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***A Paradox Approach to Organizational Tensions during the Pandemic Crisis***

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## INTRODUCTION

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The COVID-19 pandemic is a massive exogenous shock which reverberated around the world, forcing all types of organizations to change overnight – from the local coffee shop to the international airline. As we try to make sense of the events surrounding the pandemic, one question that has perplexed both scholars and managers alike has been the extent to which this experience is qualitatively different from others.

One area of research to turn to is research on organizational paradoxes, as the organizational paradox literature has focused extensively on how organizations experience change (e.g., Jay, 2013; Lüscher & Lewis, 2008; Smith & Tracey, 2016). According to the paradox literature, major exogenous change impacts organizations by increasing the saliency of organizational tensions (Smith & Lewis, 2011), such as tensions between exploration and exploitation (e.g., Smith, 2014), cooperation and competition (e.g., Raza-Ullah et al., 2014), or control and collaboration (e.g., Sundaramurthy & Lewis, 2003). The increased salience of tensions is critical for understanding organizations undergoing major change because tensions are both multi-level and multi-faceted, impacting actors ranging from the CEO to the front-line employee (Jarzabkowski et al, 2013) and involving responses that are cognitive (e.g., Miron-Spektor et al, 2018), emotional (e.g., Vince & Broussine, 1996), and material (e.g., Knight & Paroutis, 2017). By focusing attention on the tensions that organizations experience during the pandemic and their responses, the paradox literature can provide shards of clarity to this otherwise incomprehensible event. At the same time, unpacking the pandemic experience through a paradox lens can reveal new insights on organizational tensions, enabling scholars to gain sense of future, seemingly, senseless events.

To address the organizational experience during the COVID-19 pandemic through a paradox lens, we explore five examples of tensions that have been especially salient during the pandemic crisis: the short-term vs. long-term tensions (see Slawinski below); social vs. economic goal tensions (see Schrage below), learning vs. performing tensions (see Winther-Hansen, Carmine, Andriopoulos & Gotsi below); common good vs. individual privacy tensions (see Raza & Keller below) and agency tensions (see Krzeminska, Mafico & Härtel below; see Tunarosa below).

As uncertainty about the size and scope of the pandemic, the duration of the pandemic, and the government's capacity to manage the pandemic has raised the saliency of tensions, organizations have been faced with the heightened urge to navigate short-term and long-term goals (see Slawinski below). For organizations that depend on global supply chains (i.e., multinational corporations), these tensions between short-term and long-term goals have also triggered tensions around managing economic and social goals, as short-term economic objectives have become more challenging and more pressing (see Schrage below). For many organizations, time has not been the object of tension itself but has made salient new paradoxes. This is especially the case for organizations racing against time to fight the pandemic. Profound tensions between exploring new forms of knowledge and exploiting existing forms of knowledge (see Winther-Hansen, Carmine, Andriopoulos & Gotsi below) have emerged. As organizations have been forced to cooperate with others quickly, the salience of tensions between cooperation and competition has also peaked (see Razah-Ullah & Stadtler below). The pandemic has also provided opportunities for organizations to leverage technological solutions for knowledge sharing and communication, but creating tensions around transparency (see Raza & Keller below). At the same time, the crisis has created entrepreneurial opportunities (see Krzeminska, Mafico & Härtel below) and opportunities for exploiting cultural holes (see Tunarosa below). As Albert Einstein says, "in the middle of difficulty

lies opportunity”. By providing a paradox lens, we tackle this underlying paradox head-on, which further elucidates the complexity of the pandemic experience facing organizations and the further complexity that lies ahead.

## **Understanding Temporality and Paradox during the COVID-19 Crisis**

*Natalie Slawinski*

Temporal tensions abound in organizations and organizing in numerous ways. Managers must decide whether to focus on exploiting existing technologies and products or invest in new technologies and products for the future (Gibson & Birkinshaw, 2004; Raisch, Birkinshaw, Probst & Tushman, 2009). They are faced with the pressures to go fast to keep up with competitors and investor demands, while also slowing down to take stock of long-term shifts in the business environment and society (Perlow, Okhuysen & Reppenin, 2002; Slawinski, Pinkse, Busch, & Banerjee, 2017).

While organizations and their members experience these temporal tensions on a regular basis, the COVID-19 pandemic has amplified these tensions in a number of ways. For instance, the immediate and urgent need to protect people from COVID-19 and to save jobs has led to decisions that often pit human health against economic needs. Furthermore, the unprecedented uncertainty associated with the causes, nature and consequences of the pandemic has increased attention to short-term measures in an effort to alleviate the discomfort and fear that come with not knowing what the future holds. In other words, the high uncertainty combined with the severity of impacts of the pandemic has created an impetus to take quick short-term actions that often conflict with the need to consider the long-term viability of our economy and society.

Paradox theory provides us with insights into the nature and management of opposing yet interconnected poles, including between short and long-term goals that may appear to be contradictory but that also reinforce and support one another (Smith & Lewis, 2011; Slawinski & Bansal, 2017). In more recent years, research on temporal paradoxes has grown. For instance, Reinecke and Ansari (2015) studied Fairtrade International, a hybrid organization that applied process time and clock time simultaneously to advance both its short-term market and longer-term development goals. In a multi-case study of five oil and gas companies, Slawinski and Bansal (2015) found that companies that engaged in “temporal ambidexterity”, meaning they juxtaposed both short-term and long-term goals, also developed more holistic climate change strategies. They engaged in practices such as scenario planning and convening dialogues with a range of stakeholders to understand a variety of possible futures and how to connect with those futures in the short run.

Research on Toyota during the Japanese economic crisis of the 1990s provides another example of balancing short-term survival with long-term sustainability, this time in the context of a crisis (Osono, Shimizu & Takeuchi, 2008; Stewart & Raman, 2008). Even as its profits fell, the company had deep and extensive discussions about its future, which led to the development of the first mass-marketed hybrid car, the Prius, despite nay-sayers who argued hybrids would never be profitable. This paradoxical approach of taking a long-term view despite incredible short-term pressures offers lessons for companies currently navigating the pandemic.

A paradox lens offers creative approaches to tackling current tensions between the short-term and long-term arising from the pandemic. In this difficult environment, the focus of decision makers has been on responding quickly to the crisis, while understandably giving much less attention to the longer-term implications of the pandemic. Many companies have had to pivot quickly to

survive in the next quarter, with little time available for considering how the future may look very different from our pre-COVID world. Yet even as it may seem difficult right now to consider the long-term, paradox research shows the value of doing so without losing sight of pressing short-term needs. For example, as Gaim and Cunha (see Pradies et al., this issue) note, decision-makers can reduce the negative, long-term consequences of short term decisions by pausing to create a generative space for negotiation to find a shared sense of purpose. Meanwhile, Li and Keller (see Sharma et al., this issue) propose that the trade-offs required to address the pandemic in the short-term may lead to both/ands in the long term in their piece on Eastern vs. Western responses to the pandemic.

While a paradox lens offers valuable guidance for tackling the temporal tensions emerging from the COVID-19 crisis, the current crisis may also offer new insights and future research opportunities to paradox researchers. The current pandemic provides an extreme case in which to further our understanding of the dynamics of paradox when one pole (e.g. short-termism) dominates significantly over the other (e.g. long-termism). Prior research has noted that for many companies, immediate goals, concerns and pressures tend to dominate over future ones (Lavery, 1995; Marginson & MacAuley, 2008), for a variety of reasons, including that organizations attempt to reduce risks associated with the uncertain future, and this uncertainty avoidance further exacerbates short-termism (Slawinski et al, 2017). Much less research has explored the antecedents, dynamics and consequences of paradoxes in which one pole dominates over the other (see Huq et al., 2017; Putnam et al., 2019, for exceptions).

Second, the pandemic has reinforced that both the short-term and long-term have positive and negative aspects. During the COVID-19 crisis, a short-term focus has fostered positive effects such as nimble and speedy decision-making that has helped organizations pivot rapidly in a virtual

world and a growing economic downturn. At the same time, a short-term focus also contains negative aspects such as when quick decisions ignore the long-term consequences. For example, some businesses re-opened too quickly, resulting in a spike of new cases that hurt people, organizations and the economy in both the short and long run.

Similarly, a long-term approach offers advantages while also containing downsides. Some organizations have benefitted from engaging in long-term planning to prepare themselves for a potentially very different post-COVID environment. Yet such a long-term view comes with many risks including making a wrong bet on the future. In addition, long-termism can paralyze action in the short-term as managers fear acting too swiftly, and such inaction can lead to poor long-term outcomes. As such, paradox researchers could study responses to the current crisis to glean important insights into how organizations and individuals maximize the benefits and minimize the harmful aspects of each pole.

Finally, the current pandemic provides opportunities to study the relationship between each pole and related constructs. For example, previous research has shown that self-interest and short-termism appear to be related (e.g. Slawinski & Bansal, 2015). In the case of the current pandemic, such relationships appear relevant when, for instance, people push back against wearing masks claiming it is a violation of their freedoms. They appear to be acting in their own short-term interests without considering the long-term consequences to themselves and others of their actions. Similarly, sustainability challenges tend to have longer time horizons with lagged effects, as Hahn (see Sharma et al., this issue) point out.

