### ADVANCING THEORY WITH REVIEW ARTICLES

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#### Abstract

Reviewing a body of work presents unique opportunities for making a theoretical contribution. Review articles can make readers think theoretically differently about a given field or phenomenon. Yet, review articles that advance theory have been historically under-represented in *Journal of Management Studies*. Accordingly, the purpose of this editorial is to propose a multi-faceted approach for fashioning theoretical contributions in review articles, which we hope will inspire more authors to develop and submit innovative, original, and high-quality theory-building review articles. We argue that advancing theory with review articles requires an integrative and generative approach. We propose a non-exhaustive set of avenues for developing theory with a review article: exposing emerging perspectives, analyzing assumptions, clarifying constructs, establishing boundary conditions, testing new theory, theorizing with systems theory, and theorizing with mechanisms. As a journal, *Journal of Management Studies* is a journal of ideas – new ideas; ideas drawn from reflections on extant theory and ideas with potential to change the way we understand and interpret theory. With this in mind, we think that advancing theory with review articles is an untapped source of new ideas. The *Journal of Management Studies (JMS)* has a long history of publishing impactful review articles on important topics in management and organization literatures. In contrast to some other journals that publish only reviews, or that feature an annual special issue consisting of reviews, *JMS* publishes review articles alongside regular conceptual and empirical articles in regular and special issues. Review articles can take many different approaches and can vary from systematic to less systematic ones (Snyder, 2019) as long as they describe in at least some detail the scope of the works under review, how the included studies were analyzed, and what conclusions were drawn from them. For the purpose of this editorial, we define a review article as a study that analyzes and synthesizes an existing body of literature by identifying, challenging, and advancing the building blocks of a theory by examining a body (or several bodies) of prior work.

To be published in *Journal of Management Studies (JMS)*, articles must make a substantive contribution to theory in the management and organization literatures, that is, they must "advance conceptual and empirical knowledge, and address practice in the area of management and organization" (*JMS Mission Statement*). Review articles provide many opportunities for making a theoretical contribution and advancing scientific knowledge. They can help other researchers understand the research topic and discern important, under-examined areas, which allows for the development of novel and interesting research questions and empirical studies in subsequent research. In novel or emergent research areas, review articles can connect research findings from various disparate sources in original ways so that a new perspective or phenomenon emerges. In more mature research areas, review articles can help to bridge fragmented areas of research as knowledge in management studies often times develops along disciplinary lines resulting in different theoretical perspectives not sufficiently informing and drawing from each other.

Regrettably, review articles are under-represented among articles published in *JMS*, despite their potential for advancing theory and generating impact, and despite their longstanding presence in *JMS*' volumes. Many review articles do not advance far in *JMS*' review process because they do not satisfy *JMS*' aim to put forth a significant theoretical contribution, even when their topic clearly fits within *JMS*' scope. In other words, even when review articles address a topic that is of interest to *JMS* they encounter rejection when they fail to advance our theoretical understanding of the topic or phenomenon in novel ways. It may well be more expedient to write a summative and descriptive

review, but such efforts often produce limited theoretical contributions and, therefore, do not meet *JMS*' standards. However, as authors and editors, we can attest to the challenges of advancing theory with reviews.

We propose that unlocking the potential for making a theoretical contribution with a review article requires combining integrative and generative approaches, which can move a review's contribution beyond a summary of prior research and a list of suggestions for future research directions towards a fundamental theoretical contribution. The integrative aspect involves analysis and synthesis of existing research (Torraco, 2016) while the generative aspect refers to creating new ideas and theories based on reviewing prior studies to provide a strategic platform for future scholarship (Gatrell and Breslin, 2017).

Typically, a review paper consists of both critical analysis and synthesis, which support each other (Torraco, 2005). A critical analysis is the examination of an issue or question with a transparent methodology from a new perspective that questions the 'taken for granted' approach (Torraco, 2005). It lays out a compelling, logical argument to explain key dimensions of the topic, phenomenon, method, or conceptualization examined, such as origins, history, strengths, key conclusions, flaws, contradictions, interdependencies, (un)warranted assumptions, or overly limiting boundary conditions (Klein and Potosky, 2019; Torraco, 2016; Van de Ven, 2007). Preferably, the critical analysis rests on both quantitative and qualitative studies (Callahan, 2010) and engages various epistemologies. Through critical analysis, the researcher maps out important areas of agreement, disagreement, and new knowledge requirements (Torraco, 2016).

In turn, synthesis means connecting different streams of literature together to focus on core issues rather than merely reporting findings of previous literature (Torraco, 2005). Synthesis answers the "so what" question in terms of what the findings of the literature review mean for future research. When a synthesis also involves a generative approach the ultimate aim of this creative activity is the generation of a new model, framework, or other unique contribution (Torraco, 2005). Thus, although a review is inherently based on examining prior research, it results in novel knowledge or perspective (Torraco, 2005) through the researcher "standing on the shoulders of giants," but with a critical attitude. As such, combining integrative and generative approaches affords a continuous reflective interpretation of a body of knowledge (Rousseau, Manning and Denyer, 2008), which creates new

models and ways of thinking about the topic to address important gaps identified in the analysis and synthesis (Torraco, 2016).

As editors and authors, our experience is that academics, having been equipped with a set of analytical tools, are typically quite adept at the analysis part of conducting a review, that is, in terms of breaking apart a concept or a topic and going through it with a fine-tooth comb (Kunisch, Menz, Bartunek, Cardinal, and Denyer, 2018). Yet, analysis is a necessary but not sufficient. For a review to successfully change the conversation in a field, authors also need to condense the wealth of information that they have learned through the review into an interesting, meaningful, and potentially actionable format. Therefore, the purpose of this editorial is to challenge scholars to think in a new light about the power of review articles for advancing theory and, ultimately, to inspire more authors to develop and submit innovative, original, and high-quality theory-building review articles to JMS. To that effect, in this editorial we propose an 'advancing theory with review articles' approach that consists of four inter-related components. First, we explain how to consider JMS' aims and scope when writing a review article for this journal. Then, we identify seven promising and proven avenues for developing theory with a review article, illustrating them with reviews published in JMS or other leading journals. Next, we reflect on five forms of synthesis (Torraco, 2005, 2016)<sup>1</sup> that researchers can use to communicate the findings of their reviews, namely: research agenda, taxonomy or other conceptual classification of constructs, alternative models or conceptual frameworks, meta-analysis, and metatheory. Finally, we provide tips for conducting review articles that inform theory.

We want to emphasize that the avenues for generating new insights and the forms of synthesis that we highlight in this editorial are neither mutually exclusive nor exhaustive but, rather, a set of tools that, we believe, hold promise for developing significant theoretical contributions. Further, despite *JMS*' emphasis on methodological rigor, we do not aim to revisit the mechanics and methods of writing a review article because many excellent articles and reference sources already exist. Rather, in the final "Tips for conducting review articles that inform theory" section we include some high-

<sup>&</sup>lt;sup>1</sup> While we draw on Torraco's (2005, 2016) five forms of integrative synthesis reviews, these forms are consistent with other classifications proposed by other scholars, including Rousseau, et al. (2008), Klein and Potosky (2019), Durand, Grant, and Madsen (2017), Dixon-Woods, Agarwall, Jones, Young and Sutton (2005) among others. We use Torraco's (2016) forms because their terminology is familiar to a wide range of scholars and accommodates varying epistemologies.

level do's and don'ts, based on our personal editorial experiences, and direct the reader to a number of informative guides and articles on the topic.

### ALIGNING THE REVIEW ARTICLE WITH THE AIMS AND SCOPE OF JMS

A theory-building literature review suitable for publication in *JMS* should inspire readers to think differently about a given field, theory, topic, phenomenon, or other area of concern. In keeping with the aims of *JMS*, we look for theory-building reviews that bring new viewpoints or directions to knowledge in key fields within the scope of *JMS* such as organization theory, organizational behavior, human resource management, strategy, international business, entrepreneurship, innovation, and critical management studies. As with empirical papers, *JMS* has an inclusive ethos and is open to a wide range of theoretical perspectives, methods, and philosophical underpinnings in review papers.

It is important to remember that *JMS* is a journal intended for a general readership that aims to provide actionable managerial knowledge. Papers must therefore be accessible to readers who are unfamiliar with the subject area – for example a post-doctoral or early-career researcher faced with a new teaching area (as happened to one of the authors of this editorial). Any review published in *JMS*, however specialized, must read in such a way that the interested, yet unfamiliar scholar will be able to understand it. Yet, the review will also have to include insights that offer novelty for scholars who are familiar with the topic. This makes writing a theory-building review for *JMS* both more challenging than targeting a specialty journal and more rewarding, as the journal's ability to reach a wider audience may amplify a review article's impact.

