Inside Corporate Entrepreneurship:
Towards An Integration of Macro and Micro Perspectives on Entrepreneurship in Large, Diversified Firms

Von der Fakultät Wirtschaftswissenschaften
der Leuphana Universität Lüneburg

zur Erlangung des Grades
Doktorin der Wirtschafts- und Sozialwissenschaften (Dr. rer. pol.)
genehmigte

Dissertation

von
Monika Lesner

aus
Puck (Polen)

Eingereicht am: 08.10.2014
Mündliche Prüfung am: 29.04.2015

Erstgutachter: Prof. Dr. Reihlen
Zweitgutachterin: Prof. Dr. Weisenfeld

Prüfungsausschuss: Prof. Dr. Reihlen, Vors.
Prof. Dr. Weisenfeld
Prof. Dr. Albers

Die einzelnen Beiträge des kumulativen Dissertationsvorhabens sind oder werden wie folgt veröffentlicht:

Lesner, M. (2015). The Bower-Burgelman-Model Revisited.

Lesner, M., Schlapfner, J.-F., & Reihlen, M. (2015). Strategy Formation as Legitimacy Creation: The Case of Sustainability.

Lesner, M. (2015). Configurations of Corporate Entrepreneurship: A Meta-Synthesis of Case-Study Data.

Elektronische Veröffentlichung des gesamten kumulativen Dissertationsvorhabens
inkl. einer Zusammenfassung unter dem Titel:

Inside Corporate Entrepreneurship: Towards an Integration of Macro and Micro Perspectives on Entrepreneurship in Large, Diversified Firms

Veröffentlichungsjahr: 2015

Veröffentlicht im Onlineangebot der Universitätsbibliothek unter der URL:
http://www.leuphana.de/ub

ACKNOWLEDGEMENTS

First, I would like to thank Markus Reihlen for not only supervising my thesis, but also broadening my horizons and enriching my knowledge and ability to reflect on a wide array of theoretical (and meta-theoretical) debates. I could not have imagined having a more knowledgeable, gentle, motivating, and committed advisor and mentor for my dissertation. I thank you, Markus. Many thanks also go to my second advisor, Ursula Weisenfeld, for her insightful comments and hard questions on different occasions throughout the development of my thesis. I am also thankful to Sascha Albers, for agreeing to serve as my third advisor and contributing his invaluable expertise to the evaluation of my dissertation.

I feel extremely lucky to have worked with so many wonderful people at the department of strategic management. I would like to thank Regina Müller, for being such a kind, patient, and reliable troubleshooter. My sincere thanks also go to Anna Krzeminska, for the wisdom she shared with me, work related and otherwise. I am grateful for the invaluable feedback, encouragement, and most importantly friendship of my fellow doctoral students – those who have moved on, those who are in the thick of their dissertations, and those who are just beginning. Special thanks go to Jan-Florian Schlapfner for our inspiring collaboration researching the Alpha Group – whose generous support is also highly appreciated. Our fruitful and fun telephone calls, and how we managed to meet each and every deadline on the button, will be treasured in my memory.

I am grateful to the Leuphana University of Lüneburg for supporting my research in so many ways, be it the stimulating doctoral colloquia or the generous funding of my participation at international conferences. I would also like to thank the Strategic Management Society for the SMS Best Conference PhD Paper Prize. Moreover, I am grateful to all the people who facilitated my research stay at the University of Technology, Sydney, and made it such a wonderful experience.

Last, but certainly not least, I would like to express my deep love and appreciation for my family and friends. I thank my parents who have not only prized my well-being and future above everything else, but also showed me how to pursue and achieve my goals. My deep appreciation is extended to Björn for his continuous encouragement, optimism, and mental as well as culinary care. I would also like to thank my dear friends for their enormous support – you are the best. Thank you!

Monika Lesner

Hamburg, October 2014

TABLE OF CONTENTS

SYNOPSIS 3

CORPORATE ENTREPRENEURSHIP: THE MACRO AND MICRO PERSPECTIVES......................... 6
TOWARDS AN INTEGRATION OF MACRO AND MICRO PERSPECTIVES 11
CONCLUDING REMARKS.. 17

THE BOWER-BURGELMAN MODEL REVISITED 28

INTRODUCTION 30
THE BOWER-BURGELMAN MODEL OF STRATEGY-MAKING 32
CRITICAL ANALYSIS OF THE BOWER-BURGELMAN MODEL 38
DISCUSSION 51
CONCLUSION 56

STRATEGY FORMATION AS LEGITIMACY CREATION: THE CASE OF SUSTAINABILITY.. 70

INTRODUCTION 72
THEORETICAL BACKGROUND: BLENDING EVOLUTIONARY AND INSTITUTIONAL PERSPECTIVES.. 73
CONTEXT AND METHODS 77
THE CASE: THE CHANGING FACE OF SUSTAINABILITY AT ALPHA GROUP.......................... 85
LEGITIMACY-ENHANCING PRACTICES 87
DISCUSSION AND IMPLICATIONS 99

CONFIGURATIONS OF CORPORATE ENTREPRENEURSHIP: A META-SYNTHESIS OF CASE-STUDY DATA 109

INTRODUCTION 111
THEORETICAL BACKGROUND FOR CORPORATE ENTREPRENEURSHIP 113
RESEARCH DESIGN.. 118
FINDINGS 124
DISCUSSION AND IMPLICATIONS 133
CONCLUSION 136

SYNOPSIS

The concept of corporate entrepreneurship (CE) continues to occupy the minds of scholars and practitioners alike. This is not surprising as CE constitutes a major driver of organizational revitalization, learning, and growth within large and medium size organizations (Dess et al., 2003; Zahra, 1993b). Against the backdrop of ever-growing competitive intensity, the overwhelming pace and complexity of technological change, and the globalization of firm and industry boundaries (Bettis & Hitt, 1995; Castells, 1999; D'Aveni, 1994), established market players have increasingly discovered CE as a "weapon of choice" to respond to those challenges (Thornberry, 2003: 330).

But the fascination for this topic is not aroused by these positive consequences for firm performance and longevity alone. Rather, it is that the idea of CE seems inherently contradictory. Not for nothing is CE referred to as an "oxymoron" (Thornberry, 2001). Entrepreneurship is generally associated with small, organic start-up firms which are built around detecting, shaping, and turning opportunities into new businesses (e.g., Audretsch, 2001; Davidsson, 1991; Mintzberg, 2003; Sharma, 1999). By contrast, due to their cumbersome administrative systems, risk-averse attitude, and inflexible, collective mind-sets, incumbent firms tend to inhibit entrepreneurial initiatives (Dess, Lumpkin, & McGee, 1999; Sharma, 1999). Thus, early research in the field of CE went so far as to say that CE would be impossible within bureaucratic structures (Duncan, Ginter, Rucks, & Jacobs, 1988; Morse, 1986). Other researchers, however, have interpreted large firms' supposed liability of bigness as a core strength by emphasizing their abundance of human, social, and financial capital and have advocated for the active encouragement of CE (Burgelman, 1984; Kanter, 1986; Kuratko & Montagno, 1989; Miller, 1983). Yet, those who advocate CE also underline that large, diversified firms are unlikely to emulate the characteristics of small entrepreneurial firms, as they are faced with different work environments and challenges with respect to the tensions between "newstream" and "mainstream" (Kanter, 1988, 1990; Sharma, 1999).

Previous research has approached these tensions from two major angles: the macro- and micro-level. Research into the macro-levels of CE has yielded a variety of context factors which enhance CE within established firms implying, for example, cultural (e.g., Chung & Gibbons, 1997; Morris, Davis, & Allen, 1994), strategic (e.g., Antoncic, 2006; Kuratko, Ireland, & Hornsby, 2001), structural (e.g, Burgelman, 1984; Kuratko, Montagno, & Hornsby, 1990; Sathe, 1985; Zajac, Golden, & Shortell, 1991), and environmental variables (e.g., Covin & Slevin, 1991; Zahra, 1993b). In parallel, studies which focus on micro-levels have looked at how corporate entrepreneurs recognize opportunities (e.g., Kirzner, 1979; Sarasvathy, Dew, Velamuri, & Venkataraman, 2010) and what specific personality traits and competencies are needed to be a successful entrepreneur (e.g., Baum & Locke, 2004; Hayton & Kelley, 2006; Rauch & Frese, 2007).

However, the contributions made by both camps have some fundamental problems. First, in the line of macro-level antecedents of CE, it is discernable that unless firms operate within the right environment, are blessed with the right culture, are able to retain adhocratic structures, and have a strong innovation leader, entrepreneurial activities within large, diversified firms are far from being likely (Wolcott & Lippitz, 2007). Moreover, as Wolcott and Lippitz emphasize, “what works for one company will not necessarily work for another” (2007: 76). Similarly, Phan, Wright, Ucbasaran, and Tan (2009) note that research on CE has so far underplayed important heterogeneities of organizational forms. Second, studies investigating the micro-processes of entrepreneurial actions within large, diversified firms have touted activities such as initiative championing, sponsoring, or skunkworks as recipes for CE success (Hayton & Kelley, 2006; Shane, 1995). Yet, Dougherty and Heller, for instance, argue that “by relying on them [such recipes] instead of changing the institutionalized practices in their firms, managers actually perpetuate the illegitimacy of innovation” (1994: 215). Additionally, the transfer of insights provided by research on independent entrepreneurs to corporate entrepreneurs should be treated with caution. Although fraught with the same risks and uncertainties, the conditions under which corporate entrepreneurial initiatives emerge and develop are considerably different (Corbett & Hmieleski, 2007; Phan et al., 2009; Sharma, 1999).

Taken together, although the need for and value of CE is indisputable, there is still confusion about its micro- and macro-level constituents. In line with this, theoretical and empirical knowledge about how CE is embedded in both a firm’s “mind and body” and its “vision and structure” warrants a deeper understanding (Thornberry, 2001: 530).

In my dissertation, I take this persistent confusion as a starting point for shedding new light on how the gap between the macro and micro perspectives on CE can be overcome. For this purpose, I utilize a systemic reasoning to unveil how the macro- and micro-levels, which constitute entrepreneurship in large, diversified firms, interact. According to Bunge, “systemism maintains that a society is a system of interrelated, interacting individuals, and that it possesses emergent, or supra-individual, properties, so that it ought to be studied at both micro and macro levels” (1996: 241). More precisely, such a systemic ontology departs from a one-sided deterministic approach to a reciprocal conception of causation in that it does not seek to find the locus of causes for entrepreneurial processes either in environmental factors (e.g., structure, environmental conditions, culture) or in entrepreneurs' cognitive or behavioral dispositions (e.g., risk-attitude, creativity, experiences), but rather assumes both to be mutually interdependent (Bunge, 1996; Reihlen, Klaas-Wissing, & Ringberg, 2007). Unfortunately, to date only scant attention has been devoted to the systemic nature of CE. This neglect is particularly striking, given the abovementioned shortsightedness of current macro- and micro-level research and the more fundamental fact that, generally, questions of stability (mainstream) and change (newstream or CE) are questions of macro- and micro-level interactions within social systems (Bitektine & Haack, 2014; Farjoun, 2010; Van de Ven & Poole, 1995).

I approach the systemic nature of entrepreneurial processes within large, diversified firms in three stages. First, I provide a review of the theoretical framework that to a large extent underpins my research: the Bower-Burgelman process model (B-B model) (Bower, 1970; Burgelman, 1983a; 1983c; 1991). Second, by using a qualitative case study, my co-authors, Markus Reihlen and Jan-Florian Schlapfner, and I document how micro-level practices fostered the survival of an entrepreneurial initiative within the given intraorganizational and external environment. Third, on the basis of a qualitative meta-synthesis, I identify four different, coherent design types for CE within large, diversified firms which reflect particular managerial interpretive-schemes.

This work contributes to the field of CE in several ways. First, it offers a critical analysis of an established theoretical position of, in general terms, resource allocation processes within large, diversified firms: the B-B model. Although this model's major contribution is primarily associated with the literature on strategy-making and strategic change, its productive links to the concept of CE have been broadly established (Burgelman, 1983a; Kuratko & Audretsch, 2013; Sharma & Chrisman, 1999). In particular, this critical analysis not only reveals a number of fundamental, yet unaddressed, problems, but also fruitful avenues to link the model to some of the most recent theoretical discussions in the strategic management literature as a whole. Second, extending the theoretical framework, as proposed by the B-B model, with the complementary notions found in institutional theory and applying it to the specific case of an entrepreneurial initiative provides insights into the way entrepreneurs enact macro-level constituents of the firm's social system. This view particularly extends the traditional picture of initiative development within the CE literature, which has so far focused on the process of 'selling' an initiative in order to mobilize the necessary resources (e.g., top management attention or financial capital), towards a systemic position which suggests that entrepreneurs themselves can manipulate the very context for resource allocation. Third, departing from the systemic stance of configuration theory, I defy the 'one-size-fits-all' approach found in most studies on the antecedents of entrepreneurial activities within large firms. I thereby complement dominating design positions such as the de-bureaucratization of entrepreneurial processes (Burgelman, 1984; Kanter, Quinn, & North, 1992) with additional, internally consistent configurations of structures and systems for CE.

Before leading the reader through this work, I would like to delve more deeply into its theoretical and conceptual building blocks. For this purpose, I will first attempt to clarify the definitional issues with the concept of CE and offer a more detailed overview of the previous research on the macro and micro perspectives on CE. Second, I will explain in greater detail my approach towards integrating the macro and micro perspectives by introducing the rationale of systemism and the B-B model. Lastly, I will provide some concluding remarks about the systemic approach of this dissertation.

CORPORATE ENTREPRENEURSHIP: THE MACRO AND MICRO PERSPECTIVES

Definition

Inarguably, beneath most theoretical concepts lies a sea of definitions. In the case of CE, definitional ambiguities have thrived due to the immense expansion of interest in CE over the past decades. In the early stages of these debates, scholars used the term somewhat inflationarily, in that what they considered to be entrepreneurial activities within corporate structures was neither clearly defined nor distinguished from generalized phenomena of innovation (e.g., process or product innovation) (Corbett, Covin, O'Connor, & Tucci, 2013). In what follows I would like to equip the reader with the definitions most commonly used in the domain of CE research.

One of the first comprehensive definitions of CE was offered by Vesper (1984) who defined corporate entrepreneurship as consisting in (1) new strategic directions, (2) initiatives from below, and (3) autonomous business creation. Subsequently, Guth and Ginsberg (1990) provided a definition on which, to date, a vast number of publications in the CE field relies.[1] The authors define CE as "(1) the birth of new businesses within existing organizations, i.e. internal innovation or venturing; and (2) the transformation of organizations through renewal of the key ideas on which they are built, i.e. strategic renewal" (1990: 5). Shortly afterwards, Zahra added that CE embraces "formal and informal activities aimed at creating new business

[1] According to the citation index from Google Scholar, Guth and Ginsberg's 1990 introductory paper to the SMJ special issue on corporate entrepreneurship alone was cited 1,013 times (October 6, 2014).

in established companies through product and process innovations and market developments" (1991: 262). In their attempt to further reconcile definitional issues, Sharma and Chrisman suggested that CE "is the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization" (1999: 18).

More recently, the notion of CE has been consolidated into two rather than three categories: corporate venturing and strategic entrepreneurship. Corporate venturing, as already captured by prior definitions, involves the creation of a new business within an organization (internal corporate venturing), outside it (external corporate venturing), and in collaboration with other organizations (cooperative venturing) (Kuratko & Audretsch, 2013; Narayanan, Yang, & Zahra, 2009). Strategic entrepreneurship, in contrast, implies what has formerly been referred to as strategic renewal and innovation. Yet, the current conceptualization breaks those activities down into a more comprehensive group of phenomena: sustained regeneration, organizational rejuvenation, strategic renewal, and domain redefinition (Covin & Miles, 1999; Kuratko & Audretsch, 2009). These forms mainly differ in focus, basis for competitive advantage, decreasing frequency, and shrinking magnitude of negative consequences of the entrepreneurial actions (Covin & Miles, 1999). As a result, Covin and Miles (1999) propose an intrinsically hierarchical classification, from sustained regeneration as the most incremental and basic form, to domain redefinition which is the pursuit of a radical departure from existing practices. In short, these categories designate a wide variety of organizationally consequential innovations (e.g., strategic renewal or breakthrough innovation) adopted in the pursuit of competitive advantage, not all of which necessarily result in new businesses (Covin & Miles, 1999; Ireland, Hitt, & Sirmon, 2003).

These discussions over definitional issues clearly suggest that the evolution of the concept of CE is still ongoing. As firms face increasingly competitive and financially constrained markets, the spectrum of what is meant by CE as a means to survive has become even broader over recent years, generating new organizational arrangements (e.g., corporate venture capital, cooperative corporate venturing, spin-offs), and thus challenging existing classifications of CE (Kuratko & Audretsch, 2013; Narayanan et al., 2009; Phan et al., 2009). As a consequence, the definitions presented here capture the increasingly fragmented field in the most general terms. Nevertheless, these are sufficient for this dissertation.

The following sections organize research on CE into two major categories: the macro- and micro-levels of the entrepreneurial activities described above.

The Macro Perspective

Research that focuses on macro-levels can be associated with an external locus of control because the relevant external specifics are sometimes beyond the control of individual entrepreneurs (Kuratko, 2013: 9).

Initially, the literature on CE has examined the influence of external environmental dimensions on a firm's entrepreneurial behavior (e.g., Covin & Slevin, 1991; Zahra, 1993a, b; Zahra & Covin, 1995). In their framework of entrepreneurship as firm behavior, Covin and Slevin (1991) hypothesized on the positive impact of environmental technological sophistication, dynamism, hostility, and an industry's early life cycle stage on CE. In addition, Zahra (1993a, b) emphasized the perceived environmental munificence (i.e., dynamism, abundance of technological opportunities, industry growth, and demand for new products) and hostility (i.e., unfavorable results from industry changes and intensity of rivalry) to be positively associated with venturing, innovation, and/or renewal activities.

Another large body of research has studied the collective effects of such intraorganizational context variables as organizational structure (e.g., centralization, complexity) (Covin & Slevin, 1988; Hornsby, Kuratko, & Zahra, 2002; Kuratko et al., 1990), systems (e.g., human resources, governance systems, strategic planning practices) (Barringer & Bluedorn, 1999; Hayton, 2005; Schuler, 1986), culture (e.g., openness, empowerment) (Chung & Gibbons, 1997; Dess & Lumpkin, 2005; Morris et al., 1994), and strategy (e.g., corporate or competitive strategies) (Antoncic, 2006; Covin & Slevin, 1991; Ireland, Covin, & Kuratko, 2009), all of which can act as facilitators or deterrents to specific forms of CE. The impact of the structural context on CE was, for instance, observed in Burgelman's study on the internal corporate venturing process at Intel (1983c; 1991). Drawing on previous research conducted by Bower (1970), Burgelman (1983b, 1991) defines this variable as the sum of a firm's administrative (e.g., strategic planning and control, reward and resource allocation systems) and cultural mechanisms (e.g., behavioral norms, socialization rituals) that are established by top management in order to implement the prevailing concept of strategy. Sathe (1985) suggested that the tensions reigning within large, established firms that attempt to foster an entrepreneurial atmosphere could be balanced by disciplined reporting systems with a strong entrepreneurial culture of mutual trust and open communication. In terms of culture, Morris et al. studied the impact of individualism versus collectivism on CE and concluded that "The key is to balance the need for individual initiative with the spirit of cooperation and group ownership of innovation" (1994: 84). More recently, in their exploratory study on junior and middle level managers' perceptions of context variables, Srivastava and Agrawal (2010) stressed the significant impact of the organizational system (e.g., supportive structure, job design, or job rotation), team spirit (e.g., perceived trust or a collaborative work environment), leader's support in encouraging teamwork initiatives, and empowerment on CE.

As opposed to previous studies, Srivastava and Agrawal (2010) found that perceived rewards and freedoms are insignificant to employees. Additionally, Zahra (1996) studied the impact of governance and ownership systems on CE. He discerned positive effects of executive stock ownership and long-term institutional ownership (mutual, pension, and retirement funds) and negative effects of short-term (investment banks and private funds) and outside directors' ownership on CE. In terms of strategic variables, a firm's mission strategy, such as build, hold, divest, or harvest strategies (Gupta & Govindarajan, 1984), as well as business practices and competitive tactics (e.g., manufacturing and operations strategy, pricing policy), are relevant (Covin & Slevin, 1991). More precisely, a firm's entrepreneurial posture and its impact on firm performance is hypothesized to be positively related to a firm's growth strategies, its efforts to predict industry and market developments, its advertising and promotion efforts, its emphasis on product quality, and its relatively high product price (Covin & Slevin, 1991; Zahra, 1991).

From these insights two main positions have crystallized in the literature: (1) entrepreneurial activities need to be isolated from bureaucratic pressures in the form of separate business units or new venture divisions (Burgelman, 1985; Kanter et al., 1992), or (2) entrepreneurship should be treated as an integral part of an organization's culture and structure (Catmull, 2008; Covin & Slevin, 1991; Kanter, North, Bernstein, & Williamson, 1990). Regarding these approaches, Kanter et al. (1990) distinguish between the dominance of either economic or cultural goals. In the first case, "there is often more separation between mainstream and newstream, the newstream often being organized as independent, stand-alone ventures", whereas in the latter case "newstream activites [*sic*] are more likely to come out of spontaneous submissions by lower-level managers and employees, and many close linkages are maintained between newstream and mainstream" (1990: 416).

The Micro Perspective

The micro-levels of CE research include factors that underlie the internal locus of control of potential entrepreneurs or, in other words, "specifics from the inside looking out" (Kuratko, 2013: 10). This stream of research focuses on the study of particular characteristics that successful entrepreneurs typically exhibit, e.g. creativity (Heunks, 1998; Ward, 2004), self-efficacy (Chen, Greene, & Crick, 1998; Markman, Balkin, & Baron, 2002), tenacity (Baum &

Locke, 2004), or need for achievement (Collins, Hanges, & Locke, 2004; Robinson, Stimpson, Huefner, & Hunt, 1991). Such personality traits are treated as predictors of entrepreneurial behavior (Rauch & Frese, 2007). Yet, in contrast to independent entrepreneurs, corporate entrepreneurs act in the context of different organizational role schemes and social exchanges, so that it is not only the traits of the individual entrepreneur that are of interest, but also those of other organizational members involved (Dess et al., 2003). Accordingly, the entrepreneurial process within large, diversified firms is characterized by the involvement of differentiated roles that demand corresponding managerial competencies (Shaw, O'Loughlin, & McFadzean, 2005). For example, Hayton and Kelley (2006) developed a competency-based framework for supporting CE. They identify the competencies of innovating, brokering, championing, and sponsoring as specific to CE and link them to critical knowledge (e.g., specialized, multidisciplinary), skill (e.g., creativity, networking, emotional intelligence), and personality (e.g., confidence, risk tolerance, conscientiousness) characteristics of an individual. The relevance of managerial roles has also been elaborated by Floyd and Lane (2000), who particularly suggest differing strategic roles for top (ratifying, recognizing, and directing), middle (championing, synthesizing, facilitating, and implementing), and operating managers (experimenting, adjusting, and conforming) during the process of CE. These studies imply a bottom-up or emergent CE process, where entrepreneurial initiatives at the operational levels are supported by middle managers and sold to potential higher-level sponsors within the organization (Burgelman, 1983a; 1983c). Overall, a large part of this literature emphasizes the significance of middle managers' sociopolitical competencies and their mediation between operational and top-level sensemaking during the CE process (Balogun & Johnson, 2004; Burgelman, 1983c; Dutton & Ashford, 1993; Floyd & Wooldridge, 2000; Hornsby et al., 2002).

Moreover, micro-level studies investigate how and why some individuals successfully discover or recognize opportunities. Opportunity recognition is, in this sense, a unique entrepreneurial behavior (Gaglio & Katz, 2001). In this context, Shane and Venkataraman argue that opportunities are "objective phenomena that are not known to all parties at all times" (2000: 220). Questions that are of interest thus concern the reasons why some individuals recognize opportunities and others do not. The factors that influence the probability of opportunity recognition are grouped into two main categories: (1) possession of prior knowledge or information necessary for opportunity recognition (absorptive capacity), and (2) entrepreneurs' special cognitive abilities (Shane & Venkataraman, 2000). The assumptions behind this categorization are that information is unequally dispersed among individuals within a population, and that individuals differ in their ability to cognitively combine concepts and information into new ideas (Shane & Venkataraman, 2000). In this sense, personality traits such as tendencies towards regretful thinking, risk-tolerance, or perseverance again come into play (Markman et al., 2002; Miner & Raju, 2004).

TOWARDS AN INTEGRATION OF MACRO AND MICRO PERSPECTIVES

A Systemic Approach

Both camps in CE research, namely the macro- and micro-level studies, have inarguably contributed to a variety of crucial factors for CE success. However, both camps tend to have blinders on when it comes to the other camp's contributions. On the one hand, studies assuming a macro perspective undervalue the microfoundations of entrepreneurial activities, thereby neglecting fundamental heterogeneities by painting an idealized picture of how CE is to be best supported by the right environment, the right organizational structure, the right culture, and the right strategy. On the other hand, micro-level studies largely underplay the impact of macro-level contexts on corporate entrepreneurs' behaviors, which render this research somewhat incommensurable with insights into independent entrepreneurs' behaviors.

In order to address the weaknesses and, at the same time, strengths from both perspectives, I propose a systemic position (e.g., Bandura, 1986; Bunge, 1979; 2000; Reihlen et al., 2007) that aims at closing the gap between individual cognition and social systems by assuming that both are mutually interdependent and co-evolving (Reihlen et al., 2007). The significance of the systemic perspective in social science is particularly stressed by Bunge, who argues that "A sociologist may miss the most important features of the system of interest if he ignores either the needs and beliefs of its members or the macro-systems in which the system of interest is embedded" (1996: 266).

This systemic position stems from the integration of the valuable insights from both individualist and holist meta-theoretical positions in social sciences, which as yet have to dominate management research (Bunge, 1996: 264-274; Reihlen et al., 2007). Holism, as largely reflected in macro-level studies on CE, holds that society and nature are "organic wholes" or "totalities", which in this sense have a "personality" of their own that can be explained not by studying individual, but rather collective features (Bunge, 1996: 258-263; Reihlen et al., 2007: 53). Individualism, as found in micro-level studies, argues for the primacy of individual features over structure, thereby implying that individuals have a high degree of social and psychological autonomy and that social systems are just collections of individuals (Bunge, 1996: 243-247). The third way, namely systemism, attempts to overcome the respective shortsightedness of both the holist and individualist positions by arguing that

"Systems are distinguished both by the characteristics of their members and systemic or global characteristics, which cannot be reduced to any particular element" (Reihlen et al., 2007: 56). Individualism assumes a bottom-up perspective, holism a top-down one, whereas systemism integrates both by departing "from individuals embedded in a society that preexists them and watch[ing] how their actions affect society and alter it" (Bunge, 1996: 241).

According to this systemic reasoning, the explanation of socio-economic phenomena such as CE assumes a comprehensive understanding of how individual behavior is determined by, on the one hand, its embeddedness within social structures, which are characterized by specific norms, shared beliefs, and expectations, and, on the other hand, the cognitive, volitional, and emotional properties of the individual itself (Reihlen et al., 2007). In this vein, structures constrain and enable individual behavior and are also produced and reproduced by individuals who draw upon social structure in order to act (Giddens, 1979, 1984). Thus, a systemic position implies reciprocity between 'agency' and 'structure', or in other words, between personal and environmental factors (Bandura, 1986).

Only recently, entrepreneurship researchers have called for a closer consideration of the meta-theoretical foundations of their research (Busenitz et al., 2003; Shane & Venkataraman, 2000). Some initial attempts to capture the reciprocal nature of entrepreneurial behavior include, for instance, Fletcher's (2006) and Wood and McKinley's (2010) studies on opportunity construction by independent entrepreneurs. By drawing on social constructionist ideas (Berger & Luckmann, 1967; Czarniawska, 2003), these studies emphasize the interrelationships between "entrepreneurial agency *and* the cultural, social and opportunity structural spatial environment in and through which such activities are recursively reproduced at specific points in time" (Fletcher, 2006: 425). As Wood and McKinley (2010) point out, not only do the entrepreneur's cognitive evaluations of social structures play a role, but also the entrepreneur's social ties with peers and relationships to potential stakeholders. In this sense, social interactions, internal or external, are particularly vital in order to access information and resources that are otherwise not available (e.g., Aldrich & Zimmer, 1986; Anderson, 2000; Chell & Baines, 2000; Jack & Anderson, 2002). Similarly, but for the specific case of corporate entrepreneurs, Corbett and Hmieleski (2007) make use of social cognitive theory (Wood & Bandura, 1989) to explain the development and activation of entrepreneurs' mental schemes vis-à-vis the corporate context. The authors in particular describe how the context of large, diversified firms perpetuates role schemas (norms for expected behavior) that make corporate entrepreneurs develop event schemas (knowledge regarding the arrangements, willingness, and abilities necessary for CE) that considerably deviate from the ones of independent entrepreneurs. Yet, this research field is still in its infancy. Therefore, I wish to contribute to this emerging debate by proposing a systemic research agenda for CE.

In sum, a systemic explanation of CE illuminates entrepreneurial processes within large, diversified firms in terms of individual behavior and interaction with the social systems contextualizing it. Accordingly, the causes of entrepreneurial processes such as opportunity construction and exploitation lie in neither environmental nor in dispositional determinants alone, but are rather the outcome of these determinant's mutual interplay. The extent to which environmental or personal factors influence entrepreneurial processes is contingent on the characteristics of the specific socio-economic setting.

The Bower-Burgelman Model

The understanding of CE as a system of entrepreneurially behaving actors, who are simultaneously constrained and enabled by a set of environmental, social, cultural, political, and structural factors is best reflected in the work of Bower (1970) and Burgelman (1983a, b; 1983c; 1991). These researchers have modelled strategy-making within large, diversified firms as an emergent, dialectic, and multi-level process, which is largely referred to as the B-B model.

Conceptualizing strategy-making in this way began with Bower's (1970) study of the development of investment proposals in a large, multi-business firm. His research resulted in a framework depicting the selection logic of resource allocation mechanisms that drive strategy-making. One decade later, Burgelman (1983c) extended Bower's framework with his study of the internal corporate venturing process at Intel, by distinguishing between strategic behavior that is within the scope of the firm's current concept of strategy and strategic behavior that falls outside of it, thereby paving the way for new organizational learning and adaptation. In particular, Burgelman established the intraorganizational ecological perspective according to which "An organization is viewed as an ecology of strategic initiatives which emerge in patterned ways, and compete for limited organizational resources so as to increase their relative importance within the organization" (1991: 240).[2]

Overall, the model's potential compatibility with a systemic approach towards CE stems from at least two major aspects. First, the model's theoretical roots lie in evolutionary organization theory (Aldrich & Ruef, 2006; Campbell, 1969; McKelvey & Aldrich, 1983; Nelson & Winter, 1973, 1982), which particularly focuses on how "novel things" emerge

[2] In order to avoid confusion, I note that I use the terms 'entrepreneurial initiative' and 'strategic initiative' synonymously throughout this dissertation, which is due to the conjunction made between research on CE, which mostly uses the first term, and the B-B model, which primarily uses the latter.

(Murmann, Aldrich, Levinthal, & Winter, 2003: 24) and, therefore, how new organizations are created or changed over time (Aldrich & Ruef, 2006; Barnett & Burgelman, 1996). Thus, the B-B model claims a broad validity not only in terms of strategy formation, but also in terms of complementary entrepreneurial phenomena such as innovation and the creation of new businesses (Burgelman, 1983a; Burgelman, 1983c; Burgelman, 1991; Van de Ven & Poole, 1995). Second, in the logic of the B-B model, the strategy-making process is embedded in (1) the external selection environment and (2) the intraorganizational selection environment, comprised of the structural and strategic contexts of the firm. *Embeddedness* (e.g., Dacin, Ventresca, & Beal, 1999; Granovetter, 1985) is thus inherent in the B-B model, an idea that is particularly compatible with a systemic approach.

Regrettably, it should be noted that despite this potential of the B-B model to contribute to a systemic perspective on CE, it has to overcome some shortcomings, one of which are in fact the yet underdeveloped microfoundations of strategic behavior. I will discuss the B-B model in detail in the first paper. However, in sum, the model represents a unique starting point as it provides the necessary rationale and constructs to further examine how entrepreneurs are both constrained and enabled by the corporate and environmental contexts surrounding them.

Paths Through this Work

In the first article of my dissertation, *The Bower-Burgelman-Model Revisited*, I critically analyze the model's major premises and provide a number of promising avenues for future research and extensions. The B-B model constitutes this dissertation's conceptual framework for explaining corporate entrepreneurial processes. Although originally describing the strategy-making process within large, diversified firms, the B-B model implies a particularly comprehensive picture of the development of entrepreneurial or strategic initiatives within the intraorganizational and external environment. More precisely, by drawing on the variation-selection-retention paradigm of organizational evolutionary theory (e.g., Aldrich & Ruef, 2006; Campbell, 1969), the model conceptualizes new strategy formation in terms of bottom-up initiatives, which compete for scarce corporate resources and possibly survive the internal selection environment to alter the prevailing strategy. The B-B model is based on the following premises: (1) strategic initiatives originate at the bottom of the organization, (2) they are indirectly managed through the structural and strategic contexts which determine the internal selection environment, (3) induced and autonomous initiatives can be clearly separated, (4) strategic initiatives evolve within the boundaries of a single firm, and (5) the effectiveness of the internal selection environment depends on how well it reflects external selection pressures. These premises are critically discussed and three main implications for future research in the tradition of the B-B model are derived. First, a revised B-B model should incorporate insights from the strategy-as-practice and neo-institutional literatures in order to better account for the significance of micro-level activities or practices, which create and are created by their institutionalized context. Second, in order to derive more productive propositions in terms of the encouragement of CE within corporate structures, I suggest building a more in-depth understanding of how variation of strategic or entrepreneurial behavior actually comes about. By accounting for corporate entrepreneurs' personal ties and networks, future research may investigate how firms can leverage those extra-organizational bonds for the purpose of enhancing CE. Lastly, with the burgeoning of new and more complex organizational arrangements, future research may empirically unbundle the challenges these new organizational forms imply for the mechanisms suggested in the B-B model.

In the second article of my dissertation, *Strategy Formation as Legitimacy Creation: The Case of Sustainability*, my co-authors, Markus Reihlen and Jan-Florian Schlapfner, and I contribute a new perspective on the development of strategic initiatives, namely by marrying ideas of intraorganizational ecology (B-B model) with institutional theory – as proposed in the first article. This article primarily goes beyond the insights gained from micro-level studies in that it illuminates how corporate entrepreneurs enact their institutionalized macro-level contexts in order to enforce strategic initiatives. In particular, we illustrate how managers apply various legitimacy-enhancing practices at the interstices between the internal and external institutional environments to legitimize their strategic sustainability initiative. To our knowledge, no focused empirical study has as yet explicitly considered this question. We approach this question through a unique explorative and longitudinal case study, which is based on 73 in-depth, semi-structured interviews, direct observations, and archival data generated from a large, multinational manufacturing firm within the branded consumer and industrial goods industry. Our study provides insights into how firms actively shape the co-evolution of the internal and external organizational field by applying a set of legitimization practices aimed at creating favourable micro- and macro-institutional conditions for sustainability initiatives. Moreover, our study emphasizes the importance of organizational path-dependency for sustainability. As opposed to prior research, which depicted path dependency as a liability for a firm (e.g., Garud, Kumaraswamy, & Koch, 2010), we argue that a strong sustainability "DNA" can become an enabling force when coupled with a favourable external organizational field in which, at least temporarily, sustainability can be used for the creation of new opportunity spaces. In addition, our study illustrates how firms promoting their sustainability commitment can unfold stronger sources of legitimacy, by making not just moral appeals, but especially by showing how sustainability informs and shapes business practices.

While the second article complements existing micro-level perspectives on CE by showing how corporate entrepreneurs are constrained but at the same time enabled by the intraorganizational and external environment, the third article, *Configurations of Corporate Entrepreneurship: A Meta-Synthesis of Case-Study Data*, aims to approach the systemic nature of CE by addressing the shortcomings of macro-level research. More precisely, I address the question of how entrepreneurial behavior can be effectively managed and attuned with organizational design attributes. Building on configuration theory and the archetype approach (Greenwood & Hinings, 1988; Miller, 1987; Miller & Friesen, 1984), I derive four design-types for CE, namely the portfolio, the transfer, the cultural, and the individual, each of which reflects different interpretations of the challenges and objectives associated with entrepreneurial behavior within large, diversified firms. In this article, I contribute to the further methodological development of the CE field, namely by introducing a meta-synthesis of qualitative case studies (Hoon, 2013) as a valuable methodological resource. Moreover, I reconcile previously fragmented and non-cumulative notions of context factors for CE and challenge the existing bipolar conception of ideal design types for CE. Additionally, I revise the existing role perceptions of corporate entrepreneurs themselves and of top management that drive the CE process. Table 1 summarizes the articles with regard to publication status.

TABLE 1
Article Overview

Article	Title	Co-Authors	Journal	Status
1	The Bower-Burgelman model revisited	n/a	Strategic Management Journal	In preparation for submission
2	Strategy formation as legitimacy creation: The case of sustainability	Markus Reihlen and Jan-Florian Schlapfner	Journal of Management Studies	In preparation for submission
3	Configurations of corporate entrepreneurship: A meta-synthesis of case-study data	n/a	Journal of Business Venturing	Revise and resubmit

A more detailed overview of the publication status and conference contribution of the three articles can be found in the appendix.