## **COVID-19 and innovation: A paradox perspective**

*Casper Winther-Hansen, Simone Carmine, Constantine Andriopoulos & Manto Gotsi*

Innovation is rife with learning and performing tensions (March, 1991). Learning enables firms to build capabilities for the future (Janssen & van Yperen, 2004). It fosters the development of understanding and task mastery, both critical for exploration (Dweck, 1986). Failure is not seen as problematic during learning, as it is a prerequisite for experimentation and creating new knowledge (Sinkula et al., 1997). At the same time, a focus on performance fuels needed exploitation, to safeguard success in the present and deliver results (Van Der Vegt & Bunderson, 2005; Andriopoulos & Lewis, 2009). Exploration and exploitation are both necessary for organizational survival and prosperity, yet they compete for scarce resources (Levinthal & March, 1981; Levitt & March, 1988). Moreover, maintaining a balance between learning and performance is a delicate act, as tilting too much towards on exploration may lead to costly experimentation without leveraging benefits, while focusing too much on exploitation may trap firms in sub-optimal stable equilibria (March, 1991). The COVID-19 outbreak has rendered latent learning and performance innovation tensions salient across sectors (Smith & Lewis, 2011), bringing an unprecedented sense of urgency to explore and exploit for survival. On one hand, the rapidly changing environment has forced organizations to instantly develop novel solutions to an assortment of problems. Pharmaceutical companies had to develop and manufacture new vaccines and other drugs in a quarter of the usual timeframe, restaurants had to transform their fine dining establishments into food delivery providers, retailers had to create entirely new supply chains, financial service providers had to implement new virtual identification procedures, and energy providers had to implement drone technology to remotely monitor power plants. Yet, on the other hand, the instantaneous arrival of physical constraints, scarce supplies, and complex regulations reduced

organizations' capacity to develop novel solutions to address the new problems they were facing. Compounding this issue was an underlying uncertainty, as organizations wrestled with whether the solutions required to address the current problems would persist well into the future.

The pressure to respond to this global crisis 'as soon as possible' and the profound prevailing uncertainty has exacerbated the inherent learning-performing paradox underlying innovation in organizations (Smith & Lewis, 2011). Paradox theory provides a useful lens for understanding the repertoire of organizational responses that we have witnessed (Schad et al., 2016). Paradox theory views contrasting learning and performance goals as distinct but intertwined; their attainment enables a productive synergy fostering innovation (Poole & Van de Ven, 1989; Andriopoulos & Lewis, 2009). Yet, in practice, variation-increasing exploration processes often clash with variation-decreasing exploitation activities, surfacing paradoxes of performing (Benner & Tushman, 2003; Bunderson & Sutcliffe, 2003; Smith & Lewis, 2011). In the face of this global crisis, some organizations found themselves paralyzed. Cognitive, behavioral or institutional defensive responses sought to temporarily avoid or reduce the negative effect of tensions, pushing toward consistency (Lewis & Smith, 2014). Consequently, commitment to innovation decreased, as firms focused on solving short-term issues (Am et al., 2020). Along with a projection of shortcomings to others (e.g. the government, the media, even the local community), this approach may, at best, only offer short-term relief from the underlying challenges (Jarzabkowski & Lê, 2017). In fact, paradox studies predict that such defensive responses likely spur organizations into 'vicious cycles' that ultimately harm organizational effectiveness and may lead to failure (Pradies, Tunarosa, Lewis & Courtois, 2020). On the contrary, other organizations featured a different response, accepting, confronting and even transcending (Bednarek et al., 2017) the prominent learning and performance paradox during this global crisis. Recognizing the interdependence and

persistent coexistence of learning and performance demands, they accepted and embraced the paradoxical tensions for simultaneous exploration and exploitation, triggering synergies that enabled ‘leapfrogging’ and innovation to thrive (Smith & Lewis, 2011). Paradox literature highlights that such purposeful responses, can, over time, fuel ‘virtuous cycles’ of ambidexterity (Raisch & Birkinshaw, 2008) and enhance long-term performance (Smith et al., 2011).

The pandemic illuminated the importance of thinking about cycles, and paradox theory provides a unique perspective on time, as a cyclical and continuous sequence of events (Pina, 2004). While most innovation literature appears to view time as a linear progression between the present and the future, a cyclical understanding of innovation opens for interpretations of an event as the precursor as well as predecessor of other events and vice versa (Scoblic, 2020). This implies that the two exogenous events of, on the one hand, making changes now and, on the other hand, abandoning future changes are not discrete events in a linear progression, but a sequence of events through which organizations continuously change (Slawinski & Bansal, 2017). Organizations that explored new business opportunities prior to the global crisis exploited such opportunities in the wake of the crisis and thus leveraged past experience in the present to anticipate the future (e.g. digital solutions for remote consultations, for remote controls of power plants). The pandemic heightened the temporal tensions underlying paradoxes of innovation in organizations (Andriopoulos et al., 2018; Smith & Lewis, 2011). The only appropriate response was engaging in incremental and radical innovation. The learning-performing paradox became salient and companies had to learn about the increasing complexity of the changing environment and quickly perform by innovating existing processes. Organizations who recognized this paradox capitalized on the past exploration of new opportunities in their innovation labs and the existing partnerships with innovative ecosystems in the world to accept paradoxes in the short run by exploiting these opportunities in

the present to anticipate the future. The temporal separation of tensions (Poole & van de Ven, 1989) enabled firms to view innovation as a continuous process of iteration between exploration and exploitation by embracing the complementarities of incremental and radical innovation.

However, the question remains if companies will resolve these innovation tensions during the crisis or if tensions will re-emerge after the pandemic and, if so, at which pace change will reappear (Klarner & Raisch, 2013). A recent McKinsey survey of more than 200 organizations across sectors revealed that more than 90% of business executives perceive that the COVID-19 crisis will change the way they conduct business over the next 5 years (Am et al., 2020). Organizations have responded to the radical change of environments by focusing on immediate process changes and at much higher rates than during times of relative stability. Examples of process innovation, triggered by the compression of time, abound. For instance, pharmaceutical companies digitalized clinical trials to meet the need for complying with regulations while speeding up testing in as quick a manner as possible. While industry reports had outlined processes of developing new drugs as unsustainable for years (Elton & O’Riordan, 2016), the pharmaceutical industry experienced a transition towards virtual clinical trials within months (MedWatch, 2020). Health authorities facilitated the transition by both postponing regulation (EMA, 2020) and fast-tracking technology (FDA, 2020). The regulatory authorities allowed companies to embrace the tension between quickly launching medical technologies in the market and devoting resources to comply with strict regulation during the global crisis. However, the question remains whether this will also lead to pharmaceutical companies ignoring the need to consider longer term endeavors that followed a much longer regulatory track.

The pandemic provides an opportunity for us to think about innovation and paradox in a context where two exogenous events suddenly appear, namely disruption forcing firms to make sudden

changes, but also forcing firms to abandon future changes. As such, this crisis has provided a unique context for studying the transformative effects of a higher pace of change for managing paradoxical tensions through organizational innovation. There was no time for neither pure exploration nor incremental learning, forcing companies to innovate their way through the crisis in improving existing processes to make the future a little less uncertain. As such, the COVID-19 crisis can help us rethink paradox approaches to innovation in at least three ways. First, although the scale, velocity and duration of disruptions caused by the pandemic has been unprecedented (EY Global, 2020), it is clear that creating a sense of urgency can mobilize organizations to accept, confront and transcend learning and performance tensions and leapfrog innovation. Second, this global crisis has revealed that a sense of purpose can be a critical enabler in coping with the paradoxical tensions inherent in innovation. A people-centered, purpose-led approach can orient efforts in the short and long term, but also mobilize solidarity amongst multiple stakeholders in the turbulent waters of paradox (Edmondson, 2018). For instance, although paradox theory highlights that competition can intensify innovation tensions (Smith & Lewis, 2011), coopetition played a major supportive role during this global crisis. Lastly, the pandemic highlighted the importance of 'adequate resources' (Amabile, 1998) in dealing with innovation paradoxes. The public and private sectors have come together in this crisis to provide adequate and comprehensive responses, sharing resources and leveraging advisories. When it comes to solving big problems through radical innovation, it seems that this synergy can enable virtual cycles of learning and performance.

## **The embedded information technology paradoxes within a pandemic response**

*Hassan Raza & Josh Keller*

When the COVID-19 pandemic arrived, organizations immediately sought technological solutions. Public health organizations resorted to them to gather data and to disseminate data, while private firms turned to them to keep their employees connected. The more organizations sought technological solutions, the more they faced salient paradoxical tensions around knowledge sharing and privacy as the process of gathering data, disseminating data and providing access to data ineluctably opens threats to employees, consumers and other stakeholders' privacy.

Tensions between knowledge sharing and privacy in the development and application of information technology (IT) existed well before the pandemic. For example, smart phones that offer personalized information to employees or consumers have often triggered privacy concerns, as IT users must provide information about their personal interests (Sutanto et al, 2013) or location (Xu et al, 2011) in order to receive personalized information. Asking customers or employees to forgo privacy to receive information creates a power dynamic that forces the user to make pragmatic choices about their willingness to relinquish privacy. Without consideration for the user's privacy, tensions relating to maintaining privacy are forced upon the user (Berti & Simpson, 2020). This places considerable normative pressure on organizations to consider users' privacy concerns when developing technological solutions for knowledge sharing.

The pandemic crisis, however, put far more pressure on organizations to push the boundaries of knowledge sharing, thereby raising the intensity of tensions between knowledge sharing and privacy concerns. For public health organizations, access to precise data about transmission was critical for forecasting the spread of the virus and for contacting and testing those most at risk (WHO, 2020). The pervasiveness of smart mobile devices and wireless networks enabled public

health organizations to locate hotspots with high transmission activity with high levels of precision, as they could pinpoint where transmission was taking place and who was transmitting to whom. Mobile phone applications that provided constant data of each user's location and (through Bluetooth) the information of other users who were in close physical proximity, provided seamless access to transmission data. Such precise data were a means to control the spread without requiring broad measures such as lockdowns. However, it also required people to share such information about themselves. For private firms, enabling remote work - a necessity during the pandemic - was facilitated when employees could communicate and share knowledge from their homes through videoconferencing and cloud computing. This however, required employees to disclose information through the Internet and risk exposure of their personal life, beliefs and feelings.

