields. Organization Studies, 322., 231–252.

Veblen, T. 2007. The Theory of the Leisure Class. Oxford University Press.

Venkataraman, H., Vermeulen, P., Raaijmakers, A., & Mair, J. 2016. Market Meets Community: Institutional Logics as Strategic Resources for Development Work. *Organization Studies*, *37*5., 709–733.

Voronov, M. 2014. Toward a Toolkit for Emotionalizing Institutional Theory. *Research on Emotion in Organizations*, *10*May., 167–196.

Voronov, M., De Clercq, D., & Hinings, C..2013. Institutional complexity and logic engagement: An investigation of Ontario fine wine. *Human Relations*, *66*.12., 1563–1596.

Voronov, M. & Weber, K. 2016. the Heart of Institutions: Emotional Competence and Institutional Actorhood, *41*3., 456–478.

Voronov, M. & Yorks, L. 2015. Did you notice that? Theorizing Differences in Comprehending Institutional Contradictions. Academy of Management Review 2015, Vol. 40, No. 4, 1–24.

Westphal, J. D. & Zajac, E. J. 2013. A Behavioral Theory of Corporate Governance: Explicating the Mechanisms of Socially Situated and Socially Constituted Agency. The Academy of Management Annals, 2013 Vol. 7, No. 1, 607–661,

York, J. G., Hargrave, T. J., & Pacheco, D. F. 2016. Converging winds: Logic hybridization in the Colorado wind energy field. *Academy of Management Journal*, *59*2., 579–610.

Yu, K.-H. 2013. Institutionalization in the Context of Institutional Pluralism: Politics as a Generative Process. *Organization Studies*, *34*1., 105–131.

Zhang, C. M. A. N. 2017. Institutional Logics and Power Sources: Merger and Acquisition Decisions. *Academy of Management Journal*, *60*2., 671–694.

Zhang, J., & Luo, X. R. 2013. Dared to Care: Organizational Vulnerability, Institutional Logics, and MNCs' Social Responsiveness in Emerging Markets. *Organization Science*, *24*6., 1742–1764.

Zhao, E. Y., & Wry, T. 2016. Not all inequality is equal: Deconstructing the societal logic of patriarchy to understand microfinance lending to women. *Academy of Management Journal*, *59*6., 1994–2020.

Zilber, T. B. 2002. Institutionalization as an interplay between actions, meanings, and actors: The case of a rape crisis center in Israel. *Academy of Management Journal*, *45*1., 234–254.

Chapter 3

Adoption of logics in entrepreneurial ventures: how competing logics are brought in, activated, and conflict inside the organization

Abstract

Drawing on a 24-month ethnographic study of an entrepreneurial venture, I investigate how agents in the venture develop, defend and conflict over frames derived from macro-level institutional logics. Literature has argued that managers on the organizational level control which and how logics operate in their organization by using efficient structures. This paper strives to change the discussion to a focus on how logics are adopted through an iterative micro-level process that interacts with macro-level changes. The paper provides evidence from a venture that moved from an early innovators market to a mature mainstream market during a scale-up process, thereby entering an institutional complex environment. The paper investigates how a new logic is brought in and activated as a frame by newcomers over time in an iterative process with the changing environment. This prompts incumbents to defend their logic and the related framing. In this process, these logical frames may be initially compatible, but then due to differences in legitimacy, internal power, and activation develop into incompatible frames, which induce costly evaluation- and interpretation-based conflicts that compromise organizational processes and performance.

Keywords: Institutional logics, organizational change, entrepreneurial ventures, frame-based conflicts, qualitative case study

Introduction

The growth of entrepreneurial ventures is a key concern for a well-functioning economy (Guzman & Stern, 2016). However, the scale-up of ventures lags behind the formation of high potential start-ups (Guzman & Stern, 2016). We know surprisingly little about the challenges to the internal organization during scale-up, for example why this organization may be compromised and cause scale-up failures (Ambos & Birkinshaw, 2010, Desantola & Gulati 2017, McMullen & Dimov, 2013). One crucial issue is that ventures face competing demands when scaling up (Desantola & Gulati, 2017, Fisher, Kotha & Lahiri, 2016). Organizations may have to address competing external logics that pressure different modes of action (Greenwood, Raynard, Kodeih, Micellota & Lounsbury, 2011). Importantly, these external pressures also "seep" inside the organization and become different frames of action (Pache & Santos, 2010, 2013a). While researchers have paid a great deal of attention to institutional complex situations and organizations that try to function in fields of such nature (Greenwood et al. 2011, Pache & Santos, 2013b, Smets, Jarzabkowski, Burke, Bednarek & Spee 2015), there is less understanding of how logics play out inside organizations (Besharov & Smith, 2014, Pache & Santos, 2013a, Schilke, 2017). This is important for entrepreneurial ventures, as they must manage this type of logics change when they scale-up (Desantola & Gulati, 2017, Fisher et al. 2016). At present, it is not clear how this change process unfolds or why this change may harm a venture. Therefore, this paper asks: *How does the process of adopting a new logic unfold in an entrepreneurial venture?* and *What is the consequence of adopting new logics on important organizational processes and performance?* To investigate these questions, this paper presents an in-depth case study of an entrepreneurial venture during scale-up.

This investigation ties into general concerns on how organizations respond to complex logics (Greenwood et al. 2011, Pache & Santos, 2010). Here a dominant stream proposes that managers have the agency and foresight to choose the best strategy, such as whether the organization should comply with, avoid or even defy external demands (Oliver, 1991, Pache & Santos, 2010, 2013b). The issue with this view is that is puts a lot of weight on managerial agency and rationality; it contends that managers are the agents devising strategy and tasked with the responsibility of guiding the organization through the complex environment (Smith & Besharov, 2017, Smith &

Tracey, 2016). This is problematic because logics are not solely top-down governance structures, but also tools of action on the micro-level (McPherson & Sauder, 2013). Logics as function as micro-level entities between groups, the ability to manage logics is an ongoing micro-level phenomenon, not solely an organization level strategy (Smets et al. 2015). Therefore, this paper seeks to change the view of organizational adoption of logic from a focus on strategic responses to an iterative micro-level process shaped by macro-level changes.

It can be difficult to assess whether conflicting logics are detrimental to performance. While some argue that they are in fact beneficial (e.g. Jay, 2013), in general there is not a direct link between conflict of logics and organization performance. The reason why is that organizational consequences often take a backseat compared to the interest in institutional change and consequences (Greenwood, Hinings & Whetten, 2014). While there is merit in this focus, understanding organizational outcomes such as performance is practically important. For example, despite numerous studies in healthcare (e.g. Currie & Spyronidis 2016, Pouthier, Steele & Ocasio 2013, Reay & Hinings 2005, 2009), we know little on how competing logics affect performance in healthcare. Scholars talk about conflict, but why conflicts should affect performance is not directly linked. The paper seeks to add a link here, for two reasons, first; it is increasingly important for institutional theory to tie into organizational concerns (Greenwood et al. 2014). Second, if there is no link between the state of logics and performance, it has little practical relevance for managers.

By conducting a longitudinal study of an entrepreneurial venture[12] during scale-up, I show that the emergence of competing logics inside the organization is a micro-level process, where they first may seem as compatible frames, because the old logic and its frame is the most powerful. This then changes over time, making them into incompatible frames that create conflicts and have a negative impact on performance, which in this case study affects the process of new product introduction.

The study augments our knowledge of the micro-level interplay of competing logics by tying them to internal organizational processes and outcomes. Thereby, the paper contributes to two core elements of institutional theory as well as the under-researched phenomenon of venture scaling. First, the paper investigates the process of changing logics inside the organization. Here the paper

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[12] An entrepreneurial venture is defined as a young growth-oriented firm engaging in innovative behavior (Desantola & Gulati 2017).

draws on the burgeoning connection between micro-level framing and macro-level logics (Cornelissen & Werner, 2014, Grady, Ansari & Purdy, 2015). By analyzing the process of adoption, the paper provides some new insights into the connection between macro and micro level changes. This process provides some challenges to the literature on organizational responses to institutional complexity (e.g. Pache & Santos, 2010), because it shows that logics change from compatible to incompatible. Finally, the paper shows that following institutional demands to change and adopting a new logic, which frames things differently, can harm important processes, such as collaboration between R&D and operations in new product introduction. This provides some insights into why scaling of ventures may fail, i.e. that this is a result of internal problems rather than the external "liability of newness" that has hitherto been seen as the main cause of venture scale-up failure (Fisher et al. 2016).

Theoretical framework

The form of institutional logics

Institutional logics are usually defined as: "*socially constructed sets of material practices, assumptions, values, and beliefs that shape cognition and behavior"* (Thornton, Ocasio, Lounsbury 2012 p. 51). Logics are belief systems that supply guidelines for practical actions (Friedland & Alford, 1991). At the micro-level, they are frames of action that allow individuals to categorize themselves, but they also function at the macro-level as immaterial governance structures of how to act in a field (Rao, Monin & Durand, 2003). Institutional logics exist both in people's minds, as internalized dispositions and frames (DiMaggio, 1997), and as external norms, contexts and organized practices (Thornton et al. 2012). While logics are multifaceted and multi-level, this paper uses the idea of logics on the micro-level where they are conceptualized as frames (Glaser, Fast, Harmon & Green, 2016).

Individuals use frames to interpret the world around them by locating, perceiving, identifying and labeling events and situations (Goffman, 1974). Glaser et al. (2016) argue that an institutional frame, derived from an institutional logic, affect how individuals justify and describe actions. It is a cognitive frame that shape attention to problems and solutions. For example, a frame derived from market logics makes an individual act more self-interested than one derived from family logics (Glaser et al. 2016). Therefore, agents drawing on different logics could frame things

differently. These cognitive frames are formed by three different elements: availability *(how much the individual knows of the logic)*, accessibility (*how much the knowledge comes to mind*) and activation (*how much it is used in practice at a given moment*) (Pache & Santos, 2013a p.11). These three elements are crucial because agents may carry round logics that they know, and which come to mind to them, but which are not currently active in daily use. It may also mean that they frame things differently, irrespective of the changes in logics externally, one individual, or groups, frame is still strongly available and accessible to them. At present, this process is purely theoretical, and we know little about how this process would unfold empirically.

The link between inner mental states and external elements may not always be clear or fixed because culture is complex and varied in meaning. This is especially the case with institutional complexity where there are diverse and competing external elements at play. Here, meaning of action is essentially contested, as institutions intersect and conflicting frames and modes of justification can be used (Granovetter, 2017, Gray et al. 2015).

A frequent clash of logics occurs between professional and market logics, which frame things differently. A common example is conflict between medical professionals and managers in healthcare as the sector becomes increasingly marketized (Reay & Hinings, 2009). The logics carry different frames of how to classify problems and act in the world. A doctor works with personal knowledge and focuses on fixing a specific problem for a patient utilizing personal skill. In contrast, an economics-oriented business manager focuses on standardizing processes and creating routines that reduce cost and increase efficiency. These two logics provide different framings in the form of what an agent should do, according to values and norms that justifies action. Another example is pharmaceutical and medicinal research. Here, professional logic focuses on the newness and possible impact of developing a new drug. This logic is likely justified by an academic norm of truth and discovery. In contrast, market logic would ask whether this new drug is profitable. It is irrelevant to this logic if the drug is radical and new if only a hundred people in the world suffer from the disease. Justification here is aligned with profitability, but also with whether this is the most efficient use of resources. These two views are likely to clash because they essentially frame things differently. This conflict is moderated by how much power agents have (Mangen & Brivot, 2015). Logics emphasize different forms of expertise, and for this reason incumbents want to keep newcomers out and newcomers want to try to demonstrate the inadequacy of existing logics, thereby creating institutional gaps (Mangen & Brivot, 2015, Rao et al. 2003).

This leads to an interesting question – if you have an organization where one logic and its frame dominates, why would this organization allow a new logic to enter? Here the literature has primarily argued that it is the leaders of the organization who have to handle the competing logics in the form of external demands (Pache & Santos, 2010, Smith & Tracey, 2016). The idea is that the leaders weigh of the pros and cons of acquiescence to the demands (adoption) or avoidance (Pache & Santos, 2010). Logics are seen as demands that leaders cater to externally and manage internally through the use of structures (Smith & Tracey, 2016). This is problematized because logics unfold on the micro-level and are unstable; they are left to individuals and groups to change and expand upon (Thornton et al. 2012). Hence, managers are not the only actors responsible for adopting or avoiding logics, nor can they be seen as being in full control. This implies that their ability to choose correctly and control an adoption process is not certain. If logics are frames on the micro-level, then it is important to determine how they emerge and evolve within an organization and how and when they may cause framing conflicts that can derail organizational performance. This line of research has not been developed, as the literature has thus far focused more on managers and their frames (e.g. Smith & Besharov, 2017).

Compatible and incompatible frames and costly conflicts

Beginning with performance, it has recently been argued that not only opportunism, but also different cognitive frames create costly conflicts within an organization (Foss & Weber, 2016 p. 62). Different cognitive frames can result in different types of conflict, such as conflict that is interpretation-, role- and evaluation-based. These conflicts are primarily driven by frames being incompatible, but compatible frames may also engender conflicts, especially role-based ones (Foss & Weber, 2016). This paper focuses on incompatible frames because competing logics should reasonably result in incompatible frames. These conflicts are interpretation-based, in which agents misunderstand each other, and evaluation-based, in which agents evaluate each other's work with different biases, hence creating conflict around who contributed and who is therefore responsible (Foss & Weber 2016). These conflicts are costly and have a substantive negative impact on firm performance (Foss & Weber 2016).

It is reasonable to expect that competing logics always result in incompatible frames (Gray et al. 2015), which must then be negotiated so that conflicts can be avoided (Weber & Mayer 2014). However, there is one important caveat with regard to this assumption, which is that competing

logics and their frames may differ in strength (Besharov & Smith 2014, Pache & Santos 2013a). Sometimes, one logic is very strong and the other is less so, with the result that the first logic and its frame dominate the second logic. This a result of the fact that a logic's legitimacy varies outside of a particular organization, or that organizational practices such as hiring and firing, or individual characteristics may vary as well (Besharov & Smith 2014, Pache & Santos 2013a). If one logic has more devoted followers within an organization and higher legitimacy outside of it, then its framing has more legitimacy and credibility. In a contest of framing, this dominant logic defines the acceptable elements from the competing frame and determines what should be transmitted (Weber & Mayer 2014). In the case of power differences, where one logic is the dominant, then two frame that would be otherwise incompatible may be perceived as compatible, because the dominant logic suppresses the conflicting elements of the competing logic (Besharov & Smith 2014). Problems can arise if the field changes so that the two logics become equal in legitimacy and importance for the organization. This allows agents to activate the previously less powerful framing more forcibly and thereby create costly conflicts (Besharov & Smith 2014, Foss & Weber 2016). Despite its potential as a source for real conflict, we do know much about such a change in framing, as most frameworks are theoretical and set in fixed matrixes.

Recently, research in micro-institutionalism and institutional logics has placed more attention on cognitive processes and framing (e.g. Schilke 2017). While this research is promising, some crucial gaps remain, including the question of how frames enter and evolve in an organization and the consequence of this entrance and evolution for organizational processes and performance. It is these gaps that this paper seeks to address. To achieve this goal, this paper considers the current view, that managers are in charge of how logics unfold in an organization, and provides an alternative view, that managers are not in control and logics instead play out according to how individuals adhere to and use them, which is defined more by their everyday actions and the nature of their field.

Research settings and methods

Research context of entrepreneurial venture and high-tech industry

I have chosen to follow an entrepreneurial venture in the photonics industry. The reason for this choice is that the industry is fast growing and quite complex. This industry is a subcategory of the

lasers and optics and existed since the 1960s. It is a fast-growing and changing industry. A report from the German Ministry of Education and Research on the industry outlined a near doubling in market size between 2011-2020 from 350 billion euro to 615 billion euro,[13] and is projected even further in the following years.[14] The most profitable market is photonics-enabled products and services, such as internet streaming and cloud storage, with large technology corporations buying photonics equipment to run their services and deliver their products. The most profitable market segment is pure photonics products, such as optical scanners and advanced manufacturing systems, while photonics components are the least profitable.[15] The photonics industry is still discovering new applications and discontinuing others as markets change. Photonics technology has a wide array of possible uses, from bio-imaging in medicine to material processing in semiconductors, which has resulted in a diversity of firms populating the industry and a large number of start-ups. At present, only a few major players have solidified their footing in the industry.

The photonics industry is very suitable for studying scaling ventures facing complexity because it is fast growing and both university researchers and large corporations are members of the industry. Because both an important academic market and community and powerful corporations are involved in the photonics industry, there are different ideas about how organizations should behave in order to be perceived as legitimate. The case study therefore serves as revelatory regarding what goes on inside a venture as it scales up in a complex industry.

Methodology and data.

I used an explorative single case study design in order to build theory (Eisenhardt 1989, Nag, Corley & Gioia 2007) because I wanted explorative richness in order to add to a theory with little empirical research regarding this type of organization. Here a grounded, interpretive approach was appropriate (Nag et al. 2007).

I have made the case firm, Supertech, anonymous in order to protect the identity of the firm and its employees. The firm is a very high-tech manufacturing firm that began as a spin-off from a technical university, but who gradually left that background and become more like a corporation.

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[13] Industry Report 2013 from German Federal Ministry of Education and Research.
[14] International Society for Optics and Photonics (SPIE) 2014 report.
[15] SPIE 2014 report.

While I was at the firm it changed from having approximately 120 employees in one country, to having around 300 employees in four different countries.

Data collection and method

 I visited the firm regularly in a two-year long period, logging well over 100 hours of observations of meetings and daily work. During the first year I had my own desk and visited the company weekly. I interacted informally with the employees to build rapport and an informal knowledge of the daily workings of the firm. I also participated in the team building day with the firm's entire R&D group. To complement my notes, I photographed the Kanban and other types of boards that employees used for organizing their work. Comparing the different boards and their elements gave good clues about practices and motives. I noted when the boards changed, whether deadlines were rigid or flexible and whether this was consistent across units. However, this study was not truly ethnographic, because I could not observe some of the crucial work of producing the lasers, which took place in closed labs where participant observations were unwelcome and dangerous due to laser radiation. I noted key events (Van de Ven, 2007) and used my observations to derive questions for the interviews. I systematized my observations into a diary/case study. The reason for this choice was that I was particularly interested in the organizational development over time.

During this time, I conducted 37 interviews with 23 informants. I sampled informants across a range of positions and I also chose to re-interview key informants to secure a process perspective. Interviews centered around employees' personal history, collaborations across the firm and their perspectives on issues. The interviews were transcribed verbatim, except for those that could not be recorded, where I instead took notes. To complement the interviews, I also relied on internal documents. These were particularly rich as they included project data containing over 2,500 files with presentations and notes from stage-gate meetings, which I especially focused on. I also used external archival data. Table 1 provides an overview of the data.

Data Overview	Qualitative Data	Internal Archival Data	External Archival Data
	Field work: Over two year long case study	Project Documents: 2,650 files. Including presentations, resumes from meetings, internal memos and budget changes.	Annual Reports 2002-2017. 1441 pages.
	Interviews; 37. Average interview duration approx. 75 minutes. Dozens of informal interviews during field work.	Employee Surveys from 2014, 2015. 40-50 variables, 68-76 % response rate.	Job Postings with descriptions 2016-2017
			Firm News 2015-2017 128 articles
	Passive Observations: Approx. 150 hours of observations	Internal Strategy documents: 2014-2017. Including documents and powerpoints from internal presentations and meetings in this period.	Industry Reports German Federal Ministry of Education and Research 2013 SPIE Report 2015
	Active Participant Observation in R&D teambuilding day (approx 8 hours).		

Table 1. Data Overview

Research methodology and data coding

I used the different sets of data to create triangulation (Gioia, Corley & Hamilton, 2012). I used the first period of study for observations and locating overarching themes, which was particularly useful for grounded theory, where such themes are sometimes lost (Suddaby, 2006). This first period was utilized to write down an overarching case story covering different time-periods (see table 2)

I relied on building a case story over the changes. I determined how the logics changed over time according to informants, allowing me to code the development according to a timeline. This timeline and initial overview of the case led me to the institutional logics perspective as informants used the terms "mindsets" and cultures to describe their differences. This led me to use Reay and Jones' (2016) method of pattern matching to identify the two logics at play, i.e. the professional science/academia logic and the market logic, that the employees in R&D and operations adhered to respectively. Table 2 provides an overview of the timeline and different periods that I worked with. The timeline emerged out of different sources as listed.

"Good old days" ca. 2000-ca. 2012	2013-2014: Changing years: adoption phase	Late 2014-late 2015: Breaking up phase, debate over identity	Late 2015-2016: Conflict phase
Data: Archives; Retrospective statements from long tenured employees, mostly R&D.	Data: Archives; Interviews, both in real time and retrospectively	Data: Archives; Interviews; Observations	Data: Archives; Interviews; Observations
Supertech was at this point a set of pure research facilities.. Employees with longer tenure would often reminisce about this time, when research was all that mattered.	Supertech begins bringing in new people who are to help Supertech gain legitimacy and secure orders from large corporations.	Conflict over the dominant logic that should frame action emerges. This includes identity and goals. Increasing debate over where the company should go; the CEO is let go.	Full conflict over cultural framing and how and why to do things.
Dominant logic: Pure research, a pure professional logic.	Dominant logic: Professional, where the market is seen as a necessary supplement.	Dominant logic: Debate and conflict arise over which direction to go in.	Dominant logic: Conflict between two logics in near equal strength.

Table 2 Timeline

Using the case study as a background and lynchpin of the coding, I relied on the "Gioia methodology" (Gioia et al. 2012). First, I gathered open codes from interviews, observations and archival data. After creating an overview of statements and recurring themes, I used axial coding across statements to collapse the codes into themes. For example, the conflict phases were drawn from statements across informants in different units. The axial coding resulted in higher level themes. Here the coding entered the theoretical realm in order to explain my phenomena (Gioia et al. 2012), what Klag and Langley (2013) term making "theoretical leaps". Having identified the professional science logic and the market/corporation logic at play, I started to focus on literature that dealt with organizations that had to incorporate two different logics. I took my themes and compared them to the literature on institutional complexity and hybrid organizations. At this point, I realized that the process of organizations entering a situation with complex demands and having to become hybrid was not very well researched, as most studies focused on

fields and organizations that are inherently complex and (often) hybrid in nature (e.g. micro-finance or other social enterprises), despite recent developments arguing that plural logics exist in all organizations (see Schildt & Perkmann, 2017). I also realized that the focus placed on what managers were doing was much stronger than the focus on individuals and sub-groups.

Using the case story and the codes and themes I derived, the theoretical dimensions emerged as part of the adoption process. These dimensions represented certain time periods and how the logics played out at each point. The different stages of the process illuminate the dynamics and intricacies of how institutional complexity influence organizations internally. This resulted in the development of overall data structures that guided my findings. My data structure is a "boilerplate" Gioia-style structure, however I have attempted to include a process perspective, i.e. indicating that the themes occur over time to avoid presenting a static picture, thereby infusing some necessary vibrancy into the structure (Gioia et al. 2012). Importantly, I report consequences of the process, which, while not unheard of, goes somewhat against the interpretivist leanings of the Gioia methodology. In a similar research context, Gioia as a co-author describes how a process resulted in strategic change failure (Nag et al. 2007).

Data structure

First Order Categories   Second Order Themes   Aggregate Dimension

First Order Categories	Second Order Themes	Aggregate Dimension
The organization starts to take in new logics, mostly by hiring new people and getting in a new mindset	*Changing towards being more market oriented*	**Adoption of new institutional logic**
A new frame on how to things becomes present	*The firm change practices*	
The new logic is a good investment in the beginning	*The new logic supplements the existing one*	**Useful Integration**
The new logic and its way of framing things help "break down silos"	*The new frame of action improves collaborations*	
Employees note that their goals and culture do not match anymore and that this creates problems.	*Conflicts between cultures and goals starts to arise*	**Breaking up Phase**
The units act much on their own not in conjunction with the other	*The units start to move out of sync*	
Employees note that silos have been rebuilt and that they face critical issues	*Counter-framing*	**One-sided adoption and counter-framing**
There is now two competing "mentalities" in the firm	*Framing conflict*	

Figure 1 Data structure

Second order themes & First order categories	Representative Quotes
Overarching dimension: Adoption of New Institutional Logic *Changing towards being more market oriented* A. The organization starts to take in new logics by hiring new people and trying to implement a new mindset.	A1. "The new COO is the most recent change, I have made in senior management. It was not because the previous was bad. But we have reached a stage, where lean and cost focus is important. They have to be much more salient. We need to implement risk and supply chain management – the works." (CEO 1) A2. "…It's going to be more of an evolution into being more market focused as opposed to technology focused. So, there is technology focus, but we are doing things that are market focused. We are looking at the end application, but everything has to fit in with what we are good at with technology." (CEO 2)
The firm change practices A new frame on how to do things becomes present	B1. "R&D was very happy with the implementation of the project management boards [i.e. white boards with project data]. It really helped them prioritize tasks. The resource management board is the most important one in the whole organization." (External consultant).

	B2. "For the business it is life or death to create standards, quality and performance measurements. We need to create the same product over and over again…But it is a huge challenge to get that "quality mindset". We in quality live and die for quality, but this mindset is lacking overall in the company. It is a huge challenge" (Quality manager 1).
Overarching Dimension: Useful Integration: Informants state that the new logics are compatible at first and helps them improve the company	C.1 "In a high-tech firm you need R &D close to operations. It is a mirage to believe you can develop to a high level without it." (CTO) C2. "What have we chosen to do? We have invested heavily in Lean. Lean training for everyone. And not operations-lean, company lean… We have had every single employee back in school… It is an investment that kicks ass" (CEO 1)
The new logics improve daily workings in the firm	D.1 "Organizationally, the mindset, it is a huge mindset change. R & D cannot, even if they believe it, do it all themselves... That's how it was when I joined the company, there was a huge silo between R & D and manufacturing. (COO) D2. "You had labs all around… so we could not coordinate. One of the first things, I wanted done was tearing down the walls. Thereby we got a completely different flow" (Production manager)
Overarching Dimension: The Breaking up phase *Conflicts between cultures and goals starts to arise* Employees note that their goals and culture do not match anymore and that this creates problems.	E1. "We have two completely different cultures and that creates clashes. My own personal opinion is, that is would be really good to have more engineers in operations, which could act as go between. Because right now, we have really, really many engineers in R&D and really few in operations. It is because they wanted this really lean operations line with few people and very low costs and high volume" (Department head, R&D)

	E2: "You can set it so that goals do not fit with best for the company. If individual goals do not harmonize, then you drive people in different directions. Operations has the goal of streamlining, so they do that. R&D has the goal of collecting all kinds of weird OEM and then try to make something out of it…" (Head of Manufacturing Engineering department)
The units start to move out of sync The units act much on their own not in conjunction with the other	F1. R&D unit takes on their own team-building day, where they discuss the vision for the whole firm, leaving the operations unit back home (Obs.) F2. R&D starts to neglect some of the previous Lean training and systems, e.g. hiding the boards in the corner. Operations become even more focused on using the boards and other systems, e.g. making their own ERP (Enterprise resource planning) system. (Obs.):
Overarching Dimension: One-sided adoption and counter-framing *Counter-framing* Employees note that silos have been rebuilt and that they face critical issues	G1. "But I can see that the silo is being rebuilt. R & D wants to build their own infrastructure and do things themselves ... and it's value destruction. That means they do things in parallel ... it cannot be done. If you ask the engineers on the floor then they also think it's strange." (COO) G2. "We are facing a burning platform here…if we do not solve this [conflict], we will not have operations… and then we won't have R&D either…" (CTO)
Conflicts and conflicting understandings	H1. "There are obviously some challenges. But there are also historically been the case that they had a certain mentality there and a certain mentality here." (Quality Manager 2) H2. "There is a feeling that the central core is being pulled apart…Some [employees in different units] do not understand why they do as they do, and some do not understand why they prioritize as they do – , why something gets done and why something else doesn't get done. It is because some [people] are pulling in one direction and

	others are pulling in the opposite direction." (Technology Manager, R&D)
Overarching Dimension: Costly conflict due to different logics and frames *Evaluation based conflict* Conflicts over different expectations and goals in collaborations	I1. "It is in the last 10 % [of the process] where the chain breaks, and it is because of goals. I think operations are moving towards completely different goals than R&D. It is clear that there are different expectations of one another. Operations has an expectation that we are becoming a high-volume factory and that the dear R&D people should fall in line with that." (Department head, manufacturing engineering) I2. "But then you use 2500 hours in the pilot phase [of production]…and you just go 'what the f'ck!?' What did we spend that time on?" (Project Manager 1)
Interpretation- based conflict Conflict over different understandings when collaborating	J1. "I think we could come a long way if we had a process for how to transfer. In my experience, you correct the project afterwards… I do not know what it takes to transfer things" (Production Lead) J2. "Well we do plan our projects, but everyone does their own way…we don't have a joint model we use" (Project Manager 3)

Table 2 Representative quotes for the data structure

Findings

Defining the logics and change in Supertech

Supertech[16] is an entrepreneurial venture in a continuous scale-up phase. During my research period the company went from 120 employees to over 300. Supertech began primarily as a research and development site for promising technology in a specific area of fiber and lasers based on technology spun out of basic research conducted at a nearby technical university. Supertech's main customers were researchers who sought out the newest technology in order to break records and find new applications for optical laser technology. As the different associated R&D firms began to develop laser and fiber technologies that had wider applications, they were merged into one firm, BIG Supertech, owned by the conglomerate BIG, which invested heavily in developing the intellectual property base into a profitable high-tech business. The CTO described their early approach to the markets: *"At the time we ran after everyone who was interested. So, we had the luxury that people were interested. It is not more than two years ago, we became focused on what markets we want to prioritize".* In order to be profitable, Supertech moved from a pure product development focused on an innovative market of researchers towards an OEM market.