CONCLUDING REMARKS

The review of the major facets of contemporary CE research in terms of its macro- and micro-levels revealed a number of shortcomings which I aim to address in my dissertation. For this purpose, I present three complementary articles, each of which approaches the systemic nature of CE from a different angle. The first article lays the theoretical foundation for this dissertation, namely the B-B model, which represents a unique framework to develop a systemic rationale for CE due to its comprehensive, emergent, dialectic, and multi-level conceptualization of strategy-making processes within large, diversified firms. Notwithstanding its significance for the field of strategic management, I also offer a critical analysis of the B-B model in this article. In my critical analysis, I elucidate the model's major shortcomings and delineate some ways to overcome these by linking it to more recent theoretical directions in the strategic management literature. The second article draws on one of these major shortcomings by linking the model's analysis of intraorganizational ecology to the institutionalist notion of legitimacy. This approach provides exceptional insights into the corporate entrepreneurs' micro-level practices aimed at legitimizing their strategic initiatives. The third article approaches the systemic notion of CE from the direction of configuration theory and the archetype approach, while exploiting the systemic potential of the B-B model. In this article, I aim to account for existing heterogeneities among firms' interpretive schemes concerning the major challenges associated with CE and their particular design solutions to tackle these challenges in terms of structures and systems.

In conclusion, this dissertation contributes to an understanding of CE in terms of its systemic qualities, rather than its activities, antecedents, and outcomes. In this sense, CE should be conceived as a system of entrepreneurially behaving actors who are constrained and simultaneously enabled by a set of social, cultural, political, and structural context factors. For this purpose, throughout this work the notion of CE is linked to complementary theoretical positions in the strategic management field, namely the intraorganizational ecology, institutional theory, and configuration theory – links that have been so far neglected in the literature on CE.

Hopefully, future research will also find a systemic understanding of CE helpful and will further elaborate on this notion by closing the gap between the macro- and micro-levels of entrepreneurial processes within large, diversified firms. As Kuratko and Audretsch point out, "much remains to be revealed about how CE is enacted in organizational settings" (2013: 324). I believe that embracing Bunge's argument that "it is systems all the way: everything is either a system or a component of one" (2001: 406) may particularly improve our understanding of entrepreneurial processes in the corporate context.

REFERENCES

Aldrich, H., & Zimmer, C. 1986. Entrepreneurship through social networks: University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.

Aldrich, H. E., & Ruef, M. 2006. ***Organizations evolving*** (2nd ed.). Thousand Oaks: SAGE.

Anderson, A. R. 2000. Paradox in the periphery: An entrepreneurial reconstruction? ***Entrepreneurship & Regional Development***, 12(2): 91-109.

Antoncic, B. 2006. Impacts of diversification and corporate entrepreneurship strategy making on growth and profitability: A normative model. ***Journal of Enterprising Culture***, 14(01): 49-63.

Audretsch, D. B. 2001. The role of small firms in US biotechnology clusters. ***Small Business Economics***, 17(1-2): 3-15.

Balogun, J., & Johnson, G. 2004. Organizational restructuring and middle manager sensemaking. ***Academy of Management Journal***, 47(4): 523-549.

Bandura, A. 1986. ***Social foundations of thought and action: A social cognitive theory.*** Englewood Cliffs, N.J.: Prentice-Hall.

Barnett, W. P., & Burgelman, R. A. 1996. Evolutionary perspectives on strategy. ***Strategic Management Journal***, 17(1): 5-19.

Barringer, B. R., & Bluedorn, A. C. 1999. The relationship between corporate entrepreneurship and strategic management. ***Strategic Management Journal***, 20(5): 421-444.

Baum, J. R., & Locke, E. A. 2004. The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. ***Journal of Applied Psychology***, 89(4): 587-598.

Berger, P. L., & Luckmann, T. 1967. ***The social construction of reality: A treatise in the sociology of knowledge***. Garden City, NY: Doubleday.

Bettis, R. A., & Hitt, M. A. 1995. The new competitive landscape. ***Strategic Management Journal***, 16(S1): 7-19.

Bitektine, A., & Haack, P. 2014. The "macro" and the "micro" of legitimacy: Towards a multi-level theory of the legitimacy process. ***Academy of Management Review***, Published online before print September 10, 2014: 1-60.

Bower, J. L. 1970. ***Managing the resource allocation process: A study of corporate planning and investment***. Boston: Harvard Business School Classics.

Bunge, M. 1979. Treatise on basic philosophy, ***Ontology II: A world of systems***, Vol. 4. Dordrecht: Reidel.

Bunge, M. 1996. ***Finding philosophy in social sciences***. New Haven, CT: Yale University Press.

Bunge, M. 2000. Systemism: The alternative to individualism and holism. ***The Journal of Socio-Economics***, 29(2): 147-157.

Bunge, M. 2001. Systems and emergence, rationality and imprecision, free-wheeling and evidence, science and ideology - Social science and its philosophy according to van den Berg. ***Philosophy of the Social Sciences***, 31(3): 404-423.

Burgelman, R. A. 1983a. Corporate entrepreneurship and strategic management: Insights from a process study. ***Management Science***, 29(12): 1349-1364.

Burgelman, R. A. 1983b. A model of the interaction of strategic behavior, corporate context, and the concept of strategy. ***Academy of Management Review***, 8(1): 61-70.

Burgelman, R. A. 1983c. A process model of internal corporate venturing in the diversified major firm. ***Administrative Science Quarterly***, 28(2): 223-244.

Burgelman, R. A. 1984. Designs for corporate entrepreneurship in established firms. ***California Management Review***, 26(3): 154-167.

Burgelman, R. A. 1985. Managing the new venture division: Research findings and implications for strategic management. ***Strategic Management Journal***, 6(1): 39-54.

Burgelman, R. A. 1991. Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research. ***Organization Science***, 2(3): 239-262.

Busenitz, L. W., West, G. P., Shepherd, D., Nelson, T., Chandler, G. N., & Zacharakis, A. 2003. Entrepreneurship research in emergence: Past trends and future directions. ***Journal of Management***, 29(3): 285-308.

Campbell, D. 1969. Variation and selective retention in socio-cultural evolution. ***General Systems: Yearbook of the Society for General Systems Research***, 16: 69–85.

Castells, M. 1999. ***The rise of the network society***. Oxford: Blackwell.

Catmull, E. 2008. How Pixar fosters collective creativity. ***Harvard Business Review***, 86(9): 64-72.

Chell, E., & Baines, S. 2000. Networking, entrepreneurship and microbusiness behaviour. ***Entrepreneurship & Regional Development***, 12(3): 195-215.

Chen, C. C., Greene, P. G., & Crick, A. 1998. Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? ***Journal of Business Venturing***, 13(4): 295-316.

Chung, L. H., & Gibbons, P. T. 1997. Corporate entrepreneurship: The roles of ideology and social capital. ***Group & Organization Management***, 22(1): 10-30.

Collins, C. J., Hanges, P. J., & Locke, E. A. 2004. The relationship of achievement motivation to entrepreneurial behavior: A meta-analysis. ***Human Performance***, 17(1): 95-117.

Corbett, A., Covin, J. G., O'Connor, G. C., & Tucci, C. L. 2013. Corporate entrepreneurship: State-of-the-art research and a future research agenda. ***Journal of Product Innovation Management***, 30(5): 812-820.

Corbett, A. C., & Hmieleski, K. M. 2007. The conflicting cognitions of corporate entrepreneurs. ***Entrepreneurship Theory and Practice***, 31(1): 103-121.

Covin, J. G., & Miles, M. P. 1999. Corporate entrepreneurship and the pursuit of competitive advantage. ***Entrepreneurship: Theory & Practice***, 23(3): 47-63.

Covin, J. G., & Slevin, D. P. 1988. The influence of organization structure on the utility of an entrepreneurial top management style. ***Journal of Management Studies***, 25(3): 217-234.

Covin, J. G., & Slevin, D. P. 1991. A conceptual model of entrepreneurship as firm behavior. ***Entrepreneurship: Theory & Practice***, 16: 7-25.

Czarniawska, B. 2003. Social constructionism and organization studies. In R. Westwood, & S. Clegg (Eds.), ***Debating organization point-counterpoint in organization studies***. Oxford, UK: Blackwell.

D'Aveni, R. A. 1994. ***Hypercompetition***. New York: The Free Press.

Dacin, M. T., Ventresca, M. J., & Beal, B. D. 1999. The embeddedness of organizations: Dialogue & directions. ***Journal of Management***, 25(3): 317-356.

Davidsson, P. 1991. Continued entrepreneurship: Ability, need, and opportunity as determinants of small firm growth. ***Journal of Business Venturing***, 6(6): 405-429.

Dess, G. G., Ireland, R. D., Zahra, S. A., Floyd, S. W., Janney, J. J., & Lane, P. J. 2003. Emerging issues in corporate entrepreneurship. ***Journal of Management***, 29(3): 351-378.

Dess, G. G., & Lumpkin, G. T. 2005. The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. ***The Academy of Management Executive***, 19(1): 147-156.

Dess, G. G., Lumpkin, G. T., & McGee, J. E. 1999. Linking corporate entrepreneurship to strategy, structure, and process: Suggested research directions. ***Entrepreneurship: Theory & Practice***, 23(3): 85-102.

Dougherty, D., & Heller, T. 1994. The illegitimacy of successful product innovation in established firms. ***Organization Science***, 5(2): 200-218.

Duncan, W. J., Ginter, P. M., Rucks, A. C., & Jacobs, T. D. 1988. Intrapreneurship and the reinvention of the corporation. ***Business Horizons***, 31(3): 16-21.

Dutton, J. E., & Ashford, S. J. 1993. Selling issues to top management. ***Academy of Management Review***, 18(3): 397-428.

Farjoun, M. 2010. Beyond dualism: Stability and change as a duality. ***Academy of Management Review***, 35(2): 202-225.

Fletcher, D. E. 2006. Entrepreneurial processes and the social construction of opportunity. ***Entrepreneurship and Regional Development***, 18(5): 421-440.

Floyd, S. W., & Lane, P. J. 2000. Strategizing throughout the organization: Managing role conflict in strategic renewal. ***Academy of Management Review***: 154-177.

Floyd, S. W., & Wooldridge, B. 2000. ***Building strategy from the middle: Reconceptualizing strategy process***. Thousand Oaks, CA: SAGE Publications, Incorporated.

Gaglio, C. M., & Katz, J. A. 2001. The psychological basis of opportunity identification: Entrepreneurial alertness. ***Small Business Economics***, 16(2): 95-111.

Garud, R., Kumaraswamy, A., & Koch, J. 2010. Path dependence or path creation? ***Journal of Management Studies***, 47(4): 760-774.

Giddens, A. 1979. ***Central problems in social theory***. London: Macmillan.

Giddens, A. 1984. ***The constitution of society: Outline of the theory of structuration***. Cambridge: Polity Press.

Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. ***American Journal of Sociology***: 481-510.

Greenwood, R., & Hinings, C. R. 1988. Organizational design types, tracks and the dynamics of strategic change. ***Organization Studies***, 9(3): 293-316.

Gupta, A. K., & Govindarajan, V. 1984. Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. ***Academy of Management Journal***, 27(1): 25-41.

Guth, W. D., & Ginsberg, A. 1990. Guest editors' introduction: Corporate entrepreneurship. ***Strategic Management Journal***, 11(5): 5-15.

Hayton, J. C. 2005. Promoting corporate entrepreneurship through human resource management practices: A review of empirical research. ***Human Resource Management Review***, 15(1): 21-41.

Hayton, J. C., & Kelley, D. J. 2006. A competency-based framework for promoting corporate entrepreneurship. ***Human Resource Management***, 45(3): 407-427.

Heunks, F. J. 1998. Innovation, creativity and success. ***Small Business Economics***, 10(3): 263-272.

Hoon, C. 2013. Meta-synthesis of qualitative case studies: An approach to theory building. ***Organizational Research Methods***, 16(4): 522-556.

Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. 2002. Middle managers' perception of the internal environment for corporate entrepreneurship: Assessing a measurement scale. ***Journal of Business Venturing***, 17(3): 253-273.

Ireland, R. D., Covin, J. G., & Kuratko, D. F. 2009. Conceptualizing corporate entrepreneurship strategy. ***Entrepreneurship Theory and Practice***, 33(1): 19-46.

Ireland, R. D., Hitt, M. A., & Sirmon, D. G. 2003. A model of strategic entrepreneurship: The construct and its dimensions. ***Journal of Management***, 29(6): 963-989.

Jack, S. L., & Anderson, A. R. 2002. The effects of embeddedness on the entrepreneurial process. ***Journal of Business Venturing***, 17(5): 467-487.

Kanter, R. 1986. Supporting innovation and venture development in established companies. ***Journal of Business Venturing***, 1(1): 47-60.

Kanter, R. M. 1988. Three tiers for innovation research. ***Communication Research***, 15(5): 509-523.

Kanter, R. M. 1990. ***When giants learn to dance***. New York: Simon and Schuster.

Kanter, R. M., North, J., Bernstein, A. P., & Williamson, A. 1990. Engines of progress: Designing and running entrepreneurial vehicles in established companies. ***Journal of Business Venturing***, 5(6): 415-430.

Kanter, R. M., Quinn, G., & North, J. 1992. Engines of Progress V: NEES Energy Inc., 1984-1990. ***Journal of Business Venturing***, 7(1): 73.

Kirzner, I. 1979. ***Perceptions, opportunity, and profit***. Chicago: University of Chicago Press.

Kuratko, D. 2013. ***Entrepreneurship: Theory, process, practice*** (9th ed.). Mason, OH: South Western

Kuratko, D., Montagno, R. V., & Hornsby, J. 1990. Developing an intrapreneurial assessment instrument for an effective corporate entrepreneurial environment. ***Strategic Management Journal***, 11(Summer 1990): 49-58.

Kuratko, D. F., & Audretsch, D. B. 2009. Strategic entrepreneurship: Exploring different perspectives of an emerging concept. ***Entrepreneurship Theory and Practice***, 33(1): 1-17.

Kuratko, D. F., & Audretsch, D. B. 2013. Clarifying the domains of corporate entrepreneurship. ***International Entrepreneurship and Management Journal***, 9(3): 323-335.

Kuratko, D. F., Ireland, R. D., & Hornsby, J. S. 2001. Improving firm performance through entrepreneurial actions: Acordia's corporate entrepreneurship strategy. ***The Academy of Management Executive (1993-2005)***: 60-71.

Kuratko, D. F., & Montagno, R. V. 1989. The intrapreneurial spirit. ***Training and Development Journal***, 43(10): 83-87.

Markman, G. D., Balkin, D. B., & Baron, R. A. 2002. Inventors and new venture formation: The effects of general self-efficacy and regretful thinking. ***Entrepreneurship Theory and Practice***, 27(2): 149-165.

McKelvey, B., & Aldrich, H. 1983. Populations, natural selection, and applied organizational science. ***Administrative Science Quarterly***, 28(1): 101-128.

Miller, D. 1983. The correlates of entrepreneurship in three types of firms. ***Management Science***: 770-791.

Miller, D. 1987. The genesis of configuration. ***The Academy of Management Review***, 12(4): 686-701.

Miller, D., & Friesen, P. H. 1984. ***Organizations - A quantum view***. Englewood Cliffs, New Jersey: Prentice-Hall.

Miner, J. B., & Raju, N. S. 2004. Risk propensity differences between managers and entrepreneurs and between low-and high-growth entrepreneurs: A reply in a more conservative vein. ***Journal of Applied Psychology***, 89(1): 3 – 13.

Mintzberg, H. 2003. The entrepreneurial organization. In H. Mintzberg, J. Lampel, J. B. Quinn, & S. Ghoshal (Eds.), ***The strategy process***: 315-322. Upper Saddle River: Pearson Prentice Hall.

Morris, M. H., Davis, D. L., & Allen, J. W. 1994. Fostering corporate entrepreneurship: Cross-cultural comparisons of the importance of individualism versus collectivism. ***Journal of International Business Studies***, 25(1): 65-89.

Morse, C. 1986. The delusion of intrapreneurship. ***Long Range Planning***, 19(6): 92-95.

Murmann, J. P., Aldrich, H. E., Levinthal, D., & Winter, S. G. 2003. Evolutionary thought in management and organization theory at the beginning of the new millennium: A symposium on the state of the art and opportunities for future research. ***Journal of Management Inquiry***, 12(1): 22-40.

Narayanan, V., Yang, Y., & Zahra, S. A. 2009. Corporate venturing and value creation: A review and proposed framework. ***Research Policy***, 38(1): 58-76.

Nelson, R. R., & Winter, S. G. 1973. Toward an evolutionary theory of economic capabilities. ***American Economic Review***, 63(2): 440-449.

Nelson, R. R., & Winter, S. G. 1982. ***An evolutionary theory of economic change***. Cambridge, MA: Belknap Press.

Phan, P. H., Wright, M., Ucbasaran, D., & Tan, W. L. 2009. Corporate entrepreneurship: Current research and future directions. ***Journal of Business Venturing***, 24(3): 197-205.

Rauch, A., & Frese, M. 2007. Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. ***European Journal of Work and Organizational Psychology***, 16(4): 353-385.

Reihlen, M., Klaas-Wissing, T., & Ringberg, T. 2007. Metatheories in management studies: Reflections upon individualism, holism, and systemism. ***M@n@gement***, 10(3): 49-69.

Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. 1991. An attitude approach to the prediction of entrepreneurship. ***Entrepreneurship Theory and Practice***, 15(4): 13-31.

Sarasvathy, S. D., Dew, N., Velamuri, S. R., & Venkataraman, S. 2010. Three views of entrepreneurial opportunity. In Z. J. Acs, & D. B. Audretsch (Eds.), ***Handbook of entrepreneurship research***, 2nd ed., Vol. 5: 77-96. New York: Springer.

Sathe, V. 1985. Managing an entrepreneurial dilemma: Nurturing entrepreneurship and control in large corporations. ***Frontiers of Entrepreneurship Research***, 21: 636-656.

Schuler, R. S. 1986. Fostering and facilitating entrepreneurship in organizations: Implications for organization structure and human resource management practices. ***Human Resource Management***, 25(4): 607-629.

Shane, S. 1995. Uncertainty avoidance and the preference for innovation championing roles. ***Journal of International Business Studies***, 26(1): 47-68.

Shane, S., & Venkataraman, S. 2000. The promise of entrepreneurship as a field of research. ***The Academy of Management Review***, 25(1): 217-226.

Sharma, A. 1999. Central dilemmas of managing innovation in large firms. ***California Management Review***, 41(3): 146-164.

Sharma, P., & Chrisman, J. J. 1999. Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. ***Entrepreneurship Theory and Practice***, 23: 11-28.

Shaw, E., O'Loughlin, A., & McFadzean, E. 2005. Corporate entrepreneurship and innovation part 2: A role-and process-based approach. ***European Journal of Innovation Management***, 8(4): 393-408.

Srivastava, N., & Agrawal, A. 2010. Factors supporting corporate entrepreneurship: An exploratory study. ***Vision: The Journal of Business Perspective***, 14(3): 163-171.

Thornberry, N. 2001. Corporate entrepreneurship: Antidote or oxymoron? ***European Management Journal***, 19(5): 526-533.

Thornberry, N. E. 2003. Corporate entrepreneurship: Teaching managers to be entrepreneurs. ***Journal of Management Development***, 22(4): 329-344.

Van de Ven, A. H., & Poole, M. S. 1995. Explaining Development and Change in Organizations. ***Academy of Management Review***, 20(3): 510-540.

Vesper, K. H. 1984. Three faces of corporate entrepreneurship: A pilot study. In J. A. Hornaday, F. Tarpley, J. A. Timmons, & K. H. Vesper (Eds.), ***Frontiers of entrepreneurship research***: 294-320. Wellesley, MA: Babson College.

Ward, T. B. 2004. Cognition, creativity, and entrepreneurship. ***Journal of Business Venturing***, 19(2): 173-188.

Wolcott, R. C., & Lippitz, M. J. 2007. The four models of corporate entrepreneurship. ***MIT Sloan Management Review***, 49(1): 75.

Wood, M. S., & McKinley, W. 2010. The production of entrepreneurial opportunity: A constructivist perspective. ***Strategic Entrepreneurship***, 4: 66-84.

Wood, R., & Bandura, A. 1989. Social cognitive theory of organizational management. ***Academy of Management Review***, 14(3): 361-384.

Zahra, S. A. 1991. Predictors and financial outcomes of corporate entrepreneurship - An exploratory-study. ***Journal of Business Venturing***, 6(4): 259-285.

Zahra, S. A. 1993a. A conceptual model of entrepreneurship as firm behavior: A critique and extension. ***Entrepreneurship Theory and Practice***, 17(4): 5-21.

Zahra, S. A. 1993b. Environment, corporate entrepreneurship, and financial performance: A taxonomic approach. ***Journal of Business Venturing***, 8(4): 319-340.

Zahra, S. A. 1996. Governance, ownership, and corporate entrepreneurship: The moderating impact of industry technological opportunities. ***Academy of Management Journal***, 39(6): 1713-1735.

Zahra, S. A., & Covin, J. G. 1995. Contextual influences on the corporate entrepreneurship performance relationship – A longitudinal analysis. ***Journal of Business Venturing***, 10(1): 43-58.

Zajac, E. J., Golden, B. R., & Shortell, S. M. 1991. New organizational forms for enhancing innovation - The case of internal corporate joint ventures. ***Management Science***, 37(2): 170-184.

This synopsis continues with an appendix.

APPENDIX

TABLE A1

Author Contributions, Publication Status, and Conference Presentations[a]

#	Title	Author Contributions	Publication Status	Conference Presentations
1	**The Bower-Burgelman-model revisited**	ML (1.0) – single author	In preparation for submission *Strategic Management Journal*	AOM 2013
2	**Strategy formation as legitimacy creation: The case of sustainability**	ML (1/3): conceptual development, coding, data analysis, data interpretation, writing of method's section, writing of case study, contribution to discussion MR (1/3): conceptual development, data collection, data interpretation, writing of introduction, writing of theoretical framing, contribution to discussion JFS (1/3): conceptual development, participant observation, data collection, coding, data analysis, data interpretation, writing of case study, contribution to discussion	In preparation for submission *Journal of Management Studies*	SMS 2013 / winner of SMS Best Conference PhD Paper Prize WK ORG 2014 WK University of Southern Denmark 2014 LCE 2014
3	**Configurations of corporate entrepreneurship: A meta-synthesis of case-study data**	ML (1.0) – single author	Revise and resubmit *Journal of Business Venturing*	EGOS 2012 ANZAM 2012 EGOS 2013
Additional publications (not included in this dissertation)				
5	**Überleben in der Wildnis: Die Entwicklung innovativer Initiativen in Unternehmen**	JFS (2/3): conceptual development, participant observation, data collection, coding, data analysis, data interpretation, contribution to introduction, contribution to theoretical framing, writing of case studies, contribution to discussion ML (1/3): conceptual development, coding, data analysis, data interpretation, contribution to introduction, writing of theoretical framing, contribution to case studies, contribution to discussion	In press, J.-P. Büchler, A. Faix, & W. Müller (Hrsg.). **Innovationserfolg – Management und Ressourcen systematisch gestalten.** Frankfurt am Main: Peter Lang Verlag.	EGOS 2013
4	**Führungssysteme: Eine machtpolitische Analyse**	MR (2/3): literature review, conceptual development, writing ML (1/3): writing, contribution to anecdotal evidence	Published in B. Knoblach, T. Oltmanns, I. Hajnal, & D. Fink (Hrsg.). **Macht in Unternehmen – Der vergessene Faktor**: 99-116. Wiesbaden: Gabler.	n/a

[a] Including additional publications

Explanations Table A1

Authors

ML= Monika Lesner
MR= Prof. Dr. Markus Reihlen
JFS= Jan-Florian Schlapfner

Conferences

EGOS 2012	"Parenting Strategies for Corporate Entrepreneurship" exposé presentation at the PhD workshop of the 28th EGOS Colloquium: "Design!?". Helsinki, Finland. 02.-03.07.2012.
ANZAM 2012	"Parenting Strategies for Corporate Entrepreneurship", paper presentation at the 26th Australian and New Zealand Academy of Management (ANZAM) Conference: "Managing for Volatility and Stability". Perth, Australia. 05.-07.12.2012.
EGOS 2013	"Parenting Strategies and Advantage for Corporate Entrepreneurship" and "Surviving in the Wild: Determinants and Practices of Strategic Initiative Development", paper presentations at the 29th EGOS Colloquium: "Bridging Continents, Cultures and Worldviews". Montréal, Canada. 04.-06.07.2013.
AOM 2013	"Revisiting the Understanding of the Evolution of Strategic Initiatives", paper presentation at the 73rd Annual Meeting of the Academy of Management: "Capitalism in Question". Orlando, Florida, USA. 09.-13.08.2013.
SMS 2013	"Strategic Management of Sustainability: The Struggle for Legitimacy", paper presentation at the 33rd Strategic Management Society Annual International Conference: "Strategy and Sustainability". Atlanta, GA, USA. 28.09-01.10.2013.
LCE 2014	"Strategic Management of Sustainability: The Struggle for Legitimacy", paper presentation at the 4th Leuphana Conference on Entrepreneurship: "People, Opportunities and Technologies". Lüneburg, Germany. 16.-18.01.2014
WK University of Southern Denmark 2014	"Strategic Management of Sustainability: The Struggle for Legitimacy", invited presentation for a workshop at the University of Southern Denmark. Sønderborg, Denmark. 28.01.2014.
WK ORG 2014	"Strategic Management of Sustainability: The Struggle for Legitimacy", paper presentation, 39th Workshop of the "Kommission Organisation" within the "Verband der Hochschullehrer für BWL", University of Jena, Germany. 28.02.2014.

THE BOWER-BURGELMAN MODEL REVISITED

Acknowledgments
I thank Markus Reihlen and Johann Bronstein for their invaluable and constructive comments. An earlier version of this article was presented in the track on Evolutionary Perspectives on Strategy-Making of the 73rd Annual Meeting of the Academy of Management in Lake Buena Vista (Orlando), USA. On this occasion, I thank Robert A. Burgelman for making time for me, answering my questions, and discussing the essence of his approach towards strategy-making.

ABSTRACT

Bower's and Burgelman's seminal model of the strategy-making process is based on five major premises: (1) strategic initiatives originate at the bottom of an organization, (2) they are indirectly managed through the structural and strategic contexts which determine the internal selection environment, (3) induced and autonomous initiatives can be clearly separated, (4) strategic initiatives evolve within the boundaries of a single firm, and (5) the effectiveness of the internal selection environment depends on how well it reflects external selection pressures. This reasoning is based on the variation-selection-retention paradigm of organizational evolutionary theory, according to which bottom-up strategic initiatives compete for scarce corporate resources and eventually survive the internal selection environment to alter the prevailing strategy. Despite its significance for the strategic management literature, I argue that the model has so far failed to address the relevance of top-down strategic intervention, the microfoundations of strategy-making, the proliferation of more complex organizational designs, and the emergence of creative responses towards external selection pressures. Focusing on these shortcomings, this paper critically analyzes the model and then discusses avenues for its development.

Keywords: strategy-making process, evolutionary organization theory, strategic initiatives

INTRODUCTION

For more than three decades, Joseph Bower and Robert Burgelman have significantly shaped our understanding of how strategy and change within large, diversified firms actually comes about and what role they play in shaping a firm's destiny. While Bower (1970) has based his insights on field work on strategic planning and capital investment decisions, Burgelman (1983a, b, 1991; 2002b) has studied the cyclical development of Intel's organizational renewal and adaptation efforts. Their work provides a grounded framework on the resource allocation process in which interlocking, multi-level managerial activities constitute intraorganizational strategy-making – widely known as the "B-B model".

The B-B model is often referred to as a "milestone" in strategy process research (Paroutis, Heracleous, & Angwin, 2013: 5) and a "seminal" contribution to the strategic management field (e.g., Jarzabkowski, 2008; Mirabeau & Maguire, 2013). The success and influence of Bower's and Burgelman's publications is further underlined by impressive citation indexes.[3]

The B-B model's prominence and significance for the strategic management literature stems in large part from the extensive, in-depth, qualitative research designs that underlie Bower's and Burgelman's studies, which thus have provided more dynamic and eclectic perspectives on the "messy" side of the strategy-making process that had been less well understood through other static and cross-sectional research designs (Barnett & Burgelman, 1996; Bower, 1970; Hutzschenreuter & Kleindienst, 2006: 703). The model has particularly contributed to the progress of the organic perspective on strategy (Farjoun, 2002; Mintzberg, 1978), as it conceptualizes the formation of strategy not in mechanistic terms but rather as a dialectic, emergent, and multi-level process while simultaneously discriminating dialectic contradictions between induced and autonomous initiatives emerging at the lower levels of management (Burgelman, 1983a, b; Mirabeau & Maguire, 2013). However, the model's most influential aspect derives from Burgelman's novel extensions and adoption of the variation-selection-retention paradigm of evolutionary organization theory in the 1980s (e.g., Aldrich & Ruef, 2006; Campbell, 1969) – still a widely used theoretical lens in the strategic management field – through which specifically "*the pace and path of strategic change*" can be addressed (Barnett & Burgelman, 1996: 6, emphasis in original). Accordingly, "Each established company constitutes an ecology in its own right and its survival and success depends on how well it takes advantage of its internal ecological processes" (Burgelman, 2003: 7). Thus,

[3] According to the citation index from Google Scholar, the reprint of Bower's book on the resource allocation process from 1986 was cited 2,008 times, and Burgelman's 1983 ASQ publication on the internal corporate venturing process at Intel was cited 1,907 times (October 6, 2014).

bottom-up strategic initiatives compete for scarce corporate resources and top management attention and eventually survive the internal selection environment to alter the current strategy (Burgelman, 1983c; Noda & Bower, 1996). With this intraorganizational evolutionary approach, the model also provides some unique insights into the simultaneous evolution or co-evolution of firms and their environments (Burgelman, 1991; 2002a; Lewin & Volberda, 1999; Noda & Bower, 1996).

Overall, the B-B model's evolutionary perspective on the strategy-making process within large, established firms involves five major premises: (1) initiatives leading to strategic change primarily originate at the bottom of the organization, (2) a firm's structural and strategic contexts constitute the major top-down processes determining the internal selection environment, (3) induced and autonomous processes are clearly dissociated adaptation mechanisms, (4) initiatives evolve within the boundaries of a single firm, and (5) the effectiveness of the internal selection environment depends on how well it reflects the selection pressures of its external environment.

The evolutionary framework of the strategy-making process as suggested by the B-B model has certainly provided invaluable insights into the dynamic way internal selection pressures affect lower level managers' strategic behaviors. However, in its effort to specify the macro-level selection mechanisms of the corporate and environmental context, the model understates the micro-levels associated with intraorganizational and external selection as well as the behavioral assumptions driving the induced and autonomous processes. Moreover, in order to keep pace with increasingly complex and dynamic market conditions, firms have adjusted their organizational design from large, multidivisional forms in a more organic and collaborative direction, which largely obliterates the traditional top-down/bottom-up processes, and even causes the bottom-up process to fail under specific circumstances. But, as yet, those circumstances and new organizational designs have not been incorporated and only rudimentarily discussed against the background of the mechanisms proposed by the B-B model. In this paper, I address these shortcomings by linking the model to recent, complementary theoretical insights and suggesting a number of adjustments and promising avenues for future research. I seek to go beyond previous discussions of the model (e.g., Christensen & Bower, 1996; Doz, 2005; Eisenmann & Bower, 2000; Sull, 2005) and deconstruct it in terms of its micro- and macro-level dimensions. However, this approach does not aim to discard Bower's and Burgelman's significant contribution, but rather to understand it better and encourage further thinking.

The paper contributes on three major levels. First, it provides a micro-perspective on how the corporate and external selection processes take place – within firms and among them. To do so, I draw on literature which is particularly inspired by the social constructivist rationale (Berger & Luckmann, 1967; Weick, Sutcliffe, & Obstfeld, 2005), such as the strategy-as-practice approach (e.g., Jarzabkowski, 2004; Vaara & Whittington, 2012), and the recently flourishing microfoundations of institutional theory (Powell & Colyvas, 2008; Zilber, 2002). By emphasizing micro-level cognitive processes and activities, which are recursively intertwined with social structures, this literature adds to the understanding on how selection mechanisms are embedded in day-to-day routinized practices or may even be manipulated by them (Giddens, 1984; Jarzabkowski, 2004; Weick et al., 2005). Second, staying with the social constructivist argument, I deconstruct the origins of strategic behavior as proposed by the B-B model in terms of the embeddedness of corporate entrepreneurs in the larger environmental context (Aldrich & Zimmer, 1986; Dubini & Aldrich, 1991). In doing so, I contribute a new perspective on the sources and management of variations – issues on which the B-B model has as yet remained largely vague. Finally, I identify some important challenges associated with new and increasingly complex organizational arrangements that have marked the rise of "postmodernism" (Clegg, 1990) and "alliance capitalism" (Dunning, 2002) that pave the way for some promising extensions of the model.

This paper is organized as follows: First, I present the core premises underlying the B-B model. On this basis, I raise central issues and analyze them by using complementary theoretical rationales. Finally, I discuss the suggested theoretical positions and derive avenues for future research and offer some conclusions for the debate.

THE BOWER-BURGELMAN MODEL OF STRATEGY-MAKING

The B-B model has its theoretical roots in evolutionary organization theory (Aldrich & Ruef, 2006; Campbell, 1969; McKelvey & Aldrich, 1983; Nelson & Winter, 1973, 1982). This theoretical lens is particularly concerned with "a mechanism for creating novel things" (Murmann, Aldrich, Levinthal, & Winter, 2003: 24), and hence questions of how new organizations emerge, or how organizations or industries change over time (Aldrich & Ruef, 2006; Barnett & Burgelman, 1996). In biology, evolutionary theory uses four generic processes to approach these questions: variation, selection, retention, and the struggle over scarce resources (Aldrich & Ruef, 2006: 17). These processes are necessary and sufficient for evolutionary change. Further, they are not restricted to biology but may be also applied to social systems (Aldrich & Ruef, 2006). In general terms, variation constitutes any kind of change within a system – purposeful or blind – (McKelvey & Aldrich, 1983: 114) which is then subject to selection forces – environmental or internal – that either eliminate or differentially select the variation (Aldrich & Ruef, 2006). Retention then preserves the beneficial variation and simultaneously provides constraints for future variations (Aldrich & Ruef, 2006). Finally, struggles or competition over scarce resources such as capital or legitimacy accompany variation and shape the selection criteria (Aldrich & Ruef, 2006). Variation, selection, retention, and struggle occur simultaneously as continuous cycles and feedback loops at the organization, population, and community levels (Aldrich & Ruef, 2006; Burgelman, 2003).

While evolutionary models in the 1970s and 1980s were predominantly concerned with how firms within an industry survive or fail due to environmental changes and how environmental selection leads to organizational inertia (Hannan & Freeman, 1977, 1984), the B-B model has provided an explanation of how a firm's strategy-making can be a major source of adaptation to changing environmental selection pressures (Burgelman, 1991; 2005; Noda & Bower, 1996).

This integration of evolutionary and strategic perspectives implies, in essence, that strategy-making is seen as a resource allocation process in which strategic initiatives emerging at the lower levels of the firm compete for scarce organizational resources and top management attention in order to succeed. Conceptualizing strategy-making in this way began with Bower's (1970) study of the development of investment proposals in a large, multi-business firm. His research resulted in a framework depicting the selection logic of resource allocation mechanisms which drive strategy-making. One decade later, Burgelman (1983c), with his study of the internal corporate venturing process at Intel, extended Bower's ideas in that he distinguished between strategic behavior that is within the scope of the firm's current concept of strategy from strategic behavior that falls outside of it and paves the way for new organizational learning and adaptation. Finally, Burgelman formulated the intraorganizational ecology of strategy-making which implies that each "established company is an ecological system in its own right" (2002b: 92). Hence, the evolutionary processes of variation, selection, retention, and struggle are used to approach such questions as how a firm's strategy comes about or how strategy-making processes within firms evolve over time.

In what follows, I describe the major premises related to the B-B model concerning the origin of strategy-making, its management, associated adaptation patterns, the definition of firm boundaries, and, finally, the co-evolution of firms and their environments.

The Origin of New Strategy: Bottom-Up Strategy Process

The B-B model assumes a primarily bottom-up oriented strategy-making process that, at its heart, follows the Carnegie School in organization studies (Cyert & March, 1963; March & Simon, 1958; Noda & Bower, 1996; Simon, 1947). Accordingly, strategy-making is subject to individual or group initiatives at the front lines of the firm, for this is where the crucial knowledge resides to develop the strategic initiative's key technical and economic features (Bower, 1970). In this vein, Bower argues that operating managers are

> […] the ones who define the needs of their part of the corporation, who make the sales forecasts which justify new capacity, who review technology to determine what the appropriate design should be, who evaluate the economics of a strategy and draft requests for capital funds and, finally, who supervise the design and construction or purchase of a new plant facility and its equipment (1970: 10-11).

The strategy-making process according to the B-B model captures three hierarchical levels: operational, middle, and top management. The associated multilevel managerial activities constitute two major bottom-up subprocesses: "definition" and "impetus" (Bower, 1970; Burgelman, 1983c). The definition process encompasses the conceptualization and articulation of a new business opportunity and its early development stages from idea to a new product, system, or process by operational managers (Bower, 1970; Burgelman, 1983c). Most critical here are the linking of technical and market related knowledge as well as championing processes aimed to mobilize an initial resource endowment. From an intraorganizational ecological perspective, definition basically reflects variation processes at the bottom of the organization (Burgelman, 1991). The initial product championing sets the stage for the impetus process that involves attentive middle managers who, in strategically forcing and brokering the uncertain entrepreneurial projects, put their organizational reputation and career at stake (Bower, 1970; Burgelman, 1983c). The impetus process involves what Burgelman (1983c: 235-237) refers to as "strategic building", which takes place at the business development management level and involves the incremental formulation of a master strategy for the strategic initiative. Throughout this process initiatives are effectively selected out by the corporate context or the "internal selection environment", as argued by Burgelman (1991). Similarly, Bower proposed the term "selection" for this stage of initiative championing and further development in his later revisions of his conceptualization of strategy-making as a resource allocation process (Bower & Gilbert, 2005b).

