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Document type: Postprint

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Citation:

Martin, A., Keller, A., & Fortwengel, J. (2017). Introducing conflict as the microfoundation of organizational ambidexterity. Strategic Organization, 17(1), 38–61.

https://doi.org/10.1177/1476107017740060

https://doi.org/10.1177/1476127017740262

# INTRODUCING CONFLICT AS THE MICROFOUNDATION OF ORGANIZATIONAL AMBIDEXTERITY

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**Acknowledgments:** We are grateful to Gianmario Verona for his editorial guidance and the three anonymous reviewers for their developmental reviews. We also thank Kamini Gupta for useful comments. Furthermore, we wish to thank Tom Mom for feedback on a previous version of the manuscript, as well as the participants of the EURAM 2014 track 'The microfoundations of organizational ambidexterity: Multilevel insights'.

#### Abstract

This article contributes to our understanding of organizational ambidexterity by introducing conflict as its microfoundation. Existing research distinguishes between three approaches to how organizations can be ambidextrous, i.e. engage in both exploitation and exploration. They may sequentially shift the strategic focus of the organization over time; they may establish structural arrangements enabling the simultaneous pursuit of being both exploitative and explorative; or they may provide a supportive organizational context for ambidextrous behavior. However, we know little about how exactly ambidexterity is accomplished and managed. We argue that ambidexterity is a dynamic and conflict-laden phenomenon, and we locate conflict at the level of organizations, units, and individuals. We develop the argument that conflicts in social interaction serve as the microfoundation to organizing ambidexterity, but that their function and type vary across the different approaches toward ambidexterity. The perspective developed in this paper opens up promising research avenues to examine how organizations purposefully manage ambidexterity.

**Keywords:** exploitation and exploration, organizational ambidexterity, microfoundation, tensions, conflicts, conflict management.

"As conflict—difference—is here in the world, as we cannot avoid it, we should, I think, use it" (Follett 1925/1996: 67, quoted in Smith and Tushman, 2005: 525)

#### Introduction

The ubiquitous challenge of simultaneously exploiting existing capabilities on the one hand and exploring new opportunities on the other is among the most prominent topics in management and strategy research (Benner and Tushman, 2003, 2015; Levinthal and March, 1993; O'Reilly and Tushman, 2016). While these two objectives have long been argued to be dualistic by nature (March, 1991), the concept of organizational ambidexterity aims to resolve this seeming contradiction (see Birkinshaw and Gupta, 2013; Nosella et al., 2012; O'Reilly and Tushman, 2013 for comprehensive reviews). Organizational ambidexterity denotes attention to a firm's capacity to both exploit and explore. It thus refers to a firm's "ability to simultaneously pursue both incremental and discontinuous innovation" (Tushman and O'Reilly, 1996: 24).

Research discusses different ways in which organizations attain ambidexterity (O'Reilly and Tushman, 2013; Raisch et al., 2009). They may shift the organization's strategic focus from exploitation to exploration, and vice versa *over time*; they may establish a particular *organizational design* with specialized units responsible for *either* exploitation *or* exploration; or they may establish an *organizational context* that enables all organizational members to situationally oscillate between exploitation and exploration. As such, tensions and contradictions associated with exploitation and exploration are resolved either *temporally*, that is, over time, *structurally*, that is, across specialized units, or

*contextually*, that is, embedded in the culture and everyday behavior of all organizational members.

Empirical evidence points to the positive effect of ambidexterity on firm performance (see Junni et al., 2013 for a detailed meta-analysis). However, despite the increasing popularity of research on ambidexterity, what is less well understood is how it is accomplished in organizations (e.g., Benner and Tushman, 2015; Cantarello et al., 2012; Cao et al., 2009; O'Reilly and Tushman, 2011; Turner et al., 2013) and increasingly between organizations (e.g., Kauppila, 2010; Lavie and Rosenkopf, 2006; Lavie et al., 2010), and how organizations manage the multilayered interfaces between exploitation and exploration. This shortcoming relates to the observation that we have only recently started to examine the microfoundations of organizational ambidexterity (see, for example, Eisenhardt et al., 2010; Jansen et al., 2008, 2009; Kauppila and Tempelaar, 2016; Miron-Spektor et al., 2017; Mom et al., 2007, 2009; Papachroni et al., 2016; Rogan and Mors, 2014; Smith, 2014; Smith and Tushman, 2005; Turner et al., 2013).

Microfoundational reasoning emphasizes the explanatory primacy of lower-level constructs, such as individuals and their social interaction, that undergird higher-level concepts, such as organizational routines and capabilities (e.g., Felin and Foss, 2005; Felin et al., 2012; Winter, 2013) or dynamic capabilities (e.g., Helfat and Peteraf, 2015; Salvato and Vassolo, 2017; Teece, 2007). While much research has indeed focused on individuals (see, for instance, Miron-Spektor et al., 2017; Smith, 2014; Smith and Tushman, 2005), microfoundation is essentially an analytical levels argument and thus also includes social

mechanisms embedded in interaction processes<sup>1</sup> (e.g., Eisenhardt et al., 2010; Salvato and Vassolo, 2017; see Barney and Felin 2013, and Felin et al., 2015 for a general assessment). Extending the emerging discussion of microfoundations of organizational phenomena, we introduce conflict as *the* microfoundation of organizational ambidexterity. More specifically, we conceive ambidexterity as an ongoing accomplishment that can be, at least partially, steered through different conflict management activities.

Our perspective is based on the observation that organizations and organizing are inevitably characterized by conflict (e.g., Cyert and March, 1963; Simon and March, 1958; Tjosvold, 2008; Tjosvold et al., 2014). We argue that the tensions and contradictions between exploitation and exploration translate into distinct types of conflicts at different levels (Papachroni et al., 2016; Simsek, 2009). At the *systemic level*, organizations face conflicts between long-term and short-term demands; at the *unit level*, conflicts stem from different organizational groups possessing diverse ideas, demands, skills, interests, or power resources; and at the *individual level*, conflicts result from multiple roles, memberships, and perspectives. Rather than managing out these tensions, contradictions, and conflicts with *either-or-responses*, we stress the importance of *balancing them* (e.g., Bledow et al., 2009; Lewis, 2000; Lewis, et al., 2014; O'Reilly and Tushman, 2011; Putnam et al., 2016). Because conflicts incorporate both disintegrative and integrative forces (e.g., Benson, 1977; Simmel, 1964), they represent an important mechanism for

<sup>&</sup>lt;sup>1</sup> Barney and Felin (2013: 140), for instance, note that "[t]he first misconception about microfoundations is that they are about individuals, and thus microfoundations are simply equivalent to more micro disciplines such as psychology, human resources, or micro-organizational behavior."

coping with the paradoxical challenge of separating *and* integrating organizations over the course of ambidexterity (Andriopoulos and Lewis, 2009; Tushman et al., 2011).

Our conflict-centered approach enriches existing literature in several ways. First, we contribute to the debate on the microfoundations of organizational ambidexterity by highlighting the role of social interaction in general and conflict in particular. This adds an important dimension to the literature of microfoundations, going beyond the importance of particular features of individuals (see, for example, Smith, 2014; Smith and Tushman, 2005; Tushman et al., 2011). Second, we contribute to a better understanding of organizational ambidexterity as a multi-level phenomenon (e.g., Schad et al., 2016; Simsek, 2009) in that our approach is sensitive to social interaction and conflict on and across multiple levels—i.e., from the individual to the group or unit, and from the unit to the organization. This helps us to overcome the hierarchical bias in much ambidexterity research, which focuses primarily on the habits, cognitions, and actions of top managers (e.g., O'Reilly and Tushman, 2004, 2008; Smith and Tushman, 2005)—thereby disregarding the role of lower-level employees. Third, our paper is one of the few (e.g., Birkinshaw et al., 2016; Papachroni et al., 2016) that contributes to the integration of the different approaches toward organizational ambidexterity. We develop the argument that organizations can steer ambidexterity through conflict management activities within a single approach. Meanwhile, the ability to combine versatilely and/or switch situationally between the different approaches may constitute a dynamic capability (e.g., Di Stefano et al., 2014; Teece, 2007). Overall, our approach shifts attention to the microfoundation of organizational ambidexterity and how it is accomplished through conflict management activities.

## Three approaches to organizational ambidexterity

In his seminal work, March (1991) links the struggle between fostering existing capabilities and searching for new opportunities to the terms *exploitation* and *exploration*. Exploitation utilizes and incrementally extends existing knowledge and thus allows for short-term efficiency, whereas exploration entails search, experimentation, and the development of new knowledge. Given the assumption that each mode requires different structures, processes, and activities (e.g., Burns and Stalker, 1961), and competes for the same scarce resources, exploitation and exploration have been conceptualized as antagonistic opposites (e.g., Gupta et al., 2006). From this perspective, organizations are regarded as forced to decide constantly *either* to exploit *or* to explore.

Various studies have shown (e.g., Danneels, 2011; Tripsas and Gavetti, 2000) that firms often struggle when making these choices and hence fail to manage the simultaneous requirements of renewal and refinement (Benner and Tushman, 2003, 2015). Since exploiting existing strengths and using known solutions typically provides immediate and certain results, firms usually privilege exploitation over exploration (Levinthal and March, 1993; Levitt and March, 1988). This myopic bias may, over time, cause firms to become trapped in inadequate solutions, producing core rigidities and path dependence (Leonard-Barton, 1992; Sydow et al., 2009), and renders them potentially maladaptive to environmental change (e.g., Danneels, 2002; Tushman and Anderson, 1986). To tackle this fundamental organizational challenge, scholars have proposed the concept of the

ambidextrous organization (O'Reilly and Tushman, 2004, 2013; Tushman and O'Reilly, 1996). Ambidextrous organizations can exploit existing capabilities while *equally* being able to explore new opportunities. In line with recent articles by Birkinshaw et al. (2016), O'Reilly and Tushman (2013), and Raisch et al. (2009) we distinguish between three approaches toward organizational ambidexterity: *sequential*, *structural*, and *contextual*.

