

# From a Label to a Meta-Theory of Paradox:

If we change the way we look at things, the things we look at change

# Summary

What we found: We argue that similarly to a paradigm shift in physics from a linear, Newtonian approaches to paradoxical quantum theory, paradox theory enables a paradigm shift in management science towards a better understanding of complexity. It all starts with a simple shift of management questions from either/or to both/and.

Why it matters: Shifting the question from either/or to both/and enables looking at a complex issue from different perspectives and bringing them together, thus finding new approaches to manage the complexity.

What next: We need to teach both/and-thinking in schools, universities and leadership development programs to enable complexity management. Further, bringing together scholars and practitioners to cocreate solutions will help to engage different perspectives and finding both/and approaches.

### Written by

Jennifer L. Sparr, University of Zurich Ella Miron-Spekor, INSEAD Marianne W. Lewis, University of Cincinnati Wendy K. Smith, University of Delaware

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### **Abstract**

Over the last 30 years, mounting insights into paradox have enabled a paradigm shift in organizational theory from linear, static, and rational toward more holistic, dynamic, and dualistic thinking. To gain increased insight into the nature and development of this scholarship, we curated articles from Academy of Management journals. We identified four approaches to paradox as a label, a lens, a theory, and a meta-theory. Pioneering and prototypical articles illustrate how each approach expands our understanding of paradox, elucidating unresolved issues in and between established literatures. The collection displays both the progression of abstraction and complexity in paradox scholarship over time, and the recursive process accentuating the value of each approach and their interplay, thus offering three contributions. First, our delineation of these approaches demonstrates the development of paradox scholarship, helping scholars situate their own work in this expanding canon, while inviting new scholars to find their entry point to engage with paradox. Second, by tracking the journey from label to meta-theory, we offer a model which may inform similar paths for other literatures. Third, the collection suggests that insights into paradox are fostering a paradigm shift from linear and binary toward more dynamic and holistic ontologies in the organizational sciences.

**Keywords**: paradox, theory development, paradigm development, paradigm shift, meta-theory

In today's complex and dynamic world, paradoxes –persistent interdependent contradictions – have become increasingly relevant for understanding and leading organizations (Smith & Lewis, 2011; Schad et al., 2016)<sup>1</sup>. Spanning both macro and micro issues, paradox scholarship explores how organizations and their members cope with competing demands, interests, perspectives, and identities. Rather than prioritizing or stressing one demand at the expense of others, paradox scholarship invites both/and strategies, shifting from a linear, static, and rational approach to a more holistic, dynamic, and complex outlook. Adopting an alternative outlook changes how we understand and analyze organizational phenomena. For example, early perspectives depicted exploration and exploitation as two ends of a continuum (Gupta, Smith & Shalley, 2006), whereas paradox theory conceptualizes these competing demands as interdependent and mutually enabling, thus spurring integrative strategies that simultaneously address both (Smith & Tushman, 2015). In this Academy of Management Collections article, we curate Academy of Management publications from more than three decades to illustrate how paradox research has developed over time, impacting understandings, even inviting a paradigm shift, in the organizational sciences. Table 1 shows all 20 articles of this collection.

Table 1 about here

Through our retrospection, we found that scholars engaged paradox through four distinct approaches – strategies for changing the way we look at things and thus introducing new ideas and practices in the field of organizational theory. We guide readers through the journey from valuing paradox as: 1) a label, 2) a lens, 3) a theory, and 4) a meta-theory. These approaches differ in how scholars understand and adopt paradox insights; however, they are not mutually exclusive. Rather, they build on one another, with scholars often combining approaches in their work. For example, scholars may use paradox as a lens to understand a

<sup>&</sup>lt;sup>1</sup> We invite researchers who are not familiar with the paradox literature and seek a comprehensive and structured introduction to read the *Academy of Management Annals* articles by Schad et al. (2016) and Putnam et al. (2016).

particular phenomenon, while their findings might contribute to paradox theory development. For each approach, we identify one or two pioneering article(s) that developed integral foundations, paving the way for paradox work that follows. We then spotlight three to four prototypical articles that illustrate the approach. By doing so, we demonstrate how scholars apply each approach to paradox in different literatures, challenging assumptions and exploring new research questions. In addition, we discuss how these paradox approaches facilitate the integration of seemingly unrelated, even conflicting theories, which might be especially valuable for studying complexity and grand challenges.

The curated exemplars offer a unique opportunity to explore the progression of paradox scholarship. Each subsequent approach has empowered greater specificity and sophistication in understanding and applications of paradox. Doing so has allowed the literature to flourish, informing more phenomena, and continuing to deepen theory development. Paradox scholarship further offers a model for the progression of other emerging ideas. Reflecting on the expanding paradox literature, we have witnessed how a concept is established as relevant and important for scientific investigation, how it is defined and redefined until it reaches broad acceptance while remaining open to vital critique, how theory is developed around the concept, and how meta-theory develops through application across varied phenomena and theories (see Figure 1 for a visualization of this development).

Insert Figure 1 here

Finally, our categorization of paradox approaches reveals a provocative insight – a broader paradigm shift across the organizational sciences. Kuhn (1962) predicted that an established paradigm (i.e., a distinct set of guiding concepts, theories, standards, and methods on what constitute legitimate contributions to a field) eventually reaches its limits in terms of explaining phenomena in our complex and dynamic world. For example, while leadership scholars have developed a long list of unidimensional, linear concepts to explain leadership

effectiveness, these concepts fail to fully explain effective leadership in an intricate and everchanging world of work (Sparr, Waldman & Kearney, in press; Volk et al., 2022). According to Kuhn (1962), such accumulating anomalies result in a crisis, from which scientific revolution is sparked and new paradigms emerge.

Instead, we find that paradox offers a means of triggering a paradigm shift by changing the research questions. For example, the famous Gestalt psychologist's duck-rabbit figure invites us to consider the question "Do you see a duck or a rabbit?" thereby shifting our focus between these alternative options. Paradox insights further change the question to ask, "What if we see both a duck and a rabbit?" (see Figure 2), thus reconsidering both how and what we see. Similarly, instead of asking "Should I take control or empower my team?" leaders gain new perspectives when asking "How can I do both, gaining control while empowering my team?" (Lüscher & Lewis, 2008; Zhang et al., 2015). By changing the question, paradox insights invite scholars to explore tensions, building from existing approaches to contrast and integrate opposing elements, thus fostering new discoveries that change our perceptions (Rothenberg, 1996). We suggest that understanding paradox, applicable across theories and phenomena, may energize a paradigm shift in the organizational sciences more broadly.

Insert Figure 2 here

### **Looking Back: Four Paradox Approaches Changed the Way We Look at Things**

Unlike a traditional literature review that seeks a structured analysis of a body of knowledge, the *Academy of Management Collection* empowers a curated retrospection highlighting key ideas and depicting the overall arc of a literature. Curating articles for the collection was both easy and challenging for us as authors. Like crafting a museum exhibit, we applied structured discipline, as well as artistic design, to select articles. We first identified more than 80 articles in the Academy of Management publications through a simple keyword

search for "paradox", and then complemented them with important pieces on dialectics based on the expertise in our author team<sup>2</sup>. These publications span levels of analysis, contexts, phenomena, audiences, and purposes, applying a variety of methods from newer techniques for assessing and modeling paradox to long-standing qualitative, quantitative, and mixed methods. We noted how the assumptions about paradox have shaped discourses of numerous literatures, such as creativity and innovation, identity, leadership, strategy, institutional theory, and beyond. We then surveyed the publications, exploring similarities and distinctions in order to categorize articles and understand the scholarship's trajectory. To do so, we applied the principles of optimal distinctiveness (Brewer, 1991), seeking articles that differ from each other in terms of contribution to the perspective, while aligning within common themes. We noticed that insights about paradox varied in phenomena, levels of analysis, methodologies and even ontologies, yet we observed similarities in how scholars applied paradox insights in their scholarship. We describe these varied applications as an approach. Moreover, we began to see a progression of approaches over time, moving toward greater complexity and abstraction. Our curated collection illustrates four distinct approaches in the development of the paradox literature.

For each approach, we included a pioneering article that set the foundational insights and paved the way for future scholarship, and several prototypical examples that applied the approach. With such a vast array of articles, we encountered many possibilities that display the richness and nuance of each approach. We identified exemplars that both illustrated each approach, while also illuminated the diversity of applications. Given the breadth of paradox scholarship, we could have easily identified different options both within the Academy of

from dialectics research as well.

<sup>&</sup>lt;sup>2</sup> Dialectics and paradox both address insights about dynamically shifting interwoven oppositions, such that scholars often use the terms interchangeably (see Farjoun, 2019). Elsewhere, scholars have unpacked nuanced distinctions, as well as the interactions between these two concepts (see Hargrave & Van de Ven, 2017; Raisch et al., 2018), without yet converging on key differences. As we have argued elsewhere, the similarities between these two contexts often outweigh the differences (see Lewis & Smith, 2022). In this article, we use the label of paradox given the explosion of work that uses this construct. To be inclusive, we draw on illustrative examples

Management journals and beyond. As per the focus of the *Academy of Management Collections*, we focused only on Academy of Management publications. Our goal in choosing articles was to be exemplary, rather than comprehensive. Table 2 offers an overview of the four approaches.

Insert Table 2 here

Using Paradox as Label – 'It's a Paradox!'

While we can trace paradox scholarship back to the ancient Greeks (for an overview see Schad et al., 2016), related research in organizational and management theory started to develop roughly thirty years ago when scholars observed the dynamic and interwoven nature of competing demands. While some scholars drew on understandings of dialectics (i.e., Benson, 1977), others built on insights about paradox (i.e., Cameron, 1986; Poole & Van de Ven, 1989). Scholars began to understand tensions that they encountered as composed of contradictory, yet interrelated and persistent elements, and worthy of deeper research. The first approach that we identified focused on using paradox as a label, in which authors described a relevant tension in their work, calling out paradox as a focus of rigorous research, and thereby changing how we look at and approach such phenomena. Scholars did not necessarily apply an explicit, clear or shared definition of paradox, but rather started to focus on paradox as the *what* by asking what phenomena is or is not a paradox.