The issue of time made the tension between knowledge sharing and privacy even more salient. As prior research has found, time scarcity increases the salience of tensions by reducing the slack that organizational actors have in managing both poles (Miron-Spektor et al, 2018). In the case of information technology development, sufficient time can enable technological solutions that can simultaneously address knowledge sharing and privacy concerns. But without time for in-house development, organizations must rely on outsourcing solutions (Martinsons, 1993). For public health organizations, this entailed working with software application developers on developing "track and trace" technology solutions, whereas for private firms this entailed relying on third-party videoconferencing providers (e.g., Zoom) and cloud computing providers (e.g., Microsoft). But while outsourcing reduces the issue of time in technological development, it also can amplify existing tensions by triggering even more tensions (Sheep et al, 2017). As explained by Razah-Ullah & Stadtler (see below), inter-organizational cooperation raises interorganizational tensions

around coordination and competition. However, when it came to knowledge sharing vs. privacy tensions, the amplified tension was not limited to those involved in the technology development. The more salient issue was heightened privacy concerns, as it increases the number of entities that could benefit from the potential violation of data privacy. For example, from employees' perspective, trusting employers with communication data is one issue, but trusting a third-party software provider is another.

Adding another layer of complexity was the institutional and cultural context (see Xin & Keller in Sharma et al, this issue). In many Western countries, the right to individual privacy is considered a fundamental right and the increased use of surveillance technology, even for public health, was often criticized by privacy advocates. In the UK and Europe, a new type of digital track and trace application was required that would be compliant with the General Data Protection Regulation (Allen, 2020). It requires all types of organizations to follow strict guidelines on data privacy and was created to protect the privacy of UK and European nationals. The increased focus on maintaining the privacy of citizens required a track and trace technology solution that could be used to notify people about the spread of the virus without compromising the ideals of maintaining privacy. However, in the UK, the digital division of the UK National Health Service (NHSX) failed to create a design with the necessary privacy constraints (NHSX, 2020). This led to a new approach where a new contact tracing platform created by Apple and Google was used instead because it was far more developed in its capacity to satisfy privacy concerns and satisfied the regulatory constraints over privacy. Paradoxically, in the process of developing a new technology solution (which required further collaboration with third-party providers), it raised even more privacy concerns by the public—even though the goal of the new technology development was aimed at providing greater privacy protections.

In other countries such as Israel (BBC2, 2020), Singapore and South Korea (Guardian, 2020), the governments allowed knowledge sharing concerns to outweigh privacy concerns during the pandemic. Surveillance technology was re-purposed to track people and their movements by using a combination of location data, video camera footage and credit card information. This required less third-party involvement and thus less public attention to privacy concerns. However, in this case, the privacy issue was only addressed by being ignored, with public health concerns superseding privacy concerns. Even with the use of IT by private firms, maintaining productivity during a difficult economic time provided justification for not addressing privacy concerns.

The case of knowledge sharing and privacy tensions during the pandemic crisis therefore poses an interesting question for paradox scholars. If time constraints lead to innovative solutions that address both poles (c.f. Miron-Spektor et al, 2018), what explains the pandemic experience with IT, where organizations that tried to address both knowledge sharing and privacy concerns failed and others only succeeded with knowledge sharing by paying less attention to privacy concerns. Is it the institutional context? Is it the inter-organizational context? This case suggests further inquiry into the multi-level, complex processes that contribute to technological tensions.

### **Interorganizational Coopetition for Addressing Global Crisis**

*Tatbeeq Raza-Ullah & Lea Stadler*

The current pandemic has made paradox theory especially relevant for interorganizational relations. Typically, organizations in similar industries either cooperate or compete and may consider the simultaneous pursuit of both cooperation and competition, i.e. coopetition (Bengtsson & Kock, 2000), illogical or even absurd as the underlying logics seem to be contradictory. While

cooperation centers on joint value creation in a positive-sum game (i.e. ‘we benefit one another’), competition may spur opportunistic behavior in a value capturing, zero-sum game (i.e. ‘only one of us will win the race’) (Das & Teng, 2000; Deutsch, 2006).

COVID-19 and its constraining effects on resources and available timelines have prompted organizations to reconsider the typical either/or approach and realize the unique value that cooperation may provide. Many competitors have thus started to join forces and combine their resources and expertise to address COVID-19 challenges. For example, the two competing pharmaceutical companies, BioNTech and Pfizer are collaborating to develop and then distribute a COVID-19 vaccine. The giant rivals Apple and Google are working together on a COVID-19 contact tracing technology. Likewise, supermarkets have started to share distribution depots, delivery vans, and staff to help meet demand and cooperate on opening hours and stock level data sharing to meet food supply challenges.

Paradox theory helps unveil the complexities involved in these newly formed relationships, as well as navigate their synergistic and conflictive potential. Specifically, a paradox approach to cooperation underscores the interdependence of its cooperative and competitive sides (Raza-Ullah et al., 2014; Smith & Lewis, 2011). These opposing forces do not simply cancel out each other but may combine to provide superior value that neither cooperation nor competition would allow for unilaterally (Chen, 2008). Thus, to unleash the synergistic potential of cooperation, organizations need to find the right balance (Raza-Ullah, 2020): If either cooperation or competition becomes the main focus, this may lead to negative results.

On the one hand, too strong a focus on competition may risk negating any cooperative benefits. Easing off competitive mindsets may seem particularly challenging in cooperation forged because of the COVID-19 crisis, as it demands immediate collaboration (e.g. to quickly develop a joint

vaccine or tracing tool), thus leaving limited time for the partners to develop trusting relationships. Paradox theory may help the cooperation partners acknowledge emerging tensions, and provide guidance in identifying (inter-)organizational solutions that allow for the organizational, temporal, or domain separation and integration of competitive and cooperative activities (Hoffmann et al., 2018).

On the other hand, excessive cooperation can dull creative processes and innovation pursuits (Hamel, 1991; Stadtler, 2018), as well as harm competition either in the form of collusion or by overriding a partner's basis of competitive advantage. Such undermining may occur, for instance, when unintentional knowledge leakages are misused for competitive benefits, and lead to the cooperation's premature dissolution. For example, Apple and Google worked closely together to launch the first iPhone such that Google's CEO joined Apple's board and even hinted about a potential 'AppleGoo' merger (Block, 2007). However, the close ties terminated when Google announced Android as a new mobile software platform and Apple's CEO believed that it had been stolen from Apple (Isaacson, 2011).

So, when collaborating on a COVID-19 contact tracing technology, Google and Apple may be mindful of potential knowledge leakages and not let short-term pressures for cooperation endanger their individual, long-term competitiveness. Amidst such cooperative as well as intertemporal tensions, paradox theory allows to develop and maintain a more balanced view. When trying to jointly solve urgent COVID-19 challenges, organizations must not put aside all protective tools, in anticipation of a post-COVID era where markets will resurge and competition will intensify.

In turn, the increasing number of pandemic-driven cooperative relationships also provide an unprecedented opportunity to expand and revise our knowledge of paradox management. One such opportunity unfolds around the role of third parties, such as governments and competition

authorities. While these actors commonly limit the scope of ‘cooperation’ between competitors to avoid collusion, they started to relax competition laws and regulations during the COVID-19 crisis, hoping for competitor-collaborations to bring critical benefits to society. For example, many competition authorities (e.g. in UK, Spain, Italy, and Japan) have allowed and even called for competitor collaborations to address short-term market failures such as sudden demand or supply chain disruptions (OECD, 2020).

For paradox theory these developments offer an opportunity to advance insights into the role of third parties beyond that of a consultant or facilitator (Jay, 2013; Lüscher & Lewis, 2008) and explore the implications of them constraining or escalating one or both elements of a paradox. Such research may help adapt and potentially revise the conceptualization of paradoxical balancing as a cognitive challenge (Rothenberg, 1979) by informing the role of external constraints placed on the ‘when,’ ‘how’ and ‘to what extent’ of balancing.

Second, helping address the health crisis, such as providing last mile solutions once a vaccine is available, may prompt competitors to move from bilateral to more complex multi-lateral forms of collaboration in which also non-profit and governmental actors are involved. For paradox theory, these relationships offer an opportunity to investigate the rather neglected, but potentially powerful spill-over effects and interdependencies across multiple organizations’ paradox strategies.

Third, the collaborations forged during the pandemic draw our attention to co-competition as a “chosen” paradox. Rather than latently present in (inter-)organizational relations and then rendered salient (Smith & Lewis, 2011), co-competition is in most cases an explicit choice. Organizations can decide whether, when, within what scope, and with whom they want to initiate this paradox. This way, an “if, then both-and” constellation emerges. If competitors choose to cooperate or if collaboration partners choose to compete, then they have to acknowledge the underlying

interdependence and adopt the “both/and” logic. At the relational level, the choice between emphasizing cooperation, competition, or coopetition thus unveils a potential intersection of contingency and paradox approaches (Lewis & Smith, 2014) in that the coopetition choice “enacts” underlying interdependencies and hence necessitates a “both-and” approach. Likewise, the coopetition paradox can be dissolved, either intentionally (e.g. when the joint purpose related to COVID-19 has been achieved) or unintentionally (e.g. premature dissolutions due to imbalances in the relationship). Paradoxes thus can have a start, an end, as well as a restart – and it is time for paradox researchers to fully understand the implications of these deliberate choices.

Overall, we suggest that an unprecedented crisis such as COVID-19 may motivate companies to forge and join ambitious projects that require managing cooperation and competition simultaneously. Such projects may also require interactions across global value chains and, as such, bring to light other interrelated paradoxes as Schrage (see below) highlights.