Sequential Ambidexterity. Several scholars have suggested that organizations can handle the contradictory requirements of exploitation and exploration through temporal separation. Following this line of thought, firms adapt periodically in response to environmental shifts by radically amending and realigning their basic structures, strategies, and processes (Tushman and Romanelli, 1985). Relatively stable phases of evolutionary adaptation are interrupted periodically by short bursts of revolutionary organizational change. Consequently, some authors propose a temporal sequencing or rhythmic switching between exploitation and exploration as an effective way to become ambidextrous (e.g., Boumgarden et al., 2012; Brown and Eisenhardt, 1997; Duncan, 1976; Siggelkow and Levinthal, 2003).

Structural Ambidexterity. This approach proposes pursuing both modes simultaneously by establishing and facilitating structurally separate units (e.g., Benner and Tushman, 2003; O'Reilly and Tushman, 2004, 2008). Here, the focus is on *separating* the organization using specific organizational designs and mechanisms (e.g., Lawrence and Lorsch, 1967). In essence, this approach proposes spatially dispersed, autonomous, and loosely coupled units, each operating on different logics, mindsets, and capabilities. Core business units are given responsibility for routine work and for exploiting existing

capabilities, whereas innovation units are envisioned to keep track of nascent trends (e.g., Gilbert, 2006). To integrate these units and prevent organizational dissolution, firms must rely on the unifying role of an overarching senior management team (e.g., Jansen et al., 2008, 2009; Mom et al., 2007, 2009; O'Reilly and Tushman, 2011; Smith and Tushman, 2005) and a common corporate vision with a set of shared core values (e.g., Birkinshaw et al., 2016; O'Reilly and Tushman, 2004). However, as illustrated by the fate of Polaroid and Xerox, integrating these units constitutes a delicate managerial challenge that frequently fails (Chesbrough and Rosenbloom, 2002; Heracleous et al., 2017; Tripsas and Gavetti, 2000).

Contextual Ambidexterity. This approach centers on behavioral integration. Here, the focus is on the establishment of an organizational context that enables all members to engage in ambidextrous behavior (see, for example, also Lüscher and Lewis, 2008; Papachroni et al., 2016). Introduced by Gibson and Birkinshaw (2004), this view proposes that the successful management of ambidexterity rests on the creation of an organizational context in which stretch, discipline, support, and trust interact in productive ways. Thus, it is argued that the organizational value system, incentive structures, and the corporate culture enable employees to spend their time on both alignment-focused and adaptability-focused activities—and to pursue both efficient execution and creative experimentation (e.g., Adler et al., 1999; Güttel and Konlechner, 2009).

However, while we have a general idea of how organizational ambidexterity can be pursued, we still lack a fine-grained understanding of exactly how firms accomplish the shift and/or balance between exploitation and exploration (e.g., O'Reilly and Tushman,

2013; Raisch et al., 2009). Tackling this issue, scholars more recently have started to focus on the particular management processes and activities underlying ambidexterity—thereby moving beyond questions of organizational structure, contexts, and design—, directing attention toward the paradoxical challenge of handling contradictory demands and countervailing forces (e.g., Andriopoulos and Lewis, 2009; Eisenhardt et. al., 2010; Schreyögg and Sydow, 2010; Smith, 2014; Smith and Tushman, 2005).

# In search of microfoundations of ambidexterity

The management of ambidexterity is often conceived as a paradoxical challenge (see, for example, Lewis, 2000; Smith and Lewis, 2011; Putnam et al., 2016). In this respect, scholars frequently make the argument that the successful management of ambidexterity depends on the particular traits, abilities, or skills of individuals, or on specific coordination mechanisms (e.g., Andriopoulos and Lewis, 2009; Bledow et al., 2009; Papachroni et al., 2016). More specifically, studies have investigated how executives and managers embrace paradox and act ambidextrously by skillfully mastering the arising tensions (e.g., Lewis et al., 2014; Miron-Spektor et al., 2017; Smith, 2014; Tushman et al., 2011).

For example, Smith and Tushman (2005) develop a top management-centric model of managing exploitation-exploration tensions. The authors suggest that the senior leader or the entire top management team serve as an integrative lynchpin between exploitative and explorative units (see also Tushman et al., 2011). Distinct team designs and coaching concepts facilitate the development of a paradoxical mindset. Moreover, it is argued that these cognitive frames enable the members of the top management to embrace tensions,

rather than to avoid or deny them—that is to deal successfully with strategic contradictions. By stressing the importance of mangers' (paradoxical) cognitions in balancing exploitation and exploration, Smith and Tushman (2005) laid the ground for following studies, which use the literature on paradox and contradictions to deepen our understanding of organizational ambidexterity.

Building on these insights, Andriopoulos and Lewis (2009) explored the puzzle of how organizations can skillfully manage the nested tensions between exploitation and exploration. Utilizing a comparative case study design in the context of ambidextrous firms in the product design industry, they identify three paradoxes of innovation: the *paradox of strategic intent*, involving the fundamental tension between profit and breakthrough innovation; the *paradox of customer orientation*, involving both tight and loose coupling to the client; and the *paradox of personal drivers*, not least involving the tension between discipline and passion. Overall, Andriopoulos and Lewis (2009) make the important observation that the identified paradoxes (co)exist in dynamic equilibrium (see also Smith and Lewis, 2011) and are interwoven across organizational levels. They therefore claim that managing them is a challenge to be faced collectively by the whole organization. As such, experiencing and accomplishing paradoxes is not limited to (top) management teams, as is often presumed (e.g., Lewis et al., 2014; Smith, 2014; Smith & Tushman, 2005).

In this paper, we seek to extend this line of research. While the view that ambidexterity is a paradoxical phenomenon accounts for the observation that it is rife with tensions and contradictions, research does not explicitly explore the *constitutive role of conflict in (managing) ambidexterity*. In the following, we argue that tensions and

contradictions in the exploration-exploitation-relationship translate into conflicts that are interwoven, multi-layered, and nested (Andriopoulus and Lewis, 2009; Papachroni et al., 2016; Schad et al., 2016)—with distinct implications for how organizational ambidexterity can be managed.

Informed by ideas originating from dialectical thinking (e.g., Benson, 1977; Coser, 1956; Reese, 1982; Simmel, 1964; Van de Ven and Poole, 1995) and notions derived from the work on dualities, contradictions, and paradoxes (e.g., Andriopoulos and Lewis, 2009; Bledow et al., 2009; Farjoun, 2010; Lewis, 2000; Putnam et al., 2016; Simsek, 2009), we start from the assumption that organizational phenomena, such as ambidexterity are ultimately grounded in and shaped by social interaction (e.g., Giddens, 1984). Social interaction in organizations involves significant elements of contradictions and conflict (e.g., Benson, 1977; Cyert and March, 1963; Simon and March, 1958; Tjosvold, 2008; Tjosvold et al., 2014). Conflict is hereby considered as "an *interactive process* manifested in incompatibility, disagreement, or dissonance within or between social entities (i.e. individual, group, organization etc.)." (Rahim, 2002: 207, italics added) Similarly, Tjosvold et al. (2014) define conflict as *incompatible activities* which do not have be either necessarily opposing or necessarily competitive.

A dialectical perspective is inherently dynamic and states that something new may emerge from contradictions and conflicts among diverse ideas, interests, and forces in a process of integration and progression (e.g., Benson, 1977; Van de Ven and Poole, 1995). It is important to note that (some) contradictions and conflicts represent "a necessary feature of a particular order" and that "the functioning system maintains or reproduces this

contradiction." (Benson, 1977: 4) Thus, conflicts do not necessarily need to be destructive, as is often assumed in management research, but also can be beneficial (e.g., Henkin and Singleton, 1984; Jehn, 1995, 1997; Tjosvold et al., 2014). More generally, both the stable social world—enduring principles of organizing—and its transformation—organizational or social change—are grounded in conflicts (Simmel, 1964).

In the following, we map the *changing roles of conflict* in respect to the three approaches toward ambidexterity, including but not limiting ourselves to the distinction between core and peripheral conflicts (Coser, 1956). We argue that when following a strategy of sequential ambidexterity, conflicts help to disintegrate and re-establish social relations within organizations. In doing so, conflicts allow for the substantial change of established patterns of organizational behavior, i.e. discontinuous change. In contrast, firms following a structural approach are not confronted with the challenge of *unbalancing the* organization (e.g., Eisenhardt et al., 2010), but instead need to balance it (e.g., Bledow et al., 2009; Cao et al., 2009). Here, the function and type of conflicts are different and relate to the question of separation and integration. Finally, when a firm follows a contextual approach, intra-individual conflicts, created by diverse knowledge structures, help individuals to identify, understand, and deal with ambidextrous situations (e.g., Lüscher and Lewis, 2008; Putnam et al., 2016). Again, the function and type of conflicts center around separation and integration rather than unbalancing. Table 1 provides an overview of our main arguments, which will be developed next.

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## Theorizing the role of conflict in organizational ambidexterity

We build on Birkinshaw et al. (2016) who argue that each approach of ambidexterity requires a distinct way of management. Accordingly, we elaborate on the observation that management activities range from "[s]hifting the strategic focus over time and managing tensions between front-line and top managers" over "[o]rchestrating the complex interplay of resources across differentiated organizational units" to "[s]haping and reshaping a context in which the operating units can balance contradictory activities" (Birkinshaw et al., 2016: 43). We focus on conflicts and how they serve as the microfoundation of ambidexterity. The next sections offer theorizing on the function and types of conflicts associated with each approach toward organizational ambidexterity, as well as related conflict management activities.

# Conflicts within the sequential approach: Shifting the system

Main idea, function of conflict and mechanism. Within this approach, tensions and contradictions between exploitation and exploration are solved by shifting the system. The proposed solution is related to the notion of vacillation or spiraling inversion (Boumgarden et al., 2012; Putnam et al., 2016), and firms separate tensions and contradictions temporally rather than balance and integrate them (see also Bledow et al., 2009). The level of analysis is the system, respectively the organization. Here, the set of organizational values as well as structural and procedural arrangements must be scrutinized critically. For example, firms favoring exploration over exploitation are likely to solve conflicts over scarce resources in favor of activities that support the development of radical innovations. Thus, conflicts lead to reflection upon and change of dominant decision-making patterns. We argue that

conflicts allow for disputing and altering existing organizational values, structure, and capabilities. In other words, in *processes of confronting* actors identify and discuss their logics of action in order to overcome defensive reactions (Lewis, 2000; see also Rahim, 2002 for the problem of defensive mechanisms in conflict management).