Poole and Van de Ven's (1989) article "Using Paradox to Build Management and Organizational Theories," published in the Academy of Management Review (1989) offers a pioneering article for using paradox as a label. The authors raised the question of "whether the world is consistent or whether it is actually inherently paradoxical" (p. 576). In contrast to the traditional assumption that contradictory demands and conclusions reflect poor theory building or muddled sensemaking, they urged scholars to look for theoretical tensions or oppositions and to use them to stimulate the development of more encompassing

understandings. They suggested that "theories are not statements of some ultimate 'truth' but rather are alternative cuts of a multifaceted reality" (p. 563) and illustrate how recognizing and working with paradox advances the understanding of complex phenomena, and thus informs theory building. With their pioneering work, Poole and Van de Ven positioned organizational paradoxes as legitimate, even vital phenomena that should be accepted, analyzed, and managed.

Prototypical articles that use paradox as a label include Amason (1996), Audia, Locke and Smith (2000), Seo and Creed (2002), and Denis, Lamothe and Langley (2001). These articles all identify an inconsistency, contradiction, or tension between elements, labeling this relationship as a paradox and noting how their juxtaposition enables deeper understanding beyond what we learn from focusing on one of those elements alone. These articles examine varied facets and levels of complexity and dynamism, highlighting the many applications of paradox insights.

Amason's (1996) article "Strategic Decision Making: Resolving a Paradox for Top Management Teams" in the Academy of Management Journal describes inconsistent effects of conflict on strategic decision making in top management teams. Conflicts enhance decision making, yet also impair consensus and affective acceptance in the team. Instead of reconciling this inconsistency by asking which effect is stronger, Amason instead saw these opposing elements and the tension between them as an opportunity for theory development. By considering both positive and negative consequences of conflict and by measuring cognitive and emotional processes, he demonstrates that cognitive conflict contributes to decision quality, while affective conflict is detrimental. By depicting the challenge as paradoxical, this shifted the author's approach and generated new insights. In short, Amason (1996) provides a more nuanced understanding, inspiring scholars to consider the paradoxical nature – both the beneficial and detrimental effects – of group conflict. At this early stage of the scholarship,

paradox served as a label to refer to complexity and reconcile inconsistent findings in different literatures.

Audia, Locke and Smith's (2000) article "The Paradox of Success: An Archival and a Laboratory Study of Strategic Persistence Following Radical Environmental Change" in the Academy of Management Journal describes the "paradox of success", such that over time success fuels failure. Their review highlights a pattern in which successful organizations continue to exploit their once effective strategies and fail to change, even amid radical environmental shifts. They found that success spurs eventual decline when organizations avoid the tension between strategic persistence and adaptability. In this work, both contradiction and interdependency of the paradoxical elements are recognized, as well the potential for reinforcing cycles (Lewis, 2000; Putnam, 1986). Recognizing the paradoxical relationships between success and failure, persistence and adaptability, this article has sparked ongoing research on ambidexterity and dynamic organizational capabilities.

Seo and Creed (2002) also use paradox as a label in their work "Institutional Contradictions, Praxis, and Institutional Change: A Dialectical Perspective" in the Academy of Management Review. In institutional theory, scholars note ongoing tensions between structure and agency that inform institutionalization, struggling to determine if structure constrains and defines human action, or if human action informs and challenges structures. By drawing on a dialectical perspective, Seo and Creed (2002) framed this question as a theoretical paradox, thus moving beyond the either/or thinking that highlights contradiction, to offer insights about the interdependence and reinforcing nature of structure and human agency. Doing so invited institutional scholars to consider more deeply both the role of humans and their interactions with structures, described as embedded agency. In their work, they detected the mutually reinforcing aspect of the contradictory elements, thus reaching an even deeper understanding of a true paradox.

Denis, Lamothe and Langley's (2001) article "The Dynamics of Collective Leadership and Strategic Change in Pluralistic Organizations" in the Academy of Management Journal examined how adopting both forceful and approval-oriented leadership serves to manage tensions between stability and adaptability in strategic change. Similar to the other studies, this article recognized paradox as interdependent contradictions, yet it also highlights a dynamic equilibrium between the elements. The article has since informed research on tensions of leadership, strategy, and change.

These publications all label contradicting yet interdependent relationships as paradoxical. Importantly, scholarship adopting this approach started to legitimize paradox as a focus of study to enrich understandings of organizational complexity and dynamics. Doing so increased engagement with paradox and spurred future approaches that clarified and deepened insights.

## Applying a Paradox Lens to Study Complex Phenomena

Moving beyond a label, a second approach uses paradox as a lens, both for understanding phenomena and for building theory. By explicating underlying assumptions of paradox and outlining a shared framework, these studies help sharpen the focus on tensions, their interplay, and their management. A paradox lens urges scholars to question their own and their research subject's underlying assumptions and to ask how we might engage contradictions simultaneously. In contrast to either/or thinking that chooses between competing demands and articulates contingencies, a paradox lens involves both/and thinking.

With her pioneering article "Exploring Paradox: Towards a More Comprehensive Guide", which won the Academy of Management Review Best Paper Award, Lewis (2000) helped researchers move beyond labeling paradoxical phenomena to investigate their complexity and start unpacking their relationships. Lewis defined paradox as "contradictory yet interrelated elements—elements that seem logical in isolation but absurd and irrational when appearing simultaneously" (p. 760). She described the paradox lens as "a tool to help

researchers explore paradoxical tensions, reinforcing cycles, and their management" (p. 761). Lastly, she reviewed exemplary studies of paradoxes in organizations, grouped around paradoxes of learning, organizing, and belonging. Thus, while Poole and Van de Ven (1989) marked organizational paradoxes as an opportunity for theory building and focus of research, Lewis (2000) extended paradox as a lens to deepen understandings of complex phenomena.

Four examples offer prototypes of how scholars use paradox as lens across varied phenomena, including Lüscher and Lewis (2008), Kreiner, Hollensbe and Sheep (2006), Smith, Baskerville Watkins, Ladge and Carlton (2019) and Farjoun (2010). These articles explore how to simultaneously engage contradictory elements and challenge prevalent either/or thinking in their literatures, even as they apply the paradox lens in varied ways to understand peoples' perceptions and actions when navigating organizational tensions.

Lüscher and Lewis' (2008) action research, "Organizational Change and Managerial Sensemaking: Working Through Paradox" in the Academy of Management Journal, develops a process for "working through paradox" as middle managers grappled with a major restructuring at LEGO. Seeking to transform paradox "from a label to a lens" (p. 211), the authors used tools of "paradoxical inquiry" (p. 234). Specifically, the authors guided the managers in explaining the "mess" of their problems, using either/or questions to surface tensions vexing their understandings, and finally applying integrative both/and questions to explore underlying paradoxes toward a more "workable certainty" (p. 228).

In their article "Where is the 'Me' among the 'We'? Identity Work and the Search for Optimal Balance" in the Academy of Management Journal, Kreiner, Hollensbe and Sheep (2006) studied identity tensions, developing a model of identity work to handle imbalance. At the time of this study, identification literature distinguished between personal and social identities, yet little was known about how individuals align their varied identities and address tensions between them. The authors' work used the paradox lens to address how individuals can be true to both their personal identity and their social identity. Leveraging their data, they

surfaced opposing identity demands and highlight integrating tactics that individuals use to negotiate the tensions. The resulting focus on differentiating, integrating and dual-function tactics provides insights into how both/and thinking – the paradox lens – can foster optimal balance in navigating identities.

Smith, Baskerville Watkins, Ladge and Carlton's (2019) article, "Paradoxical Effects of Intersectional Invisibility on the Career Experiences of Executive Black Women" in the Academy of Management Journal used a paradox lens to better understand individuals' challenges in managing the interplay between gender and race. The authors found that Black women experience tensions between gender and race as both negative and positive. A paradox lens aids deeper insights into the lived experience of those belonging to two or more stigmatized groups, paving the way for more research into how to better support such groups in organizations. This study emphasizes paradox as lived experience and applies both/and tactics to empower more creative, inclusive, and benevolent outcomes.

Farjoun (2010) expanded the paradox lens by exploring dualities, accentuating the interdependence between opposing forces, in "Beyond Dualism: Stability and Change as a Duality" in the Academy of Management Review. Paradox and dualities are closely related concepts, sometimes used interchangeably (e.g., Bledow et al., 2009; Cunha & Putnam, 2019). Farjoun (2010) pushed further, stressing that stability and change are often conceptualized as divergent, requiring different mindsets and processes, yet define and reinforce each other, and therefore cannot and should not be separated. Stability in organizations is only possible when there is constant change and adaptation. Change offers the seeds of stability and vice versa. Leveraging the literatures of dualities and dialectics, Farjoun (2010) helps scholars revisit common assumptions about stability and change, identifying new approaches of using the merits of both to reinforce each other.

### **Toward a Theory of Paradox**

As scholars gained new insights into paradox, publications began to propose core building blocks of theory that clarified definitions, surfaced underlying assumptions, and tested key relationship to address *how*, *when*, and *why* questions. When developing paradox theory, questions arose beyond those introduced by using paradox as a lens or label. These questions swirled around theoretical boundaries, for example defining what a paradox is and is not, how it can be distinguished from and linked to other concepts and typologies, as well as underlying assumptions of paradox and its management. Applying paradox only as a lens could risk overgeneralization. If paradox is our 'hammer', everything can look like a nail. As such, efforts to build paradox theory mark an important phase in developing literature as they enable consolidation, systematization, and connection across studies.

A decade after Lewis (2000) set the stage for a paradox lens, Smith and Lewis (2011) offered foundations of paradox theory. In their *Academy of Management Review* Decade Award winning article "Toward a Theory of Paradox: A Dynamic Equilibrium Model", they reviewed the rapidly growing paradox literature and proposed the building blocks of paradox theory. Core to this effort, Smith and Lewis further clarified the concept, defining paradox as "contradictory yet interrelated elements that exist simultaneously and persist over time" (p. 382), distinguished paradox from dilemmas and dialectics, and extended the taxonomy of organizational paradoxes (i.e., paradoxes of learning, organizing, belonging, and performing). They further offered a dynamic equilibrium model of organizing that (1) explains how and when latent tensions become salient, (2) identifies factors that spur vicious versus virtuous cycles when managing tensions, and (3) explains how and why effective management strategies can foster sustainability in terms of short-term and long-term performance.