Before the change towards the OEM market of large "blue chip" corporations, informants would define the firm as a "garage shop" who conducted a "shotgun approach" to their markets. In essence, Supertech was a "skunkwork" in the conglomerate, it was given resources and freedom to conduct basic research and more radical innovation. In the early years, the procedure was that customers would contact, or be contacted by, Supertech, who would solve their specific problem using their intensive, expertise knowledge. This customer group consisted of research scientists at prestigious universities, who used Supertech's technology for experiments in a wide array of applications from bio-imaging to windmill sensors. Informants referred to this market as a general "scientific" market. These lead users shared many characteristics with the engineers at Supertech; they had PhDs in their respective fields, focused on development and highly technology focused. The go to market approach was highly based on shared occupational field, the PhDs in Supertech's R & D and sales department understood and respected the researchers they sold to highly and the researchers respected the craft of Supertech. The strategy was to capitalize on gaining reputation

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[16] I have anonymized the firm and its owning conglomerate for the sake of protecting the identity of the informants.

in the innovators market and obtain testimonials from innovators that would interest large corporations that might see a potential in the technology and utilize it for the mainstream market. The COO described the change as follows:

"We went from being a small company to a bigger one and this just changes expectations from your customers. Before, you could produce some crap, but scientific customers liked it because it was just what they needed—for the next 20 hours…Now, we need to ship a product that clears 10,000 hours and has field service capability and a built-in self-test. This is where we are going."

The COO himself and several members from his team were hired by the company between 2013 and 2015 because of the influx of OEM customers. These employees differed from the R&D personnel because they did not hold a PhD in fiber and laser technology and instead were mostly production engineers. Also, they were separated by having had a different background. While it was not uncommon for R&D personnel to have been in the firm since its inception or only have worked in the laser industry, the personnel in operations and quality management had diverse experience, working in manufacturing firms in the phone, automobile and electronics industry. The skunkwork status of Supertech ended and the organization had to incorporate practices and organizational structures that would make them more efficient and create larger scale production through selling to the OEMs, who ordered much larger series of a single product. Supertech's 2013 annual report stated that:

"In 2013 an increased number of Supertech's products and solutions proved their maturity, being implemented in an expanding range of industrial solutions. This underlined the successful change of emphasis in recent years, away from focus on research environments towards solutions for industrial customers."

This attitude from the conglomerate was even clearer in 2015, when the annual report stated that: *"Scalable manufacturing is a must to realize growth ambitions and [the] expected increase of OEM customers. Supertech pursues scalability through lean manufacturing."* This statement induced some skepticism from members of the firm. The engineers in R&D feared that they would end up producing commodities by over committing to strict processes, with one engineer stating, *"if we become a nuts and bolts factory, then I think a lot of people won't be here. That is not how we see ourselves."* However, the operations department had streamlined their operations drastically and had implemented what they proudly called "The 30-foot Lean Wall". Just prior to and during my research period, the firm moved towards a dual focus on both developing new

products and trying to implement a new "mindset" of making processes and structures more efficient and stable. The firm was in a transitioning period from a "garage shop" or "adhocracy" to a firm with clear and efficient processes. This was necessary to gain larger OEMs as customers as they demanded efficient and dependent suppliers. However, the OEMs also demanded innovation and development, which the head of the R&D department described as *"By God, this is not incremental innovation, we are still at the point where it is new technology."* The development in institutional logics was not simply a response to the market changing, but much more complex. The OEM customers existed because of the earlier scientific market, which they absorbed to some degree by requesting technology from this market to be developed further for their own uses. However, they also expressed that this technology was to be produced cost efficiently. For this reason, the professional logic originating in the scientific market co-existed with the newer market-level logic, enforced primarily by the large OEM corporations. On the field level, this was a peaceful and natural co-existence, as the OEMs and the owners of Supertech were mature firms that had institutionalized such duality.

Table 3 illustrates the differences in logics and subsequent frames as inducted from the case study:

Institutional logics	Professional logics	Market/Corporation[17] logics
Locus of legitimacy	Success on the early scientific market. Demands of radical innovation from OEM customers. Demands from the owning conglomerate to go to "the next level".	The demands of efficiency and standardization from OEMs. Demands of higher profits from the owning conglomerate.
Cognitive frame of action	Development of products and technology, "fear of missing the market".	Increasing efficiency and quality, decreasing cost and being faster to market.
Cognitive Frame of environment	Focusing on competing researchers. Hunting for "the next big thing". Constant search for new opportunities for their technology. Fear of missing the big customer or being usurped by new technology.	Focusing on demands from OEMs and board regarding efficiency, standardization and lower costs. Focusing on improving the firm at the present moment. Fear of being illegitimate in the eyes of large corporations.
Main proponent	R&D	Operations

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[17] Market and Corporation logics are intertwined, because corporation logics focuses on improving the firm's market position. It cannot exist without the market logic

Table 3

Adoption phases

Having defined the logics at play and the overall story, the paper goes into more detail on the phases of adoption. Surprisingly, the adoption of a new set of logics and frames initially resulted in a useful integration, where the firm improved. The reason seemed to be the power differences; one logic and its frame dominated the other. The next phase is where the power balance changes and the logics reach similar levels of importance; Pache & Santos (2013a) terms this change as going from "low hybridity" to "high hybridity". I call this second phase "the breaking up". The last phase "One-sided adoption and counter-framing". In this phase, the competing logics are fully activated by the newer group of people. This creates costly framing contests.

Phase one: The useful integration

Hiring practices have been seen as a key in infusing new logics into an organization (Battilana & Dorado 2010). For example, when organizations hire people with competing logics, we should expect conflict (Battilana & Dorado 2010). An interesting finding in my case was that the hiring of employees, who came from other manufacturing firms that would fit the archetypical market logic, did not result in immediate conflict. According to informants from both departments, the hiring of skilled and experienced people actually helped integrate the two departments in the beginning. The COO noted that there before his arrival, that operations was not well run because of the limited capabilities of the previous COO, which the CEO put a bit more diplomatic by saying that they needed a new set of skills and mindset. Operations had not been running smoothly, it had many RMAs (returned merchandise authorization) and errors in the production line. The first goal was to fix this and produce the technology efficiently, here the skill and knowledge from different firms was useful in accordance with professional logics, because the knowledge the newcomers brought in helped fix issues such as organizing production and thereby increasing the impact of the individual scientists in development. There was little disagreement between logics at this stage; both could agree that they needed to ship products on time. There was little discussion as it was a shared goal to fix this immediate problem. During this time, CTO remarked:

"*I have to give it to operations: we are ready to scale up big time. I would dare say that the challenge is more between me and sales, than it is between me and operations.*"

The firm could operate with an R & D department, who shed resources to make operations work. The management transformed operations from being a set of small labs into a more traditional factory floor. The interesting thing here was that it was not met with much resistance from R & D, instead they seemed to promote the idea of being more efficient and being able to cater to the new sets of customers. To them this part of market logics was quite compatible; they wanted to ship their technology to customers and they wanted to reduce errors in production. The CEO noted about the infusion of market/corporation logics:

"*Lean has been proclaimed to be a lot of things, but it has been very well received. The best is that the developers in R&D say that it is very exciting, and they want to do it too. We have succeeded in creating an innovation culture. But it is also an innovation culture that is ready for change, which has always been my dream.* "

Despite this positive development, the old logics of research and development were left untouched in R&D and this logic still dominated the firm. The important driver of a fruitful cooperation at this point was that power relations were not really affected, it was still clearly the researcher logic that dominated, the market logic's nous of efficiency and standardized quality was merely understood as a supplement to the research and development ethos. The CEO here sensed a future threat:

"*Can I school them in that it is okay to make the same thing twice? That it is okay to make money. To make a lot of money? You would think that that is normal procedure for a business, but not for these guys. You are up against religion.*"

In the first phase, a new set of logics, here market/corporate, is arriving and adopted inside the firm. However, because the new logic was ancillary to the old, they could fit together. The reason for this was that the previous frame was still dominant; thus, agents using this frame dominated the exchange of ideas. In other words, they took elements from the new logic, which they felt fitted and complemented their existing frame. The professional logic and its frame dominated and therefore market logics elements were fitted into that framing. The firm could focus around introducing new products to the OEM market, which required operations and R & D to work together in order to introduce products with strong quality and technology. This allowed the firm

to succeed in their new OEM market and launch new products. However, this further increased the focus on the OEM market.

The reason why the market logic frame is weaker than the profession based has a lot to with its newness, it was just recently that the firm changed towards a market of large corporations, hence the centrality of this logic was still not settled, because the firm was still unsure on its resource dependency towards these new corporations, as they were just starting to transact. Moreover, the practices of the market logic, e.g. a lean set-up takes time and training to establish. Therefore, the "full force" of the market logic was not activated because this activation requires that practices are in place, which in turn feeds the frame by making them routine (Pache & Santos, 2013a).

Phase two: The breaking up

The growing number of OEM customers changed the game and provided different pressure on the firm. Their largest OEM customer even intervened in Supertech and sent out their own Lean consultants to drill the operations unit. This installed a belief in Lean systems in the management of operations, or in institutional logics lingo; it made the market logic salient to them. In 2014, the orders dipped slightly, which allowed them to hire their own Lean consultant and go into a training camp. At this point, the managers in operations acquired lean certifications and joined "lean academies". This created a greater influx of market logics and its frame, which really took shape in 2015. R & D did not really seem to realize this and did not participate in this evolution. As one department head described it:

"*R & D has probably been involved [in the lean evolution], but they have not understood what is going on. They are saying 'But we used to able to go around and tinker in the corners' and operations are going 'No! You are allowed to do that anymore', so in that way you have created a divide".*

The activation of market logics in operations, the infusion of Lean, made operations into "square Lean regime" in the eyes of many R & D people, who did not understand the need for such dramatic change. This created a schism in the firm, as the R & D department did not see the necessity to change their practices significantly, they did not perceive an institutional gap between their practices and the emergence of the new logic because they framed things differently.

The CTO, COO and quality managers all noted the difficulty in changing that mindset and getting the process innovation and improvement aligned across the company. The outgoing CEO noted about his view on lean in the R & D department "*I could not implement lean, KPIs etc. even though we clearly needed it.*" On the opposite side of "the fence", as employees in the R & D group would call operations, everyone knew lean by heart and I was told that even part-time operators would know the value stream map from memory. The adoption of logics was very different in the firm, the R & D group largely continued with their usual frame and actually opened up for even more development new variants, in essence the opposite direction of operations who strove to close down on one platform and improve it. The recruitment of people in operations and quality managers who had knowledge of market logics and the equivalent skill set, made market logics available to the firm, but the full activation of these logics took time. For this reason, the hiring of people with different logics did not cause immediate conflict. It took more time and changes in the market before the employees in operations began favoring the new logics over the old in a dominant way. This occurred primarily because the large OEM customers directly influenced practices and because of the focus of Supertech's owners on achieving scale. The employees in operations argued that R&D had to agree to this scheme and that theirs was the right way. As one engineer in operations put it, the lasting impact was "*the machine that produced the machine,*" i.e. the most important element was the processes and how Supertech made their products, not the products themselves. As he emphasized, the OEMs purchased the dependency and efficiency of Supertech's operation just as much as they purchased the product. In order to achieve lean focus, operations would disregard any input not in accordance with their vision. Operations became siloed and focused on solving their own problems.

The adoption of logics began with the firm becoming aware of the need for new logics, which was due to the demands of the OEMs who were frustrated by not getting products on time. However, because the employees in R&D were heavily embedded in their profession as researchers, all being PhDs, they did not notice the change towards a market logic, but just a new arena for product development. It is important to note that the market logic was not activated immediately because the knowledge needed to activate it was not present in the firm immediately. It took time for people to adopt the new logic and it took a larger focus on OEMs to justify the logic as legitimate and salient in use. Because there was not an immediate impact and there were many other pressing issues, management did not realize the adoption of the new logic until a conflict emerged. A department head noted the uneven development in the firm: "*Huge steps*

sound good, but it has to be done in the right tempo. It is a management issue to maintain harmony. I don't think they have succeeded."

The increasing dependency on OEM customers and the interests of the conglomerate allowed the operations unit to activate their market logics more and more in practice. However, they were unable to convince R&D that they should change their practices. The OEMs made diverse demands, including a demand for radical development. Therefore, R&D believed that their frame was still legitimate and important. Instead of agreeing on a shared vision of how to use resources for both development and process improvement, a competition between the two frames arose. The frames became contested, and the conflict often highlighted the contradictions between the logics and their frames, rather than focusing on the complements as had been done previously. Thereby, inadvertently, a schism between operations and R&D was created. As one informant stated,

"Operations have been very focused on that is must be Lean and Six Sigma…and R&D has…probably been involved, but they have not understood what is going on."

The adoption resulted in what informants from both R&D and operations called a "fence" around operations, and the term "silo thinking" became a buzzword in the organization. Instead of a fit between the elements, the different logics drove conflict and mismatch. A production engineer noted that a discussion on splitting up operations and R&D was ongoing:

"There has always been a discussion in the company that maybe it would be easier and better if the R&D department had their own production unit, which they could control...Because sometimes it can be difficult to share resources with others in the company."

In this phase, the previous frame alignment begins to come apart, as the newer logic grows in external presence and the individuals inside the firm have time to socialize and activate their frame through use. Because of the change in authority, towards more equal status, the compatibility began to be reduced, as individuals using the newer market logic frame started to insist on its importance and refused to let the older profession-based frame define the firm as a whole.

As illustrated by the quotation above, the ability to share resources was reduced in the firm due to this conflict. Instead of agreeing on a joint venture of new production introduction to the OEM market, R&D focused on developing new technology while operations focused on low cost and high quality. While there had previously had been a dominant frame, the newcomers had now

built enough confidence in their own way of doing things, so that they could challenge the existing framing. The reasons for the strength of the frames being evened out was that the firm became more and more resource dependent on the large OEM customers, hence the market logic became salient and legitimate, which spilled over into the daily running of the firm. Yet, importantly it was nearly only those, who had previously worked in other firms, who adhered to the market logic and used that framing, the engineers in R&D reacted opposite by trying to strengthen their frame. The market was diverse and complex in its demands, it was not that the profession logic was replaced vis-à-vis by the market logic of the OEMs, it was absorbed into the OEMs demands, as these demands included both radical innovation and drastic improvements of efficiency and costs. Ironically, these demands were not seen as complex by the OEMs, but they had direct consequences on the firm.

Phase 3: One-sided adoption and counter-framing

An institutional gap was opened as operations insisted that the old logic and its frame no longer guided action effectively. I had a conversation with an operations manager who took me back to the storage unit to show me a component that caused the customers a very basic problem; they turned it the wrong way when installing it. This could be solved by putting a sticker on both sides of the component. The operations manager lamented at the inability of R & D to listen and design such as rudimentary solution to a simple problem that annoyed the customers. Another issue was a product that operations had difficulty producing, R & D considered to be finished and ready to produce. In an interview, the responsible R & D manager described how he had ignored project guidelines and followed his own intuition on what needed to be done*: "I've marked it with gray (stage gate model), I have not completed it. I have chosen to say f*ck it. I have not anything to do with it. You can do that."*

The understanding of a finished product was not a shared one, for the operations united a finished product could be produced in large quantities with consistent high quality. For R & D a product could be only considered finished when a couple of prototypes were completed. Operations did not want to take responsibility for these products, and therefore simply put them on a shelf. Either R & D did not get the information, or they did not understand it. Operations did not see it as their responsibility that some products failed, because they had not been including in designing the product, hence they would simply note, that R & D had borrowed their resources to R & D

projects, merely using operations' resources to develop the product did not constitute a transfer in the mind of operations' members.

In contrast, R&D thought operations was unnecessarily rigid. In order to maintain flexibility with regard to new customer demands and other changes, documentation and strict requirements did not make sense to R&D as these restricted them from their core focus of developing products that met specific customer wants. The neglect of documentation left operations very frustrated because they did not know how to produce certain products and had to ask for help from R&D, who were at that point focused on developing something new. As the CTO declared (and which properly frames this issue at its core), *"Developing new products is the holy grail for R&D engineers! That's simply how it is!"* R&D had a very strong connection to the professional logics, in which developing new products that created stirs at product exhibitions and which top researchers at high prestige universities appreciated and which drove technology in medicine forward. There seemed to a certain pride attached to having such customers. This was strengthened by the development demands that R & D faced, it was not merely that they were resistant to change, but that they faced some demands for more radical innovation than mature manufacturing firms normally do. As the new CEO, who was a laser industry veteran, stated: *"We are working on brand new products. We are not developing or improving on an existing product, we are looking at newer technologies, newer laser, newer end-users, newer applications."* On the opposite side was the idea that continuous improvement would be the cash machine. It was a belief in incremental innovation, such as making small and smart improvement like putting a sticker on both sides of a component. This suited to the hands-on "how do we make things as efficient as possible" scheme of the operations unit. The schemata relating to each logic was described to me as operations had a focus on the factory as their end result, therefore focusing on processes and efficiency, while R & D focused on the product and the short-term flow of making their products work. A company that had worked well together, by their own account, at a sudden point experienced such difficulty in co-operation, that the management acquired a competitor with the idea to split them up, as the CTO noted:

"One of the dilemmas… is how to run a track with great variance and little volume and one with large volume. It is two opposite mindsets… My thought is that now we can split them up at two sites…It has been a tremendous conflict, if I am not mistaken, we will put one unit this place and one the other place. Then the cultures will run (separately)."

The developments at Supertech are interesting when compared to studies that point to mutual adjustment and improvements as outcomes of competing logics (Jarzabkowski, Smets, Burke & Spee 2013, Smets et al. 2015). At Supertech there was little mutual adjustment, and instead an either-or situation developed, as exemplified by the idea of splitting up the two competing cultures. Crucially, what the CTO suggested almost amounted to dividing the company into two different sites. This was repeated by a department head in R&D, who believed that it was possible that operations could be outsourced in the future. This appeared in the interview data as well, where respondents provided a black-white picture of two clashing frames. In regard to this, the outgoing COO remarked:

"Is it a manufacturing company where it's structure, so we can produce and develop products for production? I think, unfortunately, we are first and foremost a development company, that's the focus."

The emergent conflict led to the COO being let go, as he was, as one informant succinctly put it; "*an elephant in a porcelain shop*". As operations and the old COO strived to open the institutional gap and show R&D the inadequacy of their practices, they challenged their "holy grail". This was one of the reasons why R&D seem to become even more professions oriented. After the COO was fired, operations did not directly challenge, but fenced themselves in.

Figure 3 shows the evolution as R&D reinforced their old frame and the new market logics frame grew in importance

External Level

```
┌─────────────────────┐              ┌─────────────────────┐
│  Profession Logics  │              │    Market Logics    │
└─────────────────────┘              └─────────────────────┘
         ↑↓                                    ↑
   Tighter Coupling                            │
                                               │
Internal level                                 │
      ╭─────────╮                              │
      │Profession│  Increase in power          │
      │ logics'  │ ←──────────                 │
      │  frame   │                         ╭─────────╮
      ╰─────────╯      Clash               │ Market  │
          │        ←──────────→            │ logics' │
          │                                │  frame  │
          ↓                                ╰─────────╯
```

Reduced focus on the grafted market logic elements
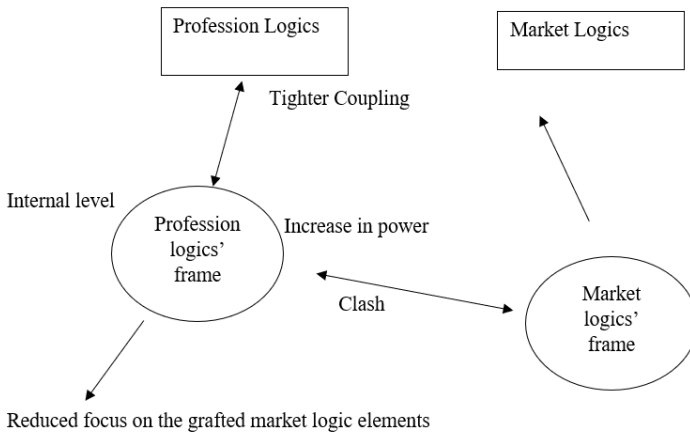
Figure 3 Illustration of the process of counter-framing

The reason was that the adoption and activation of the newer market logic frame was one-sided; members of R&D, who were deeply socialized into the profession logic, did not simply surrender theirs, instead they tried to show that it was valuable to the new market of OEM customers. They could do so because it was an instance of institutional complexity, the OEM market was very closely connected to the pre-existing scientific market; the OEM was simply an evolution from it. Hence, the profession logic and frame were still important, yet the two frames became incompatible in the firm.

In the last phase, both informants from all levels of both units feared that the ability to introduce new products, which meant transferring them from R & D and into production, had been severely comprised. The reason was that the previous dominant frame had given way to two different frames based on each group's institutional logics. Each group's reinforcement of their own goals led to the focus on new product introduction as a connected set of activities was reduced. The firm

focused around product development and process development, but reduced its focus on new product introduction because the transfer ability between units was comprised. As the frames reached similar levels of strength it became clear that they were in fact not as compatible as previously believed, but were rather incompatible and costly conflicts.

Consequences of incompatible frames: evaluation and interpretation-based conflicts

The conflicts took specific forms and affected crucial tasks that related to collaborations and transfers between the two different units. The transfer process between R & D and operations was seen as a key issue in the firm. An operations manager described the process of transferring products as such: "*They (R&D) go all up to the fence and throw it over. Then there is somebody on the other side [in operations] trying to catch it.*" I was present in the working group discussing the transfer process during the team building day for the R&D group. R&D blamed operations for not taking transfers seriously and they argued that operations should be measured on this process. Operations blamed R&D for not specifying the product specifications and not involving operations earlier on in the development process. Because the firm kept track of projects on their boards, I was able to record the date and status of projects. I noted that deadlines were being missed and kept being extended over longer periods of time. Evaluating the data and recording informant statements made it clear that new product introduction was becoming compromised.

An example of a conflict was the transfer of one product, that operations were unable to produce, yet unable to mark as an error in R & D systems, who viewed the product as finished and ready for production. This conflict took the form of misinterpretation of tasks to be performed and by who, which created mistrust and hold-ups where operations simply shelving products coming from R&D. The employees would interpret things differently according to their frames, e.g. for an employee working with a science-oriented frame the goal and nature of the technology seemed different than to an employee who used a market-based frame. This also meant assigning responsibilities and evaluating each other's roles became difficult because they did not understand each other very well. An example was that the operations manager sent a list of 27 requirements to R&D, which they did not seem to understand or was willing to use, instead, R&D worked on their own criteria during at their teambuilding day.

In response, operations would refuse to take responsibility for manufacturing products that they had not been involved in designing. When asked about the transfer process, many informants from

both sides of the fence would suggest that they needed to figure out what the term "transfer" meant to begin with. Their lack clear evaluation criteria for who did what and who had the final say. This led informants to state that they simply did not know what constituted a transfer or who had the responsibility. This was not organized but happened ad hoc.

Thus, the CTO feared that they would be unable to transfer a major OEM product, which would have dire consequences for the firm. As the CTO remarked they stood on a burning platform; they simply needed to fix the transfer process in order to be fast enough to market.

There were also interpretation-based conflicts, where the different units did not have overlapping frames in how to interpret different elements.

Interpretation of product maturity and time elements especially caused problems. Where operations considered that products should be designed for manufacturing and completely produceable before transfer, R & D believed that this was impossible, the technology was too complex. This clearly came to fore, when informants in each unit would use comparisons to describe the products. A production engineer in operations compared the product to computers and printers, and clearly believed it merely took a bit of effort to make it efficient. On the other hand, an R&D engineer would compare the same product to NASA or jetfighters. This led to interpretation-based conflicts that especially concerned product maturity and complexity. R&D conceived of maturity as the point at which the product was fully developed and could be produced, while operations thought of a mature product as one that was functional for mass production with low error margins. Conversely, and somewhat conflictingly, R&D saw products as being so complex that they could never reach such maturity, while operations perceived a lack of desire on the developers' behalf to make it so, hence the different comparisons mentioned above. These different and conflicting interpretations lead to ongoing conflicts when the two units had to transfer products and responsibility.

Another element of conflict was time. The manager of the department that stood between R&D and operations described the following time issues:

"Operations is expecting to become a high-volume factory...They are like: 'How many should we do? Let's roll and do a thousand!' where R&D are saying: 'take it easy, we're not done! It's an OEM customer, now you have to understand that. First, we are doing a proof of concept, then we sell that, then we make a pilot, then we make a reliability test, then we collect data'...It is two very different worlds that clash. I'm quite sorry that nothing has been done about it."

These differing perceptions about product time and maturity caused misunderstandings and haggling between units. As a result, the ability to transfer products and carry out new product introductions was reduced. This was manifested in employee statements, but also physically in products simply left on the shelf. Time to market was increased as new products took longer to move through the value chain due to the different forms of conflict in transactions. This threatened the long-term performance of the company, which was reported in interviews and strategy documents. These conflicts were linked to different institutionalized logics, i.e. the original logic of being nested in research and being a university spin-off and the newer belief of being based in the market and from people who had worked in large corporations.

Table 4 provides an overview of the conflicts.

Type of conflict	Evaluation-based conflict	Interpretation-based conflict
Examples of conflict	Operations refuse to receive new products from R&D as they do not feel involved and the products are" not designed for manufacturing". The conflict circles around how contribute with what and who has the overall responsibility.	Different understandings of the concept of "product maturity," the complexity of the product and how quickly it can be developed.
Results:	Products lost in the gap, i.e. left on the shelf.	Time to transfer was prolonged and complicated.

Table 4 Overview of conflicts

In conclusion, my study shows that logics may take time to be activated as frame of actions, in face a competing frame may be well received in the beginning as the incumbents use it to accomplish their goals. However, as the frames change, and we see a frame conflict, the coherence and collaborations inside the organization may be compromised. Not only may agents fight over incompatible prescriptions, but the frames of the logics themselves make it hard to collaborate, because they see and evaluate things differently. In this case, it slowed down and hindered products to flow through the organization from one unit to another.

Discussion

My study aims to provide insights into how a competing logic is adopted as the cognitive frame it is on the micro-level, and the fallout of letting a new frame enter the organization. The paper thereby provides an alternative view to the literature that focuses on organizational strategies in how logics enter an organization, and how managers control these logics (e.g. Pache & Santos, 2010, Smith & Besharov, 2017, Smith & Tracey, 2016). This alternative view ties into the growing interest in logics as frames on the micro-level that are connected to field level characteristics (Gray et al. 2015, Werner & Cornelissen, 2014). Here the paper provides a study of the process how these frames change on the micro-level in connection with macro-level changes that occur as the venture changes the field it operates in. The paper here illustrates that two logics may be peacefully settled at the field level, as literature would suggest would happen over time (Schildt & Perkmann, 2017). However, the same logics may be competing inside an organization that starts to come in contact with a new field, such as a venture during scale-up. By entering a new field, as the result of scale-up, the venture may not know quite how to operate. For example, in my case study the venture hired a large number of people tasked with professionalizing the firm. Managers were pressured to do this, and they thought that this was the right way forward, but in the longer term this move incurred a framing contest that derailed important organizational processes (here the collaboration between R&D and operations) and organizational performance (the introduction of new products).

Table 5 sums up the current literature, the contributions of the paper and the practical implications.

Topic	Current Literature	Theoretical Contributions	Impact for entrepreneurial ventures
Adoption of logics in a firm	Logics are demands that the organization adapt to as prescriptions for behavior. Adoption or avoidance is strategic choices made by managers (Oliver, 1991, Pache & Santos, 2010, Smith & Tracey, 2016).	Logics are adopted in dyadic relation between insiders transforming practices on the micro-level and external changes.	Critically, managers may not be able to foresee and control adoption.

Institutional Complexity	Institutional Complexity is understood as incompatible prescriptions forced upon an organization by outsiders (e.g. Battilana & Dorado, 2010, Pache & Santos, 2013b).	Institutional complexity may be take different forms across time and levels. For example, competing demands can be institutionalized in a functional way in markets and organizations (Schildt & Perkmann, 2017, Smets et al. 2015), however organizations changing markets do not have competing demands institutionalized, hence they may suffer conflict internally as individuals construct the demands as incompatible.	Ventures may face what the market sees as perfectly normal demands, e.g. naturally they have to mix research and lean operations, but internally this may be very complex to organize. The ventures may experience complexity very differently from a mature organization in the field.
Organizational conflict and performance	It is well known that logics may cause tensions and conflict (Besharov & Smith, 2014, Pache & Santos, 2013a, Schildt & Perkmann, 2017). But the exact nature of the logics and why they are bad for the organization is not clear.	Competing logics' frames may cause costly conflicts and reduce organizational performance due to evaluation and interpretation-based conflicts.	Competing logics are crucial because they threaten organizational tasks and performance. Competing logics have distinct material consequences.

Table 5 Contributions of the paper

Adoption and activation of logics

An important question is; why adoption occurs at all. Scholars have continuously argued that organizations should not adopt competing logics (Oliver 1991, Pache & Santos 2010), so why did Supertech engage in this? This study argues that the reason new logics are adopted that they may be complementary to begin with. Because of their newness, they do not appear as powerful, but as a useful alternative to the existing logic. It is a process that makes the new logic into a competitor, because the people who carried the new logics did not activate them with full force

immediately, but rather enact them in a continuous and somewhat stealthier manner. For Supertech this was an iterative process that relied on market and institutional forces, e.g. the influx of new customers, to legitimize the activation of market logics. First, the firm hired new people, who reinforced the focus on the market logic in time as they activated practices fitting with the market logic, thereby making the internal organization of the firm move in unison with the market. The competing logics begin as a supplement to the existing framework, and because they are not fully active incumbents can extract the complementary parts of the new logic without fearing losing authority. As this change, the new logic becomes a fully-fledged alternative and thereby a competing framework for how to run the firm. The conflict that this creates is thus not immediate. This makes it difficult for the organization to choose the right strategic response, because the problem unfolds over a long period of time.