Boumgarden et al. (2012), in an in-depth longitudinal case study of Hewlett-Packard (HP), found how firms may effectively cycle through phases of exploitation and exploration by introducing different organizational structures over time. More precisely, their study illustrates how HP repeatedly pulsated back and forth, i.e. vacillated, between centralization increase exploitation, routinization, and coordination) (to decentralization (to ignite exploration, innovation, and search) (see also Siggelkow and Levinthal, 2003). Every shift implied serious intra-organizational struggles and conflicts. For example, in the process of adopting a centralized firm structure, organizational members strove to maintain their autonomy and dominant position. One can therefore argue that the shift from exploration to exploitation was not caused by the structural amendment alone but by organizational conflicts that, after a time of turmoil, resulted in a stable state. Similarly, case studies on NCR (Rosenbloom, 2000) and Olivetti (Danneels et al., 2013) have shown that conflicts constitute a relevant mechanism to overcome maladapted strategic trajectories, causing a complete redefinition of a firm's core business (see also Danneels, 2011). Consequently, conflicts allow for the introduction of episodic change (Weick and Quinn, 1999) by starting a revolution, which alters "a system of interrelated organizational parts that is maintained by mutual dependencies among the parts and with competitive, regulatory, and technological systems outside the organization that reinforce the legitimacy of managerial choices that produced the parts." (Romanelli and Tushman, 1994: 1144) As such, conflicts are *system-destroying* (Benson, 1977).

Type of conflict. In the sequential approach, organizational ambidexterity is a function of a firm's potential to initiate and manage *core conflicts* (Coser, 1956). In contrast to peripheral conflicts, core conflicts affect the firm's founding principles and fundamental norms and values (see also Lyles and Schwenk, 1992 for a similar distinction between core and peripheral knowledge structures). These conflicts "put the basic consensus in question" (Coser, 1956: 73) and relate to the organization's identity. To do so, conflicts must tackle taken-for-granted assumptions (e.g., a firm's core technology) and the ways situations are labeled, framed, and approached over the course of *cognitive redefinition* (Schein, 1996) or *reframing and transcendence* (Putnam et al., 2016: 128). This is similar to the notions of second-order change (Bartunek and Moch, 1987; Watzlawick et al., 1974) and double-loop learning (Argyris and Schön, 1978).

This line of reasoning reflects various findings in research on constructive conflict (e.g., Jehn, 1995, 1997; Jehn and Bendersky, 2003; Tjosvold et al., 2014). Although focused on the group or team level, the arguments can be applied to the organizational level as well (see, for instance, Danneels, 2008: 523). Amason (1996), for example, demonstrates that task conflicts contribute positively to the quality of strategic decision-making while emotional conflicts, focusing on people rather than issues, tend to have a negative impact. Lewis (2000: 770) refers to this finding and argues that maintaining a task focus represents a method to manage the *paradox of belonging* by strengthening the functional side of conflict and weakening the negative effects of conflicts. Similarly, Jehn (1997) argues that

relationship conflicts are detrimental to performance while task conflict has a potentially positive effect (see also Jehn and Bendersky, 2003). Although emotional conflicts may set the ground for major organizational change, they tend to constrain creativity and performance (Weick and Quinn, 1999: 371). Thus, we expect that task conflicts, which challenge the status quo, are useful to take firms in new directions, while relationship conflicts, overall, tend to prevent organizational change (Jehn and Bendersky, 2003). Thus, promoting substantial organizational change may rely on the introduction and objectification of task or core conflicts. However, since these conflicts may also stimulate emotional conflicts, the management of conflicts becomes a sensitive, even paradoxical endeavor (Amason, 1996; Rahim, 2002; Jehn and Bendersky, 2003).

Management task and main management activities. The unfreezing of organizations, as proposed here, entails conflicts (Lewin, 1958). The main management task is to situationally introduce procedures allowing for the occurrence of core conflicts while, at the same time, tying to prevent peripheral conflicts. Notably, these core conflicts still need to be task-oriented, as opposed to being emotional or relationship conflicts. For instance, Mom et al. (2007: 926) propose that a shift of emphasis from exploitation-enhancing top-down knowledge inflows to exploration-promoting bottom-up knowledge inflows (or vice versa) serves as a suitable means to achieve a periodical alteration (see also Bledow et al., 2009: 329). Therefore, a *shift in internal knowledge flows* introduces core conflicts by providing colliding perspectives that, in turn, questions existing processes of strategizing and organizing. In addition, it's suitable to perform *projects in unrelated markets*, or to *hire employees* with different (professional) backgrounds. Although the exact relationship

between team diversity and innovation is not yet fully understood (Anderson et al., 2014: 1309-1310), one may argue that "[s]selecting people in a team with diverse knowledge, skills, and abilities [helps] to increase diversity" (Bledow et al., 2009: 323) and is therefore helpful in shifting a firm's dominant logic (see also Lewis, 2000: 770). Furthermore, the implementation of *strategy workshops* with changing participants, the help of *consultancies and outsiders*, or engaging in *inter-organizational networks and/or alliances* (Lüscher and Lewis, 2008: 232-233) help to shift the system (for related activities see, for example, Putnam et al., 2016: 128-131).

Our argument is consistent with research on the antecedents and conditions of constructive conflicts (e.g., Amason, 1996; Jehn, 1995). For example, Jehn and Bendersky (2003: 216) argue that "task conflict will be even more beneficial in groups with a variety of educational, cultural, and vocational viewpoints to help reconcile the differences creatively." However, a high degree of diversity within an organization create situations where core conflicts are not managed in a task-oriented manner—that is they turn into personal attacks (Jehn, 1995). Jehn and Bendersky (2003: 222) highlight the necessity of designing appropriate techniques to deal with this challenge, including *interest-based third parties*, such as mediators and organizational ombudsmen (see also Rahim 2002).

Shifting the system often requires powerful actors, because fundamental change is largely a political process (Pettigrew, 1977). For example, Birkinshaw et al. (2016: 51) argue that in the case of BMW, strong support from the owners and the management board was necessary to shift the organization (see also Rahim, 2002: 226-227). More generally, *resource allocation* creates and sustains power superiority in favor of proponents of change

(see also Van de Ven and Poole, 1995), thus enabling the fundamental shift required in this approach. Of course, the aforementioned conflict management activities geared toward stimulating *system-destroying conflicts* (Benson, 1977), as proposed here, are only appropriate when the shift from one mode to another is required. This is markedly different in the structural approach, which we will discuss next.

## Conflicts within the structural approach: Balancing organizational units

Main idea, function of conflict and mechanism. In this approach, the overall function of conflicts is to balance, i.e. separate yet integrate, structurally different and decentralized units without dissolving the organization (e.g., Bledow et al., 2009; see also Van de Ven, 1986: 603-604). Thus, the level of analysis is organizational units, in particular the (dynamic) relationship between them. Firms comprise units with distinct logics that are tied together (O'Reilly and Tushman, 2004). For example, Birkinshaw et al. (2016: 46) show in the case of Nestle, a company which follows a structural approach, that a "unifying vision serves to align the goals of the company as a whole." Balancing "seeks a compromise" and encompasses "searches for ways to embrace both poles through accepting the contradiction" (Putnam et al., 2016: 124; see also Smith and Lewis, 2011). In this approach, conflicts need to be *system-maintaining* (Benson, 1977), in the sense that the acceptance of conflicts separates units yet integrates the whole organizational system (see also Coser, 1956; Simmel, 1964).

Gilbert's (2006) longitudinal case study of a newspaper company's response to digital publishing demonstrates that industry discontinuity requires firms to hold multiple and inconsistent organizational logics at one time. This study shows that structural

differentiation allows opposing cognitive frames of threat and opportunity, i.e. different thought worlds (Dougherty, 1992), to coexist simultaneously within the company. Structural separation between the print unit and the online unit permitted different frames and behaviors to be enacted without one crowding out the other. However, it is important to note that these units were still connected through horizontal interactions and targeted linkages, such as content sharing, coordinated pricing, cross-functional teams, temporary workgroups, and joint product selling (Gilbert, 2006: 163). As such, the modular architecture restricted the degree of destructive conflicts over operation-intensive issues and retained each unit's distinct cognitive frames, task environments, and activity configurations (see Gilbert, 2005). However, this architecture also allowed for the development of overarching frames of reference by facilitating the exchange of information, knowledge, and resources through (limited) cross-unit interaction (e.g., Siggelkow and Levinthal, 2003) and task-related disputes (see also O'Reilly and Tushman, 2004 on the similar case of USA Today). Similarly, Fang et al. (2010) investigate the impact of interaction patterns among semi-autonomous subunits on exploitation and exploration. Based on a simulation model, they arrive at the conclusion "that moderate levels of cross-group linking lead to the highest equilibrium performance by enabling superior ideas to diffuse across groups without reducing organizational diversity too quickly." (Fang et al., 2010: 625)

These insights echo Jansen et al.'s (2009) assessment that structural separation provides a necessary yet insufficient condition for achieving ambidexterity. In order to be effective, separation has to be paired with efforts toward integration, such as formally

settled cross-departmental interfaces and informal boundary-spanning activities. This fosters the development of multilayered linkages without corrupting the inner logic of the exploitative and exploratory units, respectively. These social ties and interpersonal linkages (which inevitably imply interdepartmental conflicts) mobilize, channel, coordinate, and therefore ultimately integrate the organization. Nelson's (1989) study of intergroup ties suggests that continuous interactions between different opposing groups prevent the accumulation of destructive grievances and grudges, and thus the dissolution of the organization as a whole.