We identify four prototypical examples of publications that contribute to a theory of paradox, while also demonstrating how paradox theory development can impact other organizational literatures: Zhang, Waldman, Han, and Li (2015), Miron-Spektor, Ingram, Keller, Smith and Lewis (2018), Pamphile (2021) and Aoki (2020).

Zhang, Waldman, Han, and Li (2015), in their Academy of Management Journal article "Paradoxical Leader Behaviors in People Management: Antecedents and Consequences," developed the construct of paradoxical leader behavior, defined as "seemingly competing, yet interrelated, behaviors to meet structural and follower demands simultaneously and over time" (p. 538). These both/and behaviors include, for example, maintaining decision control, while allowing autonomy. Thus, this work leveraged paradox as a label and lens for leader behaviors, yet went beyond to also build and test hypotheses that develop theory about why such both/and behaviors arise (e.g., due to leaders' holistic thinking) and can stimulate positive outcomes (e.g., employee performance). This research also provides valued insights into the micro-foundations of paradox, broadening the scope of paradox theory that had been explicated at the organization level by Smith and Lewis (2011).<sup>3</sup>

Miron-Spektor, Ingram, Keller, Smith and Lewis' (2018) "Microfoundations of Organizational Paradox: The Problem is How We Think about the Problem" in the Academy of Management Journal developed and tested theory about how a paradox mindset explains why some individuals thrive with tensions as others struggle. While the dynamic equilibrium model of organizing (Smith & Lewis, 2011) noted the importance of individual factors such as cognitive and behavioral complexity for accepting paradoxical tensions, the concept of paradox mindset extends this part of the model. In particular, the concept integrates cognitive and emotional aspects of coping with tensions. The findings of Miron-Spektor et al. (2018) showed that when having scarce resources (e.g., limited funds and time) individuals experience greater tension. Individuals high in paradox mindset embrace and feel comfortable with tensions, enabling them to improve both their in-role and their innovative performance when experiencing high levels of tension; the performance of individuals low in paradox mindset declines under these conditions. This research contributes to paradox theory by

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<sup>&</sup>lt;sup>3</sup> The paradox approach to leadership described by Zhang et al. (2015) goes beyond contingency-based leadership models, thus presenting paradox as a new paradigm in leadership. Therefore, this work might also be considered a pre-cursor to developing paradox as meta-theory (see next section).

underlining the importance of individual-level factors for dealing with organizational tensions and testing a core assumption of paradox theory (i.e., tensions should be accommodated, not resolved). It also offers a new and validated measure for theory development and testing, enabling the expansion of paradox theory to various literatures.

More recently, Pamphile's (2021) article, "Paradox Peers: A Relational Approach to Navigating a Business-Society Paradox" in the Academy of Management Journal proposed a model of how peers from different organizations support each other and why this can foster effective paradox navigation within their organizations. Her work spotlights the value of the social context in understanding how individuals deal with paradox. This tact adds a relational perspective to paradox theory, which formerly focused more on individual cognition and emotion. The author encouraged future research to further integrate individual approaches to paradox with a relational framework, which not only considers hierarchical relationships within organizations, but also same-level relationships across organizational boundaries.

Thus, her work adds complexity to paradox theory while reinforcing its core assumptions.

In his recent Academy of Management Journal article "The Roles of Material Artifacts in Managing the Learning-Performance Paradox: The Kaizen Case," Aoki (2020) added another critical element to paradox theory. The author focused on material artifacts, such as visual representations of standardized operating procedures that are used by employees at production sites, and the roles they can play in paradox management. Aoki (2020) demonstrated how material artifacts can have multiple roles that interact with each other, such that the same artifacts can foster or hinder the ongoing acceptance of a paradox, for example, the need to focus on both performing and learning. These findings extend paradox theory by suggesting that material artifacts – similar to individual factors and organizational capabilities (Smith & Lewis, 2011) – spur vicious and virtuous cycles of managing paradox. Future research can draw on Aoki's insights into the role of material artifacts, developed via two case

studies of continuous improvement processes, for other contexts and questions of paradox management.

### **Paradox as Meta-Theory**

More recently, scholars have elaborated how meta-theoretical principles of paradox foster the extension of scientific knowledge across various realms. Poole and Van de Ven (1989) provoked the possibility of what might happen if every theory had an equal and an opposite theory. Scholars adopting paradox as a meta-theory return to that question, asking what insights about paradox are more universal and how can they be applied more broadly. We see insights from paradox theory about dualities, dynamics, the unity of opposite, the nature of ongoing balancing, and the principle of holism, etc. emerge across organizational theories (Lewis & Smith, 2014; Schad et al., 2016). In applying these principles, scholars can question existing theories and build alternative ways of generating scientific understanding. For example, applying paradox principles can offer new insights to theories such as leadership (e.g., Zhang et.al., 2015), identity (e.g., Kreiner et.al. 2015), innovation (e.g., Smith & Tushman, 2015) and creativity (e.g., Miron-Spektor et. al., 2011). More recently, Wendy Smith and Marianne Lewis integrated research about the tools to navigate paradox into an overarching framework they called "The Paradox System", which applies to tensions across levels, phenomena, and theories (Smith & Lewis, 2022; Lewis & Smith, 2022).

Two paired articles in the *Academy of Management Annals* in 2016 provide pioneering insights into paradox as meta-theory. Schad, Lewis, Raisch, and Smith's (2016) "*Paradox Research in Management Science: Looking Back to Move Forward*" and Putnam, Fairhurst, and Banghart's (2016) "*Contradictions, Dialectics, and Paradoxes in Organizations: A Constitutive Approach*" together offer disparate yet comprehensive ideas about the breadth and potential of paradox scholarship to apply across theories. The articles describe the evolution and impact of paradox literature, while also applying meta-theoretical principles of paradox to the scholarship of paradox itself, thus posing suggestions for further advances.

These articles shared the honor of being awarded runner-up for the best paper in the *Annals* that year. The articles are accompanied by a joint reflection by the authors (Fairhurst, Smith, Banghart, Lewis, Putnam, Raisch & Schad, 2016), which further underlines the metatheoretical character of this work.

Three recent publications offer prototypical examples of paradox as a meta-theory: Hahn and Knight (2021), Berti and Simpson (2021), and Jarzabkowski, Bednarek, Chalkias and Cacciatori (2021).

In their article, "The Ontology of Organizational Paradox: A Quantum Approach" in the Academy of Management Review, Hahn and Knight (2021) used quantum mechanics to complicate the ontological assumptions informing paradox theory. They recognized how paradox scholars draw on both constructivist ontologies that assume that paradoxes emerge from social construction and framing, and on rational ontologies that assume that paradoxes are inherently embedded in systems. Drawing on quantum mechanics as a sensitizing lens, they offered a model to integrate these ontologies. They argued that paradoxes can be embedded into a system but may be latent such that actors are unaware of their existence. However, these latent states may be indeterminate – unspecified and unbounded. They only become more bounded and clear paradoxes when viewed by actors through specific sociomaterial contexts. For example, organizations may face persistent tensions between exploring for today and exploiting for tomorrow, but the nature and contours of this paradoxical tension only become clear when environmental contexts trigger conflicts between the existing world and the potential for new technology and innovation (Knight & Paroutis, 2017). Moreover, Hahn and Knight (2021) further recognized the dynamic nature of tensions as they describe paradox persistence as the reenactment of paradox through a similar context. By engaging varied ontologies, Hahn and Knight (2021) highlighted and integrated differing literatures that adopt paradox theory.

Berti and Simpson (2021) adopted a different meta-theoretical approach in their work on "The Dark Side of Organizational Paradoxes: The Dynamics of Disempowerment" in the Academy of Management Review. With their focus on pragmatic paradoxes, that is, paradoxes derived from power relations that limit the actor's latitude to respond to tensions, these authors pointed to power as a vital but overlooked factor that might change core assumptions in paradox theory. More concretely, the authors suggested that both/and is not always a feasible approach for everyone, calling paradox scholars to consider the role of agency and power inequalities when theorizing.

The work of Jarzabkowski, Bednarek, Chalkias and Cacciatori (2021) on "Enabling Rapid Financial Response to Disasters: Knotting and Reknotting Multiple Paradoxes in Interorganizational Systems" in the Academy of Management Journal widened the focus to examine paradoxes across interorganizational systems, linking paradox theory with a broader array of phenomena, levels, and theories. They developed theory on how tensions between market and societal needs can be navigated by individuals in and between organizations in different countries through what they described as knotting and re-knotting. They drew on work by Sheep, Fairhurst and Khazanchi (2017) that describes how "multiple paradoxical tensions might simultaneously emerge, interrelate, and be managed" (p. 464) as paradox knots.

Specifically, Jarzabkowski and colleagues (2021) described the processes by which multiple tensions become entangled and disentangled over time, as well as the impact of these processes on the system equilibrium. For example, they depicted knotting between the market-development paradox (i.e., marked-based mechanisms need to meet development goals) and the short-term-long-term paradox (i.e., tension between short-term political and renewal cycles with long-term disaster cycles) in interorganizational systems as "sustaining the solution in the long-term means delivering on short-term financial and development goals" (p. 53). By doing so, they illustrated how paradox theory can help to parsimoniously

understand complex relationships across tensions. Through this process, they render paradox theory more complex, while reinforcing its base assumption that both/and strategies enable more sustainable, positive impact than either/or coping strategies.

### Moving Forward: Paradox as Ever-Shifting Paradigm

Our curation of *Academy of Management* publications surfaced four distinct, yet interrelated approaches for engaging paradox – as a label, lens, theory, and meta-theory. The approaches are progressive such that over time they build on one another to advance abstraction and complexity, and they are recursive such that each approach persists and continues to inform the others (see Figure 1). These approaches offer different strengths and possibilities in the development of paradox scholarship, allowing for the literature to both zoom in and be more convergent and zoom out and be more divergent (Schad & Bansal, 2018; Schad, Lewis & Smith, 2019). Specifically, paradox as a label and lens invites scholars to zoom in closely and identify specific tensions that surface in phenomena, as does paradox as a theory by helping build and clarify theoretical building blocks. These approaches encourage convergence through which to gain shared understanding and allow for accumulating insights. In contrast, paradox as a meta-theory invites scholars to zoom out to connect with broader theories and phenomena, engaging in inter-disciplinary theorizing, and allowing for more divergence of thought.