Further, in relation to the general nature of *JMS*, a well-written theory-building review also positions itself within the wider context of management and organization studies, making the case for why its contents and arguments are relevant to readers not immediately involved with the topic. A review paper on flexible working, for example, would need to show how it links to other, related areas. How would scholars of work and family, of gender and diversity or HR, or of organization theory more broadly, think differently about their research having read this theory-building review? Remembering to link with the wider subject area of management and organization studies will not only enhance the likelihood of acceptance in *JMS*, which aims to inform the wider management studies community; it will also enhance the scholarly impact of the review paper.

SOME AVENUES FOR ADVANCING THEORY WITH REVIEWS

Articles that review a body of work contribute to theory when they do not merely report on previous literature but, rather, analyze and synthesize the research to generate new ways of conceiving of a given field or phenomenon. Uncovering such novel insights requires approaching and questioning the focal body (or bodies) of work from critical and distinctive avenues. In the following, we discuss what we see as interesting and promising avenues for advancing theory with reviews and, for each, provide concrete exemplars published in *JMS* over the years (see Table I). These distinctive avenues – which, we hope, will help authors to think about how they may contribute to theory with a review article – emerged as we reflected on prior literature on the art of review articles and conducted a thorough review of theory-building review articles published in *JMS*.

### **INSERT TABLE I ABOUT HERE**

### **Exposing Emerging Perspectives in Review Papers**

Scientific research, including studies in management and organizations, tends to follow established theoretical pathways, which are elaborated and extended over time (Burrell and Morgan, 1979; Qui, Donaldson, and Luo, 2012). Literature reviews play an important role for theory development within an existing theoretical perspective by synthesizing and elaborating research within that theoretical perspective and by identifying opportunities for its further theoretical extension (Qui et al., 2012), as demonstrated by the review by Hillman, Withers and Collins (2009) on the application of resource-dependence theory in different contexts.

However, over time, contributions within an established perspective can become increasingly incremental and even disconnected from organizational practice. Hardy and Clegg (1997, p. S12) comment that "as researchers 'develop' their understanding, they become further removed from the subject." Also, fundamental changes in the business environment due to societal and technological trends—such as globalization, digitalization, open innovation, and artificial intelligence (Doh, Muzio, Prescott, Sarala, 2019)—affect management phenomena under investigation so that, over time, prominent theories and perspectives may no longer adequately describe current managerial realities and challenges.

Theory development that progressively lags and deviates from the empirical realities facing organizational actors can amplify the well-documented utilization and relevance problems of academic management research (Davis and Marquis, 2005; van Aken, 2004). Further, dominant perspectives (and their proponents) can silence alternative standpoints and pluralistic viewpoints because published research both embodies and obscures power (Hardy and Clegg, 1997). An emerging perspective develops when theoretical progress stalls and unsolved empirical anomalies accumulate while, simultaneously, new promising alternative explanations begin to surface (Qiu et al., 2012).

Therefore, literature reviews can substantially contribute to theory development by exposing and espousing an emerging perspective. A literature review can trace the historical development of the new perspective and reflect on how the perspective developed from and is embedded in social and intellectual processes, political changes, technological advancements, and wider structure of social relations (Wilmott, 1993). In addition, a literature review can contribute by identifying and elaborating on the key theoretical features and concepts of the emerging paradigm and by showing how the new concepts help to address prior theoretical omissions or to solve inconsistent findings and anomalies. A literature review can also inspire theoretical advances and improvements for future studies in the emerging perspective and offer suggestions for "paradigm interplay" (Schultz and Hatch, 1996) to engage researchers across different theoretical perspectives and viewpoints on a given topic or phenomenon. Multidisciplinary approaches can often be helpful in generating these kinds of new insights.

Constructively contrasting the emerging paradigm with established views can enable communication between different theoretical worldviews (Wilmott, 1993) and prevent further fragmentation of management theories (Donaldson, 1998). Recognizing and engaging in dialogue and debate between the novel perspective and other alternative theoretical approaches (Hardy and Clegg, 1997) requires applying reflexivity (Alvesson, Hardy and Harley, 2008; Johnson and Duberley, 2000) in a literature review.

The *JMS* article by Scherer and Palazzo (2011) exemplifies a literature review that advances theory by exposing an emerging perspective. The authors review the corporate social responsibility (CSR) literature and contrast the traditional instrumental view on CSR with the emerging political

perspective on CSR. A key argument in their study is that the current business environment, characterized by globalization and post-nationalism, requires considerations of the political role of business beyond legal compliance. The literature review summarizes and contrasts the main features of both the established theoretical view (instrumental CSR) and the emerging perspective (political CSR). Ultimately, the authors show that these theoretical angles are embedded in and stem from different research paradigms (Burrell and Morgan, 1979; Qui, et al., 2012) and approaches (Hardy and Clegg, 1997), providing opportunities to uncover different facets of CSR. The article concludes by discussing novel research questions arising from the emerging perspective on CSR and linking the new perspective to broader economic theories of the firm to illustrate the wider relevance of the review to management studies.

### **Analyzing Assumptions in Review Papers**

As social scientists attempt to capture reality in theoretical models, they make assumptions about the nature of human beings and society. These assumptions about how human and social behaviors might be understood are the underlying elements of any theory and paradigm (Burrell and Morgan, 1979; van Aken, 2004). For instance, a core assumption in mainstream economics is the rationality of human beings and the self-regulation of markets (Ariely, 2009). Similarly, organizational theorists make assumptions about the nature of society in terms of objectivity vs. subjectivity and stability vs. radical change (Burrell and Morgan, 1979). Accordingly, different research approaches in management studies—such as normative, interpretive, critical, and postmodern—rest on different fundamental assumptions about how the social and organizational world may be interpreted and analyzed (Alvesson and Deetz, 1996; Hardy and Clegg, 1997). When a review relaxes or changes a field's central assumption(s), entirely new fields of research may open up, as demonstrated, for instance, by the emergence of the field of behavioral economics through relaxing the assumption of rationality to account for irrational behavior (Ariely, 2009).

Assumptions are important because they influence every part of the research process, including formulating the research question, establishing theoretical and method congruence, selecting informants, reporting results, and interpreting findings (van Aken, 2004; Van Maanen, Sorensen and Mitchell, 2007). A closer reflection on assumptions in a body of literature may reveal that apparently conflicting results stem from fundamentally different key assumptions that reflect different theoretical perspectives or even paradigms (Alvesson and Sandbesg, 2011). Also, as a body of literature matures, its underlying assumptions tend to become increasingly shared, accepted, and implicit. This may create significant biases if the assumptions—and the related limitations of theorizing—are not fully taken into account in the interpretation and application of results (Foss, and Hallberg, 2014).

Therefore, a literature review can contribute to theory development by first defining, espousing and analyzing assumptions in a body of literature and then reflecting on how the assumptions or alternative ones link to different theoretical views, research approaches (Hardy and Clegg, 1997), and even paradigms (Burrell and Morgan, 1979). An analysis of underlying assumptions may uncover hitherto hidden, but theoretically coherent groups of scholars that would not be easily identifiable if the researcher focused solely on the surface-level findings. Naturally, this type of inquiry about assumptions is not likely to be as fruitful if one is reviewing a very narrow topic or a single theoretical perspective. However, phenomena in management studies tend to be inherently broad and multidisciplinary—as reflected in research areas such as innovation (Crossan and Apaydin, 2010), international management (Tsui, 2007), or organizational culture (Schultz and Hatch, 1996) and thereby can be approached from several different perspectives, each with its own set of assumptions.

An analysis of assumptions can also contribute to theory by revealing prevailing and competing assumptions that obscure different dominant logics and underlying paradigms. Literature reviews that uncover various viewpoints are important tools for potentially breaking the paradigm mentality (Wilmott, 1993), increasing reflexivity within and across theoretical perspectives (Hardy and Clegg, 1997), and explaining the fundamental reasons behind different viewpoints (Donaldson, 1998). If the authors advocate one set of assumptions over another, in line with reflexive research, they must also be open about their own background and potential biases as these may influence the conclusions they draw (Johnson and Duberley, 2000). Further, studying assumptions can uncover biases stemming from un-reflexive research, explain apparently contradictory or inconsistent findings, and expose under-researched areas, through which the phenomena can further be explored. Thus, the value of literature reviews that analyzes assumptions comes not necessarily from uncovering the

assumptions per se, but from reflecting on the significance and consequences of core assumptions on theorizing and developing a more nuanced understanding of a body of literature.