### **COVID-19 and global value chains: A paradox perspective**

*Stephanie Schrage*

Coming as a “shock of uncommon magnitude imposed on firms with international commercial linkages” (Verbeke, 2020, p. 444), COVID-19 paused global trade in a manner that was unthinkable before the pandemic. Breaking off supply lines, the virus had tremendous effects on relations in global value chains (GVCs), which were cut off due to lock-down in many countries (Gereffi, 2020). Multinational corporations (MNCs) as buyers on the one side were stuck without their ordered products. Suppliers in producing countries on the other side could not ship or produce

their orders. Especially China (the ‘world’s factory’) standing still led to shortcomings in all industries and tremendous economic effects.

GVCs are networks of buyers and suppliers that often connect industrialized countries with developing and emerging economies (Gereffi et al., 2005). In many industries, they are driven by multinational buyers, who – pursuing purely economic objectives – have increasingly outsourced their production to independent supplier firms in low-wage countries (Teece, 1981). During the pandemic, the typical power asymmetries in GVCs (Gereffi et al. 2005) became fiercer, as many MNCs refused to pay for unshipped or late orders and forced their suppliers to give shipment guarantees for future orders, which remained uncertain due to lockdown. In attempts to reduce uncertainty and risk, some MNCs (e.g. in the automobile industry) even opted for dropping the contracts with their developing country suppliers and ordered with more local suppliers, which quickly sparked debates on how COVID-19 might lead to ‘deglobalization’ (Verbeke, 2020).

In addition to these economic effects, social issues in GVCs, such as poor and unhealthy working and housing conditions of production workers, became alarmingly visible during the COVID-19 pandemic. For example, working migrants in the textile industry in China, India, and Bangladesh (Leitheiser et al., 2020) remained stranded without work, shelter, or means of transportation to their home provinces after their employers closed the doors the production facilities and dormitories. Similarly, contract laborers from Eastern Europe employed at subcontractors of the food industry in countries like Germany, Ireland, Belgium, Spain, or France suffered from large-scale virus outbreaks due to low health and safety standards in their workplaces and housing facilities. The COVID-19 pandemic made dramatically clear that suppliers and workers at the producing ends of GVCs are the weakest actors in their industries, who had to shoulder the weight of the pandemic and its economic and medical consequences.

Connecting the paradox perspective with the impacts of COVID-19 on GVCs offers some interesting insights. Joining GVCs, MNCs face tensions between purchasing security and economic gains. Often, ordering with the cheapest supplier at the other end of the world means the highest risk in terms of delay or not having the order delivered at all, which shows that the elements are contradictory and interrelated. As long as MNCs order with offshore suppliers, the tensions persist, which makes them paradoxical (Smith & Lewis, 2011). During the pandemic, these paradoxical tensions were driven to the extreme. Due to lockdown, MNCs had zero order security – which (paradoxically) led to zero financial gains (a lose-lose scenario). Following these extreme conditions, economists assume MNCs to increasingly internalize their production again (Verbeke, 2020), which would shift the weight of the paradoxical poles towards more order security. However, such deglobalization carries risks of economically leaving behind those workers and suppliers in developing and emerging economies that are already disadvantaged by capitalism and do not have the choice to simply switch to other buyers.

The pandemic also intensified another paradox in GVCs: the paradoxical tensions between social workplace conditions vs. economic gains. In outsourcing their production, MNCs also outsource responsibility and control of social workplace conditions. In GVCs of many industries, economic gains come at the expense of decent working conditions (Scherer & Palazzo, 2007). For multinational buyers, improving workers' conditions while simultaneously meeting economic objectives unfolds in paradoxical tensions – the social and economic elements contradict each other and are interrelated (if one element goes up, the other goes down) (Smith & Lewis, 2011). During the COVID-19 pandemic, the paradoxical tensions between economic and social objectives in GVCs proved fiercer than ever. The pandemic drove both the economic and the social poles of the paradox to the extreme. On the one hand, the declining economy affected the urgency in which

multinational buyers aimed for economic gains. On the other hand, the lock-down circumstances in many countries aggravated the social conditions of production workers.

What can we as paradox scholars learn from the pandemic? Analyzing paradoxical tensions in GVCs during the pandemic helps to shed light on the relationship of paradox and power. Paradox scholars have established that paradoxes have a ‘dark side’ and are related to dynamics of disempowerment (Berti & Simpson, 2019). This interrelation of paradox and power became alarmingly clear during the pandemic. Despite scholars stressing that COVID-19 treats every human being as equal whether rich or poor, black or white, educated or uneducated (Bapuji et al., 2020), the pandemic crisis has revealed how unequal we really are. The weakest actors in GVCs were struck most severely during the pandemic. This can be seen in the fierce virus outbreaks in migrant worker communities and economic losses of developing country suppliers that could not simply decide to switch trade partners such as some of their MNC buyers did. While large MNCs following the pandemic have the option to simply produce elsewhere, where they face less risks, developing country workers and suppliers are left behind. This demonstrates that in interorganizational settings, where there are power imbalances between involved actors, the powerful actors are the ones who control the dynamics of the paradox. In GVCs during the pandemic, powerful MNCs have influenced the proactive or defensive nature of the overall responses to the paradoxes (that were present all along the chains). This circumstance marks the difference to the case of cooptation as discussed by Raza-Ullah and Stadtler (see above), where both actors enter the paradoxical relationship consciously and on equal terms. In interorganizational relationships such as GVCs, there are significant power imbalances. One can have the most proactive paradox mindset but if one is powerlessly stuck in captive contract relations as a developing country supplier or in an 8-bed dormitory in a foreign region as a working

migrant, there is no balancing of economic and social objectives. Under such circumstances, neither accepting nor defying the paradox changes the situation (Berti & Simpson, 2020).

For future research on paradox these insights point to the importance of unexpected events and crises when analyzing the dynamics of paradox and the role of power for these dynamics. Until now, the literature on paradox and power focuses on power relations that have manifested and remained quite stable over time like circumstances of modern slavery, employee-supervisor relations, or firm-government relations (Berti & Simpson, 2019, 2020; Li, 2020). As COVID-19 has exposed, unexpected events and crises can lead to shifts in power, which create power imbalances that are much fiercer than under ‘normal’ conditions. As paradox scholars, we need to consider such power shifts during crises when analyzing the relationship of paradox and power. COVID-19 has made dramatically clear that actively addressing paradoxes requires agency, and especially during crises, agency is reserved for the privileged.

### **Entrepreneurship during the pandemic crisis – Challenging agency in managing interactions of paradox on multiple levels**

*Anna Krzeminska, Nkosana Mafico & Charmine E. J. Härtel*

A recent article in *The Conversation* argued that COVID-19 can be “a catalyst for entrepreneurship” (Meyer, Pedersen & Ritter, 2020). Entrepreneurship requires action and while entrepreneurial action is inherently uncertain (McMullen & Shepherd, 2006), entrepreneurs are “expected to rise to the challenge” (Meyer, et al., 2020) and “seize unexpected opportunities” (Bird, 1988, p. 451) by innovating and/or pivoting, i.e. redirecting existing knowledge, skills, people and networks (Hampel, Tracey & Weber, 2020).

We conceptualize the pandemic as a “fight for survival” situation and, to elaborate on this fight, we draw on concepts rooted in evolutionary theory, such as selection and retention (Aldrich & Ruef, 2006; Nelson & Winter, 1982) as well as metaphors of organic life that have been applied in entrepreneurship research (e.g., Alvarez & Barney, 2007; Lundmark, Krzeminska, & Shepherd, 2019), such as parenthood (Cardon, Wincent, Singh, & Drnovsek, 2009) and mutagenesis (Lundmark & Westelius, 2014). The virus is an organism, as are humans. When using an organism metaphor in entrepreneurship, innovation and new ventures are mutations, i.e., unique re-combinations or chance variations of the existing genetic endowment of firms embodied in their knowledge and practices (Wennekers & Thurik, 1999) brought to life by entrepreneurs. The fight for survival in the pandemic thus takes place between the virus, humans, and enterprises as the organisms of our economic system.

Because of the unpredictability of the virus, humans have seen themselves forced to act on a global scale to contain its effects like no crisis before. The coronavirus pandemic has powerfully demonstrated how humans, despite the lack of medical solutions such as vaccines, can orchestrate a global societal response to significantly mitigate what otherwise would have been a much more devastating selection impact. What is paradoxical in this crisis though is that the societal-level actions taken to reduce unpredictability and improve survival on the societal level have added considerable unpredictability to the situation upon which individual-level entrepreneurs need to act. For example, in Australia, like in many other nations, the first response was to mandate a complete shutdown of public life (Wahlquist, 2020). After the ‘curve’ was flattened, rules were loosened but differently by each state (Wahlquist, 2020). In addition, the logic behind some rules was not obvious, e.g., hairdressers were allowed to open soon after the first lockdown while other beauty or massage parlours needed to stay closed (Wahlquist, 2020). Furthermore, restaurants

could re-open to 10 guests but not bars (Wahlquist, 2020). More recently, after case numbers surged in one state, some states reclosed their borders even to states with few cases (Paul, 2020). Given this situation of unpredictably changing rules around who, how, when, and where trading can occur, how can entrepreneurs act meaningfully to survive?

While certain levels of uncertainty are inherent in entrepreneurship, extreme levels of uncertainty such as during the pandemic can constrain entrepreneurs' agency and increase the role of, for example, chance on entrepreneurial survival. Zoom Inc. is one such example. The company was under fire recently for a range of security and privacy issues (Paul, 2020). In 2019, for instance, Zoom quietly installed a hidden web server on user devices that could allow the user to be added to a call without their permission (Paul, 2020). Then, a large-scale software issue in April 2020 allowed hackers to gain access to Zoom user computer webcams and microphones. Despite these issues, Zoom has experienced a 535% rise in daily traffic as organizations seek to ease their transition to remote work as a result of the pandemic (Paul, 2020).