Thus, assuming that each unit contributes to the existence and maintenance of the organization, it follows that ambidexterity depends on the existence, acceptance, and all-embracing tolerance of the tensional relationship of exploitation and exploration (e.g., Andriopoulos and Lewis, 2009; O'Reilly and Tushman, 2011; Smith and Lewis, 2011; Smith and Tushman, 2005; Tushman et al., 2011). For example, Lewis (2000: 770) argues that *paradoxes of belonging* are best managed by valuing difference, which "means appreciating varied perspectives and capabilities, rather than accentuating personal or ethnic distinction." Similarly, Tushman et al. (2011: 80) conclude that "too much consistency in a company's strategy is a danger sin, indicating the company has run out of ideas or is relegating innovation to lower levels." Consequently, these authors suggest that an *overarching and broad identity*, in combination with *incoherent and competing strategies* and the *attention to conflicts by the top management* are essential features of an ambidextrous organization.

Type of conflict. The notion of being separated yet integrated implies that the tensions and contradictions need to be accepted by all organizational members. Thus, diverging perspectives, ideas, and interests must be acknowledged as equally valued, and discussion over conflicts must be open-minded (Tjosvold et al., 2014). Essentially, ambidexterity relies on a firm's ability to balance conflicting demands. Moreover, these inevitable conflicts must be dealt with by "constructive confrontation based on knowledge" rather than hierarchical position and economic performance in the market place rather than success in internal politicking." (Burgelman, 1994: 49) This is illustrated by Tripsas's (2013) analysis of Polaroid and Fuji's responses to digital imaging. She suggests that it was Fuji's open culture that valued new digital (explorative) as well as the established (exploitative) capabilities, enabling Fuji to act ambidextrously. While Fuji transformed itself successfully to move into the digital age, instant camera primus Polaroid did not, because it had a single-sided mind set centered on its established capabilities and therefore failed to capitalize on its digital imaging activities (see Tripsas and Gavetti, 2000). In a similar vein, Chesbrough and Rosenbloom (2002) and Heracleous et al. (2017) show how office copier primus Xerox (having a risk-averse, monolithic culture focused on its established business) failed to integrate and commercialize groundbreaking inventions developed in its innovative yet geographically and culturally distant subsidiary Xerox PARC.

Importantly, in the structural approach, the focus is on peripheral conflicts, because the organization needs to be balanced, as opposed to shifted. Peripheral conflicts are those that address less central issues (Coser, 1956). These conflicts must relate to operational task

problems while, in turn, commonly shared guidelines—or more broadly an *overarching identity* (Tushman et al., 2011)—regarding how conflicts are generally coped with must be accepted by all organizational members. This allows for constantly balancing conflicting needs in the long run. As such, ambidexterity "requires relationships characterized by ongoing information exchange, collaborative problem solving, joint decision making, and resource flows between the managers of the different units responsible for exploitation and exploration." (Simsek et al., 2009: 886-887) Moreover, it involves disciplined, fact-based conversations and continuous negotiations between units without following *feudal interests* (Tushman et al., 2011: 76).

This relates to research on group conflicts. For example, Jehn and Bendersky (2003: 216-217) argue that the *group norm of acceptability* of disagreement and conflicts positively moderates the relationship between conflicts and favorable outcomes (see also Jehn, 1995). While Jehn and Bendersky (2003) argue that such an atmosphere may also strengthen the negative effects of non-task conflicts, Rahim (2002: 227), leveraging the case of Honda, comes to the conclusion that its open culture "would encourage substantive or task-related conflict and discourages affective or emotional conflict."

Management task and main management activities. In this approach to ambidexterity, the main management task is to "embrace the tension between old and new and foster a state of constant creative conflict" (Tushman et al., 2011: 76). Tushman et al. (2011: 77) identified that CEOs need to keep the whole organization in a tensional state and to "maintain multiple and often conflicting strategic agendas" in order to create an ambidextrous organization. Unlike frequent assumptions, the main management challenge

is not to "reconcile conflicting demands" (Jansen et al., 2008: 982) and to resolve conflicts, but to steadily balance competing demands.

Overall, as argued above, it is important to establish an organizational culture in which the plurality of perspectives, ideas, and interests is recognized, and conflicts are accepted and, moreover, appreciated (Birkinshaw et al., 2016; Bledow et al., 2009; Lüscher and Lewis, 2008). In other words, it is important to build a firm that values intraorganizational diversity (e.g., Cox, 1991; Nahavandi and Malekzadeh, 1988), allows people to raise dissenting viewpoints and ideas, and encourages them to engage in controversial debates. In organizations "characterized by constructive conflict, opposing views are openly discussed" (Danneels, 2008: 523), accepted, and even appreciated rather than suppressed or inhibited (Tjosvold, 1985; Tjosvold et al., 2014). Similarly, focusing on the productive role of relational engagement and interpersonal dialogue, i.e. open-minded and cooperative discussions and negotiations between members from different departments, Salvato and Vassolo (2017) highlight the acceptance of the otherness rather than an usversus-them mindset. Meanwhile, productive dialogue (e.g., in the form of joint problem solving or inter-departmental teams) functions as "glue' that links together individuals and teams, teams and the organization" (Salvato and Vassolo, 2017: 17).

According to Cox (1991), multicultural organizations, unlike monolithic organizations, are characterized by pluralism, the integration of informal networks, an absence of prejudice and discrimination, or no gaps in organizational identification. Hence, it is important "that although integration involves interaction and adaptation between two cultures and requires mutual contributions by both groups, it does not involve loss of

cultural identity by either." (Nahavandi and Malekzadeh, 1988: 82) Specifically, it is argued that management activities such as *collaborative problem solving and joint decision making, cross-unit teams and task forces, resource and information flows between different units, transparent and non-discriminating decision rules, diversity in key committees, explicit treatment of diversity in mission statements, appropriate appraisal and reward systems, and companywide social events (Cox, 1991) help to build and sustain an ambidextrous organization.* 

Moreover, research on constructive conflicts highlights the usefulness of certain management activities. For instance, Jehn and Bendersky (2003: 218) argue that collaborative conflict management "is a prerequisite for task-related conflicts to positively affect group innovativeness." Management should therefore aim to lower in-house rivalry among subunits in order to support integration and internal knowledge flows (e.g., Tjosvold, 2008; Tjosvold et al., 2014). Similarly, Rahim (2002: 227-228) suggests that a risk-taking atmosphere, which tolerates failure and allows people to speak up and challenge other members' viewpoints without the threat of resentment or retribution, enables individuals to handle conflicts constructively.

As in the sequential approach, some of these conflict management activities bring about the dysfunctional consequences of non-task related conflicts, due to a waste of energy and time (Jehn and Bendersky, 2003: 218). Firms may therefore utilize activities such as *rights-based conflict solutions* or *interest-based third parties* in order to curb these potential downsides (Jehn and Bendersky, 2003: 220-222).

The main management challenge is to facilitate yet to limit organizational conflicts, especially by fostering peripheral conflicts while at the same time suppressing core conflicts. This inevitably entails questions of power. The top management may use the reallocation of resources strategically to steer and navigate the distribution of power within an organization (e.g., Bower, 1970; Noda and Bower, 1996). Specifically, by *reducing power discrepancies* firms prevent the possible marginalization of under-privileged units.

# Conflicts within the contextual approach: Enabling individuals

Main idea, function of conflict and mechanism. Within this approach, organizational ambidexterity is about developing a "behavioral capacity to simultaneously demonstrate alignment and adaptability across an entire business unit." (Gibson and Birkinshaw, 2004: 209) The focus is on the establishment of a supportive organizational context which ultimately empowers all employees to pursue both exploitation and exploration. Thus, contradictions inherent in the exploitation-exploration-relationship translate into individuals' experience of tensions and conflicts (e.g., Lewis, 2000; Lüscher and Lewis, 2008; Rahim, 2002: 207). Consequently, the level of analysis is the individual, and when and how individuals deal with inner conflicts or have mental dialogs. However, unlike research in the psychological tradition (e.g., Miron-Spektor et al., 2017), our argument is that the ability of individuals to engage constructively and effectively with these inner conflicts is shaped by the organizational context (Harris, 1994). The examples of Google and 3M illustrate this point. At Google and 3M, employees are permitted to spend a certain amount of their time on freely selected projects. While this policy is put in place by the management, it is the organizational members located across all levels who are confronted with the issue of dealing with the tensions between exploitative and explorative activities.

As such, this policy illustrates the organizational antecedents and prerequisites of these individual-level accomplishments.

In order to manage ambidexterity, we suggest focusing on individual knowledge structures that enable employees to conduct mental dialogs and to help to develop diverse perspectives on how to perceive and make sense of the world (e.g., Birkinshaw et al., 2016; Harris, 1994; Lewis, 2000; Plambeck and Weber, 2010; Weick, 1995). For example, Adler et al.'s (1999) study of Toyota's production system shows how shop floor employees excel in both efficiency and creativity in their day-to-day activities. The firm's production system focuses on team organization, problem-solving circles, mixed-model production, job rotation, and intensive training, as well as on limited authority and participative leadership. This dual nature allows the workers to develop a broad understanding of the manufacturing process and gives them responsibility for quality, minor maintenance tasks and line-side housekeeping (Adler et al., 1999: 53). As such, workers exhibit a certain level of mindfulness in routine production, but also accumulate diverse personal knowledge structures through non-routine activities. Overall, this organizational context qualifies the production line workers to switch between routine and non-routine tasks, that is, behave ambidextrously.

We argue that individuals are capable of consciously dealing with the conflicting demands of exploitation and exploration when situations are found to be adversarial or ambivalent (Lewis, 2000; Lüscher and Lewis, 2008; Putnam et al., 2016; Rothman et al., 2017). This relates to the general notion that conflicts must first be detected and recognized

by people, before they can be managed (Rahim, 2002: 207). Thus, it is important that individuals develop a capacity for paradoxical thinking, since this "aims to make latent tensions clear and explicit" (Putnam et al., 2016: 124). In a similar vein, Miron-Spektor et al. (2017: 28) highlight the role of a paradox mindset, not least in potentially fostering ambidexterity and learning. More broadly, here the function of conflicts is to balance exploitation and exploration by making contradictions conscious and transparent. Conflicts are *system-maintaining* (Benson, 1977) in the sense that diverse knowledge structures enable individuals to separate (i.e., detect) and integrate (i.e., choose consciously between) the conflicting demands of exploitation and exploration in the course of their daily action.