Karhunen et al.'s (2018) *JMS* literature review illustrates a contribution to theory building through an analysis of assumptions. The authors review language-sensitive research in international management and discover three different categories of taken-for-granted assumptions, which correspond to three different theoretical views of language: structural, functional, and social practice. Uncovering the underlying assumptions of language-sensitive research increases reflexivity of research, helps articulate suggestions for future research (Karhunen et al. 2018), and facilitates discourse between different research paradigms (Wilmott, 1993).

### **Clarifying Constructs in Review Papers**

Construct clarity is critical not only for building new theory (Suddaby, 2010) but also for developing measures, measurements and manipulations of constructs (Byrne, Peters, and Weston, 2016), as well as for comparing, aggregating and replicating empirical studies (Fisher and Aguinis, 2017; Le, Schmidt, Harter, and Lauver, 2010). Therefore, a review can contribute to and advance theory by clarifying a construct. Clear constructs have precise and parsimonious definitions that show their distinctiveness vis-a-vis related concepts (Podsakoff, MacKenzie, and Podsakoff, 2016; Singh, 1991; Suddaby, 2010); a careful scope that sufficiently reflects the unerlying phenomenon (Fisher and Aguinis, 2017; Hirsch and Levin, 1999; Suddaby, 2010); and logical consistency with the arguments invoked in their theoretical space (Potočnik and Anderson, 2016; Suddaby, 2010).

Yet, as fields emerge and develop, inconsistencies or even contradictions in the substantive meaning of a construct emerge, ambiguities reveal themselves; and open disagreements develop (e.g., Hulleman, Schrager, Bodmann, and Harackiewicz, 2010; Venkatraman and Rajanujam, 1986; Wales, 2016). For example, this is the case in the increasingly popular business model literature (e.g., Massa, Tucci, and Afuah, 2017). Further, research at the intersection of two or more fields, or that moves from one level to another may reveal overlaps and inconsistencies among related constructs in different fields or at different levels of analysis (Cappelli, 2012; Chan, 1998; Klein and Kozlowski, 2000). Finally, established constructs may be ripe for re-examination when researchers adopt them to inform questions, for which they were not initially intended, or when new realities may render them obsolete or incomplete (e.g., Lane, Koka, and Pathak, 2006; Sumpter, Greenberg, and Kim, 2019).

Therefore, contrasting, specifying, and (re)structuring existing theoretical constructs can help refine and advance existing theory (Fisher and Aguinis, 2017).

Two studies illustrate the capacity of a review to generate new theory through construct clarification. Zahra, Sapienza and Davidsson (2006), identifying that the literature on dynamic capabilities is "riddled with inconsistencies, overlapping definitions, and outright contradictions" go to the essence of the disagreements by identifying and reviewing a set of studies that most informatively highlight the contradictions in the definition of the construct. Doing so enables the authors to (1) clarify the scope of the dynamic capabilities construct by identifying substantive capabilities as a separate construct; (2) propose an integrated theoretical model of the relationship between dynamic capabilities and the newly separated construct of substantive capabilities. Simsek, Heavey, Veiga, and Souder (2009) also rely on a literature review to resolve the ambiguity and disagreement around the nature of the organizational ambidexterity construct. Their comprehensive review yields the insight that the various ways in which researchers use the organizational ambidexterity construct fall along a temporal and a structural dimension. This typology advances theory because, for each type of organizational ambidexterity, they identify its appropriate theoretical grounding for future theorizing, its antecedents, and its outcomes.

### **Establishing Boundary Conditions in Review Papers**

Theorizing alternative or shifting (extending or contracting) boundary conditions of extant theorizing is a third distinctive avenue through which a review may shed new light on a phenomenon. While scholars might agree on the importance of understanding alternative or shifting boundaries, and thus the consequent need to establish boundary conditions (Gonzalez-Mule and Aguinis, 2018) the definitions of how boundary conditions might be understood are imprecise (Busse et al., 2017), potentially polarizing a research area. Boundaries conditions are articulated by Whetten (1989: 492) as 'plac[ing] limitations on the propositions generated from a theoretical model'. Busse et al. (2017) make the argument that contemporary boundary conditions should be dynamic and contextual – as such, scholarly boundaries are 'intimately intertwined with the theory development process' (2017: 604).

Within management and organization studies, reviews that propose alternative or shifting boundaries may be problem-centered. Such reviews seek to shift theoretical boundaries because they

are looking for innovative solutions to explain phenomena, and to move forward thinking in order to explore contemporary questions and concerns (for example IT-enabled organizational agility (Rowe, 2014)). Typically, therefore, such papers are often inductive or grounded in approach, with theoretical frameworks and research agendas emerging from the papers examined as part of the review (Rowe, 2014). In some cases, as we discuss below, reviews allow for the empirical testing of such newly identified boundaries.

Boundary extensions may be contextual and relational. As Dubin (1978) observed, quantitative and empirical (often, by implication, deductive) studies of social and behavioral science might err on the side of caution when defining the boundaries of a research method and/ or study, due to concerns that such research might not be repeatable if applied in different contexts, or to different populations. A more qualitative (perhaps, by inference, tending towards the inductive) approach to boundary conditions within a literature review might be more flexible because the authors are not aiming for repeatability, but at moving forward understanding to reflect theoretical responses to new knowledge, or changing social contexts.

For example, Wright et al., (2018) in their *JMS* exploration of knowledge worker mobility, sought specifically to advance knowledge and understanding of knowledge worker mobility in its context. Their review extends the boundaries of theory and method within the area of concern through developing a new framework, which explores five dimensions: organizational context and roles; geographical and spatial context; social context and teams, institutional and cultural norms, and temporal dynamics. Stating the view that linking questions to context is 'crucial for theory building' (2018:2), Wright et al. observe how new insights on the context of knowledge worker mobility has the potential to influence both boundary conditions and theory. For example, previous literatures on knowledge worker mobility assumed that decisions to move location would usually be voluntary on the part of the individual. New understandings that such moves may be involuntary might change theoretical dispositions (Wright et al., 2018).

While the notion of establishing boundaries could occur within the confines of management and organization studies, reviews that embrace an interdisciplinary approach might also be included in the definition of alternative or shifting boundaries. *JMS*, with its thirst for new ideas and its ethos of plurality and interdisciplinary inclusion, has an established history of publishing interdisciplinary work. Literature reviews provide an opportunity for introducing to management and organization studies new and creative ideas that are not usually part of management debates, integrating these different perspectives with more established management frameworks to offer new ways of interpreting a problem (Jones and Gatrell, 2014). Reviews that integrate interdisciplinary literatures within the management context can assist in dissolving disciplinary boundaries and may provide novel evaluations within areas that may have been hitherto misunderstood or insufficiently explained. Establishing boundaries through interdisciplinary thinking may not provide answers (Jones and Gatrell, 2014) but this approach might dissolve disciplinary silos, thereby proposing alternative views on key topics.

For example, Whiteman et al., (2013) in their consideration of corporate social responsibility, observe how integration of theory from the natural sciences within the business and environment literature was previously limited. They turned to natural science literatures where 'the very foundations of sustainability are routinely debated and refined'. In so doing they introduce to management studies, from the science of sustainability, a provocative theoretical development 'Planetary Boundaries' (Rockström et al., 2009) which articulates the complexities of environmental problems, indicating that a dynamic approach is needed to address corporate sustainability.

According to Hubbard et al., (2010), and writing from a literal, cognitive psychology perspective), 'a view of a scene is often remembered as containing information that might have been present just beyond the actual boundaries of that view' (2010:1467). Perhaps this literal perspective of boundaries is helpful for prospective *JMS* authors, searching for explanations that others might previously have neither observed or understood, and re-defining the boundaries (potentially through multidisciplinary integration) via the review process.

# **Testing New Theory in Review Papers**

Reviews may also advance theory when they exploit accumulated research to derive new frameworks and *empirically test* new insights about a phenomenon, a relationship, or a set of relationships. Research proliferation may reveal overlaps in how distinct research traditions explain and test a relationship; may expose conflicting theories elucidating its mediating pathways; may show inconsistent, conflicting, or ambiguous results; or may present variety in research designs (e.g., in the conception and operationalization of key constructs, study settings, or sample characteristics) heightening the need to define boundary conditions and suggesting altogether new ways of thinking about a well-trodden research question. Overlapping and conflicting theories, empirical inconsistencies, and variability in research designs all present opportunities for advancing knowledge: the generation of new insights that can subsequently be quantitatively or qualitatively tested using the underlying body of empirical work.