In contrast, consider the craft beer industry which particularly has been hit hard by COVID-19. Many craft breweries around the world sell 80 to 90 percent of their beer through restaurants, which have been closed for weeks with no clear indication of when trading will resume (Armstrong, 2020). While some pivoted to produce hand sanitizer, for example, others saw themselves more constrained in their adaptability. In Germany for instance, the Werneck Brewery founded in 1617 and owned by the same family since 1861 will close its doors in September (Armstrong, 2020). The Wernecker Brewery survived world wars, economic crises and decades of declining beer consumption, but after 400 years in existence, the coronavirus proved to be a challenge it could not overcome (Armstrong, 2020). These examples highlight how societal level actions can either silence or magnify entrepreneurial-level tensions.

While recent developments in paradox theory acknowledge boundaries to individual agency due to power relationships in an organizational context (Berti & Simpson, 2019), the events around the pandemic urge us to extend this line of thinking and to consider multiple levels of paradox, i.e., how societal-level responses to paradoxical tensions (survival of humans vs. businesses) trickle down to affect organizational-level and individual-level tensions (silencing or magnifying those) and vice versa. Thus, acknowledging the complex interactions of responses to paradox on multiple levels (society, organization and individual) provides opportunities for us to rethink how paradox manifests and changes (e.g., is it affected by paradox on other levels?) as well as how actors can respond. Regarding the latter, paradox scholars have found that entrepreneurs can effectively manage paradoxical challenges through paradoxical frames or mental templates that individuals impose on an environment to recognize and embrace tensions (Lewis, 2000; Lewis & Smith, 2014; Miron-Spektor et al., 2018; Smith & Besharov, 2019). In situations of extreme complexity and/or uncertainty due to multi-level paradox interactions, such as in times of COVID-19, however, entrepreneurs and actors in general may be less agentic or act differently than previously suspected. For example, given the 400 years of tradition of the Wernecker Brewery, the family made a conscious decision to shut its doors instead of selling to rival breweries who make “industrial beer” as it would “hurt every time to see [our beer] in the shop” (Wernecker Brewery, 2020). “It also wouldn't be fair to the other great breweries we are friends with in the region, which then lose their sales” (Wernecker Brewery, 2020). This example highlights how, despite effectively managing paradoxical challenges over 400 years, entrepreneurs may choose to prioritise aspects that they deem critical to themselves, their organisation and their community such as legacy, tradition and equity. Studying how other decision factors may inhibit entrepreneurs’ use of paradoxical frames presents an exciting opportunity to rethink and extend paradox theory in light of entrepreneurial

issues during the pandemic, i.e., entrepreneurs may close their business not because they are unable to embrace tensions but because they are unwilling.

Pivoting, one of the most important concepts in entrepreneurial practice (O'Connor & Klebahn, 2011; Nobel, 2011), may provide a promising way forward for studying how entrepreneurs manage multi-level paradoxes (Hampel et al., 2020). Pivoting often occurs when resource-constrained ventures “come to view their current model and trajectory as unsustainable, and take the decision to transform themselves in an effort to survive and grow” (Grimes, 2018; Kunisch, Bartunek, Mueller, & Huy, 2017; Nicholls-Nixon, Cooper, & Woo, 2000). Thus far, research on pivoting has provided rich process-oriented contributions to literature that investigates tensions in organisations such as identification management and community management (Hampel, et al., 2020). It remains, however, a greenfield in the paradox literature despite clear implications.

Pivoting can, for example, help elucidate the process entrepreneurs undergo to modify organizational practices in contexts where there are linkages between tensions at multiple levels such as the COVID-19 pandemic (Tsoukas & Cunha, 2017). Highlighting this process can advance the paradox literature by providing us with a more nuanced understanding of how the modification of organizational practices can impact the linkages between multiple tensions and consequently change the nature of the vicious and virtuous cycles actors are exposed to (Toukas & Cunha, 2017). For example, how are entrepreneurs' decisions to pivot, such as breweries manufacturing hand sanitizer or fashion enterprises producing protective gear, affecting paradox on other levels, such as intensifying paradox by alienating employees who lose identification with the company mission or silencing tension by increased approval from the public due to the social nature of their pivot? Pivoting can furthermore illuminate the cognitive processes entrepreneurs undergo to untangle themselves and their organizations from multiple tensions that have become intertwined and nested

in one another (Sheep, Fairhurst, & Khazanchi, 2017). In particular, it may enhance our understanding of paradoxical frames by highlighting cognitive supports and constraints that originate at multiple levels that help and hinder the enactment of paradoxical frames. In the Wernecker Brewery example, the family perceived pivoting or selling their business as increasing or introducing new tensions due to the adverse effect on company tradition and legacy.

Overall, we hope that our writing serves as the basis for a movement towards research on the interactions of paradox on multiple levels and the implications on managing tensions based on different conceptualizations of and factors influencing agency.

### **Constructing possibilities: Cultural entrepreneurship and paradox in times of COVID-19**

*Andrea Tunarosa*

A *New York Times* article from May 2020 asked whether a pandemic was the right time to be entrepreneurial (Haimerl, 2020). The article asserted that, although at a slower rate than pre-COVID-19, new businesses were emerging “*despite* the pandemic” (emphasis added). However, in recent years, scholars interested in cultural entrepreneurship, or “the processes by which actors draw upon cultural resources (e.g., discourse, language, categories, logics, and other symbolic elements) to advance entrepreneurship or to facilitate organizational or institutional innovation” (Lounsbury & Glynn, 2019: 3), have shown that entrepreneurs do not act in a vacuum. What they imagine and consider worth pursuing at any given time is intimately related to the social context in which they are embedded (Seelos, Mair, Battilana, & Dacin, 2011). Certainly, in the COVID-19 era, entrepreneurs are forced to operate under dramatically different -- sometimes threatening -- circumstances and amidst a number of environmental forces that are, at once, contradictory,

persistent, and interdependent (Smith & Lewis, 2011). Should one prioritize profit or safety? Time-to-market or ethics? Compliance with healthcare guidelines or consumer demands? Dealing with such paradoxical tensions has especially complicated the early stages of entrepreneurship, where theorizing novel ideas or practices (Strang & Meyer, 1993) now requires envisioning a future that seems improbable at best. How, then, are actors constructing new entrepreneurial possibilities, or “opportunities to engage in entrepreneurial action” (Lounsbury & Glynn, 2019: 37), when environmental demands keep pulling them in completely different directions?

A key concept for understanding the construction of entrepreneurial possibilities is that of a “cultural hole” (Lizardo, 2014; Pachucki & Breiger, 2010). Cultural sociologists introduced this concept as a complement to the more predominant notion of “structural holes” in social networks (Burt, 2004), and defined cultural holes as “contingencies of meaning, practice, and discourse” (Pachucki & Breiger, 2010: 206), which exist “not between other persons but between cultural worlds” (Lizardo, 2014: 395). Healthcare and business, for instance, comprise two distinct cultural worlds characterized by different sets of shared meanings, practices and discourse. In the absence of a pandemic, entrepreneurs may purposefully situate themselves within cultural holes and selectively use elements from opposing world to develop novel concepts and practices. Examples of such cultural processes can be found in the creation of a market for cultural craft goods (Khair, 2019) and the elevation of grappa to a high-status liquor (Delmestri & Greenwood, 2016), to name a few.

However, crises may alter the symbolic boundaries that separate cultural worlds, and either silence or intensify tensions. For entrepreneurs, an unprecedented crisis, like the COVID-19 pandemic, may suddenly impose divergent and pressing courses of action that make latent tensions more salient (Hahn & Knight, 2019). In such cases, differences appear irreconcilable, and

interdependence—a central element that unleashes the generative power of paradox (Lüscher & Lewis, 2008; Smith, 2014)—becomes difficult to materialize. Nonetheless, recent examples of the current pandemic also suggest that stark conflict does not preclude cultural holes from becoming more than just symbolic spaces of opposition. Cultural holes may actually constitute the space where actors creatively engage with opposite worlds and experiment with cultural resources to build interrelations where there were none (Putnam, Fairhurst, & Banghart, 2016). In doing so, actors may be able to define novel opportunities for entrepreneurial action (Lounsbury & Glynn, 2019) and thus make the impossible, possible.

One such example comes from the U.S. sports realm. In March 2020, the National Basketball Association (NBA) abruptly terminated the season after a professional player tested positive for COVID-19 (Stein, Deb, Cacciola, & Draper, 2020). With no games airing on TV and a threatening virus at its doorstep, the pressing demands of financial performance and public safety came to a clash. Assembling an institutional innovation that could allow for an indoor, high-contact sport to resume in a timely fashion seemed impossible.

And yet, from the get-go, the NBA refrained from favoring just one side and adopting an either/or mindset (Miron-Spektor, Ingram, Keller, Smith, & Lewis, 2018). In fact, the NBA commissioner “dismissed the praise” he received for prioritizing public safety and, instead, engaged in a both/and discourse: “‘I’m not proud of shutting down’ [...] ‘I would be proud of finding a path that was safe and as risk-free as possible for us to play. I think that would be much more of an accomplishment than shutting down the league’” (Stein & Barnes, 2020). Over the next four months, NBA representatives began to theorize possibilities that would create interdependencies between business and public health. Building on the experiences of other sports leagues, the NBA experimented with the idea of resuming the season in a single location (rather than in the teams’

home cities) and with all the players in isolation, while securing massive COVID-19 testing and enforcing strict rules of engagement. Phrases like, “data not the date” (Stein & Barnes, 2020) and “[it’s] never ‘full steam no matter what’” (Gregory, 2020) set the tone for a both/and approach to any decision associated with an operational reboot. In addition, the NBA developed partnerships with companies like Disney and ESPN, and with scientists, doctors, and health experts to address the specific challenges of business and public health respectively. The NBA emphasized the interdependence of these two worlds by framing the cultural significance of a both/and solution as extending beyond the game itself. In public discourse, the commissioner described the NBA’s efforts as enabling the players to further the social justice movement. He also referred to sports as being “part of society” and, therefore, he asserted that any institutional innovation could, in fact, become “a model for other industries and a model for the broader society” (Gregory, 2020). On July 30, “the most extraordinary experiment in league history” (Stein, 2020) formally launched, with fan-less games rebooting inside an isolated camp-like site known as “the bubble.” Here, 22 teams undergo COVID-19 testing on a daily basis, and players adhere to an unprecedented list of rules that maximize safety.