We now explore how our insights about these four approaches advance research on organizations in three main ways: 1) extending and expanding paradox scholarship, 2) informing other literatures, and 3) initiating a paradigm shift in the field of organizational theory. Finally, we consider the influence of paradox scholarship on management in practice.

### **Extending and Expanding Paradox Scholarship**

Our analysis highlights the ongoing maturation of paradox scholarship, as this expansive literature enables ongoing theoretical development. With such advances, scholars might ask whether, similar to other literatures, paradox scholarship is already or will be soon

saturated, reaching the point where it becomes harder to innovate. While that may be the case, we see how each of these four approaches individually and in relation to one another has the potential to fuel further development, enabling continuous innovation through dual efforts of convergence and divergence. For example, consider the progression of definitions.

Converging over time, the definition of paradox has evolved within and across the four approaches, sharpening focus on what paradox is and how it differs from other concepts (please refer to Putnam et al., 2016; Schad et al., 2016; Smith & Lewis, 2011 for discussions about definition, distinctiveness, and boundaries of paradox). Yet the more confident scholars become in defining paradox, the more they can flexibly explore connections to a broadening array of concepts (e.g., power as in Berti & Simpson, 2021; materiality as in Aoki, 2021). Indeed, the steep increase in paradox-related work continues adding supportive findings and insights (convergence) and raising new questions that challenge key assumptions (divergence).

We envision options for advancing paradox scholarship through each of the four approaches. First, similar to Audia and colleagues' (2000) description of the 'paradox of success', there are many more phenomena that could be labeled as paradox. For example, Schwartz (2004) described the 'paradox of choice' – how having more options reduces effectiveness in making a choice. Mazmanian, Orlikowski and Yates (2013) proposed how mobile technologies, meant to expand our independence, result in greater dependence, labeling this the 'autonomy paradox'. We can also recognize psychological paradoxes such as the paradox of vulnerability – that openness to vulnerability is a source of strength and empowerment (i.e., Brown, 2012).

Second, as our world becomes more complex, paradox offers a lens to help unpack a broad range of phenomena. At the macro level, scholars have explored paradoxical tensions in grand challenges and interorganizational systems (i.e., Jarzabkowski et al., 2021). Others have started to apply paradox as a lens to understand complex micro phenomena, such as how

individuals navigate both positive and negative emotions (Rothman et al., 2017). Waldman et al. (2019) suggested using neuroscience methods to gain new insights into the paradox mindset and cognitions. Recently, 35 scholars came together to consider how paradox might aid understanding of both macro and micro tensions of the global pandemic (Carmine et al., 2021; Keller et al., 2021; Pradies et al., 2021; Sharma et al., 2021).

Applying paradox to a wider range of phenomena can expand our understanding, reflecting the principle of requisite variety. Often termed Ashby's Law (see Ashby, 1957), this principle stems from cybernetics and states that a viable system requires a mix of mechanisms that matches the variety of the challenges it may confront. To effectively cope with problems – societal, organizational and/or personal – requires a repertoire of responses at least as nuanced, complicated, and varied as the problems experienced. Since change, plurality and scarcity intensify experiences of paradox, the time is ripe for paradox to inform our thinking, research, and leadership across a broad range of phenomena. However, paradox as a lens also teaches us how to combine the principle of requisite variety with Occam's razor, which favors parsimonious over complex theoretical explanations. We argue that contemporary organizational challenges require explanations that are both parsimonious and complex (for a similar argument see Schad et al., 2016, p. 35). Paradox theory offers a way to integrate simplicity with complexity, parsimony with plurality.

For example, Ancona et al. (2021) outlined both evolutionary and revolutionary developments in team research after the pandemic disruption. Paradox offers a parsimony lens to enhance insights on evolutionary questions around complex issues such as stable and dynamic memberships, clear and fuzzy team boundaries, or humans and machines in teams, and revolutionary questions around balancing in-person and remote work contexts or forces between different life domains. Similarly, research on artificial intelligence (AI) that takes a normative stance can overemphasize automation (in which machines take over a human task) at the expense of augmentation (when humans and machines collaborate to perform tasks).

Applying a paradox lens invites scholars to recognize that automation cannot be neatly separated from the augmentation domain, and that by pursuing dual AI applications, organizations can achieve complementarities that benefit business and society (Raisch & Krakowski, 2021). Likewise, scholars continue to apply a paradox lens to business sustainability, labeling different sustainability objectives, such as business considerations, environmental protection, and social well-being as paradoxical (Hahn et al., 2017). By viewing the ongoing sustainability tensions through a paradox lens, we might gain a more holistic understanding of the complexity of sustainability problems, the intrinsic value of environmental and social elements, and their systemic nature (Carmine & De Marchi, 2022; Hahn et al., 2014).

However, paradox scholarship can only advance if we as theorists and researchers remain open to critical discussions, willing to review and revise our personal assumptions, and remain wary of falling prey to biases (Cunha & Putnam, 2019). For example, readers might have a personal bias toward the value of globalism, rather than nationalism (see Waldman & Javidan, 2020); humility, rather than narcissism on the part of leaders (see Owens et al., 2015); and empowerment, rather than directiveness on the part of leaders (see Zhang et al., 2015; Volk et al., 2022). Each of these seeming contradictions could not have been examined in an unbiased paradoxical manner if the researchers themselves fell prey to either/or thinking.

Third, scholars can continue to build paradox theory. We highlighted pieces in this collection that helped to lay the foundations of theory building, emphasizing the how, why, and when of managing paradox. Doing so helps to set boundaries, while enabling generalizability of core insights. For example, Zhang and colleagues (2015) introduced key traits for paradoxical leadership behaviors. Such insights can be extended to other contexts and different levels of analysis. Similarly, Miron-Spektor and colleagues (2018) developed a paradox mindset inventory, identifying dimensions of paradox and exploring the impact of

these ideas on individual outcomes such as job satisfaction and performance. These ideas lay a basis to generalize these insights to teams (Miron-Spektor et al., in 2022), and across different cultures (Keller et al., 2017; Leung et al., 2018).

Scholars can also expand key areas of paradox theory. For example, we still need to better understand the microfoundations of paradox (Miron-Spektor et al., 2018; Miron-Spektor et al., 2022; Sparr et al., in press), the role of emotions in processing paradox (Pradies, 2022), and the role of time (Putnam et al., 2016; Volk et al., 2022) and unfolding dynamics (Schad et al., 2016). Likewise, we encourage researchers to continue exploring how paradox perceptions and management are influenced by material artifacts (Aoki, 2020), how multiple paradoxes work together in concert (Jarzabkowski et al., 2021; Sheep et al., 2017), and what are potentially dark sides of paradox (Berti & Simpson, 2021).

Finally, scholars can extend the boundaries of paradox by considering all four approaches to paradox in relation to one another. For example, Berti and Simpson (2021) point to power inequalities as a source of pragmatic paradoxes (i.e., paradox as a label) that limit actors' agency in responding to these tensions. Power is acknowledged in Smith and Lewis (2011)'s dynamic equilibrium model of organizing as a boundary condition that might spur a vicious cycle by privileging only one side of a paradox (i.e., paradox as a theory). Speaking in the language of their model, power might be an organizational force for inertia (p. 389). However, the notion of power-stimulating, pragmatic paradox provides an interesting perspective for studying interrelations between paradoxes (i.e., paradox as a lens). For example, female managers may confront an agency-communion paradox, given a stereotype of females being more communal, while leaders are often stereotyped as more agentic (Putnam & Ashcraft, 2017; Zheng et al., 2018). This puts them in the paradoxical situation that either their femininity or their leadership qualities or both are questioned due to the systemic power of stereotypes – a pragmatic paradox (Berti & Simpson, 2021). However, in their leader role, they also may encounter paradoxes of people management, such as between

control and empowerment or between maintaining distance and closeness (Zhang et al., 2015).

Future research might explore the interrelations between such paradoxes, building deeper insights into how leaders can navigate and thrive amidst multiple paradoxes. This research can draw from work on knotted paradoxes (e.g., Jarzabkowski et al., 2021 in our collection). When power is "asymmetric control over valued resources" (Anderson & Brion, 2014: 69), a paradox mindset might aid the management of pragmatic paradoxes (Berti & Simpson, 2021). As shown by Miron-Spektor et al. (2018), in our collection, individuals with a paradox mindset find creative ways to use resources that are under their own control to improve their job performance and innovation. By enabling acceptance and comfort with tensions, paradox mindset builds resilience and a sense of agency. As such, a paradox mindset can be an important source of personal power for coping with tensions. This example demonstrates how continuing work on the boundaries of paradox theory and new labels for paradoxes (i.e., pragmatic paradoxes; Berti & Simpson, 2021) might both reinforce assumptions of paradox theory (i.e., power as force of organizational inertia) and extend paradox theory (i.e., means of navigating knotted paradoxes, or identifying boundary conditions). Such potential underlines the value of converging and diverging processes in paradox as a living paradigm. Thus, we encourage future research to both draw on paradox foundations and continue disrupting paradox understandings, together ensuring collective learning toward a more comprehensive, complicated, and dynamic paradigm.

### **Informing Other Literatures**

Our analysis of paradox scholarship in Academy of Management journals surfaced four approaches that advance paradox scholarship, having progressed over time, while continuing to inform one another. Scholars can consider how these approaches might aid development of other literatures. For example, paradox approaches might contribute to diversity and inclusion literature (e.g., van Knippenberg et al., 2020), where troubling

evidence is accumulating that many initiatives fail in terms of increasing diversity in organizations (e.g., Devine & Ash, 2022; Leslie, 2019). Recently, Waldman and Sparr (2022) suggested that viewing diversity and inclusion as a paradox (label) might shine light on their contrasting goals and processes, as well as their persistent interdependence, and help question how diversity initiatives might fail from an over-emphasis on diversity to the neglect of unity (lens). Further, they highlighted how combining paradox theory with positive organizational behavior theory (e.g., Youssef & Luthans, 2007) might build insights into diversity-inclusion dynamics, such as how such interplay impacts the psychological capital of all organization members. This example suggests how paradox as a meta-theory can both inform a theory and practice, while being informed by other theories.