Reviews advance theory not only when they synthesize and integrate theories, but also when they can simplify a theoretical space by discarding inadequate theories. For example, Habersang and her colleagues (2019) helped resolve the competing explanations -i.e., inertia, extremism, or a mixture of both - for why organizational failure processes unfold as they do, by qualitatively metaanalyzing failure processes from 17 case studies and synthesizing them into four process archetypes. Doing so brings order to this field of study and opens up new possibilities for further research. Conversely, researchers may be able to simplify theories by testing the relative explanatory power of competing theoretical models about the mechanisms linking two constructs (Bergh, Aguinis, Heavey, Ketchen, Boyd, Su, Lau, and Joo, 2016; Cheung and Hafdahl, 2016). For example Allan and his colleagues (2019) identified competing theories for the relationship between meaningful work and its proximal and more distal outcomes. The authors predict that meaningful work directly increases work engagement, job satisfaction, and commitment, which in turn influence self-rated performance, organizational citizenship behaviors, and withdrawal intentions. However, they recognize the competing prediction, that work engagement, job satisfaction, and commitment could indirectly be affecting self-rated performance, organizational citizenship behaviors, and withdrawal intentions, by rendering work more meaningful. To test these and a third competing model, they create a meta-analytic correlational matrix based on the meta-analytic correlational values from previous meta-analyses as well as their own and use meta-analytic structural equation modeling to test the explanatory value of each model.

While above we developed problem-centered contextual and relational boundary extensions as an avenue for advancing theory with reviews, here we argue that reviews may expand and advance theory by proposing and empirically testing novel boundary conditions or moderators to an oftstudied relationship. As any management or organization studies textbook lays out, the shape and strength of a relationship often depends on other factors. Therefore, as a body of work about a given

relationship grows, it becomes increasingly important to understand in which situations the relationship holds, does not hold, intensifies or peters out (Boyd, Takacs Haynes, Hitt, Bergh, and Ketchen Jr, 2012; Cortina, 2003) and what mechanisms are at play with these contingencies. Developing new logic and knowledge of the factors that alter the nature or strength of a relationship advances theory because it increases theoretical precision. In some cases, the identification of contingent factors may elucidate puzzling null results (e.g., Post and Byron, 2015). Further, a theoretically contributive literature review may introduce and empirically test moderators that cannot be ascertained in primary studies (Gonzalez-Mulé and Aguinis, 2018). Data for these moderators may come from the studies under review (e.g., study design, operationalization of constructs, sample characteristics) or may be collected from external sources (e.g., country-level data that correspond to the primary study's national research setting). For example, Rosenbusch and her colleagues (2019), noting inconsistencies in the body of empirical evidence linking innovation offshoring and innovation performance, advance theory by establishing country-level differences in the institutional environment as boundary conditions to the relationship.

Reviews may also reinvigorate a field of study when scholars use them to identify an altogether new way of thinking about how to approach a well-trodden research question. For example, Cornelissen and Duran (2014) content-analyze 24 ground-breaking theories to organize them into an a-priory typology of thinking processes associated with theoretical contributions. Doing so enabled them, first, to refine the a-priory typology and, second, to ascertain the usefulness of the typology in developing original theoretical contributions.

### **Theorizing with Systems Theory in Review Papers**

Analyzing a body of work using systems theory is yet another distinctive avenue for developing theory with a review, in that it seeks to account for (rather than reduce) organizational complexity (Schneider, Wickert, and Marti, E. (2017). Systems theory originated in the natural sciences before migrating to the social sciences including management studies (Mele, Pels and Polese, 2010; Schad and Bansal, 2018) where it has experienced a diverse and fragmented popularity among researchers. A system is an "assemblage of elements that interact repeatedly and in the same manner" (Dubin, 1978, p. 240). The three components of a system are elements (e.g., constructs, processes) that remain the same through the life of the system, interrelationships among the elements that allow us to know the state of a system (e.g., employed, unemployed) and a boundary that tells us who or what is in and out of the system.

A guiding principle in applying system theory is that 'the whole is more than the sum of its parts.' Accordingly, the system is understood as the unit of analysis in this approach. Many management topics can be conceptualized as systems: Resources, teams, departments, routines, strategies, firms, environments, and institutions can all be seen as systems although researchers typically choose to focus on a subset of their attributes or characteristics. Management theories based on systems theory include complex adaptive systems (Simon, 1962, 1996), open systems theory (Katz and Kahn, 1978), complexity theory (Dick, Faems and Harley, 2017), fuzzy set theory (Fiss, 2007), configuration theory (Meyer, Tsui and Hinings, 1993), and activity systems theory (Siggelkow, 2011) to mention a few.

A systems theory approach to advancing theory with a review seeks to identify, (re)align, and join various components of a system represented in one or several bodies of literature into an entire system around a focal research question to provide a more complex picture. Dubin (1978, 263) provides guidance for theorizing about systems in literature reviews, in the form of four questions. First, how many states of the system are there? For example, the Miles and Snow (1978) strategy typology has three successful (defender, prospector, analyzer) and one unsuccessful (reactor) system states. Second, what are the trajectories of the system as it moves from one of its states to another? For instance, Siggelkow's (2011) conceptualizes firms as systems of interdependent choices and theorizes how the subsystems of firms evolve over time "because it is quite unlikely that firms are founded with ... full-fledged systems" (p. 1128). Third, what are the conditions for the destruction of the system (lethality) or its transformation into another system? For example, Katz and Kahn (1978) argue that adopting an open systems perspective for organizations requires theorizing that firms are not part of a closed system but are a subsystem of a large system that includes their environment to which they need to shape or adapt. The open systems perspective stimulated the rise of entirely new bodies of research such as resource dependencies, inter-organizational relationships, ecology, coopetition, corporate social responsibility, institutions, and the mechanisms that explain transformation processes. Fourth, what is the value or range of values taken on by any given unit of the system, given a specific system state? Advances in techniques such as fuzzy set theory,

simulations, and qualitative comparative analysis (QCA) allow researchers to theorize and empirically demonstrate the implications of the range of values for a variable in a system (e.g., Misangyi, Greckhamer, Furnari, Fiss, Crilly, and Aguilera, 2016).

Theorizing with system theory can revitalize a well-established stream of research. For example, Schleicher and colleagues' (2018) observe in their review of the performance management (PM) literature that while scholars conceptualize PM as a process involving a set of interrelated components (i.e., system), the field lacks a parsimonious model for theorizing resulting in "many unanswered questions about its [PM] effectiveness" (p. 2210). To address this concern, they reason that adopting a systems perspective to PM theorizing provides a way to parsimoniously organize the interrelated components of PM and identify novel research directions. Applying system principles including internal interdependencies, capacity for feedback, equifinality, and adaptation they developed a taxonomy model illuminating the complex and dynamic nuances of a PM systems theory perspective. They demonstrate the value of their taxonomy by illustrating how our understanding of three important 'debates' in the PM literature are informed by adopting a system-based approach.

# Theorizing with Mechanisms in Review Papers

The systematic and critical examination of a body of work through a mechanism prism is yet another avenue for advancing theory with a review. A mechanism is a plausible explanation for a puzzling phenomenon, unexpected outcome, process of change, or an observed relationship between constructs. Mechanisms open up the black box revealing the social "cogs and wheels" of social processes (Hedstrom and Wennberg, 2017).

Social processes are amenable to mechanism-based explanations because they are multi-level, multifaceted, nuanced, involving social interdependencies and complex feedback loops (e.g., Davis 2006). To sort the variety of mechanisms involved in social processes, Hedstrom and Swedberg (1998) developed a typology of social mechanism based on a macro-micro distinction (i.e. the bathtub model) that includes situational mechanisms (macro-to-micro transitions), action-formation mechanisms (micro-to-micro transitions) and transformational mechanisms (aggregated micro-to-macro transition).

Mechanisms are intriguing because they can counteract each other, come in pairs, and be part of a families of mechanisms to "form continuous and contiguous chains of causal links" (Elster, 1989 in Hedstrom and Wennberg, 2017, p. 93). Also, the same mechanism can explain different social process, have opposite effects for different social processes, and exist at different levels of analysis (Hedstrom and Swedberg, 1998). Further, there is the challenge of aggregating micro mechanisms to explain macro outcomes (Hedstrom and Wennberg, 2017, Schelling, 1978). Thus, in any research project the espoused mechanisms are plausible explanations, not the only explanation.

There is a consensus that mechanisms that have generalizability across phenomenon, outcomes, processes or relationships are preferred because they have broad explanatory power. Examples include the self-fulfilling prophesy, cognitive dissonance, competition, and imitation mechanisms (see Hedstrom and Swedberg, 1998). There is also a preference for mechanisms in which the causal actors are individuals (e.g., Foss, Husted, and Michailova, 2010; see Kahneman, 2011 for a compendium of micro mechanisms) because they provide fine-grain explanations, although this preference depends on the definition of an actor. While some might advocate that mechanisms are the outcome of individual beliefs, values, actions, attitudes (Hedstrom and Swedberg, 1998), others have successfully argued that organizations (at least legally) also have agentic capabilities (King, Felin and Whetten, 2010).