Type of conflict. As suggested in the literature on schema-based information processing (Harris, 1994; Taylor and Crocker, 1981), sensemaking (Balagun and Johnson, 2004; Harris, 1994; Weick, 1995) and absorptive capacity (Cohen and Levinthal, 1990), individuals interpret situations based on their previous experience and their existing knowledge stock. Precisely, complex and uncertain situations are handled in reference to knowledge and solutions that proved successful in the past. The accumulation of domain-specific (coherent) knowledge in the course of successful action may, however, lead individuals and organizations to be locked onto a certain path of action (Levitt and March, 1988) and prevent them from pursuing alternative paths of action (Cohen and Levinthal, 1990). Referring to Miller (1993), Plambeck and Weber (2010: 692) contend that success increases the confidence of a CEO in mastering turbulent situations. This, in turn, results in a decline of efforts in developing alternative perceptions and interpretations. Relatedly, Lewis (2000) argues that this process of simplification, in which the simultaneity of

conflicting demands is masked and either-or-solutions are created, is manifested in self-referential loops, mixed messages, and system contradictions. In other words, actors develop defensive reactions in order to cope with complexity and ambivalence, thereby reinforcing processes of simplification.

Domain-specific accumulation of experience and knowledge—either directed toward exploration or exploitation—prevents individuals and organizations from developing fresh ideas. Without diverse and complex internal knowledge structures, individuals are unable to perceive situations as potentially ambidextrous (Lewis, 2000; Lüscher and Lewis, 2008; Lyles and Schwenk, 1992; Putnam et al., 2016; Smith and Tushman, 2005). For example, Cohen and Levinthal (1990) suggest that absorptive capacity is grounded in diverse knowledge structures. These authors conclude that "diversity of knowledge plays an important role. In a setting in which there is uncertainty about the knowledge domains from which potentially useful information may emerge, a diverse background provides a more robust basis for learning because it increases the prospect that incoming information will relate to what is already known." (p. 131, italics added) Lyles and Schwenk (1992: 164) support this argument by arguing that "[m]ore complex [knowledge] structures allow more diverse information to be recognized and processed [...] As the knowledge structure becomes more complex, it [a firm] is able to encompass a greater number of new situations and problems."

We posit that firms following a contextual approach face a similar challenge. These firms need to enable individuals to develop diverse internal knowledge structures by

providing a supportive organizational context. For this purpose, they can utilize a set of distinct management activities.

Management task and main management activities. The main management task is to provide an organizational context that promotes the development of diverse individual knowledge structures. While Cohen and Levinthal (1990) argue that diverse knowledge structures allow for the development of innovation, we state that this holds equally true for processes of exploitation. In other words, diverse—and therefore potentially conflicting knowledge structures help individuals to consciously regard exploitation and exploration as equally possible modes, and to make thoughtful decisions between them. In this respect, diverse knowledge structures are critical for the perception of dissonance and for coping with uncertainty (Stark, 2009) and therefore for the balanced processing of conflicting demands. Smith and Tushman (2005), for example, highlight the importance of paradoxical cognitive frames in enabling managers to successfully attend to and effectively cope with the contradictory logics of exploitation and exploration (see also Lewis, 2000; Miron-Spektor et al., 2011). In their view, paradoxical "leaders recognize the conflicts between the [contrasting] agendas, and they accept and manage those conflicts." (Smith and Tushman, 2005: 529) Albeit focusing on top managers, the authors cite several conditions which seem to apply to all organizational members equally. For example, it is argued that an extensive exchange of information facilitates the ability to engage in paradoxical cognitive processes (i.e., processes that counteract a person's natural preference for consistency but allow her or him to embrace rather than avoid contradictions). Overall, paradoxical leadership—in combination with open communication and the opportunity of experimentation—helps

others to explore tensions and to manage paradoxes of learning (Andriopoulos and Lewis, 2009; Lewis, 2000).

While the literature predominately argues that "[s]ocialization, human resources, and team building practices, for instance, foster shared values and aid coordination, helping actors think and act ambidextrously on a daily basis" (Andriopoulos and Lewis, 2009: 696), we would highlight that an overly high level of socialization and shared values may also amplify processes of coherent groupthink (Janis, 1982) and prevent the development of diverse knowledge structures. For example, Van de Ven (1986: 604) concluded that "[t]he more specialized, insulated, and stable an individual's job, the less likely the individual will recognize a need for change or pay attention to innovative ideas." Diverse knowledge structures—as for example provided by the introduction of *autonomous and self-organizing groups, redundant functions*, a *high-level of internal complexity* and *temporal linkages* (Van de Ven, 1986)—represent the precursor to contextual ambidexterity.

Diverse knowledge structures are developed further through different means such as constant job rotations, job enlargement, extracurricular training programs, organizational learning circles or cross-functional and switching project teams (Andriopoulos and Lewis, 2009). Based on ideas derived from organization development (e.g., Burke and Cooke, 2012), Rahim (2002: 225-226) refers to different intervention processes that facilitate the reframing of situations. These intervention processes are, for example, the introduction of organizational consultants or role plays. These techniques help individuals to acquire new knowledge that is needed to develop diverse (and conflicting) perspectives. Notably, while these management activities aim at enabling and empowering individuals, organizations are

essentially hierarchical systems, which is why power is lurking, and may (re-)enter the stage at any given moment.

#### Discussion

Informed by dialectical thinking (e.g., Benson, 1977) and related ideas derived from the work on organizational dualities, contradictions, and paradoxes (e.g., Andriopoulos and Lewis, 2009; Lewis, 2000; Putnam et al., 2016), we develop a conflict-centered perspective on ambidexterity. Locating the nexus of exploitation and exploration at different levels, i.e. the system/organization (sequential approach), the (inter-)unit (structural approach), and the individual (contextual approach), we uncover conflict as the theoretical micromechanism in each approach to ambidexterity. While constituting the microfoundation in all approaches, the function and type of conflict vary substantially across the different forms of ambidexterity and revolve around the key theme of unbalancing vs. balancing and separating-yet-integrating. Our theorizing sheds light on the nature and functioning of organizational/system, inter-unit, and individual-level conflicts. With this, we advance our understanding of how firms can be ambidextrous, and we highlight the idea that ambidexterity can be accomplished and managed with the help of distinct conflict management activities. These are geared toward either shifting the organization, balancing inter-organizational units, or enabling individuals to both exploit and explore.

Our theorization makes several unique contributions to existing literature. First, we contribute to the literature on microfoundations of organizational phenomena, in particular ambidexterity, by moving beyond the dominant view focusing on individual's backgrounds, skills, and decision making. Instead, we focus our attention on the role of

intra- but, above all, inter-unit and organizational conflicts—and how these function as relevant micro-macro links in the context of ambidexterity. That is, conflicts offer the constituting mechanism of how individuals aggregate to groups, to units, and to organizations acting ambidextrously. As such, we contribute to recent research on microfoundations that stresses the role of "individuals *plus* the relations between those individuals" (Salvato and Vassolo, 2017: 28), that is their social interactions, in explaining the origins and evolution of organizational phenomena. This moves us beyond behavioral strategy literature, which is concerned mostly with cognitive processes (Gavetti, 2012; see also Miron-Spektor et al., 2017). Rather, we build on previous research making the argument for a better integration of conflict research and organizational studies (Tjosvold et al., 2014: 560) by building theory around organizational ambidexterity as triggered, driven, and accomplished through conflicts.

Second, our theorization advances a multi-level model of ambidexterity. More specifically, we distinguish between the distinct yet interrelated levels of system/organization, unit, and individual. We relate this to distinct roles of conflicts in terms of shifting, balancing, and enabling. As such, we push the boundaries of our understanding of ambidexterity by highlighting how it can be managed actively, utilizing distinct conflict management activities. Notably, we conceive of these levels as nested. For example, Papachroni et al. (2016) illustrate how individual differences in perceptions of the tensions between innovation and efficiency are linked to organizational levels. In line with microfoundations reasoning, we thus explore how individuals and their micro-level actions

and cognitive processes aggregate to broader organizational phenomena, in our case ambidexterity.

This paves the way for a third contribution, in that our theorization is moving us closer to a combination and integration of the three distinct approaches of ambidexterity: sequential, structural, and contextual. This can be important not least because (over time) firms may experience different types (incremental or discontinuous) and rates (low or high velocity) of environmental dynamism (Schilke, 2014). For example, a firm acting in a relatively stable competitive environment and thus relying on contextual ambidexterity, is—triggered by environmental turmoil—forced to alter its ambidexterity strategy, that is, switch to a structural or sequential approach, respectively. Here, Raisch (2008) provides evidence of how firms, such as Nestle, BMW, or Siemens, over time, utilized different approaches to tackle particular challenges, such as develop radically new products. We envision unique dynamic capabilities to be critical to shift between and/or integrate different ambidexterity approaches. In this context, we expect that dynamic capabilities take the form of bundles of learnt and approved patterns and collective routines (Di Stefano et al., 2014; Zollo and Winter, 2002) geared toward systematically monitoring/sensing the firm's external environment as well as its internal knowledge base (Schreyögg and Kliesch-Eberl, 2007; Teece, 2007), and accordingly selecting, linking, and potentially combining different ambidexterity approaches through reconfiguring the firm's conflict management activities. Not least because environmental contingencies are increasingly complex and multilayered, we expect to a lesser extent merely periodical selection and reselection of single approaches (Birkinshaw et al., 2016), and instead a dynamic linking and temporal interlacing of *sequential*, *structural*, and *contextual* approaches to be of growing importance. Thereby, our perspective not only pave the way for a conceptual integration of different ambidexterity approaches but also contribute to a more processual, time-based understanding that systematically highlights contradictory requirements and countervailing forces, and explores how they can be mastered (Schreyögg and Sydow, 2010). Overall, our theorization moves beyond understanding ambidexterity as a static feature of an organization, merely grounded in the abilities of its top management, to see it rather as a higher-order capability that materializes through conflict management activities.

Figure 1 below provides an illustration of the key relationships in our multi-level theorizing. Notably, our theorization, highlighting the role of conflicts and conflict management, explores the ways and activities by which firms remain competitive and sustain their competitive advantage facing dynamically changing business environments. It opens up exciting avenues for future research on organizational ambidexterity, not least with regards to the relationship between different environmental characteristics and organizational response strategies.