In sum, definition and impetus primarily build on the knowledge of the operational and sociopolitical competencies of middle managers. From this perspective, top management lacks essential information to assess an initiative's economic value, so that they must rely on middle managers provision of credible commitments throughout the process. Accordingly, Burgelman notes that "most of the time, knowledge and facts tend to win over positional power" (1991: 252).

Managing the Strategy-Making Process: The Structural and Strategic Contexts

The concept of structural context reflects a significant shift in the role perception of top management. While the Design School, which occupied a dominant position at the time the B-B model emerged, regarded top management as the firm's strategic architect dominating the processes of strategy formulation and implementation (Andrews, 1980; Mintzberg, 1990), the B-B model provides a rather indirect, facilitator role of top managers in that they shape the corporate context within which strategy-making takes place, rather than the strategy itself.

In Bower's seminal framework the structural context is defined as the "set of forces, subject to management control, which are the principal influences on the processes of definition and impetus" (1970: 78). Structural context is established by top management in order to implement their strategy and maintain coherence in terms of the behavior of organizational actors (Burgelman, 1983c; Chakravarthy & Doz, 1992; Noda & Bower, 1996). Insofar as the structural context reflects the prevalent corporate strategy, it actually induces strategic behavior at the lower levels of the organization and serves as a key selection device (Bower, 1970; Burgelman, 1983b). In the first place, this overlaying top-down process encompasses general structural configurations and administrative mechanisms, such as the degree of formalization, measures of managerial performance, information and reward systems (Bower, 1970; Burgelman, 1983b). Burgelman (1991) later assumed a broader definition of the structural context in that he complemented it with cultural mechanisms in the form of socialization rituals and behavioral norms (e.g., Ouchi, 1980).

Over time top management tends to fine-tune the structural context, so that more rules arise that significantly reduce the variability of strategic initiatives, yet, at the same time decrease their probability of failure (Burgelman, 1983b). As Burgelman argues, "One major consequence of the increased selective efficiency of the structural context is that fewer of the selected strategic projects have the potential to force a significant change in the concept of strategy" (1983b: 66). Thus, expanding a firm's domain and renewing its strategy requires the circumvention of the structural context. Burgelman's (1983a; 1983c) study on the internal corporate venturing process at Intel therefore suggests a second process affecting definition and impetus called "strategic context determination" that allows strategic initiatives to be evaluated and selected outside the prevailing administrative arrangements. Determining the strategic context for an initiative is a primarily political process through which middle managers seek to convince top management to retroactively rationalize initiatives by altering the concept of strategy (Burgelman, 1983a, b; Burgelman, 1983c). Burgelman (1991) stresses that the activation of the strategic context is a particularly precarious and political process involving very few rules and highly ambiguous inputs. While the structural context selects initiatives that are consistent with an ex-ante strategy, the strategic context selects those for which the strategy becomes determined ex post (Burgelman, 1983a).

Two Adaptation Patterns: Induced and Autonomous Strategy Processes

Burgelman's refinements of Bower's (1970) resource allocation process model have led to the seminal discrimination between induced and autonomous strategic behavior. This dichotomy lies at the core of Burgelman's (1983a, b, 1991) intraorganizational ecology of strategy-making. Both processes are assumed to be analytically separable while following different logics.

Induced strategic behavior emerges within the realm of the prevalent corporate strategy and builds on existing organizational learning. Autonomous behavior, however, concerns initiatives that derive from new combinations of individual and organizational knowledge and competencies, thus leading to new organizational learning and constituting corporate entrepreneurship (Burgelman, 1983a, 1991). As with induced initiatives, autonomous initiatives are most likely to emerge at organizational levels below top management (Burgelman, 1991). While induced strategic initiatives represent organizational actors' commitments vis-à-vis an organization's structurally determined career paths, autonomous initiatives are favored by actors' self-images in terms of risk disposition or the mimicry of the successful autonomous behaviors of colleagues (Burgelman, 1991).

It follows from this distinction that induced initiatives are variation reducing, whereas autonomous initiatives are variation increasing (Burgelman, 2002b). However, both processes need to be kept in balance, as Burgelman points out:

> Strategic intent (induced strategy) and internal entrepreneurship (autonomous strategy), by themselves, are not sufficient for continued adaptation. Strategy-making as adaptive organizational capability involves keeping both processes in play simultaneously at all times, even though one process or the other may be more prominent at different times in a company's evolution (2002: 14).

Putting these thoughts into the intraorganizational ecological context, relative inertia and peripheral adjustments of an organization's strategy are both possible outcomes of the induced process. Autonomous strategic initiatives, however, provide a way to anticipate major, external changes through the provident learning of new capabilities and internal experimentation and selection (Burgelman, 1991).

Locus of Change: The Boundaries of the Firm

Bower's (1970) and Burgelman's (1983) studies were designed to cover managerial activities that take place within the boundaries of the single firm. Accordingly, the B-B model depicts a process of strategic initiative development which is exclusively managed by the individual firm. This can be explained historically, as at the time the B-B model emerged innovation activities were primarily organized internally (Mowery, 1983; Nelson, 1990).

Strategic initiatives are created by managers at the front lines of the firm and then developed and championed by similarly internal actors from managerial lines above. To be sure, the model acknowledges that managers are in direct contact with technological developments and changes in the marketplace through which they gain inspiration for their strategic initiatives (Burgelman, 1991). It does not include, however, interorganizational collaboration. In this line of thinking, the internal selection of those initiatives is guided by intraorganizational, firm-specific beliefs, values, and knowledge about the current and future performance of the single firm. This perspective applies to induced as well as to autonomous strategic behavior.

In this way, the paradigm of organizational evolutionary theory is integrated into a framework of intraorganizational ecology, where internal selection can largely substitute for external selection (Barnett & Burgelman, 1996).

Co-Evolution: Internal and External Selection Environments

The way the external environment is implied in the B-B model is primarily inspired by the adaptation paradox in organization ecology (Burgelman, 1991; Hannan & Freeman, 1984; Hannan & Freeman, 1989). In this sense, firms attempting to overcome the liability of newness seek to increase overall legitimacy through more elaborate routines and procedures. Environmental selection thus leads to relative inertia (Hannan & Freeman, 1984). Paradoxically, this adaptation to environmental demands inhibits a firm's capacity to adapt to future changes and seek out new environments. In his attempt to integrate organizational ecology and strategic change, however, Burgelman (2002a; 2003) suggests that firms may substitute internal for external selection. In the light of this idea, those firms that succeed and survive in the long-run, have built an internal selection environment which corresponds to the relevant external selection pressures while simultaneously allowing new environments to be sought out (Burgelman, 1991; 1994).

In his longitudinal study at Intel, Burgelman (1983c) outlined how the firm had survived as an independent company for more than 20 years in an increasingly dynamic environment. Intel's successful strategic evolution was at least in part explained by its ability to recognize and appropriately select internal initiatives that turned out to be externally viable (Burgelman, 1991). Either positive or negative feedback from the external environment was thus reflected in respective incremental adaptations within the internal selection environment. In general, top management needs to be alert to upcoming threats and opportunities arising from environmental changes and modify the internal selection apparatus accordingly. In this vein, Burgelman explained how Intel succeeded over the years in reproducing itself within its familiar (semiconductor) environment through the induced strategic process (Burgelman, 2002b). However, unplanned internal variations such as the microprocessor sustainably shaped the firm's strategy in the face of an unfamiliar, emerging environment.

More recently, revisions of the B-B model have specified external forces such as financial markets (Noda & Bower, 1996) and customer power (Christensen & Bower, 1996). In the revised B-B model the capital and product market contexts are thus explicitly displayed as separate from the processes they shape, namely the structural and strategic contexts as well as the definition and impetus processes (Bower & Gilbert, 2005a).

CRITICAL ANALYSIS OF THE BOWER-BURGELMAN MODEL

The premises on which the B-B model is based can be critiqued at various levels. First, the B-B model overrates the effectiveness of the bottom-up strategy process thereby neglecting the significance of top-down intervention under specific internal and external circumstances. Although, some of those circumstances have been recognized in Bower's and Gilbert's (2005a) most recent revision of the resource allocation process, others remain as yet underdeveloped. Second, the B-B model fails to account for the microfoundations that connect context and behavior. It has thus so far failed to link to a recently emerging sensibility towards exploring the reciprocal interplay between micro and macro-level processes that either maintain or change existing institutions (e.g., Balogun & Johnson, 2005; Jarzabkowski, 2004; Powell & Colyvas, 2008; Zilber, 2002). I develop this idea on the basis of the structural context as well as the model's co-evolution argument. Third, I question the overstated representations of human behavior constituting the induced and autonomous processes. Reconsidering the behavioral assumptions on which the separation between induced and autonomous processes is based provides more productive implications with regard to entrepreneurship-enhancing structural designs marking most recent discussions on new structural characteristics. Finally, I emphasize the demands and challenges associated with extending the model in terms of new organizational arrangements such as interfirm partnerships. Table 1 summarizes the model's original premises, the suggested revisions, and the theoretical directions for advancing it.

TABLE 1
Deconstruction and Extension of the Bower-Burgelman Model

Premises		Revision	Literature
(1)	Strategic initiatives leading to change primarily originate at the bottom of the organization	Strategic initiatives may equally emerge at the top levels of the organization and bottom-up processes may fail under specific circumstances	Top management value creation (Collins & Clark, 2003; Goold, Campbell, & Alexander, 1998; Nell & Ambos, 2013); contingencies for top-down intervention (Christensen, 1997; Doz, 2005; Dutton & Duncan, 1987; Eisenmann & Bower, 2000)
(2)	A firm's structural and strategic contexts constitute the major top-down selection processes	The corporate context is the result of multi-level sensemaking and social interaction processes	Interpretive schemes and sensemaking (Balogun & Johnson, 2005; Maitlis & Sonenshein, 2010); strategy-as-practice (Jarzabkowski, 2004; Whittington, 1996); microfoundations of institutional theory (Powell & Colyvas, 2008; Zilber, 2002)
(3)	Induced and autonomous strategic processes are clearly dissociated	The induced and autonomous processes form a duality and are both embedded in the corporate and environmental contexts	Entrepreneurial embeddedness (Aldrich & Zimmer, 1986; Jack & Anderson, 2002); enabling bureaucracy (Farjoun, 2010; Rivkin & Siggelkow, 2003)
(4)	Strategic initiatives evolve within the boundaries of a single firm	Strategic initiatives are the result of interfirm collaboration	Alliances and networks (Albers, Wohlgezogen, & Zajac, 2013; Doz, 2005; Dunning, 2002; Grant & Baden-Fuller, 2004; Powell, Koput, & Smith-Doerr, 1996; Weisenfeld, Reeves, & Hunck-Meiswinkel, 2001b)
(5)	The effectiveness of the internal selection environment depends on how well it reflects the selection pressures of its external environment	Micro-level sensemaking and interpretive processes may manifest themselves in deviating or even disruptive responses to external selection pressures	Creative destruction (Schumpeter, 1994); constructivist processes (Garfinkel, 1967; Weick et al., 2005); Institutional entrepreneurship (DiMaggio, 1988; Hardy & Maguire, 2008; Lawrence, Suddaby, & Leca, 2011)

Top-Down Intervention

The B-B model starts from the premise that strategic change primarily originates at the bottom of the organization, as this is where the crucial operational knowledge is located (Bower, 1970; Bower & Gilbert, 2005a; Burgelman, 1983a; 1983c). A top manager's role is limited to the manipulation of the structural context and the retroactive rejection or rationalization of initiatives that fall outside the bounds of the prevailing strategy. Here, the destiny of an initiative depends on whether top management is "willing enough to recognize strategically bottom up initiatives and capitalize on them rather than pass them by" (Noda & Bower, 1996: 188). Following Simon's (1947) reasoning on bounded rationality and dispersed knowledge, a bottom-up process helps overcome top management's limited information processing capacity within large diversified firms.

Nevertheless, a mere bottom-up orientation towards the strategy-making process explains only half of the story. In particular, the B-B model deemphasizes top management's value creation capacity, which has in fact been widely discussed – under the label of *parenting advantage* amongst others (Campbell, Goold, & Alexander, 1995; Goold et al., 1998). Apart from the administrative and political tools top management uses to shape the structural context and negotiate the strategic one, top managers can unfold entrepreneurial potential itself by initiating strategic change, or contribute their personal expertise as well as their most often notable social capital to ongoing bottom-up initiatives (Aspara, Lamberg, Laukia, & Tikkanen, 2011; Athanassiou & Nigh, 2000; Collins & Clark, 2003; Nell & Ambos, 2013). A necessary condition for top-down value creation is top management's sufficient understanding of business specifics and ties to local networks (Goold et al., 1998; Nell & Ambos, 2013). But, in contrast to the B-B model's assumption of top managements limited role, previous literature confirms that top management can draw on an often more substantial body of crucial information than lower level managers (Burt, 1997; Dacin, Ventresca, & Beal, 1999). As Collins and Clark underline,

> The social networks of top managers, defined as the systems of relationships top managers have with employees and other actors outside of their organization, are a chief source of timely and relevant information on the state of both the external environment and the organization (2003: 740).

Besides, as "strategic change frequently involves symbolic struggles over the purpose and direction of an organization" (Fiss & Zajac, 2006: 1173), top management also plays a symbolic role during strategic change (Ford & Ford, 1995; Gioia & Chittipeddi, 1991; Jacobides, 2007; Pfeffer, 1981). In their study on strategic change in a university, Gioia and Chittipeddi concluded that symbolism is "an encompassing feature of the role definition of an effective CEO, and not merely a desirable, but unessential, characteristic" (1991: 446). The authors observed how top management actively instrumentalized symbols and symbolic actions which conveyed its new vision in order to construct new meanings for others and thus promote and negotiate alternative interpretive schemes with internal and external stakeholders – an activity the authors refer to as *sensegiving*.

In the light of top-down value creation, several studies point towards specific contingencies under which the bottom-up process fails and which have recently, at least in part, found their way into the revision of the traditional resource allocation model (Bower & Gilbert, 2005a).

First, the context of multinational corporations (MNC) often implies a much more active value-adding role for top management as compared to the rather simple contexts of nationally concentrated, diversified firms as studied by Bower and Burgelman (Ambos & Mahnke, 2010; Doz, 2005; Goold & Campbell, 2002; Nell & Ambos, 2013). Doz (2005) found that top management intervention occurs on a more frequent and direct basis for MNCs, as traditional bottom-up resource allocation mechanisms may fall down under the complexity of an MNC's structural conditions. More precisely, this increased top-down activism stems from the "need to foster high-quality interactions along multiple dimensions" (Doz, 2005: 389) – not only interactions among a firm's existing subsidiaries, but also interactions with potential external alliance or joint venture partners on whom the MNC cannot simply impose its own structural context. These particular conditions demand top management's direct intervention which in turn depends on a profound understanding and tacit knowledge of the MNC's markets and operations largely obtainable only through top management's exclusive access to professional networks, relations with external stakeholders, and personal experiences within the MNC (Athanassiou & Nigh, 2000; Doz, 2005).

Second, under the circumstances of disruptive technologies, previous dimensions of performance which have so far represented an incumbent firm's key strengths are gradually rendered obsolete against the background of new entrants' technological offers (Christensen, 1997). Yet, according to Christensen and Bower (1996), most established firm's lose their leadership position not because of managerial myopia, lethargy, and insufficient investments in disruptive technologies (which do not even necessarily pose major technological challenges), but because of a lack of impetus from core customers, which leads to a chronic underfunding of such initiatives. Disruptive technologies may in their early generations catch on in smaller, emerging markets while not addressing the needs of the firm's core customers (Christensen, 1997). Due to this lack of acceptance by core customers, middle managers will tend to favor more certain initiatives generating higher, and more reliable returns, so that disruptive technology initiatives will be denied the resources needed for their survival by the traditional resource allocation mechanism and finally cease altogether (Christensen & Bower, 1996). Consequently, top management ought to directly intervene in an initiative's development, the definition of its substantial content, and thus ensure sufficient funding and a successful commercialization (Christensen & Bower, 1996). Steve Jobs' role during the development of the iPod aptly illustrates top-down intervention under disruptive conditions. Jobs not only set an ambitious schedule for the completion of the project but also directly interacted with the project team to define product-related details in terms of design and functionality (Levy, 2006). The invention of the iPod was a project of great moment for Apple, as it not only revolutionized the way music is consumed and distributed, but also redefined the firm's strategy from a niche computer maker to a mass market player (Berry, 2006; Levy, 2006).

Third, top-down intervention can be also required in the context of turbulent markets where fast decision making and relatively large resource commitments are needed to maintain the firm's competitive position (Eisenmann & Bower, 2000; Poppo, 2003; Raynor & Bower, 2001; Sull, 2009). Traditional resource allocation processes fail to keep pace with environmental demands, as they are typically based on lengthy, multi-level, consensus-seeking managerial interaction (Eisenmann & Bower, 2000). Moreover, in the face of turbulent and uncertain environments, initiatives requiring high resource commitments will be labelled as too risky and neglected by divisional management (Raynor, 2005). Thus, by overriding the structural context top managers may speed up decision making and prevent large-scale, yet strategically relevant initiatives from being selected out in that they shift the risk from lower-level managers to themselves (Raynor, 2005). Eisenmann and Bower (2000) highlight activist top managements in global media firms such as the Walt Disney Company or News Corp. Operating under particularly "high-commitment, high-turbulence" conditions, those companies rely on a top-down strategy approach which can more effectively ensure first-mover advantages and allocate the personal risks of "bet-the-company" investment where they can be more easily borne, namely at the top (Eisenmann & Bower, 2000: 353).

Finally, top management's active intervention is highly necessary within crisis-ridden organizations. Pearson and Clair define crisis as "a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly" (1998: 60). Under such circumstances, the initiation and implementation of strategic change is typically centralized at the top (Dutton & Duncan, 1987; Maitlis & Sonenshein, 2010). Not uncommonly, during performance downturns, top managers are "scapegoated" (Boeker, 1992) and eventually replaced by successors who, for their part, lead the necessary transformation. This happened, for instance, at Scandinavian Airlines Systems (SAS) where a newly appointed CEO saved the company from its increasing downturn in the late 1970s and made it 'Airline of the Year' in 1983 (Kao & Blome, 1993).

In sum, these findings suggest that an initiative's struggle for survival does not depend on a solely bottom-up process, but, under certain circumstances, demands the active intervention of top managers.

Microfoundations of Structural Context Determination

One further fundamental point of criticism of the B-B model is its failure to provide an understanding of how context and behavior interrelate. To recap, structural context determination is a top-down process aimed at keeping variation in terms of strategic initiatives in line with the firm's prevailing strategy. But, the structural context "once designed and institutionalized as part of a firm's administrative systems and processes, seems to present a strong source of a firm's inertia" (Noda & Bower, 1996: 186), as mechanisms become increasingly impermeable to change initiatives (Burgelman, 1983b). In this line of thinking, it remains unclear how strategic behavior can unfold despite these control rigidities. A closer look at the microfoundations of the structural context is therefore needed.

The definition of the structural context suggests that the associated administrative and cultural systems set by top management to indirectly manage the strategy process are able to influence lower-level managers' behaviors specifically. For this influence to work effectively, the structural context, and with it top management's strategic intentions, need to be understood correctly and translated into corresponding actions at the lower levels of the organization. However, from a pluralism perspective, people's diversity in experiences, cognitive values and methodologies, as well as the unequal availability of data leads to "a difference in the beliefs, judgements, and evaluations even of otherwise 'perfectly rational' people" (Rescher, 1995: 11). The reality of organization-wide consensus on the structural context is therefore questionable.

In addition, the B-B model's concept of the structural context deemphasizes lower-level managers' sensemaking (Balogun & Johnson, 2004; Bartunek, 1984; Jarzabkowski, 2008; Maitlis & Lawrence, 2003). These highlight that lower-level sensemaking tends to considerably deviate from top management's intended meanings, which can lead to organizational dissonances and unintended consequences (Balogun & Johnson, 2005; Blackler, Crump, & McDonald, 2000). The lion's share of research in this field has emphasized the proximity of middle managers to the interpretations of both front-line and top managers and hence their mediating role in making and giving sense to top management's cognition (Balogun & Johnson, 2004; Beck & Plowman, 2009; Maitlis & Sonenshein, 2010). Due to this role, middle managers may enrich interpretations and encourage either divergence or convergence of interpretations across hierarchical levels (Beck & Plowman, 2009), a crucial role which highlights the structuralized functions of sensemaking.

Given that meanings manifest themselves in actions (Bartunek, 1984; Weick et al., 2005), it is important to examine how specific patterns of actions derive over time and how they in turn contribute to the structural context's maintenance or change.

One major research field in strategic management addressing managers' day-to-day practices and how they shape macro-level, aggregate patterns of behavior is known as the strategy-as-practice approach (Jarzabkowski & Whittington, 2008; Vaara & Whittington, 2012; Whittington, 1996). Its theoretical underpinnings lie in sociological theories of practice, which explain action and social order through an interpretive and cultural lens (Bourdieu, 1977; Giddens, 1984; Reckwitz, 2002). Rather than seeing strategy as embedded and maintained in an entirely top-down structural context, the strategy-as-practice literature implies that managers perform strategy through socially interacting and through recourse to specific practices present within a context (Hendry, 2000; Whittington, 1996). In this vein, social structures and human agency are linked together to explain action in organizations (Vaara & Whittington, 2012). The key concepts of this literature are praxis, practices, and practitioners (Jarzabkowski & Paul Spee, 2009; Jarzabkowski & Whittington, 2008). *Praxis* refers to "the flow of activities such as meeting, talking, calculating, form filling, and presenting in which strategy is constituted" (Jarzabkowski & Whittington, 2008: 282). *Practices* are the social, symbolic, and material tools which managers use in order to perform their work, such as Power Points or workshops (Jarzabkowski & Whittington, 2008). Finally, *practitioners* are those "who do the work of strategy, which goes beyond senior managers to include managers at multiple levels of the firm as well as influential external actors" (Jarzabkowski & Whittington, 2008: 282). Taken together, these concepts not only explain how structure is reproduced by actions and how it relates to strategic outcomes, but may also account for the ways strategy is changed (Jarzabkowski & Whittington, 2008). According to Jarzabkowski (2004), the emergence of adaptive practices yielding change and renewal is contingent on the interaction between pluralistic macro and micro contexts. Only then, can actors attribute meaning to their own and other's actions (Jarzabkowski, 2004).

More recently, institutionalists have also moved towards more micro-level explanations (Elsbach, 2002; Powell & Colyvas, 2008; van Dijk, Berends, Jelinek, Romme, & Weggeman, 2011; Zilber, 2002). Traditionally, institutional theory has tended to look through a macro-level lens to examine organizations as entities and explain their behavior through the pressures of their institutional environment (Greenwood, Oliver, Sahlin, & Suddaby, 2008; Meyer & Rowan, 1977: 1-20; Zucker, 1987). Key to those earlier formulations of institutional theory were notions of inertia and stability due to organizations' tendencies to conform to taken-for-granted rules of conduct (Meyer & Rowan, 1977). The micro-level approach as subsumed by neo-institutional theory, however, sheds light on how institutional structures arise from, constrain, and are reproduced by social interaction (Powell & DiMaggio, 1991). Studies in this stream of literature suggest that actors are not solely passive, but “might become active in choosing and infusing actions with meanings through interpretive acts” (Zilber, 2002: 235). If those interpretive acts result in bending existing taken-for-granted norms, practices aimed at legitimizing the new strategic behavior become a central concern (e.g., Dougherty & Heller, 1994).

All these micro-level approaches, sensemaking, strategy-as-practice, and neo-institutionalism, provide fruitful explanations for how actions, meanings, and actors shape the structural context and provide the breeding ground for strategic behavior and change – an issue that remains underdeveloped by Bower and Burgelman.

The Managers Behind the Induced and Autonomous Processes

Burgelman (1983b; 1983c; 1991) distinguishes between induced and autonomous behavior referring to initiatives that are, respectively, either compatible with a firm’s current strategy or initiatives that aim to change or extend it. Both are kept in balance through the top-down processes of structural and strategic context determination. Yet, the more autonomous an initiative is, the more it departs from the constraints of the structural context and the more it has to rely on the goodwill of higher level managers. But, given its significance for a firm’s adaptive capacity, how can autonomous behavior then be encouraged and managed at all within the corporate context? The B-B model in its current form remains unclear on this issue.

Against the background of the aforementioned microfoundations of the structural context, I argue that the separation between induced and autonomous behavior, in this sense, should be reconsidered in favor of more productive structural design implications. This idea is in line with contributions made by, for example, Lovas and Ghoshal (2000) who consider autonomous and induced initiatives as not separate, but rather mutually enabling constituents of the strategy-making process, or Reitzig and Sorenson (2013) and their study on middle managers’ selection biases, where induced and autonomous initiatives are conflated into the notion of product innovation.

For both adaptation mechanisms, the induced and the autonomous, the B-B model assumes two very different types of managers or entrepreneurs. The induced process – operating under the influence of the structural context – implies a manager who is ‘over-embedded’ within their institutionalized context and may be identified as what Garfinkel (1967: 68) calls a “cultural dope”. In contrast, the autonomous process rests on managers who reflect on existing modes of behavior or practices and envision new ones in a Schumpeterian sense (Schumpeter, 1947), and who thereby provoke "processes of disembedding" from existing structures (Beckert, 1999: 786). Yet, opposing both processes as extremes not only overlooks the middle, more fuzzy, and complex grounds that constitute the realm between stability-enhancing and change-initiating behaviors (Farjoun, 2010), but also provides two images of corporate entrepreneurs that overemphasize managers' dependence (induced behavior) and independence (autonomous behavior) from the structural context.

Construing economic action independent of its social relations and structures is a misunderstanding, as shown, for instance, by Granovetter's (1985) embeddedness argument. Research into the entrepreneurial process supports this view by suggesting that entrepreneurship not only draws from the individual, but also from the context (Aldrich & Zimmer, 1986; Anderson, 2000; Carsrud & Johnson, 1989). Entrepreneurial embeddedness, in this sense, involves "understanding the nature of the structure, enacting or reenacting this structure which forges new ties, and maintaining both the link and the structure" (Jack & Anderson, 2002: 468). Structural embeddedness is key for entrepreneurs to access information and resources otherwise not available (e.g., Aldrich & Zimmer, 1986; Anderson, 2000; Chell & Baines, 2000; Jack & Anderson, 2002). Moreover, being embedded even creates opportunities which in turn are enacted through "embedded entrepreneurial agency" (Jack & Anderson, 2002: 469). Yet, as Aldrich and Zimmer (1986) argue, the social context not only channels and facilitates, but also constrains and inhibits entrepreneurs dependent on their position in social networks.

In this line of thinking, the autonomous process is initiated by managers who for their part experience the same enabling and constraining pressures exerted by the structural context as their induced counterparts. Consequently, isolating autonomous processes from the structural context results in incomplete and misleading implications for the design of appropriate entrepreneurship-enhancing structures. But, acknowledging that both induced and autonomous behaviors are not separate but rather form a duality may better account for entrepreneurial behavior as an organizational imperative worthy of structural support.

There is a significant stream in the literature that has abandoned the idea of the solely demotivating and creativity destroying effects of bureaucracies, thus addressing their significance for not only incremental, but also breakthrough change or innovation (Becker, Lazaric, Nelson, & Winter, 2005; Cohen, 2007). As Rivkin and Siggelkow (2003) point out, a firm's efforts to balance stability and change through organizational design creates interdependencies among design elements so that elements meant to foster stability may at the same time influence design elements aiming at the opposite. Accordingly, stable processes, control systems, and formalization allow better codification, replication, and generation of knowledge (Nonaka, 1994; Zollo & Winter, 2002), thus enabling incremental and even radical innovation, as illustrated at Pixar (Catmull, 2008) or Toyota (Adler & Borys, 1996). This structural shift towards an "enabling bureaucracy" (Farjoun, 2010) might also involve the emphasis of competition among individuals (Boudreau, Lacetera, & Lakhani, 2008), the facilitation of social capital building (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998), or the establishment of frequent feedback and adequate incentive systems (Catmull, 2008; Finkle, 2012).

In sum, aiming to derive managerial and design implications for the encouragement of an innovative culture, which is a precondition for the constant renewal of a competitive advantage (Bettis & Hitt, 1995), firms need to pay more careful attention to interdependencies between the effective direction of structural design elements towards stability (induced behavior) and change (autonomous behavior). However, the ideas presented here do not substitute for but rather complement the literature on "ambidextrous" organizations, which proposes an effective solution for the parallel realization of exploitation and exploration (March, 1991; Tushman & O'Reilly, 1996). Nonetheless, a shift in perspective may help reconcile opposing empirical observations and arrive at more fruitful structural solutions (Adler & Borys, 1996; Argote, McEvily, & Reagans, 2003; Feldman & Pentland, 2003; North, 2005).

Beyond Single Hierarchies

The B-B model starts from the premise that resource allocation takes place in the context of a single firm with unidimensional hierarchical structures as characterized by the "M-form" organization (Bartlett & Ghoshal, 1993; Doz, 2005). Accordingly, both induced and autonomous initiatives evolve from the competence set of one focal organization (Bower, 1970; Burgelman, 1991). However, today's organizations need to assert themselves in an increasingly global and informational economy, which demands the establishment of multidimensional and more complex structural and strategic solutions (Castells, 1999: 66-147; Doz, 2005). Moreover, within industries characterized by rapid technological development and widely dispersed sources of expertise, such as biotechnology, learning and innovation occur primarily within networks of firms, universities, suppliers, research laboratories, and customers (Powell et al., 1996; Weisenfeld et al., 2001b). Given the inevitable rise of the "network society" (Castells, 1999) and Dunning's (2002) "alliance capitalism", which largely replace the socio-institutional structures of hierarchical capitalism, I want to argue for an explicit integration of interfirm partnering and industrial networks into a model depicting the evolution of strategic behavior.

The past three decades have seen a proliferation of the different forms of interfirm collaborations – ranging from virtual companies to joint ventures to strategic alliances – to which scholars and practitioners have devoted attention (Borys & Jemison, 1989; Child & Faulkner, 1998; Kogut, 1988; Weisenfeld, Fisscher, Pearson, & Brockhoff, 2001a). One of the major motivations for a firm to enter a partnership stems from intellectual considerations, namely the quest for learning and knowledge transfer (Becerra, Lunnan, & Huemer, 2008; Inkpen, 2000; Kogut, 1988; Mowery, Oxley, & Silverman, 1996). Mutual learning, and especially the transfer and integration of tacit knowledge with its personal quality, demand close interaction between the parties involved (Grant, 1996; Nonaka, 1994). Consequently, a firm aiming to utilize another firm's critical knowledge for exploitation or exploration purposes needs to engage in intense commitment and investments in structural and strategic terms (Albers et al., 2013; Doz, 1996; Koza & Lewin, 2000). Such interorganizational arrangements intervene in a firm's intraorganizational resource allocation and selection mechanism through the negotiation of a shared strategic context reflecting the common strategic priorities of the partnership and through structural adjustments which lay down the set of relations between the partners and through the specialization, formalization, and centralization of the collaboration's organizational design (Albers, 2010; Albers et al., 2013; Grandori & Soda, 1995; Koza & Lewin, 2000).

The particular challenges alliance structures pose for the partners' corporate contexts of resource allocation have been further discussed by Doz (2005). Accordingly, separate strategic decision-making centers, ownership arrangements, resource allocation processes, and the partners' continuously questioned alignment of strategic interests render the shared strategic context quite incoherent. Likewise, complex is the reconciliation of diverse structural contexts characterizing the organizations' respective resource allocation systems. This may be particularly due to differences in national cultures which are associated with different control-systems, degrees of centralization, or formalization and which in their turn substantially influence processes of definition and impetus (Hofstede, Neuijen, Ohayv, & Sanders, 1990). But, at the same time, firms may avoid revealing details of their internal structural context on the basis of tactical and strategic considerations. Hence, firms that keep their resource allocation mechanisms opaque might gain a more advantageous position during negotiations than firms that keep them transparent (Doz, 2005; Rao & Schmidt, 1998). Doz remarks that "Substantive dialogue concerning alliance strategy, governance, and quality of relations needs to take place both vertically – across levels – within each partner's organization […] and also among partners at each level of their organizations" (2005: 388).

On the whole, the B-B model's evolutionary view on strategy-making as an organizational learning process (Burgelman, 1988; 1991) demands a broader conception of the ways learning or strategic behavior – be it induced or autonomous – comes into existence, is selected, and finally retained. The integration of "interorganizational learning" (Child, 2001; Hamel, 1991; Holmqvist, 2003) constitutes a major step in modifying the model to meet the challenges and opportunities of alliance capitalism (Dunning, 2002). In this vein, Burgelman's (1991) vague acknowledgement that while the origin of the induced process is coupled to the firm's strategic priorities, the autonomous process may be triggered by external ideas or events is no longer satisfactory. On the contrary, for the sake of new learning organizations actively search for external stimuli in the form of bilateral interactions or connections to more complex institutional networks. Interfirm partnerships have become a key source of not only exploitative learning (i.e., pooling of complementary competencies leading to incremental innovations), but also explorative learning (i.e., probing and developing new markets or technologies in a radical sense) (Koza & Lewin, 2000).

From Co-Evolution to Creative Destruction

The B-B model assumes that the better a firm's internal selection criteria reflect the selection pressures of the external environment, the higher the probability of a firm's adaptive success and long-term survival within the industry (Burgelman, 1991). This assumption implies that firms trying to avoid being selected out, develop the same industry-specific selection criteria as their competitors. However, this co-evolution argument excludes instances where firms deviate from industry-common internal selection environments. Cases where firms develop alternative selection criteria and, as an outcome of that, different strategic responses to the (future) challenges of an industry, can be observed often enough to reconsider the explanatory power of the B-B model's co-evolution assumption.

For instance, the introduction of Kodak's roll-film camera in 1882 marked the institutionalization of a new technology which substantially transformed the concept of photography from a profession to a popular, social practice (Munir & Phillips, 2005). Other examples include Skype and how it revolutionized the telecommunication industry (Rao, Angelov, & Nov, 2006), Napster.com's peer-to-peer sound file trading and the resulting challenges to the recording industry (McCourt & Burkart, 2003), Apple's iPod (Linden, Kraemer, & Dedrick, 2009), or Tesla Motors' bold advancements in the field of electric cars (Van den Steen, 2013). These cases are illustrative of what Schumpeter refers to as the process of "creative destruction" – the lifeblood of capitalism – "that incessantly revolutionizes the economic structure *from within*, incessantly destroying the old one, incessantly creating a new one" (Schumpeter, 1994: 83, emphasis in original). Such strategic behavior is also captured by the construct of institutional entrepreneurship characterizing "the activities of actors who have an interest in particular institutional arrangements and who leverage resources to create new institutions or to transform existing ones" (Maguire, Hardy, & Lawrence, 2004: 657). In this line of thinking, external conditions are not taken for granted, but are open to entrepreneurial manipulations and redesign. However, as yet, the B-B model has failed to extend its co-evolution argument by incorporating either deviant internal reactions to external selection pressures or instances of selection pressure manipulation.

But, how is it that some firms have a "creative response" where others simply adapt (Schumpeter, 1947: 150)? Building on the argument already used in the critical analysis of the structural context, external pressures are also subject to differences in interpretations and discursive struggles over meaning and sense (Gioia & Chittipeddi, 1991; Powell & Colyvas, 2008; Zilber, 2002). Organizations not only absorb external selection pressures but cognitively translate them into their internal interpretive schemes through language, talk, and communication (Colyvas, 2007; Gioia & Chittipeddi, 1991; Weick et al., 2005; Zilber, 2002). The manifestations of such micro-translations and framing have been vividly depicted by Levitt's landmark article on "marketing myopia" in 1960. Here, the author explains how major, once growth industries declined due to their managements' failures to define and frame proper business purposes. For instance, by assuming itself to be in the railroad rather than in the transportation industry, American Railroads squandered future growth opportunities which were ultimately filled by others (airplanes, cars, trucks, etc.) (Levitt, 1960).

As Weick et al. argue, "Sensemaking is central because it is the primary site where meanings materialize that inform and constrain identity and action" (2005: 409). Hence, the micro-processes lying behind actors' interpretations and sensemaking of external conditions and developments provide the microfoundation for actions constituting such creative responses as illustrated by the cases above (Powell & Colyvas, 2008: 277). Organizational actors are, in this sense, knowledgeable, purposive, and reflexive and thus have the capacity to enact the context in other than the prescribed ways, thereby either sustaining or changing the existing order (Garud, Hardy, & Maguire, 2007; Giddens, 1984). To this end, the B-B model can benefit from complementary research into sensemaking (e.g., Maitlis, 2005; Weick et al., 2005) and ethnomethodology (e.g., Garfinkel, 1967) that emphasizes the constructivist processes that illuminate how micro-mechanisms cause macro-level changes in the internal and even external selection environment.

DISCUSSION

The above critical analysis of the B-B model in terms of its major premises suggests that in order to maintain its meaningfulness, the model needs to be reconsidered and extended in a number of ways entailing (1) the interplay of the micro- and macro-levels of analysis, (2) the emergence of opportunities for strategic behavior, and (3) the incorporation of innovative and collaborative organizational forms.