In theorizing, mechanism have at least four roles; unobservable constructs, mediators, moderators, or identified/discovered as part of an empirical study (via induction, abduction or experiment). When theorizing with mechanism in review papers, we advocate Hedstron and Wennberg's (2017) guidelines. Scholars should "clearly and precisely explicate the mechanisms at work, ...explicate the dynamic processes that the mechanisms are likely to give rise to, ...are actor and not variable or factor oriented, and ...are semi-general and hence portable and able to explain other types of phenomena than those they initially were developed for" (p 93). Notable theorizing examples include developing a research agenda for a mechanism (routines in Feldman, Pentland, D'Adderio and Lazarics, 2016), cataloging mechanisms for a research stream (coordinating mechanism in Jarabkowski, Le and Feldman, 2012), demonstrating the generality of a mechanism across research streams (attention in Ocasio, 2011), and identifying mechanisms absent from the literature (problem-driven research in Davis and Marquis, 2005).

Foss, Husted and Michailova's (2010) *JMS* review article is an exemplar of mechanism-based theorizing with a review article. They examined the propositions that research on knowledge sharing

in organizations "has paid insufficient attention to micro (individual) level constructs and mechanisms and to the role of formal organization in governing knowledge processes" (455). Their review is an example of developing a research agenda for governance mechanisms and knowledge sharing in organizations. To establish the boundaries of their review, they defined knowledge governance and focused their review on knowledge sharing within organizations around two mechanism-related issues: macro and micro levels of analysis (i.e., the bathtub taxonomy) and the influence of formal and informal organizational mechanisms on knowledge sharing. Their review demonstrated that knowledge-sharing scholars have devoted "too little attention to building micro-foundations in the form of making behavioral assumptions and building theoretical accounts of [formal and informal governance] mechanisms" (p. 456). Building on their theoretical framework and synthesis, they discuss a variety of 'open issues' for theorizing.

# ADVANCING THEORY WITH REVIEWS: FIVE FORMS OF SYNTHESIS FOR COMMUNICATING THE FINDINGS FROM A REVIEW

While the avenues described above are approaches for generating novel insights from a literature review, here we reflect on five forms of synthesis (Torraco, 2005, 2016) that authors may use to package and communicate the findings from their review for scholarly consumption: research agenda, taxonomy, alternative models, meta-analysis, and metatheory. In Table I, we imagine various forms of synthesis for each of the theory-generating avenues we described earlier and provide examples of how prior reviews have combined our proposed avenues with different forms of synthesis.

A *research agenda* draws on the critical analysis of prior literature to offer stimulating research questions and even propositions for researchers to examine in subsequent studies (Torraco, 2016). To make a theoretical contribution, the research agenda can for example, show how to examine a topic or phenomenon with a novel perspective (Avenue 1: Exposing emerging perspectives). We want to emphasize that using a research agenda as a form of synthesis is typically not sufficient by itself for a theoretical contribution in the leading management journals. Research agenda typically follows and accompanies another form of synthesis, such as a taxonomy or framework. Accordingly, the contribution of the review lies in the framework's or taxonomy's ability to bring forth novel and

interesting avenues, which are elaborated on in the research agenda, through which subsequent studies can further advance theory development.

A *taxonomy* forms the organizing framework for understanding previous research and builds the foundation for new theorizing (Torraco, 2016). Taxonomy is an effective form of synthesis and is very commonly used in review papers in the area of management. To make a theoretical contribution, a taxonomy can, for instance, depict two major dimensions along which constructs fundamentally differ, which results in the identification of four construct archetypes (Avenue 3: Establishing construct clarity; see Whiteman et al. (2013) in Table 1). As another example, a taxonomy can be used to depict the major dimensions along which the underlying assumptions differ within a body of research, which results in fundamentally different views of the phenomenon in question (Avenue 2: Assessing assumptions; see Karhunen et al. (2018) in Table 1).

*Alternative models or conceptual frameworks* illustrate different ways of thinking on the topic based on what the prior literature does and does not address and stem from the literature review (Torraco, 2016). To make a theoretical contribution, an alternative framework can, for instance, propose a new, alternative, emerging perspective (Avenue 1: Exposing emerging perspectives) or present a model that takes into account the boundary conditions (Avenue 4: Establishing boundary conditions) or mechanisms of a phenomena (Avenue 7: Theorizing with mechanisms). This form of synthesis can be connected to the "taxonomy" form of synthesis discussed above so that several alternative models or frameworks arise from the different taxonomy categories. For instance, different construct archetypes arising from a taxonomy form of synthesis that is built to establish construct clarity (Avenue 1: Exposing emerging perspectives) can lead to the development of several alternative models with different theoretical groundings, antecedents, and outcomes (see Simsek et al. 2009 in Table 1).

*Meta-analysis* uses the empirical results from prior studies to examine their combined effect (Combs et al. 2019; Torraco, 2016). A meta-analysis can be used, for instance, to examine how empirical results vary across different constructs used (Avenue 3: Establishing construct clarity) or to test the relative significance of different boundary conditions (Avenue 4: Establishing boundary conditions), system states (Avenue 6: Theorizing with systems theory), or mechanisms (Avenue 7: Theorizing with mechanisms; see Habersang et al. 2019 in Table 1 for an example). However, the use of meta-analysis, especially quantitative meta-analysis, is typically more applicable to examining established topics and literature streams as opposed to emerging ones because of the statistical power required. The *JMS* 2019 special Issue on Meta-analysis on Contemporary Phenomena in Management Studies (volume 56, 1, 1 - 302) includes several examples of the use of meta-analysis.

Finally, *metatheory* refers to theorizing across theoretical domains based on the literature review (Torraco, 2016). For example, King, Felin, and Whetten (2010) proposed a meta-theory of organizations as social actors. In review papers, metatheory can be used, for instance, to theorize boundary conditions across disciplines and phenomena by bringing theory from one discipline (e.g. ecology) and using it to explain a management topic (e.g. corporate sustainability) (see Whiteman et al. 2013 in Table 1).

## TIPS FOR CONDUCTING REVIEW ARTICLES THAT INFORM THEORY

Arguably, scholarly opportunities for writing review papers within management and organization studies are greater now than in the past. Where authors might once have regarded writing a review paper as a risky business, due to lack of potential outlets and fear of rejection, a growing appetite has arisen within our field for capturing and critiquing extant scholarship. Hence the increasing propensity among leading management and organization studies journals (including *JMS*) to publish literature reviews, which often are highly cited (see, for example, Zahra *et al.*, 2006)

A rich array of guidance exists on how best to initiate, develop, and organize a literature review. For example, Webster and Watson's highly cited (2002) paper reflects on how analyzing past studies can shape future research, outlining the components of an effective review and offering advice on how to review emerging fields. Snyder (2019) provides an overview of different types of reviews that researchers can use. Denyer and Tranfield (2009) emphasize the importance of methodological transparency in ensuring that reviews are evidence based (rather than merely a collection of papers known already to authors) and Torraco (2005; 2016) provides guidance, through exemplification, on how to write integrative reviews. A requirement to focus on research content (as opposed to the trajectories of specific research teams) is emphasized by Bem (1995) and Baumeister and Leary (1997) explain the importance of engaging with future research agendas (see also Jones and Gatrell, 2014). In this section of our editorial, our intent is not to produce a synthesis of the many studies on how best to write a review. Rather, we highlight six tips, which, we think, are important and relevant for authors seeking to advance theory with literature reviews in *JMS*.

## **Clarify the scope and objectives of the review**

Is the purpose of your review to advance theory? Are you conducting an in-depth review of 'a mature topic where an accumulated body of research exists that needs analysis and synthesis'? (Webster and Watson, 2002: xiv). Or are you 'tackling an emerging issue that would benefit from exposure to potential theoretical foundations'? (Webster and Watson, 2002: xiv). In the first case (mature field), it would be important to justify, to potential readers, why your review is important. In the second case, it would be necessary to demonstrate how, though emergent research, your chosen area has sufficient substance and quantity of papers to merit a review. In either case you would need to identify why, and how, you intend to make sense of existing scholarship and what your review offers – are you making sense of a perplexing and complex field? (see Weick, 1989). Or are you proposing new perspectives with implications for theorizing? (see for example Scherer and Palazzo's (2011) review which reenvisions corporate social responsibility as a politicized concept). In other words, it is important to justify why your review fills an important theoretical gap, puzzle, or anomaly in the literature, the avenue taken to advance theory (e.g., Table I) and the form of you review.