I am building and expanding on Pache & Santos' (2013a) framework of how logics act as frames. Their framework posits an interesting source of conflict. Newcomers may have logics that are available and accessible to them because they have been trained in these logics and have used them in a different organization. These logics are not active in the new organization and newcomers need time to activate them, for example by creating practices and structures that fit them. Meanwhile, incumbents keep their logics intact as they strongly identify with them. As a result, it may be the case that a firm has two competing sub-groups, despite the field having high hybridity. The adoption process illuminates how organizations may end up with two competing sub-groups. Figure 4 illustrates the adoption process through which these sub-groups develop.

| Science-based field | Market logic becomes salient in the environment | Pluralism between market and science logic |

Elite organizations from the mature market start to gain interest in the firm and induces them to change

Organizational Level:
The firm encounters elite corporate players and decides to adopt market logics by hiring new people with other skills

Organizational Level
Costly conflicts and managerial realization of problems

Phase 1:
The science logic is dominant and draws complementary ideas from the market logic

Phase 2:
The market logic framing is gaining in force due to external changes and increased internal use

Phase 3:
Framing conflict. Each frame is active and can gain legitimacy from the plural environment.

Figure 4 Adoption process over the different phases

However, my paper also finds differences to the theoretical frameworks of Besharov & Smith (2014) and Pache & Santos (2013a). Most importantly, compatibility changes over time; logics are not inherently prescribing incompatible action as Besharov & Smith (2014) suggests, instead the power of them as frames may make them compatible or incompatible as other literature on framing suggests (Foss & Weber, 2016, Weber & Mayer, 2014). Also, from the findings of this study it does not appear to be the case that individuals hired into a new field are necessarily socialized into the new logic as Pache and Santos (2013a) suggest. Rather, it seems that these individuals instead start to enforce their own logic.

The process by which logics are adopted as frames on the individual level brings a new perspective to how logics unfold within an organization, which ties into recent theoretical work on institutional complexity and hybrid organizations (e.g. Besharov & Smith, 2014, Gray et al. 2015, Pache & Santos, 2013a). For example, my paper provides some insights into the work of Besharov and Smith (2014) regarding multiple logics within organizations, here my paper adds a framing perspective that lends some dynamism to how logics can change in compatibility, similar to others who have used the framing perspective to explain the dynamics, amplification and conflict in and between frames (Gray et al. 2015). The framing construct is useful for institutional theory because it ties together the macro-level with the micro-level of agents' cognition and motivations (Cornelissen & Werner, 2014 p. 39-40). Using this construct, the paper can provide a more

dynamic view on the interplay of multiple logics as well as tying together macro-level developments with the framing on the micro-level, where the ties in institutional theory is sometimes weak (Jarvis, 2017, Schilke, 2017). Here the outlined process of adoption and activation sheds some light on this tie and the dynamism that makes logics compatible or incompatible, which contributes to existing literature on multiple logics in organizations that until now has not had focus on the adoption process of a new logic, but more stable complexity in form of organizations that are inherently hybrid such as social enterprises. However, many more organizations may face hybrid demands (Schildt & Perkmann, 2017), so it is necessary to understand more about how such demands arise, how they affect the organization and how they should best be managed. The process I uncover in my study provides some insight and changes to some degree the view on institutional complexity in organizations, because many scholars assume that managers can control it (e.g. Battilana & Dorado, 2010, Pache & Santos, 2013b, Smith & Besharov, 2017). My study highlights that this may not always be the case. Hence, more research that focuses on the micro-level of how organizations become hybrid is needed. by looking more on the micro-level.

Nature of institutional complexity on multiple levels

An interesting observation in my study was that the institutional complexity seemed settled at the field level. The larger corporations who dominated the mature field seemed to have settled the complexity of science and the market over time, as other studies have proposed (Smets et al. 2015). The demands for innovation, which originates in a science logic, and profits, which originates in a market/corporation logic, are not very surprising or uncommon. It would be expected that all companies would have to address these competing logics. However, for ventures moving from an early market to a mature market these demands take a complex form on the micro-level because they present inherently different frames; a scientist does not have a strong focus on cutting cost and an operations engineer have a hard time understanding the choices of a scientist. Settling this complexity would likely take time (Smets et al. 2015), but also the ability to juggle paradoxical frames that contain both elements (Smith & Besharov, 2017). In their study of a hybrid organization, a Cambodian social enterprise, Smith & Besharov (2017) showed that it is critical that managers of the organization possess paradoxical frames that allow them to grasp the complexity, manage it and use it to make the organization hybrid. My study finds that this may be a demand made not only of managers, but also of individual employees who might be required to possess paradoxical frames in order to grasp complexity.

Costly conflicts and reduced organizational performance.

The interest in competing logics in the organization have often focused on settlement (Reay & Hinings, 2009), how they may be a source of innovation (Jay, 2013), or how they may be formed for strategic needs (Pache & Santos, 2013b). However, few papers have analyzed whether or how logics can harm an organization. Merely stating that they may cause conflict seems too vague. While there are certainly plenty of conflicts in organizations, which of these can hurt organizations with regard to core functions and which may merely be annoying but not ultimately important? In answer to this question I draw on different literatures that share a common focus on framing. One literature in particular, that of institutional logics, can illuminate where frames come from and how they change (e.g. Gray et al. 2015, Pache & Santos, 2013a), the other literature on framing conflicts can illuminate how different frames affect how members of the organizational collaborate and transact (e.g. Foss & Weber, 2016). The study does find that framing contests can arise, here the two ends of the literature provide some important knowledge when compared and integrated; the institutional theory (e.g. Gray et al. 2015) can be used to analyze how frames arise and evolve, while the other end of the literature (Foss & Weber, 2016), can be used to analyze the nature and consequence of the frame conflict. These findings are important for entrepreneurial ventures may adopt a competing logic and frame that create internal problems. This may cause them to fail, as some informants feared would happen to my case company. We know little on how entrepreneurial ventures experience and handle the challenges of competing logics (Desantola & Gulati 2017). Here there is a path for future research to analyze differences in strategies and outcomes; why do some ventures successfully accommodate competing institutional demands but externally and internally, and why do some fail? Here we need much more future research into the scale up of entrepreneurial ventures, which is quite underdeveloped (Desantola & Gulati, 2017).

Organizational performance is not just important for entrepreneurial ventures; it is likely that all kinds of organizations are vulnerable to competing logics and costly internal conflicts. The approach from this study can therefore be applied to many types of organizations that have been popularly studied in the literature, for example, healthcare organizations have also been shaped by the adoption of market logics (Reay & Hinings, 2009). Yet, we know little on how this affects how different logics shape performance, here I propose that they might incur costs and harm performance because they as different frames reduce the ability to collaborate and transact inside

the organization. Other studies have proposed benefits (e.g. Jay, 2013), hence my findings may be contingent. But future research is needed to discover which factors make logics detrimental or beneficial to the internal workings of the organization.

Limitations and future research

This paper strives to bring the organization "back in" to the discussion in institutional theory, as it has been pointed to being missing in action (Greenwood et al.,2014). There is still very little scholarship on the micro-level in the institutional logics literature despite its potential (Jarvis 2017, Schilke 2017). There is not much comparative research in the institutional tradition that looks at entrepreneurial ventures or organizational performance, so it is difficult to draw comparisons. Yet, as a single case study, it may be hard to generalize results from this study toto all kinds of entrepreneurial ventures, there may be boundary conditions, different logics at play and other elements at play. Future research is therefore needed to test the applicability and generality of the process of adoption that I find.

Interestingly, my findings go against the literature on cross-occupational collaborations, which find these collaborations to be successful (Bechky 2003, Truelove & Kellogg 2016). Regarding cross-occupational collaborations, Truelove and Kellogg (2016) present a completely different set of results, as they find successful collaboration in a similar case of a maturing engineering heavy firm. The reason for these contradicting findings could be that, while in Truelove and Kellogg's (2016) study there is conflict between two groups, one group consists of a radical flank and a more moderate group, which provides ground for frame negotiation. In Bechky's (2003) study, differences are situated inside the organization and are less affected by the environment. This could lessen the complexity as the environment and organization are more stable, hence increasing the chance likelihood of conflict resolution and future integration. As these studies show, conflict may be very contingent on how different frames unfold and how they affect the organization. This may be due to the different locus of frames that these studies use. In my study the frames are derived from a macro-level logic while in the occupational literature the cognitive frames are group based. Whether this is why the frames work, is up to debate and future research.

The scale-up process of entrepreneurial ventures has received a lot of attention on the practical front (e.g. Gulati & Desantola, 2016, Sutton & Rao, 2014), and it is an important practical problem because many ventures fail to scale (Guzman & Stern, 2016). Yet, research here is short. My study

merely points to one type of problem rooted in the arise of complex institutional demands, this may only be one obstacle from one literature, surely there are many others that future research would find, and which would shed light on the problems that ventures face. Moreover, I do not point to solutions here. Future research is also needed to find out how ventures successfully deal with the complexity and incompatible frames that I find in my study.

Conclusion

Entrepreneurial ventures deal with complex institutional environments as they grow, yet we know very little on how this complexity affects the ventures (Desantola & Gulati, 2017). The conventional wisdom has been that these ventures should hang on and maintain existing culture and mindsets, in order to keep growing and be successful when entering this complex environment. The paper challenges whether this is possible, because the "professionalization" process is more complex than normally imagined. There may be an "incubation period", where bringing on change agents result in the smaller, positive change that the firm wants, but these agents evolve and empower their framework as they activate it and the field changes, as such firms may get more change than they bargained for.

Therefore, it may not be possible to maintain existing culture or mindset as it becomes contested, so the ventures may have to do frame negotiation to reconcile the logics and arrive at a new shared understanding. Moreover, competing logics may decrease performance of entrepreneurial ventures and perhaps cause organizational deaths, yet we know very little on how these ventures manage the competing logics they face. There is much more research to be done on how institutional logics are infused into the organization, how it changes peoples' cognitive framings and how founders respond to challenge from joiners as well as the environment.

References

Ambos, T. C., & Birkinshaw, J.

2010. How Do New Ventures Evolve? An Inductive Study of Archetype Changes in Science-Based Ventures. *Organization Science*, *21*(6), 1125–1140.

Bechky, B.

2003 "Sharing Meaning Across Communities : The Transformation of Understanding on a Production Floor" Organization Science, 14(3), 312–330.

Besharov, M. L., & Smith, W. K.

2014 "Multiple Institutional Logics in Organizations : Explaining Their Varied Nature and Implications" Academy of Management Review 39(3), 364–381.

Cornelissen, J.P & Werner, M.D.

2014 "Putting Framing in Perspective" The Academy of Management Annals, 2014 Vol. 8, No. 1, 181–235

Currie, G. & Spyridonidis, D.

2016 "Interpretation of Multiple Institutional Logics on the Ground: Agents' Position, their Agency and Situational Constraints in Professionalized Contexts" Organization Studies 2016, Vol. 371. 77–97

Desantola, A. & Gulati, R.

2017 "Scaling: Organizing and Growth in Entrepreneurial Ventures." Academy of Management Annals 2017, Vol. 11, No. 2, 640–668

DiMaggio, P.J .

1997 "Culture and Cognition" Annual Review of Sociology, Vol. 23 .1997., pp. 263-287

Eisenhardt, K.M.

1989 "Building Theories from Case Study Research." Academy of Management Review October 1, 1989 vol. 14 no. 4 532-550

Fisher, G., Lahiri, A., & Kotha, S.

2016. Changing with the Times: An Integrated View of Legitimacy, Logics and New Venture Lifecycles. Academy of Management Review p. 383-409

Foss, N. J., & Weber, L.

2016 "Moving opportunism to the back seat: Bounded rationality, costly conflict, and hierarchical forms" Academy of Management Review, 41(1), 61–79.

Friedland, R. & Alford, R.R.

1991 "Bringing society back in: Symbols, Practices and Institutional Contradictions" The New Institutionalism in Organizational Analysis. University of Chicago Press

Gioia, D., A., Corley, K.G. and Hamilton, A. L.

2012 "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology." Organizational Research Methods 16.1. 15-31

Glaser, V. L., Fast, N.J, Harmon, D.J & Green Jr., S.E.

2016 "Institutional Frame Switching: How Institutional logics shape individual action." How Institutions Matter! Research in the Sociology of Organizations p.35-69

Goffmann, E.

1974 "Frame Analysis: an essay on the organization of experience" New York Harper Colophon

Granovetter, M.

2017 "Society and Economy" The Belknap Press of Harvard University Press.

Gray, B., Purdy, J. M. & Ansari, S.

2015 "From Interactions To Institutions : Microprocesses of Framing and Mechanisms for the Structuring of Institutional Fields" Academy of Management Review 40(1), 115–143.

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E.R., & Lounsbury, M.

2011 "Institutional Complexity and Organizational Responses" The Academy of Management Annals, 5:1, 317-371

Gulati, R. & Desantola, A.

2016 "Start-ups that last" Harvard Business Review March 2016

Jarvis, L. C.

2017 "Feigned vs. Felt: Feigning Behaviors and the Dynamics of Institutional logics" Academy of Management Review vol. 42 nr. 2 p. 306-333.

Jay, J.

2013 "Navigating paradox as a mechanism of change and innovation in hybrid organizations" Academy of Management Journal, 56(1), 137–159.

Klag, M., & Langley, A.

2013 "Approaching the conceptual leap in qualitative research" International Journal of Management Reviews, 15(2), 149–166.

Mangen, C., & Brivot, M.

2015 "The challenge of sustaining organizational hybridity: The role of power and agency."Human Relations, 68(4), 659–684.

McPherson, C. M., & Sauder, M.

2013 "Logics in Action" Administrative Science Quarterly**,** 58.2., 165–196.

Mcmullen, J. S., & Dimov, D.

2013. Time and the entrepreneurial journey: The problems and promise of studying entrepreneurship as a process. *Journal of Management Studies*, *50*(8), 1481–1512.

Nag, R., Corley, K. G., Gioia, D. A.

2007 "The Intersection of Organizational Identity, Knowledge and Practice: Attempting Strategic Change via Knowledge Grafting" Academy of Management Journal, Vol. 50, No. 4 .Aug., 2007., pp. 821-847

Ocasio, W.

1997 "Towards an Attention-Based View of the Firm" Strategic Management Journal Vol. 18, Summer 1997 Special Issue: Organizational and Competitive Interactions .Jul., 1997., pp. 187-206

Oliver, C.

1991 "Strategic Responses to Institutional Processes" The Academy of Management Review, Vol. 16, No. 1 (Jan., 1991), pp. 145-179

Pache, A. & Santos, F.

2010 "When Worlds Collide: The Internal Dynamics of Organizational Responses to Conflicting Institutional Demands" Academy of Management Review 2010, Vol. 35, No. 3, 455–476.

Pache, A. & Santos, F.

2013a. "Embedded in Hybrid Contexts: How Individuals in Organizations Respond to Competing Institutional Logics" Institutional Logics in Action, Part B, Research in the Sociology of Organizations, Volume 39B, 3–35

Pache, A., & Santos, F.

2013b. "Inside the hybrid organization: Selective coupling as a response to conflicting institutional logics" Academy of Management Journal,56: 972–1001.

Pouthier, V. Steele, C.W.J & Ocasio, W.

2013 "From Agents to Principles: The Changing Relationship between Hospitalist Identity and Logics of Health care" in Michael Lounsbury, Eva Boxenbaum .ed. Institutional Logics in Action, Part A .Research in the Sociology of Organizations, Volume 39 Part A. Emerald Group Publishing Limited, pp.203 - 241

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: 795-843.

Reay, T., & Hinings, C.R.
2005 "The recomposition of an organizational field: Health care in Alberta" Organization Studies, 263., 349–382.

Reay, T. Hinings, C.R.

2009. "Managing the Rivalry of Competing Institutional Logics" Organization Studies 06/2009; 30.6.:629-652.

Schildt, H. & Perkmann, M.

2017 "Organizational Settlements: Theorizing How Organizations Respond to Institutional Complexity" Journal of Management Inquiry 2017, Vol. 26.2. 139– 145

Schilke, O.

2017 "A Micro-Institutional Inquiry into Resistance to Environmental Pressures" Forthcoming in Academy of Management Journal

Smith, W. K., & Besharov, M. L.

2017. "Bowing before Dual Gods: How Structured Flexibility Sustains Organizational Hybridity. Administrative Science Quarterly."

Smith, W.K & Tracey, P.

2016 "Institutional complexity and paradox theory: Complementarities of competing demands"
Strategic Organization vol. 14(4) p. 455-466.

Suddaby, R.

2006 "From the editors: What grounded theory is not" Academy of Management Journal, 49.4., 633–642.

Sutton, R.I & Rao, H.

2014 "Scaling Up Excellence" Crown Business

Swidler, A.

1986 "Culture in Action: Symbols and Strategies." American Sociological Review, Vol. 51, No. 2 .Apr., 1986., pp. 273-286

Swidler, A.

2001 "Talk of Love". University of Chicago Press

Swidler, A.

2008 "Comment on Stephen Vaisey's ''Socrates, Skinner, and Aristotle: Three Ways of Thinking About Culture in Action'' Sociological Forum, Vol. 23, No. 3, September 2008

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 Vol. 105, No. 3 .November 1999., pp. 801-843

Thornton, P. H.

2002 "The Rise of the Corporation in a Craft Industry: Conflict and Conformity in Institutional Logics" Academy of Management Journal 2002, Vol. 45, No. 1, 81-101.

Thornton, P. H. & Ocasio, W.

2008 "Institutional Logics" in Sage Handbook of Organizational Institutionalism Sage 2008.

Thornton P. H., Ocasio, W. & Lounsbury, M.

2012 "The Institutional Logics Perspective" Oxford University Press

Truelove, E., & Kellogg, K. C.

2016 "The Radical Flank Effect and Cross-occupational Collaboration for Technology Development during a Power Shift." Administrative Science Quarterly, 61(4), 662–701.

Van de Ven, A.

2007 "Engaged Scholarship" Oxford University Press.

Weber, L., & Mayer, K.

2014 "Transaction cost economics and the cognitive perspective: Investigating the sources and governance of interpretive uncertainty" Academy of Management Review, 39(3), 344–363.

Chapter 4

Getting the best of both worlds: the hybridity challenge of entrepreneurial ventures during scale-up

Abstract

It is commonly understood that entrepreneurial ventures have to secure legitimacy and resources from a complex set of stakeholders in order to grow and succeed. What is not well known is how two different logics blend together on the micro-level to form a coherent organization. Using a 24-month ethnographic study of a venture, this paper seeks to improve our knowledge of how competing logics interact in entrepreneurial ventures. I find that the venture faces a difficult challenge in pursuing a hybrid strategy where the organization must blend logics. Individuals may not see a reason to pursue hybridity, but instead seek to avoid blending their logics because they are motivated to pursue practices under their current logic and see the new logic as a possible threat. This study reorients research towards examining dynamics and tensions when combining logics on the micro-level. My study points to a trade-off between seeking dualistic external resources and legitimacy and maintaining internal order. Thereby, this study provides a counter point to literature that proposes that managers can pursue a hybrid strategy and control logics by identifying barriers on the micro-level that derail the strategy.

Keywords: Microinstitutionalism, institutional logics, entrepreneurial ventures, hybrid strategy and organizations, qualitative methods, case study

Introduction

Scaling up ventures is a difficult task for managers and their organizations (Desantola & Gulati, 2017). In order to accomplish scale-up, ventures would often have to rely on legitimacy and resources from multiple external sources (Almandoz, 2012, Granqvist, Grodal & Wooley, 2013, Pontikes, 2012, Wry, Jennings & Lounsbury, 2014). Ventures, for example, often have to be legitimate in both the science/technology and business realms (Fischer, Lahiri & Kotha, 2016).

To manage this complex environment, scholars have called for organizations to be "institutional ambidextrous" where they cater to stakeholders who represent competing logics (Greenwood, Raynard, Kodeih, Micelotta & Lounsbury, 2011, Jarzabkowski, Smets, Burke, Bednarek & Spee, 2013). Pursuing such ambidexterity is a "hybrid strategy" where the venture deliberately attempts to engage with a complex set of stakeholders, i.e. customers, owners and investors. The venture here strives to use different institutional logics as strategic resources (Durand, Szostak, Jourdan & Thornton, 2013). A challenge to pursuing this strategy is that the venture must blend logics on the micro-level by having individuals hybridize the logics in their daily work (Besharov & Smith, 2014, Jarzabkowski et al. 2013). Unfortunately, we know very little about how to make such hybridization work. As Besharov and Smith (2014 p. 365) state, "*We do not know, for example, why multiple logics produce internal conflict in some organizations but become seamlessly blended in others.*"

This paper proposes a trade-off between seeking legitimacy from a complex set of stakeholders and opening the organization up for complex logics that can cause conflict and derail the hybrid strategy.

Curiously, the literature has continuously argued for the possibility and success of combining such different identities, structures and goals that reside in competing logics, thus making organizations hybrid (Battilana & Dorado, 2010, Pache & Santos, 2013b, Schildt & Perkmann, 2017, Smets, Jarzabkowski, Burke & Spee, 2015, Smith & Besharov, 2017). The main reason is that organizations strategically combine logics using organizational structures and practices, e.g. through hiring, business missions, goals and structures (Battilana & Dorado, 2010, Pache & Santos, 2013b, Ocasio & Radoynovska, 2016, Ramus, Vaccaro & Brusoni, 2017, Smith & Besharov, 2017). In short, the literature argues that competing logics can be managed by implementing effective structures at the organizational and field level (Smith & Tracey, 2016 p. 457). The problem with this view is that it disregards the fact that logics are also active on the micro-level and have to be settled here (Jarzabkowski et al. 2013). As the quote from Besharov

and Smith (2014) indicates, we lack knowledge about why logics would settle or conflict on this level. This knowledge gap leads to my research question: *"What are the micro-level barriers to successfully pursuing a hybrid strategy in entrepreneurial ventures and why do they emerge?"*

The problem here is that while it is clear why organizations desire hybridity; it increases their chance of success, this does not translate to the agents on the floor. Why would they want to be hybrid and blend logics? A problem, known in management literature is that these individual "drives", or motivations, may not be aligned with the overall organizational goals (Gottschlag & Zollo, 2007, Lindenberg & Foss, 2011). For example, agents could conflict over not only the existence of competing logics, but the status of them in the mix. As most research focuses on organizational dynamics rather than micro (i.e. individual and group) level, we know little on this (Ashforth & Reingen, 2014, Jarvis, 2017, Schilke, 2017, Smith & Besharov, 2017). The paper therefore investigates how individuals and groups experience being subjected to a complex environment and how they respond.

The paper contributes by putting the spotlight on the agents in the organization and their personal motivation and interests, where institutional theory has tended to disregard agency (Barley, 2008, Cloutier & Langley, 2013, Friedland, 2017, Jarvis, 2017, Schilke, 2017). To understand individuals' connection to logics, which motivate individuals to use them I draw on self-determination theory of motivation (Ryan & Deci, 2000). Hereby, the study contributes to the increasing interest in how agents are embedded into logics, not just cognitively, but emotionally (Fan & Zietsma, 2016, Toubiana & Zietsma, 2017). Finally, the paper discovers a trade-off to the literature on venture legitimacy (Fisher et al. 2016, Granqvist et al. 2013, Pontikes, 2012, Wry et al. 2014), by finding that seeking legitimacy and resources from complex stakeholders may be derailed by actions of employees on the ground, who are not motivated to pursue the strategy and actively seek to avoid having to work hybridly. This creates harmful conflicts that are detrimental to the internal organization. Hence, ventures may face a trade-off; seek complex legitimacy and resources and face internal turmoil or seek internal stability but lack of external recognition. Here the paper also contributes to the growing interest in the scaling of ventures (Desantola & Gulati, 2017, Fisher et al. 2016).

Theoretical framework

Logics and hybrid organizations

For organizations, institutional logics can appear as governance structures and rules on how to behave (Rao, Monin & Durand, 2003, Thornton, Ocasio & Lounsbury, 2012). This is a conceptualization that focuses on how organizations adhere to institutional structures. On the micro-level, scholars tend to conceptualize them as "guidelines of action", that is frames of action and related practices and structures that individuals use as tools for meaning and action (Rao et al. 2003, Thornton et al. 2012). Recently, there has been a strong a focus on institutional complexity, the permanent co-existence of multiple and competing logics and the hybrid organizations that manage to incorporate them (Battilana & Dorado, 2010, Greenwood et al. 2011, Reay & Hinings, 2009).

Contrary to what might be expected, most studies find that it is possible to combine otherwise competing logics (Battilana & Dorado, 2010, Jay, 2013, Pache & Santos 2013b, Smets & Jarzabkowski, 2013). The reasons are multiple, but there are two main tenets of explanation. The first explanation is that individuals become socialized into complex environments, which over time makes individuals familiar and accepting of the duality present in the environment (Pache & Santos, 2013a). Examples of this include Smets and Jarzabkowski's (2013) study of a merger in a global law firm, where logics first are seen as contradicting but then are reconstructed as compatible due to institutional pressures. Similarly, in their study of insurance underwriting at Lloyd's, Smets et al. (2015) propose that individuals learn to "institutionalize" complexity by managing the paradoxical tension through finding spaces to blend logics as well as places to avoid a contradicting logic. For this reason, the employees at Lloyd's have been able to resolve a long standing institutional complexity in their everyday practices.

The second line of explanation focuses on organizational responses to complexity (Greenwood et al. 2011). Battilana and Dorado (2010), in their analysis of micro-finance, point to the importance of hiring and socialization. For example, by hiring recent graduates organizations have "blank slates" who are not socialized too much into one logic or the other. Another example found by Pache and Santos (2013b) in their study of social enterprises is that it is strategically beneficial for organizations to combine logics, hence they use hybridity as a deliberate strategy. Most of these studies share a common characteristic – the organizations are necessarily hybrid, there is no way they could function without involving competing logics (e.g. social enterprises cannot be just pure business, they necessarily involve a social mission). However, not only social enterprises or

service organizations have to contend with competing logics. Schildt and Perkmann (2017, p.139) propose that *"each and every organization"* faces competing logics, which they must synthesize in order continue functioning. Schildt and Perkmann (2017) argue that hybrid organizations are not rare, but ubiquitous, and that organizations are always moving from settlement to settlement of different logics. While a great deal is understood about how to sustain hybridity, as the above-mentioned studies illustrate, we do not know much about the dynamism, where an organization may face the need to reach a new settlement. An in-depth understanding of how individuals on the floor decide that their field is hybrid and that they should now mix logics in their everyday practices is missing. Individuals must here relinquish some of their current logic and negotiate the status and nature of this hybridization. For this reason, much recent theoretical contemplation has been directed at the micro-level (Friedland, 2017, Jarvis, 2017, Schilke 2017, Voronov & Yorks, 2015). Yet, as an overview the literature demonstrates, an understanding and explanation of this level of hybrid organizations is missing. As Cloutier and Langley (2013 p. 362) state, our understanding of the micro-level in the case of multiple logics is very much a black-box. Moreover, they argue that the current institutional logics perspective lacks the conceptual tools to explain such actions. In the next section I outline the reasons for this and why it is critical in order to understand how organizations become hybrid.

Micro-foundations of institutional logics

From an institutional perspective, there are generally two explanations of why individuals behave as they do: a socialization explanation, which is most common in neo-institutional theory (see Meyer, 2010 for review), and a toolkit explanation (see Swidler, 1986 and Thornton et al. 2012). The problem with both perspectives is that they strive to explain first-person choices through macro-level features, i.e. by the power of a logic in a field (Pache & Santos, 2013a), or by the availability of logics (McPherson & Sauder, 2013, Swidler, 2001). The socialization explanation makes it unimportant to study organizations at all, because if agents follow logics because of the logics in their field, then understanding the field allows the researcher to understand individual action; this perspective essentially examines macro-foundations instead of micro-foundations (see Jepperson & Meyer, 2011 and Meyer, 2010). Some criticize this type of analysis for seeing hybrid organizations as merely the result of "cultural dopes" (i.e. managers) following cultural rules (Jarvis, 2017). The toolkit view runs into a different problem, which is the question of the motivation behind an action (Vaisey, 2008, 2009). In McPherson and Sauder's (2013) excellent paper on drug courts, the authors show that agents may pick logics almost at random to solve their

goals, i.e. they pick up unexpected logics and logics that they should not be familiar with. Here, the issue is that the availability of logics as a toolkit does not explain their use; why, out of many logics available, is one in particular used? (DiMaggio, 1997, Swidler, 2001). In essence, the pure toolkit approach suffers from the problem of not explaining why agents have certain goals (Vaisey, 2008, 2009).

Both views have recently received strong criticism in books and papers (see Levi-Martin, 2011 and Vaisey, 2009) for explaining individual actions from macro-level features that do not account for what individuals want and what they choose to do. To answer these questions, the motivation and emotional connections to logics must be examined, not only whether certain logics are available or socialized (Friedland, 2017, Levi-Martin 2003, 2011). In his influential paper on field theory, Levi-Martin (2003 p. 37) argues that field theorists (such as institutional theorists) should not dread the notion of personal motivations but embrace the fact that fields are driven by subjective representations of what an individual considers to be good. These personal motivations are often conceptualized through self-determination theory (Ryan & Deci, 2000), which is relevant because institutional logics are used by individuals because they find them to be of worth and because they are satisfied by carrying out the actions relating to a particular logic (Friedland, 2017). In rough terms the theory separates personal motivation into two camps: intrinsic, which refers to whether the individual considers a task to be enjoyable and meaningful, and extrinsic, which refers to whether the individual can expect a reward from completing a certain task (Ryan & Deci, 2000).