Closing the Gap Between Micro- and Macro-Levels of Analysis

I argue that the B-B model in its current form obscures the relationship between the behavioral (strategic behavior) and contextual (strategic and structural context, external environment) dimensions of the strategy-making process. The definitions of the corporate and external contexts as provided by the B-B model largely underplay cognitive and interpretive processes on the part of organizational actors (e.g., Balogun & Johnson, 2005; Rescher, 1995). However, as these processes manifest themselves in micro-level actions which are recursively intertwined with social structures, they may either contribute to the maintenance of day-to-day routinized practices or succeed in amending them (Jarzabkowski, 2004; Weick et al., 2005). By stressing that norms and perceived structures not only constrain, but rather form a platform for unfolding entrepreneurship in this vein (Farjoun, 2010; Garud et al., 2007), I propose an alternative view of how the as yet somewhat neglected micro-level, symbolic and cognitive mechanisms that underlie the strategy-making process interact with the development of macro-level processes. The reference to the plurality of contexts is pivotal here (Giddens, 1991; Rescher, 1995). Actors participate in social processes with a variety of institutions (political, economic, religious, and ethnic). As Jarzabkowski notes, strategic behavior "may thus be divergent or isomorphic depending upon the particular institutions that are invoked, with modern society characterized by plural social institutions" (2004: 536). Following this line of reasoning, I suggest a more realistic image of organizational actors, namely one of knowledgeable, reflexive, and purposive strategists that are neither overembedded "cultural dopes" nor totally disembedded change agents (Garfinkel, 1967; Giddens, 1984; Powell & Colyvas, 2008). Actors are able to enact structures to their own ends (Hardy & Maguire, 2008; Powell & Colyvas, 2008), be this within the intraorganizational context or the external organizational field.

In more concrete terms, a revised B-B model should incorporate a "practice turn" (Reckwitz, 2002) by accounting for the corporate and external contexts as being embedded in micro-level practices. As a consequence, this shift in perspective construes the structural and strategic contexts not as substitutes for the management of respective strategic behaviors (induced or autonomous) but rather as mutually enabling, interdependent constituents of the corporate context. This is particularly in line with the reconsideration of the behavioral foundations of the induced-autonomous-dichotomy in favor of more effective structural design implications that may particularly help encourage even radical forms of corporate entrepreneurship – a capacity firms cannot do without to preserve their longevity in today's hypercompetitive markets (D'Aveni, 1994). For instance, by accounting for the enabling qualities of organizational routines (Becker et al., 2005; Feldman, 2000; Feldman & Pentland, 2003), Adler, Goldoftas, and Levine (1999), explain for the case of Toyota how the effective use of metaroutines, job enrichment, switching, and partitioning can support both routine and non-routine tasks, including even radical innovation.

Moreover, instead of conceptualizing the determination of the structural context as a linear top-down process, such a revised model acknowledges that structure exists, not solely in the heads of individual (top) managers, but as the outcome of multi-level routinized social practices (e.g., Jarzabkowski, 2004; Powell & Colyvas, 2008; Reckwitz, 2002). Thus "the 'breaking' and 'shifting' of structures must take place in everyday crises of routines, in constellations of interpretative interdeterminacy and of the inadequacy of knowledge with which the agent, carrying out a practice, is confronted in the face of a 'situation'" (Reckwitz, 2002: 255). Similarly, Dougherty and Heller (1994: 215) question the reliance on such broadly touted mechanisms as championing and sponsorship in a "recipe fashion", and instead suggest managers engage in changing institutionalized practices themselves in order to create legitimacy for their initiatives.

Likewise, the acknowledgement that the sensemaking of external selection pressures implies a cognitive momentum, such that firms may do more than simply mirror these pressures in the intraorganizational ecology, and may better account for what Schumpeter (1947) defines as "creative responses" and, what is more, for firm-level activism towards transforming the rules of the game.

Inspired by Weick et al.'s statement that micro-level actions "are small actions, but they are small actions with large consequences" (2005: 419), some promising avenues for future research lie in the tools and activities managers use to manipulate their institutionalized contexts instead of adhering to prevailing recipes. Fruitful theoretical starting points are found in the strategy-as-practice literature, which has already specified important practices constituting strategy work within organizations (e.g., Jarzabkowski, 2008; Mantere & Vaara, 2008), as well as studies in the field of neo-institutionalism highlighting micro-level activities employed in the struggle for legitimacy of strategic behavior (e.g., Bitektine & Haack, 2014; Dougherty & Heller, 1994; Zilber, 2002). Particularly suitable for approaching this issue are qualitative and, more specifically, ethnographic methods emphasizing the penetration of the subjective nature of organizational life by actors' interpretations and negotiations of it (e.g., Bate, 1997; Garfinkel, 1967; Yin, 2003).

Constructing Opportunities

Building a considerable part of the critical analysis of the B-B model upon social constructivist notions of the strategic process provides a new perspective on the way macro-level, contextual dimensions are intertwined with micro-level processes of sensemaking and enacting (Berger & Luckmann, 1967; Giddens, 1984; Weick et al., 2005). But, constructivist ideas also shed new light on the microfoundations of strategic behavior, and more precisely, on how managers enact structures in order to create opportunities for entrepreneurial actions.

The constructivist perspective suggests that "entrepreneurial opportunities emerge from the cognitions and behaviors of entrepreneurs as they engage in interactions with current social structures" (Wood & McKinley, 2010: 68). In contrast to objectivist positions on the origins of entrepreneurial opportunities, which treat entrepreneurs as mere "information processors or reactors" (e.g., Kirzner, 1979; Mir & Watson, 2000: 942; Shane & Venkataraman, 2000), constructivism regards them as active participants in the social processes that construct opportunities for strategic initiatives. Here, the diagnosis of strategic issues is not of central concern (Dutton, Fahey, & Narayanan, 1983), but rather the emphasis is on the subjective, cognitive and simultaneously social processes through which entrepreneurs may even "create something out of nothing" (Baker & Nelson, 2005: 330). More precisely, according to Wood and McKinley (2010) opportunity creation starts with a mere idea – an imagined opportunity. Through sensemaking processes and interactions with peers the entrepreneur then gains clarity about the idea's viability and either objectifies or abandons it. In the second stage, the entrepreneur attempts to enact the opportunity by engaging the social structure and entraining potential stakeholders. In sum, the core dimensions of opportunity creation involve existing social structures, their cognitive evaluation on the part of the entrepreneur, and the entrepreneur's ability to manipulate social structures in the future (Wood & McKinley, 2010: 68).

The B-B model has, so far, remained rather vague on the origins of strategic initiatives and the process of opportunity creation or – in evolutionary terms – the sources of variation. Its explanations amount to nothing more than general notions of firms' perceiving and pursuing market opportunities that are either within or outside the scope of their prevailing strategy (Bower, 1970; Burgelman, 1983b, 1991). Yet, in order to effectively encourage and navigate the strategic behavior of lower-level managers, a deeper understanding of the process and its main constituents that lies behind opportunity construction is needed. As mentioned above, entrepreneurs are not only filters and interpreters of the contexts surrounding them, but play an active role in their construction and even manipulation (Giddens, 1984; Weick et al., 2005). A revised model therefore needs to clarify how initiatives and structure are coupled. Promising links to complementary ideas on this issue are also found in the literatures on strategy-as-practice (e.g., Jarzabkowski, 2004; Vaara & Whittington, 2012) or institutional entrepreneurship (e.g., Garud, Jain, & Kumaraswamy, 2002; Hardy & Maguire, 2008).

As Wood and McKinley (2010) point out, not only do entrepreneurs' cognitive evaluations of social structures play a role, but also their social ties with peers and relationships to potential stakeholders. Extending the model in this vein thus demands addressing the entrepreneur's position within the relevant social networks (internal or external, and not necessarily hierarchical) from which consensus about the initiative's value is drawn. This micro-level consensus process, then, precedes processes of definition and impetus. Instead of waiting for opportunities to emerge "fortuitously" (Burgelman, 1991: 246), firms interested in encouraging corporate entrepreneurship need to ensure managers' embeddedness within a broader productive network of knowledgeable peers. This embeddedness argument further contradicts the B-B model's bipolar concept of managers and entrepreneurs as being either over-embedded (induced process) or disembedded (autonomous process). Thus, elaborating on the variety and intensity of social ties corporate entrepreneurs can enact is also a promising avenue for future research. Particularly interesting are questions of how such extra-organizational networks are built and used to create impetus within the intraorgnizational ecology, and under what conditions they can be used most effectively to further an initiative. Furthermore, it is worth investigating how managers can leverage their personal social ties and networks so that firms can endorse their embeddedness as a whole.

Reconsidering Organizational Design

Because new and more complex organizational arrangements are burgeoning (Ghoshal & Bartlett, 1990; Grandori & Soda, 1995; Gulati, 1998), it is imperative that models of change and innovation, such as the B-B model, account for the variables and mechanisms that characterize these new ways of organizing economic activities. Against the background of recent megatrends captured in such notions as “alliance capitalism” (Dunning, 2002), the “network society” (Castells, 1999), or “postmodernism” (Clegg, 1990), organizational designs have increasingly moved towards “post-bureaucratic” forms of project organization or “hybrids” such as network and virtualized forms setting up the collapse of traditional hierarchies (Clegg, 1990; Clegg & Courpasson, 2004; Grandori & Soda, 1995; Powell et al., 1996; Weisenfeld et al., 2001a). As yet, however, it has remained unclear how the incorporation of these new organizational arrangements affects the processes of strategy-making and change proposed in the B-B model.

Conceivably, the adoption of design features such as, for instance, “structural ambiguities” (Ravasi & Verona, 2001) or “internal hybrids” (Foss, 2003) will blur the top-down/bottom-up dichotomy as suggested by Bower and Burgelman, for it may imply a realignment of decision-making rights and coordination mechanisms towards more democratic and participative forms. Moreover, revising the model in this vein may necessitate reconsidering the sphere of the structural and strategic contexts, respectively. Putting individual expertise first at the expense of hierarchical position, the structural context may forfeit at least a part of its control function in favor of a more intense use of mutual adjustment (Mintzberg, 2003), and thus the activation of the strategic context. To confirm these consequences, subsequent research should juxtapose cases of entrepreneurial processes within diverse organizational configurations with the dimensions and mechanisms proposed by the B-B model.

Likewise, profound adjustments of the B-B model can be expected when collaborative and network arrangements are integrated. Although much research has been conducted in terms of the antecedents and success factors of interfirm collaboration (Brouthers, Brouthers, & Wilkinson, 1995; Das & Teng, 2001; Doz, 1996; Koza & Lewin, 2000), or interfirm knowledge transfer (Bjorkman, Barner-Rasmussen, & Li, 2004; Mowery et al., 1996; Simonin, 1999), or of joint innovation (Ghoshal & Bartlett, 1988; Powell et al., 1996; Zajac, Golden, & Shortell, 1991), less is known about how such arrangements and the associated pooling of resources, or the forgoing of certain decision-making rights, intervene in the intraorganizational resource allocation and selection mechanisms as well as about how the reconciliation of divergent strategic and structural contexts takes place (Doz, 2005). As discussed above, Doz (2005) has already illustrated diverse challenges associated with the alignment of partner firms’ different corporate contexts within multidimensional organizations. From the perspective of the subsidiary, Birkinshaw (1997, 1998) has advanced a framework for an “internal market” of diverse entrepreneurial initiatives. However, collaborative arrangements imply a much more diverse repertoire of governance modes than has been captured by Doz's (2005) or Birkinshaw's (1997, 1998) studies. Albers (2010), for example, identified five configurations of alliance governance, which considerably differ in such dimensions as centralization, formalization, and control thus implying different settings for strategic behavior to develop. Similarly, Weisenfeld et al. (2001b) specified the collaboration profiles of virtual companies and industrial platforms used in high-technology areas. Future research may thus take those insights as a basis in order to empirically unbundle the effects different governance structures have on the mechanisms suggested in the B-B model.

CONCLUSION

The critique and extension of the B-B model put forward in this paper unpacks some fundamental dilemmas associated with the five major premises underlying Bower's and Burgelman's line of argument: the bottom-up strategy process, the role of top management, the dichotomy of induced versus autonomous processes, single hierarchies, and the co-evolution of internal and external selection environments. As yet, the B-B model has underplayed important developments in terms of new organizational design solutions, which in terms of complexity go well beyond the organizational settings Bower and Burgelman have examined. Besides, the model has insufficiently linked to most recent theoretical contributions in the field of strategic management which, taken together, have the potential to close the gap between the macro and the micro of the strategy-making process. Yet, this critique is not intended to dismiss the model, but rather to identify current challenges that must be addressed in order to retain its viability. Though appreciating the authors' most recent attempts to expand the model with respect to increasingly global competitive dynamics and more complex, multi-dimensional organizational designs (Bower & Gilbert, 2005a; Burgelman, 2014; Burgelman & Grove, 2007; Yu & Bower, 2010), I argue that those isolated contributions have not yet captured the bulk of the challenges that lie ahead of the model. Future attempts to advance the model and adjust it to recent macro-level changes may go well beyond the necessarily limited range of theoretical perspectives presented in this paper and suggest alternative approaches. Nevertheless, I hope I have clearly indicated the directions such work should follow, while confirming the ongoing basic viability of the B-B model. The model's basic mechanisms will certainly assert themselves in most organizational and environmental scenarios, nonetheless, in order to continue to inform future research, the model needs to be expanded by newly generated insights, concepts, and labels.

REFERENCES

Adler, P. S., & Borys, B. 1996. Two types of bureaucracy: Enabling and coercive. ***Administrative Science Quarterly***: 61-89.

Adler, P. S., Goldoftas, B., & Levine, D. I. 1999. Flexibility versus efficiency? A case study of model changeovers in the Toyota production system. ***Organization Science***, 10(1): 43-68.

Albers, S. 2010. Configurations of alliance governance systems. ***Schmalenbach Business Review: ZFBF***, SBR 62: 204-233.

Albers, S., Wohlgezogen, F., & Zajac, E. J. 2013. Strategic alliance structures: An organization design perspective. ***Journal of Management***, Published online before print May 29, 2013: 1-33.

Aldrich, H., & Zimmer, C. 1986. Entrepreneurship through social networks: University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.

Aldrich, H. E., & Ruef, M. 2006. ***Organizations evolving*** (2nd ed.). Thousand Oaks: SAGE.

Ambos, B., & Mahnke, V. 2010. How do MNC headquarters add value? ***Management International Review***, 50(4): 403-412.

Anderson, A. R. 2000. Paradox in the periphery: An entrepreneurial reconstruction? ***Entrepreneurship & Regional Development***, 12(2): 91-109.

Andrews, K. R. 1980. ***The concept of corporate strategy*** (2nd ed.). Homewood, IL: R. D. Irwin.

Argote, L., McEvily, B., & Reagans, R. 2003. Managing knowledge in organizations: An integrative framework and review of emerging themes. ***Management Science***, 49(4): 571-582.

Aspara, J., Lamberg, J. A., Laukia, A., & Tikkanen, H. 2011. Strategic management of business model transformation: lessons from Nokia. ***Management Decision***, 49(4): 622-647.

Athanassiou, N., & Nigh, D. 2000. Internationalization, tacit knowledge and the top management teams of MNCs. ***Journal of International Business Studies***, 31(3): 471-487.

Baker, T., & Nelson, R. E. 2005. Creating something from nothing: Resource construction through entrepreneurial bricolage. ***Administrative Science Quarterly***, 50(3): 329-366.

Balogun, J., & Johnson, G. 2004. Organizational restructuring and middle manager sensemaking. ***Academy of Management Journal***, 47(4): 523-549.

Balogun, J., & Johnson, G. 2005. From intended strategies to unintended outcomes: The impact of change recipient sensemaking. ***Organization Studies***, 26(11): 1573-1601.

Barnett, W. P., & Burgelman, R. A. 1996. Evolutionary perspectives on strategy. ***Strategic Management Journal***, 17(1): 5-19.

Bartlett, C. A., & Ghoshal, S. 1993. Beyond the M-form: Toward a managerial theory of the firm. ***Strategic Management Journal***, 14(Special Issue: Organizations, Decision Making and Strategy): 23-46.

Bartunek, J. M. 1984. Changing interpretive schemes and organizational restructuring: The example of a religious order. ***Administrative Science Quarterly***: 355-372.

Bate, S. P. 1997. Whatever happened to organizational anthropology? A review of the field of organizational ethnography and anthropological studies. ***Human Relations***, 50(9): 1147-1175.

Becerra, M., Lunnan, R., & Huemer, L. 2008. Trustworthiness, risk, and the transfer of tacit and explicit knowledge between alliance partners. ***Journal of Management Studies***, 45(4): 691-713.

Beck, T. E., & Plowman, D. A. 2009. Experiencing rare and unusual events richly: The role of middle managers in animating and guiding organizational interpretation. ***Organization Science***, 20(5): 909-924.

Becker, M. C., Lazaric, N., Nelson, R. R., & Winter, S. G. 2005. Applying organizational routines in understanding organizational change. ***Industrial and Corporate Change***, 14(5): 775-791.

Beckert, J. 1999. Agency, entrepreneurs, and institutional change. The role of strategic choice and institutionalized practices in organizations. ***Organization Studies***, 20(5): 777-799.

Berger, P. L., & Luckmann, T. 1967. ***The social construction of reality: A treatise in the sociology of knowledge***. Garden City, NY: Doubleday.

Berry, R. 2006. Will the iPod kill the radio star? Profiling podcasting as radio. ***Convergence: The International Journal of Research into New Media Technologies***, 12(2): 143-162.

Bettis, R. A., & Hitt, M. A. 1995. The new competitive landscape. ***Strategic Management Journal***, 16(S1): 7-19.

Birkinshaw, J. 1997. Entrepreneurship in multinational corporations: The characteristics of subsidiary initiatives. ***Strategic Management Journal***, 18(3): 207-229.

Birkinshaw, J. 1998. Corporate entrepreneurship in network organizations: How subsidiary initiative drives internal market efficiency. ***European Management Journal***, 16(3): 355-364.

Bitektine, A., & Haack, P. 2014. The "macro" and the "micro" of legitimacy: Towards a multi-level theory of the legitimacy process. ***Academy of Management Review***, Published online before print September 10, 2014: 1-60.

Bjorkman, I., Barner-Rasmussen, W., & Li, L. 2004. Managing knowledge transfer in MNCs: the impact of headquarters control mechanisms. ***Journal of International Business Studies***, 35(5): 443-455.

Blackler, F., Crump, N., & McDonald, S. 2000. Organizing processes in complex activity networks. ***Organization***, 7(2): 277-300.

Boeker, W. 1992. Power and managerial dismissal: Scapegoating at the top. ***Administrative Science Quarterly***: 400-421.

Borys, B., & Jemison, D. B. 1989. Hybrid arrangements as strategic alliances: Theoretical issues in organizational combinations. ***Academy of Management Review***, 14(2): 234-249.

Boudreau, K. J., Lacetera, N., & Lakhani, K. R. 2008. ***Incentives versus diversity: Re-examining the link between competition and innovation***. Paper presented at the Wharton Technology Conference.

Bourdieu, P. 1977. ***Outline of a theory of practice***. Cambridge, UK: Cambridge University Press.

Bower, J. L. 1970. ***Managing the resource allocation process: A study of corporate planning and investment***. Boston: Harvard Business School Classics.

Bower, J. L., & Gilbert, C. G. 2005a. ***From resource allocation to strategy***. Oxford: Oxford University Press.

Bower, J. L., & Gilbert, C. G. 2005b. A revised model of the resource allocation process. In J. L. Bower, & C. G. Gilbert (Eds.), ***From resource allocation to strategy***: 439-455. New York: Oxford University Press.

Brouthers, K. D., Brouthers, L. E., & Wilkinson, T. J. 1995. Strategic alliances: Choose your partners. ***Long Range Planning***, 28(3): 18–25.

Burgelman, R. A. 1983a. Corporate entrepreneurship and strategic management: Insights from a process study. ***Management Science***, 29(12): 1349-1364.

Burgelman, R. A. 1983b. A model of the interaction of strategic behavior, corporate context, and the concept of strategy. ***Academy of Management Review***, 8(1): 61-70.

Burgelman, R. A. 1983c. A process model of internal corporate venturing in the diversified major firm. ***Administrative Science Quarterly***, 28(2): 223-244.

Burgelman, R. A. 1988. Strategy making as a social-learning process - The case of internal corporate venturing. ***Interfaces***, 18(3): 74-85.

Burgelman, R. A. 1991. Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research. ***Organization Science***, 2(3): 239-262.

Burgelman, R. A. 1994. Fading memories - A process theory of strategic business exit in dynamic environments. ***Administrative Science Quarterly***, 39(1): 24-56.

Burgelman, R. A. 2002a. Strategy as vector and the inertia of coevolutionary lock-in. ***Administrative Science Quarterly***, 47(2): 325-357.

Burgelman, R. A. 2002b. ***Strategy is destiny: How strategy-making shapes a company's future***. New York: The Free Press.

Burgelman, R. A. 2003. Strategy making and evolutionary organization theory: Insights from longitudinal process research, ***CBS Annual Celebration*** Vol. Research Paper Series 1844: 1-52: Stanford Business School.

Burgelman, R. A. 2005. The role of strategy making in organizational evolution. In J. L. Bower, & C. G. Gilbert (Eds.), ***From resource allocation to strategy***: 38-70. New York: Oxford University Press.

Burgelman, R. A. 2014. Built to become: Corporate longevity and strategic leadership, ***Research Paper Series***: 75: Graduate School of Business Stanford University. Working Paper.

Burgelman, R. A., & Grove, A. S. 2007. Let chaos reign, then rein in chaos - Repeatedly: Managing strategic dynamics for corporate longevity ***Strategic Management Journal***, 28: 965–979.

Burt, R. S. 1997. The contingent value of social capital. ***Administrative Science Quarterly***, 42(2): 339-365.

Campbell, A., Goold, M., & Alexander, M. 1995. The value of the parent company. ***California Management Review***, 38(1): 79-97.

Campbell, D. 1969. Variation and selective retention in socio-cultural evolution. ***General Systems: Yearbook of the Society for General Systems Research***, 16: 69–85.

Carsrud, A. L., & Johnson, R. W. 1989. Entrepreneurship: A social psychological perspective. ***Entrepreneurship & Regional Development***, 1(1): 21-31.

Castells, M. 1999. ***The rise of the network society***. Oxford: Blackwell.

Catmull, E. 2008. How Pixar fosters collective creativity. ***Harvard Business Review***, 86(9): 64-72.

Chakravarthy, B. S., & Doz, Y. 1992. Strategy process research: Focusing on corporate self-renewal. ***Strategic Management Journal***, 13(S1): 5-14.

Chell, E., & Baines, S. 2000. Networking, entrepreneurship and microbusiness behaviour. ***Entrepreneurship & Regional Development***, 12(3): 195-215.

Child, J. 2001. Learning through strategic alliances. In M. Dierkes, A. B. Antal, J. Child, & I. Nonaka (Eds.), ***Handbook of organizational learning and knowledge***: 657-680. Oxford: Oxford University Press.

Child, J., & Faulkner, D. O. 1998. ***Strategies of cooperation: Managing alliances, networks, and joint ventures***. Oxford: Oxford University Press.

Christensen, C. 1997. ***The innovator's dilemma: When new technologies cause great firms to fail***. Boston, MA: Harvard Business Press.

Christensen, C. M., & Bower, J. L. 1996. Customer power, strategic investment, and the failure of leading firms. ***Strategic Management Journal***, 17(3): 197-218.

Clegg, S. 1990. ***Modern organizations: Organization studies in the postmodern world***. London: Sage.

Clegg, S., & Courpasson, D. 2004. Political hybrids: Tocquevillean views on project organizations. ***Journal of Management Studies***, 41(4): 525-547.

Cohen, M. D. 2007. Administrative behavior: Laying the foundations for Cyert and March. ***Organization Science***, 18(3): 503-506.

Collins, C. J., & Clark, K. D. 2003. Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. ***The Academy of Management Journal***, 46(6): 740-751.

Colyvas, J. A. 2007. From divergent meanings to common practices: The early institutionalization of technology transfer in the life sciences at Stanford University. ***Research Policy***, 36(4): 456-476.

Cyert, R. M., & March, J. G. 1963. ***A behavioral theory of the firm*** (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

D'Aveni, R. A. 1994. ***Hypercompetition***. New York: The Free Press.

Dacin, M. T., Ventresca, M. J., & Beal, B. D. 1999. The embeddedness of organizations: Dialogue & directions. ***Journal of Management***, 25(3): 317-356.

Das, T. K., & Teng, B. S. 2001. Trust, control, and risk in strategic alliances: An integrated framework. ***Organization Studies***, 22(2): 251-283.

DiMaggio, P. J. 1988. Interest and agency in institutional theory. In L. G. Zucker (Ed.), ***Institutional patterns and organizations: Culture and environment***, Vol. 1: 3-22. Cambridge, MA: Ballinger.

Dougherty, D., & Heller, T. 1994. The illegitimacy of successful product innovation in established firms. ***Organization Science***, 5(2): 200-218.

Doz, Y. L. 1996. The evolution of cooperation in strategic alliances: Initial conditions or learning processes? ***Strategic Management Journal***, 17(S1): 55-83.

Doz, Y. L. 2005. Resource allocation processes in multidimensional organizations: MNCs and alliances. In J. L. Bower, & C. G. Gilbert (Eds.), ***From resource allocation to strategy***: 365-392. New York: Oxford University Press.

Dubini, P., & Aldrich, H. 1991. Personal and extended networks are central to the entrepreneurial process. ***Journal of Business Venturing***, 6(5): 305-313.

Dunning, J. H. 2002. ***Alliance capitalism and global business***. New York: Routledge.

Dutton, J. E., & Duncan, R. B. 1987. The creation of momentum for change through the process of strategic issue diagnosis. ***Strategic Management Journal***, 8(3): 279-295.

Dutton, J. E., Fahey, L., & Narayanan, V. K. 1983. Toward understanding strategic issue diagnosis. ***Strategic Management Journal***, 4(4): 307-323.

Eisenmann, T. R., & Bower, J. L. 2000. The entrepreneurial M-form: Strategic integration in global media firms. ***Organization Science***, 11(3): 348-355.

Elsbach, K. 2002. Intraorganizational institutions. In J. A. C. Baum (Ed.), ***Companion to organizations***: 37-57. Oxford: Blackwell.

Farjoun, M. 2002. Towards an organic perspective on strategy. ***Strategic Management Journal***, 23(7): 561-594.

Farjoun, M. 2010. Beyond dualism: Stability and change as a duality. ***Academy of Management Review***, 35(2): 202-225.

Feldman, M. S. 2000. Organizational routines as a source of continuous change. ***Organization Science***, 11(6): 611-629.

Feldman, M. S., & Pentland, B. T. 2003. Reconceptualizing organizational routines as a source of flexibility and change. ***Administrative Science Quarterly***, 48(1): 94-118.

Finkle, T. A. 2012. Corporate entrepreneurship and innovation in Silicon Valley: The case of Google, Inc. ***Entrepreneurship Theory and Practice***, 36(4): 863-884.

Fiss, P., & Zajac, E. 2006. The symbolic management of strategic change: Sensegiving via framing and decoupling. ***Academy of Management Journal***, 49(6): 1173-1193.

Ford, J. D., & Ford, L. W. 1995. The role of conversations in producing intentional change in organizations. ***Academy of Management Review***, 20(3): 541-570.

Foss, N. J. 2003. Selective intervention and internal hybrids: Interpreting and learning from the rise and decline of the Oticon spaghetti organization. ***Organization Science***, 14(3): 331-349.

Garfinkel, H. 1967. ***Studies in ethnomethodology***. Englewood Cliffs, NJ: Prentice Hall.

Garud, R., Hardy, C., & Maguire, S. 2007. Institutional entrepreneurship as embedded agency: An introduction to the special issue. ***Organization Studies*** 28(7): 957-969.

Garud, R., Jain, S., & Kumaraswamy, A. 2002. Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java. ***Academy of Management Journal***, 45(1): 196-214.

Ghoshal, S., & Bartlett, C. A. 1988. Creation, adoption, and diffusion of innovations by subsidiaries of multinational corporations. ***Journal of International Business Studies***, 19(3): 365-388.

Ghoshal, S., & Bartlett, C. A. 1990. The multinational corporation as an interorganizational network. ***Academy of Management Review***, 15(4): 603-625.

Giddens, A. 1984. ***The constitution of society: Outline of the theory of structuration***. Cambridge: Polity Press.

Giddens, A. 1991. ***Modernity and self-identity***. Cambridge, UK: Polity Press.

Gioia, D. A., & Chittipeddi, K. 1991. Sensemaking and sensegiving in strategic change initiation. ***Strategic Management Journal***, 12(6): 433-448.

Goold, M., & Campbell, A. 2002. Parenting in complex structures. ***Long Range Planning***, 35(3): 219-243.

Goold, M., Campbell, A., & Alexander, M. 1998. Corporate strategy and parenting theory. ***Long Range Planning***, 31(2): 308-314.

Grandori, A., & Soda, G. 1995. Inter-firm networks: Antecedents, mechanisms and forms. ***Organization Studies***, 16(2): 183-214.

Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. ***American Journal of Sociology***: 481-510.

Grant, R. M. 1996. Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. ***Organization Science***, 7(4): 375-387.

Grant, R. M., & Baden-Fuller, C. 2004. A knowledge accessing theory of strategic alliances. ***Journal of Management Studies***, 41(1): 61-84.

Greenwood, R., Oliver, C., Sahlin, K., & Suddaby, R. 2008. ***Organizational institutionalism***. Thousand Oaks, California: Sage.

Gulati, R. 1998. Alliances and networks. ***Strategic Management Journal***, 19(4): 293.

Hamel, G. 1991. Competition for competence and interpartner learning within international strategic alliances. ***Strategic Management Journal***, 12(S1): 83-103.

Hannan, M. T., & Freeman, J. 1977. The population ecology of organizations. ***American Journal of Sociology***, 82(5): 929-984.

Hannan, M. T., & Freeman, J. 1984. Structural inertia and organizational change. ***American Sociological Review***, 49(2): 149-164.

Hannan, M. T., & Freeman, J. 1989. ***Organizational ecology***. Cambridge, MA Harvard University Press.

Hardy, C., & Maguire, S. 2008. Institutional entrepreneurship. In R. Greenwood, C. Oliver, R. Suddaby, & K. Sahlin-Andersson (Eds.), ***The Sage Handbook of Organizational Institutionalism***: 198-217. Thousans Oaks, CA: Sage.

Hendry, J. 2000. Strategic decision making, discourse, and strategy as social practice. ***Journal of Management Studies***, 37(7): 955-978.

Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. 1990. Measuring organizational cultures: A qualitative and quantitative study across twenty cases. ***Administrative Science Quarterly***, 35(2): 286-316.

Holmqvist, M. 2003. A dynamic model of intra- and interorganizational learning. ***Organization Studies***, 24(1): 95-123.

Hutzschenreuter, T., & Kleindienst, I. 2006. Strategy-process research: What have we learned and what is still to be explored. ***Journal of Management***, 32(5): 673-720.

Inkpen, A. C. 2000. Learning through joint ventures: A framework of knowledge acquisition. ***Journal of Management Studies***, 37(7): 1019-1044.

Jack, S. L., & Anderson, A. R. 2002. The effects of embeddedness on the entrepreneurial process. ***Journal of Business Venturing***, 17(5): 467-487.

Jacobides, M. G. 2007. The inherent limits of organizational structure and the unfulfilled role of hierarchy: Lessons from a near-war. ***Organization Science***, 18(3): 455-477.

Jarzabkowski, P. 2004. Strategy as practice: Recursiveness, adaptation, and practices-in-use. ***Organization Studies***, 25(4): 529.

Jarzabkowski, P. 2008. Shaping strategy as a structuration process. ***Academy of Management Journal***, 51(4): 621-650.

Jarzabkowski, P., & Paul Spee, A. 2009. Strategy-as-practice: A review and future directions for the field. ***International Journal of Management Reviews***, 11(1): 69-95.

Jarzabkowski, P., & Whittington, R. 2008. A strategy-as-practice approach to strategy research and education. ***Journal of Management Inquiry***, 17(4): 282-286.

Kao, J., & Blome, J. 1993. Scandinavian Airlines Systems. Harvard: Harvard Business School.

Kirzner, I. 1979. ***Perceptions, opportunity, and profit***. Chicago: University of Chicago Press.

Kogut, B. 1988. Joint ventures: Theoretical and empirical perspectives. ***Strategic Management Journal***, 9(4): 319-332.

Koza, M., & Lewin, A. 2000. Managing partnerships and strategic alliances: Raising the odds of success. ***European Management Journal***, 18(2): 146-151.

Lawrence, T., Suddaby, R., & Leca, B. 2011. Institutional work: Refocusing institutional studies of organization. ***Journal of Management Inquiry***, 20(1): 52-58.

Levitt, T. 1960. Marketing myopia. ***Harvard Business Review***, 38(4): 24-47.

Levy, S. 2006. ***The perfect thing***. New York: Simon & Schuster.

Lewin, A. Y., & Volberda, H. W. 1999. Prolegomena on coevolution: A framework for research on strategy and new organizational forms. ***Organization Science***, 10(5): 519-534.

Linden, G., Kraemer, K. L., & Dedrick, J. 2009. Who captures value in a global innovation network? The case of Apple's iPod. ***Communications of the ACM***, 52(3): 140-144.

Lovas, B., & Ghoshal, S. 2000. Strategy as guided evolution. ***Strategic Management Journal***, 21(9): 875-896.

Maguire, S., Hardy, C., & Lawrence, T. B. 2004. Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. ***Academy of Management Journal***, 47(5): 657-679.

Maitlis, S. 2005. The social processes of organizational sensemaking. ***Academy of Management Journal***, 48(1): 21-49.

Maitlis, S., & Lawrence, T. B. 2003. Orchestral manoeuvres in the dark: Understanding failure in organizational strategizing. ***Journal of Management Studies***, 40(1): 109-139.

Maitlis, S., & Sonenshein, S. 2010. Sensemaking in crisis and change: Inspiration and insights from Weick (1988). ***Journal of Management Studies***, 47(3): 551-580.

Mantere, S., & Vaara, E. 2008. On the problem of participation in strategy: A critical discursive perspective. ***Organization Science***, 19(2): 341-358.

March, J. B., & Simon, H. A. 1958. ***Organizations***. New York: Wiley.

March, J. G. 1991. Exploration and exploitation in organizational learning. ***Organization Science***, 2(1): 71-87.

McCourt, T., & Burkart, P. 2003. When creators, corporations and consumers collide: Napster and the development of on-line music distribution. ***Media, Culture & Society***, 25(3): 333-350.

McKelvey, B., & Aldrich, H. 1983. Populations, natural selection, and applied organizational science. ***Administrative Science Quarterly***, 28(1): 101-128.

Meyer, J. W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. ***American Journal of Sociology***, 83(2): 340-363.

Mintzberg, H. 1978. Patterns in strategy formation. ***Management Science***, 24(9): 934-948.

Mintzberg, H. 1990. The design school: Reconsidering the basic premises of strategic management. ***Strategic Management Journal***, 11(3): 171-195.

Mintzberg, H. 2003. The innovative organization. In H. Mintzberg, J. Lampel, J. B. Quinn, & S. Ghoshal (Eds.), ***The strategy process***: 434-445. Upper Saddle River: Pearson Prentice Hall.

Mir, R., & Watson, A. 2000. Strategic management and the philosophy of science: The case for a constructivist methodology. ***Strategic Management Journal***, 21(9): 941-953.

Mirabeau, L., & Maguire, S. 2013. From autonomous strategic behavior to emergent strategy. ***Strategic Management Journal***, 35: 1202–1229.

Mowery, D. C. 1983. The relationship between intrafirm and contractual forms of industrial research in American manufacturing, 1900–1940. ***Explorations in Economic History***, 20(4): 351-374.

Mowery, D. C., Oxley, J. E., & Silverman, B. S. 1996. Strategic alliances and interfirm knowledge transfer. ***Strategic Management Journal***, 17(S2): 77-91.

Munir, K. A., & Phillips, N. 2005. The birth of the 'Kodak Moment': Institutional entrepreneurship and the adoption of new technologies. ***Organization Studies***, 26(11): 1665-1687.

Murmann, J. P., Aldrich, H. E., Levinthal, D., & Winter, S. G. 2003. Evolutionary thought in management and organization theory at the beginning of the new millennium: A symposium on the state of the art and opportunities for future research. ***Journal of Management Inquiry***, 12(1): 22-40.

Nahapiet, J., & Ghoshal, S. 1998. Social capital, intellectual capital, and the organizational advantage. ***Academy of Management Review***, 23(2): 242-266.

Nell, P. C., & Ambos, B. 2013. Parenting advantage in the MNC: An embeddedness perspective on the value added by headquarters. ***Strategic Management Journal***, 34(9): 1086-1103.

Nelson, R. R. 1990. US technological leadership: Where did it come from and where did it go? ***Research Policy***, 19(2): 117-132.

Nelson, R. R., & Winter, S. G. 1973. Toward an evolutionary theory of economic capabilities. ***American Economic Review***, 63(2): 440-449.

Nelson, R. R., & Winter, S. G. 1982. ***An evolutionary theory of economic change***. Cambridge, MA: Belknap Press.

Noda, T., & Bower, J. L. 1996. Strategy making as iterated processes of resource allocation. ***Strategic Management Journal***, 17: 159-192.

Nonaka, I. 1994. A dynamic theory of organizational knowledge creation. ***Organization Science***, 5(1): 14-37.

North, D. C. 2005. ***Understanding the process of economic change***. Princeton, NJ: Princeton University Press.

Ouchi, W. G. 1980. Markets, bureaucracies, and clans. ***Administrative Science Quarterly***, 25(1): 129-141.

Paroutis, S., Heracleous, L., & Angwin, D. 2013. ***Practicing strategy***. Thousand Oaks, Californa: SAGE

Pearson, C. M., & Clair, J. A. 1998. Reframing crisis management. ***Academy of Management Review***, 23(1): 59-76.

Pfeffer, J. 1981. Management as symbolic action: The creation and maintenance of organizational paradigms. ***Research in Organizational Behavior***, 3(1): 1-52.

Poppo, L. 2003. The visible hands of hierarchy within the M-form: An empirical test of corporate parenting of internal product exchanges. ***Journal of Management Studies***, 40(2): 403-430.