We can see how the four paradox approaches begin to shift other literatures as well. For example, applying a paradox lens, scholars have begun to explore the inherent tension between idea novelty and usefulness, the two dimensions of creativity (Amabile & Pratt, 2016). Informed by paradox theory, some creativity scholars explore why gatekeepers prefer practical ideas over novel ones (Mueller, Melwani, Lowenstein & Deal, 2018), while others study contradictory yet interrelated processes that simultaneously promote both dimensions (Miron-Spektor, et al., 2011; Miron-Spektor et al., 2022). In their new work on the metatheory of creativity, Harvey and Berry (2022) urge scholars to revisit well-established assumptions about creativity, enabling a fine-grained understanding of factors and conditions that foster the development of ideas that are both highly novel and useful.

In a similar vein, in leadership research, scholars tend to study leader traits (e.g., humility) and styles (e.g., empowering leadership) in isolation, leaving the literature in a rather fragmented state (for an elaborate discussion see Sparr et al., in press). Identifying paradoxes between divergent traits and styles and analyzing them through a paradox lens can better align understandings of effective leadership to our increasingly complex, dynamic, and tenuous world (Zhang et al., 2015). For example, as mentioned earlier, studies find that there

is merit in narcissism when balanced with humility, in directive leadership when integrated with empowering leadership (e.g., Sparr et al., in press).

Recently, in a two-volume compilation of *Research in the Sociology of Organizations*, scholars applied the different approaches to connect paradox to literatures beyond the realm of organizational theory (see Bednarek et al., 2021a; Bednarek et al., 2021b). Doing so invited greater insights into paradoxes in other fields, while also expanding understanding among paradox scholars. For example, Bednarek and colleagues (2021a, 2021b) explored paradoxes in music and improvisation, religion and culture, and science. Through interdisciplinary theorizing, the authors explored paradox in other domains, while introducing to paradox new ideas about underlying assumptions, core relationships and methodological approaches.

### Towards a paradox paradigm shift

Beyond informing other literatures, paradox scholarship can spur scientific breakthroughs by helping to leverage both disagreements and similarities between differing lenses, ideas, and approaches. The integrative nature of paradox thinking values such tensions, encouraging scholars to work together, rather than in silos. Indeed, interdisciplinary scholars find that paradox offers the framing and processes for differentiating and integrating diverse perspectives and methods (cf. Bednarek et al., 2021a, 2021b).

An ongoing discourse in contemporary philosophy of science, for example, contrasts deductive, inductive, and abductive reasoning and methods. While these approaches can be complementary, scholars usually develop expertise in one method, becoming cognitively entrenched, and often relatively oblivious to the benefits of alternatives (Dane, 2010; Locke, 2007; Popper, 2003). Paradox scholarship, however, encourages appreciation of contrasting approaches, valuing their distinct contributions and interdependencies in scientific endeavors (Bamberger, 2019). As such, paradox offers a new paradigm for theories in the organizational sciences. A paradox paradigm poses that persistent, interdependent contradictions underlie

management and scholarly work, and that we can gain better insight into phenomena when we apply contrasting yet complementary ways of reasoning.

Other disciplines have already taken a turn toward a paradox paradigm. For example, over the last century, physics has shifted from the more linear, Newtonian approach to embrace the paradox mindset when scholars such as Faraday, Clark, Einstein, and Bohr introduced principles of quantum theory. This theory suggests that at the most subatomic level, matter is both there and not there depending on how we see it. In other words, matter does not exist in a particular place at a particular time, but only shows probabilistic tendencies to exist. This shift of underlying assumptions has been accompanied by advances in technology and methods to better study and understand this complexity. In our collections, we noted how Hahn and Knight (2021) drew on insights from quantum physics to help expand our understanding of paradox in organizational theory.

While physics illustrates a paradox paradigm shift in our understanding of the material world, psychoanalysis offers a similar example in our inner psychic world. Philosophers and psychoanalysts such as Jung, Adler, Frankel, Kierkegaard, and others depicted our psyche as riddled with competing demands – tensions between the id and the ego, desire and restraint, expansion and constriction, good and evil, and many more. Paradox, they pose, sits at the heart of understanding the human experience. For example, Schneider (1990) captured these paradoxical approaches, particularly drawing on tensions between expansion and constriction as outlined by Kierkegaard in his book, *The Paradoxical Self*.

Akin to physics and psychoanalysis, our curated analysis suggests that organizational theory is ripe for a paradox paradigm shift. As our analysis suggests, insights about paradox have drawn upon and informed a broad range of phenomena across theories, levels of analysis, ontologies, and epistemologies. Scholars have seen paradoxes in our individual cognition, emotions, and neuroscience, as well as in organizational challenges and interorganizational interactions. Paradoxical approaches are deepening insights into the

complexity of individual agency, the challenges of institutionalized structures, as well as the relationships between agency and structure. And, since paradoxes are dynamic – involving ongoing dualities in constant motion in relation to one another – growing attention to continuous change (i.e., Tsoukas & Chia, 2002), processual dynamics (Langley & Tsoukas, 2010; Langley & Tsoukas, 2018), and practice theory (i.e., Whittington, 2006) also portend a paradox paradigm shift for theories in the organizational sciences.

We return to Poole and Van de Ven's (1988) early provocation to wonder how we might advance theory if we were more attuned to paradox across phenomena. Indeed, what if every theory nurtured by the Academy of Management had an equal and opposite theory? As an example, how could a paradoxical approach to positive organizational scholarship invite us to explore the role of negativity to advance positivity (Cameron, 2017)? Likewise, how might theories of practice and process integrate with more static and structural approaches (i.e., Giddens, 1984; Jarzabkowski, 2008)?

### **Paradox in Managerial Practice**

We hear growing calls from practitioners to understand how paradox studies might inform their organizations and leadership. As evidence consider recent reports of top-tier consultancies, such as PwC (2020, 6 paradoxes of leadership) and Deloitte (2020, "paradoxes as a path forward" in human capital management), positioning paradox management as a strategic priority. While many consultants and managers use paradox as a label or lens, some engage deeply with paradox theory. For instance, Polarity Partnerships, founded by Barry Johnson, helps clients explore the interdependencies across opposing forces using a Polarity Map as a guiding tool (see Johnson, 1996, 2020). Similarly, in her consulting, Lotte Lüscher (2019) invites clients to embrace paradoxes as integral to their learning and management. Such research-consulting collaborations help practitioners move beyond the label to effectively engage paradox, while testing, adapting, and growing the impact of paradox scholarship.

This collection demonstrates the positive potential for paradox to inform practice across managerial issues (e.g., strategy, leadership, identity, creativity, and innovation). The curated articles illustrate how engaging paradox can empower new understandings and responses to complexity. Practitioners can directly glean insights from this work, for example, adopting the paradoxical inquiry process developed by Lüscher and Lewis (2008), nurturing a paradox mindset as posed by Miron-Spektor et al. (2018), and applying paradoxical leader behaviors as conceptualized by Zhang et al. (2015). Evidence-based management can fuel such practices, as managers learn to make organizational decisions informed by increasingly rigorous and relevant paradox research (Rousseau, 2006). Such research-practice exchanges, however, require ongoing innovation in pedagogical approaches and experience-based learning. We encourage paradox scholars to collaborate with education scientists and practitioners, exploring new means of teaching and learning about paradox (as examples see textbook by Waldman & O'Reilly, 2022, and practitioner-oriented book by Smith & Lewis, 2022).

To tap the full potential of paradox for practice, we encourage scholars to continue cocreating rigorous and relevant research with practitioners (e.g., Sharma & Bansal, 2020) and make those insights more readily and widely accessible (see Bartunek, 2007). The paradox mindset work of Miron-Spektor et al. (2018), as example, has been disseminated in practitioner-oriented outlets such as the *Academy of Management Insights* (2019) and INSEAD Knowledge (Miron-Spektor & Smith, 2020). Similarly, the "CEO Report" transfers paradox research to leadership recommendations (Smets et al., 2015). Likewise, we urge scholars to submit their validated approaches to the *Academy of Management Learning and Education* (as example, see Smith et al., 2012) and *Academy of Management Perspectives* (see Waldman & Bowen, 2016) to increase their impact on teachers and practitioners, respectively. Yet progress is not a one-way street, where paradox scholars inform practitioners. We also need more research that is inspired by practitioners' concerns and

observations. Lived organizational challenges – particularly those that we cannot yet address with our current knowledge – hold the greatest potential to push, enrich, and transform paradox theory. Examples are still relatively rare, even in the *Academy of Management Discoveries* (as exception, see Clark, Tan, Murfett, Rogers, & Ang, 2019), yet would emerge via greater research-practice collaborations.

Indeed, we envision a future in which it is standard for practitioners to appreciate tensions, and even seek out opposing demands and multiple truths, rather than looking for unidimensional solutions. Results would create greater opportunities to engage with paradox not only verbally but also visually and perhaps with all our senses. Imagine the push and pull as we learn to feel the knotted tensions between individual and collective goals, the tug from competing demands and opposing stakeholder views. How can actors knot, un-knot, and reknot these tensions? Through such exploration and practice, cognitions will become more connected with emotions and behaviors to enable creative and sustainable ways of navigating tensions of complexity, uncertainty, and fluidity. Paradox as a paradigm can them come to shape conversations about how we define Grand Challenges, allowing us to find much needed interdisciplinary, cross-level, and cross-cultural approaches for our most difficult problems.

### Conclusion

Reflecting on the progression of paradox scholarship, we are humbled. The depth and breadth of insights generated by the global paradox community (see leveragingtensions.com) continue to deepen, challenge, and extend our understandings. Yet as the experience of paradoxes intensifies, so will demands for requisite variety. Scholars, practitioners, and politicians alike will increasingly need to master the paradox mind shift from linear either/or to more integrative and complex both/and thinking, theorizing, meta-theorizing and beyond. We expect this progression to continue through converging and diverging forces. More and more scholars, both joining in and criticizing the status quo, will continuously and discontinuously change the way we look at things, as things change.