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# Conclusions and avenues for future research

This paper develops the argument that conflicts work as a micromechanism through which organizational ambidexterity is accomplished. Taking into account that "conflict management can require interventions to reduce conflicts if there is too much, or intervention to promote conflict if there is too little" (Brown, 1983: 9, quoted from Rahim, 2002: 211), we highlight the role of conflict management, in contrast to conflict resolution

(Rahim, 2002: 207-208). By shifting the view toward ambidexterity as grounded in conflicts, we chart new territory for research on organizational ambidexterity and its underlying processes and activities, as well as the opportunities (and limits) of strategic management. Looking ahead, we see four main areas for future research: (1) *in-depth and multi-level studies on conflict and organizational ambidexterity*, (2) *integration and combination of different ambidexterity approaches*, (3) *ambidexterity as a dynamic capability*, and (4) *use of conflicts to manage ambidexterity across firm boundaries*.

First, we encourage research to explore the ordinary day-to-day activities through which (individuals in) organizations accomplish and enact conflicts (e.g., Jarzabowski et al., 2007; Salvato, 2009; Whittington, 2003) in—and potentially across—the different approaches toward ambidexterity. Ethnography might offer a useful research methodology to uncover the multi-level and complex relationships between individuals, units, and organizations in achieving and sustaining ambidexterity over time. Moreover, in line with existing research (e.g., Birkingshaw and Gupta, 2013; Schad et al., 2016), we suggest integrating research to understand organizational ambidexterity as a multi-level phenomenon.

A second promising area for future research is the conceptual integration of the different approaches toward ambidexterity. Most existing literature treats each approach largely independently (Birkinshaw et al., 2016). In contrast, empirical evidence shows that firms (over time) use specific combinations of strategies to achieve and maintain ambidexterity (e.g., House and Price, 2009; Raisch, 2008). For example, O'Reilly and Tushman (2013: 330) note that incumbent firms frequently approach breakthrough

technologies or new business models via structural separation and then switch (back) to the contextual approach after the exploratory unit has achieved a certain level of legitimacy. Similarly, Kauppila (2010: 284) illustrates how a Finnish firm used all three ambidexterity approaches and concluded that "[i]n reality, firms are likely to create ambidexterity through a combination of structural and contextual antecedents [...], rather than through any single organizational or interorganizational antecedent alone." Our approach locates the nexus of exploitation and exploration at different levels—i.e., the system/organization, the unit, and the individual—and therefore allows for an integrated and holistic perspective on organizational ambidexterity. While this may allow us to view the relationship between the different approaches of organizational ambidexterity as a nested phenomenon, the three forms may also be related to each other over time or even be complementary (see Van de Ven and Poole, 1995 for this idea). Overall, we encourage future research to study organizational ambidexterity as a distributed, multi-level phenomenon—thereby uncovering how the different ambidexterity approaches and the respective strategies for managing conflicts interplay and feed back into each other in a virtuous cycle across levels (individual, unit, organization) and over time.

Third, our theorizing stimulates dialog between—and advocates a stronger integration of—research on ambidexterity and dynamic capabilities (e.g., Di Stefano et al., 2014; Teece, 2007). In essence, our perspective suggests that ambidextrous organizations need to develop an overall capacity for dealing with tensions, contradictions, and paradoxes (e.g., Andriopoulos and Lewis, 2009; Schreyögg and Sydow, 2010) and that this capacity is grounded in the management of organizational conflicts. While this is accomplished

through conflict management activities within each approach of ambidexterity, switching modes may require unique higher-order capabilities. Here, we envision constant *monitoring* of both the organization and the environment, in particular their relationship (see Schreyögg and Kliesch-Eberl, 2007), in order to assess critically and potentially adapt and switch the ambidexterity approach. Based on our theorizing, we expect conflict management activities to play a prominent role in helping to explain how organizations switch approaches, in response to environmental shifts. Thus, we build on recent calls to "view ambidexterity as a capability rather than as a thing that is wholly divorced from the specific context in which tensions arise" (Nosella et al., 2012: 460; see also O'Reilly and Tushman, 2008; 2013). We urge future research to track and specify the mechanisms through which firms may accomplish the integration of and/or switch between different ambidexterity approaches. Here, Teece's (2007) framework of sensing (exploration), seizing (exploitation), and reconfiguring (asset orchestration to maintain an appropriate balance) may offer a suitable starting point (Birkinshaw et al., 2016). Our theorizing thus positions conflicts as a potential bridge to better integrate ambidexterity literature with research on dynamic capabilities.

Lastly, the locus of innovation (i.e., exploration) is moving beyond the boundaries of the traditional Chandlerian firm (e.g., Benner and Tushman, 2015). Thus, organizations increasingly rely on inter-organizational networks and alliances for balancing exploitation and exploration (Kauppila, 2010; Lavie and Rosenkopf, 2006; Lavie et al., 2010). We therefore encourage future research to apply and extend our conflict-centered perspective to include the management of inter-organizational conflicts (see Lumineau et al., 2015; Zeitz,

1980). The studies by Das and Teng (2000) and de Rond and Bouchikhi (2004), which both apply a conflict-oriented perspective to the management of strategic alliances, provide interesting insights to build on. Here, our theorizing suggests that particular conflict management activities may take an inter-organizational dimension.

In conclusion, research on organizational ambidexterity has become both broad and deep over the last years (O'Reilly and Tushman, 2013). However, our knowledge of how organizational ambidexterity is accomplished *on the ground* and how it manifests itself through daily organizational activities is still limited. Our paper aimed to shed new light on these issues by introducing conflict as the microfoundation of ambidexterity. Studying conflicts promises to offer theoretical and managerial insights into how firms handle the ubiquitous challenge of exploitation and exploration, and how they successfully maneuver through turbulent and discontinuous times.

## References

- Adler PS, Goldoftas B and Levine DI (1999) Flexibility versus efficiency? A case study of model changeovers in the Toyota production system. *Organization Science* 10(1): 43-68.
- Amason AC (1996) Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal* 39(1): 123-148.
- Anderson N, Potočnik K and Zhou J (2014) Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management* 40(5): 1297-1333.
- Andriopoulos C and Lewis MW (2009) Exploitation—exploration tensions and organizational ambidexterity: Managing paradoxes of innovation. *Organization Science* 20(4): 696-717.
- Argyris C and Schön DA (1978) *Organizational learning: A theory of action perspective*. Reading, MA: Addison-Wesley.

- Balagun J and Johnson G (2004) Organizational restructuring and middle manager sensemaking. *Academy of Management Journal* 47(4): 523-549.
- Barney J and Felin T (2013) What are microfoundations? *Academy of Management Perspectives* 27(2): 138-155.
- Bartunek JM and Moch MK (1987) First-order, second-order, and third-order change and organization development interventions: A cognitive approach. *Journal of Applied Behavioral Science* 23(4): 483-500.
- Benner MJ and Tushman ML (2003) Exploitation, exploration, and process management: The productivity dilemma revisited. *Academy of Management Review* 28(2): 238-256.
- Benner MJ and Tushman ML (2015) Reflections on the 2013 Decade Award—" Exploitation, exploration, and process management: The productivity dilemma revisited" Ten years later. *Academy of Management Review* 40(4): 497-514.
- Benson JK (1977) Organizations: A dialectical view. *Administrative Science Quarterly* 22(1): 1-21.
- Birkinshaw J and Gupta K (2013) Clarifying the distinctive contribution of ambidexterity to the field of organization studies. *Academy of Management Perspectives* 27(4): 287-298.
- Birkinshaw J, Zimmermann A and Raisch S (2016) How do firms adapt to discontinuous change? Bridging the dynamic capabilities and ambidexterity perspectives. *California Management Review* 58(4): 36-58.
- Bledow R, Frese M, Anderson N, Erez M and Farr J (2009) A dialectic perspective on innovation: Conflicting demands, multiple pathways, and ambidexterity. *Industrial and Organizational Psychology* 2(3): 305-337.
- Boumgarden P, Nickerson J and Zenger TR (2012) Sailing into the wind: Exploring the relationships among ambidexterity, vacillation, and organizational performance. *Strategic Management Journal* 33(6): 587-610.
- Bower JL (1970) *Managing the Resource Allocation Process*. Boston, MA: Harvard Business School Press.
- Brown LD (1983) *Managing Conflict at Organizational Interfaces*. Reading, MA: Addison-Wesley.
- Brown SL and Eisenhardt KM (1997) The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly* 42(1): 1-34.
- Burgelman RA (1994) Fading memories: A process theory of strategic business in dynamic environments. *Administrative Science Quarterly* 39(1): 24-56.
- Burke B and Cooke B (2012) Review Article: The past, present and future of organization development: Taking the long view. *Human Relations* 65(11): 1395-1429.