Powell, W. W., & Colyvas, J. A. 2008. Microfoundations of institutional theory. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), ***Organizational institutionalism***: 276-298. Thousand Oaks, California: Sage.

Powell, W. W., & DiMaggio, P. J. 1991. ***The new institutionalism in organizational analysis***. Chicago: University of Chicago Press

Powell, W. W., Koput, K. W., & Smith-Doerr, L. 1996. Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. ***Administrative Science Quarterly***, 41: 116-145.

Rao, A., & Schmidt, S. M. 1998. A behavioral perspective on negotiating international alliances. ***Journal of International Business Studies***, 29(4): 665-693.

Rao, B., Angelov, B., & Nov, O. 2006. Fusion of disruptive technologies: Lessons from the Skype case. ***European Management Journal***, 24(2): 174-188.

Ravasi, D., & Verona, G. 2001. Organising the process of knowledge integration: The benefits of structural ambiguity. ***Scandinavian Journal of Management***, 17(1): 41-66.

Raynor, M. E. 2005. Strategic flexibility: Corporate-level real options as a response to uncertainty in the pursuit of strategic integration. In J. L. Bower, & C. G. Gilbert (Eds.), ***From resource allocation to strategy***: 330-364. New York: Oxford University Press.

Raynor, M. E., & Bower, J. L. 2001. Lead from the center: How to manage divisions dynamically. ***Harvard Business Review***, 79(5): 92-100.

Reckwitz, A. 2002. Toward a theory of social practices - A development in culturalist theorizing. ***European Journal of Social Theory***, 5(2): 243-263.

Reitzig, M., & Sorenson, O. 2013. Biases in the selection stage of bottom-up strategy formulation. ***Strategic Management Journal***, 34(7): 782-799.

Rescher, N. 1995. ***Pluralism: Against the demand for consensus***. New York: Oxford University Press.

Rivkin, J. W., & Siggelkow, N. 2003. Balancing search and stability: Interdependencies among elements of organizational design. ***Management Science***, 49(3): 290-311.

Schumpeter, J. A. 1947. The creative response in economic history. ***The Journal of Economic History***, 7(02): 149-159.

Schumpeter, J. A. 1994. ***Capitalism, socialism and democracy*** (New paperback ed.). London: Routledge.

Shane, S., & Venkataraman, S. 2000. The promise of entrepreneurship as a field of research. ***The Academy of Management Review***, 25(1): 217-226.

Simon, H. A. 1947. ***Administrative behavior: A study of decision-making processes in administrative organization*** (4th ed.). New York: Macmillan.

Simonin, B. L. 1999. Ambiguity and the process of knowledge transfer in strategic alliances. ***Strategic Management Journal***, 20(7): 595-623.

Sull, D. 2009. How to thrive in turbulent markets. ***Harvard Business Review***, 87(2): 78-88.

Sull, D. N. 2005. No exit: The failure of bottom-up strategic processes and the role of top-down disinvestment. In J. L. Bower, & C. G. Gilbert (Eds.), ***From resource allocation to strategy***: 133-175. New York: Oxford University Press.

Tsai, W., & Ghoshal, S. 1998. Social capital and value creation: The role of intrafirm networks. ***Academy of Management Journal***, 41(4): 464-476.

Tushman, M. L., & O'Reilly, C. A. 1996. Ambidextrous organizations: Managing evolutionary and revolutionary change. ***California Management Review***, 38(4): 8-30.

Vaara, E., & Whittington, R. 2012. Strategy-as-practice: Taking social practices seriously. ***Academy of Management Annals***, 61(1): 285-336.

Van den Steen, E. 2013. Tesla Motors, Vol. August 2013: 714-413: Harvard Business School Case.

van Dijk, S., Berends, H., Jelinek, M., Romme, A. G. L., & Weggeman, M. 2011. Micro-institutional affordances and strategies of radical innovation. ***Organization Studies***, 32(11): 1485-1513.

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. 2005. Organizing and the process of sensemaking. ***Organization Science***, 16(4): 409-421.

Weisenfeld, U., Fisscher, O., Pearson, A., & Brockhoff, K. 2001a. Managing technology as a virtual enterprise. ***R&D Management***, 31(3): 323-334.

Weisenfeld, U., Reeves, J. C., & Hunck-Meiswinkel, A. 2001b. Technology management and collaboration profile: Virtual companies and industrial platforms in the high-tech biotechnology industries. ***R&D Management***, 31(1): 91-100.

Whittington, R. 1996. Strategy as practice. ***Long Range Planning***, 29(5): 731-735.

Wood, M. S., & McKinley, W. 2010. The production of entrepreneurial opportunity: A constructivist perspective. ***Strategic Entrepreneurship***, 4: 66-84.

Yin, R. K. 2003. ***Case study research: Design and methods*** (3rd ed.). Thousand Oaks, California: Sage.

Yu, H. H., & Bower, J. L. 2010. Taking a "deep dive": What only a top leader can do: 55. Boston: Harvard Business School. Working Paper.

Zajac, E. J., Golden, B. R., & Shortell, S. M. 1991. New organizational forms for enhancing innovation - The case of internal corporate joint ventures. ***Management Science***, 37(2): 170-184.

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.

Zollo, M., & Winter, S. G. 2002. Deliberate learning and the evolution of dynamic capabilities. ***Organization Science***, 13(3): 339-351.

Zucker, L. G. 1987. Institutional theories of organization. ***Annual Review of Sociology***, 13: 443-464.

STRATEGY FORMATION AS LEGITIMACY CREATION: THE CASE OF SUSTAINABILITY

Acknowledgments

We would like to thank Anna Krzeminska, Katrin Obermeit, Johann Bronstein, Ferdinand Wenzlaff, and Elias Kaiser for their helpful comments on earlier versions of this article. This article was presented at the 33rd Annual International Conference of the Strategic Management Society, in Atlanta, GA, USA, and was awarded with the SMS Best Conference PhD Paper Prize. We would like to thank Sarah Kaplan and Tomi Laamanen and the remaining PhD Paper Prize Committee for honoring our work in this way and the conference participants for their invaluable comments on our article.

ABSTRACT

Based on an in-depth, longitudinal case study of the development of a sustainability initiative within a major diversified firm, we illuminate key practices managers apply to win legitimacy for embedding sustainability within the firm's systems, processes, structure, and strategy. In particular, we reflect on how managers co-align their activities with respective developments within the intraorganizational and external environments. Our study contributes towards the integration of evolutionary and institutional approaches of the strategy process and the development of strategic sustainability management.

Keywords: strategic initiative, evolutionary organization theory, sustainability

INTRODUCTION

Strategy-making in large corporations is of vital interest to strategy scholars and practitioners alike. However, strategy process research has become a contested field; since its origin a diversity of theoretical approaches and concepts have been proposed (Hoskisson, Hitt, Wan, & Yiu, 1999; Mintzberg, Ahlstrand, & Lampel, 2009). Yet, a useful and widely applied perspective in strategy process research draws on an evolutionary perspective that regards strategy formation as the outcome of dynamic, path-dependent processes of variation, selection, and retention (Barnett & Burgelman, 1996; Durand, 2006). Consequently, the ability of firms to identify entrepreneurial opportunities and continuously create new strategic initiatives that either explore new strategic directions or exploit the current strategic position becomes a source of competitive advantage.

Although there is considerable research on how strategic initiatives are created, championed, selected, and become institutionalized in this literature (Burgelman, 1983c; Burgelman, 1991; Lovas & Ghoshal, 2000), little research has explored how legitimacy of strategic initiatives is created or destroyed. Under the institutionalist premise that organizations are not self-contained "rational" entities, but "open" systems embedded in broader systems of rules and norms, legitimacy becomes a critical success factor in the internal struggle for managerial attention and resource mobilization. By blending evolutionary strategy research with institutional theory, we argue that strategic initiatives compete for "social as well as economic fitness" (DiMaggio & Powell, 1983: 150) so that the adequacy of strategic actions is no longer exclusively evaluated against intraorganizational rational calculations, but against supra-organizational, socially constructed notions of appropriateness (Dougherty & Heller, 1994; Suchman, 1995).

We examine this link between the institutionalist notion of legitimacy (e.g., DiMaggio & Powell, 1983; Suchman, 1995; Zucker, 1989) and the concept of strategic initiatives from evolutionary strategy process research (Bower, 1970; Burgelman, 1983c; Burgelman, 1991; Lovas & Ghoshal, 2000). More specifically, we ask what practices managers apply to legitimize strategic initiatives and therefore create favorable conditions for competition and survival within the intraorganizational and external environment. Furthermore, we address how such managerial influence co-evolves with a changing external organizational field. We build on a unique and longitudinal case study of a major diversified firm when showing how managers at the interstices of multiple institutional environments adopt and align varying legitimization practices to changing patterns of events played out over time.

Our study contributes, first, towards the advancement of evolutionary strategy-process research (Barnett & Burgelman, 1996; Burgelman, 1983c; Burgelman, 1991; Lovas & Ghoshal, 2000; Nelson & Winter, 1982). Through its integration with institutional theory (Lounsbury, 2001; Meyer & Rowan, 1977; Oliver, 1991; Powell & DiMaggio, 1991; Suchman, 1995) we examine how managers shape specific practices that are aimed at establishing legitimacy for new strategic initiatives within an intraorganizational ecology and within the external organizational field. Our longitudinal approach further illuminates not only how current developments influence legitimacy building but also how history matters. Secondly, we unravel the challenges associated with establishing strategic sustainability management within large organizations. Over the last decade, the concept of sustainability has enjoyed increasing awareness among executives and scholars who agree that it is not just an issue of doing good, but something that should be incorporated into firms' strategies (Bonini, Mendonca, & Oppenheim, 2006; Porter & Kramer, 2006). As prominent businesses restructure and expand their operations to satisfy consumers' and investors' desires for sustainable products and processes, the ability of firms to continuously create new strategic sustainability initiatives becomes a source of competitive advantage. But, as yet, existing studies have provided only part of the story of how sustainability finds its way into a firm's concept of strategy.

The paper is structured as follows: We first frame the question of how strategic initiatives are impelled by blending evolutionary and institutionalist perspectives. We then empirically investigate in a longitudinal case study how managers of a large diversified firm apply different legitimization practices for sustainability initiatives at the interstices of multiple institutional environments. Finally, we discuss our findings with respect to theory development for integrating evolutionary and institutional strategy research and for the particular case of strategic management of sustainability.

THEORETICAL BACKGROUND: BLENDING EVOLUTIONARY AND INSTITUTIONAL PERSPECTIVES

Evolutionary perspectives on strategy investigate how variations in the strategic repertoire of a firm occur and how these variations become selected and proliferate within an organizational ecology (Barnett & Burgelman, 1996; Durand, 2006). One of the key contributions to an evolutionary theory of the firm, the *population ecology* view (Hannan & Freeman, 1977; Hannan & Freeman, 1989), advocates that organizational survival and growth depends on the ability to acquire and sustain a flow of resources needed to sustain existence.

Evolutionary theorists of strategy-making build upon population ecology, but extend these thoughts in a number of ways. Instead of focusing on the competitive dynamics of populations of firms, evolutionary approaches to strategy-making have concentrated on the intraorganizational dynamics of strategic initiatives such as new ventures competing for managerial attention and resources (Bower, 1970; Bower & Gilbert, 2005; Burgelman, 1991; Burgelman, 1994, 2002; Lovas & Ghoshal, 2000). From an intraorganizational ecology perspective, organizations themselves are viewed as ecologies; they not only adapt to isomorphic constraints of their external ecosystem, in which firms compete for survival, but create through their administrative and cultural context the nurturing ground and the selection mechanisms that create and exploit strategic initiatives. Consequently, the firm is viewed as a collection of initiatives that compete for organizational resources as well as for managerial attention. An important research issue in this respect is concerned with the sources and drivers of entrepreneurial venturing creating new strategic variations and the behavioral selection mechanism in the pursuit of new strategies (Burgelman, 1983c). Previous studies (Bower, 1970; Burgelman, 1983a, b; Burgelman, 1983c; Lovas & Ghoshal, 2000) have shown that an initiative's evolution is determined by a firm's concept of strategy and its corporate context, namely the structural and the strategic contexts. The structural context comprises various administrative mechanisms, which can be actively manipulated by top management in order to influence the behavior and interests of the organizational actors at lower levels. The strategic context refers to a variety of political activities which managers, promoting their initiatives to top management, have to engage in. In essence, from "the perspective of a process study, the concept of strategy of large, complex firms can be viewed as the result of the selective effects of the corporate context on the stream of strategic behaviors at operational levels" (Burgelman, 1983b: 66).

Research in this vein has also emphasized the co-evolutionary nature of external and internal selection. A firm's success is dependent on creating an internal selection environment that encourages entrepreneurial ventures mirroring external isomorphic constraints and external selection (Durand, 2006). In a longitudinal study of the personal computer industry, for instance, Henderson and Stern show how internal and external selection become interwoven mechanisms and coevolve "as each affected the other's future rate and the odds of firm failure" (2004: 34). Barnett and Burgelman sum up the argument: "Those that continue to survive have an internal selection environment that reflects the relevant selection pressures in the external environment and produces new, externally viable strategic variations that are internally selected and retained" (1996: 7).

While evolutionary strategy research has greatly contributed towards a dynamic theory of strategy-making, the concept of intraorganizational ecology central to this research perspective is left underdeveloped. Following Zucker's early lead, we suggest that blending evolutionary theory with institutionalism may stimulate a fruitful advancement of the field because "the variables of interests to institutionalists … are simply missing" (1989: 542). Drawing on institutionalism, we argue that evolutionary strategists have largely overlooked the normative and cognitive foundations that constrain and enable organizational actors in defining new strategic initiatives and mobilizing resources for their implementation. Previous research has pointed out the role of managers as "champions" (Burgelman, 1983b; 1983c) who translate and promote new strategic initiatives and engage in strategic issue selling (Dutton & Ashford, 1993). However, the picture that is traditionally painted is one that regards resource allocation as a reaction to an economic opportunity that has to be "sold" within the firm in order to receive the necessary managerial attention and organizational impetus. Yet, we learn very little about how this entrepreneurial opportunity is actually socially constructed and legitimized within and outside the firm. Constructivist approaches in strategy (e.g., Mir & Watson, 2000) and entrepreneurship (e.g., Wood & McKinley, 2010) have suggested that managers are not mere processors of or reactors to environmental demands, but have to be viewed as actors that co-produce and influence the intraorganizational ecology through "rhetorical devices, shared values and ceremonies" (Mir & Watson, 2000: 945). This implies that the creation of new strategic initiatives and the mobilization of resources are conditioned by collectively institutionalized belief systems and reflections of rationalized corporate strategies and institutional rules.

More recently, institutionalists have moved from a macro towards a micro-perspective and conceptualized firms as micro-institutions (Elsbach, 2002; van Dijk, Berends, Jelinek, Romme, & Weggeman, 2011). In the spirit of increasing convergence between evolutionary and institutionalist perspectives, we can conceptualize the intraorganizational ecology as a micro-institutional system with embodied understandings and taken-for-granted assumptions about the competitive reality, the dominant organizational strategy, and norms that are reproduced by organizational members. One of our key arguments is that strategic initiatives within an organizational ecology compete for "social as well as economic fitness" (DiMaggio & Powell, 1983: 150) as their survival and success depend on the economic opportunity, and the perceived social appropriateness of their ideas, products, structures and related practices. Legitimacy becomes a critical resource that entrepreneurial initiatives must extract from their institutional environment. However, this extraction of legitimacy is never effortless. Rather, it is better understood as a struggle or contestation for "cultural support" (Meyer & Scott, 1983: 201). In focusing on this struggle for legitimacy, Dougherty and Heller argue that innovations initially face the problem of being considered as illegitimate because "They either violate prevailing practice, inside and outside the firm, or require ways of thinking and acting that are 'undoable' or 'unthinkable'" (1994: 202) and fall into an evaluation vacuum. The more radical these strategic initiatives are – in Burgelman's (1983c) terms the "autonomous strategic initiatives" – the more they are at odds with existing micro- and macro-institutions and therefore depend on legitimacy creation. Consequently, a key managerial challenge is to legitimize their entrepreneurial initiatives because "once this legitimacy is lost, the process halts" (Takeishi, Aoshima, & Karube, 2010: 168). For Suchman (1995) strategies for gaining legitimacy may address three major legitimacy types: pragmatic, moral, and cognitive legitimacy. While pragmatic legitimacy embraces an organization's social, economic, and political interdependencies with its most immediate audience's self-interests, moral and cognitive legitimacy is concerned with larger cultural rules implying positive normative appraisals or, for the case of cognition, the comprehensibility and taken-for-grantedness of organizational activities. The author stresses that "as one moves from the pragmatic to the moral to the cognitive, legitimacy becomes more elusive to obtain and more difficult to manipulate, but it also becomes more subtle, more profound, and more self-sustaining, once established" (Suchman, 1995: 585).

Drawing on the literature of institutional entrepreneurship (e.g., Greenwood & Suddaby, 2006; Hardy & Maguire, 2008) and institutional work (e.g., Lawrence, Suddaby, & Leca, 2009), we suggest that managers who implement more radical strategic initiatives engage as (*micro-)institutional entrepreneurs* and deploy strategies by which self-interested actors try to establish "a strategically favorable set of conditions" (Lawrence, 1999: 167) for their strategic initiative within the organization for improving the likelihood of internal selection. Oliver (1991) provides a repertoire of strategic *responses* to existing institutional pressures, Suchman (1995) and Lawrence (1999) suggest more pro-active strategies for managing organizational legitimacy and shaping the institutional context against which organizational actions are evaluated. Building upon this previous work, van Dijk et al. (2011) explain in a recent empirical study of 20 legitimacy problems at two mature firms how actors legitimized more radical innovations. The authors found that actors were not only constrained by their micro-institutional environment, but institutional ambiguity and heterogeneity and the multiplicity of institutional interests offered entrepreneurs "opportunities to propagate novel interpretations, transforming the institutional system to favor the innovation" (van Dijk et al., 2011: 1508).

Prior studies on the micro-institutions of the firm have shown that organizational institutions are much less homogeneous and constraining than previously assumed. The intraorganizational ecology is therefore rather "fragmented and contested" (Lounsbury & Crumley, 2007: 289) or complex (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011), and offers entrepreneurs strategic opportunities for influencing legitimacy. In line with a co-evolutionary perspective, we argue that managers at the interstices of internal and external institutional environments develop legitimization strategies that are responses to existing, but much more heterogeneous (Greenwood, Magán Díaz, Li, & Lorente, 2010) and pluralist (Glynn, Barr, & Dacin, 2000) institutional pressures. It is this struggle for legitimacy at the boundary between micro- and macro-institutions and the sources of legitimacy and strategic actions used by managers to gain social support for their entrepreneurial ventures that we explore next in our empirical study using the example of establishing sustainability as one of the firm's central strategic priorities.

CONTEXT AND METHODS

Setting

We choose a case study (Eisenhardt, 1989; Yin, 2003) approach to investigate the evolution of sustainability's strategic role within an organization. The case study approach helped us to explore how managers adopted specific practices to influence the internal selection environment for sustainability initiatives within the natural context by collecting context-rich data and gaining insights into the complex interaction on multiple levels of analysis (Edmondson & McManus, 2007; Eisenhardt, 1989; Yin, 2003).

Our case study was conducted at Alpha Group (a pseudonym), a diversified, multinational manufacturing firm within the branded consumer and industrial goods industry. Headquartered in Europe, Alpha Group businesses ranked significantly in their relevant industries on a global level resulting in a strong financial performance at group level for the last decade. Looking back on a long corporate history Alpha Group employs tens of thousands of employees in a number of different business units operating in over 70 countries. All business units rank significantly in their relevant markets, globally generating a turnover in the double-digit EUR billion range in 2009. We focused our research in particular on the Group level and one of the business units, BU1, a consumer goods business that formed the original core of Alpha Group and was the group's largest business unit in financial terms at the time the study started.

Alpha Group had been recognized externally in the business community and by the general public as a firm extremely committed to sustainability and good corporate citizenship for decades. This reputation had been documented by leading positions in national and international sustainability rankings and sustainability prizes awarded to Alpha Group on a regular basis. The firm was among the first to publish an annual sustainability report and had a tradition of participating early in selected high-level international or governmental initiatives related to sustainability. Alpha Group was clearly considered a sustainability leader within and beyond its industry.

The 'embedded unit of analysis' is a sustainability initiative, consisting of several sub-initiatives brought about within our organization of interest. For embedding the initiative within its relevant contexts, we first generated rich accounts of the external and internal organizational field consisting of the organization's strategic and structural context, and then delineated micro-activities in the form of practices employed to intervene at the macro-institutional level mentioned above. Bridging micro- with macro-level analysis offers a particularly fruitful way to examine strategic actions (Vaara & Whittington, 2012) and the co-evolution of the intraorganizational ecology and the external institutional field. By approaching the research object longitudinally we were also able to depict the temporal interplay of context and action (Langley, 1999; Pettigrew, 1990). The case study setting we chose is an exceptional, best-practice example for the systemic institutionalization of sustainability into a firm's systems, processes, structure, and strategy.

Data Sources

Understanding the temporal interplay of multi-level generative elements within and beyond the organization's boundaries, calls for a longitudinal research design and a triangulation of data sources. The case study covers the time frame between the end of 2005 and beginning of 2010. Data collection involved interviews, direct observation, and archival data.

Interviews. The study draws on 73 in-depth, semi-structured interviews with organizational members from all core functions and management levels at Alpha Group and in particular BU 1. Table 1 summarizes the distribution of interviews. The interviewees were selected according to theoretical, opportunistic, and snowball sampling techniques. The interviews were conducted in three phases over a period of four years (Phase 1: Spring 2006, Phase 2: Spring 2008, Phase 3: Winter 2009/2010) with some interviewees being approached in two or all of the phases. Thus, we obtained different perspectives on the development of sustainability within Alpha Group at different points in time. We were able to detect how organizational members from different functions were involved in developing sustainability and how the sustainability initiative has affected the functions respectively. The interviews lasted between 60 and 150 minutes and all but two interviews were audio-taped and transcribed. The interview questions generally involved three areas. Firstly, we wanted to better understand the history and the organizational and strategic context of the firm, in which our unit of analysis was embedded. Secondly, we focused on the development of the sustainability initiative and its management within the firm. Thirdly, we were interested in how the sustainability initiative was affected by the external context and how managers attempted to influence external conditions. Throughout the interview phases key themes were repeatedly mentioned and key categories were theoretically saturated after five to ten interviews. This allowed us to become increasingly focused and explore new domains in subsequent interviews. We were confident that this strategy provided the required breadth for understanding the relevance of legitimacy sources and micro-practices employed by single actors to draw on them.

Besides triangulating the data by approaching multiple informants, we continually cross-checked information provided during the interviews against internal and public documents, primarily in order to check for retrospective bias.

Direct observation. The major rationale for including observations as a data source is their inherent potential for exploring “the realms of subjective meaning” (Morgan & Smircich, 1980: 498). Direct observations help to gain micro-institutional insights into the particular relationships between actors and their organizational context (Easterby-Smith, Thorpe, & Jackson, 2008: 95). As one of our authors had the opportunity to take an insider position at Alpha Group when the sustainability initiative evolved, we were able to get even closer to the subjects involved and acquire extensive informal, contextual insights into the research setting. This circumstance allowed for an intense contact with key managers driving legitimacy building for the sustainability initiative and thus frequent opportunities for formal and informal conversations about the ongoing research project. Interviewees sharing their knowledge with us could be leveraged and preliminary results regularly reported to a number of corporate managers mentoring the research in order to validate our findings. Links between macro-level developments and micro-level activities could be made more confidently as they were observed *in situ* while attending meetings or joining social interactions and informal debates.

TABLE 1
Interview Matrix[b]

	Management Board	Finance	HR & Compliance	Marketing & Sales	R&D & Purchasing	Production & Supply Chain	Country/SBU Management	Sustainability Management	Communi-cations	Total
BU 1	**3**	**3**	**1**	**19**	**7**	**4**	**2**		**2**	**41**
Board	1									1
SVP				3	1		1			5
VP	1	1		3	1	1	1			8
Director	1	1		9	2	2			2	17
Manager		1	1	4	3	1				10
BU 2	**1**			**1**			**1**			**3**
SVP							1			1
VP	1									1
Director				1						1
BU 3				**1**						**1**
Director				1						1
Group	**7**	**2**	**7**			**1**		**4**	**7**	**28**
Board	2									2
SVP		1	1							2
VP	1	1	1			1			1	5
Director	2		1					1	3	7
Manager	2		3					3	2	10
Trainee			1							1
Jr. Manager									1	1
Total	**11**	**5**	**8**	**21**	**7**	**5**	**3**	**4**	**9**	**73**

[b] Horizontal axis: functions, vertical axis: Group/BU & hierarchy, SVP*= Senior Vice President, VP**= Vice President

Archival documents. We gathered a variety of internal documents that particularly helped us to construct the case history and reveal temporal interconnectedness among internal and external events and actions taken by the actors involved. We had access to internal communication materials such as e-mails, company newsletters, as well as externally communicated documents including press releases, annual and sustainability reports. We also collected public speeches and interviews given by managers involved that were communicated through the media. In particular, diverse strategy papers and power point presentations illustrating the firm's status quo, competitive position, and goals in terms of sustainability provided helpful background insights. This helped to understand how the sustainability initiative was "sold" and how competitors and business partners were perceived within Alpha Group. In total, the archival sources amounted to 657 documents. The material particularly allowed us to validate information provided through our primary data sources.

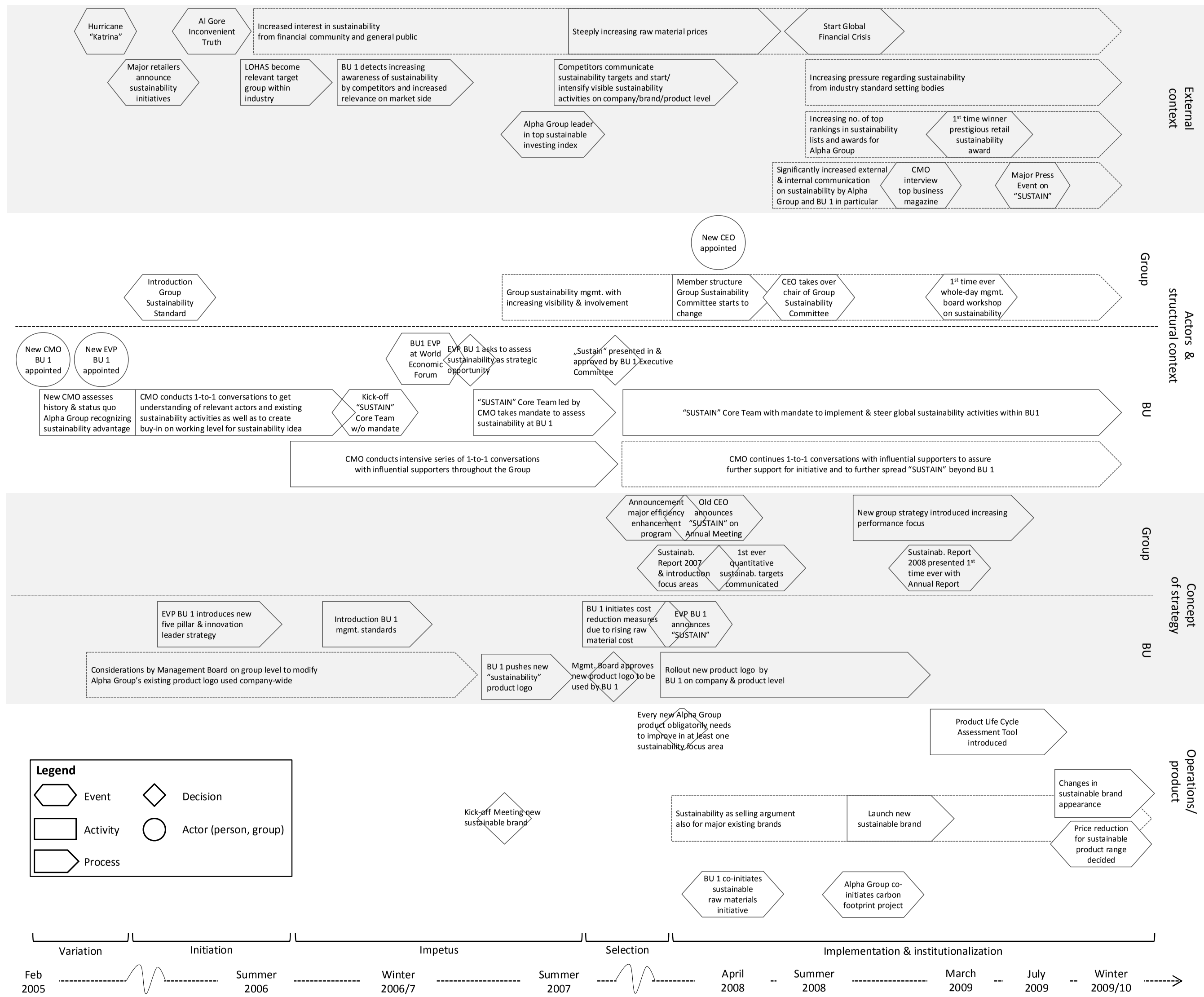
Data Analysis

Data analysis followed what Strauss and Corbin (1990) refer to as the "grounded theory framework". Essentially, the grounded theory approach is an open-ended, inductive discovery of emerging concepts within the data which allows moving from mass descriptive codes to fewer, conceptually abstracted codes. We adhered closely to the guidelines specified by Strauss and Corbin (1990) and Lincoln and Guba (1985) for constant comparison techniques and naturalistic inquiry, where the collection of data is iteratively intertwined with its actual analysis. The coding process of the transcribed interviews was supported by the software ATLAS.ti 6.0, a computer-based qualitative analysis program. In order to manage the huge quantity of verbal and archival data that we generated, we used different sensemaking strategies as suggested by Langley (1999).

We aimed for a high degree of inter-subjectivity throughout our research process. This not only implied member validation to gain confidence that the emerging interpretations made sense to our informants as noted above, but also a multi coder approach. Accordingly, after having coded the primary and secondary data sources independently, we assessed and compared our coding schemes whilst continuing to travel back and forth between raw data, key informant validation, and emerging concepts. We engaged in numerous discussions on possible themes and concepts implying the review of the open coding results in the first step and then cross-interview comparisons (axial coding) until we arrived at a gradually reduced list of issues that fit the entire data set and our final model of legitimacy enhancement. Conflicts between coding schemes were marginal during these stages of analysis. Furthermore, we exploited various opportunities to present preliminary findings at different stages of the study to experts in the field of interest. Most importantly these were national and international scholarly conferences and informal workshops with managers from Alpha Group.

We started coding by discerning the macro-level contexts of Alpha Group encompassing the intraorganizational field, i.e. the firm’s structure and strategic priorities, as well as the supra-organizational field, i.e. Alpha Group’s competitive position, major business partners, megatrends within its relevant markets, and key events which took place within the external national and international environment. Beside these general contextual insights, we specifically analyzed text passages referring to Alpha Group’s sustainability approach. More precisely, we built an understanding of the role sustainability has played throughout the firm’s history, its cultural embeddedness, and Alpha Group’s sustainability position relative to its competitors and business partners. We mapped the key events, decisions, activities, actors, and processes in a flow chart as shown in Figure 1. Visualizing these constituents particularly helped us to reconstruct the case of the sustainability initiative in view of the development of the internal and external organizational field during the period between the end of 2005 and beginning of 2010. This analytical step is an intermediate level of theorizing between raw data and the more abstract model (Langley, 1999).

FIGURE 1
Course of Events: Evolution of Sustainability Management at Alpha Group



With the flow chart in mind we entered the second stage of coding. Here we particularly went in search of practices driving the legitimization of sustainability. The criteria underlying the identification of legitimacy practices ensured that they (a) were referred to repeatedly by interviewees and key informants, (b) could be supported with evidence from archival materials and observations, and (c) helped us to unveil and order patterns of the development of the sustainability initiative over time. We arrived at the final, refined set of nine practices after multiple rounds of cross-checking our draft with additional information gained from other data sources and feeding it back to our key respondents within Alpha Group. Those practices refer to the institutional work (e.g., Lawrence et al., 2009) and "include a wide range of meaning-laden actions and non-verbal displays" (Suchman, 1995: 586). As these legitimization practices combined multiple levels of inquiry (organizational, strategic, operational) we created narratives in order to organize the data at this stage (Langley, 1999) by summarizing the related intra- and supra-organizational actions, processes, and actors involved. We generated these descriptions by returning to our first-order code structure and referring to observations from the raw data and quotations such as "creating alliances and positioning the topic well prepared within the right committees" or "therefore a pilot project may provide a positive case". In this way we were also able to shed light on the co-evolvement of practices and developments within the intraorganizational and external environment. Besides, it is noteworthy that our interviewees provided us with insightful in-vivo codes, namely by routinely throwing in terms and concepts during the interviews. Codes such as "hardwiring" or "broadcasting" originated from exactly these unconscious theoretical marks on our raw data made by the interviewees.

THE CASE: THE CHANGING FACE OF SUSTAINABILITY AT ALPHA GROUP

We observed the evolution of Alpha Group's – and particularly BU1's – sustainability initiative from being a license-to-operate and company reputation-driven topic to a mainstream strategic one with sustainability understood as a business-relevant source of competitive advantage.

In what follows we juxtapose the very beginnings of the sustainability initiative in 2005 with its eventual incorporation into the firm's systems and strategy in 2009.

Sustainability Management 2005: Assure License to Operate and Safeguard Group Reputation

For decades, Alpha Group had been recognized in the business community and the political arena of its home country as a firm dedicated to sustainability and good corporate citizenship. Sustainability, understood as a firm's endeavor to balance economy, ecology, and social responsibility to assure its long-term success, had been integrated as one of ten underlying company values communicated by top management. The group's sustainability tradition and reputation had also been continuously documented internally by publishing sustainability performance reports and also externally, most often by high national rankings or sustainability awards.

Employees across the firm unanimously regarded sustainability as being embedded in the firm's tradition and culture. They strongly associated sustainability with Alpha Group's role as a good, responsible citizen, but in the business itself the core staff of the branded goods firm – marketing and sales – attributed no or minimal relevance of sustainability to their work, for it was not seen as being a decisive buying criterion on the end consumer or retail customer side.

Although Alpha Group had an official sustainability management organization in place, the management board, claiming the overall responsibility for sustainability, had no permanent representative in the group's "sustainability committee". Also the firm's CEO, though strongly advocating the importance of business ethics, participated only on an irregular basis in the committee's meetings. Due to this setup the sustainability committee had very limited decision-making power and was only loosely coupled to the requirements of the business on the end-consumer and customer side. Topics discussed in the bi-monthly committee meetings thus focused mainly on assuring the firm's license to operate and the sustainability performance reporting at group level.

The situation started to change in February 2005 with the appointment of a new Chief Marketing Officer (CMO). New to the firm, he started to assess its strategic position recognizing sustainability as a vital part of Alpha Group's DNA with strong, though in his opinion mostly untapped, strategic potential. Despite the CMO's commitment, when the likewise newly appointed Executive Vice President (EVP) for BU1 announced his new strategy aimed at overcoming the low organic growth suffered by BU 1 for a couple of years, sustainability has not been explicitly considered as an important strategic variable.

However, by the end of 2005 the topic gained increasing attention in the industry starting with major retailers announcing sustainability initiatives worldwide to target a new consumer segment, labeled LOHAS, describing consumers who cultivate a lifestyle emphasizing health, consciousness and principles of sustainability. This development was further supported by the general public's awareness and shift in opinion about issues of climate change and sustainability after hurricane Katrina in August 2005 and the success of Al Gore's documentary "An Inconvenient Truth" premiering in May 2006 in the US.

With this external support, the new CMO gained further confidence in "his" sustainability initiative and initiated a round table meeting in December 2006 for everyone in the firm somehow involved with the topic of sustainability. At this point in time, the CMO titled the initiative "SUSTAIN". The round table meeting could, retrospectively, be considered a kick-off meeting for a working group on sustainability with representatives from all functions within BU 1 and the Group's Sustainability Management which was since then called the "SUSTAIN core team". Although, by that time without official mandate, the working group met weekly under the CMO's direction with the purpose of assessing the status quo of BU 1's and Alpha Group's sustainability activities.

Sustainability Management 2009: Promoting and Using Sustainability as Competitive Advantage

Alpha Group's sustainability commitment continued to flourish unabated even despite the global financial and economic crisis in summer 2008. Pursuing a path to sustainability involving accordingly higher priced products was a very bold step, as customers had become increasingly price sensitive by that time. But the collaterally rising interest in sustainability of not only the financial community but also other key stakeholders such as the government and competitors was particularly favorable for Alpha Group's consistent sustainability endeavor, especially since this saw the firm taking the lead for the first time in the relevant category of a leading global sustainable investing stock index. Moreover, in summer 2008, Alpha Group was the first winner of a newly introduced, highly prestigious industry sustainability award, a success that was repeated in 2009.

From the beginning of 2008 the increased strategic importance of sustainability was also reflected by changes in Alpha Group's sustainability management organization. The former CEO had recognized the increasing importance of the sustainability committee and increased his presence in it – a move that also changed the participation behavior of higher-level members previously often only sending representatives. After BU 1's CMO entered the committee as the first high-level marketing representative, the CMOs of the other business units joined shortly after, bringing in the previously missing customer and consumer perspectives. This development was further reinforced when Alpha Group's new CEO, appointed in spring 2008, immediately decided to take over the chair of the sustainability committee. Moreover, the new CEO externally announced the first-ever quantitative sustainability targets at group level and made the committee accountable for the successful achievement of these targets. The SUSTAIN core team had the mandate to centrally steer global implementation of all sustainability activities within BU1.