### **References and the \*Collection Articles**

- Academy of Management Insights 2019. *Contradictions at work? Adopt a "paradox mindset"*. Retrieved from <a href="https://doi.org/10.5465/amj.2016.0594.summary">https://doi.org/10.5465/amj.2016.0594.summary</a>
- Amabile, T.M. & Pratt, M.G. 2016. The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior*, 36: 157-183
- \*Amason, A. C. 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.
- \*Aoki, K. 2020. The roles of material artifacts in managing the learning-performance paradox: The Kaizen case. *Academy of Management Journal*, 63(4): 1266-1299.
- Ancona, D., Bresman, H. & Mortensen, M. 2021. Shifting team research after COVID-19:

  Evolutionary and revolutionary change. *Journal of Management Studies*, 58(1): 289-293.
- Anderson, C. & Brion, B. 2014. Perspectives on power in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 1: 67-69.
- Ashby, W. R. 1957. An introduction to cybernetics (2<sup>nd</sup> Edition). Chapman & Hall, London.
- \*Audia, P. G., Locke, E. A., & Smith, K. G. 2000. The paradox of success: An archival and a laboratory study of strategic persistence following radical environmental change.

  \*Academy of Management Journal, 43(5): 837–853.
- Bamberger, P. 2019. On the replicability of abductive research in management and organizations: internal replication and its alternatives. *Academy of Management Discoveries*, 5(2): 103-108.
- Bartunek, J. M. 2007. Academic-practitioner collaboration need to require joint or relevant research: Toward a relational scholarship of integration. *Academy of Management Journal*, 50(6): 1323-1333.

- Bednarek, R., Pina Cunha, M., Schad, J., & Smith, W. K. 2021a. The value of interdisciplinary research to advance paradox in organization theory. In R. Bednarek,
  M. Pina Cunha, J. Schad, & W. K. Smith (Eds.), *Interdisciplinary dialogues on organizational paradox: Learning from belief and science*, volume A: Emerald Insight.
- Bednarek, R., Pina Cunha, M., Schad, J., & Smith, W. K. 2021b. Implementing interdisciplinary paradox research. In R. Bednarek, M. Pina Cunha, J. Schad, & W. K. Smith (Eds.), *Interdisciplinary dialogues on organizational paradox: Investigating social structures and human expression*, Volume B: Emerald Insight.
- Benson, J. K. 1977. Organizations: a dialectical view. *Administrative Science Quarterly*, 22(1): 1-21.
- \*Berti, M., & Simpson, A. V. 2021. The dark side of organizational paradoxes: The dynamics of disempowerment. *Academy of Management Review*, 46: 252–274.
- Bledow, R., Frese, M., Anderson, N., Erez, M., & Farr, J. 2009. A dialectic perspective on innovation: Conflicting demands, multiple pathways, and ambidexterity. *Industrial and Organizational Psychology*, 2(3): 305–337.
- Brewer, M. B. 1991. The social self: On being the same and different at the same time.

  Personality and Social Psychology Bulletin, 17: 475–482.
- Brown, B. 2012. Daring greatly: How the courage to be vulnerable transforms the way we live, love, parent, and lead. Penguin.
- Cameron, K. S. 1986. Effectiveness as paradox: Consensus and conflict in conceptions of organizational effectiveness. *Management Science*, 32(5): 539-553.
- Cameron, K. 2017. Cross-cultural research and positive organizational scholarship. *Cross Cultural & Strategic Management*, 24(1): 13–32.
- Capra, F. 1975. The Tao of physics: An exploration of the parallels between modern physics and eastern mysticism: Shambhala Publications.

- Carmine, S., Andriopoulos, C., Gotsi, M., Härtel, C. E., Krzeminska, A., Mafico, N., Pradies, C., Raza, H., Raza-Ullah, T., & Schrage, S. 2021. A paradox approach to organizational tensions during the pandemic crisis. *Journal of Management Inquiry*, 30(2): 138-153.
- Carmine, S., & De Marchi, V. in press. Reviewing paradox theory in corporate sustainability toward a systems perspective. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-022-05112-2
- Clark, C. M., Tan, M. O., Murfett, U. M., Rogers, P. S., & Ang, S. 2019. The call center agent's performance paradox: A mixed-methods study of discourse strategies and paradox resolution. *Academy of Management Discoveries*, 5(2): 152-170.
- Cunha, M. P. & Putnam, L. L. 2019. Paradox theory and the paradox of success. *Strategic Organization*, 17(1): 95-106.
- Dane, E. 2010. Recognizing the trade-off between expertise and flexibility. *Academy of Management Review*, 35(4): 579-603.
- Deloitte 2020. The social enterprise at work: Paradox as a path forward. 2020 Deloitte Global Human Capital Trends. *Deloitte Insights*. Retrieved from:

  <a href="https://www2.deloitte.com/content/dam/Deloitte/at/Documents/human-capital/at-hc-trends-2020.pdf">https://www2.deloitte.com/content/dam/Deloitte/at/Documents/human-capital/at-hc-trends-2020.pdf</a>
- \*Denis, J.-L., Lamothe, L., & Langley, A. 2001. The dynamics of collective leadership and strategic change in pluralistic organizations. *Academy of Management Journal*, 44(4), 809-837.
- Devine, P. G., & Ash, T. L. 2022. Diversity training goals, limitations, and promise: A review of the multidisciplinary literature. *Annual Review of Psychology*, 73(1): 403-429.
- Fairhurst, G. T., Smith, W. K., Banghart, S. G., Lewis, M. W., Putnam, L. L., Raisch, S., & Schad, J. 2016. Diverging and converging: Integrative insights on a paradox metaperspective. *Academy of Management Annals*, 10(1): 173-182.

- \*Farjoun, M. 2010. Beyond dualism: Stability and change as duality. *Academy of Management Review*, 35(2): 202-225.
- Farjoun, M. 2019. Strategy and dialectics: Rejuvenating a long-standing relationship. Strategic Organization, 17(1): 133-144.
- Giddens, A. 1984. *The constitution of society. Outline of the theory of structuration.*Berkeley: University of California Press.
- Gupta, A. K., Smith, K. G. & Shalley, C. E. 2006. The interplay between exploration and exploitation. *Academy of Management Journal*, 49(4): 693-706.
- Hahn, T., Figge, F., Pinske, J. & Preuss, L. 2017. A paradox perspective on corporate sustainability: Descriptive, instrumental, and normative aspects. *Journal of Business Ethics*, 148: 235-248.
- Hahn, T., Preuss, L., Pinske, J. & Figge, F. 2014. Cognitive frames in corporate sustainability:

  Managerial sensemaking with paradoxical and business case frames. *Academy of Management Review*, 39(4): 463-487.
- \*Hahn, T., & Knight, E. 2021. The ontology of organizational paradox: A quantum approach.

  \*Academy of Management Review, 46(2): 362-384.
- Hargrave, T. J. & Van de Ven, A. H. 2017. Integrating dialectical and paradox perspectives on managing contradictions in organizations. *Organization Studies*, 38(3-4): 319-339.
- Harvey, S. & Berry, J. 2022. Toward a meta-theory of creativity forms: How novelty and usefulness shape creativity. *Academy of Management Review*.

  <a href="https://doi.org/10.5465/amr.2020.0110">https://doi.org/10.5465/amr.2020.0110</a>
- Jarzabkowski, P. 2008. Shaping strategy as a structuration process. *Academy of Management Journal*, 51(4): 621-650.
- \*Jarzabkowski, P., Bednarek, R., Chalkias, K., & Cacciatori, E. 2021. Enabling rapid financial response to disasters: Knotting and reknotting multiple paradoxes in

- interorganizational systems. *Academy of Management Journal*. https://doi.org/10.5465/amj.2019.0745
- Johnson, B. 1996. Polarity management. Amherst (MA): HRD Press.
- Johnson, B. 2020. AND: Making a difference by leveraging polarity, paradox or dilemma.

  Amherst (MA): HRD Press.
- Keller, J., Carmine, S., Jarzabkowski, P., Lewis, M. W., Pradies, C., Sharma, G., Smith, W.K., & Vince, R. 2021. Our collective tensions: Paradox research community's response to covid-19. *Journal of Management Inquiry*, 30(2): 168-176.
- Keller, J., Loewenstein, J., & Yan, J. 2017. Culture, conditions and paradoxical frames.

  Organization Studies, 38(3-4): 539-560.
- Knight, E., & Paroutis, S. 2017. Becoming salient: The TMT leader's role in shaping the interpretive context of paradoxical tensions. *Organization Studies*, *38*(3-4): 403-432.
- \*Kreiner, G. E., Hollensbe, E. C., & Sheep, M. L. 2006. Where is the "me" among the "we"? Identity work and the search for optimal balance. *Academy of Management Journal*, 49(5): 1031–1057.
- Kreiner, G., Hollensbe, E., Sheep, M., Smith, B. & Kataria, N. 2015. Elasticity and the dialectic tensions of organizational identity: How can we hold together while we're pulling apart? *Academy of Management Journal*, 58(4): 981-1011.
- Kuhn, T. 1962. *The structure of scientific revolutions. Chicago*: University of Chicago Press.
- Langley, A., & Tsoukas, H. 2010. Perspectives on process organization studies. In T. Hernes,& S. Maitlis (Eds.), *Process, sensemaking and organizing:* 1-27. Oxford: OxfordUniversity Press.
- Langley, A., & Tsoukas, H. 2018. Introduction: Process thinking, process theorizing and process researching. In A. Langley, & H. Tsoukas (Eds.), *The Sage handbook of process organizational studies:* 1-26. London: Sage.

- Leslie, L.M. 2019. Diversity initiative effectiveness: A typological theory of unintended consequences. *Academy of Management Review*, 44(3): 538-563.
- Leung, A. K., Liou, S., Miron-Spektor, E., Koh, B., Chan, D., Eisenberg, R., & Schneider, I. 2018. Middle ground approach to paradox: within- and between-culture examination of the creative benefits of paradoxical frames. *Journal of Personality and Social Psychology*, 114(3): 443-464.
- \*Lewis, M. W. 2000. Exploring paradox: Toward a more comprehensive guide. *Academy of Management Review*, 25(4): 760–776.
- Lewis, M. W. & Smith, W. K. 2014. Paradox as a metatheoretical perspective: Sharpening the focus and widening the scope. *Journal of Applied Behavioral Science*, 50: 127-149.
- Lewis, M. W. & Smith, W. K. 2022. Reflections on the 2021 decade award: Navigating paradox is paradoxical. *Academy of Management Review*.