To sum up the gaps in the literature, the first problem is that most research on hybridity takes an organizational approach, asking, "What does the organization want?" (Ashforth & Reingen, 2014, Smith & Besharov, 2017). There are few studies that examine the micro-level (individuals and groups) (Schilke, 2017), and as a result there is a lack of knowledge regarding how individuals and groups decide what logics should govern their organization and how (Besharov & Smith, 2014, Pache & Santos 2013a). We know little about the motivation behind why individuals in organizations are motivated to pursue hybridity, even though it may well be a necessary strategy for organizational success and survival (Schildt & Perkmann, 2017, Wry et al. 2014). This is due to the lack of focus on the coalface (Barley, 2008), which means that we have little knowledge about what individuals may do to avoid hybridization. Here, we lack understanding about how individuals could "play around" with logics and fit them to their needs (Binder, 2007, Zilber, 2016).

These gaps are important in my research context, because if logics clash violently in entrepreneurial ventures during scale-up it may severely damage the venture's ability to cater to investors and customers. If we do not know what organizational and individual characteristics drive such conflict, then our knowledge of how to make these ventures successful will be limited.

Case study methodology and data

Research context

This study follows an entrepreneurial venture, a young and growing firm engaging in innovative behavior (Desantola & Gulati, 2017). The reason for this choice was that scale-up of ventures is an important practical problem. While start-up quality is increasing, scale-up success is decreasing (Guzman & Stern, 2016). Venture scale-up is also a problem that has received little attention from researchers (Desantola & Gulati, 2017, McMullen & Dimov, 2013). This study was conducted in the photonics industry, which is a rapidly growing and fast changing technological industry that has nearly doubled in market size between 2011 and 2020 from 350 billion euro to 615 billion euro according to a 2013 industry report published by the German Federal Ministry of Education and Research). The photonics industry is promising because it caters to development in semi-conductors, high-speed internet cables and bio-imaging, fields that are certain to grow in the future.

Data collection

The data was captured using an inductive case study with the goal to build theory (Eisenhardt, 1989). I have chosen an in-depth, single case study to better understand the complex relationship between logics (macro-level) and individuals and their actions inside the firm (micro-level).

The data consists of internal data, such as participant observations, interviews, internal documents, internal employee surveys and internal project documentation and external documents, such as annual reports, job postings, news reports and industry reports. I visited the company frequently over a two-year period, especially during the first six months of the study when I visited the company once a week (or more) and had my own desk in the R&D department. I relied on field notes as well as a case study diary and photos. The interview data consists of 37 interviews, as well as several informal interactions and short informal interviews, primarily conducted during my intensive period the first six months.

Data overview	Qualitative data	Internal archival data	External archival data
	Field work: over a two-year long case study from 2015-2017.	Project documents: 2,650 files, including presentations, resumes from meetings, internal memos and budget changes.	Annual reports from 2002-2017, 1441 pages.
	Interviews: 37, with 23 informants. Average interview duration: approx. 75 minutes. Dozens of informal interviews and encounters during field work.	Employee surveys from 2014 and 2015, including 40-50 variables with a 68-76% response rate.	Job postings with descriptions from 2016-2017. Firm news 2015-2017: 128 articles.
	Passive observations: approximately 150 hours of observations	Internal strategy documents from 2014-2017, including documents and PowerPoints from internal presentations and meetings during this period.	Industry reports from: German Federal Ministry of Education and Research 2013; SPIE Report 2015
	Active participant observation on R&D team building day (approximately 8 hours).		

Table 1. Data overview

Interviews were recorded when possible. As they were conducted on site some took place in noisy production facilities and were impossible to record, in which case recording was replaced by field notes. Interviews were transcribed verbatim. As I became increasingly interested in the

motivations behind behaviors and beliefs, I focused on exploring this area in more depth. When I was focused more on institutional logics and the individuals' relationship to them and their subsequent actions, I adjusted the interview guide to capture these elements.

According to grounded methods (Glaser & Strauss, 1967), I sampled informants across the organization both vertically as well as horizontally. A particular strength of my data is the internal archival data, which includes years of strategy documents, internal presentations, and all the documents and files relating to a five-year product development project. This data includes over 2,500 documents and files, and due to this quantity, I relied on only a sample of this information, paying special attention to presentations of stage-gate meetings to analyze the collaboration and changes that occurred when a product changed hands between units.

I used the narrative lens to support grounded theory coding, especially with regard to finding and working with some overarching themes, which grounded theory has a tendency to overlook (Langley, 1999). One of the first steps in my data analysis was developing a case story to function as the foundation of the analysis.

Data analysis

The goal of the data analysis was to map the relationships that arise between concepts when a firm pursues a hybrid strategy in an institutionally complex environment, with a particular focus on the interplay on the micro-level as a result hereof. I relied on grounded theory and its mode of grounding concepts (Glaser & Strauss, 1967, Suddaby, 2006). The first step in my data analysis was writing down a case story to secure a timeline and thick description of the case. I then revisited the data again to complement the developing story, thereby going back between my overlying narrative, the data and theory to secure accuracy and focus on the theoretical elements I sought to develop. I relied on the "Gioia methodology", where the different sets of data were used to triangulate the emerging findings during constant comparison (Gioia, Corley & Hamilton, 2012). The interviews were openly line coded and continuously cross-coded with each other and the theory in order to find relationships between themes (Gioia et al. 2012, Suddaby, 2006). As coherent and stable codes emerged through the grouping of the open coding, I changed the focus in order to theoretically saturate the codes through second and third order coding. I determined that I reached categorical saturation when the codes became constant across a wide sample of informants and data. The coding process resulted in the data structure presented in the next section.

I chose the logics approach, because informants would continuously talk about their different mindsets with one originating in academia and one from the industry. This theoretical stream emerged from the data and initial coding, not from a research question. Because this paper takes a micro-level approach, I rely on the micro-level conceptualization of logics, which sees these more as guidelines of action that agents can elaborate and "play around with" (Binder, 2007, Zilber, 2016).

To capture and ground the institutional logics, I relied on Reay and Jones' (2016) pattern matching method and inspiration from Pache and Santos' (2013b) method of capturing logics on multiple levels. To find field-level logics, I used external archival data and especially interviews with the managers who described interaction with customers, investors and other stakeholders. Annual reports from the parent conglomerate served as an excellent representation of these stakeholders' demands and the changes in them. For example, the 2008 annual report highlight the excellent Intellectual Property base of the case company, whereas the 2015 report called for a stronger focus on lean manufacturing and scalability in order to appeal to the large corporations that comprised the OEM customer segment. This change, from focusing on the possibility of creating new patents through research to capitalizing on it to make profits, was noted as a change in logics.

To capture these logics in practice, I conducted observations and in-depth interviews with employees on the floor, talking about their everyday work and personal history. For example, informants could be seen as adhering to a professional researcher logic if they cared about publishing and gaining reputation in their field and to a market logic if they cared more about increasing the profits of the firm through streamlining and cost reduction. Looking at inter-institutional system, such beliefs neatly fit the ideal-types of a professional/science logic and a market/corporate logic (Thornton et al. 2012). Observing how individuals placed themselves in groups and subsequently tied their behavior to their experience either in science or in corporations, I was able to match informants' statements with logics as per Reay and Jones's (2016) method.

The data analysis went through three stages after the formulation of the case story and the overall framework of institutional logics. The first analysis focused on the individual responses to this hybrid environment where the firm was supposed to be strong in both science and business. The reason for this focus was that I found surprisingly little blending of logics despite the demand from the environment and the desire from the management for hybridity. A common theme was the lack of motivation to find a common ground. Informants in operations would accuse R&D of

"talking the talk, but not walking the walk" with regard to becoming an industrial company, while R&D saw operations as unnecessarily rigid. To understand these different perspectives, I adjusted my interview guide to focus on the resistance towards blending logics, i.e. finding common ground, and I therefore began to ask about each group's and individual's motivations to determine why they were not pursuing a hybrid solution. This second phase was captured especially by in-depth interviews where I asked about informants' personal history and motivations. There are some scholars who doubt the possibility of capturing these interests of informants (e.g. Boxenbaum, 2014, Vaisey, 2013). While I agree with the issues they raise, I believe that there are some interview techniques available to enable this (Pugh, 2013), especially the use of longer and more in-depth interviews and spending a longer period of time in the field. Hence, I chose to re-interview some informants over time and observe their work and changes in their practices to try to capture these elements. I also used survey questions from self-determination theory in my interviews (e.g. Amabile, Hill, Hennessey & Tighe, 1994), as a way to test the creditability of this theory in this context.

The third stage of data analysis focused on how individuals and groups avoided hybridity. Here, I looked at how the groups implemented structures, as each group would adopt structures and processes from different institutional logics. For example, engineers in R&D would use the NASA handbook of systems engineering, which I see as using cultural elements from a science logic, while the operations unit would adopt in ideas and processes from larger companies nearby, such as lean processes and quality management systems. In addition to this, the groups would also play around and re-arrange structures and processes. For example, many members in R&D altered the lean board system that management had tried to implement, while operations members would find or make their own enterprise resource planning and documentation management systems.

In Table 2 I present the core empirical findings of this study with representative quotes. In my findings section, I elaborate and analyze these findings in depth.

My data structure is inspired by the "Gioia methodology" (Gioia, Corley & Hamilton, 2012). I use a variation utilized by Tracey, Phillips and Jarvis (2011), which is relevant because this study similarly focuses on how institutional logics are used to create organizational forms as well as on micro-level dynamics.

Data Structure

Figure 1 Data structure

First order categories and second order themes	Representative data
Overarching dimension: *Positive framing of one's own logics, but negative framing of the other*	
1. There are two different perspectives in each group	A1 . *"I don't think…that we have become [a leading company in industry], because we are super at business processes and operating efficient. That's not why we are here. We are not good at that. We are not here either, because we are good at marketing… We are not top salesmen, who can sell whatever we can find in the corners. That's not we are here either. Why are we here? One of the reasons is that we have a unique technology that nobody else has."* (Technology Manager, R & D).
A. The R&D group focuses heavily on radical development only, disliking the business orientation.	
	A2. "*We are still an R & D focused firm, we develop markets. And we will stay so forever because we can produce with a small operations team and a high revenue"* (CEO 1)
B. Operations is heavily influenced by the market	B1. "*What matters to me is that we have customer first focus, it does not matter what kind of product it is, but we to have an organization that is capable of that."* (COO)
	B2. *"Customers buy is not just the "box", it is our ability to produce high quality. It is the "machine that makes the machine".* (Operations engineer)
2. Each group knows each other's perspective but does not like it	

C. R&D dislikes, or fears, the business orientation, seeing it as dangerous.	C1. *"Can I train R&D into believing that it is okay to make the same thing over and over again? That it is okay to make money?. That it is okay to make a lot of money? That it is really good to make the same thing for two customers and demand payment from both places? You would think that is very normal business, but not for these people. Here it is religion [against making money and for research]"* (CEO 1)
	C2. *"If we become a 'nuts and bolts' factory, then I think a lot of people won't be here. That's not how we see ourselves."* (Department head, Fiber Management)
D. Operations mistrusts the R&D view and fears it will harm the company	D1. "*How do we qualify our products, when we do not have a standard operating procedure If I wanted to do a cost reduction, I need to have it. But R&D does not have the will. Yeah, they are saying they want processes. But they don't want to follow them and they want to write their own. So is it 'talk the talk, but not walk the walk'?* (COO)
	D2. *"To put it bluntly, then everything we do is processes. From the time we meet in till we go home. So, to look at a process-diagram and go "yeah, that is not really about me, I do not have to do it". That's a sign that something is wrong with the culture… We lack a culture, where people are aware that they are carrying out processes."* (Production development engineer)

Overarching dimension: *individuals are motivated by practices tied to each logic, hence they have negative feelings about the other*	
3. Intrinsic motivation tied to goals in each logic	E1. "*What I find motivating is to create a brand-new product, that you develop a new product.*" (R&D technology lead)
E. The scientists are motivated by development and freedom, not short term solutions	
	E2. "*I am saying that we are driven 100% by customers. It is a pure commercial pull. And that is okay. But it must be limited in extent. We have a hard time driving things that are more than one year into the future. I think we are much too shortsighted about what we have to win in the next quarter.*" (Technology manager, R&D)
	F1. "*What I am motivated about is building the 'machine that makes the machine,' not just the box [the product].*" (Operations engineer)
F. Production engineers are more motivated towards order and structure	
	F2. *"I don't have a schedule, I don't have a sheet with the standard terms of delivery. I want to say…It's just not a 'nice' freedom to have!"* (Production lead)
4. Extrinsic motivation facilitated by each logic	
G. The scientists are motivated by getting attention from their peers.	
	G1. The scientists care about winning awards, such as the Prism Award, the "photonics Oscar," and receiving recognition from their peers (observation and data from press releases)
	G2. The scientists in R&D work with academics, publish in peer-reviewed journals and maintain Google Scholar profiles (observation)
H. Production engineers are motivated by salary and customer satisfaction	

	H1. *"For the production personnel salary matters more than it does for the R&D personnel. They hunger for the 'calling' and are probably not as interested in the salary, whereas the salary means more for the operations employees."* (Production lead)
	H2. *"When we look at it from a raw operations perspective, we can be pretty proud of how things have to look. It is an exhibition window to orient ourselves and to show future customers. But it does not help that we are throwing in R&D goods left and right completely randomly, because then are back at the lab stage again."* (Operations manager)
Overarching dimension: avoiding hybridity by strengthening existing logic and changing structures and processes to avoid the other	
5. Importing practices from each logic	
I. *Scientists in R&D adopt processes from the science field, e.g. NASA*	I1. Engineers use the NASA Systems Engineering Handbook (internal archival data)
	I2. *"I ran into a concept called systems engineering. That's a while ago now. I have been following that some time now. I think I is very interesting. It is like a systematic way of doing product development, where you make sure that things happen in the right way at the right time."* (Engineer, R&D)
J. *Production engineers adopt processes from corporations*	J1. Operations relies on a lean system from a large, nearby pharmaceutical company (observation at firm and at the pharmaceutical company)
	J2. *"For the business it is life or death to create standards, quality and performance measurements. We need to create the same product over and*

6. Each group resists the practices of and being affected by the other group	*over again…But it is a huge challenge to get that "quality mindset". We in quality live and die for quality, but this mindset is lacking overall in the company. It is a huge challenge"* (Quality manager 2)."
K. R&D changes structure and neglects processes that do not fit with their logic	K1. *"So I started to put my own stamp on what I have been told to do, because in the meantime the quality manager left the company, so now it is up to what do I feel make sense?"* (R&D project manager)
	K2. R&D personnel changes the boards to fit individual needs, eventually they abandon the use of them (Observation)
L. Operations "fence" themselves in to protect their structure and processes	L1. "*So the operations manager runs it and he is doing a good job. But he is putting up a fence, which is debatable, but management has okay'ed it. So if you come and meddle with the fence, then he [operations manager] comes and growls at you. Inside his own square his is operating really well. It just does not fit in."* (Department head, manufacturing engineering)
	L2. *"R&D does not want to become an industrial firm, they do not want processes and structures...They are not efficient. They come in here and misuse our resources because they do not plan ahead."* (Department head, operations)."

Table 2 Representative quotes for data structure

Case narrative: pursuing a hybrid strategy at Supertech

It has become widely known that entrepreneurial ventures must pursue legitimacy and resources externally in order to survive and thrive (Fisher et al. 2016, Zimmerman & Zeitz, 2002). When ventures change phases, such as changing from conception to commercialization or from commercialization to a growth phase, they face multiple logics that may be competing (Fisher et al. 2016). Here, ventures must balance being legitimate in science, which indicates future value, with legitimacy as a corporation, which indicates that they can produce value in the present (Fisher et al. 2016). In order to do this, ventures must pursue a hybrid strategy.

My case serves as a revelatory case that illustrates the internal mechanisms of pursuing a hybrid strategy, where most other literature looks at the external mechanisms (Almandoz, 2012, Granqvist et al. 2013, Wry et al. 2014). Furthermore, it sheds light on the issues that ventures face when scaling up, which have thus far lacked empirical backing (Desantola & Gulati, 2017, McMullen & Dimov, 2013), despite being a systemic problem for many ventures (Guzman & Stern, 2016).

The company, which I refer to using the pseudonym "Supertech,"[18] began as a research and development site for promising technology in the specific area of photonics. Its products were based on technology spun out of basic university research and it was funded by a large conglomerate, dubbed "BIG" in this study. Supertech's main customers were researchers who sought out the newest technology in order to develop new technical knowledge and find novel applications for optical laser technology. As the different associated R&D firms began to develop photonics technologies that had wider applications, they were merged into one firm, "BIG Supertech." The conglomerate BIG invested heavily in the firm's IP base to build the future potential of the firm. In order to be profitable, Supertech moved from pure product development, focused on an innovative market of researchers, towards an original equipment manufacturer (OEM) market of large corporations, taking the applied science to a mainstream market. This change was the result of Supertech's ability to devise dominant technologies and products, for which researchers then found applications, which aroused the interest of OEMs. The OEMs liked the technology and its possible applications, yet demanded that the technology become more profitable and that Supertech become better at making a standardized product. In the span of 18

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[18] Both the owning conglomerate and the company are anonymized to protect the informants' privacy.

years, from 1999-2017, the firm changed and grew from 5 engineers tinkering with lasers to include 300 people. In the research phase (2015-2017), the firm expanded from 120 to 300 people.

In 2015 the firm changed its strategy to be more commercialization driven, reflected in the change in CEOs.

The COO described this change as follows:

"We went from being a small company to a bigger one and this just changes expectations from your customers. Before, you could produce some crap, but scientific customers liked it, because it just was what they needed – for the next 20 hours they needed it—to…Now, we need to ship a product that clears 10,000 hours and has field service capability and has a built in self-test. This is where we are going."

In contrast, the new CEO stated:

"We are working on brand new products. We are not developing or improving on an existing product, we are looking at newer technologies, newer laser, newer end-users, newer applications. That's what we are good at. So, it's very different from manufacturing something that has been on the market for 20 years."

A sense of this hybrid strategy was apparent in the annual reports, internal strategy documents and external data. For example, documents showed that the firm sought both basic research support from the European Union, while also targeting their technology and products to large corporations. In the 2017 annual report the firm was shown to have passed 50 million euro revenue mark, and the report discussed how it would improve its lean operations to continue to expand on this revenue growth. However, the report also noted that fundamental R&D was necessary to avoid being replaced by newer technology. This meant that the firm had to internally blend these ideas – the lean operations required that R&D develop products for manufacturing, while R&D depended on operations being able to translate their ideas into products quickly.

Findings

Previous research has suggested that in institutionally complex organizations individuals are likely to be socialized into both logics present within the firm, thereby making competing logics functional in daily work (Battilana & Dorado, 2010, Pache & Santos, 2013a, Smets & Jarzabskowski 2013). However, my data does not support this. In contrast, my findings suggest that individuals can devise frames that keep them embedded in their "core" logic. Moreover, my data reveals that this is due to a motivation to maintain an existing logic, which individuals and groups achieve by manipulating structures and practices.

Positive framing of one's own logics, but negative framing of the other

Framing in R&D

The core element of the R&D frame was that they were in business because of science and because they had developed leading technology through their own brilliance and co-creation with superior lead users at prestigious universities. The former CEO explained: "*We went to MIT, to Caltech, to Stanford, to Harvard and to Germany. To all the leading universities. They are always on the look-out for the newest new stuff…Then you get them to adopt the technology and play around with it, for us this is a 'bingo'. They are like rock stars, they have followers.*"

When the firm started to pursue a hybrid strategy where commercialization plays a big role, they were aware of it. But they were afraid that the commercialization would take over and Supertech would become a *"nuts and bolts factory"* as one described. Another informant in R&D emphasized that Supertech's core competency simply was not lean manufacturing or sales, it was their R&D competency, and that this needed to be reiterated as their core competency. He feared that commercialization would result in short term development would lead the firm into trouble in the future.

When faced with the demand to secure the commercialization R&D would emphasize the role of science and development to secure a commercial product, because commercialization included radical development as well, and not just involved in producing more of the same product. The department head of R&D explained:

"Right here and now, one of the great focus points in R&D is to go from having a product that has a lifespan and overall reliability that is appropriate for scientific customers to one that is good for industrial customers who want to use it 24/7. That's really a lot of research and development because we know we have components that simply do not have the lifetime to do it [be used at this intensity]…There we clearly have something that is fundamentally difficult to develop."

Many R&D personnel did not like the business orientation of commercialization. The previous CEO had had serious problems in convincing the R&D employees that selling the same thing twice was positive and that it was acceptable to make money this way. While R&D accepted that they had to have efficient operations, they did not really want to be involved in this process. As one operations managers stated, it was very difficult to get people to transfer from R&D to operations, but very easy to get individuals to transfer in the other direction. Another employee in operations noted: *"When you are talking manufacturing, you need people with that gene. You cannot just take R&D engineers and put them down here. They will grow unhappy, and fast. It is not what they want."*

R&D held the framing that their logic of science and its practice of very loosely organized work was necessary in order to be agile and develop radical new technology that would secure commercialization through being frontrunning technologies. For this reason, R&D feared that being too business oriented would turn the firm into a commodity producer, which they found both dull and negative in the long term. The issue was simply not how R&D saw themselves, as one informant in R&D said. This negative framing of corporation and market logics did lead to some employees in R&D simply leaving for smaller firms in order to continue working on basic research in a kind of "garage" set-up.

Framing in operations

As a part of their scale-up, Supertech had hired a lot of new people, especially in operations, who were tasked with transforming the firm from a couple of research sites to a professional, high tech manufacturing company. These people were brought because the large OEM customers demanded more standardized quality and delivery, one going so far to send out its own team of lean consultants to drill the company. This led the previous CEO to hire new people into operations from mostly larger and more mature firms with the mandate to drive Supertech in this direction.

These newcomers brought with them a different mindset. To them, improving processes and making the firm into an efficient machine was the key objective. The managers of the operations unit had a clear focus on reducing waste, which took the shape of lean artifacts such as QDIP (Quality, Delivery, Inventory and Productivity) boards, Kanban boards and Kaizen. Their core goal was making Supertech into a true industrial firm. The COO explained why this was important:

"The few engineers I have are used to continuous improvement. It might be a waste sometimes, but the value they create is huge and the savings in the future will be significant…this is how we bring the money home"

Making continuous improvements and getting processes formalized and clarified was seen as crucial. A production engineer used a metaphor of having *"a small train set,"* where R&D, engineering and operations were each one cart that needed to be "*fitted together and pulled in the same direction.*"

Employees in operations seemed quite proud of their achievements, as one operations manager demonstrated when he discussed the lay-out of the production floor of which he had been the chief designer. Before, there had been a set of labs spread across the floor, but he had torn them down and created a fluent layout, that had lasted several years, which was rare. Because of this, he and others were a bit afraid of R&D throwing their projects into the mix and threatening the order operations had built. When asked whether this was necessary, the department head argued that he had vast experience working with R&D people in other firms, and here they would be much better at getting things "right," as he called it. He felt that R&D often misused operations' resources and hindered their work towards becoming an industrial firm. An example of this was described by an operations engineer who faced the problem of an R&D engineer creating his own serial number and traceability system, despite operations already having an existing system. The operations engineer lamented that this pushed them back to "A1" in the excel sheet, and continued: "*If he had had his own business completely isolated from everything else then he would have designed a brilliant product and a brilliant system.*" Of course, the problem was that the engineer did not have his own isolated business.

The framing that operations worked with was that they would develop Supertech into a high-tech industrial firm and create an extremely efficient operations system – and that they would have more authority. They did not appreciate the "Gyro Gearloose" type R&D employees hindering

their achievement of this goal. When these goals did not materialize they were quite disappointed and saddened. The COO stated:

"Is it a manufacturing company where there is structure, so we can produce and develop products for production? I think, unfortunately, we are first and foremost a development company, that's the focus."

They did not feel that R&D understood the need for streamlining because R&D personnel all came from the *"same basement at the technical university"* as a production engineer stated.

In conclusion, I saw two very different framings of the logics. Not only did employees adhere to one logic, they framed their own logic as positive and necessary for the business and the other as a threat that could jeopardize the company, either by pushing it into a commodity trap or by keeping it from the efficient enough and legitimate in the eyes of the large OEM corporations who demanded order. Interestingly, as my quotes illustrate, each group was aware of the logic of the other. They were as such socialized into each logic because both logics were so present as practices that each group performed, R&D using scientific practices in their labs and in operations using lean practices. Yet, each group developed a positive and negative frame of each logic, which is unexpected as seen from a socialization perspective and given they were very close in their everyday activities. This first finding is surprising given that scholars have continuously shown that socialization and tight integration should result in agreement and the finding of common ground (Battilana & Dorado, 2010, Bechky, 2003, Smets & Jarzabkowski, 2013, Smets et al. 2015, Truelove & Kellogg, 2016). However, I find a dualistic framing in which individuals actively frame the logic they currently hold as more positive and the other in a negative light Hence we see a more active framing than simply a top-down one. Table 4 illustrates the differences in framing.

Predominant logic	Professional/Science logics	Market/Corporate logics
Logics of action	Develop new technology through agile, creative and circular practices with little formalization.	Refine and improve practices so that they can be repeated many times to reduce costs and increase consistent quality.

Overall goal	Improve the firm's position by developing the best technology.	Increase the firm's profits and size by making it more efficient and commercial.
Threat and fear	Do not miss the market and be overtaken by new technology. Fear of not being ahead and respected in one's field.	Do not appear incompetent in the eyes of large OEM customers. Fear of not being seen as legitimate by corporations; being embarrassed by low quality products.
Desired organizational identity	A technology firm in a commercial industry. Development is the "holy grail."	A manufacturing firm in a high-tech industry. Developing efficient processes is the way forward.
Framing of the other logic	The market/corporation logic is too shortsighted and focuses on profits in the next quarter rather than long-term development. The practices tied to it, e.g. lean, formalization and bureaucracy are unwanted because they hinder agile development. The logic and its practices could harm the company.	The science logic and its loose way of working with little formalization is simply not tenable for an industrial firm. How do we sell to large corporations if we do not have an ISO certificate or have processes that they recognize? The science logic and its practices therefore threaten the firm and the goal of transforming it into a commercial, industrial player.

Locus of legitimacy and origin of ideas on how to run the firm	Academia. The basic research conducted is the reason large corporations are now interested in Supertech. The technology is still in need of radical development. To do this, the firm must be organized to facilitate research.	Corporations. The firm needs to copy practices from other corporations to be perceived as legitimate in their eyes.
Main proponent	R&D	Operations

Table 4. The different perspectives

Motivations to frame a logic

A crucial element was that informants were aware of both perspectives. As one employee in R&D stated: "*I know the perspective that I have is just one of many, and it is not necessarily the right one. I know that the employees in operations have a different one, and that is naturally a challenge.*"

In addition, there were a few individuals who "crossed over" from one logic to another. For example, one production engineer who now saw himself as a "hardcore lean guy" had begun his career as an associate professor in lasers and atomic physics. This was interesting because they were clearly aware of each logic and the practices, so it was not because they were cognitively embedded and could not see beyond "taken-for-granted" ways of doing things. Individuals had the discretion to choose, for example they could cross over from science to corporation or vice versa but they rarely choose to do so. This led me focus on how individuals attached themselves to their chosen logic.

Intrinsic motivation for each group

Many informants in R&D discussed technology and making it "succeed," a sentiment that the CTO also expressed: *"What turns people on… is when you have designed something and are seeing it succeed. There is a great professional satisfaction in that."*

To the researchers in R&D the technology was the "holy grail" (as described by the CTO), and some of the R&D personnel had spent decades working on this technology. One leading employee in R&D described his story: he had been interested in photonics technology since he was a student, and he joined the company because he believed that Supertech could take photonics further than the university. He was part of the company because he wanted to make it succeed, to test how far photonics could go. Innovation in photonics was a shared passion or calling for many of the engineers in R&D. A binding motivation was to develop something from the ground up, which for them meant that the company *"had to as flexible as possible,"* and growing and becoming rigid was *"a dangerous development,"* as stated by a manager in R&D. Rather than a blind focus on being researchers, the R&D employees knew and recognized that the firm would have to be more commercial in the future, but this was a development that they feared. Seen in the statement of one informant who claimed: "*if we become a nuts and bolt factory, then I think a lot of people won't be here."* Making the same thing over and over again was not seen as particularly interesting, what drove the R&D employees was creating new things.

Developing wholly new products required great freedom, which I saw evidence of in how employees would organize their work. R&D took a very lenient approach with nearly no structure, as they believed structure limited their development abilities and restricted the "agility" needed to respond to market changes. Therefore, changing their way of working was a very sensitive subject. As one quality manager noted when discussing his work towards such change:

"We need to change the structure a little. Not that we need a 'new world,' but we must change to some degree. But this is a big change in R&D's mindset, when you have been used to being able to work freely, almost without control. And it is a challenge. It is not just to hit people over the head, then it will not work."

On the opposite side, employees in operations had a quite different intrinsic motivation. As one project manager described it, he wanted to build the machine (the factory) that built the machine (the product). This meant a focus on making people work together as a unit and increasing efficiency and reducing waste. In an interview, the operations manager described how he played an important role in setting the team and designing the set-up; he used a football analogy to cast himself as the coach who made others play better together. He was very proud that his set-up had been very long lasting and successful. For operations, the ability to professionalize the firm gave

them great "self-respect." They also liked more structure and clear processes. As one informant stated:

"*I like clear boxes rather than undefined ones…I feel much better with clear guidelines and structures than I do with riding with my gut-feeling.*"

This clearly separated the operations unit from R&D employees who detested structures and documentation. Operations employees wanted these structures and did not like too much freedom, as this could lead to a situation where they would have to devise a solution that would be scrutinized by customers. Motivations were very much tied to the practices associated with each logic, i.e. the freer and more "innovative" way of working in science versus the more rigid practices from corporation logic, for example lean operations. The individuals had personal preferences regarding these practices, which explained some of their framing of the logics.