## **Check for fit**

The pitfalls of writing review papers tend to fall into two categories – the first based on practical issues, the second on deeper problems relating to the contribution of the paper. At the most superficial level, reviews get 'desk rejected' because the authors have not followed the *JMS* submission guidelines. For example, it is understood within *JMS* that review papers might need to be of substantive length in order for relevant literatures to be assessed. Nevertheless, for an initial submission, an upper word limit of 11,000 word is imposed, with an absolute maximum of 15,000 including all references, tables and figures. Papers that exceed the advised word count are likely to be deemed insufficiently succinct. Tables and figures should relate to, and enhance, understanding of the main text of a review, not serve to extend the *JMS* word limitations. Still, for transparency and replicability purposes, authors should include the list of papers reviewed, which could be extensive depending on the maturity of a reviewed topic or number of fields examined in the review. Authors

may consider using an appendix for this sort of information. Keep in mind, however, that appendices are not a repository for materials that do not substantively contribute to a paper's main message. Further, if the paper's presentation is poor, with grammatical and typographical errors interrupting the flow of the review, it is unlikely to be sent out for peer-review.

Theoretically, papers are unlikely to enter, or continue in the review process if the area of concern is deemed not mature enough to merit an in-depth review (for guidance on how to publish reviews in 'new' fields, see Webster and Watson, 2002). Papers which list, or describe a field, as opposed to extending or shifting theoretical arguments, are unlikely to succeed with JMS, where the purpose of reviews is to make a new and definable contribution to theory, based on the review of the area of concern. Similarly, papers which are unfocused, and which fail to explicate clearly and convincingly where the contribution lies, are unlikely to make progress within the *JMS* peer-review system (see Jones and Gatrell, 2014). Post-doctoral and early career scholars might wish to consider teaming with supervisors and/or more experienced colleagues, who may assist in crafting the review.

# Aim for a theoretical contribution

The scope, objective, and purpose of a review that advances theory are important for journals like *JMS*, which seek analytical, in-depth reviews of a given field, with implications for knowledge creation and transfer. As Clarke *et al.*, (2013) observed, for articles (reviews or empirical studies) to be relevant for *JMS* readers, there is a requirement to be conceptual, advancing both theory and debate (Gatrell and Breslin, 2017; Sutton and Staw, 1995). As noted below, *JMS* expects reviews to rely on state-of-the-art methods including transparency in one's search methods (Denyer and Tranfield, 2009). However, the present fashion for bibliometric analyses (especially those using software packages that privilege quantitative measures such as co-citation analysis, Boyack and Klavans, 2010) may produce papers that do not meet *JMS* criteria for publication in terms of theoretical contribution, unless the review uncovers truly novel, unexpected, and exciting findings. Similarly, reviews that rely heavily on mapping and do not explore, analyze, and demonstrate how they advance theory in the research stream of concern, are likely to be rejected. As Bem (cited in Webster and Watson, 2002: xiv) observed, 'Authors of literature reviews are at risk for producing mind-numbing lists of citations and findings that resemble a phone book-impressive case: lots of numbers, but not much plot'. (Bem, 1995: 172).

Beyond a comprehensive, state-of-the-art review of a particular research field, *JMS* seeks reviews which are theoretically-driven with an integrative and generative approach which open up or redirect lines of research by linking avenues (Table I) for making a theoretical contribution through different forms of synthesis (Torraco, 2016). *JMS* is a journal of ideas, and literature reviews that advance theory provide a unique opportunity for developing novel and engaging theoretical ideas and constructs, based on informed understandings of past research.

### Explain your methodological approach

JMS and many other journals require a methodological section indicating how papers were selected for review. As a journal, JMS takes a pluralist stance respect to methods (e.g., Green, et al., 2006; Pautasso, 2013). It is thus open to different styles, ranging from quantitatively conducted systematic reviews, where literatures are gathered using specific protocols with a view to hypothesis testing (Pautasso, 2013) to narrative reviews (often qualitative discussions of ideas produced by authors who are experienced in their fields, Green et al., 2006). In some journals, narrative reviews (usually from a team of experienced writers who develop their arguments drawing upon prior knowledge (Baumeister and Leary, 1997; Jones and Gatrell, 2014) might not include a methods section explaining how the reviewed literatures were chosen. Authors may decide to include various types of papers based upon their own databases and experience. For example, *Academy of* Management Annals does not presently require a formal methods section, though author teams are required to evidence their position within the relevant field. For the JMS, however, (see also International Journal of Management Reviews) a methods section is mandatory. While JMS embraces a plurality of review styles including the narrative approach, we nevertheless expect authors to explain at a minimum how they selected which literatures to include, which they excluded, how they delineated these boundaries, and how they envisage their theoretical contribution to the field.

Whatever the approach, the methods section needs to be transparent. How did you choose your objectives and how did you select papers to review in the light of your aims? How did you categorize papers, and how did you analyze them? How do your methods fit your aim and contribute to a review that advances theory? Here, again, others have written extensively about and provide useful guidance on how to improve transparency in reporting the inevitable choices authors make in scoping and analyzing the underlying studies (e.g., Aytug, Rothstein, Zhou, and Kern, 2012; Bergh et al., 2016;

Callahan, 2014). Crossan and Apaydin's (2010) review on organizational innovation provides a transparent, clear and logical example of how the author team integrated differing research perspectives into a comprehensive and multi-dimensional framework.

# Write for a general audience

Remember that *JMS* is a multi-disciplinary, inclusive journal with a broad readership. To be published in *JMS*, review papers are required to be clear, jargon free and comprehensible (and interesting!) to the generalist as well as the specialist reader.

# Embrace a building blocks perspective

As Webster and Watson (2002) observe, reviews can provide the foundations for new research. Review papers that *JMS* seeks to publish are those that provide the building blocks for future of research in management and organization studies. It is worth investing in the process of writing a review that contributes to theory for *JMS*, given that those reviews, when published, will significantly influence future progress within a given field.

# CONCLUSION

Essentially, what we are looking for is a contribution that adds value 'beyond a review'; a theoretical contribution. Our approach builds on the critical analysis and synthesis foundations of an integrative synthesis review to propose several important, interesting, and promising avenues and forms (Table I) for generating theory with a review article.

As a journal, *JMS* is a journal of ideas – ideas drawn from reflections on extant theory, and ideas with potential to change the way we understand and interpret theory. A review that contributes to theory should stimulate readers to think differently about their own future research, having gained new insights from the review. We hope that our article can serve as an inspiration for authors as they work on designing and writing reviews that contribute to theory with *JMS* as a potential target.

### REFERENCES

Allan, B. A., Batz-Barbarich, C., Sterling, H. M. and Tay, L. (2019). 'Outcomes of meaningful work: A meta-analysis'. *Journal of Management Studies*, **56**, 500-28.

Alvesson, M. and Deetz, S. (1996). 'Critical theory and postmodernism approaches to organizational studies'. In Clegg, S. R., Hardy, C. and Nord, W. R. (Eds), *Handbook of Organization Studies*. Thousand Oaks, CA: Sage, 191-217.

Alvesson, M. and Sandberg, J. (2011). 'Generating Research questions through Problemization'. *Academy of Management Review*, **36**, 247-71.

Alvesson, M., Hardy, C. and Harley, B. (2008). 'Reflecting on Reflexivity: reflexive textual practices in organization and management theory'. *Journal of Management Studies*, **45**, 480-502.

Ariely, D. (2009). 'The end of rational economics'. Harvard Business Review, 87(7/8), 78-84.

Aytug, Z. G., Rothstein, H. R., Zhou, W. and Kern, M. C. (2012). 'Revealed or concealed? Transparency of procedures, decisions, and judgment calls in meta-analyses'. *Organizational Research Methods*, **15**, 103–33

Baumeister, R. F. and Leary, M. R. (1997). 'Writing narrative literature reviews'. *Review of General Psychology*, **1**, 311-20.

Bergh, D. D., Aguinis, H., Heavey, C., Ketchen, D. J., Boyd, B. K., Su, P., Lau, C. L. and Joo, H. (2016). 'Using meta-analytic structural equation modeling to advance strategic management research:
Guidelines and an empirical illustration via the strategic leadership-performance relationship'. *Strategic Management Journal*, **37**, 477-97.

Bem, D. J. (1995) 'Writing a review article for Psychological Bulletin'. *Psychological Bulletin*, **118**, 172–77.

Boyack, K. W. and Klavans, R. (2010). 'Co-citation analysis, bibliographic coupling, and direct citation: Which citation approach represents the research front most accurately?'. *Journal of the American Society for Information Science and Technology*, **61**, 2389-404.