By the end of 2009 sustainability had been established in BU1's systems and businesses at both brand and product level and had become part of the strategy. More precisely, this embraced the introduction of a new sustainability product logo, enhanced self-commitment in terms of newly defined focus areas and a life cycle tool evaluating the environmental, social, and economic impact of new products from raw material to actual consumption, the launch of a new sustainable brand and changes to the marketing of top brands, and finally, an intensified engagement with external parties resulting in, for instance, the co-initiation of sustainable raw material production or a major press event on sustainability.

However, it is important to mention that the SUSTAIN initiative was exclusively implemented by BU1 and that the other two BUs did not follow suit in this consequent approach. Nonetheless, the significant change in the strategic role of sustainability and the effects of the SUSTAIN initiative within Alpha Group were clearly visible in our third interview phase. Whereas employees in marketing did not see any relevance for their field of work in the first interview phase in 2005, this perception has changed considerably by the end of 2009. Most interviewees described sustainability as a "part of Alpha Group's DNA".

LEGITIMACY-ENHANCING PRACTICES

The transition of the SUSTAIN initiative from a firm's license to operate to an integral part of the firm's management systems, products, brands, and strategy was driven by micro-level activities that were aimed at legitimizing the initiative internally and externally (see Figure 2).

While the sustainability theme found a fertile cultural environment at Alpha Group in 2005, its relevance for business and competitiveness was contested. For the survival and cultural support of SUSTAIN internally, managers manipulated the internal context in order to create momentum within the organization. This was achieved by various internal legitimacy-enhancing practices such as broadcasting, symbolizing, involving, substantiating, and hardwiring. The aim was that SUSTAIN would be increasingly perceived as business relevant and issued with the required resources and managerial attention within the intraorganizational selection environment. In addition, external legitimacy for SUSTAIN was gained by establishing "a strategically favorable set of conditions" (Lawrence, 1999: 167) by credibility building, recognition seeking, standardizing, and materializing. External audiences or stakeholders should therefore decide and act in favor of the firm's sustainability endeavor.

FIGURE 2

Legitimacy-Enhancing Practices

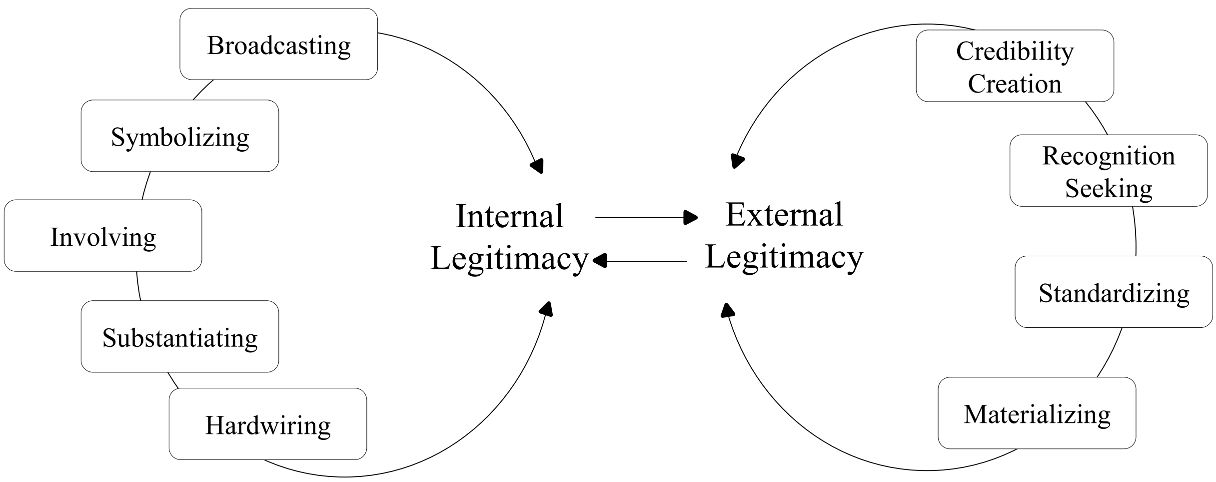


Figure 2 also illustrates that both internal and external legitimacy are interrelated in a reciprocal manner. Thus, customers' and competitors' increasing commitment to sustainability-related issues facilitated the internal recognition of SUSTAIN as a source of competitive advantage. By the same token, numerous SUSTAIN-related activities emerged as the joint outcome of Alpha Group's managerial influence and the favorable external selection environment. Consequently, the firm's self-commitment in terms of a sustainable production fell on fertile ground when external authorities co-initiated new sustainability standards such as the invention of certificates for a major raw material.

Creating Internal Legitimacy

Firstly, gaining internal legitimacy rested heavily on internal *broadcasting* practices. In the case of Alpha Group this involved intense communication of the topic through multiple communication channels. These channels included company-wide newsletters, speeches, and the direct communication between managers and their employees. As one interviewee emphasized, “It is key that it is kept up; not only top management has to keep it warm, but also the communication channels involved”. The continuous communication of the sustainability initiative proved essential for creating awareness and momentum within the firm. These kinds of messages “need to be compressed, they need to be repeatable”, as another interviewee explained. The initiative needed to be kept omnipresent through day-to-day verbal discourses among relevant organizational members. The intense broadcasting of sustainability contributed to the gradual manifestation of the topic within everyday managerial considerations and actions, simultaneously assuring that organizational members shared a common understanding and positive attitude towards the topic. The development of a shared mental model and common understanding of sustainability was vital in that sustainability may elicit multiple associations. These associations are basically positive, as one interviewee noted, “It’s a topic one can identify with extremely well; practically, it’s a topic one can be proud of”. This fact principally facilitated getting people on board. However, in order to achieve broad acknowledgement of the initiative’s business relevance it was imperative to win acceptance beyond the “corporate nerds” as one of our interviewees stressed. Winning managers from the firm’s core staff – sales and marketing – demanded a clear account of how SUSTAIN might meet their concrete demands. The initiative’s value and practical consequences were thus key content components of the broadcasting campaign at Alpha Group.

Secondly, the relevance of *symbolizing* practices particularly enhanced moral and cognitive commitment on the side of organizational members. The sustainability initiative was supported by non-verbal, symbolic displays, stories, and actions. The most important symbolic impact could be credited to the CMO. His commitment and perseverance made him a symbolic character which helped build a role model for sustainable behavior and inspired story-telling on the way he discovered and developed the sustainability topic within Alpha Group. Organizational members learned that the CMO revealed the topic’s strategic relevance through intensive desk-based research which he conducted shortly after his appointment as BU 1’s new CMO. He not only embodied a sustainable lifestyle by, for example, driving a hybrid car, but also succeeded in establishing a mandatory and long-term decision-making body for sustainability-related issues – the SUSTAIN core team. As the CMO noted, "I think one of the most important actions is to declare the topic 'a matter for the boss'". Eventually, the CEO took over the chair of the sustainability committee and, hence, signaled the topic's strategic significance for the firm. Subsequently, doubters who had not attended the committee's meetings yet, felt that if they did not start to participate, they would miss important internal developments and decisions. Besides, the incorporation of sustainability into Alpha Group's first-ever quantitative sustainability targets marked a similarly important symbolic milestone. One interviewee stated, "We achieved a higher level of intensity by establishing mandatory targets; in my opinion that's an important step, and a step, I think, not many companies have taken".

Thirdly, although verbal (broadcasting) and non-verbal (symbolizing) communication were necessary practices, purposefully *involving* the right people with a strong internal reputation when promoting the initiative was equally important. More precisely, this practice implied building horizontal and vertical alliances in order to create common ownership among diverse hierarchical and functional levels. A top manager at Alpha Group confirmed that "creating alliances, bringing top management over to one's side, convincing them of the issue is imperative". In addition, ensuring majorities for the SUSTAIN initiative prior to decisive committee meetings further enhanced the initiative's survival. This highlights the significance of direct, personal dialogues allowing for the circumvention of formal communication channels. As one interviewee noted, "A successful mechanism is to really do a lot of face-to-face persuading through extreme personal commitment". This way, managers were not only mobilized to take collective action, but also recruited to further convey the message throughout the organization.

However, it is not only top management that needed to be brought in, as the involvement of experts on sustainability and people with a high internal reputation was also vital. Hence, the initially vague conceptualization of the initiative and related activities called for the *substantiation* of the initiative's major dimensions. Thus, linking the sustainability initiative to a "dense factual carpet", as one of our interviewees called it, was a decisive step to winning approval and acceptance among organizational members. The SUSTAIN core team resorted to facts that were predominantly linked to the organization's history and especially its sustainability track record – this included its former environmental commitment, its strategic goals, and the external market, for example, in the form of figures indicating a significant socio-economic trend, such as the new LOHAS target group, and competitors' moves. Taken together these facts supported the arguments brought forth by actors aiming to advance sustainability within their organization. Substantiation efforts became particularly evident when the SUSTAIN core team, led by the CMO, had to persuade BU1's executive committee to grant funds for the initiative's further development. The team prepared a 300-slide presentation illustrating in detail facts and figures backing SUSTAIN's relevance and its potential for generating a long-term competitive advantage in a changing market environment. However, substantiation also took place on a continuous basis. The SUSTAIN team regularly recorded concrete, measurable performance indicators and outcomes related to the initiative in order to enhance organizational acceptance.

Finally, *hardwiring* practices sought to cement sustainability within the firm's management systems, processes, and structure. As one manager emphasized, "Factors of success are structures and systems aimed at sustainably embedding those topics within the organization and in people's heads." With the definition of quantifiable targets, focus areas, or the life cycle tool the SUSTAIN initiative has increasingly gained influence on new product development or production processes. Although these targets and tools were initially rather symbolic in character, their global roll-out has led to their eventual binding validity and, more importantly, the introduction of a new sustainable brand. With sustainability gradually becoming hardwired in this way, a new organizational path was created. Efforts to reverse this path have become increasingly difficult. And as one interviewee warned, "There's a high risk associated with this topic, namely that once embark on it, you won't be able to get out of it easily." The organization thus explicitly committed itself for the long-term. "It should not aim for the opportunistic realization of short-term competitive advantages because that way it will go awry, it won't work", as one interviewee emphasized.

Table 2 summarizes these practices by providing exemplary quotes and respective definitions.

TABLE 2
Practices Enhancing Internal Legitimacy, Exemplary Quotes, and Definitions

Practice	Exemplary Quotes	Definition
Broadcasting	"Of course, Alpha Group newsletters have a very broad impact even on the doorman or line worker. […] In the number of meetings, project teams that work within the firm, it is important that managers address the topic of sustainability on every occasion. "(Director) "It has immediately been made an issue and it has been used as a multiplier through Alpha Group's internal media channels. And this is perceived by our consumers, including our employees who are consumers, too." (Manager) "You need to repeat your message. Announcing it once won't help you. You have to have clear, synchronized, consistent communication." (Director) "[…] but you have to ensure the issue remains present." (Director)	Raising organization-wide awareness and support for the issue necessitates an intense internal broadcasting strategy implying the repeated use of multiple communication channels.
Symbolizing	"When I came to Alpha Group, it was important for me to understand the employer branding and how the firm works. And after very, very intense weekends which I mostly spent reading, Alpha Group's overall history has become increasingly clear to me, and that sustainability is a good, a DNA component at Alpha Group which actually has always been existent." (CMO) "If I can boil it down to an essence, the very essence, I would say that it's a kind of messianic sense of mission of the CMO." (Vice President) "Exactly, you have to formulate a focus like this somehow. And this is what we achieved with our SUSTAIN concept – short and crisp. We have been criticized for it so much we got tired of hearing that. But, in my opinion, you can communicate it clearly enough and put in a handy formula, so that it's really communicated and comprehensible for everybody, and that you have it on your mind every day." (CMO)	The use of non-verbal, symbolic displays, stories, and actions particularly enhances moral and cognitive commitment on the part of organizational members.
Involving	"You have to buy in a top-team supporter. From that moment, it definitely becomes easier to push the initiative when you have someone from the top management team. Consequently, if you have issue where you can involve multiple parties, at that point you can gain positive feedback from different areas and you all appear as a team and say this is the idea." (Director) "If it is someone with an extremely positive image among the decision makers, someone we know as one of our stars, a really good one, then they will definitely listen and be receptive and let themselves be persuaded." (Director)	Building vertical and horizontal alliances with top managers, sustainability experts, or people with a high internal reputation, and thus, manipulating decision making procedures, namely through assuring majority pre-decisions in favor of the sustainability initiative, is a key practice for enhancing legitimacy.

TABLE 2
Continued

	"Creating alliances and positioning the topic well prepared within the right committees, trying to get a majority there, a coalition, and then to implement it." (Vice President)	
Substantiating	"As long as I have known Alpha Group, this [sustainability] was in the firm's genes and soundly cemented in its culture." (Vice President) "It's a leadership topic. I mean, everybody who leads a department or a business unit has to push the topic. And the only way this can be done is to embed it [sustainability] in your practical strategy. Because only then can it find its way in the overall concept of strategy, only then can the topic automatically pop up in the planning process. It has to be part of the corporate strategy. This way we can ensure that it's always top of mind." (Director) "And because employees are simultaneously our consumers, of course, and they notice there is something going on, other firms engage, too. So it was important to elaborate it on the basis of concrete facts. And in my view, this had an extremely positive motivational impact. Because it's a topic everyone can identify with very easily." (Manager) "It's the normative power of the factual, it has been simply done."	The vague nature of the topic means it needs to be linked with hard facts, such as obligatory sustainability targets or market figures to emphasize the issue's business relevance and potential for competitive advantage. Embedding it within the firm's history highlights the firm's predispositions and enhances perceived practicability and its capacity to successfully implement sustainability.
Hardwiring	"You need to establish starting points at corporate level for embedding it within the business units. […] and this is the business level which means operations, operative actions, and this is where it has to be reflected. These two levels need to complement each other." (Director) "And if you say hardwiring, this is where we have systems, processes, standards, and we have had them for a relatively long time, earlier than many other peers." (Director) "If you have determined targets at the corporate level, you need to cascade them. This implies that you communicate the respective sub-goals to your business units and this ultimately means that all the target dialogues and incentive systems are dependent on whether we achieve our sustainability targets. And this means that it's embedded in the organization, and this is irrespective of who sits in the chair." (Vice President) "We changed our whole innovation pipeline so that every new product, every product we have been working on, clearly addresses these focus areas and results in a significant improvement." (Director)	Institutionalizing sustainability calls for addressing it in the firm's overall systems, processes, and targets.

Creating External Legitimacy

Firstly, *credibility building* within the external organizational field through intense and repetitive communication constituted a major prerequisite for legitimizing Alpha Group's sustainability track record in the external context. We found significant differences regarding previous sustainability management efforts and the present SUSTAIN initiative. The majority of interviewees confirmed that intense external communication had been only recently employed, but had so far triggered incredibly positive feedback from the external environment. As one interviewee stated, "We had so much to communicate, but we were far too modest by that time". Another interviewee argued, "We put more energy into communicating it [sustainability] now; we weren't doing that three years ago". The external communication of the SUSTAIN initiative through, for instance, press conferences, sustainability reports, or interviews with top managers early on was linked to the firm's "DNA" and its pre-existing sustainability track record. Through these activities, Alpha Group addressed end consumers and retail customers alike and influenced their moral evaluations of the firm. The objective was to signal that Alpha Group provides the necessary knowledge, capabilities, and processes to face the challenges associated with successfully implementing sustainability. One interviewee argued, "Alpha Group could prove very well that it's not just an ad-hoc story for us". Taken as a whole, this practice has built a strong reputation for Alpha Group in terms of its long-term sustainability commitment and helped the initiative gain external stakeholder acceptance.

Secondly, *seeking recognition* in the form of certificates, rankings, and awards honoring outstanding achievements in the field of sustainability further enhanced external acceptance through the strong signaling effects to end consumers, retail customers, and investors. These forms of external recognition by customers or non-governmental organizations supported the firm's image of being a reliable and committed market player within the sustainability arena. As one interviewee pointed out, "We earn awards on a regular basis, we are featured on sustainability rankings, mostly in first or second place, and, and, and; this helps immensely to augment our firm's reputation and prominence". The importance of such recognition was further exemplified by another interviewee: "Without these awards I would have thought nobody is really interested in what we do". Seeking recognition through awards or rankings also implies that the firm conforms to the highest industry-specific requirements. The sustainability management department over the years has made great efforts to document Alpha Group's achievements in terms of sustainability, actively filling out required application forms for important awards and rankings. It should be noted, though, that awards and high scores in sustainability rankings may simultaneously impact internal legitimacy. External recognition in the form of prestigious awards is a strong symbolic display. However, as recognition seeking draws on externally defined ideals of competencies and achievements, we assigned this practice to external legitimacy.

Thirdly, being the first to assert explicit and comparatively high *standards* in sustainable operations along the value chain not only established a benchmark for customers and business partners but also obliged competitors to mimic those standards. This was particularly driven by Alpha Group's self-commitment regarding, for instance, the creation of certificates for a major raw material ensuring sustainable resource exploitation and the firm's continuous engagement in political and environmental discourses on a national and international level. The institutionalization of new industry standards was therefore facilitated through the firm's collaboration with superordinate authorities, such as governmental and non-governmental organizations. For external legitimation, Alpha Group's initial internal hardwiring activities were thus linked to the official control of external institutions. The firm's consistent commitment in terms of establishing new industry standards made it a pioneer in implementing sustainability which was broadly appreciated by competitors. According to accounts from our interviewees, when the BU 1's EVP attended the World Economic Forum, top managers from other companies directly approached the manager and highly acknowledged Alpha Group's strong position in the field of sustainability. As one manager put it, "This is how it works, success attracts other companies; and then, eventually, I have set a new standard; this is to be accomplished only if it's honored, if it's successful". This positive development was especially assisted by the fact that the sustainability field was still rather emerging and immature at that stage. Where there is no common agreement on certain issues such as in the case of sustainability, first mover advantages may be quite easily realized by pioneering the field with adequate propositions regarding standards and regulations. In essence, proactively setting standards supports a pursued market-maker strategy in the field of sustainability and consequently enhances external legitimacy.

Finally, we found that *materializing* the SUSTAIN initiative into artefacts at product and brand level was a practice that completed Alpha Group's portfolio of legitimacy-enhancing activities. Similar to the practice of substantiating and symbolizing in the internal case, materializing proved an indispensable step for handling the topic's inherently diffuse nature and for making it more tangible, especially to consumers and customers. The materializing practices particularly resulted from considerations in marketing and innovation management to serve the recently identified target group of LOHAS through a "mnemonic device", as one interviewee called it. Firstly, the introduction of a new company logo highlighting Alpha Group's sustainability commitment, and secondly, the launch of the new sustainability brand, as illustrated in the case narrative, immensely endorsed the firm's external acceptance. As one interviewee stressed, "The most successful and perceptible aspects are the things with an external impact; the logo on the packaging, for example". Yet, the launch of the sustainable product brand was particularly significant – due to the still recalled experiences with less successful sustainable product launches in the 80s and 90s and also because this was the first new brand launch from BU1 for over 5 years.

Table 3 lists the practices, illustrative quotes and definitions aimed at enhancing external legitimacy.

TABLE 3
Practices Enhancing External Legitimacy, Exemplary Quotes, and Definitions

Practice	Exemplary Quotes	Definition
Credibility Building	"You can advance the topic, especially if there's a heritage you can build on." (Director) "It became more visible, we have already talked about it, because it gained in relevance within society and then you start making use of it. Especially if you have the relevant heritage to build on." (Vice President) "What I intend to emphasize is how Alpha Group distinguishes itself. This is why – especially regarding this topic – it heavily depends on credibility. There are other topics you can serve quite easily and as a consumer you might think: ok, where's the difference between this and that firm? But this is where the issue of credibility is crucial. And then it became clear that a firm that has been working on that issue for many years gains a better position when it comes to public image." (Manager) "We were able to develop this topic extremely fast and communicate it externally, and we were significantly more credible than our competitors." (Director) "Because of the fact that sustainability has always been present within Alpha Group, the handling of the topic wasn't something new. Alpha Group is able to make use of the topic faster or maybe more credibly than its competitors." (Manager)	As sustainability is a highly ambiguous, vague, and intangible issue, demonstrating and marketing your superior capabilities regarding sustainability management is key. Thus, linking the issue to the firm's DNA builds the needed credibility and approval among consumers, customers, or investors, with respect to the firm's sustainability efforts.
Recognition Seeking	"It is being recognized more and more, it is increasingly gaining recognition through awards or at least rankings and so on and so forth. So that eventually many people realize that this is an issue that can set you apart." (Manager) "It's successful in the first place through these awards." (Manager) "Hey, we have it, we can serve that, we are sustainable and we win one sustainability award after the other, let's make use of it." (Director) "And so all the international awards that we get show that it's understood externally. Also the key awards we received from a major retailer, for instance, reflect that we are doing it right – i.e. that we are in a leading position." (Senior Vice President)	When there is high uncertainty about the actual degree of sustainability commitment, explicit certificates and awards contribute to the firm's positioning and enhance legitimacy in the marketplace.
Standardizing	"An external factor, we commit ourselves and set standards out of our business unit, for our sustainable brand." (Director) "And the third, fourth, and fifth step is actually to make it a new standard. What is then regarded as something normal. Because it's not possible any other way to pave the way for the next step." (Manager)	Where there are only imperfect common standards, the active engagement in regulatory discussions and determination of new sustainability standards allows a firm to pioneer and thus eventually encourage isomorphism

TABLE 3
Continued

	"We engage in the regulatory discussion to determine criteria and standards for CSR, because we believe that if we don't, we will have a competitive disadvantage." (Vice President)	through coercing competitors and other market players to adhere to those new standards.
Materializing	"The first thing was really that factual, we just add something on our products. There is something on the packaging. Making it tangible. This was definitely a success factor. And this was the first perceptible step for the organization. And look…, suddenly it's something the external world sees. And this is how you get the ball rolling." (Director) "As I said, regarding public image it helps a lot to put Alpha Group with its initiatives at the forefront of people's minds across the board. Sometimes it's easier to communicate it in a handy way through a special sustainability brand." (Director) "Flagships. And saying what we do quite boldly. […] This is what would be relevant. So I think making it tangible is really important." (Director) "When I see that we are constantly recognized, that we win prizes, invent products that market it in a special way, then it's a real overall concept or an overall picture that is slowly put together and makes more and more sense. Now I begin to understand that without these things and without our own product I wouldn't know how to tackle this topic." (Director) "Well, I mean, do good and talk about it. I mean, if you are able to produce such products and formulas then you have to talk about it and what's more advertise it." (Vice President)	In order to make sustainability explicit and understandable, a tangible and physical product is needed to transfer the firm's implicit messages on its commitment to sustainability.

DISCUSSION AND IMPLICATIONS

In this article we have presented a study describing different practices to legitimize strategic sustainability initiatives within a large diversified firm. Although evolutionary strategy researchers have argued that competition and survival of strategic initiatives within an intraorganizational ecology is driven by various behavioral mechanisms embedded in a structural, cultural, and strategic context of the firm, to our knowledge no focused study has explicitly addressed the question how managers apply various legitimacy-enhancing practices at the interstices between the internal and external institutional environments to support the acceptance of their strategic initiatives. Our empirical study attempts to fill this gap with a unique explorative and longitudinal case study in a diversified firm.

Our research provides three important insights: (1) entrepreneurial firms actively shape the co-evolution of the internal and external organizational field by applying a set of legitimacy-enhancing practices in order to create favorable micro- and macro-institutional conditions for the survival and implementation of their strategic initiatives; (2) organizational path-dependency towards sustainability can become a source of competitive advantage when a firm's strong sustainability "DNA" meets a favorable external organizational field in which, at least temporarily, sustainability can be used to create space for new opportunities; and (3) firms promoting their sustainability commitment can develop stronger sources of legitimacy not just by a moral appeal, but especially by showing how sustainability informs and shapes business practices.

Shaping the Co-Evolution Between the Internal and External Organizational Field

Our study shows that the strategic management of sustainability is subject to the co-evolution of the internal and external organizational field. In this vein, the internal survival of strategic initiatives in their competition for managerial attention and scarce resources is dependent on changes in the external environment concerning, for instance, social movements, competitors' and customers' behavior, or external regulations. Conversely, organizational actors may actively exert influence on the external organizational field. This finding concurs with a co-evolutionary (e.g., Baum, 1999; Henderson & Stern, 2004) or organic perspective on strategic management (Farjoun, 2002).

Strategic initiatives in the evolutionary perspective (Barnett & Burgelman, 1996; Burgelman, 1983b, 1991) compete for scarce managerial attention and resources within the intraorganizational ecology. However, internal selection mechanisms are not isolated from external selection. As Volberda and Lewin note, "Adaptation and selection are not wholly opposing forces but are fundamentally interrelated and co-evolving" (2003: 2114). Prior studies in the field of intraorganizational ecology have acknowledged that internal selection environments mirror selection conditions within the external organizational field (Barnett & Burgelman, 1996). However, previous literature has mostly focused on internal factors and mechanisms influencing this process, such as an organization's structural determinants, its articulated strategic direction (Burgelman, 1983a, b) as well as the role of strategic leadership in translating external challenges into the strategic intent, which in turn directs variation and selection processes towards those outcomes that are aligned to the company's strategic goals (Burgelman & Grove, 2007; Lovas & Ghoshal, 2000). On a micro level, previous research has devoted particular attention to the perspective of middle managers who have a significant strategic influence because of their front-line position (e.g., Floyd & Wooldridge, 1997; Wooldridge, Schmid, & Floyd, 2008). In essence, a middle-level manager's role within the co-evolutionary mechanism is to resolve ambiguities between an organization's external environment and internal capabilities (Burgelman, 1983c) by playing an important mediating and political brokering role. Thus, the influence exerted by the external environment has not yet been comprehensively integrated into models of evolutionary strategy processes (Hutzschenreuter & Kleindienst, 2006). In our case study, however, we suggest that the internal context, within which strategic behavior unfolds, should by no means be taken for granted. Broadcasting, symbolizing or substantiating the initiative play key roles in enhancing internal legitimacy and manipulating the micro-institutional field of the corporation (van Dijk et al., 2011).

Similarly, the external institutional field has experienced significant managerial interventions in our case study through such practices as standardizing or materializing. While population ecology (Hannan & Freeman, 1977) suggests that "managerial intentionality" makes no difference (Lewin & Volberda, 1999: 520), our case illustrates the centrality of interests and agency in actively manipulating the institutional environment. As a consequence, questions of how organizations and environments co-evolve have remained largely underdeveloped. Instead of either examining company adaptation (intraorganizational ecology) or environmental selection (population ecology), our study mirrors Lewin and Volberda's suggestion that change is "rather the joint outcome of intentionality and environmental effects" (1999: 523). In other words, the co-evolution of organizations and environments does not merely happen, but rather underlies proactive and systematic managerial influence. One key implication we surmised from this research is that proactive moves are critical when seeking legitimacy. Especially, in such a new and emerging field as sustainability, organizations may realize first-mover advantages by actively establishing yet unclear standards. Thus, organizations may enhance external legitimacy by "remaking others in their own image" (Suchman, 1995: 593), among others through coercion and regulation. However, pioneers draw on emerging institutional arrangement and prevailing general "heuristics" in order to gain legitimacy (Suchman, 1995).

Ultimately, we suggest that marrying evolutionary perspectives on strategy making and change with institutional notions of institutional work and entrepreneurship (DiMaggio, 1988; Garud, Hardy, & Maguire, 2007; Hardy & Maguire, 2008) is particularly able to fill the conceptual gaps previous models have left behind. Assuming that actors are able to enact structure to advance personal interests they value highly (DiMaggio, 1988) – be it within the intraorganizational ecology or the external organizational field – and at the same time draw on particular institutional arrangements as enabling conditions this would provide an explanation for the emergence of deviating, non-isomorphic strategic responses as observed in the case of Alpha Group.

When Strong Firm DNA Meets a Favorable External Organizational Field

Our second insight relates to the discourse on organizational path dependency. Earlier research has argued that a company's "historical imprinting of decision-making" (Sydow, Schreyögg, & Koch, 2009: 689) through self-reinforcing, institutionalization processes creates lock-ins that stabilize a current strategic path of that company. Interestingly, this literature relates organizational path-dependency with inertia because "those processes … are 'unable to shake free of their history'" (Garud, Kumaraswamy, & Koch, 2010: 760). The main gist of the argument is that path dependency is a source of the company's inability to adapt to changing environmental demands. The message is that firms have to learn how to break away from history through unlearning the past, restore strategic choices, and prepare for a different future. Hence, path dependency becomes a liability of the firm because it is related to lower organizational innovations, technological traditionalism, and strategic conservatism (e.g., Abrahamson & Fombrun, 1994).

Our case, however, offers a very different and more nuanced picture. Since its origin, Alpha Group has developed a culture, or in the words of managers a "corporate DNA", that has been susceptible to sustainability. This culture was supported by self-reinforcing mechanisms of selecting, socializing, training, and later incentivizing managers. As our case illustrates, this path dependency can not only become a corporate liability, but turns into an aforementioned enabling force when the external environment offers new strategic opportunities that help to exploit the corporate DNA by translating it into specific business opportunities.

However, new business opportunities never come with red flags, but have to be socially constructed and negotiated within and across the firm (Wood & McKinley, 2010). A corporate culture that is susceptible to an emerging opportunity space – here sustainability – offers stronger absorptive capacity (Cohen & Levinthal, 1990) and therefore a higher readiness for innovation in a new technological field. This explains why Alpha Group's path dependency based on its corporate DNA was in fact an enabling condition for business-related innovations.

The case, however, also implies another issue. Implementing new strategic initiatives requires more than favorable enabling conditions because managers also engaged in strategic manipulations of internal and external selection mechanisms through legitimacy-enhancing practices. Throughout these processes managers were aware of the fact that sustainability imposes specific requirements on the overall credibility of the firm. With the firm's increasingly institutionalizing sustainability in their systems, processes, structure, and products, they are implicitly creating a new path and locking themselves in. Leaving the sustainability track becomes more and more problematic, as organizations risk losing their credibility and legitimacy. Our interviewees particularly supported this point mainly referring to the inherent philanthropic nature of the topic which demands extremely careful communication and implementation. As a result, the case of Alpha Group neither fits into a typical path-dependence nor into a typical path-creation case, but is rather driven by a mix of the two (see also Sydow et al., 2009). Previous research has therefore largely simplified a much more complex enterprise, in which path dependency and path creation can go hand in hand and mutually support each other. Evolutionary models such as the Bower-Burgelman model (Bower, 1970; Burgelman, 1983c), in particular, have paid only scant attention to path dependency and creation, yet these issues are widely discussed in institutionalist literature.

From Ethical Meaningfulness to Business Relevance

Our analysis shows that the prevailing justification for sustainability based on a "moral appeal" (Porter & Kramer, 2006: 2) was a necessary condition, but the real impetus for sustainability being accepted by organizational members as strategically relevant and a potential source of competitive advantage emerged from demonstrating its relevance for the business. This finding parallels recent contributions in the field of corporate sustainability, or more precisely, the business case of corporate sustainability (Salzmann, Ionescu-Somers, & Steger, 2005). Those attempts to prove the economic rationale of sustainability management, mainly by linking environmental and social activities to long-term financial performance (Epstein, Buhovac, & Yuthas, 2012), however, are yet largely inconclusive (Griffin & Mahon, 1997) and lack major descriptive studies (Salzmann et al., 2005). This is mainly attributable to the issue's inherent complexity and related, multi-faceted trade-offs between its economic, environmental, and social sustainability constituents (e.g., Hahn, Figge, Pinkse, & Preuss, 2010).

In our case study the meaningfulness of sustainability proved to be not only a unique characteristic of this type of initiative but also an advantage and disadvantage at the same time with regard to internal legitimacy. Consistent with values and beliefs held individually and organization-wide implying that being a respected citizen and 'doing good' is something Alpha Group stands for, organizational members intrinsically accepted sustainability due to its ethically meaningful nature. On the other hand, sustainability was trapped in philanthropy since organizational members attributed sustainability to the Group's reputation but did not see any relevance for the business itself in their daily work. Sustainability lived a rather comfortable, but isolated life within the organization on the 'green island'. It was mainly kept alive by organizational members that were located (1) either in sustainability management departments mainly at Group level (corporate nerds) fostering the firm's reputation with legitimacy derived from external reputation, or (2) in operations-related roles assuring the firm's license to operate with legitimacy derived mainly from external regulation. In this context the CMO acted as a micro-institutional entrepreneur by interpreting the internal and external organizational field and creating new ways to legitimize the sustainability initiative beyond sustainability's ethically meaningful nature. He underpinned the topic's inherent business relevance and potential for competitive advantage using different legitimacy practices. To shape the perceptions of key organizational members to understand the entrepreneurial opportunity they resorted to the rather economic or pragmatic sources of legitimacy (Suchman, 1995) which each and every initiative needs to satisfy in the internal struggle for legitimacy in the business.

With sustainability management increasingly accepted as a strategic source of competitive advantage, the actors involved and the sources of legitimacy shifted over the period of the study. Sustainability had, metaphorically speaking, moved from the 'green island' to the "business continent". This finding has consequences for the further long-term survival of sustainability as a prominent strategic topic. This means that managers in support of the initiatives had to adjust their legitimacy-enhancing practices from a moral legitimacy based on a license to operate to pragmatic legitimacy based on creating space for new opportunities to gain business and competitive advantage (Porter & Kramer, 2006).

REFERENCES

Abrahamson, E., & Fombrun, C. J. 1994. Macrocultures - Determinants and consequences. ***Academy of Management Review***, 19(4): 728-755.

Barnett, W. P., & Burgelman, R. A. 1996. Evolutionary perspectives on strategy. ***Strategic Management Journal***, 17(1): 5-19.

Baum, J. A. 1999. ***Whole-part coevolutionary competition in organizations***. London: Sage Publications.

Bonini, S. M., Mendonca, L. T., & Oppenheim, J. M. 2006. When social issues become strategic. ***McKinsey Quarterly***, 2: 20-32.

Bower, J. L. 1970. ***Managing the resource allocation process: A study of corporate planning and investment***. Boston: Harvard Business School Classics.

Bower, J. L., & Gilbert, C. G. 2005. ***From resource allocation to strategy***. Oxford: Oxford University Press.

Burgelman, R. A. 1983a. Corporate entrepreneurship and strategic management: Insights from a process study. ***Management Science***, 29(12): 1349-1364.

Burgelman, R. A. 1983b. A model of the interaction of strategic behavior, corporate context, and the concept of strategy. ***Academy of Management Review***, 8(1): 61-70.

Burgelman, R. A. 1983c. A process model of internal corporate venturing in the diversified major firm. ***Administrative Science Quarterly***, 28(2): 223-244.

Burgelman, R. A. 1991. Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research. ***Organization Science***, 2(3): 239-262.

Burgelman, R. A. 1994. Fading memories - A process theory of strategic business exit in dynamic environments. ***Administrative Science Quarterly***, 39(1): 24-56.

Burgelman, R. A. 2002. Strategy as vector and the inertia of coevolutionary lock-in. ***Administrative Science Quarterly***, 47(2): 325-357.

Burgelman, R. A., & Grove, A. S. 2007. Let chaos reign, then rein in chaos - Repeatedly: Managing strategic dynamics for corporate longevity ***Strategic Management Journal***, 28: 965–979.

Cohen, W. M., & Levinthal, D. A. 1990. Absorptive capacity: A new perspective on learning and innovation. ***Administrative Science Quarterly***, 35(1): 128-144.

DiMaggio, P., & Powell, W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. ***American Sociological Review***, 48(2): 147-160.

DiMaggio, P. J. 1988. Interest and agency in institutional theory. In L. G. Zucker (Ed.), ***Institutional patterns and organizations: Culture and environment***, Vol. 1: 3-22. Cambridge, MA: Ballinger.

Dougherty, D., & Heller, T. 1994. The illegitimacy of successful product innovation in established firms. ***Organization Science***, 5(2): 200-218.

Durand, R. 2006. ***Organizational evolution and strategic management***. London: Sage.

Dutton, J. E., & Ashford, S. J. 1993. Selling issues to top management. ***Academy of Management Review***, 18(3): 397-428.

Easterby-Smith, M., Thorpe, R., & Jackson, P. R. 2008. ***Management Research*** (3rd ed.). Thousand Oaks, California: Sage.

Edmondson, A. C., & McManus, S. E. 2007. Methodological fit in management field research. ***Academy of Management Review***, 32(4): 1155-1179.

Eisenhardt, K. M. 1989. Building theories from case-study research. ***Academy of Management Review***, 14(4): 532-550.

Elsbach, K. 2002. Intraorganizational institutions. In J. A. C. Baum (Ed.), ***Companion to organizations***: 37-57. Oxford: Blackwell.

Epstein, M. J., Buhovac, A. R., & Yuthas, K. 2012. Managing social, environmental and financial performance simultaneously. ***Long Range Planning***, Available online 20 December, 2012.

Farjoun, M. 2002. Towards an organic perspective on strategy. ***Strategic Management Journal***, 23(7): 561-594.

Floyd, S. W., & Wooldridge, B. 1997. Middle management's strategic influence and organizational performance. ***Journal of Management Studies***, 34(3): 465-485.

Garud, R., Hardy, C., & Maguire, S. 2007. Institutional entrepreneurship as embedded agency: An introduction to the special issue. ***Organization Studies*** 28(7): 957-969.

Garud, R., Kumaraswamy, A., & Koch, J. 2010. Path dependence or path creation? ***Journal of Management Studies***, 47(4): 760-774.

Glynn, M. A., Barr, P. A., & Dacin, M. T. 2000. Pluralism and the problem of variety. ***Academy of Management Review***, 25(4): 726-731.

Greenwood, R., Magán Díaz, A., Li, S. X., & Lorente, J. C. 2010. The multiplicity of institutional logics and the heterogeneity of organizational responses. ***Organization Science***, 21(2): 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., & Suddaby, R. 2006. Institutional entrepreneurship in mature fields: The big five accounting firms. ***Academy of Management Journal***, 49(1): 27-48.