Extrinsic motivation for each group

I noted that many scientists in R&D still published in journals and maintained a Google Scholar profile. This led me to believe that they still desired recognition from their peers, rather than just generating firm profits. They also were keen on the Prism Award, which is seen as the "Oscar" in the photonics industry. Winning such awards for scientific prowess was important to them, as gaining recognition from peers is important in a professional logic and improves one's status. However, corporation/market logics do not recognize these achievements unless they can be linked to profits. Hence, it would be unlikely that the scientists in R&D would get the such recognition from a corporate/market perspective. Similarly, R&D members did not particularly care about the salary and bonus perspective nested in a corporate logic.

In contrast, operations would receive more recognition from the corporation logic, as reducing waste and increasing profits is something that is important to the company and a market-oriented perspective. These individuals also cared more about salaries and bonuses, because did not feel they had a "scientific calling." One production engineer stated that salary mattered more to him and noted about R&D: *"A bonus just appears in the bank account. It does not say what for. What R&D wants is public recognition"*.

Operations wanted recognition for their skills as managers, who could run a business. Not getting this recognition from R&D, annoyed employees in operations. As the COO stated:

"There is a lack of recognition from a group of people who have not worked in other areas or other industries. My group of people have worked in different industries and in different companies, so we understand more."

In other words, operations wanted recognition from a corporation logic, where being able to manage, reduce waste and increase efficiency are key skills. Not getting that because of a pervading science logic left them baffled, as they had been used to working under a corporate logic. Therefore, they worked towards introducing the corporation logic, where their skills would receive higher approval.

This had consequences for the structures of the firm, because individuals and groups had the discretion and power to manipulate these structures and could disrupt the firm from the bottom up. R&D focused on keeping their loose structures and ridding themselves of documentation and processes, which they deemed to hinder them. In contrast, operations "boxed" themselves in even more with strict processes and structures. For the firm, this created serious problems because the technology was so complex that if R&D worked flexibly and agilely without formal structures or documentation, the problems associated with the products meant that operations could not and would not produce them. Because the firm was very tightly knit together and pursued a hybrid strategy, this posed serious problems.

Disruption of the organization bottom up: building fences and manipulating structures
Initially, Supertech shifted towards a more corporate logic internally as a response to larger OEM customers. This caused the firm to change its practices, expressed as follows by the former CEO:

"We have invested heavily in lean. Lean training for everyone. And not operations lean, company lean…We have had every single employee back in school…It is an investment that kicks a's."

The new COO was tasked with orchestrating this shift towards a corporate/market logic, and the CEO stated that he would get the "hot potato" of changing the organization, including R&D. In the beginning R&D did buy into some elements, such as a resource board, that prioritized resources for projects, hence formalizing this structure. R&D chose to do this primarily because it helped them improve their development projects and allowed them to measure personal impact as projects were given more measurements. Such complementary elements of the market logic, here the formalization of resources and more control over projects, were not resisted. As a result, the first period between 2013-2015 was quite successful, and informants reported that relations between operations and R&D improved. The successful transitioning from a scientific market to

an OEM market, however, put operations under more and more pressure to deliver and maintain their successful transformation of the firm from a research site to a manufacturing company. They therefore insisted that R&D formalize more of their practices and provide more assistance in making operations successful – in other words that R&D relinquish of some of their science logic. In 2016, the COO described the change he was going to make across the firm despite the likely R&D resistance:

"The R&D people don't want to. They say they do not have time for things [that are] not R&D. But you cannot do that as a company. You have to look at quality control and to secure quality, that is the way to secure the future, we need that customer attention, but at the moment we do not have it."

Operations believed that the formal structures they had implemented in their unit, in the form of Kanban and QDIP boards and strict value stream maps, should be extended to R&D as well, and that R&D should use more of their resources to make these structures successful. However, employees in the R&D department did not want to implement such structures, as they did not want to become a "nuts and bolts factory instead they loosened up and played around with the formal structures and practices. For example, the boards that had been designed for them by a consultant, and which were supposed to bring the company together in one flow, were disrupted and played around with by employees who fitted them to their needs. Each employee in R&D would create his own way of using the board, hence disrupting the idea of order. In contrast, the boards in operations were completely rigid in structure and "design-locked." Here, I observed clear differences in each unit's practices and beliefs: one flexible and "agile," one very structured and rigid.

I noticed that the projects and information on the boards in operations and R&D were not the same, they simply did not communicate the same way. Instead of aligning themselves with the development in operations, R&D focused on development projects that they called *"must-win."* These projects were important to the entire company, but R&D took hold of them and made them their own, which they could as they were in charge of developing and designing them. As a result, other employees felt excluded because they did not know what was going on. The COO was not pleased and accused the R&D unit for running their own show:

"I generally think you should move away from the R&D driven projects, to a more holistic

where we have R&D, finance and operations together. If we are going to make a business then we must work together, we cannot do it on our own."

R&D did not buy into the overall organizational goal of "company lean" as set out by the CEO in the beginning. The reasons for this were quite clear, and one project manager in R&D described in his thoughts on these practices:

"*I haven't done it. I have chosen to say 'f'ck it,' I do not have anything to do with it, so I have chosen to do my own thing, you can do that."*

The resistance from R&D was one of the factors that led to the CEO to being let go in mid-2015. The resistance was so strong that the CEO stated:

"I could not implement lean [in the R&D department] ... even though we clearly needed it."

Simply put, the implementation of lean was not seen as legitimate in the eyes of R&D. Similarly, the idea that the firm should be completely agile was considered illegitimate by the operations department, who refused to be influenced by this logic. This created a schism in the firm where each group fenced themselves in. Struggles set in as operations strived to create their own structures while R&D simultaneously tried to carve out a piece on the operations floor where they could tinker. The operations management saw this as an offensive move and as R&D trying to build their own structure.

Another illustration of this schism and resulting conflict was seen when I participated in a team building day that was arranged by and only for the R&D department. Here they discussed some of the problems in the firm, for example how collaborations between the units should work, which structures and rules should be in place and so forth. However, since no-one from operations was present this discussion naturally got a bit one-sided. They also listed their ideas for improvement and sent them to the rest of the company, including the COO who was not pleased: "*You don't see resource utilization [among R&D], you don't see effectivization. Perhaps they are not pressured in their own projects...I want to mention this [note] from the Engineering Day (the event for the R&D department), their suggestions were regular events, monthly social activities..."*

Clearly, having one unit of the firm doing their own teambuilding while discussion company-wide issues, signaled a division between units.

However, the COO's worries were not to end, on the contrary the new CEO was a photonics industry veteran, technology focused and oriented towards inorganic growth, not fixing internal problems. A half year after the CEO succession the COO was let go and not replaced. Without a leader in the management team, the operations group "fenced" themselves in according to themselves and to the R&D department. This was very strange and dysfunctional given the strong interdependencies, for example the splicing of the crucial laser fibers was very finely balanced and this dysfunctional behavior meant that it was nearly a daily question of whether this splicing would work. Therefore, delicate re-engineering was often needed. The schism did not help that as collaboration suffered, as one operations manager described it:

"They (R&D) all go up to the fence [the operations unit] and throw it [the product] over. Then there is somebody on the other side [in operations] trying to catch it."

In order to protect themselves from having R&D products that would hamper their streamlining, operations would reject ownership of products coming in. Operations could do so because of the external demands, for example they had to secure an ISO certificate to continue selling to the OEM customers, hence operations could use external demands as legitimacy and avoid the demands that R&D demanded of them, despite R&D being the now reinvigorated after the CEO succession. Despite, this organizational change in power, operations could point to external stakeholders to bolster their control over products in their unit, for example by enforcing ISO demands. These demands provided legitimacy and resources to build their own practices and structures, for example by using ISO systems and other quality management systems from other firms, operations could legitimately enforce their way of working as a legitimate approach; it was what customers demanded and what more mature firms would do.

At this point around 2016, power had shifted back to R&D, with the firing of the COO. However, interestingly the focus on the OEM market was even stronger, yet the science logics were maintained inside the firm as R&D solidified their authority with a management team more in their favor. It was now operations seeking to close of their premises in order to make sure that their practices were not to compromised. Members of operations, and especially their manager, would secure a lean strategy, which was accepted by management as it was part of the overall strategy. On the other side, R&D would argue that development was necessary to be legitimate in high tech. R&D would argue that there was a fundamental need for radical development. A

technology manager explained their strategy: *"We put out something unique, where the salesperson can say on parameter X, our product is so much better. And nobody else can do that."*

R&D would therefore rely on flexibility and their own personal ingenuity individually and in small groups to solve this difficult development. Here they would graft in ideas from other research heavy organizations, for example systems engineering from the NASA handbook was used as one way of organizing their work. On the other hand, the operations unit would tighten up their structures and processes, because they needed to keep the ISO certificate that legitimized them as suppliers to large corporations. They would therefore graft in ideas from the large corporations, e.g. the lean management and product life cycle systems. The outcome of the hybrid strategy was that each group could pursue one end of it; R&D would focus on scientific development and avoid corporation logics, while operations would focus on corporate logic items such as lean and ISO certificates. The logics were not really blended, instead a struggle between sub-groups emerged and kept smoldering. This led the CTO to comment that they stood on a *"burning platform"* from which they had to jump. He stated: "*We have to set up a culture that is organized and that works. Otherwise, it is the same as closing shop".*

Figure 2 illustrates the relations between the concepts. Management exposed the firm to complexity by pursuing a hybrid strategy. The interplay between different motivations, framings and the resulting use of practices and structures resulted in barriers to the hybrid strategy, that created barriers to the hybrid strategy and forced the firm unto a burning platform. Interestingly, there was calls for management to do more and convince the employees to follow the strategy.

Complex field with multiple logics

Enables

Management decides to pursue a hybrid strategy

Managers become aware of problems with the hybrid strategy

Micro-level

Motivation to use logics

Triggers

Positive framing of ones' own logics and negative framing of the others

Motivates

Use of practices and structures to strength own logic and avoid hybridity

Reinforces

Figure 2 Relationship between concepts and creation of barrier

Management recognized this issue, as the CTO remarked:

"*There is a job to be done here; how do we align the management's wishes with the employees? It has something to do with strategy and vision… how do we make that trickle down, so that they can see themselves in it?"*

In the end of my study, the incompatibility was still there with employees having learned to live with the daily frustration. Instead of resolving it and reaching a settlement that would pave the way for a shared culture, employees instead dug down and tried to avoid contact. It seemed as if the incompatibility was institutionalized in the firm, which could threaten the future success of the firm.

Discussion

My study points to a weakness in the current discussion on organizations pursuing a hybrid strategy, namely the role of individuals on the floor. Much of the current literature have focused on the role of management, who is seen as the key players in making the organization hybrid through strategizing and use of formal structures and processes (Battilana & Dorado, 2010, Ramus et al. 2017, Smith & Besharov, 2017). Here whether the individuals on the floor wants to become hybrid has not received that much focus. Here my study points to the bottom-up process is important in pursuing a hybrid strategy, as individuals may actively try to avoid blending their logics.

Here my shows a opposite tendency than previous studies, not only may employees on the ground skillfully pick-up and combine logics, they may also deliberately manipulate structures, rules and goals to avoid hybrid practices. Employees may fight over which logic should rule the organization or defend their own turf by "fencing themselves in". This undermines the organization's pursuit of a hybrid strategy where employees blend their logics. Thereby, the paper opens up for some new discussions in the literature on institutional complexity and hybrid organizations.

Active framing by individuals.

This study suggests that individuals make up their own minds in regard to institutional complexity as they can frame logics in a positive or negative way. Interestingly, they were aware of both logics, so the reason for choosing a logic was not cognitive embeddedness, inability of seeing beyond existing prescriptions. If it was so, the informants would not know of both perspectives and I would not have seen individuals "crossing over" from one logic to another, which was the case in a few examples. The socialization explanation where individuals are socially constructed by the logic and come to take it for granted as argued by Meyer (2010) and Pache & Santos (2013a) therefore does not seem fitting, because even when the different people were socialized into a new logic, e.g. R&D members into the corporation logic or operations members into the science logic, by their daily interaction and work in a complex field, they did not become identified with that logic as suggested (Pache & Santos, 2013a), instead they created positive and negative frames of each. Whereas most institutional theory sees individuals as passive receivers of frames from logics (Pache & Santos, 2013a, Thornton et al. 2012), in my study they do not act as passive receivers but actively frame different logics themselves more akin to how framing works in social movement theory (Benford & Snow, 2000). Here the individuals play an active role in creating collective frames of action, they are not just receiving information from institutional logics. In my study, each group created such frames of action, for example R&D created the frame of having to be agile and do radical development. In their frame, they condensed the market into one certain aspect. Operations did a similar thing by condensing their perspective to focus on continuous improvement. This is interesting because current literature presumes that individuals will become familiar with both logics as they spend time in a hybrid field or organization (Pache & Santos, 2013a).

This finding that individuals were aware of both perspectives but created a positive and negative frame of each changes the role of individuals; they may not be "cultural dopes", who act as if

guided by a higher power (Garfinkel, 1964, Jarvis, 2017). Instead, they may quite actively frame their logic in a more positive light. For example, in my study each unit just focused on their own logic, even though they knew that both logics were in play, they just framed their own as the most important one. Here my study provides some insights into the literature that looks on how individuals may resist external pressure (e.g. Schilke, 2017) and how organizations face issues when both logics are internally represented (e.g. Pache & Santos, 2010).

Motivation to use logics

The reasons behind the activity and agency here were that agent were motivated by the practices that each logic contained. R&D employees by the freedom and focus on developing new ideas granted to them by the science logic. Employees in operations were motivated by the ability to set up a well-oiled team, a "machine that made the machine", which the practices in the corporation logic facilitated. In contrast, employees in R&D were much more motivated by the personal reputation gained in a science logic, such as posting on Google Scholar, and they did not really care about money or promotions, which the operations employees did care about.

My study connects to the ideas of scholars who have focused increasingly on attachment and emotions in relation to institutional logics (e.g. Fan & Zietsma, 2016, Toubiana & Zietsma, 2017). However, because this is a new development, the reasons why individuals become emotionally invested in logics is not well understood. Here looking at how individuals are motivated by practices residing in an institutional logic may provide some explanation why they care about it and why they would change or on the other hand frame another logic in a negative light. My study uses the term of motivations instead of emotions. A reason for choosing self-determination theory is that is has the advantage of being clearer compared to the concept of "emotions"[19]. Secondly, the use of motivations allows for a more bottom-up approach, where individuals use logics to serve their interest, rather than being "socially conditioned" by emotions (Toubiana & Zietsma, 2018, p.429). Thereby, the term fits better with the notion of embedded agency as supposed to the strong socialization program currently residing in the use of emotions.

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[19] To illustrate this, Wikipedia defines emotion as "any conscious experience" and continues; "there is no consensus on a definition". This naturally limits the use ability and clarity of using the term. We all know what emotions mean, but apparently, we also know them to mean different things.

My study also points out some weaknesses in the toolkit approach to institutional logics, because it is unlikely that individuals can switch completely free as some studies suggest (e.g. McPherson & Sauder, 2013). Swidler (2008, p. 615) admits that toolkits are not just exchangeable according to situation, but that individuals grow attached to a toolkit as they learn to use it and deploy, which takes time and skill to learn.

Another point in the literature that my study contributes to is how individuals may reframe changes in the field. Here Kyratsis, Atun, Phillips, Tracey & George (2017) produces some interesting insights into how physicians reframed their work in response to a change in institutional logics. Kyratsis et al. (2017) show that the physicians related the new institutional logic to enduring values in medicine, which could be interpreted as they tried to find intrinsic motivation to the new logic and its practices. Another strategy was trying to find new narrative that made the physicians respectable in the eyes of others and improve their changes of positive external validation, which is related to extrinsic motivation. The reason why self-determination theory is useful is that it is an individual level theory, meaning researchers can focus intensely on the first-person explanations for action, which is needed in order to explain social action (Levi-Martin, 2011). Moreover, while the focus on professional identity can be extremely useful, especially in the case where the professional identity is deeply historical and tied to an institution, such as medicine. But in other cases, the professional identities may not that powerful as a well-known and historical profession as medicine is. Professions without these well-known historical characteristics probably have unclear and less powerful professional identities because the social group is not clear and membership of it does not produce the same recognition as medicine.

Here motivation theory could be used instead to understand the attachment and use of logics from an individual point of view. In a relevant finding to this, Kyratsis et al. (2017) shows a reframing of identity and what individuals find motivating, the informants in their study simply changed their views according to a greater societal change. This indicates that motivation to use logics is not set in stone but may be changed through identity work (Kyratsis et al. 2017, Tracey, 2016).

The use of formal structures, practices and processes.
Formal structures play an important role in securing that competing logics function and even becomes a driver of organizational innovation and performance. For example, Smith & Besharov (2017) show that formal structures, such as goals and roles associated with business missions, play an important role as "guardrails" in securing hybridity. However, an important finding of this

study is that leaders may not possess full discretion over such structures, indeed agents on the floor may use logics as external demands, for example the need to get certifications or approval, to affect the structures, thereby bypassing the managers. This took place over a couple of stages. First the old CEO tried to implement "company lean" and hired a new COO to do so, and they did have some success in implementing a set of new structures across the organization. However, the buy in differed vastly, operations bought in and continued to expand in this line of thought. But employees in R&D did "what made sense to them" and tampered with the idea of the organization being lean, therefore changing or avoiding this strategy altogether. Later on, in the cycle as the power changed, it was operations' turn to "fence themselves in" and lock down on their way of doing things, leaving the firm in dynamic tension. This finding is important because it challenges the notion that organizations become hybrid by the action of managers and organizational structures (Battilana & Dorado, 2010, Pache & Santos 2013b, Ramus et al. 2017, Smith & Besharov, 2017). My study suggests that in certain organizations, the individuals on the floor can themselves come up with ways the company should run and be put together based on institutional logics. Here they graft in ideas from other organizations and institutions, for example they take models and structures from other organizations or from academia. Thereby, several cultures can arise in the organization as members and groups use external material to build the organizational structures and cultures. Moreover, employees may also re-arrange old ones to fit external changes, retooling their skills and beliefs to a new context, here exemplified by the R&D group who kept arguing for radical innovation, hence legitimizing loose and agile structures instead of more corporation like ones. Here we see that logics are not solely top-down but can be used by individuals bottom-up as they play around and re-arrange them (Binder 2007, Zilber, 2016). Therefore, simply setting out an organizational identity top-down by using formal structures such as hiring, organizational strategy, business missions as seen in other studies (Battilana & Dorado, 2010, Pache & Santos, 2013b, Smith & Besharov, 2017), may be not be enough. The reason my study points to, is that this does not affect the motivations that agents have to frame logics and use them in practice, hence when left own their own when the managers focus on the external stakeholders, they may disrupt the strategy by changing structures and processes to fit what they want from the logics, which may exclude blending them. Here my study provides some new insights into hybridity and reorients the literature away from leaders of the organization to the common members of the organization.

Pursuing hybrid strategies in ventures

It is widely acknowledged that ventures can benefit from pursuing legitimacy from multiple, and sometimes complex stakeholders (Almandoz, 2012, Desantola & Gulati, 2017). Several studies have focused on the outside presentation of these ventures. For example, Wry et al. (2014) find that being hybrid increases access to resources. However, a problem not focused on is the internal organization, where these ventures may face the problem that they do not have a bureaucracy with strong managerial control and they have employees with highly specialized skills who require (and demand) freedom to act. Hence, a clear problem is what these employees want and how you manage them. There is a lack of focus on the micro-foundations of hybridity, because most studies examine how organizations gain legitimacy from the outside, not as much on how individuals and groups respond to competing logics (Besharov & Smith, 2014, Pache & Santos, 2013a). In my study the managers spend a lot of time engaging with external stakeholders and they set up a hybrid strategy of pursuing science and business simultaneously, hence according to other studies suggesting such action (e.g. Pache & Santos, 2013a, Smith & Besharov, 2017), they did several things right, yet a functional hybrid organization did not emerge as a result. An important difference here is the various levels; as Jarzabkowski et al. (2013) points out, being a successful hybrid, what they call "institutional ambidexterous", relies on the micro-level, the daily interaction of people and their work, not just the managers. Just focusing on the top level limits the literature on hybrid organizations to a narrow focus on managers and the organizational level, similarly to the focus that has limited the ambidexterity literature (Jarzabkowski et al. 2013).

Here my study points to a problem or a trade-off when pursuing hybrid strategies, which is that individuals in the firm can draw on either one with legitimacy and they can derail the hybrid strategy internally. This leaves an important task of making employees buy in to the hybrid strategy – in other words face a task of persuasion and reframing. Here some studies have looked into persuasion and making people change their logics through frame and identity work (Tracey, 2016). Here there could also be links to the resistance to change and change management literature. I am not drawing on that, because the individuals were not the typical routine seeking and rigid individuals described in this literature (see Oreg, 2003), but openminded, creative and forward-looking individuals with PhDs. They were not resistant to change, they loved trying new things in their work, that they feared a change was not necessarily to do with change itself, but the nature of it. However, others may find use for it, studying resistance to change and change

management may still prove fruitful in future research, similar to the recent draw on paradox literature (e.g. Smith & Besharov, 2017).

Table 4 summarizes the contributions and new questions that this paper provides to the body of existing literature

Phenomenon	Current Research	Contributions	New Questions
Individual frame logics positively and negatively	Current research proposes that either individuals are socialized into logics and come to follow them as taken-for-granted rules (Meyer, 2010, Pache & Santos, 2013a). Or, they can pick them up as tools at almost random with no cost (McPherson & Sauder, 2013).	This phenomenon goes against some of the literature, because it gives the individuals more agency and a different kind of framing. Instead of being passive recipients, individuals may actively frame complex logics, they can be fully aware of several logics, yet focus one that they care most about as positive and the other as negative.	In my study, I point to motivation as the key driver in why individuals see logics as they do. But others may have other explanations such as identifying with the logic they are embedded in (Fan & Zietsma, 2016). This view needs some clarification: is this identification conscious or unconscious (Voronov &Yorks, 2015)?
Emotions and motivations to use logics, blending them or change them.	Individuals may create a new logic if they have positive social emotions towards each other (Fan & Zietsma, 2016). They may also be very emotionally invested in logics (Toubiana & Zietsma, 2017, Voronov & Yorks, 2015).	I find that agents may have motivations to use logics. This take the form of intrinsic motivation, the individuals find joy in fulfilling practices relating to a logic, and extrinsic motivation, the individuals gain from external sources, such as professional recognition or managerial power and salary.	How do organizations convince employees to change their stripes or create a joint motivation to follow a hybrid strategy or mission? Can they change this through socialization or perhaps through symbolic management (Glaser et al. 2016)?
Formation of hybrid organizations,	Organizations can become hybrid by managerial or	Individuals may "copy culture" from organizations and	There may be different outcomes of hybrid fields and

organizational decisions of hiring, socialization and use of strategic decisions and business missions. Managers control the formation. (Battilana & Dorado, 2010, Pache & Santos, Ramus et al. 2017, 2013b, Smith & Besharov, 2017)	institutions, as here with science and industry. But they may also play around and change structures to avoid hybrid practices, for example by using formal structures, here rules and processes, to avoid blends. Thereby, two competing logics can co-exist, however in a dysfunctional manner that threatens the idea behind the organization's hybrid strategy.	organizations. In some individuals may align themselves and in others conflict. If it is not enough for managers to set out a hybrid strategy, but they also must persuade their employees to blend logics in everyday practices, then how is that accomplished? Perhaps future research needs to look at identity work and reframing as methods of persuasion (Kyratsis et al. 2017, Tracey, 2016)?

Table 6 Contributions and new directions for future research

Conclusion

This paper was motivated by the lack of understanding of the barriers that entrepreneurial ventures face when they scale up. (Desantola & Gulati, 2017). Here I point to a challenge in using and securing a hybridity strategy, which may increase firm success in regard to external stakeholders (Granqvist et al. 2013, Wry et al. 2014), but which may cause internal conflict that it quite durable.

What my study shows is a dualism between an imprinted research logic and a change towards formalization to follow the rising demand of the market logic. While most research has focused on organizational level responses to these demands, they have had less focus on the crucial element of how the organization becomes functional in everyday practices between employees. This is a problem, because the entrepreneurial organization is flat and reliant on autonomous, skilled individuals who may not be alike in their motivation and interests. A reliance that may be a crucial point in securing hybridity, as these individuals can disrupt and change the structures to

their wants often utilizing the external demands as lever. My study is naturally limited as a single case study into one type of organization, much more research is needed to understand the challenges such organizations face and the contemplations of individuals, which we are only beginning to understand (Jarvis, 2017, Schilke, 2017). As our economies grow more stagnant, with fewer entrepreneurial ventures succeed in becoming large companies that disrupt and improve the status quo, research looking in how venture scale and the barriers here is crucial (Desantola & Gulati, 2017, Guzman & Stern, 2016).

References

Almandoz, J. 2012. Arriving at the starting line: The impact of community and financial logics on new banking ventures. *Academy of Management Journal*, *55*(6), 1381–1406.

Amabile, T. M., Hill, K. G., Hennessey, B. A., & Tighe, E. M. 1994. The Work Preference Inventory : Assessing Intrinsic and Extrinsic Motivational Orientations, *66*(5), 950–967.

Ashforth, B. E., & Reingen, P. H. 2014. Functions of Dysfunction: Managing the Dynamics of an Organizational Duality in a Natural Food Cooperative. *Administrative Science Quarterly*, *59*(3), 474–516.

Barley. S. 2008. Coalface Institutionalism. Sage Handbook of Organizational Institutionalism

Battilana, J., & Dorado, S.2010. Building sustainable hybrid organizations: The case of commercial microfinance organizations. Academy of Management Journal,53: 1419–1440.

Besharov, M. L., & Smith, W. K. 2014. Multiple Institutional Logics in Organizations : Explaining Their Varied Nature and Implications, *39*(3), 364–381.

Binder, A. 2007. For love and money: Organizations' creative responses to multiple environmental logics. Theory and Society, 36(6), 547-571.

Boxenbaum, E.2014. Toward a situated stance in organizational institutionalism: Contributions from French Pragmatist Sociology theory. *Journal of Management Inquiry*, *23*(3), 319–323.

Deci, E. L., Ryan, R. M., & Koestner, R. 1999. A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, *125*(6), 627–668.

Desantola, A. & Gulati, R. 2017 Scaling: Organizing and Growth in Entrepreneurial Ventures. Academy of Management Annals 2017, Vol. 11, No. 2, 640–668

DiMaggio, P. J.1988. Interest and agency in institutional theory. In L. G. Zucker .Ed., *Institutional patterns and organizations* .pp. 3-21. Cambridge, MA: Ballinger

DiMaggio, P J.1991. Constructing an Organizational Field as a Professional Project: U.S. Art Museums, 1920-1940. in *The New Institutionalism in Organizational analysis University of Chicago Press*

DiMaggio, P. J.1997. Culture & Cognition. Annual Review of Sociology, Vol. 23 (1997), pp. 263-287

Durand. R., Szostak, B., Jourdan. J. & Thornton, P.H. 2013. Institutional Logics as Strategic Resources. Institutional Logics in Action, Part A Research in the Sociology of Organizations, Volume 39A, 165–201

Eisenhardt, K. M.1989. Building Theories from Case Study Research. Academy of Management Review October 1, 1989 vol. 14 no. 4 532-550

Fan, G.H & Zietsma, C. 2016. Constructing a Shared Governance Logic:
The Role of Emotions in Enabling Dually Embedded Agency. Academy of Management. 2016. Online Version.

Fisher, G., Lahiri, A., & Kotha, S. 2016. Changing with the Times: An Integrated View of Legitimacy, Logics and New Venture Lifecycles. Academy of Management Review p. 383-409

Friedland, R.2017. Moving Institutional Logics Forward: Emotion and Meaningful Material Practice. Organization Studies, 1–28.

Friedland, R. & Alford, R.R.1991. Bringing society back in: Symbols, Practices and Institutional Contradictions. The New Institutionalism in Organizational Analysis.

Garfinkel, H. 1964. Studies of the Routine Grounds of Everyday Activities. Social Problems,

Vol. 11, No. 3 (Winter, 1964), pp. 225-250

Gioia, D.A., Corley, K.G. and Hamilton, A. L.2012. Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. Organizational Research Methods 16.1. 15-31

Glaser, B., & Strauss, A. 1967. The discovery of grounded theory: Strategies in qualitative research. London: Wiedenfeld and Nicholson.

Glaser, V. L., Fast, N. J., Harmon, D. J. & Green Jr., S.E.2016. Institutional Frame Switching: How Institutional Logics Shape Individual Action. Research in the Sociology of Organizations, Vol. 48A p. 37-69

Gottschalg, O., & Zollo, M. 2007. Interest alignment rents and competitive advantage. *Academy of Management Review*, *32*(2), 418–437.

Granqvist, N., Grodal, S., & Woolley, J. 2013. Hedging your bets: Executives' market labeling strategies in nanotechnology. Organization Science, 24: 395–413.

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E.R., & Lounsbury, M.2011. Institutional Complexity and Organizational Responses. The Academy of Management Annals, 5:1, 317-371

Greenwood, R., Hinings, C.R. & Whetten, D.2014. Rethinking Institutions and Organizations. Journal of Management Studies 51:7 November 2014

Guzman, J & Stern, S. 2016. The State of American Entrepreneurship. MIT working paper

Jarvis, L.C.2017. Feigned vs. Felt: Feigning Behaviors and the Dynamics of Institutional logics. Academy of Management Review vol. 42 nr. 2 p. 306-333.