This example evidences the importance of cultural holes in constructing entrepreneurial possibilities and the central role of cultural entrepreneurs in experimenting with and building symbolic connections across opposite paradoxical worlds (Seo, Putnam, & Bartunek, 2004). In the context of a pandemic, cultural holes may operate as sites of invention and paradoxical creativity (Miron-Spektor, Gino, & Argote, 2011) and, therefore, resemble Putnam and colleagues’ (2016: 129) notion of a “third space,” whereby actors engage paradox through mutual learning and collaborative dialogue to derive “energy from tensions.” But unlike third spaces, the concept of a cultural hole brings meaning to the fore. By pointing to the absence of relations and shared

meanings across cultural worlds, cultural holes cast a light on the role played by the broader socio-cultural context in which competing demands arise (Smith & Tracey, 2016). Cultural holes also pinpoint the importance of creating meaningful linkages across opposing realms. Cultural resources (e.g., forms of discourse, values, etc.) must resonate with relevant audiences and be perceived as legitimate. The NBA, for instance, linked the disparate worlds of business and health by framing the connection in social (e.g., contributing to society) rather than just economic terms (e.g. avoiding massive financial losses). This cultural perspective thus highlights how entrepreneurial possibilities are constructed in between specific cultural worlds, using available cultural resources, and through situated efforts to connect paradoxical demands.

In addition, weaving interdependencies required more than cognitively making sense of a paradox (Lüscher & Lewis, 2008); it entailed tentative, progressive movements towards a feasible, both/and idea. This emphasis on experimentation (Pradies, Tunarosa, Lewis, & Courtois, 2020) reminds us that paradoxes, rather than static entities, are ever-changing and dynamic. Hence, while a paradoxical mindset may be a critical way of thinking during a crisis, achieving interdependence across opposing elements may be a process that is inextricably bound to the specificities of space and time. In the realm of professional sports, for example, a prolonged pandemic may eventually render “bubbles” as ineffective ways to bridge the cultural hole between business and public health. Isolation, for instance, may create other health issues and result in pressing demands that will, once again, require creative engagement to outline new possibilities. The mere passing of time may prompt actors to re-interpret past experiences (Weick, 1995) and thus seek to assemble new possibilities. From this temporal perspective, interdependence becomes an ongoing accomplishment (Feldman, 2000; Weick, 1995) that requires continuous attention and symbolic action. Entrepreneurs may eventually re-interpret their experience of COVID-19-related tensions

and weave new forms of interdependence using the cultural resources available then (Schultz & Hernes, 2013). Undoubtedly, if and when new entrepreneurial possibilities emerge, it will not be *despite* COVID-19, but *because* of it.

## REFERENCES

- Aldrich, H. & Zimmer, C. (1986). Entrepreneurship through social networks. In D.L. Sexton and R.W. Smiler, eds. *The Art and Science of Entrepreneurship*. Cambridge, MA: Ballinger, p. 3-23
- Aldrich, H. E., & Ruef, M. (2006). *Organizational evolution and entrepreneurship*. London: Sage Publications.
- Allen, T. 2020. *Government's test-and-trace programme is illegal under GDPR*. [Online]. Available at: <https://www.computing.co.uk/news/4017986/uk-test-trace-illegal-gdpr>. [10 August 2020].
- Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1(1-2), 11-26.
- Am, J. B., Furstenthal, L., Jorge, F., & Roth, E. (2020). *Innovation in a crisis: Why it is more critical than ever*. McKinsey & Company, June 2020, [https://www.mckinsey.com/~/\\_media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/Innovation%20in%20a%20crisis%20Why%20it%20is%20more%20critical%20than%20ever/Innovation-in-a-crisis-Why-it-is-more-critical-than-ever-vF.pdf](https://www.mckinsey.com/~/_media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/Innovation%20in%20a%20crisis%20Why%20it%20is%20more%20critical%20than%20ever/Innovation-in-a-crisis-Why-it-is-more-critical-than-ever-vF.pdf)
- Amabile, T. M. (1998). How to kill creativity. *Harvard Business Review*, September-October, 77-87.
- Andriopoulos, C., & Lewis, M. W. (2009). Exploitation-Exploration Tensions and Organizational Ambidexterity : Managing Paradoxes of Innovation. *Organization Science*, 20(4), 696–717.

- Andriopoulos, C., & Lewis, M. W. (2010). Managing innovation paradoxes: Ambidexterity lessons from leading product design companies. *Long range planning*, 43(1), 104-122.
- Andriopoulos, C., Gotsi, M., Lewis, M. W., & Ingram, A. E. (2018). Turning the Sword: How NPD Teams Cope with Front-End Tensions. *Journal of Product Innovation Management*, 35(3), 427–445. <https://doi.org/10.1111/jpim.12423>
- Armstrong, M., (2020). *Bavarian Brewery Closes Over COVID-19*. [online] euronews. Available at: <<https://www.euronews.com/2020/04/19/bavarian-brewery-becomes-economic-victim-of-coronavirus>> [Accessed 23 August 2020].
- Bapuji, H., Bakker, F. G. A. de, Brown, J. A., Higgins, C., Rehbein, K., & Spicer, A. (2020). Business and Society Research in Times of the Corona Crisis. *Business & Society*, 59(6), 1067–1078. <https://doi.org/10.1177/0007650320921172>
- BBC News, 2020. *Coronavirus: Track and trace system in place from June – PM*. [ONLINE]. Available at: <https://www.bbc.co.uk/news/uk-52741331>. [Accessed 9 August 2020].
- BBC1. 2020. *Coronavirus: What went wrong with the UK's contact tracing app?*. [ONLINE]. Available at: <https://www.bbc.co.uk/news/technology-53114251>. [Accessed 9 August 2020].
- BBC2. 2020. *Coronavirus: Israel enables emergency spying powers*. [ONLINE]. Available at: <https://www.bbc.co.uk/news/technology-51930681/>. [Accessed 9 August 2020].
- Bednarek, R., Paroutis, S., & Sillince, J. (2017). Transcendence through rhetorical practices: Responding to paradox in the science sector. *Organization Studies*, 38(1), 77-101.

- Bengtsson, M., & Kock, S. (2000). "Coopetition" in business networks - to cooperate and compete simultaneously. *Industrial Marketing Management*, 29(5), 411-426.  
[https://doi.org/10.1016/s0019-8501\(99\)00067-x](https://doi.org/10.1016/s0019-8501(99)00067-x)
- Benner, M., & Tushman, M. L. (2003). Exploitation, exploration, and process management: The productivity dilemma revisited. *The Academy of Management Review*, 28(2), 238-256.  
<http://dx.doi.org/10.5465/AMR.2003.9416096>
- Berti, M., & Simpson, A. (2019). The dark side of organizational paradoxes: the dynamics of disempowerment. *Academy of Management Review*. Advance online publication.  
<https://doi.org/10.5465/amr.2017.0208>
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442-453.
- Block, R. (2007, July 23, 2020). Live from Macworld 2007: *Steve Jobs keynote*.  
<https://www.engadget.com/2007-01-09-live-from-macworld-2007-steve-jobs-keynote.html>
- Bunderson, J. S., & Sutcliffe, K. M. (2003). Management team learning orientation and business unit performance. *Journal of Applied Psychology*, 88(3), 552-560.  
<https://psycnet.apa.org/doi/10.1037/0021-9010.88.3.552>
- Burt, R. S. (2004). Structural Holes and Good Ideas. *American journal of sociology*, 110(2), 349-399.
- Cardon, M. S., Foo, M. D., Shepherd, D., & Wiklund, J. (2012). Exploring the heart: Entrepreneurial emotion is a hot topic. *Entrepreneurship Theory and Practice*, 36(1), 1-10.

- Chen, M. J. (2008). Reconceptualizing the Competition-- Cooperation Relationship: A Transparadox Perspective. *Journal of Management Inquiry*, 17(4), 288-304. <https://doi.org/10.1177/1056492607312577>
- Cloutier, C., & Langley, A. (2020). What Makes a Process Theoretical Contribution? *Organization Theory*, 1(1), 2631787720902473.
- Das, T. K., & Teng, B.-S. (2000). Instabilities of strategic alliances: An internal tensions perspective. *Organization Science*, 11(1), 77-101. <https://doi.org/https://doi.org/10.1287/orsc.11.1.77.12570>
- Delmestri, G., & Greenwood, R. (2016). 'From a Cinderella into a Queen': Radical Status Recategorization. *Administrative science quarterly*, 61(4), 507–550.
- Deutsch, M. (2006). Cooperation and competition. In: M. Deutsch, P. Coleman, & E. Marcus (Eds.), *The Handbook of Conflict Resolution: Theory and Practice*, 23–42. San Francisco: Jossey-Bass.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.
- e Cunha, M. P. (2004). Organizational time: A dialectical view. *Organization*, 11(2), 271-296.
- Poole, M. S., & van de Ven, A. H. (1989). Using Paradox to Build Management and Organization Theories. *The Academy of Management Review*, 14(4), 562–578. <https://doi.org/10.2307/258559>
- Edmondson, A. C. (2018). *The fearless organization: Creating psychological safety in the workplace for learning, innovation and growth*. Hoboken, NJ: John Wiley & Sons.