Griffin, J. J., & Mahon, J. F. 1997. The corporate social performance and corporate financial performance debate twenty-five years of incomparable research. ***Business & Society***, 36(1): 5-31.

Hahn, T., Figge, F., Pinkse, J., & Preuss, L. 2010. Trade-offs in corporate sustainability: You can't have your cake and eat it. ***Business strategy and the environment***, 19(4): 217-229.

Hannan, M. T., & Freeman, J. 1977. The population ecology of organizations. ***American Journal of Sociology***, 82(5): 929-984.

Hannan, M. T., & Freeman, J. 1989. ***Organizational ecology***. Cambridge, MA Harvard University Press.

Hardy, C., & Maguire, S. 2008. Institutional entrepreneurship. In R. Greenwood, C. Oliver, R. Suddaby, & K. Sahlin-Andersson (Eds.), ***The Sage Handbook of Organizational Institutionalism***: 198-217. Thousans Oaks, CA: Sage.

Henderson, A. D., & Stern, I. 2004. Selection-based learning: The coevolution of internal and external selection in high-velocity environments. ***Administrative Science Quarterly***, 49(1): 39-75.

Hoskisson, R. E., Hitt, M. A., Wan, W. P., & Yiu, D. 1999. Theory and research in strategic management: Swings of a pendulum. ***Journal of Management***, 25(3): 417-456.

Hutzschenreuter, T., & Kleindienst, I. 2006. Strategy-process research: What have we learned and what is still to be explored. ***Journal of Management***, 32(5): 673-720.

Langley, A. 1999. Strategies for theorizing from process data. ***Academy of Management Review***, 24(4): 691-710.

Lawrence, T. B. 1999. Institutional Strategy. ***Journal of Management***, 25(2): 161-187.

Lawrence, T. B., Suddaby, R., & Leca, B. 2009. ***Institutional work: Actors and agency in institutional studies of organizations***. Cambridge: Cambridge University Press.

Lewin, A. Y., & Volberda, H. W. 1999. Prolegomena on coevolution: A framework for research on strategy and new organizational forms. ***Organization Science***, 10(5): 519-534.

Lincoln, Y. S., & Guba, E. G. 1985. ***Naturalistic inquiry***. Newbury Park, Calif.: Sage Publications.

Lounsbury, M. 2001. Institutional sources of practice variation: Staffing college and university recycling programs. ***Administrative Science Quarterly***, 46(1): 29-56.

Lounsbury, M., & Crumley, E. T. 2007. New practice creation: An institutional perspective on innovation. ***Organization Studies***, 28(7): 993-1012.

Lovas, B., & Ghoshal, S. 2000. Strategy as guided evolution. ***Strategic Management Journal***, 21(9): 875-896.

Meyer, J., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. ***American Journal of Sociology***, 83(2): 340-363.

Meyer, J. W., & Scott, W. R. 1983. ***Organizational environments: Ritual and rationality***. Beverly Hills: Sage.

Mintzberg, H., Ahlstrand, B. W., & Lampel, J. 2009. ***Strategy safari: The complete guide through the wilds of strategic management*** (2nd ed.). Harlow: Financial Times Prentice Hall.

Mir, R., & Watson, A. 2000. Strategic management and the philosophy of science: The case for a constructivist methodology. ***Strategic Management Journal***, 21(9): 941-953.

Morgan, G., & Smircich, L. 1980. The case for qualitative research. ***Academy of Management Review***, 5(4): 491-500.

Nelson, R. R., & Winter, S. G. 1982. ***An evolutionary theory of economic change***. Cambridge, MA: Belknap Press.

Oliver, C. 1991. Strategic responses to institutional processes. ***Academy of Management Review***, 15(1): 145-179.

Pettigrew, A. M. 1990. Longitudinal field research on change: Theory and practice. ***Organization Science***, 1(3): 267-292.

Porter, M. E., & Kramer, M. R. 2006. The link between competitive advantage and corporate social responsibility. ***Harvard Business Review***, 84(12): 78-92.

Powell, W. W., & DiMaggio, P. J. 1991. ***The new institutionalism in organizational analysis***. Chicago: University of Chicago Press

Salzmann, O., Ionescu-Somers, A., & Steger, U. 2005. The business case for corporate sustainability: Literature review and research options. ***European Management Journal***, 23(1): 27-36.

Strauss, A. L., & Corbin, J. M. 1990. ***Basics of qualitative research: Grounded theory procedures and techniques***. London, UK: Sage.

Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. ***Academy of Management Review***, 20(3): 571-610.

Sydow, J., Schreyögg, G., & Koch, J. 2009. Organizational path dependence: Opening the black box. ***Academy of Management Review***, 34(4): 689-709.

Takeishi, A., Aoshima, Y., & Karube, M. 2010. Reasons for innovation: Legitimizing resource mobilization for innovation in the cases of the Okochi Memorial Prize

Winners. In H. Itami (Ed.), ***Dynamics of knowledge, corporate systems and innovation***: 165-189. Berlin: Springer.

Vaara, E., & Whittington, R. 2012. Strategy-as-practice: Taking social practices seriously. ***Academy of Management Annals***, 61(1): 285-336.

van Dijk, S., Berends, H., Jelinek, M., Romme, A. G. L., & Weggeman, M. 2011. Micro-institutional affordances and strategies of radical innovation. ***Organization Studies***, 32(11): 1485-1513.

Volberda, H. W., & Lewin, A. Y. 2003. Co-evolutionary dynamics within and between firms: From evolution to co-evolution. ***Journal of Management Studies***, 40(8): 2111-2136.

Wood, M. S., & McKinley, W. 2010. The production of entrepreneurial opportunity: A constructivist perspective. ***Strategic Entrepreneurship***, 4: 66-84.

Wooldridge, B., Schmid, T., & Floyd, S. W. 2008. The middle management perspective on strategy process: Contributions, synthesis, and future research. ***Journal of Management***, 34(6): 1190-1221.

Yin, R. K. 2003. ***Case study research: Design and methods*** (3rd ed.). Thousand Oaks, California: Sage.

Zucker, L. G. 1989. Combining institutional theory and population ecology: No legitimacy, no history. ***American Sociological Review***, 54(4): 542-545.

CONFIGURATIONS OF CORPORATE ENTREPRENEURSHIP: A META-SYNTHESIS OF CASE-STUDY DATA

Acknowledgments

I thank Markus Reihlen, Johann Bronstein, Katrin Obermeit, Ferdinand Wenzlaff, and Jochen Schweitzer for their valuable and helpful comments on earlier drafts of this article. An earlier version of this article was presented in the strategic management stream of the 26th Annual Australian and New Zealand Academy of Management Conference in Perth, and in the sub-theme on strategic and institutional environments of the 29th EGOS Colloquium in Montréal.

ABSTRACT

While the value of corporate entrepreneurship for a firm's performance has been broadly confirmed, much remains to be revealed about how entrepreneurial behavior can be effectively managed and harmonized with the existing organizational context. In order to reconcile the still fragmented insights into the ways organizational structures and systems may constitute a breeding ground for corporate entrepreneurship, I offer a meta-synthesis of qualitative case studies. With configuration theory and the archetype approach as a theoretical basis, I derive configurations of corporate entrepreneurship that reflect different interpretations of the challenges and objectives associated with entrepreneurial behavior: the portfolio, transfer, cultural, and individual configuration.

Keywords: corporate entrepreneurship, qualitative meta-synthesis, configuration theory

INTRODUCTION

Over the last four decades, scholars and practitioners alike have not grown tired of praising the positive effects of corporate entrepreneurship (CE) on a firm's competitiveness and performance (Burgelman, 1983a; Covin & Miles, 1999; Guth & Ginsberg, 1990; Zahra, 1993b, 1995). Thus, the scope of conceptualizations of CE grows constantly, as researchers diligently – and often independently – document the recently expanding variety of CE programs in practice (Dess et al., 2003; Guth & Ginsberg, 1990; Sharma & Chrisman, 1999). Not less vast is the number of studies dedicated to identifying organizational contingency factors of CE (Covin & Slevin, 1991; Gómez-Haro, Aragón-Correa, & Cordón-Pozo, 2011; Urbano & Turró, 2013; Zahra & Covin, 1995).

However, the ever-growing interest in CE and diversity of approaches, preponderantly seeking novelty, have so far generated a bulk of fragmented and non-cumulative evidences (Corbett, Covin, O'Connor, & Tucci, 2013; Phan, Wright, Ucbasaran, & Tan, 2009). Notably, the studies often present the birth of new businesses or innovation within large firms as isolated "skunkworks" or as serendipitous, but CE is much more than the effective realization of single instances of entrepreneurial activities (Kanter, 1984). Those activities are, rather, inextricably intertwined with an organization's structures and systems, which need to be composed according to the organization's entrepreneurial predispositions. Yet the majority of studies on organizational context factors have failed to link their insights in a systemic way, while others have contented themselves with a 'one best way' of entrepreneurial designs, primarily combining ad hoc organizational features (Covin & Slevin, 1991; Miller, 1983; Wolcott & Lippitz, 2007) with the establishment of de-bureaucratized, parallel structural entities (Burgelman, 1984, 1985; Tushman & O'Reilly, 1996). As a result, we are confronted with an oversimplified idea about how CE can be effectively managed and attuned with organizational design attributes. This is particularly unfortunate considering CE has become the key strategy for many organizations to survive and grow in a very competitive and dynamic global environment.

The prevailing methodological attitude accentuates this problem. Studies in the field of CE have so far particularly favored cross-sectional designs and single-case studies. Notwithstanding their individual contributions, these studies have overvalued novelty in the form of accumulating primary data at the expense of actually generating new and convergent findings (Rousseau, Manning, & Denyer, 2008).

Consequently, my research interest lies in reconciling imperatives of CE, still independently treated, into a taxonomy of ideal design types while revealing yet unclear relationships and roles of structures, systems, and actors.

I approach this with a meta-synthesis of 22 published case studies followed by a qualitative validation of preliminary findings via in-depth interviews with CE practitioners and experts. This method is explorative and inductive in that it compiles existing qualitative data with the aim of identifying concepts and categories that extend the original studies' contributions (Hoon, 2013; Rousseau et al., 2008). As conventional attempts to integrate existing literature fail to generate new theoretical insights, a meta-synthesis is particularly suitable for theory development in that it not only unveils key variables, but also their interrelations (Hoon, 2013).

Hence, the paper extends research in the field of CE in a number of ways. First, it contributes to further methodological development by introducing a meta-synthesis as a valuable methodological resource. By accumulating a rich body of knowledge on key variables and relationships across a set of qualitative case studies, I address issues of generalizability and context-specificity typically found in single-case studies. Second, I offer an approach to reconciling fragmented and even contradictory findings on the ways entrepreneurship can be embedded within a firm's structures and systems. With my configurations of CE, I provide a framework for scholars and practitioners alike that allows us to address the well-known conflict between "newstream" and "mainstream" (Kanter, 1990) within corporate structures. In line with this, I challenge the prevailing ideal of an entrepreneurial structure that combines mainly ad hoc organizational attributes aimed at de-bureaucratizing the whole organization or at least separate business units. Third, I identify specific role perceptions of the actors involved in CE that go well beyond existing conceptualizations. In addition to the rather tentative roles of the retroactive rationalizer and structural context designer (Burgelman, 1983c; Lovas & Ghoshal, 2000), this paper contributes a more differentiated account of top managers' involvement in CE. But, the configurations also attribute divergent roles to the corporate entrepreneur(s) themselves.

In what follows, I provide a review of the key concepts and perspectives constituting the CE literature and a short overview of my theoretical anchor, namely configuration theory and the concept of archetypes. Next, I delineate the research design which has recourse to published case-study data and aims to identify consistent clusters of effective CE management in large and medium sized firms. I then present the configurations of CE and discuss contributions and implications in light of the relevant academic literature. Finally, I sum up the main points of this study and propose some productive lines for future research.

THEORETICAL BACKGROUND FOR CORPORATE ENTREPRENEURSHIP

From Activities and Outcomes to Systems

CE is a key element of corporate strategy and a major driver of organizational revitalization, learning, and growth within large and medium size organizations (Dess et al., 2003; Sharma & Chrisman, 1999; Zahra, 1993b). Its positive consequences for a firm's revitalization and performance have been broadly confirmed (Antoncic & Hisrich, 2001; Zahra, 1993b, 1995; Zahra & Garvis, 2000; Zahra, Nielsen, & Bogner, 1999). Thus, over the last four decades, scholars' as well as practitioners' interest in CE has substantially flourished (Dess et al., 2003; Phan et al., 2009).

The recent expansion of research in the field of CE has yielded a considerable range of conceptualizations (Covin & Miles, 1999; Kuratko & Audretsch, 2009; Phan et al., 2009; Sharma & Chrisman, 1999). A prominent conception of CE is to define it as the sum of a firm's innovation, renewal, and venturing activities that drive new business creation within established organizations (Guth & Ginsberg, 1990; Zahra, 1993a). In addition, Zahra distinguishes between formal and informal CE activities which "may take place at the corporate, division (business), functional, or project levels, with the unifying objective of improving a company's competitive position and financial performance" (1991: 262). Covin and Miles (1999) suggest sustained regeneration, organizational rejuvenation, strategic renewal, and domain redefinition to account for the complexity of CE-related phenomena. Following this view, CE is also known as "strategic entrepreneurship" representing the commonalities of strategic management and entrepreneurship, as defined by Morris, Kuratko, and Covin (2008). They occur in "the presence of innovation plus the presence of the objective of rejuvenating or purposefully redefining organizations, markets, or industries in order to create or sustain competitive superiority" (Covin & Miles, 1999: 50). The assumption is that a firm's competitive advantage needs to be constantly renewed instead of frantically sustained (Bettis & Hitt, 1995). The pursuit of competitive advantage through CE underscores the exhibition of Schumpeterian (disruptive) innovation (Sharma & Chrisman, 1999), which may not necessarily lead to new business creation (Kuratko & Audretsch, 2009).

Notwithstanding the invaluable insights contributed by the abovementioned studies, the definitions they use primarily focus on the range of activities and outcomes of CE. This line of thinking, however, underrates the fact that the associated exploitation and exploration of entrepreneurial opportunities is embedded in a broader organizational context. Hence, CE should be conceived as a system of entrepreneurially behaving actors who are constrained and simultaneously enabled by the set of social, cultural, political, and structural factors. This perspective particularly favors a reciprocal relationship between individuals and organizations (Bunge, 1996; Giddens, 1984). A comparable conceptualization of CE has been introduced by Burgelman (1983a, b) and his model of the interaction of strategic behavior, and the structural and strategic contexts of the organization. Accordingly, bottom-up entrepreneurial behavior evolves at the interstices of structural and socio-political forces constituting the intraorganizational selection environment (Burgelman, 1991).

Such a systemic definition (Reihlen, Klaas-Wissing, & Ringberg, 2007) is not only suitable for reconciling micro- and macro-level features of CE, but also for linking to the major contradiction underlying this concept, namely its alleged incompatibility with established organizational structures. It is exactly this contradiction that has fascinated scholars and practitioners alike and fueled multiple models, the most renowned of which is March's (1991) exploration versus exploitation trade-off. Other management scholars refer to mainstream and newstream (Kanter, 1990), induced and autonomous strategic behavior (Burgelman, 1983a, b), or commitment and flexibility (Williamson, 1985), to name but a few.

Against this backdrop, CE is justifiably claimed to be an oxymoron (Thornberry, 2001). While entrepreneurship is primarily associated with small, organic start-up structures which are built around detecting, shaping, and turning opportunities into new businesses, large, bureaucratic corporations tend to starve new ideas which object to established planning modes and rigid control systems (Dess, Lumpkin, & McGee, 1999). Early research in this field went so far as to argue that CE would be impossible within bureaucratic structures (Duncan, Ginter, Rucks, & Jacobs, 1988; Geneen, 1985; Morse, 1986), whereas others turn the liability of bigness into a strength, emphasizing the abundance of resources and capabilities that are available to large organizations (Sharma, 1999) and advocating for the active encouragement of CE within bureaucratic structures (Burgelman, 1984; Kanter, 1986; Sathe, 1985, 1989). Sharma argues accordingly that the "chief impediment to successful innovation is not so much the unimaginative bureaucracy, but rather a lack of experience or judgment at reconciling new ideas in the context of preexisting interests" (1999: 147). Fighting the "corporate immune system" (Birkinshaw & Ridderstråle, 1999) implies not only overcoming bureaucratic resistance, but also dealing with cognitive predispositions or mindsets on the part of managers who are evidently biased in their decision making (Simon, 1947). Those individual predispositions determine the way entrepreneurial behavior and its challenges are interpreted and finally implemented within the firm. Contributions in the field of issue selling (Dutton &

Ashford, 1993; Dutton, Ashford, O'Neill, & Lawrence, 2001) and, more generally, strategy process research (e.g., Bower, 1970; Burgelman, 1983c; Jarzabkowski, 2008), have particularly suggested the further analysis of individual behavior and interpersonal interaction against the backdrop of the enabling and simultaneously constraining organizational context of bureaucratic, normative, and political variables. In this sense, Thornberry aptly stresses that firms “must build themselves to be more opportunity-focused in both mind and body, in both vision and structure” (2001: 530).

In sum, a systemic ontology helps resolve the abovementioned tensions associated with CE by reconciling the individual-level interpretations of the entrepreneurial process and its challenges with their translation into the organizational context.

From Contingencies to Configurations

Prior studies have identified a variety of context factors that help enhance CE within organizational settings (Covin & Slevin, 1988; Covin & Slevin, 1991; Kuratko, Montagno, & Hornsby, 1990; Miller, 1983; Zahra, 1993b; Zahra & Covin, 1995). These studies particularly examined a firm’s entrepreneurial capacity vis-à-vis different configurations of cultural, strategic, and structural leadership, and environmental variables. Although there is no universal consensus on which contingencies are the most important for enhancing entrepreneurial behavior, the accumulated findings point towards at least two major groups of factors that influence the intraorganizational environment.

The first is organizational structure (Burgelman, 1983b; Burgelman & Sayles, 1986; Covin & Slevin, 1991; Sathe, 1985; Zahra, 1991). The organizational structure particularly refers to the integration or separation of entrepreneurial activities from a firm’s mainstream business (Burgelman, 1984; Kanter, 1990; Lawson & Samson, 2001), which in turn determines whether entrepreneurial activities emerge independently or within a dedicated organizational unit (Aspara, Lamberg, Laukia, & Tikkanen, 2011; Burgelman, 1983c; Regnér, 2003). In addition, it implies the administrative mechanisms that regulate the entrepreneurial process in terms of an initiative’s development and selection within the internal environment (Burgelman, 1983c; Burgelman, 1991). Moreover, the structure reflects and stipulates the specific roles top management and corporate entrepreneurs assume.

Those multilevel interactions have been particularly examined in Bower's (1970) and Burgelman's (1983c) seminal studies.[4]

The second group concerns an organization's systems that directly relate to entrepreneurial activities. Thereunder are systems such as a firm's human-resource management (e.g., Hayton, 2005; Kaya, 2006) including incentive and reward systems and the staffing of CE (Hayton & Kelley, 2006; Hornsby, Kuratko, & Zahra, 2002; Sathe, 1989; Zahra, 1996). Likewise important are systems that regulate the ways CE is funded (McNally, 2002; Wolcott & Lippitz, 2007; Zahra, 1995).

Although these studies highlight essential contingencies for CE, they treat them largely independently. Others, who assumed a more holistic perspective, suggest an ideal, corporate model that combines ad hoc attributes such as a decentralized, future-oriented decision making, open internal communication, and minimal hierarchical levels (Covin & Slevin, 1991; Miller, 1983). However, this homogeneity-praising perspective provides an oversimplified and incomplete idea of how CE can effectively be managed and embedded in an organization's structures and systems. An alternative perspective of CE, which seeks to unveil heterogeneity among organizations and the different ways they govern entrepreneurial activities, has been largely neglected (Wolcott & Lippitz, 2007). I therefore draw on the ideas of configuration theory and the archetype approach as most prominently represented by Miller (1987, 1996), Miller and Friesen (1984), Mintzberg (1979), and Greenwood and Hinings (1988). It is a stance in organization theory that particularly resorts to the abovementioned systemic ontology (Bunge, 1996; Bunge, 2000; Reihlen et al., 2007).

Accordingly, organizations have a "total" design which manifests itself in an overall configuration, i.e. a coherent cluster of attributes of organizational strategies, structures, and processes (Greenwood & Hinings, 1988; Miller & Friesen, 1984). Such design types or archetypes can be derived either theoretically (typologies) or empirically (taxonomies). In the process, both approaches typically seek to cover a large fraction of the target population of organizations and can be situated at multiple levels of analysis (Meyer, Tsui, & Hinings, 1993; Miller & Friesen, 1984). Miller and Friesen (1984) stress that there is only a limited number of configurations of organizational elements, and that configurations are based on the essential coherence between those organizational elements as a whole. This coherence implies

[4] Although acknowledging the specific role of middle managers, which has been widely emphasized (e.g., Bower, 1970; Burgelman, 1983c), this study does not differentiate between middle and operating managers. According to the case-study data, corporate entrepreneurs may be found across all hierarchical levels. Consequently, this differentiation would not be productive in this context.

that organizations will typically remain within an archetype rather than move between different ones (Greenwood & Hinings, 1993).

A central focus of the archetype approach lies in unveiling the underlying "provinces of meaning" or "interpretive schemes" which are defined as isolated patterns of prevailing ideas, beliefs, and values (Greenwood & Hinings, 1988). Similarly, Miller argues that configurations have "an internal logic, integrity, and evolutionary momentum of their own, as well as a central, enduring theme that unifies and organizes them" (1987: 697). In other words, organizations tend to converge into uniform clusters of structures and processes underpinned by a single interpretive scheme.

In this vein, configurations of CE characterize internally consistent designs for organizations to govern and implement entrepreneurial initiatives, which for their part reflect a particular interpretation of the nature and challenges of such behavior. More precisely, with top managers orchestrating the organizational context (Bower, 1970; Burgelman, 1983c), the way the abovementioned structural and system-related elements combine is subject to their cognitive models or philosophies (Covin & Slevin, 1988; Covin & Slevin, 1991). Prahalad and Bettis use the term 'dominant logics' which "represent beliefs, theories and propositions that have developed over time based on the manager's personal experiences" (1986: 489). Eventually top managers' dominant logic turns into a corporation-wide, consistent mindset by inculcating in middle and operation managers the same cognitive foundations (Lampel & Shamsie, 2000). With varying logics across firms, however, CE may underlie differing assumptions and beliefs about its overall relevance, meaning, and the ways and means by which it can be eventually realized within established organizational contexts.

In sum, the configurational approach may help to consolidate the fragmented concepts and complement the one ideal type of a CE-supporting organizational environment which to date dominates the writings in this field. Building on configuration theory and the archetype approach to organizational design, I aim to empirically derive a taxonomy of corporate design solutions for CE. The methodological approach as explained in the next section involves the synthesis of case studies that provide rich accounts of entrepreneurial activities within large and medium-size firms. Like other configuration studies, I uncover regularities in the data in the form of distinct, internally consistent clusters of organizational attributes defining coherent design types for CE.

For reasons of clarity, and consistency with the literature used, I focus on how entrepreneurial activities are governed within the boundaries of a single firm. Thus, my configurations exclude inter-firm or collaborative designs of CE. In my view, these arrangements deserve an independent consideration as they raise a variety of additional, complex issues such as effective knowledge transfer, cultural differences, or control that would go beyond the scope of the underlying analysis.

RESEARCH DESIGN

I adopt a meta-synthesis of qualitative case studies to approach my research objective: a taxonomy of the management of entrepreneurial activities within established corporate structures.

Hoon defines a meta-synthesis "as an exploratory, inductive research design to synthesize primary qualitative case studies for the purpose of making contributions beyond those achieved in the original studies" (2013: 527). This approach particularly draws on Yin's (2003) and Miles and Huberman's (1994) within-case and cross-case analysis techniques. Like a meta-analysis, a meta-synthesis treats case studies as a primary source of evidence. The purpose is to refine, extend, or even generate new theory through the identification of new categories and recurring patterns across the re-examined case studies (Hoon, 2013).

Considering the immense body of literature on CE, case studies constitute a substantial part of the research designs used. Although single-case studies may provide invaluable empirical descriptions of the dynamics within a single setting, they do so without claiming a high degree of robustness and generalizability in a positivistic sense (Eisenhardt, 1989; Yin, 2003). Instead of contributing to the generalizability of existing findings, the associated research findings tend to develop in an increasingly disparate and irreconcilable manner (Denyer & Tranfield, 2006; Sandelowski & Barroso, 2007). The dangers associated with a lack of synthesis are "the misuse of existing research, the overuse of limited or inconclusive findings, and the underuse of research evidence with substantive implications for understanding and working with organizations" (Rousseau et al., 2008: 6). Therefore, accumulating primary insights represents a way to more generalizable conclusions and thus more comprehensive applications of existing as yet incompatible findings.

Synthesizing existing qualitative data has just recently been refined as a methodological resource. This approach exceeds the scope of traditional literature reviews in that it provides new interpretations of case-study findings through deconstruction and decontextualization (Finfgeld, 2003). The method has been most commonly used in an evidence-informed and systematic manner in fields such as healthcare or social policy (Sandelowski & Barroso, 2007; Tranfield, Denyer, & Smart, 2003). However, there are a number of influential studies conducted in the field of management (Miller & Friesen, 1984; Mintzberg, Raisinghani, & Theoret, 1976) and more recently entrepreneurship (Rauch, Doorn,

& Hulsink, 2014) that draw on the synthesis of case studies. Miller and Friesen (1984), for instance, provided a taxonomy entirely based on cases published in *Fortune* magazine or the *Harvard Case Clearing House*. The authors argue that these cases are valuable, since they provide vivid and detailed accounts of the processes studied (Miller & Friesen, 1984: 269).

In sum, the meta-synthesis of qualitative case studies offers a fruitful means to consolidate and refine existing knowledge in particularly fragmented domains. Moreover, as far as I know, this method has not yet been applied in the field of CE.

I organized the research into two phases. In the first, exploratory phase I developed a taxonomy of different configurations of organizational attributes specifically established to house entrepreneurial activities. In the second phase, I validated the taxonomy through a series of key-informant interviews.

Case Location

I examined 22 published case studies that describe the processes of different forms of CE. Cases were selected for their transparency in regard to the research question and their contribution to extending theory to a broad range of diversified organizations covering diverse manifestations of CE and industries.

I located the cases online using four reputable sources: EBSCO Host, Web of Science, Google Scholar, and the Harvard Business School case-study database. I conducted a simple Boolean search including the following keyword combinations expressing the most commonly used designations for CE (Guth & Ginsberg, 1990): “corporate entrepreneurship”, “corporate entrepreneur”, “corporate venture”, “strategic renewal”; OR “innovation”, AND “case” OR “case study”. As the initial search yielded an immense number of hits, I decided to refine the set of keywords by adding “corporate parent”, “headquarter”, OR “parent company”. This way I was able to search for those case studies that address the way CE is linked to the mainstream business of the firm or alternatively managed at the imbrication of mainstream and newstream. I then reviewed the case titles, abstracts, and sources in order to assess their thematic focus and suitability. Table 1 summarizes the criteria used to either include or exclude the case studies retrieved as suggested by Hoon (2013). One important inclusion criterion was to focus on published case studies only. I thereby traded off the potential of publication bias against an increased scientific rigor related to an eventually peer-reviewed publication process and full text availability (Hoon, 2013; Kepes, Banks, McDaniel, & Whetzel, 2012). This rationale not only applies to qualitative case studies, but particularly to the educational case studies found in the *Harvard Business* database. Educational case studies are a specific form of narrative. Although they provide anecdotal information which is as rich as qualitative case studies, their specific purpose leads to potentially overemphasized dimensions. However, as I did not intend to assess the magnitude or scale of certain categories and actions, I also traded off this bias against detailed descriptions found in those types of case studies. Moreover, Miller and Friesen's (1984) quantum view study is also based on educational case studies and the authors acknowledged their particular usefulness and value for deducing organizational typologies.

TABLE 1

Inclusion/Exclusion Criteria

Criteria	Rationale	Exclusion
(1) Case studies (qualitative, educational)	High degree of descriptive richness, methodological consistency	Illustrative case examples, case studies that mainly rely on quantitative data
(2) Case studies explicitly addressing CE (innovation, renewal, venturing)	Coherence with common definitions of CE (Guth & Ginsberg, 1990) among cases	Case studies based on a different theoretical framing and literature stream (innovation, change)
(3) Comprehensive accounts of organizational context factors (structure, strategy, culture, etc.)	Detailed anecdotal information	Scarce notions of context factors

During the search process I found recurring journals (*Journal of Business Venturing*, *Entrepreneurship Theory and Practice*, and *Harvard Business Review*) that provided a significant number of hits. I thus scanned these journals manually for the purpose of finding further suitable case studies on CE. As a result, I arrived at an initial sample of 37 qualitative case studies. After carefully reading through those case studies I evaluated their descriptive and didactic richness with regard to the process of CE and organizational context (structure, strategy, and systems). I excluded case studies that primarily served theory reflection and development (Yin, 2003) thus providing only limited accounts of the process and context CE took place, and settled for the final set of the following eligible qualitative case studies as illustrated in Table 2.

TABLE 2
Overview of Case Studies

Source	Firm	Industry
Entrepreneurship Theory & Practice		
	Google	Internet service and software
Harvard Business School		
	Apple	Electronic products
	IDG Books	Publishing
	3M	Chemicals and technology
	McKenzie-Higgins	Electronic products
	Intel	Electronic products
	MDB Technologies	Electronic products
	Procter & Gamble	Consumer goods
	Nortel Networks	Telecommunication
	Dow Chemical Company	Chemicals and technology
	Hewlett-Packard	Electronic products
	Wawa Food Market	Retail
Harvard Business Review		
	Landmark	Communication and television
	Pixar	Motion pictures
	R.J. Reynolds	Consumer goods
Journal of Business Venturing		
	Analog Devices	Semiconductors
	Eastman-Kodak	Electronic products
	Merlin-Gerin	Electrical and industrial products
	New England Electric System	Electrical and industrial products
	Ohio Bell	Telecommunications
	Raytheon	Aerospace and defense
	Toshiba	Electronic products

Case Analysis

Considering the research objective, I followed a grounded theory approach (Strauss & Corbin, 1990) to explore categories and recurring patterns within and across the selected case studies. The grounded-theory approach is an open-ended, inductive discovery of emerging concepts within the data which allows moving from mass descriptive codes to fewer, conceptually abstracted ones. I adhered closely to the guidelines specified by Strauss and Corbin (1990) and Lincoln and Guba (1985) for constant comparison techniques and naturalistic inquiry, where the collection of data is iteratively intertwined with its actual analysis. I used ATLAS.ti, a software program for analyzing qualitative data, to perform the coding. In line with the inductive research approach, the codes and categories gradually emerged from the primary data. First, I open-coded the separate case studies in a line-by-line manner. Open coding comprises "breaking down, examining, comparing, conceptualizing, and categorizing data" (Strauss & Corbin, 1990: 61). The open-coding process resulted in 184 initial codes inductively generated from the 22 case studies. In a second step, I analyzed the case studies on a cross-case basis. More precisely, I explored the relationships among the categories that I had generated in the first step by linking them to higher-order dimensions denoting emerging patterns in the data and more abstract categories. Through this process of axial coding, as defined by Strauss and Corbin (1990: 99), I recombined the first order codes. Finally, I integrated the categories derived through the open and axial coding processes to form a higher-level abstraction. The selective coding approach aims to generate hypothetical statements that are then used to validate the demonstrated relationships among categories and also capture the core of the storyline (Stall-Meadows & Hyle, 2010). In this paper, this approach meant that I had to review the categories representing the initial configurations of CE in light of each of the cases and with the relevant literature in the field (Strauss & Corbin, 1990). This part of the data analysis was guided by existing analytical frameworks and discussions within the configuration and archetype literature (e.g., Greenwood & Hinings, 1988, 1993; Miller & Friesen, 1984) as well as the CE literature (e.g., Covin & Slevin, 1991; Zahra, 1993a).

Case Validation

In the second stage of the research, I conducted nine in-depth interviews with key informants from six large, diversified companies in Australia. The purpose of these interviews was to further the configurations of CE that I had developed from the case analysis. The use of key-informant interviews is an established way of gathering data in strategy research (Tippins & Sohi, 2003) and at the corporate level (Kale, Dyer, & Singh, 2002; Simonin, 1997). The informants were selected according to their affiliation to a large or medium-size firm and recent involvement in, and leadership of, entrepreneurial initiatives within their organizations. I applied the theoretical sampling guideline for collecting data, and stopped data collection when I had gathered sufficient insights to populate and validate the various elements of my taxonomy. By approaching informants through a university-internal business network, I was able to include a wide range of expertise and experiences regarding CE. Among the interviewees were executives from both the parent and subsidiary level who were responsible for product or strategy related innovation, renewal or corporate venturing within their firm. The interviews were semi-structured and took on average one hour. Table 3 shows the industry as well as the key informant's functional responsibility.

TABLE 3
Interviewee's Background

Firm/Industry	Function
Insurance/ Financial Services	Strategy
Insurance/ Financial Services	Strategy
Financial Services	General Management
Financial Services	Innovation
Financial Services	Marketing
Publishing	Strategy
Telecommunication	Innovation
Electrical and Industrial Products	Innovation and Quality
Medical Appliances and Equipment	Marketing

Key informants were first asked to define corporate entrepreneurship in their own words, and then to recall a recent entrepreneurial project within their organization that they were directly responsible for. Using that particular project as a case, I was able to identify seven instances of CE. During the interviews I referred to my insights from the exploratory case-analysis phase and invited participants to relate their own stories to concepts and categories within my proposed framework. I thus used a "strong form" of qualitative validation (Seale, 1999). I gained additional understanding of the informants' roles and responsibilities, as well as, their perceptions of the entrepreneurial process.

Regardless of the idiosyncratic nature of industry settings, strategic orientations, and cultural particularities of the investigated firms, the in-depth validation of concepts and categories gave me further valuable insights into the actual organizational practices and routines. Most importantly, the qualitative assessment of the informant's subjective awareness of their organizational context, their own roles, and top management's commitment shed further light on how CE is practiced and experienced in the corporate reality of day-to-day operations.

Construct validity and generalizability of this research is ensured by the two-stage approach of exploration and validation. I incorporated both primary and secondary data, together constituting multiple sources of evidence. Although the meta-synthesis approach is new to the field of CE, I maintain that my results are a useful contribution. In contrast to conventional research reviews, a meta-synthesis provides an empirical consolidation and aggregated interpretation of still disparate conclusions found in separate primary studies (Hoon, 2013). These isolated insights are accumulated to new theoretical statements, thus fueling analytical generalizability (Yin, 2003).

FINDINGS

The systemic approach has revealed four configurations of CE: portfolio, transfer, cultural, and individual. Each configuration reflects an organization's very own interpretation of the major challenge associated with CE, and each has developed a particular way to face it. These differences are due to an overarching and prevailing constellation of ideas, values, and beliefs or "interpretive schemes," as designated by configuration theorists (Ranson, Hinings, & Greenwood, 1980). The configurations form coherent clusters of 10 final dimensions that constitute the structure and systems. Table 4 specifies the underlying patterns of attributes and resulting configurations.

TABLE 4
A Taxonomy of Corporate Entrepreneurship

	Configurations			
	Portfolio	**Transfer**	**Cultural**	**Individual**
The corporate entrepreneurship challenge	*How to organize a steady stream of entrepreneurial initiatives throughout the organization?*	*How to enhance cross functional sharing of entrepreneurial experiences?*	*How to maintain employees' entrepreneurial curiosity?*	*How to link entrepreneurial opportunities with new, outside entrepreneurs?*
Solution	*Incubator design*	*Linking teams*	*Vision and values*	*Lateral hiring*
Dimensions				
Structure				
Organizational locus of entrepreneurship	Independent incubator organization, truncated from other divisions and operating systems	Independent department, corporate level	Integrated within the culture and structure	Independent division, new venture
Relationship with mainstream operations	Separated	Intermediary	Integrated	Separated
Degree of diversification of entrepreneurial initiatives	Highly diversified	Core technology centered	Related in terms of cultural heritage	Unrelated
Entrepreneurial process	Partly institutionalized, decentralized, bottom-up	Partly institutionalized, center to periphery	Partly institutionalized, decentralized, bottom-up	Ad hoc, centralized
Role of top management	Architect: designer of process, decision maker, adviser on strategic direction	Facilitator: designer of transfer process, performance evaluator	Visionary: manifest cultural values and norms, inspire	Sponsor: recruiter, expert, networker, financial monitor

TABLE 4
Continued

	Configurations			
	Portfolio	**Transfer**	**Cultural**	**Individual**
Dimensions				
Role of corporate entrepreneur(s)	Embedded entrepreneur: creator of new ideas and follow the system	Generator: creative process, coordination of interest groups involved	Player: experiment and learn with given resources	Autonomous entrepreneur: manage project independently, share required expertise
Systems				
Incentive and reward system	Venture performance	Knowledge transfer, marketable prototypes, cross fertilization	Idea generation and commercialization	Venture performance, financial objectives
Horizontal systems	Minor	Elaborate	Elaborate	Minor
Funding	External funding, corporate funding, and own returns	Corporate, departmental, and external funding	Business units	Corporate funding
Staffing	External and internal	Internal	Internal	External
Number of cases	8	2	6	6

Portfolio

The portfolio configuration follows an incubator design that results from the pursuit of a steady stream of entrepreneurial initiatives in order sustain the firm's competitiveness. I identified eight case studies that had this configuration of CE. Formally, portfolio configurations imply the creation and management of a venture-capital fund that is structurally embedded within a new business development group or new business ventures division. This design type thus involves the structural separation of entrepreneurial activities from the firm's mainstream. New business opportunities and technologies tend to be sought via intense close-to-market research or result from experimentation activities within operational units. The global electronics firm MDB Technologies, for instance, not only makes direct investments in emerging technologies, but also examines venture capital investment patterns within a market in order to filter most recent trends and feed them back to the firm's very own research and development teams. Thus new ideas can also emerge internally, and not only through investing in or acquiring start-up firms. Their development is then incubated through a partly institutionalized process, often involving multiple stages and the involvement of disparate internal institutions. Hence, the entrepreneurial process is primarily decentralized and bottom-up oriented.