Jay, J.2013. Navigating paradox as a mechanism of change and innovation in hybrid organizations. Academy of Management Journal,56: 137–159.

Jarzabkowski, P., Smets, M., Bednarek, R., Burke, G., Spee, P.2013. Institutional Ambidexterity: Leveraging Institutional Complexity in Practice. Research in the Sociology of Organizations, Vol. 39 Part B p. 37-61

Jepperson, R., & Meyer, J. W.2011. Multiple levels of analysis and the limitation of methodological individualisms. *Sociological Theory*, *29*(1), 54–73.

Kyratsis, Y., Atun,R.,Phillips, N., Tracey, P. & George, G.2017) Health Systems in Transition : Professional Identity Work in the Context of Shifting Institutional Logics. *Academy of Management Journal*, *60*(2), 610–641.

Langley, A. 1999. Strategies for theorizing from process data. Academy of Management Review, 691(4), 691–710

Levi-Martin, J. 2013. What Is Field Theory ? 1, *109*(1), 1–49. American Journal of Sociology

Levi-Martin, J. 2011. The Explanation of Social Action. Oxford University Press

Lindenberg, S., & Foss, N. J.2011. Managing Joint Production Motivation: The role of Goal Framing and Governance Mechanisms. Academy of Management Review 2011 vol. 36 no.3 500-525

McPherson, C. M., & Sauder, M.2013. Logics in Action. Administrative Science Quarterly, 58.2., 165–196.

McMullen, J. S., & Dimov, D. 2013. Time and the entrepreneurial journey: The problems and promise of studying entrepreneurship as a process. *Journal of Management Studies*, *50*(8), 1481–1512.

Meyer. J.W. 2010. World Society, Institutional Theories, and the Actor. Annual Review of Sociology 36. 1-20.

Ocasio, W. & Radoynovska, N.2016. Strategy and commitments to institutional logics: Organizational heterogeneity in business models and governance. Strategic Organization 1–23

Oreg, S. 2003. Resistance to change: Developing an individual differences measure. *Journal of Applied Psychology*, 88(4), 680–693.

Pache, A., & Santos, F.2010. When Worlds Collide: The Internal Dynamics of Organizational Responses to Conflicting Institutional Demands. Academy of Management Review July 1, 2010 vol. 35 no. 3 455-476

Pache, A. & Santos, F.2013a. Embedded in Hybrid Contexts: How Individuals in Organizations Respond to Competing Institutional Logics. Institutional Logics in Action, Part B, Research in the Sociology of Organizations, Volume 39B, 3–35

Pache, A., & Santos, F.2013b. Inside the hybrid organization: Selective coupling as a response to conflicting institutional logics. Academy of Management Journal,56: 972–1001.

Pontikes, E. G. 2012. Two sides of the same coin: How ambiguous classification affects multiple audiences' evaluations. *Administrative Science Quarterly*, *57*(1), 81–118.

Powell, W.W. & Sandholtz, K.W. 2012. Amphibious Entrepreneurs and theEmergence of Organizational Forms. Strat. Entrepreneurship J., 6: 94–115 (2012)

Pugh, A.J.2013. What good are interviews for thinking about culture? Demystifying interpretive analysis. *American Journal of Cultural Sociology*, 2013. 1, p.42–68

Ramus, T. Vaccaro, A. & Brusoni, S. (2017). Institutional complexity in turbulent times: formalization, collaboration and the emergence of blended logics. *Academy of Management Journal*, *60*(4), 1253–1284.

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: 795-843.

Reay, T., Hinings, C.R.2009. Managing the Rivalry of Competing Institutional Logics. Organization Studies, 2009. Vol. 30 nr. 6 p. 629-652.

Ryan, R.M. & Deci, E.L. 2000. Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. American Psychologist vol. 55 nr.1 9 p.68-78

Schilke, O. 2017. A Micro-Institutional Inquiry into Resistance to Environmental Pressures. Forthcoming Academy of Management Journal

Smets, M., Jarzabkowski, P., Burke, G. & Spee, P.2015. Reinsurance Trading in Lloyd's of London: Balancing Conflicting-yet-Complementary Logics in Practice. Academy of Management Journal2015, Vol. 58, No. 3, 932–970.

Smith, W. K., & Besharov, M. L. 2017. Bowing before Dual Gods: How Structured Flexibility Sustains Organizational Hybridity. Administrative Science Quarterly. Online Version.

Smith, W.K & Tracey, P.2016. Institutional complexity and paradox theory: Complementarities of competing demands. Strategic Organization vol. 14(4) p. 455-466.

Suddaby, R. 2006. From the editors: What grounded theory is not. Academy of Management Journal,49(4), 633–642.

Suddaby, R.2010. Challenges for Institutional Theory. Journal of Management Inquiry 19.1. 14–20

Sutton, R.I & Rao, H. 2014. Scaling up Excellence: Getting More Without Settling For Less. Crown Business New York.

Swidler, A.1986. Culture in Action: Symbols and Strategies.   American Sociological Review, Vol. 51, No. 2 .Apr., 1986., pp. 273-286

Swidler, A.2008. Comment on Stephen Vaisey's ''Socrates, Skinner, and Aristotle: Three Ways of Thinking About Culture in Action'' Sociological Forum.Vol. 23, No. 3, September 2008

Thornton P. H., Ocasio, W. & Lounsbury, M., 2012. The Institutional Logics Perspective. Oxford University Press

Toubiana, M., & Zietsma, C. 2017. The Message is on the Wall? Emotions , Social Media and the. *Academy of Management Journal*, *60*(3), 922–953.

Tracey, P.2016. Spreading the Word: The Microfoundations of Institutional Persuasion and Conversion. Organization Science, 27(4), 989–1009.

Tracey, P., N. Phillips, and O. Jarvis.2011. Bridging institutional entrepreneurship and the creation of new organizational forms: A multilevel model.' Organization Science, 22: 60–80.

Vaisey, S. 2008. Socrates, skinner, and Aristotle: Three ways of thinking about culture in action. Sociological Forum, 23(3), 603–613.

Vaisey, S.2009. Motivation and Justification: A dual process model of culture in action. American Journal of Sociology, Volume 114 Number 6. May 2009.: 1675–1715

Vaisey, S.2013. Is Interviewing Compatible with the Dual-Process Model of Culture? *American Journal of Cultural Sociology*, February 2014, Volume 2, Issue 1, pp 150–158

Voronov, M. & Yorks, L. 2015. Did you notice that? Theorizing Differences in Comprehending Institutional Contradictions. Academy of Management Review 2015, Vol. 40, No. 4, 1–24.

Wright, M. & Stigliani, I. 2012. Entrepreneurship and Growth. International Small Business Journal 31(1) 3–22

Wry, T., Lounsbury, M., & Jennings, P. D. 2014. Hybrid vigor: Securing venture capital by spanning categories in nanotechnology. Academy of Management Journal, 57: 1309–1333.

Zietsma, C., & Toubiana, M. 2018. The Valuable, the Constitutive, and the Energetic: Exploring the impact and importance of studying emotions and institutions. *Organization Studies*, *39*(4), 427–443

Zilber, T.B. 2016. How Institutional Logics Matter: A Bottom-up Exploration. How Institutions Matter: From the Micro Foundations of Institutional Impacts to the Macro Consequences of Institutional Arrangements", Research in the Sociology of Organizations, Vol. 48A pp. 1-34

Zimmerman, M.A & Zeitz, G. J. 2002. Beyond Survival: Achieving New Venture Growth by Building Legitimacy. The Academy of Management Review, Vol. 27, No. 3 (Jul. 2002), pp. 414-431

Chapter 5

Seeing institutional change as a strategic opportunity: linking managerial decisions with institutional logics

Abstract

Organizational responses to institutional change are a matter of growing concern. Yet, little is known on whether the decision makers, who conjure up the responses, differ in how they frame the change. This paper argues that decision makers differ in how they come to frame institutional change. Managers may see the change as a strategic opportunity, leading them into action, or as more undesirable, hence making them less active. This difference is dependent on whether the organization has previously had a central and embedded position in a field or been on the periphery on the field and/or bridging to other fields. Because different positions in a field creates different representational and information processing schemata, decision makers frame change differently. This framing shapes the responses that decision makers conjure up. This paper contributes to this field of study by framing responses to organizational change in a micro-foundational model that integrates institutional logics and managerial decision-making. I end the paper with a discussion about the possibility of integrating perspectives from institutional logics with the behavioral theory of the firm using this model.

Keywords: Decision Making, Embeddedness, Institutional Logics, Cognitive Schemata and Frames, Micro-foundations of responses to institutional change

Introduction

Organizations, and the actors inhabiting them, are not atoms separated from society, but are entities embedded in a myriad of relationships, institutions and historical contingencies. Therefore, the organization's environment is riddled with turmoil, with rapid institutional changes and logics that compete as relations, markets, institutions and societies change (Greenwood, Raynard, Kodeih, Micelotta & Lounsbury, 2011). Institutional change is therefore crucial for the organization to respond to and a core phenomenon for researchers to understand, yet the concept is burdened with a bewildering set of conflicting theoretical and empirical claims (Micelotta, Lounsbury & Greenwood, 2017). This paper attempts to contribute to the discussion around institutional change by linking an institutional logics perspective of decision making to that of the cognitive processes of managers, broadly known as the behavioral theory of the firm (BTF). This is achieved by constructing a theory of how institutional logics affect decision makers in the firm and then discussing how this can be incorporated into a micro-foundational model of organizational responses to institutional change.

One practical observation is that some organizations respond better to change than others. Interestingly, some firms are adept at navigating the tides of cultural, political and societal changes, which enables their success. For example, Nike and Adidas seem to have fruitfully embraced CSR in combination with profit seeking, Nike by employing a closed loop supply chain and Adidas by creating their Parley shoes, which are made from ocean waste in collaboration with strong anti-corporation NGOs such as Sea Shepherd. Meanwhile, H&M is consistently in the media for transgressing norms when they burn unused clothes or commit perceived racial offenses. Nike, Adidas and H&M are quite similar corporations, i.e. they produce similar products (including running shoes and clothes), and they produce them in the same places. So why do they differ in their ability to use institutional change and complexity as a strategic opportunity?

There are generally two dominant schools of thought explaining this difference. The first is that Nike and Adidas had managers with higher cognitive capabilities (Peteraf & Helfat 2015). These managers are thought to have had "superior mental associative processes", which made them capable of seeing new opportunities (Gavetti 2012, Helfat & Peteraf 2015 p. 833). This first view is clearly the most dominant research stream in the strategic management literature (Powell, Lovallo & Fox 2011). There is, however, a second explanation, which is that CSR is a result of institutionalized behavior (Bromley & Meyer 2015, DiMaggio & Powell 1983). In new institutionalism, it is argued that organizations must be congruent with their institutional

environment, which is often defined as cultural-cognitive norms and values that shape taken-for-granted beliefs. As such, CSR is simply a rationalized myth that organizations adhere to without deliberation (Bromley & Meyer 2015). This second view is the most popular in organizational sociology (Meyer 2010).

However, in order to understand decision-making, we must take both structures and cognitive limitations and proclivities into account (Ocasio, 1997, Simon, 1947). While Simon (1947) argued for the consideration of both structures and cognitive limitations, it is fair to say that cognitive limitations have received the most attention (Powell, Lovallo & Fox, 2011). Although the concept of bounded rationality has become ubiquitous, this idea is quite limited because it only refers to cognitive limitations, whereas a full understanding of psychological micro-foundations also would include structural effects (Powell et al. 2011, Simon 1947). Here, we see a core problem in the literature, namely that the notion of agency and structures are often not connected (Micelotta et al. 2017). Separating into two distinct views, leaves them bare in explaining real life events, because the cognitive theory becomes under-socialized with little explanatory power besides internal cognitive processes (Granovetter, 1985) while the other becomes over-socialized with an unrealistic appreciation of structure and too little agency (Heugens & Landers, 2009).

This paper therefore seeks to link structural and agentic explanations of organizational responses to institutional change. The core idea is to apply micro-foundations of institutional logics to the concept of organizational responses (Thornton, Ocasio & Lounsbury, 2012), and by doing so bring institutional logics into contact with the BTF in order to connect the two blades of Simon's scissor of decision-making: structures, such as institutional logics, and cognitive proclivities, such as cognitive limitations and biases. The core argument of this paper states that when individuals work in an organization that is central and embedded in a field, they learn a firm set of representational and information processing schemata (what Swidler (1986, 2008) calls a cultural toolkit) of how to act in that field. Because these schemata are preconscious (what Kahneman (2003) popularized as "system 1" thinking), people rely on them automatically. Therefore, despite that a field changes in the institutional logics governing it, individuals may not embrace change because the change does not fit with their schemata, which are resistant to change despite having reached the end of their usefulness (Seo & Creed, 2002). Here, I argue that working in different organizations creates different contingencies regarding how individuals frame and respond to institutional change. Members in embedded and central organizations have invested in a specific set of schemata that is resistant to change. Hence, the managers in these organizations are more

inclined to try to maintain the status quo. Organizations on the periphery or who bridge fields filter a more diverse set of schemata down to their members. These members are therefore less cognitively constrained and more unencumbered (Greenwood & Suddaby, 2006, Sherer, 2017). Therefore, these members are more likely to see change as a strategic opportunity and thereby embrace the change with an offensive response.

By building this argument I demonstrate a stronger and clearer link between institutions and their logics at the macro-level and in individual decision-making. By making this link more salient, I can connect the sociological perspective, which dominates the institutional logics perspective, with the psychological perspective, which prevails in the BTF. Thereby, I strive to link the macro-determinants that institutional logics focuses on with the micro-determinants that the BTF focuses on. This improves our understanding of organizational responses to institutional change because it enables the connection of macro-determinants, such as the characteristics of institutional fields, with micro-determinants, such as the characteristics of individuals and groups, resulting in a more holistic explanation.

The paper with theoretical review, where I outline the institutional logics perspective on culture and cognition and organizational responses to institutional change. I then compare this perspective with the BTF to demonstrate how the two perspectives can complement each other in understanding organizational responses to institutional change. I then build my arguments and propositions on how organizations and decision makers differ in their responses to institutional change. Finally, I offer a discussion on what this entails for the micro-foundations of institutional logics. This discussion circles around the proposed idea that institutional logics and BTF could mutually benefit one another, especially in the manner they explore managerial framings and decision-making (Gavetti, Greve Levinthal & Ocasio 2012). This paper contributes to the discussion on organizational responses to institutional change. I argue that we need both approaches to take into consideration how individuals are shaped by macro-level logics as well as individual characteristics and group-level processes, which is necessary to create a more holistic understanding of organizational responses to institutional change.

Theoretical review

The institutional logics perspective on cognition

The crux of the institutional logics perspective (ILP) is avoiding both an under-socialized view, where individuals are not shaped in anyway by structural elements, as well as an over-socialized view, where individuals are fully formed by structural elements. Instead, ILP promotes an embedded agency approach, where agents can form own action but are given tools and some constraint by their environment (Granovetter, 1985, Swidler, 1986, Thornton et al. 2012). This perspective argues that we have purposeful agents, but also agents who cannot perform meaningful actions without drawing on cultural phenomena. Not only is this perspective gaining traction in sociology (Cerulo, 2010, DiMaggio, 1997, Vaisey, 2008), it is also coming to the attention of scholars in strategy, who need behavioral foundations that are not solely reduced to the cognitive level and include structural explanations (Powell et al. 2011).

Thornton et al. (2012 p.80) propose a view of human behavior from an institutional logics perspective, stating: "*Our model of human behavior views social actors as embedded in social, cultural, and political structures and as guided by cognitively bounded identities and goals.*" This statement forms the concept of bounded intentionality (Thornton et al. 2012). Intentionality is defined as the power of our minds to be about something, to represent something and stand for something (Searle 1995). As such, the term "bounded intentionality" refers to a constraint on the ability to imagine state of affairs in a particular way.

Agents are embedded in social networks and structures. This helps agents form schemata, as they use (and sometimes) internalize norms, values, beliefs and practices. These systems help them form social identities, goals and schemata that can be seen as a cultural toolkit (Swidler 1986, Thornton et al. 2012). These toolkits both enable and limit action depending on their availability and presence to individuals. For example, Swidler (1986) argues that youth living in a slum have a hard time using middle class values to achieve higher social status because these values are simply not available. This is not a question of social programming, but rather simply being unable to act according to norms because these norms are unknown. This is an example of bounded

intentionality, where the subject is unable to imagine a different way of doing things and therefore cannot escape the current state of affairs.

It may be difficult to escape the slum, not because one is socialized into accepting the slum as a given and there therefore do not consider alternatives, an argument made by socialization proponents (e.g. Meyer, 2010), but because someone growing up in the slum does not have the toolkit to succeed outside. This does not mean that someone is determined to stay in the slum, but that it takes create effort to obtain a different cultural toolkit and break out. Here bounded intentionality is somewhat similar to how Kahneman (2003) view bounded rationality; we are bounded to certain beliefs and cognitive processing mechanisms, but we can escape them giving time, space and training.

Bounded intentionality takes the form of internalized dispositions consisting of schemata that prioritize particular stimuli and disregard other, thereby shaping perceptions, beliefs and actions (DiMaggio 1997). Schemata are both representations of knowledge and information processing mechanisms (DiMaggio 1997). The array of schemata the individual has at his or her disposal is what bounds the individual's cognitive and practical understanding of the world. As Scott (2003 p.885) states, "*Their meaning is mediated by frames: 'interpretive schema that simplifies and condenses the 'world out there' by punctuating and encoding objects, situations, events, experiences, and sequences of action.'*" The framing resulting from schemata is important because it may stop people from seeing the ability to change institutions or recognizing that institutions are changing (Scott 2003, Werner & Cornelissen 2014). It is important to note that this framing is cognitive and is a proclivity for seeing things in a certain way; it is not an active framing through the use of metaphors. Framing can be dynamic or stable based on two determinants; cognitive personality traits, such as openness, makes one more open to re-framing things, and second, an individual's position in a field or network also matters.

When people are embedded in a network and social position, they internalize the schemata of that field, i.e., they gain a "feel of the game". People draw on this "feel" to define and solve tasks without using conscious and deliberate cognition (DiMaggio 1997). Therefore, the form of institutional cognition is often defined by this automatic drawing on built-up schemata in the form of habits or routines. This "feel" is difficult to divorce from bias, as it solidified into norms that are taken for granted (Scott 2003).

Schemata is similar to Kahneman-Tversky's research program on heuristics and biases, except the schemata is the result of structures, not lack of cognitive processing power. Schemata can therefore be seen as representing the structural blade of Simon's scissor, whereas heuristics and biases represent the cognitive side. Schemata and heuristics/biases work the same way – they limit how much information we take in, how we use it and thereby how we think and act (DiMaggio 1997, Kahneman 2003). Ocasio (1997) and later Thornton et al. (2012) build on Simon's theory by proposing that institutional logics are the structures that shape our attention, which in turn shapes our decision-making and actions. In this way, institutional logics create a consistency of action, values and norms, which the individual internalizes as schemata that then create frames and enforce the consistency of logics (Thornton et al. 2012). The stability of frames is dependent their previous success, and when agents have successfully learned to navigate their environment, they are disinclined to abandon their frames (Swidler 2008).

Organizations play a role in how institutional logics shape attention and schemata. Organizations filter logics to their members (Pache & Santos 2013a). In comparison to an organization that is more de-coupled from institutional logic, members in organizations that are tightly bound to a logic develop schemata that are more consistent with that logic. In line with this, Greenwood and Suddaby (2006) propose that organizations that bridge fields are more likely to decouple themselves from existing prescriptions and instead act as entrepreneurs who create their own prescriptions.

To sum up my short walkthrough of the current view of cognition in institutional logics is the idea that Thornton et al. (2012) put forward to explain the relation between macro-level structures and individual behavior: logics shape attention. The degree to which logics shape attention is dependent on organizational position. The shaping of attention affects decision-making and action, which in turn produces schemata. Sets of schemata becomes frames, hence logics become guidelines of micro-level. Strong schemata take the shape of taken-for-granted ways of thinking about things (Scott, 2003, Werner & Cornelissen, 2014), which reduces an individual's ability to recognize and legitimize new opportunities (Gavetti, 2012).

The view on organizational responses to institutional change
In her seminal paper, Oliver (1991) argued that organizations not only act isomorphic to institutional processes but also choose strategic responses to institutional processes and change.

Here the notions are that organizations may acquiesce, compromise, avoid or manipulate the demands from the environment[20] (Oliver 1991, Pache & Santos, 2010).

Recently, this school of thought has focused on one particular form of change – the rise of a competing logic that makes a field institutionally complex (Pache & Santos, 2010, Raiijmakers, Vermeulen, Meeus & Zietsma, 2015). Institutional change is a complex research area with multiple definitions (Micelotta et al. 2017). This paper does not focus on the nature of change, but rather examines the macro-to-micro link (instead of the macro-to-macro link) in the case of change. Therefore, this paper works with a simple definition of institutional change and defines this as occurring when a dominant logic is either replaced (displacement) or challenged by a new logic (institutional complexity).

Contingencies explored in the literature on organizational responses to date have focused on the power of outside pressure, such as whether regulative pressure is strong or weak, whether the field is united or fragmented, whether pressure is diffuse or clear or whether the organization is in a central position where it is caught in the "spotlight" of external stakeholders (Greenwood et al. 2011, Raaijmakers et al. 2015). These contingencies are inherently institutionalist in the way that the mechanisms of individual and organizational action are determined by institutional forces (Agassi 1975). This excludes micro-foundational aspects that focus on individuals as the basis for social explanations (Abell, Felin & Foss 2014, Coleman 1990, Felin, Foss & Ployhart 2015, Levi-Martin, 2011, Thornton et al. 2012). The problem with the current view that institutional pressures and advantages drive responses, is that unless decision makers are perfectly rational (or irrational for that matter), how they see macro-level changes affects their responses. This is essentially the idea of behavioral economics program, which in rough term states that individuals may not choose a perfectly rational decision in a market because of limited cognitive powers. In other words, individuals may not see the opportunities or advantages due to cognitive characteristics. This perspective is what the literature on organizational responses is lacking. Without a micro-foundational view of the differences in individuals, researchers are either working with perfectly rational "supermen" or perfectly stupid cultural dopes (Jarvis, 2017, Suddaby, 2010).

Recently, some institutionalists have embraced micro-foundations. For example, Thornton et al. (2012) explicitly argues in favor of considering cognitive elements of individuals and groups. Here, the authors take a stance towards framing through the before-mentioned toolkit approach.

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[20] See Pache & Santos (2010) for a more detailed overview of the strategies.

This changes the view of organizational responses to institutional change because it becomes not as much about following norms or complying with institutional demands, but rather about how institutional forces shape beliefs and decision-making.

The literature has moved in the direction of framing institutional change and complexity as strategic opportunities that can be exploited (Ocasio & Radoynovska 2016). Ocasio and Radoynovska (2016) propose that firms may change their governance structures and business models depending on whether they frame the change, here in the form of the rise of institutional complexity, as a beneficial strategic opportunity or a problem. Comparably, Bertels and Lawrence (2016) note that it is individual agents who experience the complex logics and conjure up responses. In their study of schools, Bertels and Lawrence (2016) discovered that the sensemaking of the people in charge affected the overall organizational response. If leaders did not perceive the complexity as significant, they would re-interpret the complexity as being unimportant and unworthy of response. That it is the framing by individuals that affects decisions leads to a new question: How do individuals come to operate with certain frames and how do they differ? Here, Pache and Santos' (2013a) argument that organizations "filter" a frame to their members is notable. This idea connects to organizational position in that if an organization is central, i.e. elite status in the field (Greenwood & Suddaby, 2006), and is embedded, i.e. if it has a long history in the field, then it socializes its members to develop a frame that fits that field (Greenwood & Suddaby, 2006, Pache & Santos, 2013a). A firm like Boeing, for example, would be considered both central and embedded in the field of aviation, and thus elite. In contrast, other organizations may be at the periphery of their field (Greenwood et al. 2011). These organizations may be not as entrenched in institutional relationships and demands, which, while allowing greater flexibility, may lead to being advantaged by existing arrangements (Greenwood et al. 2011). The dissatisfaction with being disadvantaged may lead organizations to perform "boundary bridging" and enter new fields to compete here or to bring in elements that change their" home" field (Greenwood & Suddaby, 2006).

While it is well known that central organizations, as result of being advantaged, have less reason to conduct institutional entrepreneurship, it is also proposed that they would be less prone to see opportunities for such entrepreneurship or in other ways respond positively to change (Greenwood et al. 2011, Greeenwood & Suddaby, 2006). In contrast, organizations on the fringe of a field would be more exposed to institutional contradictions because the organization comes into contact with other fields (Greenwood & Suddaby, 2006). Despite these conjectures, how managers come

to understand and frame the contradictions they are exposed to, such as the displacement of an existing arrangement or a new competing set of ideas entering the arena, is not well understood.

The notion of the framing of opportunities and managerial decisions brings the ILP closer to the literature of BTF literature (Gavetti et al. 2012). In a recent review of the literature, Gavetti et al. (2012) note that there are complements between institutional logics literature and BTF. BTF explains the micro-determinants of decisions on both the individual and group level in the firm, while institutional logics are macro-determinants that explain how the environment affects decision-making. Despite this review by Gavetti et al., these links have not been fully explored.

Comparison between institutional logics and BTF

Table 1 summarizes the differences and similarities between institutional logics and the BTF. The purpose of this comparison is to identify elements where the two theories already converge and to find future areas where they can complement each other.

Table 1 Comparison between institutional logics and BTF

Explanatory factor	Convergent assumptions	Institutional logics	Behavioral theory of the firm
Cognition of individuals	Decision makers will select among available organizational moves depending on where they place attention. Attention and cognition are limited resources.	Decision makers' attention and decision-making ability is shaped and constrained by structural factors. Decision makers may be blind to opportunities due to lack of access to the right cultural toolkit or a cognitive sunk cost fallacy.	Decision makers' attention and decision-making ability are subject to limited processing power and biases.
Organizational environment	The organizational environment is often very complex and dynamic. Responding to this environment encompasses both adaptive, but mostly routine responses.	The environment consists of socially constructed structures of culture, politics and social networks. Decision makers' tools and cognition are shaped by this social construction.	The environment is a task environment consisting of information where decision makers apply different search strategies.

	The organization acts as filter on the environment.		
Decision-making	Decision makers in firms pursue profit maximization. Decision makers are embedded in networks and coalitions. There may be conflicts between different groups seeking different goals that must be resolved for the organization to function.	Decisions are aimed at extracting resources and legitimacy from the environment. Decision-making is shaped by the cognitive and social embeddedness of decision makers, which incurs "bounded intentionality".	Decision makers seek the nearest satisfying decision due to cognitive limitations and biases. Adaption to the environment encompasses "organizational foolishness" in the form of slack, managerial incentives, symbolic action, ambiguity and loose coupling.
Organizational Strategies	Organizations (firms) have to adapt to their changing environments. Decision makers try to find the best possible strategy to accomplish this. Coalitions, intra-organizational conflicts and organizational structures affect these decisions.	Organizational strategies to respond to the environment are constrained by the environment in the form the strength of institutional pressures.	Firm strategies are constrained by the decision makers' search reach. Decision makers rely on cognitive abilities to extend their search area, for example by using associative thinking.

Cognition of individuals

The BTF's main assumption about individuals is that they are cognitively limited (Cyert & March, 1963, Gavetti et al. 2012, Simon, 1947). These limitations are reflected in biases and heuristics that individuals use to understand their environment and make decisions. These heuristics and biases can result in different framings. For example, the anchoring bias or representative heuristic can frame situations and decisions in a certain way (Kahneman, 2003).

The ILP makes the same assumptions about individuals' cognitive capabilities, but the perspective strives to connect these psychological assumptions with sociological perspectives so as to make

the asocial theory of cognitive proclivities and limitations into a social theory that ties into the institutional level (Thornton et al. 2012). While Thornton et al. (2012) retain the psychological assumptions of BTF, they do not expand on these but rather focus on the sociological perspectives outlined in the previous section on the ILP's view on cognition. It is especially these macro-determinants of organizational attention that could be incorporated into BTF (Gavetti et al. 2012, p. 16).

Organizational Environment

One important obstacle to accomplishing such a linkage between macro- and micro-determinants is the differences between cultural, political and social structures outside of the organization and information processing inside the organization. Behavioral theory of the firm solves this issue by reducing the environment to an information landscape where decision makers search for the right information and possible solutions (Gavetti, 2012). In contrast, ILP considers the environment to not solely consist of information, tasks and solutions, but also to extend to social relations, norms, values and identities that are preconscious. An important development in sociology has been to link the cultural perspective with the cognitive perspective (Cerulo, 2010, DiMaggio, 1997). This cognitive development in sociology could allow the ILP to integrate more with BTF, as the obstacle of linking external cultural elements with the internal information processing of individuals is overcome.

Decision-making

A contribution of BTF is that decision-making in organizations is not perfectly rational, but rather is bounded, satisficing and shaped by political processes within the firm (Cyert & March, 1963, Gavetti, Levinthal & Ocasio, 2007, Simon, 1947). This contribution focuses on the micro-level of the firm, considering the individual's cognition and interactions between people. In contrast, ILP focuses on the macro-level elements that determine decision-making, which in extreme treatments reduces individual decisions to non-choice; they have to accommodate institutional pressures (Oliver, 1991). In less extreme versions, decisions are directed towards obtaining legitimacy and resources from the environment, which differentiates the ILP from the BTF; in ILP the environment asserts itself on decision makers by pushing certain values, norms and practices to the forefront, whereas in BTF, decision makers search the environment.