  <a href="https://journals.aom.org/doi/10.5465/amr.2022.0251">https://journals.aom.org/doi/10.5465/amr.2022.0251</a>
- Locke, E. A. (2017). The case for inductive theory building. *Journal of Management*, 33(6): 867-890.
- Lüscher, L. 2019. Managing leadership paradoxes. Routledge: London.
- \*Lüscher, L. S., & Lewis, M. W. 2008. Organizational change and managerial sensemaking: Working through paradox. *Academy of Management Journal*, 51(2): 221-240.
- Mazmanian, M., Orlikowski, W. J., & Yates, J. 2013. The autonomy paradox: The implications of mobile email devices for knowledge professionals. *Organization Science*, 24(5): 1337–1357.
- \*Miron-Spektor, E., Ingram, A., Keller, J., Smith, W. K., & Lewis, M. W. 2018.

  Microfoundations of organizational paradox: The problem is how we think about the problem. *Academy of Management Journal*, 61: 26-45.

- Miron-Spektor, E., & Smith, W. K. 2020. Overwhelmed? Adopt a paradox mindset. *INSEAD Knowledge*, May 5, 2020. <a href="https://knowledge.insead.edu/leadership-organisations/overwhelmed-adopt-a-paradox-mindset-14026">https://knowledge.insead.edu/leadership-organisations/overwhelmed-adopt-a-paradox-mindset-14026</a>
- Miron-Spektor, E., Gino, F., & 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., Emich, K.J., Argote, L., & Smith, W.K. 2022. Conceiving opposites together: Cultivating paradoxical frames and epistemic motivation fosters team creativity. *Organizational Behavior and Human Decision Processes*.
- Mueller, J., Melwani, S., Lowenstein, J. & Deal, J. J. 2018. Reframing the decision-makers' dilemma: Towards a social context model of creative idea recognition. *Academy of Management Journal*, 61: 94-110.
- Owens, B. P., Wallace, A. S., & Waldman, D. A. 2015. Leader narcissism and follower outcomes: The counterbalancing effect of leader humility. *Journal of Applied Psychology*, 100: 1203-1213.
- \*Pamphile, V. D. 2021. Paradox peers: a relational approach to navigating a business-society paradox. *Academy of Management Journal*. <a href="https://doi.org/10.5465/amj.2019.0616">https://doi.org/10.5465/amj.2019.0616</a>
- \*Poole, M. S., & van den Ven, A. H. 1989. Using paradox to build management and organization theories. *Academy of Management Review*, 14: 562-578.
- Popper, K. 2003. The logic of scientific discovery. New York: Routledge.
- Pradies, C. 2022. With head and heart: how emotions shape paradox navigation in veterinary work. *Academy of Management Journal*. <a href="https://doi.org./10.5465/amj.2019.0633">https://doi.org./10.5465/amj.2019.0633</a>
- Pradies, C., Aust, I., Bednarek, R., Brandl, J., Carmine, S., Cheal, J., Pina e Cunha, M., Gaim, M., Keegan, A., & Lê, J. K. 2021. The lived experience of paradox: How individuals navigate tensions during the pandemic crisis. *Journal of Management Inquiry*, 30(2): 154-167.

- Putnam, L. L. 1986. Contradictions and paradoxes in organizations. In L. Thayer (Ed.),

  Organization communications: Emerging perspectives: 151-167. Norwood, NJ:

  Ablex Publishing.
- Putnam, L. L. & Ashcraft, K. L. 2017. Gender and organizational paradox. In W. K. Smith,
  M. W. Lewis, P. Jarzabkowski & A. Langley, *The Oxford handbook of organizational paradox: Approaches to plurality, tensions and contradictions*: 333-352. Oxford: Oxford University Press.
- \*Putnam, L. L., Fairhurst, G. T., & Banghart, S. G. 2016. Contradictions, dialectics, and paradoxes in organizations: A constitutive approach. *Academy of Management Annals*, 10(1): 65-171.
- PwC 2020. *Six paradoxes of leadership*, April 2020. Brochure retrieved from https://www.pwc.com/gx/en/issues/assets/pdf/six-paradoxes\_brochure.pdf
- Raisch, S., Hargrave, T. J. & Van De Ven, A. H. 2018. The learning spiral: A process perspective on paradox. *Journal of Management Studies*, 55(8): 1507-1526.
- Raisch, S. & Krakowski, S. 2021. Artificial intelligence and management: The automation-augmentation paradox. *Academy of Management Review*, 46(1): 192-210.
- Rousseau, D. M. 2006. Is there such a thing as "evidence-based management"? *Academy of Management Review*, 31(2): 256-269.
- Rothenberg, A. 1996. The Janusian process in scientific creativity. *Creativity Research Journal*, 9(2/3): 207-231.
- Rothman, N. B., Pratt, M. G., Rees, L., & Vogus, T. J. 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.
- Schad, J. & Bansal, P. 2018. Seeing the forest and the trees: How a systems perspective informs paradox research. *Journal of Management Studies*, 55(8): 1490-1506.

- Schad, J., Lewis, M. W., & Smith, W. K. 2019. Quo vadis, paradox? Centripetal and centrifugal forces in theory development. *Strategic Organization*, 77(1): 107-119.
- \*Schad, J., Lewis, M. W., Raisch, S., & Smith, W. K. 2016. Paradox research in management science: Looking back to move forward. *Academy of Management Annals*, 10(1): 5-64.
- Schneider, K. J. 1990. *The paradoxical self: Toward an understanding of our contradictory nature*. New York: Insight Books.
- Schwartz, B. 2004. *The paradox of choice: Why more is less.* New York, NY: ECCO: HarperCollins.
- \*Seo, M.-G. & Creed, W. E. D. 2002. Institutional contradictions, praxis, and institutional change: A dialectical perspective. *Academy of Management Review*, 27(2): 222-247.
- Sharma, G., & Bansal, P. 2020. Cocreating rigorous and relevant knowledge. *Academy of Management Journal*, 63(2): 386-410.
- Sharma, G., Bartunek, J., Buzzanell, P. M., Carmine, S., Endres, C., Etter, M., Fairhurst, G., Hahn, T., Lê, P., & Li, X. 2021. A paradox approach to societal tensions during the pandemic crisis. *Journal of Management Inquiry*, 30(2): 121-137.
- Sheep, M. L., Fairhurst, G. T., & Khazanchi, S. 2017. Knots in the discourse of innovation: Investigating multiple tensions in a reacquired spin-off. *Organization Studies*, 38(3–4): 463–488.
- Smets, M., White, A., Morris, T., Athanasopoulou, A., Cowan, A., Tullett, D., Germain, V., & West, K. 2015. *The CEO-Report*. Retrieved from:

  https://www.sbs.ox.ac.uk/sites/default/files/2018-09/The-CEO-Report-Final.pdf
- \*Smith, A. N., Baskerville Watkins, M., Ladge, J. J., & Carlton, P. 2019. Making the invisible visible: Paradoxical effects of intersectional invisibility on the career experiences of executive black women. *Academy of Management Journal*, 62: 1705–1734.

- Smith, W. K., Besharov, M. L., Wessels, A. K., & Chertok, M. 2012. A paradoxical leadership model for social entrepreneurs: Challenges, leadership skills, and pedagogical tools for managing social and commercial demands. *Academy of Management Learning & Education*, 11(3): 463-478.
- \*Smith, W. K., & Lewis, M. W. 2011. Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*, 36(2): 381-403.
- Smith, W. K. & Lewis, M. W. 2022. *Both/And Thinking: Embracing creative tensions to solve your toughest problems*. Harvard Business Review Press.
- Smith, W. K., Lewis, M. W., & Tushman, M. L. 2016. "Both/And" Leadership. Don't worry so much about being consistent. *Harvard Business Review* (May): 63-70.
- Smith, W. K., & Tushman, M. L. 2015. Managing strategic contradictions: A top management model for managing innovation streams. *Organization Science*, *16*(5): 453-562.
- Sparr, J. L., Waldman, D. A., & Kearney, E. in press. Paradoxes in agentic and communal leadership. *SAGE Handbook of Leadership* (2<sup>nd</sup> Edition).
- Tsoukas, H., & Chia, R. 2002. On organizational becoming: Rethinking organizational change. *Organization Science*, 13(5): 567-582.
- Van de Ven, A., & Poole, M. S. 1988. Paradoxical requirements for a theory of organizational change. In R. Quinn, & K. Cameron (Eds.), *Paradox and transformation: Toward a theory of change in organization and management:* 19-54. Cambridge: Ballinger.
- Van Knippenberg, D., Nishii, L. H., & Dwertmann, D. J. G. 2020. Synergy from diversity:

  Managing team diversity to enhance performance. *Behavioral Science & Policy*, 6(1): 75–92.
- Volk, S., Waldman, D. A., & Barnes, C. M. in press. A circadian theory of paradoxical leadership. *Academy of Management Review*. https://doi.org/10.5465/amr.2020.0468
- Waldman, D. A., & Bowen, D. E. 2016. Learning to be a paradox-savvy leader. *Academy of Management Perspectives*, 30(3): 316-327.

- Waldman, D. A. & Javidan, M. 2020. The false dichotomy between globalism and nationalism. *Harvard Business Review* (June). Retrieved from <a href="https://hbr.org/2020/06/the-false-dichotomy-between-globalism-and-nationalism">https://hbr.org/2020/06/the-false-dichotomy-between-globalism-and-nationalism</a>
- Waldman, D. A., & O'Reilly, C. 2022. *Leadership for organizations* (2nd ed.). Boston, MA: FlatWorld Publishing.
- Waldman, D. A., Putnam, L. L., Miron-Spektor, E. & Siegel, D. 2019. The role of paradox theory in decision making and management research. *Organizational Behavior and Human Decision Processes*, 155: 1-6.
- Waldman, D. A. & Sparr, J. L. 2022. Rethinking diversity strategies: An application of paradox and positive organizational behavior theory. *Academy of Management Perspectives*. <a href="https://doi.org/10.5465/amp.2021.0183">https://doi.org/10.5465/amp.2021.0183</a>
- Whittington, R. 2006. Completing the practice turn in strategy research. *Organization Studies*, 27: 613- 634.
- Youssef, C. M., & Luthans, F. 2007. Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience. *Journal of Management*, 33: 774-800.
- \*Zhang, Y., Waldman, D. A., Han, Y.-L., & Li, X.-B. 2015. Paradoxical leader behaviors in people management: Antecedents and consequences. *Academy of Management Journal*, 58(2): 538-566.
- Zheng, W., Surgevil, O., & Kark, R. 2018. Dancing on the razor's edge: How top-level women leaders manage the paradoxical tensions between agency and communion. *Sex Roles*, 79(11-12): 633-650.