- Elton, J., & O’Riordan, A. (2016). Healthcare disrupted: next generation business models and strategies. *In Chain Drug Review* (Issue 11). John Wiley & Sons.  
<http://proxyiub.uits.iu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsgao&AN=edsgcl.460286032&site=eds-live&scope=site>
- EMA (2020). Medical devices: Medical devices legislation,  
<https://www.ema.europa.eu/en/human-regulatory/overview/medical-devices>
- EY Global (2020), COVID-19 and pandemic planning: How companies should respond,  
[https://www.ey.com/en\\_gl/covid-19/covid-19-and-pandemic-planning--how-companies-should-respond#chapter-1964280102](https://www.ey.com/en_gl/covid-19/covid-19-and-pandemic-planning--how-companies-should-respond#chapter-1964280102), 19/3/2020
- FDA (2020). Coronavirus (COVID-19) Update: FDA Issues Guidance for Conducting Clinical Trials, <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-issues-guidance-conducting-clinical-trials>
- Feldman, M. S. (2000). Organizational routines as a source of continuous change. *Organization Science*, 11(6), 611-629.
- Gereffi, G. (2020). What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies. *Journal of International Business Policy*, 3(3), 287–301.  
<https://doi.org/10.1057/s42214-020-00062-w>
- Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The Governance of Global Value Chains. *Review of International Political Economy*, 12(1), 78–104.
- Gibson, C., & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of Management Journal*, 47(2), 200–26.

- Gilbert, F., Michaud, V., Bentein, K., Dubois, C.-A., Bédard, J.-L. (2018). Unpacking the dynamics of paradoxes across levels: Cascading tensions and struggling professionals. In Farjoun, M., Smith, W., Langley, A., Tsoukas, H. (Eds.), *Dualities, dialectics, and paradoxes in organizational life*, 56–81. Oxford: Oxford University Press.
- Gray, D., (2020). Craft Brewer Pivots To Hand Sanitiser As Firms Rise To Virus Challenge. [online] *The Sydney Morning Herald*. Available at: <https://www.smh.com.au/business/companies/craft-brewer-pivots-to-hand-sanitiser-as-firms-rise-to-virus-challenge-20200327-p54ehh.html> [Accessed 23 August 2020].
- Gregory, S. (2020). 'Much Is Unpredictable.' NBA Commissioner Adam Silver Can't Guarantee NBA Restart as Coronavirus Cases Rise. *Time Magazine*.
- Grimes, M. G. (2018). The pivot: How founders respond to feedback through idea and identity work. *Academy of Management Journal*, 61(5), 1692-1717.
- Guardian. (2020). *Test, trace, contain: how South Korea flattened its coronavirus curve*. [ONLINE]. Available at: <https://www.theguardian.com/world/2020/apr/23/test-trace-contain-how-south-korea-flattened-its-coronavirus-curve>. [ Accessed 9 August 2020].
- Hahn, T., & Knight, E. (2019). The ontology of organizational paradox: a quantum approach. *Academy of management review*. <https://doi.org/10.5465/amr.2018.0408>
- Haimeri, A. (2020, May 25, 2020). It's Great Timing for a Start-Up. *The New York Times*, p. 1.
- Hamel, G. (1991). Competition for competence and interpartner learning within international strategic alliances. *Strategic Management Journal*, 12(S1), 83-103. <https://doi.org/https://doi.org/10.1002/smj.4250120908>

- Hampel, C.E., Tracey, P. and Weber, K., (2020). The art of the pivot: How new ventures manage identification relationships with stakeholders as they change direction. *Academy of Management Journal*, 63(2), 440-471.
- Hoffmann, W., Lavie, D., Reuer, J. J., & Shipilov, A. (2018). The Interplay of Competition and Cooperation. *Strategic Management Journal*, 39(12). <https://doi.org/doi:10.1002/smj.2965>
- Huq, J., Reay, T. & Chreim, S. (2017). Protecting the paradox of interprofessional collaboration. *Organization Studies*, 38(3-4), 513-538.
- Isaacson, W. (2011). Steve jobs. New York: Simon & Schuster.
- Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of management journal*, 47(3), 368-384.
- Jarzabkowski, P., & Lê, J. (2017). We have to do this and that? You must be joking: Constructing and responding to paradox through humor. *Organization Studies*, 38(3-4), 433–462.
- Jay, J. (2013). Navigating paradox as a mechanism of change and innovation in hybrid organizations [Article]. *Academy of Management Journal*, 56(1), 137-159. <https://doi.org/10.5465/amj.2010.0772>
- Khaire, M. (2019). Entrepreneurship by design: the construction of meanings and markets for cultural craft goods. *Innovation*, 21(1), 13-32. doi:10.1080/14479338.2018.1530566
- Klarner, P., & Raisch, S. (2013). Move to the beat—Rhythms of change and firm performance. *Academy of Management Journal*, 56(1), 160–184.
- Kunisch, S., Bartunek, J. M., Mueller, J., & Huy, Q. N. (2017). Time in strategic change research. *Academy of Management Annals*, 11(2), 1005-1064.

- Laverty, K.J., 1996. Economic “short-termism”: The debate, the unresolved issues, and the implications for management practice and research. *Academy of Management Review*, 21(3), 825-860.
- Leitheiser, E., Hossain, S., Sen, S., Tasnim, G., Moon, J., Steen Knudsen, J., & Rahman, S. (2020). *Early impacts of coronavirus on Bangladesh apparel supply chains RISC Briefing – April 2020*.
- Levinthal, D. A., & March, J. G. (1981). A model of adaptive organizational search. *Journal of Economic Behavior and Organization*, 2, 307-333.
- Levitt, B., & March, J. G. (1988). Organizational learning. *Annual Review of Sociology*, 14, 319-340.
- Lewis, M. W. & Smith, W. K. (2014). Paradox as a metatheoretical perspective: Sharpening the focus and widening the scope. *The Journal of Applied Behavioral Science*, 50(2), 127-149. <https://doi.org/10.1177%2F0021886314522322>
- Lewis, M. W. (2000). Exploring paradox: Toward a more comprehensive guide. *Academy of Management Review*, 25(4), 760-776.
- Li, X. (2020). Solving Paradox by Reducing Expectation. *Academy of Management Review*. Advance online publication. <https://doi.org/10.5465/amr.2020.0005>
- Lizardo, O. (2014). Omnivorousness as the bridging of cultural holes: A measurement strategy. *Theory and Society*, 43(3-4), 395-419.
- Lounsbury, M., & Glynn, M. A. (2019). *Cultural Entrepreneurship: A New Agenda for the Study of Entrepreneurial Processes and Possibilities*. United Kingdom: Cambridge University Press.

- Lundmark, E., & Westelius, A. (2014). Entrepreneurship as elixir and mutagen. *Entrepreneurship Theory and Practice*, 38(3), 575-600.
- Lundmark, E., Krzeminska, A., & Shepherd, D. A. (2019). Images of entrepreneurship: exploring root metaphors and expanding upon them. *Entrepreneurship Theory and Practice*, 43(1), 138-170.
- Lüscher, L. S., & Lewis, M. W. (2008). Organizational change and managerial sensemaking: Working through paradox. *Academy of Management Journal*, 51(2), 221-240.  
<https://doi.org/https://doi.org/10.5465/amj.2008.31767217>
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71-87.
- Marginson, D., & McAulay, L. (2008). Exploring the debate on short-termism: A theoretical and empirical analysis. *Strategic Management Journal*, 29, 273-292.
- Martinsons, M. G. (1993). Outsourcing information systems: a strategic partnership with risks. *Long Range Planning*, 26(3), 18-25.
- MedWatch (2020). Digitalisering af lægemiddelforsøg kan spare milliarder for lægemiddelindustrien, [https://medwatch.dk/Medicinal\\_\\_\\_Biotek/article12237932.ece](https://medwatch.dk/Medicinal___Biotek/article12237932.ece)  
(Retrieved 22 June)
- Meyer, K., Lund Pedersen, C. and Ritter, T., (2020). *The Coronavirus Crisis: A Catalyst For Entrepreneurship*. [online] The Conversation. Available at: <<https://theconversation.com/the-coronavirus-crisis-a-catalyst-for-entrepreneurship-135005>> [Accessed 23 August 2020].