Organizational strategies

A crucial difference in how each perspective conceptualizes constraints on firm strategy, how they adapt to the environment. For ILP the constraints are mostly related to the environment, it is how strong the institutional pressures are, which depends on the fragmentation of the field and the organizational position (Greenwood et al. 2011). For BTF the constraints are internal. In essence, decision makers may not identify the best strategy because it is cognitively distant to them (Gavetti, 2012).

To conclude my theoretical review, I outline and elaborate on the ILP view on cognition and how it relates to the literature on organizational responses to institutional change, mostly with regard to the shift towards institutional complexity. The basic argument is that decision makers' information processing and framing of such a shift or change is limited by bounded intentionality, which may vary depending on which organization the decision makers belong to. This view differs from the traditional institutional view that promotes a non-choice framework (Oliver, 1991, Raiijmakers et al. 2015). The ILP view on cognition may integrate with BTF as both perspectives have several convergent assumptions as the ILP moves to the micro-level. Here especially, the connection between macro- and micro-level determinants, essentially how institutional environments affects the processes inside the firm, is promising (Gavetti et al. 2012). To facilitate such connection, it is necessary to connect cultural elements, the structural blade of Simon's scissor, with the information processing of individuals, the cognitive blade of Simon's scissor. Moreover, it is crucial to establish how different organizational positions incurs variances in responses, otherwise the institutional environment cannot explain variances in strategies of firms in the same field. By developing the cultural-cognitive link of ILP further, and proposing such variances, we can provide a varied theory of how the institutional environment, as macro-determinants, shape attention and schemata, that provides the mental maps and search landscapes that BTF operates in. Hence, the link becomes clearer and we can find a role of both ILP and BTF in explaining organizational responses to institutional change in greater depth.

The effect of previous organizational position on managerial decision-making

My primary theoretical argument is that organizational position filters logics to its decision makers to varying degrees, which in turn shapes how they frame change and how they act. Organizational position is simplified into two opposites on a spectrum. Organizations can either

be central and embedded, what Greenwood and Suddaby (2006) call "elite", or they can be peripheral and/or boundary bridging.

I offer four propositions, for each of which my argument takes two forms: a theoretical backstory and a deductive line of reasoning.

Theoretical backstory for proposition 1

Organizations are considered legitimate when they adhere to the audience's precognition of how they should behave (Hannan, Polós & Carroll 2007). When successful, the organization embeds itself more into the field and, in good cases, it becomes a central actor. High status in a field is the positive side of embeddedness and centrality, a firm becomes recognized as high status in a field, because it fits the exact prototype that the audience expects of an organization in that particular field (Hannan et al. 2007). Banks are a classic example of high status organizations. Big banks often reside in impressive buildings, the reason for this being that people must trust banks, as nobody would entrust their money to a bank that seemed short of cash, so banks must project stability and prestige. Legitimate entry can be very costly. Outsiders often have to pay homage to insiders in order to be allowed entrance. Outsiders have to defer to the logic(s) of the field and show they are able to follow the "rules" (Jourdan, Durand & Thornton 2017). There are two key outcomes of this. First, managers create schemata that fit their field as people gain a "feel of the game" and starts to rely on automatic cognition in adhering to the values and rules of the field (DiMaggio 1997). Managers, who have made their firms into central players in a field, become attached to the decisions and actions that made them successful. Miller (1994) finds that after experiencing success, managers show a greater tendency to draw on the past and do less deliberate information processing. This tendency is reinforced by CEOs and key decision makers being flattered by others due to their status (Westphal & Zajac 2013). It is in spirit the hot-hand fallacy, where previous success leads to a belief that current practices will also be successful in the future. Second, in order to become a manager in these firms, one has to fit into a social network that promotes such schemata. This leads to some form of inbreeding, where managers have to identify with the arrangement in order to be deemed legitimate. Examples of this include firms hiring top managers based on a particular education and long tenure within the firm (Burgelman & Grove 1996). This is seen with German car manufacturers, such as Mercedes-Benz. They traditionally hire top managers from within the company who hold technical degrees. Another example is Boeing, which has a similar tradition with regard to hiring. Evaluating a list of CEOs in these

firms, it would be surprising to find someone who has not 1) been with the company for many years or 2) come from a close competitor. This argument is further backed by research, for example, Zhu and Westphal (2014) discovered that even if CEOs were prohibited from hiring people very similar to themselves, they would hire people who had worked with a CEO similar to them, in other words they used similar CEOs as proxies for themselves.

This illustrates that managers have to fit specific categories to gain legitimacy (Hannan et al. 2007). Organizations with embedded networks where people are recruited from within resemble a kind of private party. For this reason, people with short tenure in the relevant organization or field are less likely to obtain powerful positions. These are the people, who otherwise are most likely to carry out institutional entrepreneurship (Battilana 2006). Companies like Mercedes-Benz and Boeing are "pure" members in their field, therefore "the zone legitimacy", i.e. ways you can act, is clearly defined (Hannan et al. 2007, Zuckerman 1999). The organization's position in a field acts as a filter to its members (Pache & Santos 2013a), a filter that takes form of available networks and knowledge (Pache & Santos 2013a). Because of the clearer zone of legitimacy in embedded and central organization, the filtering is clearer and the logic takes a more a salient demeanor, which makes members of the organization identify with it (Pache & Santos 2013a). Scholars have argued for a "paradox of embeddedness", where individuals and organizations are so embedded into a field that they are impervious to knowledge outside their network and to exogenous shocks (Seo & Creed, 2002, Uzzi, 1997). But such embeddedness also creates a conform and strong set of schemata that individuals obtain from being in such a closed network. They become cognitively constrained to conventional wisdom (Sherer, 2017).

Deductive Line of reasoning:

1) Central and embedded organizations face stricter institutional pressure but are also advantaged by the current arrangements (Greenwood et al. 2011). Given their advantages, these organizations become successful because they adhere to rules and therefore gain legitimacy and resources.

2) The success that follows centrality and embeddedness leads managers to build schemata that lay out ways to replicate the success (Bingham & Kahl 2014). Managers, who have been successful, will rely more on the schemata they have obtained as they look to the past and reduce conscious information processing (Miller, 1994). A feedback mechanism takes

place where playing by the rules and being advantaged by the system, leads managers to internalize the successful behaviors and ideas that has led to this advantage.

3) In order to reinforce existing ideas, CEOs and managers tend to hire people into their management group who are similar to themselves and who will support their ideas (Zhu & Westphal 2014). On a micro-level, managers therefore have the same problem of embeddedness as firms; they insulate themselves from information outside their network (Uzzi, 1997).

Based on this, I propose:

Proposition 1: The higher the embeddedness and centrality of an organization, the higher the conformity and coupling of managerial schemata to its specific field.

Theoretical backstory for proposition 2

Agents that are truly embedded are not supposed to be able to imagine, desire or realize any alternative ways of doing things, because the embeddedness into institutional arrangements define and conform their cognition and interests (Hardy & Maguire 2008). In contrast, organizations on the periphery of their field are less embedded in current arrangements and are more exposed to contradictions as they come into contact with other fields (Greenwood et al. 2011, Greenwood & Suddaby, 2006).

Organizations on the periphery may span across their field and into another. In some rare cases, even organizations at the center of mature fields may be subjected to contradictions and begin to bridge to a new field, which enables them to create new organizational forms (Greenwood & Suddaby, 2006).

Greenwood & Suddaby (2006) uses a study of big accountancy firms to illustrate this. These firms were increasingly asked by clients to offer multidisciplinary services, as they grew larger and more multinational. As a result, the Big Four accountancy firms started to offer consulting services. Thus, they bridged from the accountancy field to a consultancy field. Greenwood & Suddaby's (2006) story is that stakeholders wanted firms that linked accountancy with consultancy, as they felt these services were related and would gain from being connected. Therefore, they pushed the big four accountancy firms to assume this position. The big four acquiesced and integrated consultancy services. Boundary bridging organizations work with different stakeholders that have diverse demands that create different experiences. The

organization now works in two or more fields. The organization becomes multi-logical as a result (Greenwood & Suddaby 2006). When the organizational position is bridging the individuals will work under different logics. As the organizational position includes different logics, the organization is presented with different schemata and tools attached to these logics. People in such organizations have different networks that are not embedded into one logic and its field. However, boundary bridging is not a necessity for being exposed to new ideas and institutional contradictions. Being on the margin of a field can lead important players to have different and unencumbered views, as individuals in such organizations are less cognitively constrained than industry insiders (Sherer, 2017).

Being on the periphery of a field and/or bridging boundaries with a different field has two important results: 1) the networks inside the firm become more open and diverse and 2) the original logic is not filtered as purely as in anthe embedded organization, because the organization broadens what is filtered through. Because of this, people in the organization must be able to switch between logics (Jarzabkowski et al. 2013), which makes for a more dynamic organization.

Deductive line of reasoning

1) Organizations that are on the periphery are less cognitively constrained than embedded and central organizations and are more exposed to ideas from other fields (Greenwood et al. 2011, Sherer, 2017). Organizations that bridge into other fields meet new customer and demands which incurs them to produce a new set of schemata (Bingham & Eisenhardt, 2014). Therefore, being peripheral and/or boundary bridging reduces the tight adherence to conventional wisdom and opens organizations to outside ideas (Sherer, 2017, Uzzi, 1997).

2) Managers in peripheral and boundary bridging organizations are less enforced to hire other managers who are similar to them. They are also incentivized to hire managers who can fit the adjacent field they are close to or already operating in.

3) As being on the periphery increases the diversity of networks (Uzzi, 1997), it is more likely that outsiders with new ideas will meet insiders and exchange these new ideas (Sherer 2017).

Therefore, I propose:

Proposition 2: The more peripheral and/or boundary bridging the organization is, the more diverse the managerial schemata will be.

Seeing institutional change as a strategic opportunity

Scholars have argued for a "paradox of embeddedness", where embeddedness (and centrality) leads to increased success, until a point where the embeddedness insulates organizations from exogenous shocks outside their network (Seo & Creed, 2002, Uzzi, 1997). Yet, this "paradox" lacks some explanatory power; what happens when the whole field changes? Will the organization that has been embedded and central be as open to such change as an organization on the periphery? I will argue that because being embedded in a field creates different representational and information processing schemata than those resulting from being in peripheral organization, the framing of institutional change in embedded organizations will likewise differ.

Theoretical Backstory for proposition 3

How organizations apprehend institutional change is not as much defined by limits in information processing capability, as it is limited by embeddedness.

Being in an organization where the status quo is highly valued blocks how willing people are to apprehend change (Voronov & Yorks 2015). As Granovetter (1985) points out people are shaped by previous interactions with people and value close social relations, therefore breaking with close social norms have emotional consequences, which Voronov & Yorks (2015) also point out. Accordingly, people deeply ingrained into a field, where the organizational culture is tightly coupled to it, may come to it as a natural state of affairs, despite it being the result of cultural choices and processes. When institutional change arises, it presents itself as new practices and worldviews and the organization may face demands to use them, but a key notion is that they also might decouple and not respond at all or window dress (Bromley & Powell 2012). CSR policies and their actual effects are an example of this behavior. The organization shaped by its historical habits may not be moved be outside demands nor the infusion of new practices into its field. If the organization perceive its current operations as fully functioning, there would be little room for apprehension to novel ideas (Siggelkow 2001). The reason is that the bounds to decision making here are historical and cultural (Oliver, 1997). The more embedded and central the organization has been in the past the stronger its organizational culture is aimed at reproducing that success. Burgelman & Grove state in their paper on strategic inflection points: *"Corporate strategy reflects top management's beliefs about the basis of success of the firm. Top managers usually rise through the ranks and are deeply influenced by their perception of what made the company successful."*(Burgelman & Grove 1996 p.15) In heavily embedded and central organizations,

managers have achieved success by carrying out actions fitting the logic of the field. They develop schemata that fit the field and which deeply influence their view on what is valuable for the organization. These schemata act as a cultural toolkit, which despite changes in the environment may stay intact (Swidler, 1986, 2008). Oliver (1997) argues that the sunk cost connected with these toolkits is cognitive. In other words, the more one learns to be successful in a field by internalizing schemata, the higher the sunk cost one faces when changing these beliefs. It is well known that people tend to hold on to sunk costs, and when managers have learned schemata and have come to automatically rely on them, they will be disinclined to abandon them for new belief systems. Building on Oliver's (1997) analysis, this implies that managers adhere to "taken-for-granted" rules instead of perceiving interesting new way of doing things, not because these ways are seen as "taken for granted" but because of the mental and emotional detriments to changing them.

Deductive line of reasoning:

In this regard, I propose:

1) Managers in an embedded and central organization have to abandon their set of schemata (or cultural toolkits) to see a change as an opportunity. However, abandoning such learned skills and habits is difficult and undesirable (Swidler, 2008). Here, managers may face a cognitive sunk cost fallacy (Oliver, 1997).
2) Managers face punishment by their close network if they change their views and these are not shared by their network (Voronov & Yorks 2015).
3) The more managers conform to their schemata, the more change originating from other fields is cognitively distant to them (Gavetti 2012).

Therefore, I propose

Proposition 3: Previous heavy embeddedness and centrality is negatively related to managers seeing institutional change as a beneficial strategic opportunity.

Theoretical backstory for proposition 4

Reversibly, the organization that bridges its field would have to operate and familiarize itself with other logics, thus opening the organization for alternatives (Greenwood & Suddaby 2006). In Greenwood & Suddaby's (2006) study of accounting firms, the firms that bridged to other fields

were able to perceive and instigate a change in their own field. They did so be taking in the new elements and training their employees in the new logic.

Greenwood et al (2011) propose that organizations that bridge fields may be reflexively aware of new demands coming in and have greater discretion in their choices. The reflexivity is created by networks that are more diverse, variances in practices and incentives to change. The boundary bridging organization would also have an advantage even if it were unfamiliar with the new logic entering the field because it would have experience switching modes and working multi-logically (Jarzabkowski et al. 2013). By bridging and working with multiple logics, a boundary bridging organization has already had to debate how to combine different elements. In addition, it is more likely to have entrepreneurial spirits who can mobilize power to shake up things. Because the managers in boundary bridging organizations would tend to be more diverse and have more diverse lines of thought, these managers would be more likely to see change as a beneficial strategic opportunity. This is especially true, because the boundary bridging organization are ranked lower than specialized incumbents (Zuckerman 1999), and this increases their incentive to utilize environmental changes compared to a highly central, and therefore more highly ranked organization.

Deductive line of reasoning:

1) The more diverse managerial schemata mean that opportunities from other fields are likely to be less cognitively distant. Moreover, the when the set of schemata are diverse and not tied to previous success, the habits are not as embedded in people.

2) The management group in a boundary bridging organization is more diverse and does not face an internal group mechanism that makes adhere to one logic. Indeed, they are more likely to meet outsiders who present them with new ideas that re-frame change as strategic opportunities (Sherer 2017).

3) The boundary bridging organization are not likely to be central either of the fields they bridge, hence managers may see an opportunity to unseat an incumbent.

Following, I propose:

Proposition 4: Previous boundary bridging is positively related to managers seeing institutional change as a beneficial strategic opportunity.

Managers, who see institutional change as a strategic opportunity are more likely to enact changes such as altering their business model to fit the change (Ocasio & Radoynovska 2016). In contrast, decision makers who frame institutional change as undesirable and a threat to their success and status are more likely to either ignore changes or create defensive strategies (Oliver 1991). As Kahneman-Tversky's seminal research program demonstrated (Kahneman 2003), framing greatly affects how decisions are made, if a situation is framed as a "losing game", people change the decisions they make compared to when the same situation is presented as a "winning game". Kahneman-Tversky also demonstrated that, people use their framings to simulate events (Kahneman & Tversky 1982). People are biased towards easy scenarios, i.e. scenarios in which they can imagine themselves, and biased against what they consider "bizarre" scenarios. Therefore, the framing of institutional change is important as to whether decision makers make the best possible decision. When managers see institutional change as a strategic opportunity, managers frame it as a possible scenario with probable desirable outcomes, it is more likely that people can think out a proper response, compared to managers who frame it as bizarre, and thus costlier in cognitive and emotional resources. Hence, avoidance or dismissal of new logics coming in, thereby simply negating the existence of change, may be a result of framing, not a strategic choice.

Using a simplified spectrum, where the central organization is the embedded (or tightly coupled) one to a logic and the boundary bridging is a more flexible one. I propose that the position affects this framing, because managers develop different cognitive mechanisms, schemata, across the spectrum. At the heart, managers who have been successful or operate in central organizations, wants things to continue the way they are. Contrarily, managers in less central and more bridging organizations would be less tied to an existing paradigm. Scholars have predominately argued that logics appear more or less saliently, however they neglect that it is not necessarily as much saliency as framing of it that matters. Institutional change may be very salient, but also seen as a threat to existing harmony, hence driving negative and defensive responses, such as avoidance or defiance. Contrarily, seeing it as possibility may lead to offensive responses such as embracing new demands for first mover advantage or acting as an institutional entrepreneur in one's field.

This leads to another set of deductive reasoning for the last couple of propositions:

Deductive line of reasoning:

1) Managers in embedded and central organizations are less likely to frame changes as a strategic opportunity and more likely to see them a threat because they face higher cognitive costs in changing their schemata. In comparison, managers in peripheral and boundary bridging organizations face lower cognitive costs.

2) Having a negative frame for a change, for example seeing it as undesirable for one's current arrangements or very different from the status quo, reduces one's ability to comprehend the change and provide an active response (Kahneman & Tversky, 1982). Conversely, finding change more desirable enables one to conjure up active responses (Kahneman & Tversky, 1982).

3) If one have a negative framing one is more prone to choose a defensive response to maintain status quo, whereas a positive framing makes one more prone to chose an offensive response to facilitate the change of status quo.

Therefore, I have two final propositions:

Proposition 5a: Seeing institutional change not as an opportunity, but as a threat increases the likelihood of negative and defensive responses.

Proposition 5b: Seeing institutional change as a strategic opportunity increases the likelihood of positive and offensive responses.

Figure 1 simply illustrates the causal relationship. The important consideration here is that organizational position is a moderator here, not a mediator of institutional pressures as in other models (Greenwood et al. 2011).
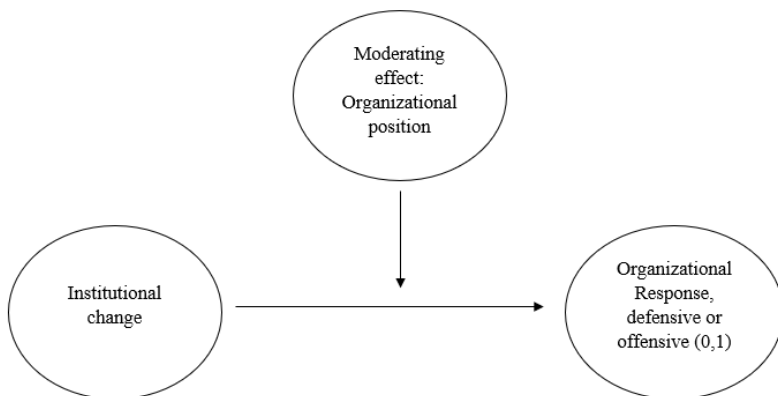
Figure 1 Illustration of the relationship

Discussion

The important change here is where Greenwood et al. (2011 p.342) argue that position can leave organizations (i.e. its managers) unaware of change, this model proposes that organizational position moderates the information and information processing that managers do, because the schemata obtained functions as representations and processors of information, which shape the responses. Thus, the propositions the paper makes and the mechanisms it outlines, change the organizational position from a mediator, a determinant of organizational responses, to an influencer, a moderator. This simple model thereby fits into an overall micro-foundational scheme were individuals play a bigger role than in other institutional paradigms (Thornton et al. 2012). In my discussion, I will analyze how the connections made in the propositions fit together with assumptions from BTF.

Linking ILP and BTF through a micro-foundational perspective.

In my propositions I connect institutional logics as external rules, norms, values, identities and practices to internal schemata. This allows for a link to BTF. I do not seek to expand upon BTF

but by developing ILP from the macro to the micro level (from logics to schemata and framing), I can link it to the micro-level that BTF commonly works on.

In BTF it is assumed that managers have "mental maps" that influence both the information they perceive and how they process it[21] (Siggelkow, 2001 p. 839). The term "mental maps" is simply more popular way to say schemata, and these two concepts refer to the same thing. Where these maps derive from is not well developed in BTF because they are not a result of individual characteristics or solely micro-level interactions within the firm. Nobody is born a corporate strategist, nor can we understand how people interpret and respond to macro-level changes by only examining elements at the micro-level (Coleman, 1990). We therefore need macro-determinants to understand where these mental maps come from (Gavetti et al. 2012). I argue that they are institutional, that we learn mental maps of beliefs and actions because we operate in institutionalized fields when we are employed in organizations. I strive to link macro-determinants (logics and fields) with micro-determinants (individual cognition and group-level interaction). I use Coleman's popular bathtub model to illustrate this (Coleman, 1990).
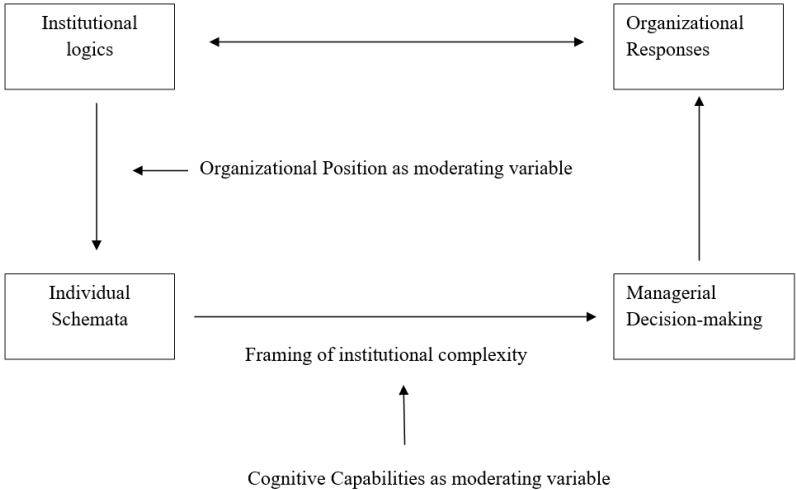
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[21] Other scholars have used terms such as "opportunity box". March (1991) calls them individual beliefs.

Figure 2. Illustration of the micro-foundational relationships and possible integration of BTF ideas

In this model, I follow my propositions that suggest that organizational position acts as a moderator on the schemata of managers[22]. This is what Hedstrom and Swedberg (1998) term the "situational mechanism" or the "belief forming mechanism". This mechanism forms beliefs, frames and modes of action, which in institutional logics literature is accomplished by shaping and providing schemata to individual agents. Here, this paper contributes by pointing to a variance in these schemata. The organizational position moderates this relationship in the macro-micro model – it does not mediate because individuals can be influenced by logics outside of their organizations, and therefore the organizational position is conceptualized as a moderator.

In the figure above, managerial decision-making refers more to BTF and the work on managerial decision making, which is often in teams. In this model, this managerial decision-making is shaped by the framing of institutional change. The connection between the second and third box is the action formation mechanism (Hedstrom & Swedberg 1998). Managerial decision-making is affected by social and institutional constraints, not only cognitive ones. These institutional constraints to some degree shape thinking in the management group, however, it does not determine as other elements are at play. While the schemata produce a frame, the stability and strength of the frame is moderated by cognitive elements, for example if a person has a higher IQ or higher associative capability, then this person would be more likely to reflect over the situation. Similarly, a personality trait such as openness may make a person that is otherwise strongly embedded into a field willing to change.

Therefore, while institutions shape the frames so that some possibilities and opportunities are more cognitively distant than others, this effect is moderated by specific cognitive processes, such as associative ability (Gavetti 2012). For this reason, some agents are able to see beyond existing prescriptions and break with existing frames (Thornton et al 2012). BTF scholars refer to the cognitive capabilities as "micro-determinants". In my model, both macro and micro determinants can vary and thus moderate the result. The next mechanism is the transformation mechanism, where individual decisions aggregate to an organizational outcome (Hedstrom & Swedberg 1998). This mechanism is essentially the result of an interaction effect between structural conditions,

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[22] This is if we look at the macro-to-micro link up. If we just look at two organizations in the same field (thereby using logics as a control, not a changing variable), then organizational position is the main independent variable.

such as coupling to logics, and cognitive conditions, such as openness and ability to create new associations. In table 1 I outlined the convergence and divergence between ILP and BTF. In table 2 I will outline how my paper contributes to more integration.

Explanatory Factor	Problem for institutional logics	Problem for BTF	Contribution of this paper	Integration possibility
Cognition of individuals	How are individuals cognitively different? By putting most of the weight on institutional explanations, we may "black-box" individuals. This means that scholars do not look at how individuals vary in cognitive characteristics, for example schemata and frames.	Where does individual beliefs and mental maps come from? And how do individuals differ in how they perceive information?	Cognition of individuals vary according to what kind of organization they are in. The more embedded and central organization they are in the more sturdy and encumbered are their schemata.	BTF could use the theory of how mental maps, i.e. schemata, are developed and how they vary. The ILP could use theory on how individuals differ in cognitive capabilities to form strategies, for example how individuals vary in associative and search capabilities.
Organizational environment	The organizational environment, such as the nature of institutional pressures, account for most of the variation in how organizations behave. The literature sometimes makes the environment so powerful and encompassing that individual	The organizational environment is a passive reservoir of information and possible strategies. The literature has a tendency to put all the explanatory power on individual cognitive capabilities and political pressures.	The paper argues for a middle position. The environment does actively shape how individuals think in their respective organizations. The environment shapes the "opportunity box" wherein decision makers identify strategic opportunities. But the paper also leaves room	For BTF working with macro determinants from ILP could complement their internal determinants of organizational attention and action. For ILP the ability to link from macro to micro would allow to draw on these internal determinants

	decisions do not matter.		for variance in cognitive capabilities and political processes in the firm.	from BTF, thereby finding more explanatory power in understanding organizational responses to institutional change and complexity.
Decision making	The literature is not strongly developed on the micro-level of decision making. First of because the notions of these micro-foundations are new and just gaining ground. Secondly, the theory has a tendency to swing between rational strategizing and non-choice behavior. The view on decision making lacks balance between these extremes.	The literature has a tendency towards reductionism, for example reducing managerial decision to cognitive capabilities of the managers in question. While group mechanisms do play a large role, going beyond an information processing environment is not well developed. The decision makers become conceptualized as acting in a neutral and sterile environment. For example, how morals and norms reflect in decision making is lacking.	The paper conceptualizes decision makers as imperfectly rational. They are shaped by the environment. Their cognitive frames, the top management team and their network is shaped by varying degrees of embeddedness. Thereby, the paper takes the micro-foundations perspective from ILP and fleshes it out more and introduces contingencies.	Working with the notion that top management teams and networks are shaped by outside forces introduces a new perspective to understanding group dynamics in BTF.
Organizational Strategies	Organizational strategies are either driven by organizational	Organizational strategies are most driven by the micro-level.	The ability to choose and organizational response is	How organizational strategies are shaped both by

	environment or rational strategizing.		affected by previous position.	institutional factors, moderated by organizational position, but also by micro-level mechanisms.

Table 2 Links between ILP and BTF

To exemplify how this link between ILP and BTF, that I am suggesting, may be working, I will turn to recent works on the micro-foundations of behavioral strategy. In his 2013 paper, Greve argues that there are four main behavioral strategies; a momentum, feedback, inferential and anticipatory. These strategies exist on a spectrum from momentum, which is lowest in rationality, to anticipatory, which is highest in rationality (Greve, 2013). The choice between a strategy that is low or high in rationality rests on the decision makers' ability to manage mental processes, for example how proactive managers are able to be in shaping new opportunities and how plastic they are in seeking "strange" opportunities (Gavetti, 2012). Gavetti (2012) argues that choosing a low rationality strategy is the result of a limited "opportunity box", which is constrained by the scope of cognitive processes in managers. The danger of this BTF perspective is that it may reduce organizational ability to act dynamically in changing environments to managerial cognitive abilities (Helfat & Peteraf, 2015). In contrast, this paper argues that an organization's embeddedness in its field matters, as this shapes the bounded intentionality of managers and in effect limits the "opportunity box" they work within. This does not ignore BTF. The ability to break out of this box or see beyond current recipes is likely to be affected by managers' ability to see, shape and associate towards other opportunities.

Why integration of ILP and BTF?

There are two reasons for linking ILP and BTF. First, they share similar ideas of cognition, the core tenet being that there are limits to what individuals see as possible courses of action ILP calls it bounded intentionality, which is shaped by schemata, while the BTF calls it mental maps or opportunity boxes, which is shaped by cognitive limitations. Essentially, these two theories are referring to a different blade of Simon's scissor. If we believe Simon to be right, that both structures as well as cognitive limitations and proclivities play a role in decision-making, then we stand to gain from combining these two perspectives. The second reason is that essentially few

academics, and people in general for that matter, believe that social phenomena can be explained by solely cognitive factors or cultural factors but a combination of these two elements. This is also seen in behavioral strategy, where Powell et al. (2011) precisely argue for a combination. Unfortunately, a combination of both structural and cognitive elements seems rare.