In this specific organizational context for CE, corporate entrepreneurs being embedded within the system are well informed about what to expect of their entrepreneurial endeavor: formulating a business case, finding a sponsor, and ways of funding. They create new ideas and develop their projects as it is suggested by the experts, facilitators, support units, and sponsors involved. While this configuration might ensure some procedural dependability, it can also kill projects too early because of strict formalities, as in the case of Nortel's software rental program NetActive, or even repel potential innovators, as illustrated by the struggle of Toshiba's notebook business. In the latter case, the development of the notebook was pursued "under the table", as the formal process for this product innovation turned out to be too restrictive as a result of the unstable attitude of the top management. This case is thus also exemplary for the influence of the latter. Its role can be summarized as that of an architect who designs the organizational context comprising the objectives, processes, and institutions needed to control the development of entrepreneurial initiatives. However, this role implies effectively balancing newstream and mainstream activities while at the same time keeping them separate. The context should ensure a sufficient degree of knowledge spillover and at the same time an effective level of isolation from day-to-day operations. Moreover, it is for top managers to decide on a project's destiny, i.e. whether the business is of strategic relevance for the remaining corporate activities and should be incorporated or not. For example, in the case of MDB Technologies, a change in the top management composition has resulted in new strategic priorities. As a consequence, a new venture, which was previously meant to be spun out, was now considered to be of major strategic relevance. Hence, it becomes clear that it is the top management's most recent and dominant logic that drives a firm's newstream portfolio decisions.

Eastman Kodak's new venture development incubator further exemplifies the characteristics of the configuration in terms of systems. The first contact point for new ideas is the office of innovation where the involved entrepreneurs are assigned to a facilitator who supports them in formulating a business case and coordinating crucial operations such as manufacturing, marketing, and finance. The initial goal is to find a corporate sponsor. The office of new opportunity development is staffed with experts on new business development and particularly focuses on maintaining a project's long-term sponsoring and the development of the venture's management team. Ultimately, elaborated and sponsored projects end up at Eastman Technologies Inc., a stand-alone firm within Kodak's portfolio, where they are further equipped with personnel and office space in order to continue to grow and start up on their own, although the project's funding and staffing may not only be confined to internal resources, but also involve external ones. At this point any links to the mainstream organization are formally cut, so that horizontal relationships are minimized. Essentially, this represents a one-way street for the corporate entrepreneurs, as they completely abdicate their former positions within the firm in favor of the new business. Their incentives and rewards related to the entrepreneurial endeavor are mainly driven by the performance of the project.

The most commonly illustrated manifestations of this configuration are the internal incubation of new ventures, corporate venture capital, licensing, mergers and acquisitions, joint ventures, and spin-offs. It is predominantly found in large, diversified firms that have a relatively long tradition in CE and have over time chosen to institutionalize prescribed CE processes.

Transfer

The transfer configuration is based on the objective of enhancing cross-functional collaboration in terms of entrepreneurial experiences. This is achieved through the establishment of a linking team located within an independent department at corporate level that passes its innovative outcomes on to the other business units of the firm. The team usually has representatives from different corporate disciplines such as research and development, finance, marketing, and manufacturing. Team members devote their skills and competencies on a full-time basis to the development of new breakthrough business ideas that span the entire firm. Although the key processes are driven by the team members' creativity, the associated research and information processing is highly analytical and tends to be at least in part institutionalized. I found this configuration at Raytheon in the form of the New Products Center (NPC), and at Procter and Gamble with its Corporate New Ventures (CNV) team.

The formation of transfer teams is favored where relatively radical but core technology-related innovation is pursued that requires the recombination or redefinition of existing, internal competencies. At Procter and Gamble, for instance, new ideas were traditionally confined to a specific product category. Ideas that fell out of the box or in-between the "sector cracks" were not pursued further. The existing reward system and brand-oriented organizational culture also led to managers being focused more on their sector and brand development than on cross fertilization. As a consequence, over time new business development activities had declined. Thus this configuration is particularly likely to be relevant for corporate contexts that have long suffered from an insufficient co-operation among departments and existing disciplines. In these cases, top management assumes the role of a facilitator who not only designs the transfer process but also supervises its success in terms of performance indicators. These determine the relevant incentive and reward systems and are based on the degree of knowledge shared across the firm, and the number of big ideas that can be handed off to mainstream for finalization and perform profitably as products at the marketplace.

The loosely managed working arrangement and the often isolated office particularly attract individuals' intents on escaping the bureaucratic structures dominating the mainstream of the organization. Key to their everyday work, besides the constant exchange of ideas, is the intense research of core consumer trends and new technologies through the study of, for example, relevant publications, industry reports, the collaboration with consultants and experts in specific fields, and attending trade shows and conferences. The horizontal systems within the firm are elaborated accordingly. However, struggles with the firm's conventional research and development teams and so-called "not-invented-here" problems are the most frequently mentioned challenges even though the team members regard their role as business generators rather than research labs. They shepherd the ideas through the early development phase while assuming the coordination of various interest groups. Such parties include users, customers, clients, experts, and top managers. In contrast to the portfolio type, the associated financial risks are diminished by leaving the development decisions in the hands of the 'clients' as referred to by the team at Raytheon. Here the NPC was neither budgeted for nor had to concern itself with the funds necessary to take a newly developed product from the laboratory to the marketplace. Their primary mission was to instill the creative process into the mainstream business of the firm, thus, despite their organizational separation, staying closely linked with the mainstream operations or 'clients' that would receive and exploit the idea. Indeed, the NPC team at Raytheon stressed that ideas generated solely within the transfer unit are less successful than the ones developed in cooperation with the mainstream 'client.'

Cultural

The cultural configuration relies on a firm's vision and values that buttress employees' entrepreneurial curiosity. I found evidence of such a configuration in six of the 22 cases of CE in this study. New ideas for business models, products, services, or processes often emerge at the bottom of the organization. The collective beliefs and shared priorities attribute a high degree of leeway to the potential corporate entrepreneurs. The focus of cultural configurations is on stipulating a creative environment where risk taking and experimentation are encouraged and managers are free to spend a considerable amount of time on elaborating ideas and projects, as is cultivated in the case of Google, for instance.

With cultural settings that are conducive to innovation comes – in the ideal case – an organic or ad hoc structure featuring flat hierarchies, a focus on teamwork, an open flow of information, and respective incentive and reward systems that emphasize and promote creativity, idea generation, and the commercialization of innovations. The case of Pixar particularly highlights such structural arrangements with elaborated horizontal systems. At Pixar the mostly complex and creative projects are managed in interdisciplinary teams with the help of boundless and effective communication patterns, appropriate training programs that foster a learning culture, and peer control. Nonetheless, even a cultural configuration of CE does not get on without a certain degree of standardization. Thus, communicating new ideas may involve a certain pattern that determines whom to ask for advice or sponsorship as particularly shown in the case of Google and Pixar. Establishing standard procedures for communication becomes even more important as a project approaches maturity. Such (at least partial) institutionalization of the entrepreneurial process also plays a role in the case of Ohio Bell's Enter Prize, where an employee-suggestion program aimed at activating a cultural change. The firm set out to undergo a profound transition: from a regulated monopoly to an open market competitor that embraces innovative and creative thinking. A cultural shift was encouraged by rewarding suggestions that fulfilled some prescribed guidelines and by expositing successful projects through internal innovation fairs.

Providing leeway for employees is key for this configuration, so that potential entrepreneurs do not need to obey a prescribed CE process, but rather make use of their autonomy and slack resources to develop their ideas. Funding therefore largely depends on the respective business units' very own means.

The corporate entrepreneurs primarily originate from within the firm and are regarded as players. They are rewarded for taking the initiative and submitting suggestions for process or product improvements without being necessarily torn out of their ongoing agendas. In this sense, newstream and mainstream co-evolve within the same organizational entity and are handled simultaneously by organizational members. An entrepreneurial culture creates awareness among employees for incremental optimizations and helps organizational members to have the confidence to address a need for change. Entrepreneurial initiatives are thus related in terms of the firm's cultural heritage.

The role of the top management in cultural configurations is to articulate the vision and mission of the organization and translate those into symbols and structural context as mentioned above. Top management inspires and motivates employees through speeches and public recognition. At Apple, for example, the firm's innovative capacity significantly hinged on Steve Jobs. Cultivating such an innovative environment implies that top managers in turn appoint managers who share the same innovative dominant logic thus further augmenting the firm's culture. In the case of more radical entrepreneurial initiatives, top management advises more directly, and selects the most promising ideas.

Individual

I identified six cases that exhibit a coherent pattern of organizational attributes constituting what I call individual configuration of CE. This configuration assumes that the evolvement of entrepreneurial initiatives originates neither from random experimentation and suggestions by organizational members as in the cultural configuration, nor from specialized units as in the portfolio or transfer type. Rather, CE is driven by the individual expertise that is needed to realize opportunities that accrue in, if anything, unrelated business fields. The individual configuration particularly originates from the ranks of top managers who have the necessary knowledge themselves or can appoint external experts who are capable of driving the entrepreneurial endeavor. For example, the case of Merlin-Gerin's foundry business exemplifies how the externally hired expert Roger Huet struggled to revitalize the mainstream business with a new technology. Similarly, the case of Wawa illustrates how the CEO Richard

Wood promotes the integration of gasoline with the existing retail business. In either case expertise and extensive social capital have proved crucial to realizing the entrepreneurial project. Most often this configuration implies a separation of the newly founded business from the firm's mainstream. The rather ad hoc and centralized entrepreneurial process involves the formation of a new venture or independent division.

The individual configuration is most commonly found within firms that lack considerable knowledge and experiences within the relevant business field or market. Collectively, the cases revealing this configuration are situated in more traditional industries, such as retail (Wawa Food Market) or electrical equipment (Merin-Gerin, New England Electric System). However, as illustrated by the case of IDG Books, a publisher of magazines for the information technology industry, this configuration can also be found within firms whose management feels overwhelmed by the opportunities the industry offers.

Within the individual configuration, the corporate entrepreneur is given considerable control and operates relatively independently of the mainstream business without resorting to any horizontal systems. This correlates with the more radical nature of the entrepreneurial projects. Most often these projects comprise what Covin and Miles (1999) refer to as domain redefinition or rejuvenation. The entrepreneur's efforts are funded internally and underlie financial objectives that assess the project's contribution to the firm's long-term growth targets. However, in combination with the firm's scarce experience with CE, such evaluation metrics may not meet the specific requirements of innovative projects. Consequently, success and failure of the project may be misinterpreted.

I find that top management's key role lies in recruiting and sponsoring experts and 'real' entrepreneurs who are given extensive autonomy and responsibility for the projects. However, the emergence of the Weather Channel at Landmark is a particular example of how disastrous a misjudgment of the entrepreneur's competencies can be. Despite a high degree of passion and commitment for the project, the entrepreneur in this case failed to meet major financial targets as a result of his limited managerial skills, thereby putting the whole project at risk.

When top managers themselves act as entrepreneurs, not only their expertise is of relevance, but also their social and professional network of external experts and advisers. When Wawa's CEO Richard Wood considered selling gasoline he largely exchanged experiences with the CEO of QuickTrip (a convenience-store chain with a different geographic presence than Wawa), Chester Cadieux, who had already successfully merged gasoline retailing with his convenience-store business.

DISCUSSION AND IMPLICATIONS

This study contributes to the field of CE methodologically and theoretically. The meta-synthesis allows me to mitigate generalization issues and context-dependencies typically found in single-case studies. Using a meta-synthesis method, I am able to synthesize fragmented insights into the ways organizational structures and systems configure to nurture CE within large and medium-size firms. Theoretically, a systemic ontology highlights and clarifies yet unclear relationships and roles of structures, systems, and actors of CE. I contribute towards a conceptual reference framework for scholars and practitioners alike that will help reflect on the design and effectiveness of configurations of CE.

In terms of methodology, research in the field of CE has drawn its insights from a diversity of approaches, but predominantly from cross-sectional research studies. Though diversity is not "troublesome in itself," it may undermine a field's "integration and knowledge accumulation" (Rousseau et al., 2008: 29). In this sense, the field is now composed of a salmagundi of "islands of knowledge" (Hoon, 2013: 523), especially in regards to antecedents and outcomes of CE as well as to understanding diversity of CE forms in practice (Phan et al., 2009). Notwithstanding their individual contributions, the studies have overvalued novelty in the form of accumulating primary data at the expense of actually generating new knowledge and convergent rather than divergent findings (Rousseau et al., 2008). A meta-synthesis thus helps integrate existing evidences and interpretations into current thinking, while generating new, or refining and extending existing, theory (Hoon, 2013). As Hoon stresses, "the synthesis entails extracting and analyzing insights from primary studies to identify categories and patterns that emerge across the studies while attempting to preserve the original studies' integrity" (2013: 523). This way the case studies' specific contexts receive a central consideration in theory development. In this vein, I argue that the field of CE is ripe for a new methodological agenda reconciling still disparate findings into a more coherent and generalizable understanding of the phenomenon of interest. The consolidation of the yet independently treated imperatives of CE into a taxonomy of ideal design types revealing underlying relationships serves as an adequate starting point.

From a theoretical perspective, prior studies have largely neglected the systemic nature of CE. In particular, the contingencies found for CE lead to two dominant design types. Both underline a homogenous context for CE that is based on the de-bureaucratization of bottom-up entrepreneurial processes (Burgelman, 1985): the separation-based design type found in concepts such as the new venture division (Burgelman, 1985) and basically reflecting the dualistic idea of an ambidextrous organization (Gibson & Birkinshaw, 2004; Tushman &

O'Reilly, 1996), and the ad hoc ideal of an innovative organization which emphasizes the suggested design attributes of team-based work, flat hierarchies, and a visionary leader (Covin & Slevin, 1991; Mintzberg, 2003a). My findings, however, demonstrate that CE can flourish beyond those two design types depending on the prevailing interpretations of the forces that drive CE. Besides the portfolio and cultural configuration which particularly confirm the abovementioned design types, the individual and transfer types highlight two further coherent and stable configurations with the first being associated with *lateral hiring* and the latter with *linking teams*. The four configurations thus open up new perspectives on the management of the conflict between newstream and mainstream businesses whilst challenging ideals still taken for granted (Kanter, 1990). For instance, I highlight the fact that the institutionalization of CE within an organization’s structures and systems may underlie a path-dependent development. The notion that “history matters” (Sydow, Schreyögg, & Koch, 2009) thus particularly affects organizational CE types. Organizations with a trajectory particularly rich in experiences with entrepreneurial activities will either explicitly standardize and systematize the CE process as in the portfolio configuration, or implicitly embed the CE process within the values and norms of the organization as in the cultural design type. Organizations that are less experienced, or simply have so far failed to realize either of these two designs, will tend to rely on experts or interdisciplinary teams that provide access to still unfamiliar fields of knowledge or business territories.

Moreover, I found that the role of top management has been so far undermined in that top managers can do more than retroactively rationalize entrepreneurial initiatives and design the structural context for CE (Burgelman, 1983c). The individual configuration particularly emphasizes top managers’ expertise as well as networking abilities, as has been discussed by Nell and Ambos (2013) for the case of multinational corporations, for example. As a facilitator in the transfer configuration, top management is further involved in leveraging the organization’s core competencies through empowering cross-fertilization among business units. These findings particularly support claims of a more hands-on corporate management in the parenting literature, especially in complex structures (Goold & Campbell, 2002). Of similar importance are the distinct roles attributed to the corporate entrepreneurs or, in other words, the actors directly responsible for the entrepreneurial activities. Depending on the configuration, these roles can be more or less restrictive. The portfolio type, for instance, provides corporate entrepreneurs with an established system for innovation and new business creation. Thus the entrepreneurial project’s progress depends on their obedience to it. In the case of the transfer configuration, corporate entrepreneurs are given more creative leeway throughout the process. However, the coordination of interest groups or internal 'clients,' and the development path of prototypes, underlie a similar standardization. Corporate entrepreneurs are in this case seen as generators, a role that permits less autonomy than in the individual configuration but nevertheless room for experimentation and learning as in the cultural design-type.

But what do the underlying insights imply for the management of CE? The configurations particularly demonstrate that CE is more than a hodgepodge of activities, outcomes, and antecedents. It needs to be nurtured and properly managed as a system. CE "won't just happen" as Wolcott and Lippitz (2007: 82) argue. In most cases it is not a serendipitous event. Likewise unrealistic is the idea that CE mainly takes place in the form of a firm's 'skunkworks' projects. Moreover, CE is more than its different manifestations, which may range from new product development to new venture creation. CE may start with an idea but subsequently encompass an organization's way of operating, such as the exploitation of existing knowledge or its resource allocation systems (Bower, 1970; Burgelman, 1983c). For organizations aiming to replicate their individual formula of success, CE constitutes a learning process. It therefore suggests itself to consider CE as an organization's dynamic capability, as was recently done by Zahra, Sapienza, and Davidsson (2006). In this vein, the authors define dynamic capabilities as "*the abilities to re-configure a firm's resources and routines in the manner envisioned and deemed appropriate by its principal decision-maker(s)*" (2006: 3, emphasis in original).

Facing the bulk of context variables that are said to support entrepreneurial behavior within corporate structures, and the fragmented way they have been treated in the literature so far, might suggest to managers that they can be "picked and chosen independently, the way a shopper picks vegetables at the market" – to put it in Mintzberg's (2003b: 209) words. But, as the choice of 'vegetables' should harmonize and yield a tasteful dish, so should organizational attributes logically configure into internally consistent designs reflecting an implicit accord with the prevailing interpretive schemes.

Organizations will tend to configure towards one of the four CE types according to their prevalent values and beliefs concerning the way CE can best be accomplished. This interpretive scheme is the starting point, and can be made explicit by managers through the definition of the overall vision or rationale for CE. Is it aiming to culturally transform the organization or improve the exploitation of existing core competencies and inter-unit knowledge sharing? Are the required knowledge and capabilities diversified enough and internally available, or do they need to be complemented with external sources? What is the time frame of the entrepreneurial projects pursued? The answers to these questions will lead to the development of a set of organizational attributes that will cluster to one of the four coherent design types as described above. However, as visions, managers, and external conditions change over time, configurations may become increasingly inconsistent, necessitating adjustments either in terms of prevailing interpretive schemes which would most probably imply the replacement of top management, or the structures and systems. A conceivable track could be the development from the individual to the portfolio type. Organizations accumulating considerable experiences with CE and investing a higher degree of managerial resources in the form of elaborating the control and standardization systems might indeed nurture a portfolio of diversified entrepreneurial projects and new businesses. Likewise, the transition from a transfer to a cultural type might be the result of a long-term cultural manipulation through which the transfer team members successfully awaken the remaining organizational members' eagerness to experiment and exploit their slack resources. Both scenarios require a certain degree of learning on the part of top managers and organization members alike. In the first case, top managers need to devote significant resources to adapt the administrative processes and thus assume an architect role, whilst corporate entrepreneurs abdicate a considerable degree of their entrepreneurial autonomy. In the latter case on the other hand, top management needs to satisfy its new visionary role. As mentioned above, this is particularly supported by appointing a new CEO, as illustrated in the case of Apple, for instance. Organizational members on the other hand are given enough leeway to experiment and innovate on the basis of their available knowledge and capabilities.

It should be noted, though, that particularly large, multinational corporations with multiple regional headquarters might converge towards more than one of the four configurations simultaneously, however, at different levels and/or regions. Nonetheless, the presented design types are mutually exclusive, as they are based on distinct inherent interpretive schemes.

CONCLUSION

I began this study by noting that prior studies have provided numerous yet patchy insights into contingency factors (Covin & Slevin, 1991; Zahra & Covin, 1995) or diverse manifestations of CE (Kuratko & Audretsch, 2013). However, we still know very little about how CE can be managed and embedded within organizations so that newstream and mainstream can co-evolve most effectively. The underlying research design synthesizes insights from anecdotal case-study data, and converts the inductively generated concepts and categories into four distinct clusters of organizational designs underpinned by specific interpretive schemes: portfolio, transfer, cultural, and individual.

The limitations that underlie this study predominantly focus on my anecdotal data set, which contains a range of case studies that differ considerably in focus of analysis and research objective, be it educational as in the case of the Harvard Business case studies, or primarily theoretical as in most of the remaining qualitative case studies. Consequently this study is subject to a self-selection bias and an interpretive bias, which have been partly mitigated through an iterative approach that integrates the empirical findings and insights from the existing literature to the same extent. Future research may therefore empirically test the underlying taxonomy. Moreover, while this study focuses on the internal organizational factors that influence a firm's implementation of CE, additional research incorporating environmental variables is recommended. Looking beyond the boundaries of the firm in this way, researchers may address interorganizational collaborations and examine how these organizational arrangements challenge and reconcile the firm's different dominant logics. Likewise valuable are longitudinal studies which may contribute to our understanding of the temporal development of organizational tracks and intra-configurational changes, in the manner of prior studies on strategic change by Greenwood and Hinings (1988) or Reihlen, Albers, and Kewitz (2009).

REFERENCES

Antoncic, B., & Hisrich, R. D. 2001. Intrapreneurship: Construct refinement and cross-cultural validation. ***Journal of Business Venturing***, 16(5): 495-527.

Aspara, J., Lamberg, J.-A., Laukia, A., & Tikkanen, H. 2011. Strategic management of business model transformation: Lessons from Nokia. ***Management Decision***, 49(4): 622-647.

Bettis, R. A., & Hitt, M. A. 1995. The new competitive landscape. ***Strategic Management Journal***, 16(S1): 7-19.

Birkinshaw, J., & Ridderstråle, J. 1999. Fighting the corporate immune system: A process study of subsidiary initiatives in multinational corporations. ***International Business Review***, 8(2): 149-180.

Bower, J. L. 1970. ***Managing the resource allocation process: A study of corporate planning and investment***. Boston: Harvard Business School Classics.

Bunge, M. 1996. ***Finding philosophy in social sciences***. New Haven, CT: Yale University Press.

Bunge, M. 2000. Systemism: The alternative to individualism and holism. ***The Journal of Socio-Economics***, 29(2): 147-157.

Burgelman, R. A. 1983a. Corporate entrepreneurship and strategic management: Insights from a process study. ***Management Science***, 29(12): 1349-1364.

Burgelman, R. A. 1983b. A model of the interaction of strategic behavior, corporate context, and the concept of strategy. ***Academy of Management Review***, 8(1): 61-70.

Burgelman, R. A. 1983c. A process model of internal corporate venturing in the diversified major firm. ***Administrative Science Quarterly***, 28(2): 223-244.

Burgelman, R. A. 1984. Designs for corporate entrepreneurship in established firms. ***California Management Review***, 26(3): 154-167.

Burgelman, R. A. 1985. Managing the new venture division: Research findings and implications for strategic management. ***Strategic Management Journal***, 6(1): 39-54.

Burgelman, R. A. 1991. Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research. ***Organization Science***, 2(3): 239-262.

Burgelman, R. A., & Sayles, L. R. 1986. ***Inside corporate innovation***. New York: The Free Press.

Corbett, A., Covin, J. G., O'Connor, G. C., & Tucci, C. L. 2013. Corporate entrepreneurship: State-of-the-art research and a future research agenda. ***Journal of Product Innovation Management***, 30(5): 812-820.

Covin, J. G., & Miles, M. P. 1999. Corporate entrepreneurship and the pursuit of competitive advantage. ***Entrepreneurship: Theory & Practice***, 23(3): 47-63.

Covin, J. G., & Slevin, D. P. 1988. The influence of organization structure on the utility of an entrepreneurial top management style. ***Journal of Management Studies***, 25(3): 217-234.

Covin, J. G., & Slevin, D. P. 1991. A conceptual model of entrepreneurship as firm behavior. ***Entrepreneurship: Theory & Practice***, 16: 7-25.

Denyer, D., & Tranfield, D. 2006. Using qualitative research synthesis to build an actionable knowledge base. ***Management Decision***, 44(2): 213-227.

Dess, G. G., Ireland, R. D., Zahra, S. A., Floyd, S. W., Janney, J. J., & Lane, P. J. 2003. Emerging issues in corporate entrepreneurship. ***Journal of Management***, 29(3): 351-378.

Dess, G. G., Lumpkin, G. T., & McGee, J. E. 1999. Linking corporate entrepreneurship to strategy, structure, and process: Suggested research directions. ***Entrepreneurship: Theory & Practice***, 23(3): 85-102.

Duncan, W. J., Ginter, P. M., Rucks, A. C., & Jacobs, T. D. 1988. Intrapreneurship and the reinvention of the corporation. ***Business Horizons***, 31(3): 16-21.

Dutton, J. E., & Ashford, S. J. 1993. Selling issues to top management. ***Academy of Management Review***, 18(3): 397-428.

Dutton, J. E., Ashford, S. J., O'Neill, R. M., & Lawrence, K. A. 2001. Moves that matter: Issue selling and organizational change. ***Academy of Management Journal***, 44(4): 716-736.

Eisenhardt, K. M. 1989. Building theories from case-study research. ***Academy of Management Review***, 14(4): 532-550.

Finfgeld, D. L. 2003. Metasynthesis: The state of the art—So far. ***Qualitative Health Research***, 13(7): 893-904.

Geneen, H. 1985. Why Intrapreneurship doesn't work. ***Venture***, 7: 46-52.

Gibson, C. B., & Birkinshaw, J. 2004. The antecedents, consequences, and mediating role of organizational ambidexterity. ***Academy of Management Journal***, 47(2): 209-226.

Giddens, A. 1984. ***The constitution of society: Outline of the theory of structuration***. Cambridge: Polity Press.

Gómez-Haro, S., Aragón-Correa, J. A., & Cordón-Pozo, E. 2011. Differentiating the effects of the institutional environment on corporate entrepreneurship. ***Management Decision***, 49(10): 1677-1693.

Goold, M., & Campbell, A. 2002. Parenting in complex structures. ***Long Range Planning***, 35(3): 219-243.

Greenwood, R., & Hinings, C. R. 1988. Organizational design types, tracks and the dynamics of strategic change. ***Organization Studies***, 9(3): 293-316.

Greenwood, R., & Hinings, C. R. 1993. Understanding strategic change: The contribution of archetypes. ***Academy of Management Journal***, 36(5): 1052-1081.

Guth, W. D., & Ginsberg, A. 1990. Guest editors' introduction: Corporate entrepreneurship. ***Strategic Management Journal***, 11(5): 5-15.

Hayton, J. C. 2005. Promoting corporate entrepreneurship through human resource management practices: A review of empirical research. ***Human Resource Management Review***, 15(1): 21-41.

Hayton, J. C., & Kelley, D. J. 2006. A competency-based framework for promoting corporate entrepreneurship. ***Human Resource Management***, 45(3): 407-427.

Hoon, C. 2013. Meta-synthesis of qualitative case studies: An approach to theory building. ***Organizational Research Methods***, 16(4): 522-556.

Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. 2002. Middle managers' perception of the internal environment for corporate entrepreneurship: Assessing a measurement scale. ***Journal of Business Venturing***, 17(3): 253-273.

Jarzabkowski, P. 2008. Shaping strategy as a structuration process. ***Academy of Management Journal***, 51(4): 621-650.

Kale, P., Dyer, J. H., & Singh, H. 2002. Alliance capability, stock market response, and long-term alliance success: The role of the alliance function. ***Strategic Management Journal***, 23(8): 747-767.

Kanter, R. 1984. ***The change masters: Innovation and entrepreneurship in the American corporation***. New York: Simon & Schuster.

Kanter, R. 1986. Supporting innovation and venture development in established companies. ***Journal of Business Venturing***, 1(1): 47-60.

Kanter, R. M. 1990. ***When giants learn to dance***. New York: Simon and Schuster.

Kaya, N. 2006. The impact of human resource management practices and corporate entrepreneurship on firm performance: Evidence from Turkish firms. ***The International Journal of Human Resource Management***, 17(12): 2074-2090.

Kepes, S., Banks, G. C., McDaniel, M., & Whetzel, D. L. 2012. Publication bias in the organizational sciences. ***Organizational Research Methods***, 15(4): 624-662.

Kuratko, D., Montagno, R. V., & Hornsby, J. 1990. Developing an intrapreneurial assessment instrument for an effective corporate entrepreneurial environment. ***Strategic Management Journal***, 11(Summer 1990): 49-58.

Kuratko, D. F., & Audretsch, D. B. 2009. Strategic entrepreneurship: Exploring different perspectives of an emerging concept. ***Entrepreneurship Theory and Practice***, 33(1): 1-17.

Kuratko, D. F., & Audretsch, D. B. 2013. Clarifying the domains of corporate entrepreneurship. ***International Entrepreneurship and Management Journal***, 9(3): 323-335.

Lampel, J., & Shamsie, J. 2000. Probing the unobtrusive link: Dominant logic and the design of joint ventures at General Electric. ***Strategic Management Journal***, 21(5): 593-602.

Lawson, B., & Samson, D. 2001. Developing innovation capability in organisations: A dynamic capabilities approach. ***International Journal of Innovation Management***, 5(03): 377-400.

Lincoln, Y. S., & Guba, E. G. 1985. ***Naturalistic inquiry***. Newbury Park, Calif.: Sage Publications.

Lovas, B., & Ghoshal, S. 2000. Strategy as guided evolution. ***Strategic Management Journal***, 21(9): 875-896.

March, J. G. 1991. Exploration and exploitation in organizational learning. ***Organization Science***, 2(1): 71-87.

McNally, K. 2002. ***Corporate venture capital: Bridging the equity gap in the small business sector***. London: Routledge.

Meyer, A. D., Tsui, A. S., & Hinings, C. R. 1993. Configurational approaches to organizational analysis. ***Academy of Management Journal***, 36(6): 1175-1195.

Miles, M. B., & Huberman, A. M. 1994. ***Qualitative data analysis: An expanded sourcebook***: Sage Publications, Incorporated.

Miller, D. 1983. The correlates of entrepreneurship in three types of firms. ***Management Science***: 770-791.

Miller, D. 1987. The genesis of configuration. ***The Academy of Management Review***, 12(4): 686-701.

Miller, D. 1996. Configurations revisited. ***Strategic Management Journal***, 17(7): 505-512.

Miller, D., & Friesen, P. H. 1984. ***Organizations - A quantum view***. Englewood Cliffs, New Jersey: Prentice-Hall.

Mintzberg, H. 1979. ***The structuring of organizations: A synthesis of the research***. Englewood Cliffs: Prentice Hall.

Mintzberg, H. 2003a. The innovative organization. In H. Mintzberg, J. Lampel, J. B. Quinn, & S. Ghoshal (Eds.), ***The strategy process***: 434-445. Upper Saddle River: Pearson Prentice Hall.

Mintzberg, H. 2003b. The structuring of organizations. In H. Mintzberg, J. Lampel, A. M. Quinn, & S. Ghoshal (Eds.), ***The strategy process***: 209-226. Upper Saddle River: Pearson Prentice Hall.

Mintzberg, H., Raisinghani, D., & Theoret, A. 1976. The structure of 'unstructured' decision processes. ***Administrative Science Quarterly***, 21(2).

Morris, M., Kuratko, D., & Covin, J. 2008. ***Corporate Entrepreneurship and Innovation***. Mason, OH: Thomson/South-Western Publishers.

Morse, C. 1986. The delusion of intrapreneurship. ***Long Range Planning***, 19(6): 92-95.

Nell, P. C., & Ambos, B. 2013. Parenting advantage in the MNC: An embeddedness perspective on the value added by headquarters. ***Strategic Management Journal***, 34(9): 1086-1103.

Phan, P. H., Wright, M., Ucbasaran, D., & Tan, W. L. 2009. Corporate entrepreneurship: Current research and future directions. ***Journal of Business Venturing***, 24(3): 197-205.

Prahalad, C. K., & Bettis, R. A. 1986. The dominant logic: A new linkage between diversity and performance. ***Strategic Management Journal***, 7(6): 485-501.

Ranson, S., Hinings, B., & Greenwood, R. 1980. The structuring of organizational structures. ***Administrative Science Quarterly***, 25(1): 1-17.

Rauch, A., Doorn, R., & Hulsink, W. 2014. A qualitative approach to evidence-based-entrepreneurship: Theoretical considerations and an example involving business clusters. ***Entrepreneurship Theory and Practice***, 38(2): 333-368.

Regnér, P. 2003. Strategy creation in the periphery: Inductive versus deductive strategy making. ***Journal of Management Studies***, 40(1): 57-82.

Reihlen, M., Albers, S., & Kewitz, T. 2009. Internationalization as strategic change: The case of Deutsche Treuhand-Gesellschaft. ***Management Revue***, 20(2): 1-25.

Reihlen, M., Klaas-Wissing, T., & Ringberg, T. 2007. Metatheories in management studies: Reflections upon individualism, holism, and systemism. ***M@n@gement***, 10(3): 49-69.

Rousseau, D. M., Manning, J., & Denyer, D. 2008. Evidence in management and organizational science: Assembling the field's full weight of scientific knowledge through syntheses. ***The Academy of Management Annals***, 2(1): 475-515.

Sandelowski, M., & Barroso, J. 2007. ***Handbook for synthesizing qualitative research*** New York: Springer Publishing Company.

Sathe, V. 1985. Managing an entrepreneurial dilemma: Nurturing entrepreneurship and control in large corporations. ***Frontiers of Entrepreneurship Research***, 21: 636-656.

Sathe, V. 1989. Fostering entrepreneurship in the large, diversified firm. ***Organizational Dynamics***, 18(1): 20-32.

Seale, C. 1999. Quality in qualitative research. ***Qualitative Inquiry***, 5(4): 465-478.

Sharma, A. 1999. Central dilemmas of managing innovation in large firms. ***California Management Review***, 41(3): 146-164.

Sharma, P., & Chrisman, J. J. 1999. Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. ***Entrepreneurship Theory and Practice***, 23: 11-28.

Simon, H. A. 1947. ***Administrative behavior: A study of decision-making processes in administrative organization*** (4th ed.). New York: Macmillan.

Simonin, B. L. 1997. The importance of collaborative know-how: An empirical test of the learning organization. ***Academy of Management Journal***, 40(5): 1150-1174.

Stall-Meadows, C., & Hyle, A. 2010. Procedural methodology for a grounded meta-analysis of qualitative case studies. ***International Journal of Consumer Studies***, 34(4): 412-418.

Strauss, A. L., & Corbin, J. M. 1990. ***Basics of qualitative research: Grounded theory procedures and techniques***. London, UK: Sage.

Sydow, J., Schreyögg, G., & Koch, J. 2009. Organizational path dependence: Opening the black box. ***Academy of Management Review***, 34(4): 689-709.

Thornberry, N. 2001. Corporate entrepreneurship: Antidote or oxymoron? ***European Management Journal***, 19(5): 526-533.

Tippins, M. J., & Sohi, R. S. 2003. IT competency and firm performance: Is organizational learning a missing link? ***Strategic Management Journal***, 24(8): 745-761.

Tranfield, D., Denyer, D., & Smart, P. 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. ***British Journal of Management***, 14(3): 207-222.

Tushman, M. L., & O'Reilly, C. A. 1996. Ambidextrous organizations: Managing evolutionary and revolutionary change. ***California Management Review***, 38(4): 8-30.

Urbano, D., & Turró, A. 2013. Conditioning factors for corporate entrepreneurship: An in (ex) ternal approach. ***International Entrepreneurship and Management Journal***, 9(3): 379-396.

Williamson, O. E. 1985. ***The economic intstitutions of capitalism***. New York: Free Press.

Wolcott, R. C., & Lippitz, M. J. 2007. The four models of corporate entrepreneurship. ***MIT Sloan Management Review***, 49(1): 75.

Yin, R. K. 2003. ***Case study research: Design and methods*** (3rd ed.). Thousand Oaks, California: Sage.

Zahra, S. A. 1991. Predictors and financial outcomes of corporate entrepreneurship - An exploratory-study. ***Journal of Business Venturing***, 6(4): 259-285.

Zahra, S. A. 1993a. A conceptual model of entrepreneurship as firm behavior: A critique and extension. ***Entrepreneurship Theory and Practice***, 17(4): 5-21.

Zahra, S. A. 1993b. Environment, corporate entrepreneurship, and financial performance: A taxonomic approach. ***Journal of Business Venturing***, 8(4): 319-340.

Zahra, S. A. 1995. Corporate entrepreneurship and financial performance: The case of management leveraged buyouts. ***Journal of Business Venturing***, 10(3): 225-247.

Zahra, S. A. 1996. Governance, ownership, and corporate entrepreneurship: The moderating impact of industry technological opportunities. ***Academy of Management Journal***, 39(6): 1713-1735.

Zahra, S. A., & Covin, J. G. 1995. Contextual influences on the corporate entrepreneurship performance relationship – A longitudinal analysis. ***Journal of Business Venturing***, 10(1): 43-58.

Zahra, S. A., & Garvis, D. M. 2000. International corporate entrepreneurship and firm performance: The moderating effect of international environmental hostility. ***Journal of Business Venturing***, 15(5-6): 469-492.

Zahra, S. A., Nielsen, A. P., & Bogner, W. C. 1999. Corporate entrepreneurship, knowledge, and competence development. ***Entrepreneurship Theory and Practice***, 23: 169-190.

Zahra, S. A., Sapienza, H. J., & Davidsson, P. 2006. Entrepreneurship and dynamic capabilities: A review, model and research agenda. ***Journal of Management Studies***, 43(4): 917-955.