- Burns T and Stalker GM (1961) *The Management of Innovation*. London: Tavistock Publications.
- Cantarello S, Martini A and Nosella A (2012) A multi-level model for organizational ambidexterity in the search phase of the innovation process. *Creativity and Innovation Management* 21(1): 28-48.
- Cao Q, Gedajlovic E and Zhang H (2009) Unpacking organizational ambidexterity: Dimensions, contingencies, and synergistic effects. *Organization Science* 20(4): 781-796.
- Chesbrough H and Rosenbloom RS (2002) The role of business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change* 11(3): 529-555.
- Cohen WM and Levinthal DA (1990) Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly* 35(1): 128-152.
- Coser LA (1956) The Functions of Social Conflict. Glencoe, IL: Free Press.
- Cox T (1991) The multicultural organization. *Academy of Management Perspective* 5(2): 34-47.
- Cyert RM and March JG (1963) *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice-Hall.
- Danneels E (2002) The dynamics of product innovation and firm competences. *Strategic Management Journal* 23(12): 1095-1121.
- Danneels E (2008) Organizational antecedents of second-order competences. *Strategic Management Journal* 29(5): 519-543.
- Danneels E (2011) Trying to become a different type of company: Dynamic capability at Smith Corona. *Strategic Management Journal* 32(1): 1-31.
- Danneels E, Provera B and Verona G (2013) (De-)institutionalizing organizational competence: Olivetti's transition from mechanical to electronic technology (Working Paper Bocconi University).
- Das TK and Teng B-S (2000) Instabilities of strategic alliances: An internal tensions perspective. *Organization Science* 11(1): 77-101.
- de Rond M and Bouchikhi H (2004) On the dialectics of strategic alliances. *Organization Science* 15(1): 56-69.
- Di Stefano G, Peteraf M and Verona G (2014) The organizational drivetrain: A road to integration of dynamic capabilities research. *Academy of Management Perspectives* 28(4): 307-327.
- Dougherty D (1992) Interpretive barriers to successful product innovation in large firms. *Organization Science* 3(2): 179-202.
- Duncan RB (1976) The ambidextrous organization: Designing dual structures for innovation. In: Kilmann RH, Pondy LR and Slevin D (eds.) *The Management of*

- *Organization Design: Strategies and Implementation.* New York, NY: North Holland, pp. 167-188.
- Eisenhardt KM, Furr NR and Bingham CB (2010) Microfoundations of performance: Balancing efficiency and flexibility in dynamic environments. *Organization Science* 21(6): 1263-1273.
- Fang C, Lee J and Schilling MA (2010) Balancing exploration and exploitation through structural design: The isolation of subgroups and organizational learning. *Organization Science* 21(3): 625-642.
- Farjoun M (2010) Beyond dualism: Stability and change as a duality. *Academy of Management Review* 35(2): 202-225.
- Felin T and Foss NJ (2005) Strategic organization: A field in search of micro-foundations. *Strategic Organization* 3(4): 441-455.
- Felin T, Foss NJ and Ployhart RE (2015) The microfoundations movement in strategy and organization theory. *Academy of Management Annals* 9(1): 575-632.
- Felin T, Foss NJ, Heimeriks KH and Madsen TL (2012) Microfoundations of routines and capabilities: Individuals, processes, and structure. *Journal of Management Studies* 49(8): 1351-1374.
- Follett MP (1925/1996) Constructive conflict. In: Graham P (ed.) *Mary Parker Follett: Prophet of Management*. Boston, MA: Harvard Business School Press, pp. 67-86.
- Gavetti G (2012) Toward a behavioral theory of strategy. *Organization Science* 23(1): 267-285.
- Gibson CB and 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.
- Gilbert CG (2005) Unbundling the structure of inertia: Resource versus routine rigidity. *Academy of Management Journal* 48(5): 741-763.
- Gilbert CG (2006) Change in the presence of residual fit: Can competing frames coexist? *Organization Science* 17(1): 150-167.
- Gupta AK, Smith KG and Shalley CE (2006) The interplay between exploration and exploitation. *Academy of Management Journal* 49(4): 693-706.
- Güttel WH and Konlechner SW (2009) Continuously hanging by a thread: Managing contextually ambidextrous organizations. *Schmalenbach Business Review* 61(2): 150-172.
- Harris SG (1994) Organizational culture and individual sensemaking: A schema-based perspective. *Organization Science* 5(3): 309-321.

- Helfat CE and Peteraf MA (2015) Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic Management Journal* 36(6): 831-850.
- Henkin AB and Singleton CA (1984) Conflict as an asset: An organizational perspective. *International Review of Modern Sociology* 14(2): 207-220.
- Heracleous L, Papachroni A, Andriopoulos C and Gotsi M (2017) Structural ambidexterity and competency traps: Insights from Xerox PARC. *Technological Forecasting and Social Change* 117: 327-338.
- House CH and Price RL (2009) *The HP Phenomenon: Innovation and Business Transformation*. Redwood City, CA: Stanford University Press.
- Janis IL (1982) *Groupthink: Psychological Studies of Policy Decisions and Fiascoes*. Boston, MA: Houghton Mifflin.
- Jansen JJP, George G, van den Bosch FAJ and Volberda HW (2008) Senior team attributes and organizational ambidexterity: The moderating role of transformational leadership. *Journal of Management Studies* 45(5): 982-1007.
- Jansen JJP, Tempelaar MP, van den Bosch FAJ and Volberda HW (2009) Structural differentiation and ambidexterity: The mediating role of integration mechanisms. *Organization Science* 20(4): 797-811.
- Jarzabkowski P, Balogun J and Seidl D (2007) Strategizing: The challenges of a practice perspective. *Human Relations* 60(1): 5-27.
- Jehn KA (1995) A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly* 40(2): 246-282.
- Jehn KA (1997) A qualitative analysis of conflict types and dimensions in organizational groups. *Administrative Science Quarterly* 42(3): 530-557.
- Jehn KA and Bendersky C (2003) Intragroup conflict in organizations: A contingency perspective on the conflict-outcome relationship. *Research in Organizational Behavior* 25: 187-242.
- Junni P, Sarala RM, Taras V and Tarba SY (2013) Organizational ambidexterity and performance: A meta-analysis. *Academy of Management Perspectives* 27(4): 299-312.
- Kauppila O-P (2010) Creating ambidexterity by integrating and balancing structurally separate interorganizational partnerships. *Strategic Organization* 8(4): 283-312.
- Kauppila O-P and Tempelaar MP (2016) The social-cognitive underpinnings of employees' ambidextrous behaviour and the supportive role of group managers' leadership. *Journal of Management Studies* 53(6): 1019-1044.
- Lavie D and Rosenkopf L (2006) Balancing exploration and exploitation in alliance formation. *Academy of Management Journal* 49(4): 797-818.

- Lavie D, Stettner U and Tushman ML (2010) Exploration and exploitation within and across organizations. *Academy of Management Annals* 4(1): 109-155.
- Lawrence PR and Lorsch JW (1967) Differentiation and integration in complex organizations. *Administrative Science Quarterly* 12(1): 1-47.
- Leonard-Barton D (1992) Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal* 13: 111-125.
- Levinthal DA and March JG (1993) The myopia of learning. *Strategic Management Journal* 14: 95-112.
- Levitt B and March JG (1988) Organizational learning. *Annual Review of Sociology* 14: 319-340.
- Lewin K (1958) Group decision and social change. In: Maccoby EE, Newcomb TM and Hartley EL (eds.) *Readings in Social Psychology*. New York, NY: Holt, Rinehart and Winston, pp. 197-211.
- Lewis MW (2000) Exploring paradox: Toward a more comprehensive guide. *Academy of Management Review* 25(4): 760-776.
- Lewis MW, Andriopoulos C and Smith WK (2014) Paradoxical leadership to enable strategic agility. *California Management Review* 56(3): 58-77.
- Lumineau F, Eckerd S and Handley S (2015) Inter-organizational conflicts: Overview, challenges, and opportunities. *Journal of Strategic Contracting and Negotiation* 1(1): 42-64
- Lüscher LS and Lewis MW (2008) Organizational change and managerial sensemaking: Working through paradox. *Academy of Management Journal* 51(2): 221-240.
- Lyles MA and Schwenk CR (1992) Top management, strategy and organizational knowledge structures. *Journal of Management Studies* 29(2): 155-174.
- March JG (1991) Exploration and exploitation in organizational learning. *Organization Science* 2(1): 71-87.
- Miller D (1993) The architecture of simplicity. *Academy of Management Review* 18(1): 116-138
- Miron-Spektor E, Gino F and Argote L (2011) Paradoxical frames and creative sparks: Enhancing individual creativity through conflict and integration. *Organizational Behavior and Human Decision Processes* 116(2): 229-240.
- Miron-Spektor E, Ingram A, Keller J, Smith W and Lewis M (2017) Microfoundations of organizational paradox: The problem is how we think about the problem. *Academy of Management Journal* in press.
- Mom TJM, van den Bosch FAJ and Volberda HW (2007) Investigating managers' exploration and exploitation activities: The influence of top-down, bottom-up, and horizontal knowledge inflows. *Journal of Management Studies* 44(6): 910-931.

- Mom TJM, van den Bosch FAJ and Volberda HW (2009) Understanding variation in managers' ambidexterity: Investigating direct and interaction effects of formal structural and personal coordination mechanisms. *Organization Science* 20(4): 812-828.
- Nahavandi A and Malekzadeh AR (1988) Acculturation in mergers and acquisitions. *Academy of Management Review* 13(1): 79-90.
- Nelson RE (1989) The strength of strong ties: Social network and intergroup conflict in organizations. *Academy of Management Journal* 32(2): 377-401.
- Noda T and Bower JL (1996) Strategy making as iterated processes of resource allocation. *Strategic Management Journal* 17: 159-192.
- Nosella A, Cantarello S and Filippini R (2012) The intellectual structure of organizational ambidexterity: A bibliographic investigation into the state of the art. *Strategic Organization* 10(4): 450-465.
- O'Reilly CA and Tushman ML (2004) The ambidextrous organization. *Harvard Business Review* 82(4): 74-81.
- O'Reilly CA and Tushman ML (2008) Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. *Research in Organizational Behavior* 28(1): 185-206.
- O'Reilly CA and Tushman ML (2011) Organizational ambidexterity in action: How managers explore and exploit. *California Management Review* 53(4): 5-22.
- O'Reilly CA and Tushman ML (2013) Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives* 27(4): 324-338.
- O'Reilly CA and Tushman ML (2016) *Lead and Disrupt: How to Solve the Innovator's Dilemma*. Stanford, CA: Stanford University Press.
- Papachroni A, Heracleous L and Paroutis S (2016) In pursuit of ambidexterity: Managerial reactions to innovation-efficiency tensions. *Human Relations* 69(9): 1791-1822.
- Pettigrew AM (1977) Strategy formulation as a political process. *International Studies of Management & Organization* 7(2): 78-87.
- Plambeck N and Weber K (2010) When the glass is half full and half empty: CEOs' ambivalent interpretations of strategic issues. *Strategic Management Journal* 31(7): 689-710.
- Putnam LL, Fairhurst GT and Banghart S (2016) Contradictions, dialectics, and paradoxes in organizations: A constitutive approach. *Academy of Management Annals* 10(1): 65-171.
- Rahim MA (2002) Toward a theory of managing organizational conflict. *International Journal of Conflict Management* 13(3): 206-235.
- Raisch S (2008) Balanced structures: Designing organizations for profitable growth. *Long Range Planning* 41(5): 483-508.