Boyd, B. K., Takacs Haynes, K., Hitt, M. A., Bergh, D. D. and Ketchen Jr, D. J. (2012). 'Contingency hypotheses in strategic management research: Use, disuse, or misuse?'. *Journal of Management*, **38**, 278-313.

Burrell, G. and Morgan, G. (1979). *Sociological paradigms and organizational analysis*. Heinemann Educational Books. Reprinted 2016 by Routledge, Oxford.

Busse, C., Kach, A. and Wagner, S. (2017). 'Boundary conditions: what they are, how to explore them, why we need them, and when to consider them'. *Organizational Research Methods*, **20**, 574-609.

Byrne, Z. S., Peters, J. M. and Weston, J. W. (2016). 'The struggle with employee engagement:
Measures and construct clarification using five samples'. *Journal of Applied Psychology*, **101**, 1201-27.

Callahan, J. L. (2010). 'Constructing a manuscript: Distinguishing integrative literature reviews and conceptual and theory articles'. *Human Resource Development Review*, **9**, 300-04.

Callahan, J. L. (2014). 'Writing literature reviews: A reprise and update'. *Human Resource Development Review*, **13**, 271-75.

Cappelli, P. (2012). 'A cautionary view of construct validity'. *Human Resource Management Review*, **2**, 149-51.

Chan, D. (1998). 'Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models'. *Journal of Applied Psychology*, **83**, 234-46.

Cheung, M. W. L. and Hafdahl, A. R. (2016). 'Special issue on meta-analytic structural equation modeling: Introduction from the guest editors'. *Research Synthesis Methods*, **7**, 112-20.

Clark, T., Floyd, S. W. and Wright, M. (2013). 'In search of the impactful and the interesting: Swings of the pendulum?'. *Journal of Management Studies*, **50**, 1358-73.

Combs, J. G., Crook, T. R. and Rauch, A. (2019). 'Meta-analytic research in management: Contemporary approaches, unresolved controversies, and rising standards'. *Journal of Management Studies*, **56**, 1-18.

Cornelissen, J. P. and Durand, R. (2014). 'Moving forward: Developing theoretical contributions in management studies'. *Journal of Management Studies*, **51**, 995-1022.

Cortina, J. M. (2003). 'Apples and oranges (and pears, oh my!): The search for moderators in metaanalysis'. *Organizational Research Methods*, **6**, 415-39.

Crossan, M. M. and Apaydin, M. (2010). 'A multi-dimensional framework of organizational innovation: A systematic review of literature'. *Journal of Management Studies*, **7**, 1154-91.

Davis, G. F. (2006). 'Mechanisms and the theory of organizations'. *Journal of Management Inquiry*, **15**, 114–18.

Davis, G. and Marquis, C. (2005). 'Prospects for organizational theory in the twenty-first century: Institutional fields and mechanisms'. *Organization Science*, **16**, 332-43.

Denyer, D. and Tranfield, D. (2009). 'Producing a systematic review'. In Buchanan, D. and Bryman, A. (Eds), *The Sage Handbook of Organizational Research Methods*. London: Sage, 671–89.

Dick, P., Faems, D. and Harley, B. (2017). 'An introduction to the special issue on managing complexity within and across organizational boundaries'. *Journal of Management Studies*, **54**, 129–31.

Dixon-Woods, M., Agarwal, S., Jones, D., Young, B. and Sutton, A. (2005). 'Synthesising qualitative and quantitative evidence: a review of possible methods'. *Journal of Health Services Research and Policy*, **10**, 45–53

Doh, J., Muzio, D., Prescott, J. and Sarala, R. (2019). 'Future of work. Call for papers'. *Journal of Management Studies*.

Donaldson, L. (1998). 'The myth of paradigm incommensurability in management studies: Comments by an integrationist'. *Organization*, **5**, 267-72.

Dubin, R. (1978). Theory Building, Revised Edition. New York: Free Press.

Durand, R., Grant, R. and Madsen, T. (2017). 'The expanding domain of strategic management research and the quest for integration'. *Strategic Management Journal*, **38**, 4-16.

Elster, J. (1989). Nuts and Bolts for the Social Sciences. Cambridge: Cambridge University Press.

Feldman, M., Pentland, B., D'Adderio, L. and Lazaric, N. (2016) 'Beyond Routines as Things: Introduction to the Special Issue on Routine Dynamics'. *Organization Science*, **27**, 505-13.

Fisher, G. and Aguinis, H. (2017). 'Using theory elaboration to make theoretical advancements'. *Organizational Research Methods*, **20**, 438-64.

Fiss, P. C. (2007). 'A self- theoretic approach to organizational configurations'. *Academy of Management Review*, **32**, 1180-98.

Foss, N. and Hallberg, N. (2014). 'How symmetrical assumptions advance strategic management research'. *Strategic Management Journal*, **35**, 903-13.

Foss, N., Husted, K. and Michailova, S. (2010). 'Governing knowledge sharing in organizations: levels of analysis, governance mechanisms, and research directions'. *Journal of Management Studies*, 43, 455-82.

Gatrell, C. and Breslin, D. (2017). 'Editors' statement'. *International Journal of Management Reviews*, **19**, 1-3.

Gonzalez-Mule, E. and Aguinis, H. (2018). 'Advancing theory by assessing boundary conditions with metaregression: a critical review and best practice recommendations'. *Journal of Management*, **44**, 2246-73.

Green, B. N., Johnson, C. D. and Adams, A. (2006). 'Writing narrative literature reviews for peerreviewed journals: secrets of the trade'. *Journal of Chiropractic Medicine*, **5**, 101-17.

Habersang, S., Küberling-Jost, J., Reihlen, M. and Seckler, C. (2019). 'A process perspective on organizational failure: A qualitative meta-analysis'. *Journal of Management Studies*, **56**, 19-56.

Hardy, C. and Clegg, S. (1997). 'Relativity without relativism: Reflexivity in post-paradigm organization studies'. *British Journal of Management*, **8**, S5-S17.

Hedstrom, P. and Swedberg, R. (Eds). (1998). *Social Mechanisms*. Cambridge: Cambridge University Press.

Hedstrom, P. and Wennberg, K. (2017). 'Causal mechanisms in organization and innovation studies'. *Innovation*, **19**, 91-102.

Hillman, A. J., Withers, M. C. and Collins, B. J. (2009). 'Resource dependence theory: A review'. *Journal of Management*, **35**, 1404-27.

Hirsch, P. M. and Levin, D. Z. (1999). 'Umbrella advocates versus validity police: A life-cycle model'. *Organization Science*, **10**, 199-212.

Hubbard, T. L., Hutchison, J. L. and Courtney, J. R. (2010).' Boundary extension: Findings and theories'. *Quarterly Journal of Experimental Psychology*, **63**, 1467-94.

Hulleman, C. S., Schrager, S. M., Bodmann, S. M. and Harackiewicz, J. M. (2010). 'A meta analytic review of achievement goal measures: Different labels for the same constructs or different constructs with similar labels?'. *Psychological Bulletin*, **136**, 422-49.

Jarzabkowski, P., Le, J. and Feldman, M. (2012). 'Toward a theory of coordinating: creating coordinating mechanisms in practice'. *Organization Science*, **23**, 907-27.

Johnson, P. and Duberley, J. (2000). *Understanding Management Research: An Introduction to Epistemology*. Thousand Oaks, CA: Sage Publications

Jones, O. and Gatrell, C. (2014). 'Editorial: The future of writing and reviewing for IJMR'. *International Journal of Management Reviews*, **16**, 249-64.

Kahneman, D. (2011). Thinking, Fast and Slow. New York: Farrar, Straus and Giroux.

Karhunen, P., Kankaanranta, A., Louhiala-Salminen, L. and Piekkari, R. (2018). 'Let's talk about language: A review of language-sensitive research in international management'. *Journal of Management Studies*, **55**, 980-1013.

Katz, D. and Kahn, R. L. (1978). The Social Psychology of Organizations, 2nd ed. New York: Wiley.

King, B., Felin, T. and Whetten, D. (2010). 'Finding the organization in organization theory: a metatheory of the organization as a social actor'. *Organization Science*, **21**, 290-305.

Klein, H. and Potosky, D. (2019). 'Making a conceptual contribution at Huamn Resource Management Review'. *Human Resource Management Review*, **29**, 299-304.

Klein, K. J. and Kozlowski, S. W. (2000). 'From micro to meso: Critical steps in conceptualizing and conducting multilevel research'. *Organizational Research Methods*, **3**, 211-36.