In recent years, management research seems to have embraced a very reductionist view of decision-making. For example, Helfat & Peteraf (2015) argue that dynamic capabilities can be reduced to managerial cognitive capabilities. Gavetti (2012 p. 270) argues that firm failure to compete for opportunities rest on behavioral (mental process) failures of their manager: *"Behavioral failures can be viewed in terms of limits to strategic leaders' abilities to manage and overcome such mental impediments."* For example, Laureiro-Martinez, Brusoni, Canessa & Zollo (2015) look at fMRI images to analyze how persons shift between exploration and exploitation. On its own there is nothing wrong with these studies, but if this becomes the dominant (and possibly only) trend, then we risk reducing firm differences to a matter of IQ differences in managers. To this author, this would be a case of "greedy reductionism" (Pinker, 2002), here on the part of strategic management research. On the other hand, sociologists' (including institutional scholars) reduction of decision making, or more precisely the removal of decision making, represents a contrasting side of greedy reductionism. Vaisey (2008 p. 605) offers a provoking analysis of this tendency, according to which we risk reducing culture to a "Skinnerian Model" of behaviorism, in which individuals and their choices are the product of cultural materials and forces (see Meyer, 2010 for this view). This model makes it wholly unnecessary to examine micro-foundations, individuals and groups (Jepperson & Meyer, 2011). Neither of these extreme views are desirable. A more realistic perspective is that, while cognitive abilities and proclivities in individuals matter, institutions and their surrounding logics are relevant for consideration as well. The perspective I am striving for argues that institutional logics shape decision makers but also leave room for micro-level mechanisms, such as cognitive capabilities and group dynamics. I do not contribute by developing these micro-level mechanisms further, as other papers have done, but rather by attempting to make room for them in the ILP.

Contributions

The paper makes contributions to our understanding of organizational responses to institutional changes by developing the macro-micro link and putting in the variance of organizational position. This allows us to understand these responses from both angles and avoids taking an exclusively

macro-level view. Moreover, I connect ideas from BTF and ILP that allows the bridging of perspectives between macro- and micro-concerns, which in future could be used by studies that seek to combine approaches. Finally, this paper presents some managerial implications relating to the differences in having top management teams with schemata that are strong and tightly connected to one field versus having management teams with diverse schemata.

Contributions to the study of organizational responses to institutional change and complexity

There is a rich and sizable body of literature on how organizations respond to (or strategize) institutional change and complexity (Micelotta et al. 2017, Oliver, 1991, Pache & Santos, 2010, Voronov & Yorks, 2015). One of the main shortfalls of this literature, however, is that it is weak with regard to the macro-micro link and the variance between individuals. As Suddaby (2010 p. 15) notes, institutional theory tends to vacillate between assuming passive cultural dopes and rational, over-active "supermen". I argue that this is problematic because by only focusing on macro-level explanations the same problem arises as was seen in neoclassical economics before the behavioral revolution – the need to work with a perfectly rational actor in order to aggregate micro-level behavior to macro-level outcomes[23]. Now, institutional theory usually has a non-choice actor that isomorphs to the environment (DiMaggio & Powell, 1983, Meyer & Rowan, 1977). In her work, Oliver (1991) changed this figure to a more rational actor, and combined with DiMaggio's work on institutional entrepreneurship (1988, 1991) the literature developed into a sort of "hero story" about individuals and organizations where individuals are attributed remarkable capacity to act and change institutions at their discretion (Micelotta et al. 2017). To solve this, we need to have variance on the micro-level, where individuals and organizations can differ. Otherwise, we would only have macro-to-macro level explanations with either dopes or heroes carrying out these changes. The development of the macro-micro link in this paper could be used for future research that seeks to understand how individuals and organizations respond differently to institutional change and complexity. Moreover, it could be used to improve our understanding of the paradox of embeddedness and the paradox of "peripheralness" (Sherer, 2017).

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[23] Some saw this as a strength of economic theory because the rational actor models allowed for a strong link between individual choices and macro level outcomes. James Coleman is probably the most known proponent of this view (Coleman, 1990).

Contributions the micro-foundations of Institutional Logics and linking with Behavioral Theory of the firm

This paper seeks to expand on the micro-foundations outlined by Thornton et al. (2012). A common problem in institutional theory (and logics) has been the lack of strong micro-foundations (Jarvis, 2017, Schilke, 2017, Thornton et al. 2012, Voronov & Yorks, 2015). Here the paper contributes by exploring the link between logics and schemata, which has been mentioned in other work (Seo & Creed, 2002, Thornton et al. 2012), but which is not fully developed. The mechanisms I set out are supposed to be testable and could improve our understanding of the interplay between logics and organizational decision making.

The relationship I am suggesting helps understand why logics both can constrain and enable action. Here I argue that action in the form of strategic responses depend on the framing of institutional change as either a strategic opportunity or more a threat to an existing arrangement that one prefers. Logics may therefore constrain some people and some organizations, while other people and organizations are not as cognitively constrained. Here the paper connects with the institutional entrepreneurship and institutional work literature (e.g. Battilana 2006, Lawrence & Suddaby 2006), but this paper adds a distinct cognitive dimension that the literature on responses have not operationalized clearly. Moreover, the paper contributes to the literature on organizational responses to institutional change, through this micro-foundational view that includes psychological mechanisms.

These psychological mechanisms allow for a connection to BTF, seen in how ILP can explain the origin of managers' mental maps and opportunity boxes because it utilizes a cultural dimension with macro-determinants. This allows us to understand the differences in managers' capacities to find and chose opportunities that goes beyond considering only their cognitive abilities, thereby allowing for more holistic view of managerial decision making as envisioned by Gavetti et al. (2012). Future work in BTF could use the ideas in this paper to complement their micro-level analysis by including institutional logics and organizational position as a variable.

Managerial Implications

When considering institutional framing, there are some important managerial implications. As several scholars have noted, institutional change and complexity is in essence also opportunity, it is the breakdown of old structures, which opens up gap that can be exploited by the opportunistic

and open-minded organization. How the change and/or complexity is framed could have significant impact on the success and survival of the firm. This framing is very much dependent on the constellation of managers and the schemata they have obtained. Managers' immersion into different fields is crucial for them to be able to frame change as opportunities (Shepherd, McMullen & Ocasio 2016). Therefore, if a top management team has little diversity, but only people with similar background, then the managers may focus on incrementally building on existing schemata, rather than seeing radical new opportunities (Shepherd et al. 2016). A problem that Westphal & Zajac (2013) point to is that often CEOs and managers rely on an inside network that conforms their thinking. Thereby, taken for granted representations and ways to perceive information may be institutionalized in a top management team that has a great degree of homophily. Here, my paper points out some managerial implications on how management teams may grow conform. It is important to note that this conformity is not solely negative. In fact, it may create competitive advantage due to specialization in a profitable field. Managers who develop conformal schemata gain the advantage that they can operate smoothly and successfully in their field without large costs on their deliberate cognition. In addition, by having managers with a high internal fit of how they think, competitors may find themselves unable to replicate such consistency (Siggelkow, 2001). The danger is that when the environment changes, this consistent fit of schemata is too narrow to realize it leading to detrimental performance (Siggelkow, 2001). Thus, being central and embedded, while leading to success in the current arrangements, may disable managers in exploiting change and complexity happening in the future.

Conclusion

Ultimately, this paper argues the simple premise that a manager's relationship to culture and institutions matters for how they perceive changes in their environment. Returning to my initial question of why Nike and Adidas have chosen rather radical business models focusing on sustainability. While it is likely that they do have managers with an impressive set of cognitive capabilities, part of the explanation may also lie in that they framed their business differently. They were not tied to taken for granted ways of action but could break out of the hurtful dichotomy of profits versus CSR and find a third way. The framing of opportunities and decision making of managers is likely to be in part a cultural process, unless one believes top-level managers to be born with business plans fully formed in their minds. It is also a cognitive process, unless one believes that people are blank slates without any cognitive proclivities and characteristics of their own. If these assumptions seem realistic, it is clear that we need new schools of thought and

models that encourage a mix of culture and cognition. This paper hopes to provoke research in this direction.

References

Abell, P., Felin, T. & Foss, N.J. (2014). Microfoundations of Social Theory. A Response to Jepperson and Meyer. Sociologica 2/14

Agassi, J. (1975). "Institutional Individualism." The British Journal of Sociology, Vol. 26, No. 2 (Jun., 1975), pp. 144-155

Batillana, J. (2006) "Agency and Institutions: The Enabling Role of Individuals' Social Position" Organization Volume 13(5): 653–676

Battilana, J., & Dorado, S. (2010). "Building sustainable hybrid organizations: The case of commercial microfinance organizations." Academy of Management Journal, 53: 1419–1440.

Bromley, P. & Meyer, J.W. (2015). "Hyper-Organization." Oxford University Press

Burgelman, R., A. & Grove, A., S. (1996) "Strategic Dissonance" California Management Review vol. 38 no.2 p.8-28.

Cerulo, K. (2010). "Mining the intersections of cognitive sociology and neuroscience" Poetics 38 (2010) 115–132

Coleman, J. S. (1990). "Foundations of Social Theory" The Belknapp Press of Harvard University Press

DiMaggio, P. J. (1988). "Interest and agency in institutional theory." In L. G. Zucker (Ed.), Institutional patterns and organizations (pp. 3-21). Cambridge, MA: Ballinger

DiMaggio, P. J. (1997). "Culture & Cognition" Annual Review of Sociology, Vol. 23 (1997), pp. 263-287

DiMaggio, P.J. & Powell, W. W. (1983). "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields" American Sociological Review 48 (2), 147-160

Felin, T., Foss, N. J., & Ployhart, R. E. (2015). "The Microfoundations Movement in Strategy and Organization Theory." Academy of Management Annals, 9(1), 575–632.

Fiske, A.P (2000). "Complementarity Theory: Why Human Social Capacities Evolved to Require Cultural Complements" Personality and Social Psychology Review 2000, Vol. 4, No. 1, 76-94

Friedland, R. & Alford, R.R. (1991). "Bringing society back in: Symbols, Practices and Institutional Contradictions." The New Institutionalism in Organizational Analysis.

Garfinkel, H. (1964). "Studies of the Routine Grounds of Everyday Activities." Social Problems, Vol. 11, No. 3 (Winter, 1964), pp. 225-250

Gavetti, G. (2005). "Cognition and Hierarchy: Rethinking the Microfoundations of Capabilities' Development" Organization Science Vol. 16, No. 6, November–December 2005, pp. 599–617

Gavetti, G. (2012). "Toward a Behavioral Theory of Strategy" Organization Science Vol. 23, No. 1, January–February 2012, pp. 267–285

Gavetti, G., Greve, H., R., Levinthal, D., A. & Ocasio, W. (2012). "The Behavioral Theory of the Firm: Assessment and Prospects" The Academy of Management Annals Volume 6, Issue 1, 2012

Goffmann, E. (1974). "Frame Analysis; on the organization of experience" New York Harper Colophon

Granqvist, N., Grodal, S., & Woolley, J. (2013). "Hedging your bets: Executives' market labeling strategies in nanotechnology." Organization Science, 24: 395–413.

Greenwood, R. & Suddaby, R. (2006). "Institutional Entrepreneurship in Mature Fields: The Big Five Accounting Firms" The Academy of Management Journal, Vol. 49, No. 1 (Feb., 2006), pp. 27-48

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). "Institutional Complexity and Organizational Responses" The Academy of Management Annals, 5:1, 317-371

Hannan, M. Polos, L & Carroll, G. (2007). "Logics of Organization Theory". Princeton University Press.

Hedstrom, P., and Swedberg, R. (1998). "Social Mechanisms: An Introductory Essay" in "Social Mechanisms: An analytical approach to social theory" Cambridge University Press

Helfat, C., E. & Peteraf, M., A. (2015). "Managerial Cognitive Capabilities and the Microfoundations of Dynamic Capabilities" Strat. Mgmt. J., 36: 831–850 (2015)

Heugens, P. P. M. A. R., & Lander, M. W. 2009. Structure! agency! (and other quarrels): A meta-analysis of institutional theories of organization. *Academy of Management Journal*, *52*(1), 61–85.

Ioannou, I., & Serafeim, G. (2015). "The Impact of Corporate Social Responsibility on Investment Recommendations: Analysts' Perceptions and Shifting Institutional Logics", Strategic Management Journal, 36: 1053–1081

Jarvis, L. C. (2017). "Feigned vs. Felt: Feigning Behaviors and the Dynamics of Institutional logics." Academy of Management Review vol. 42 nr. 2 p. 306-333.

Jarzabkowski, P., Smets, M., Bednarek, R., Burke, G., Spee, P. (2013). "Institutional Ambidexterity: Leveraging Institutional Complexity in Practice" Research in the Sociology of Organizations, Vol. 39 Part B p. 37-61

Jepperson, R., & Meyer, J. W. (2011). "Multiple levels of analysis and the limitation of methodological individualisms." *Sociological Theory*, *29*.1., 54–73.

Jourdan, J., Durand, R., & Thornton, P. H. (2017). The Price of Admission: Organizational Deference as Strategic Behavior. *American Journal of Sociology*, *123*(650), 232–275.

Kahneman, D. (2003). "Maps of Bounded Rationality" The American Economic Review, Vol. 93, No. 5 (Dec., 2003), pp. 1449-1475

Kahneman, D., & Tversky, A. (1982). "The simulation heuristic." In D. Kahneman, P. Slovic, & A. Tversky (Eds.), Judgment under uncertainty: Heuristics and biases (pp. 201-208). New York: Cambridge University Press.

Lawrence, T. B., & Suddaby, R. (2006). "Institutions and Institutional Work". The SAGE Handbook of Organization Studies, January 2006), 215.

Lehman, D.R., Chiu, C. & Schaller, M. (2004). "Psychology and Culture" Annu. Rev. Psychol. 2004. 55:689–714

Levi-Martin, J. (2011). "The Explanation of Social Action." Oxford University Press

Meyer. J.W. (2010). "World Society, Institutional Theories, and the Actor" Annual Review of Sociology" 36. 1-20.

Meyer, J. W. & Rowan, B. (1977). "Institutionalized Organizations: Formal Structure as Myth and Ceremony" American Journal of Sociology, Vol. 83, No. 2 (Sep., 1977), pp. 340-363

Miller, D. (1994). "What Happens after Success: The perils of excellence" Journal of Management Studies Journal of Management Studies 31-3 May 1994

Ocasio, W. (1997). "Towards an Attention-Based View of the Firm" Strategic Management Journal Vol. 18, Summer 1997 Special Issue: Organizational and Competitive Interactions (Jul., 1997), pp. 187-206

Ocasio, W. & Radoynovska, N. (2016). "Strategy and commitments to institutional logics: Organizational heterogeneity in business models and governance" Strategic Organization 1–23

Oliver, C. (1991). "Strategic Responses to Institutional Processes." The Academy of Management Review, Vol. 16, No. 1 (Jan., 1991), pp. 145-179

Oliver, C. (1997). "Sustainable Competitive Advantage: Combining Institutional and Resource-Based Views." Strategic Management Journal vol. 18 no. 9 p. 697-713

Pache, A. & Santos, F. (2010). "When Worlds Collide: The Internal Dynamics of Organizational Responses to Conflicting Institutional Demands" Academy of Management Review 2010, Vol. 35, No. 3, 455–476.

Pache, A., & Santos, F. (2013a). "Embedded in Hybrid Contexts: How Individuals in Organizations Respond to Competing Institutional Logics" Institutional Logics in Action, Part B, Research in the Sociology of Organizations, Volume 39B, 3–35

Pache, A., & Santos, F. (2013b). "Inside the hybrid organization: Selective coupling as a response to conflicting institutional logics." Academy of Management Journal, 56: 972–1001.

Pinker, S. (2002). "The Blank Slate" Penguin Press

Powell, T. C., Lovallo, D. & Fox, C. R. (2011). "Behavioral Strategy" Strat. Mgmt. J., 32: 1369–1386 (2011)

Powell, W.W & Colyvas, J.A (2008). "Microfoundations of Institutional Theory." Sage Handbook of Organizational Institutionalism.

Powell, W. W. & Rerup, C. (2017). "Opening the Black-Box: The Microfoundations of institutions" Sage Handbook of Organizational Institutionalism 2nd edition forthcoming

Searle, J.R., (1995). "The Construction of Social Reality" New York Free Press

Schmidt, F. L. & Hunter,J. (2004). "General Mental Ability in the World of Work: Occupational Attainment and Job Performance" Journal of Personality and Social Psychology · February 2004 Vol. 86, No. 1, 162–173

Sherer,P.D. (2017). "When is it time to stop doing the same old thing? How institutional and organizational entrepreneurs changed Major League Baseball" Journal of Business Venturing 32 (2017) 355–370

Shepherd, D.A., McMullen, J. S. & Ocasio, W. (2016). "Is that and opportunity? An attention-based model on top managers' opportunity belief for strategic action" Strategic Management Journal October 2016

Simon, H.A (1947). "Administrative Behavior: a study of decision making processes in administrative organizations" MacMillan

Siggelkow, N. (2001). "Change in the presence of Fit; The Rise, the Fall and the Renaissance of Liz Claireborne" The Academy of Management Journal vol.44, no.4 pp. 838-857

Suddaby, R. (2010). "Challenges for Institutional Theory" Journal of Management Inquiry 19(1) 14–20

Swidler, A. (1986). "Culture in Action: Symbols and Strategices " American Sociological Review, Vol. 51, No. 2 .Apr., 1986., pp. 273-286

Swidler, A. (2008). "Comment on Stephen Vaisey's ''Socrates, Skinner, and Aristotle: Three Ways of Thinking About Culture in Action'' Sociological Forum, Vol. 23, No. 3, September 2008

Thornton P. H., Ocasio, W. & Lounsbury, M. (2012). "The Institutional Logics Perspective" Oxford University Press

Tracey, P., Phillips, N. & Jarvis, O., (2011). "Bridging Institutional Entrepreneurship and the creation of New Organizational Forms: A Multilevel Model" Organization Science Vol.22 No. 1 2011 p. 60-80

Vaisey, S. (2008). "Socrates, Skinner, and Aristotle: Three Ways of Thinking About Culture in Action." Sociological Forum, Vol. 23, No. 3, September 2008

Vaisey, S. (2009). "Motivation and Justification: A dual process model of culture in action" AJS Volume 114 Number 6 (May 2009): 1675–1715

Vermeulen, P., Zietsma, C.A.M, Greenwood, R. & Langley, A. (2016). "Strategic responses to institutional complexity" Strategic Organization2016, Vol. 14(4) 277– 286

Voronov, M. & Yorks, L. (2015). "Did you notice that? Theorizing Differences in Comprehending Institutional Contradictions". Academy of Management Review 2015, Vol. 40, No. 4, 1–24.

Werner, M., D. & Cornelissen, J. P. (2014). "Framing the Change: Switching and Blending Frames and their Role in Instigating Institutional Change"   Organization Studies 2014, Vol. 35(10) 1449– 1472

Westphal, J. D. & Zajac, E. J. (2013). "A Behavioral Theory of Corporate Governance: Explicating the Mechanisms of Socially Situated and Socially Constituted Agency" The Academy of Management Annals, 2013 Vol. 7, No. 1, 607–661.

Wrong, D.H. (1961). "The Oversocialized Conception of Man in Modern Sociology." American Sociological Review, Vol. 26, No. 2 (Apr., 1961), pp. 183-193

Zajac, E. J. & Westphal, J.D. (2004). "The Social Construction of Market Value: Institutionalization and Learning Perspectives on Stock Market Reactions" American Sociological Review, 2004, VOL. 69 (June:433–457)

Zhu, D. H. & Westphal, J. D. (2014). "How directors' prior experience with other demographically similar CEOs affects their appointments onto corporate boards and the consequences for CEO compensation". Academy of Management Journal June 1, 2014 vol. 57 no. 3 791-813

Zuckerman, E. W. (1999). "The Categorical Imperative: Securities Analysts and the Illegitimacy Discount" American Sociological Review vol. 104 nr. 5 1999

Chapter 6

Conclusion

This thesis strives to shed light on the scale-up phase of entrepreneurial ventures. Here the thesis relied on a venture scaling up in the complex industry of photonics. Relying on an institutional logics' framework the thesis shows that ventures face a major problem as they come to work in an institutional complex environment that shapes them. This is a problem because rarely do managers and employees know how to behave, what the right strategy is, and how to think about the organization's identity. While the thesis does not produce a set of "fixes" to this problem, I do believe that knowing about and understanding the internal organizational problems will help ventures to scale.

The thesis consists of four papers. In the first paper (Chapter 2) I review the institutional logics literature in order to outline the theoretical tools I am working with, their strengths and weaknesses and where future research, including my own, could contribute to further this perspective. By looking through all the papers using institutional logics that have been published in top management journals, I discovered that studies tend to focus mostly on the field level and on particular types of organizations, such as service firms and social enterprises. I therefore argue that the institutional logics perspective needs to look at a wider sample of organizations, it could look more at organizational characteristics, interact with different theories and strive to build more holistic micro-foundations. Thus, the paper proposes future research directions, which include the directions I am taking in the empirical papers.

In the second paper (Chapter 3), I look at the process of how a venture adopts a logic and the consequence on organizational processes and outcomes. The study shows that the adoption process is difficult to control and that the interplay between logics changes over time, making it difficult for managers to predict and control the fallout. The paper indicates that the process of adopting a new logic may cause framing contests when different members and units collaborate

on tasks, for example employees working with a science logic have a different frame than employees working with a corporation logic.

The third paper (Chapter 4), takes the findings from the second paper further and focuses on a different period in the case. This paper changes the focus from the adoption process and takes a look at how the venture decided to pursue a hybrid strategy, for example by trying to secure funding for projects as a science-based venture catering to EU research projects while also trying to cater to large corporations as a commercial venture. Here, the paper points to a trade-off between getting resources and legitimacy from a different set of external stakeholders and maintaining internal coherence, as competing logics become salient as a result of the strategy. Thereby, employees could legitimize different actions and beliefs according to what logic they were most motivated to follow. For this reason, groups adhering to each logic and wanting to go in different directions emerged and hindered the successful fulfillment of the hybrid strategy.

The fourth paper (Chapter 5) takes a look beyond ventures and focuses on how organizations respond to institutional change and complexity from a decision-making perspective that links macro and micro determinants of decision making. While this paper differentiates from the empirical papers by being conceptual and not looking specifically on ventures, it is very relevant to understanding the decision making in ventures as they scale. The core argument here is that having been central in one field makes it harder to fathom change and act accordingly. For example, if a venture has been central in the scientific community, perhaps it is a spin-off, then fathoming the institutional change and complexity arising when changes make the field more market and corporate oriented, is really difficult. The reasons are simple; the decision makers in charge of understanding this change and the opportunities within, are not likely to have experience in dealing with corporations and the demands of the mature market, they are more likely to be scientists in it for the science. Research has backed this, for example in Powell & Sandholtz' (2012) study of science ventures, and the same in Pahnke et al.'s (2015) study of how it matters which type of VC that invests in a company. Naturally, it is also notions that stick to a wider array of organizations, for example elite organizations that are tied to a specific field are likely to develop cognitive bounds as a result.

Theoretical implications

I have repeatedly stated the argument that we need a better understanding of institutional logics on the micro-level. We need to understand them in daily interactions and be able to translate them into actual ideas and actions in order to use and understand them. A good theory should allow us to do so. A recurring issue with institutional logics, or at least one critics often raise, is that they are abstract and not tied to everyday situations (Greenwood et al. 2014). Here the empirical papers strive to show that logics are a) frames that people use to understand what to do and why and b) they are different set of practices that follows the framing. Here the thesis strives to give a better account of how the logics play out at on the ground.

I focus especially on the competition between logics in framing action and which practices and structures should be used in an organization. Here, each paper contributes with new knowledge.

Chapter two, the review paper, shows the strengths and weaknesses of the literature and where it could be improved. Chapter 3, the second paper, investigates the adoption process and shows the iterative process between micro-level activation of frames and the macro-level empowerment of the new frame, as well as the consequence of this change for the firm.

Chapter 4, the third paper, follows the rise of the dual frames by looking at how this is tied into a hybrid strategy. This paper follows the second one in time where the firm has adopted the logic and is now pursuing a hybrid strategy. This paper seeks to explain why and how logics compete and are not settled into a hybrid order that allows the firm to successfully pursue a hybrid strategy. Here the paper points to a crucial trade-off; when managers decide to get resources and legitimacy from competing sources, they open their organization to competing inputs, for example one from science and one from corporations, then the firm is susceptible to conflict between the two sub-groups inside that represents each view. Thus, the firm faces a trade-off in getting resources from multiple sources and having an unruly organization, where the members can seek legitimation for different action and graft in ideas on how to do organize and do things, in my case they grafted in ideas from science and corporations. Thereby, the paper takes an influential idea, that ventures should pursue legitimacy and resources from multiple stakeholders (Fisher et al. 2016), and points to a problem; employees may not have the same desire to pursue such strategy, in fact they may

use the opportunity to focus on the element they like and actively try to avoid becoming hybrid in their work. Hence, there is a job for leaders of the firm not just to cater to external stakeholders but to also secure support for the strategy on the home front.

Chapter 5, the final paper, contributes to looking at organizational responses to institutional complexity and applying a micro-foundations perspective that ties institutional logics ideas to that of the Behavioral Theory of the Firm. The paper argues that logics create a set of schemata, what we would popularly call a "mental map", that shape how managers frame institutional change as either an opportunity or a threat. This macro-micro outline in the paper allows for a link to behavioral theory, as they have focused on how managers operate with such a mental map. Hence, the link is that institutional logics provide you with a map on how to operate (the socially constructed assumptions, beliefs and rules that individuals use to produce their reality), the paper here argues that the strength of these maps differ, some people are more tied to their assumptions and beliefs if they have been very successful in using them and have been using them exclusively for a long time. But importantly, I propose that if we take behavioral theories into account, cognitive traits matter as well; for example, some people are more open to new ideas than others, and this may shape how they respond to institutional change too.

Table 1 shortly outlines the contributions.

Paper	Existing Literature	Contributions
Chapter 2, "Institutional logics as an organization and management theory"	Institutional logics have a pre-dominant focus on the macro-level and on a certain type of organization.	The perspective could be enriched by studies of a wider sample of organizations, connections with other theories and more developed micro-foundations.
Chapter 3, "Adoption of Logics in Entrepreneurial ventures; how logics are brought in, activated and conflict in the organization"	Focus on organizations that work in inherently hybrid fields, such as social enterprise.	How the change from a singular to a hybrid field affects the organization as it adopts a new logic.

Chapter 4, "Getting the best of both worlds: the hybridity challenge of entrepreneurial ventures"	Accepted idea that ventures should pursue legitimacy from different stakeholders (Fisher et al. 2016, Wry et al. 2014)	Pursuing a hybrid strategy may benefit the organization for its stakeholders but facilitate conflict internally, as members are not motivated to follow the strategy.
Chapter 5, "Seeing Institutional Change as an opportunity; linking managerial decision making and institutional logics"	The literature has predominantly focused on how the institutional field and the organizations role in it, forces it do acquiesce to demands or creates opportunity to avoid (Greenwood et al. 2011, Pache & Santos, 2010).	It is not only the "force" of the field that matters, but embeddedness. Managers in embedded organizations not only may face stronger demands, but they are also shaped by the history; they come to take the status quo for granted and as desirable, hence they frame change as negative.

Table 1 List of contributions

Practical implications

The thesis points to a crucial problem in scaling ventures that the literature has not given much attention; that operating in institutional complex environments not only provides challenges for managers in catering to these external demands, but also provides ammunition for conflict internally.

While the thesis does not provide any direct tool that managers can apply to solve the problem, it provides insight on the process and the elements that create the conflict. An issue, I have found is the lack of attention to the problem; managers are more focused on the market and "crossing the chasm", rather than the internal organization.

Hence, for scaling an increased focused on the internal organization is needed as it may face challenges that can cause break-up. A likely practical implication is that managers need to change the organizational design and manage the culture to make sure the organization successfully scales. The scaling up is not just more of the same for the organization, but an overall change, as Edith Penrose once wrote: a growing organization is like a caterpillar and a mature one is like a butterfly (Penrose, 1959). To get to this the leaders of the organization must organize a bricolage of the new people and inputs from the environment to create a scaling organization.

Future research and concluding remarks

The thesis is limited as a single case study, much more research into scaling is naturally needed to understand and facilitate a solution of this practical and societal important issue.

I chose an institutional logics approach as it fitted with the data, but naturally many other approaches, macro and micro, are relevant and needed. However, in order to continue applying the institutional approach, as in popular in looking at ventures (Desantola & Gulati, 2017, Fisher et al. 2016), the perspective needs to encompass a more micro-level approach that allows for organizational differences and management strategies (Greenwood et al. 2014).

The hope of this thesis is to sow opportunities for future research to dig into the problem of scaling ventures and to apply an institutional lens that spans across levels to find the problems that happen in the everyday life on the factory floor of a scaling venture and how these problems tie into overall changes in the organization and in its environment.

References

Desantola, A. & Gulati, R. 2017 Scaling: Organizing and Growth in Entrepreneurial Ventures. Academy of Management Annals 2017, Vol. 11, No. 2, 640–668

Fisher, G., Lahiri, A., & Kotha, S. 2016. Changing with the Times: An Integrated View of Legitimacy, Logics and New Venture Lifecycles. Academy of Management Review p. 383-409

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E.R., & Lounsbury, M.2011. Institutional Complexity and Organizational Responses. The Academy of Management Annals, 5:1, 317-371

Greenwood, R., Hinings, C.R. & Whetten, D.2014. Rethinking Institutions and Organizations. Journal of Management Studies 51:7 November 2014

Pache, A., & Santos, F.2010. When Worlds Collide: The Internal Dynamics of Organizational Responses to Conflicting Institutional Demands. Academy of Management Review July 1, 2010 vol. 35 no. 3 455-476

Pahnke, E. C., Katila, R., & Eisenhardt, K. M. 2015. Who Takes You to the Dance? How Partners' Institutional Logics Influence Innovation in Young Firms. *Administrative Science Quarterly*, *60*(4), 596–633.

Penrose, E. 1959. Theory of the Growth of the Firm. Oxford University Press.

Powell, W.W. & Sandholtz, K.W. 2012. Amphibious Entrepreneurs and the Emergence of Organizational Forms. Strat. Entrepreneurship J., 6: 94–115 (2012)

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