- Raisch S, Birkinshaw J, Probst G and Tushman ML (2009) Organizational ambidexterity: Balancing exploitation and exploration for sustained performance. *Organization Science* 20(4): 685-695.
- Reese HW (1982) A comment on the meanings of 'dialectics'. *Human Development* 25(6): 423-429.
- Rogan M and Mors ML (2014) A network perspective on individual-level ambidexterity in organizations. *Organization Science* 25(6): 1860-1877.
- Romanelli E and Tushman ML (1994) Organizational transformation as punctuated equilibrium: An empirical test. *Academy of Management Journal* 37(5): 1141-1166.
- Rosenbloom RS (2000) Leadership, capabilities, and technological change: The transformation of NCR in the electronic era. *Strategic Management Journal* 21(10-11): 1083-1103.
- Rothman NB, Pratt MG, Rees L and Vogus TJ (2017) Understanding the dual nature of ambivalence: Why and when ambivalence leads to good and bad outcomes. *Academy of Management Annals* 11(1): 33-72.
- Salvato C (2009) Capabilities unveiled: The role of ordinary activities in the evolution of product development processes. *Organization Science* 20(2): 384-409.
- Salvato C and Vassolo R (2017) The sources of dynamism in dynamic capabilities. *Strategic Management Journal* in press.
- Schad J, Lewis MW, Raisch S and Smith WK (2016) Paradox research in management science: Looking back to move forward. *Academy of Management Annals* 10(1): 5-64.
- Schein EH (1996) Kurt Lewin's change theory in the field and in the classroom: Notes toward a model of managed learning. *Systems Practice* 9(1):27-47.
- Schilke O (2014) On the contingent value of dynamic capabilities for competitive advantage: The nonlinear moderating effect of environmental dynamism. *Strategic Management Journal* 35(2): 179-203.
- Schreyögg G and Kliesch-Eberl M (2007) How dynamic can organizational capabilities be? Towards a dual-process model of capability dynamization. *Strategic Management Journal* 28(9): 913-933.
- Schreyögg G and Sydow J (2010) Organizing for fluidity? Dilemmas of new organizational forms. *Organization Science* 21(6): 1251-1262.
- Siggelkow N and Levinthal DA (2003) Temporarily divide to conquer: Centralized, decentralized, and reintegrated organizational approaches to exploration and adaptation. *Organization Science* 14(6): 650-669.
- Simmel G (1964) Conflict & The Web of Group-affiliations. New York, NY: Free Press.
- Simon HA and March JG (1958) Organizations. New York, NY: Wiley.

- Simsek Z (2009) Organizational ambidexterity: Towards a multilevel understanding. *Journal of Management Studies* 46(4): 597–624.
- Simsek Z, Heavey C, Veiga JF and Souder D (2009) A typology for aligning organizational ambidexterity's conceptualizations, antecedents, and outcomes. *Journal of Management Studies* 46(5): 864-894.
- Smith WK (2014) Dynamic decision making: A model of senior leaders managing strategic paradoxes. *Academy of Management Journal* 57(6): 1592-1623.
- Smith WK and Lewis MW (2011) Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review* 36(2): 381-403.
- Smith WK and Tushman ML (2005) Managing strategic contradictions: A top management model for managing innovation streams. *Organization Science* 16(5): 522-536.
- Stark D (2009) *The Sense of Dissonance: Accounts of Worth in Economic Life.* Princeton, CA: Princeton University Press.
- Sydow J, Schreyögg G and Koch J (2009) Organizational path dependence: Opening the black box. *Academy of Management Review* 34(4): 689-709.
- Taylor SE and Crocker J (1981) Schematic bases of social information processing. In: Higgins ET, Herman CP and Zanna MP (eds.) *Social Cognition: The Ontario Symposium*. Hillsdale, NJ: Lawrence Erlbaum Associates, pp. 89-134.
- Teece DJ (2007) Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal* 28(13): 1319-1350.
- Tjosvold D (1985) Implications of controversy research for management. *Journal of Management* 11(3): 21-37.
- Tjosvold D (2008) The conflict-positive organization: It depends upon us. *Journal of Organizational Behavior* 29(1): 19-28.
- Tjosvold D, Wong ASH and Chen NYF (2014) Constructively managing conflicts in organizations. *Annual Review of Organizational Psychology and Organizational Behavior* 1(1): 545-568.
- Tripsas M (2013) Exploring the interaction between organizational identity and organizational design in technological transitions (Working Paper Boston College).
- Tripsas M and Gavetti G (2000) Capabilities, cognition, and inertia: Evidence from digital imaging. *Strategic Management Journal* 21(10-11): 1147-1161.
- Turner N, Swart J and Maylor H (2013) Mechanisms for managing ambidexterity: A review and research agenda. *International Journal of Management Reviews* 15(3): 317-332.
- Tushman ML and Anderson P (1986) Technological discontinuities and organizational environments. *Administrative Science Quarterly* 31(3): 439-465.

- Tushman ML and O'Reilly CA (1996) Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review* 38(4): 8-30.
- Tushman ML and Romanelli E (1985) Organizational evolution: A metamorphosis model of convergence and reorientation. *Research in Organizational Behavior* 7(1): 171-222
- Tushman ML, Smith WK and Binns A (2011) The ambidextrous CEO. *Harvard Business Review* 89(6): 74-80.
- Van de Ven AH (1986) Central problems in the management of innovation. *Management Science* 32(5): 590-607.
- Van de Ven AH and Poole MS (1995) Explaining development and change in organizations. *Academy of Management Review* 20(3): 510-540.
- Watzlawick P, Weakland J and Fisch R (1974) *Change: Principles of problem formation and problem resolution*. New York, NY: Norton.
- Weick KE (1995) Sensemaking in Organizations. Thousand Oaks, CA: Sage.
- Weick KE and Quinn RE (1999) Organizational change and development. *Annual Review of Psychology* 50(1): 361-386.
- Whittington R (2003) The work of strategizing and organizing: For a practice perspective. *Strategic Organization* 1(1): 117-125.
- Winter SG (2013) Habit, deliberation, and action: Strengthening the microfoundations of routines and capabilities. *Academy of Management Perspectives* 27(2): 120-137.
- Zeitz G (1980) Interorganizational dialectics. *Administrative Science Quarterly* 25(1): 72-88.
- Zimmermann A, Raisch S and Cardinal LB (2017) Managing persistent tensions on the frontline: A configurational perspective on ambidexterity. *Journal of Management Studies* in press
- Zollo M and Winter SG (2002) Deliberate learning and the evolution of dynamic capabilities. *Organization Science* 13(3): 339-351.

## **Appendix**

Table 1: Changing roles of conflict as the microfoundation of organizational ambidexterity.

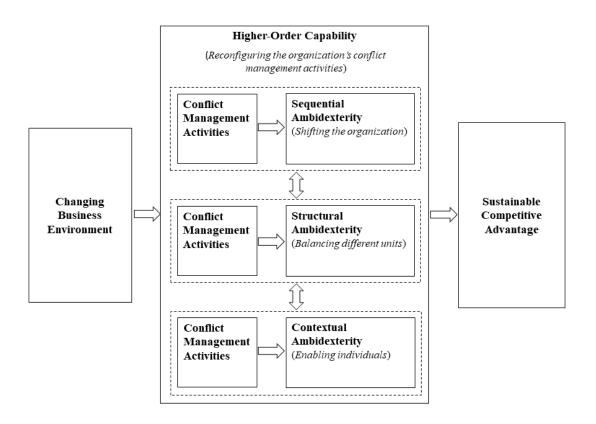
	Organizational Ambidexterity		
	Sequential	Structural	Contextual
Main Idea	Conflicts allow for breaking open	Conflicts allow for balancing opposing	Conflicts allow for individuals to see

Level of Analysis	established organizational structures and patterns of behavior System	structures and patterns of behavior by establishing a relationship between them	situations from different perspectives and to deal consciously with contradictory demands
Function of Conflict	Shifting between exploitation and exploration	Balancing exploitation and exploration	Enabling individuals to both exploit and explore
Mechanism	Disintegration (system-destroying)	Separation and integration (system-maintaining)	Separation and integration (system-maintaining)
Type of Conflict	Core conflicts	Peripheral conflicts	Inner conflicts
Management Task	Timely introduction of core conflicts, objectifying conflicts, power alignment to proponents of change	Facilitating yet limiting peripheral conflicts in order to keep the organization in a tensional state, equal power alignment	Providing an organizational context that supports diverse individual knowledge structures and inner conflicts, equal power alignment
Main Management Activities	<ul> <li>Shift in internal knowledge flows</li> <li>Projects in unrelated markets</li> <li>Hire employees with diverse backgrounds</li> <li>Strategy workshops</li> <li>Consultancies and outsiders</li> <li>Inter-organizational networks and alliances</li> <li>Interest-based third parties</li> <li>Resource allocation to proponents of change</li> </ul>	<ul> <li>Facilitating productive dialogues</li> <li>Collaborative problem solving and joint decision making</li> <li>Cross-unit teams and task forces</li> <li>Resource and information flows between different units</li> <li>Transparent and non-discriminating decision rules</li> <li>Diversity in key committees</li> <li>Explicit treatment of diversity in mission statements</li> <li>Appropriate appraisal and reward systems</li> <li>Companywide social events</li> </ul>	<ul> <li>Extensive exchange of information</li> <li>Open communication</li> <li>Opportunity for experimentation</li> <li>Contact with the environment and boundary spanners</li> <li>Introduction of self-organizing groups</li> <li>Redundant functions and slack</li> <li>Temporal linkages</li> <li>Job rotation and enlargement</li> <li>Extracurricular training programs</li> <li>Organizational learning circles</li> <li>Cross-functional and switching project teams</li> </ul>

- Collaborative conflict management
- Risk-taking atmosphere
- Rights-based conflict resolution
- Interest-based third parties
- Reducing power discrepancies

- Consultancies and outsiders
- Role plays
- Lurking power

Figure 1: How conflicts can be managed over the course of organizational ambidexterity.



Source: Own illustration, based on Birkinshaw et al., 2016: 40.