Table 1. Articles included in the collection

Journal	Authors	Title	DOI
Academy of Management Journal	Amason, A. C.	Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams	10.2307/256633
Academy of Management Journal	Aoki, K.	The roles of material artifacts in managing the learning- performance paradox: The Kaizen case	10.5465/amj.2017.0967
Academy of Management Journal	Audia, P. G., Locke, E. A., & Smith, K. G.	The paradox of success: An archival and a laboratory study of strategic persistence following radical environmental change	10.5465/1556413
Academy of Management Review	Berti, M., & Simpson, A. V.	The dark side of organizational paradoxes: The dynamics of disempowerment.	10.5465/amr.2017.0208
Academy of Management Journal	Denis, JL., Lamothe, L., & Langley, A.	The dynamics of collective leadership and strategic change in pluralistic organizations	10.5465/3069417
Academy of Management Review	Farjoun, M.	Beyond dualism: Stability and change as duality	10.5465/amr.35.2.zok202
Academy of Management Review	Hahn, T., & Knight, E.	The ontology of organizational paradox: A quantum approach	10.5465/amr.2018.0408
Academy of Management Journal	Jarzabkowski, P., Bednarek, R., Chalkias, K., & Cacciatori, E.	Enabling rapid financial response to disasters: Knotting and reknotting multiple paradoxes in interorganizational systems	10.5465/amj.2019.0745
Academy of Management Journal	Kreiner, G. E., Hollensbe, E. C., & Sheep, M. L.	Where is the "me" among the "we"? Identity work and the search for optimal balance	10.5465/AMJ.2006.22798186

Table 1 (continued). Articles included in the collection

Journal	Authors	Title	DOI
Academy of Management Review	Lewis, M. W.	Exploring paradox: Toward a more comprehensive guide	10.2307/259204
Academy of Management Journal	Lüscher, L. S., & Lewis, M. W.	Organizational change and managerial sensemaking: Working through paradox	10.5465/amj.2008.31767217
Academy of Management Journal	Miron-Spektor, E., Ingram, A., Keller, J., Smith, W. K., & Lewis, M. W.	Microfoundations of organizational paradox: The problem is how we think about the problem	10.5465/amj.2016.0594
Academy of Management Journal	Pamphile, V. E.	Paradox peers: a relational approach to navigating a business-society paradox	10.5465/amj.2019.0616
Academy of Management Review	Poole, M. S., & van den Ven, A. H.	Using paradox to build management and organization theories	10.5465/amr.1989.4308389
Academy of Management Annals	Putnam, L. L., Fairhurst, G. T., & Banghart, S. G.	Contradictions, dialectics, and paradoxes in organizations: A constitutive approach	10.5465/19416520.2016.1162421
Academy of Management Annals	Schad, J., Lewis, M. W., Raisch, S., & Smith, W. K.	Paradox research in management science: Looking back to move forward	10.5465/19416520.2016.1162422
Academy of Management Review	Seo, MG. & Creed, W. E. D.	Institutional contradictions, praxis, and institutional change: A dialectical perspective	10.5465/amr.2002.6588004
Academy of Management Journal	Smith, A. N., Baskerville Watkins, M., Ladge, J. J., & Carlton, P.	Making the invisible visible: Paradoxical effects of intersectional invisibility on the career experiences of executive black women	10.5465/amj.2017.1513

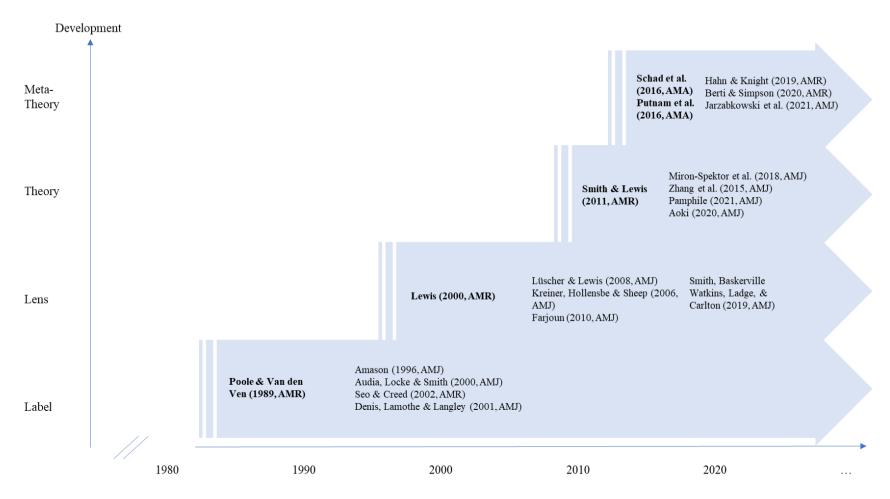
Table 1 (continued). Articles included in the collection

Journal	Authors	Title	DOI
Academy of Management	Smith, W. K. & Lewis, M. W.	Toward a theory of paradox: A dynamic equilibrium	10.5465/amr.2009.0223
Review		model of organizing	
Academy of Management	Zhang, Y., Waldman, D. A., Han,	Paradoxical leader behaviors in people management:	10.5465/amj.2012.0995
Journal	YL., & Li, XB.	Antecedents and consequences	

Table 2. Overview of the paradox approaches

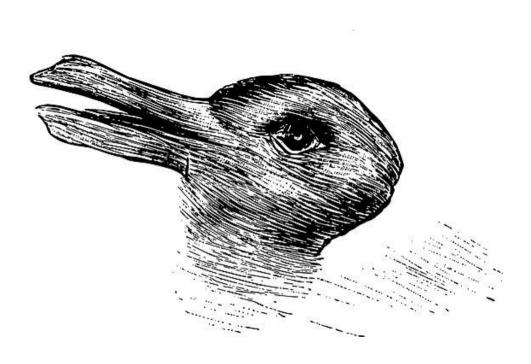
Approach	Definition	Research questions	Pioneering Article	Prototypical articles
Label	Labels phenomena as paradoxical; Legitimizes paradox as an important topic for study Paradox is the WHAT	Is a phenomenon (tensions, oppositions, contradictions) a paradox? Is there merit in studying paradox as focal phenomena in organizations and theories?	Poole & Van den Ven (1989, AMR)	Amason (1996, <i>AMJ</i> ) Audia et al. (2000, <i>AMJ</i> ) Seo & Creed (2002, <i>AMR</i> ) Denis et al. (2001, <i>AMJ</i> )
Lens	Uses insights into paradox to shift underlying assumptions about phenomena; Recognizes how subjects use the lens of paradox to understand tensions; Either/or becomes both/and <i>Paradox is the HOW</i>	How can we engage contradictions simultaneously (in research, practice, understanding)? Is there merit in using a both/and approach rather than an either/or approach?	Lewis (2000, AMR)	Lüscher & Lewis (2008, AMJ) Kreiner et al. (2006, AMJ) Smith et al. (2019, AMJ) Farjoun (2010, AMJ)
Theory	Develops and applies paradox theory by clarifying definitions, underlying assumptions, boundary conditions and mechanisms, while building models that link definitions and assumptions to sharpen relationships WHY, HOW and WHEN of effective paradox management	How do we sharpen theoretical boundaries (what is/not paradox, underlying assumptions, typologies) to identify relationships (linked constructs, models of paradox in action)?  What underlying assumptions explain paradox management, its mechanisms and boundary conditions?	Smith & Lewis (2011, <i>AMR</i> )	Miron-Spektor et al. (2018, AMJ) Zhang et al. (2015, AMJ) Pamphile (2021, AMJ) Aoki (2020, AMJ)
Meta- theory	Extends paradox theory to a paradigm (elucidating paradoxical patterns that span levels, time periods and phenomena)  Exploring the MORE-THAN of paradox	How can meta-theoretical principles of paradox (e.g., unity of opposites) foster extensions of scientific knowledge and understanding across realms?	Schad et al. (2016, <i>AMA</i> ) Putnam et al. (2016, <i>AMA</i> )	Hahn & Knight (2019, AMR) Berti & Simpson (2020, AMR) Jarzabkowski et al. (2021, AMJ)

Figure 1. The development of paradox scholarship over time



*Note*. Bold references are pioneering articles marking foundations of the respective phase, non-bold references are prototypical articles selected for the collection. Overall, the figure shows how four distinctive approaches emerged over time, building on each other.

Figure 2. Duck or rabbit? – What if it is both? (Picture source: Wikimedia Commons)



## **Author Short Bios**

**Jennifer L. Sparr** (<u>jennifer.sparr@uzh.ch</u>) is a senior researcher and lecturer at the Center for Leadership in the Future of Work at the University of Zurich. Her research focuses on paradox, leadership, organizational change, and innovation.

**Ella Miron-Spektor** (ella.miron-spektor@insead.edu) is an Associate Professor of Organisational Behaviour at INSEAD. Her research focuses on microfoundations of organizational paradox, creativity, learning, entrepreneurship, and culture.

Marianne W. Lewis (@MarianneWLewis) is Dean of the University of Cincinnati's Lindner School of Business and Professor of Management, having formerly served as Dean at Bayes Business School (formerly Cass). A thought leader in organizational paradoxes, her work explores tensions and competing demands surrounding leadership and innovation. She integrates this research in her upcoming book Both/And Thinking: Embracing Competing Demands to Solve Our Toughest Problems (HBSP: August 2022).

Wendy K. Smith (@profwendysmith) is the Dana J. Johnson Professor of Management and Faculty Director of the Women's Leadership Initiative at University of Delaware's Lerner School of Business and Economics. Her research on strategic paradoxes investigates how leaders and senior teams effectively respond to contradictory, yet interdependent demands. She integrates this research in her upcoming book Both/And Thinking: Embracing Competing Demands to Solve Our Toughest Problems (HBSP: August 2022).



## Contact

University of Zurich
Center for Leadership in the Future of Work
Department of Business Administration
Plattenstrasse 14
8032 Zurich
Switzerland

clfw@business.uzh.ch www.leadthefuture.org