- 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., 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(1), 26-45.
- Nelson, R. R., & Winter, S. G. (1982). *An evolutionary theory of economic change* Cambridge MA and London: Belknap Press of Harvard University Press.. Cambridge, Mass. and London, Belknap Harvard.
- Nelson, R. R., & Winter, S. G. (1982). The Schumpeterian tradeoff revisited. *The American Economic Review*, 72(1), 114-132.
- NHSX. 2020. *NHS Covid-10 App*. [ONLINE] Available at: <https://www.nhsx.nhs.uk/COVID-19-response/nhs-COVID-19-app/>. [Accessed 9 August 2020].
- Nicholls-Nixon, C. L., Cooper, A. C., & Woo, C. Y. (2000). Strategic experimentation: Understanding change and performance in new ventures. *Journal of Business Venturing*, 15(5-6), 493-521.
- Nobel, C. (2011). Teaching a 'Lean Startup' Strategy. *HBS Working Knowledge*, 1-2.
- O'Connor, C., & Klebahn, P. (2011). The strategic pivot: rules for entrepreneurs and other innovators. *Harvard Business Review*.
- OECD. (2020). *Co-operation between competitors in the time of COVID-19*. <https://doi.org/https://www.oecd.org/competition/Co-operation-between-competitors-in-the-time-of-COVID-19.pdf>

- Osono, E., Shimizu, N., & Takeuchi, H. (2008). *Extreme Toyota: Radical contradictions that drive success at the world's best manufacturer*. Wiley.
- Pachucki, M. A., & Breiger, R. L. (2010). Cultural holes: Beyond relationality in social networks and culture. *Annual Review of Sociology*, 36, 205-224.
- Paul, K., (2020). 'Zoom Is Malware': Why Experts Worry About The Video Conferencing Platform. [online] *The Guardian*. Available at: <<https://www.theguardian.com/technology/2020/apr/02/zoom-technology-security-coronavirus-video-conferencing>> [Accessed 27 August 2020].
- Paul, S., (2020). *Australia Suffers Record Coronavirus Deaths, Triggering Tighter Curbs*. [online] Reuters. Available at: <<https://www.reuters.com/article/us-health-coronavirus-australia/australia-suffers-record-coronavirus-deaths-triggering-tighter-curbs-idUSKCN251053>> [Accessed 23 August 2020].
- Perlow, L., Okhuysen, G., & Reppenning, N. (2002). The speed trap: Exploring the relationship between decision making and temporal context. *Academy of Management Journal*, 45(5), 931– 55.
- Pradies, C., Tunarosa, A., & Lewis, M. W. (2020). From vicious to virtuous paradox dynamics: The social-symbolic work of supporting actors. *Organization Studies*, in press. <https://doi.org/10.1177%2F0170840620907200>
- Putnam, L. L., Fairhurst, G. T., & Banghart, S. (2016). Contradictions, dialectics, and paradoxes in organizations: A constitutive approach. *Academy of Management Annals*, 10(1), 65-171.

- Raisch, S., & Birkinshaw, J. (2008). Organizational ambidexterity: Antecedents, outcomes, and moderators. *Journal of Management*, 34, 375-409.  
<https://doi.org/10.1177%2F0149206308316058>
- Raisch, S., Birkinshaw, J., Probst, G., & Tushman, M. L. (2009). Organizational ambidexterity: Balancing exploitation and exploration for sustained performance. *Organization Science*, 20(4), 685-695.
- Raza-Ullah, T. (2020). Experiencing the paradox of cooptation: A moderated mediation framework explaining the paradoxical tension–performance relationship. *Long Range Planning*, 53(1), 101863. <https://doi.org/https://doi.org/10.1016/j.lrp.2018.12.003>
- Raza-Ullah, T., Bengtsson, M., & Kock, S. (2014). The cooptation paradox and tension in cooptation at multiple levels. *Industrial Marketing Management*, 43(2), 189-198.  
<https://doi.org/https://doi.org/10.1016/j.indmarman.2013.11.001>
- Reinecke, J., and Ansari, S. (2015). When times collide: Temporal brokerage at the intersection of markets and development. *Academy of Management Journal*, 58(2), 618– 48.
- Rothenberg, A. (1979). *The emerging goddess : the creative process in art, science, and other fields*. Univ. of Chicago P.
- Schad, J., Lewis, M. W., Raisch, S., & Smith, W. K. (2016). Paradox research in management science: Looking back to move forward. *The Academy of Management Annals*, 10(1), 5-64. <http://dx.doi.org/10.1080/19416520.2016.1162422>
- Scherer, A. G., & Palazzo, G. (2007). Towards a Political Conception of Corporate Responsibility: Business and Society Seen From a Habermasian Perspective. *Academy of Management Review*, 32(4), 1096–1120.

- Schultz, M., & Hernes, T. (2013). A temporal perspective on organizational identity. *Organization Science*, 24(1), 1-21.
- Scoblic, J.P. (2020). Learning from the future, *Harvard Business Review*, July-August
- Seelos, C., Mair, J., Battilana, J., & Dacin, M. T. (2011). The embeddedness of social entrepreneurship: Understanding variation across local communities Communities and organizations. In Marquis, C., Lounsbury, M., Greenwood, R. (Eds.), *Communities and organizations*, 333-363. Bingley, England: Emerald Group.
- Seo, M., Putnam, L. L., & Bartunek, J. M. (2004). Dualities and tensions of planned organizational change. *Handbook of organizational change and innovation*, 73-107.
- 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.
- Sinkula, J. M., Baker, W., & Noordewier, T. G. (1997). A Framework for Market-Based Organizational Learning: Linking Values, Knowledge and Behavior. *Journal of the Academy of Marketing Science*, 25(Fall), 305-318.
- Slawinski, N. & Bansal, P. (2015). Short on time: Intertemporal tensions in business sustainability. *Organization Science*, 26(2), 531-549.
- Slawinski, N. & Bansal, P. (2017). The paradoxes of time in organizations. In W. K. Smith, M. W. Lewis, P. Jarzabkowski & A. Langley, A. (Eds.) *The Oxford Handbook of Organizational Paradox*, Oxford: Oxford University Press, 373-392.

- Slawinski, N., Pinkse, J., Busch, T., & Banerjee, B. (2017). The role of short-termism and uncertainty avoidance in organizational inaction on climate change: A multi-level framework. *Business & Society*, 56(2), 253-282.
- Smith, W. K. (2014). Dynamic decision making: A model of senior leaders managing strategic paradoxes. *Academy of Management Journal*, 57(6), 1592-1623.
- Smith, W. K., & Besharov, M. L. (2019). Bowing before dual gods: How structured flexibility sustains organizational hybridity. *Administrative Science Quarterly*, 64(1), 1-44.
- 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.  
<https://doi.org/10.1214/07-AOP369>
- 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.  
<https://doi.org/https://doi.org/10.5465/amr.2009.0223>
- Smith, W. K., & Tracey, P. (2016). Institutional complexity and paradox theory: Complementarities of competing demands. *Strategic Organization*, 14(4), 455-466.
- Smith, W. K., Lewis, M. W., & Tushman, M. L. (2011). Organizational ambidexterity: Organization design and senior leadership to enable strategic paradox. In K. Cameron & G. Spreitzer (Eds.), *The Oxford handbook of positive organizational scholarship*, 798-810. New York, NY: Oxford University Press.
- Smith, W. K., Lewis, M. W., Jarzabkowski, P. & Langlely, A. (2017). *The Oxford Handbook of Organizational Paradox*. Oxford: Oxford University Press.

- Stadtler, L. (2018). Tightrope Walking: Navigating Competition in Multi-Company Cross-Sector Social Partnerships. *Journal of Business Ethics*, 148(2), 329-345.  
<https://doi.org/10.1007/s10551-017-3579-2>
- Stein, M. (2020, July 27, 2020). For the N.B.A., a Long, Strange Road Trip to the Finals. *The New York Times*.
- Stein, M., & Barnes, B. (2020, June 6, 2020). For N.B.A., Safety First Becomes Money First. *The New York Times*.
- Stein, M., Deb, S., Cacciola, S., & Draper, K. (2020, March 13, 2020). From Rocky Season To No Season at All. *The New York Times*.
- Stewart, T.A., Raman, A.P., (2007). Lessons from Toyota's long drive. *Harvard Business Review* 85(7/8), 74–83.
- Strang, D., & Meyer, J. W. (1993). Institutional conditions for diffusion. *Theory and Society*, 22(4) 487-511.
- Sutanto, J., Palme, E., Tan, C. H., & Phang, C. W. (2013). Addressing the personalization-privacy paradox: an empirical assessment from a field experiment on smartphone users. *MIS quarterly*, 37(4), 1141-1164.
- Svahn, F., Mathiassen, L., & Lindgren, R. (2017). Embracing Digital Innovation in Incumbent Firms: How Volvo Cars Managed Competing Concerns. *Mis Quarterly*, 41(1), 239-253.
- Teece, D. J. (1981). The Multinational Enterprise: Market Failure and Market Power Considerations. *Sloan Management Review*, 22(3), 3–17.
- Tsoukas, H., & e Cunha, M. P. (2017). On organizational circularity. In: Smith, W. K., Lewis, M., Jarzabkowski, P., Langley, A. (Eds.), *The Oxford handbook of organizational paradox:*

- Approaches to plurality, tensions, and contradictions*, 393-412. Oxford: Oxford University Press.
- van der Vegt, G., & Bunderson, S. (2005). Learning and performance in multidisciplinary teams: The importance of collective team identification. *Academy of Management Journal*, 48(3), 532-547.
- Verbeke, A. (2020). Will the COVID-19 Pandemic Really Change the Governance of Global Value Chains? *British Journal of Management*, 31(3), 444-446. <https://doi.org/10.1111/1467-8551.12422>
- Wahlquist, C., (2020). Australia's Coronavirus Lockdown – The First 50 Days. [online] *The Guardian*. Available at:<<https://www.theguardian.com/world/2020/may/02/australias-coronavirus-lockdown-the-first-50-days>> [Accessed 23 August 2020].
- 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.
- Weick, K. E. (1995). Sensemaking in organizations (Vol. 3). London:: Sage Publications, Inc.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization science*, 16(4), 409-421.
- Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13(1), 27-56.
- Wernecker Brewery. (2020). *Corona Zwingt Fränkische Traditionsbrauerei In Die Knie*. [online] Available at: <<https://www.br.de/nachrichten/wirtschaft/corona-zwingt-fraenkische-traditionsbrauerei-in-die-knie,RyIQPpJ>> [Accessed 27 August 2020].

WHO. 2020. *New Zealand takes early and hard action to tackle COVID-19*. [ONLINE]. Available at: <https://www.who.int/westernpacific/news/feature-stories/detail/new-zealand-takes-early-and-hard-action-to-tackle-COVID-19/>. [Accessed 9 August 2020]

Xu, H., Luo, X. R., Carroll, J. M., & Rosson, M. B. (2011). The personalization privacy paradox: An exploratory study of decision making process for location-aware marketing. *Decision support systems*, 51(1), 42-52.