Kunisch, S., Menz, M., Bartunek, J., Cardinal, L. and Denyer, D. (2018). 'Feature topic at *Organizational Research Methods*: how to conduct rigorous and impactful literature reviews'. *Organizational Research Methods*, **21**, 519-23.

Lane, P. J., Koka, B. R. and Pathak, S. (2006). 'The reification of absorptive capacity: A critical review and rejuvenation of the construct'. *Academy of Management Review*, **31**, 833-63.

Le, H., Schmidt, F. L., Harter, J. K. and Lauver, K. J. (2010). 'The problem of empirical redundancy of constructs in organizational research: An empirical investigation'. *Organizational Behavior and Human Decision Processes*, **112**, 112-25.

Massa, L., Tucci, C. L. and Afuah, A. (2017). 'A critical assessment of business model research'. *Academy of Management Annals*, **11**, 73–104

Mele, C., Pels, J. and Polese, F. (2010). 'A brief review of systems theories and their managerial applications'. *Service Science*, **2**, 126–35.

Meyer, A. D., Tsui, A. and Hinings, C. R. (1993). 'Configurational approaches to organizational analysis'. *Academy of Management Journal*, **36**, 1175-95.

Miles, R. E. and Snow, C. C. (1978). *Organizational Strategy, Structure, and Process*. New York: McGraw-Hill.

Misangyi, V., Greckhamer, T., Furnari, S., Fiss, P., Crilly, D. and Aguilera, R. (2016). 'Embracing causal complexity: the emergence of a neo-configurational perspective'. *Journal of Management*, **43**, 255-82.

Ocasio, W. (2011). 'Attention to attention'. Organization Science, 22, 1286-96.

Pautasso, M. (2013) 'Ten simple rules for writing a literature review'. *PLoS Comput Biology*, **9**, e1003149. https://doi.org/10.1371/journal.pcbi.1003149

Podsakoff, P. M., MacKenzie, S. B. and Podsakoff, N. P. (2016). 'Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences'. *Organizational Research Methods*, **19**, 159-203.

Post, C. and Byron, K. (2015). 'Women on boards and firm financial performance: A meta-analysis'. *Academy of Management Journal*, **58**, 1546-71.

Potočnik, K. and Anderson, N. (2016). 'A constructively critical review of change and innovationrelated concepts: towards conceptual and operational clarity'. *European Journal of Work and Organizational Psychology*, **25**, 481-94.

Qiu, J., Donaldson, L. and Luo, B.N. (2012). 'The benefits of persisting with paradigms in organizational research'. *Academy of Management Perspectives*, **26**, 93-104.

Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S. III, Lambin, E. F. et al. (2009). 'Planetary boundaries: exploring the safe operating space for humanity'. *Ecology and Society*, **14**, 10.5751/ES-03180-140232.

Rosenbusch, N., Gusenbauer, M., Hatak, I., Fink, M. and Meyer, K. E. (2019). 'Innovation offshoring, institutional context and innovation performance: A meta-analysis'. *Journal of Management Studies*, **56**, 203-33.

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

Rowe, F. (2014). 'What literature review is not: diversity, boundaries and recommendation'. *European Journal of Information Systems*, **23**, 241–55.

Schad, J. and Bansal, P. (2018). 'Seeing the forest and the trees: how a systems perspective informs paradox research'. *Journal of Management Studies*, **55**, 1490-506.

Schelling, T. C. (1978). *Micromotives and Macrobehavior*. New York: WW Norton and Company.

Scherer, A. G. and Palazzo, G. (2011) 'The new political role of business in a globalized world: A review of a new perspective on CSR and its implications for the firm, governance, and democracy'. *Journal of Management Studies*, **48**, 899-931.

Schleicher, D., Baumann, H., Sullivan, D., Levy, P., Hargrove, D. and Barrow-Rivera, B. (2018). 'Putting the *system* into performance management systems: a review and agenda for performance management research'. *Journal of Management*, **44**, 2209-45.

Schneider, A., Wickert, C. and Marti, E. (2017). 'Reducing complexity by creating complexity: a systems theory perspective on how organizations respond to their environments.' *Journal of Management Studies*, **54**, 182-208.

Schultz, M. and Hatch, M. J. (1996). 'Living with multiple paradigms: The case of paradigm interplay in organizational culture studies'. *Academy of Management Review*, **21**, 529-57.

Siggelkow, N. (2011). 'Firms as systems of interdependent choices'. *Journal of Management Studies*, **48**, 1126-40.

Simon, H. A. (1962). 'The Architecture of Complexity'. *Proceedings of the American Philosophical Association*, **106**, 467-82.

Simon, H. A. (1996). The Science of the Artificial, 3rd ed. Cambridge, MA: MIT Press.

Simsek, Z., Heavey, C., Veiga, J. F. and Souder, D. (2009). 'A typology for aligning organizational ambidexterity's conceptualizations, antecedents, and outcomes'. *Journal of Management Studies*, **46**, 864-94.

Singh, J. (1991). 'Redundancy in constructs: Problem, assessment, and an illustrative example'. *Journal of Business Research*, **22**, 255-80.

Snyder, H. (2019). 'Literature review as a research methodology: An overview and guidelines'. *Journal of Business Research*, **104**, 333-39.

Suddaby, R. (2010). 'Construct clarity in theories of management and organization: editor's comments'. *Academy of Management Review*, **35**, 346-57.

Sumpter, D. M., Greenberg, D. and Kim, S. (2019). 'The dark side of construct convergence: navigating consensus, evolution, and practical relevance in theory building'. *Academy of Management Perspectives*, https://doi.org/10.5465/amp.2018.0153.

Sutton, R. I. and Staw, B. M. (1995) 'What Theory Is Not'. *Administrative Science Quarterly*, **40**, 371-84.

Torraco, R. J. (2016). 'Writing integrative literature reviews: Using the past to explore the future'. *Human Resource Development Review*, **15**, 404-28.

Torraco, R. J. (2005). 'Writing integrative literature reviews: Guidelines and examples'. *Human Resource Development Review*, **4**, 356-67.

van Aken, J. (2004). 'Management research based on the paradigm of the design sciences: The quest for field-tested and grounded technological rules'. *Journal of Management Studies*, **41**, 219-46.

Van de Ven, A.H. (2007). *Engaged scholarship: A guide for organizational and social research*. New York: Oxford University Press.

Van Maanen, J., Sorensen, J. and Mitchell, T. (2007). 'The interplay between theory and methods'. *Academy of Management Review*, **32**, 1145-54.

Venkatraman, N. and Rajanujam, V. (1986). 'Measurement of business performance in strategy research: A comparison of approaches'. *Academy of Management Review*, **11**, 801-14.

Wales, W. J. (2016). 'Entrepreneurial orientation: A review and synthesis of promising research directions'. *International Small Business Journal*, **34**, 3-15.

Webster, J. and Watson, R. T. (2002). 'Analyzing the past to prepare for the future: Writing a literature review'. *MIS Quarterly*, **26**, xiii-xxiii.

C

Weick, K. (1989). 'Theory construction as disciplined imagination'. *Academy of Management Review*, **14**, 516–31.

Whetten, D. A. (1989). 'What constitutes a theoretical contribution?'. *Academy of Management Review*, **14**, 490-95.

Whiteman, G., Walker, B. and Perego, P. (2013). 'Planetary boundaries: Ecological foundations for corporate sustainability'. *Journal of Management Studies*, **50**, 307-36.

Wilmott, H. (1993). 'Breaking the paradigm mentality'. Organization Studies, 14, 681-719.

Wright, M., Tartari, V., Huang, K. G., Di Lorenzo, F. and Bercovitz, J. (2018). 'Knowledge worker mobility in context: Pushing the boundaries of theory and methods'. *Journal of Management Studies*, **55**, 1-26.

Zahra, S. A., Sapienza, H. J. and Davidsson, P. (2006). 'Entrepreneurship and dynamic capabilities: A review, model and research agenda'. *Journal of Management Studies*, **43**, 917-55.

Table 1. Avenues for advancing theory with reviews: Their analytic approach, potential resulting forms of synthesis, and illustrative examples.

| Theory-<br>generating<br>avenue                   | Analytical approach   | Potential resulting forms of synthesis <sup>2</sup>   | Examples of connecting avenues and synthesis forms  |
|---|---|---|---|
| avenue<br>1. Exposing<br>emerging<br>perspectives | Identifies an emerging<br>theoretical perspective<br>on an important<br>management<br>phenomenon and<br>contrasts it with more<br>established ones. | <ul> <li>-A research agenda on further examining<br/>the emerging perspective</li> <li>-A taxonomy that illustrates the theoretical<br/>dimensions along which the new<br/>perspective and the more established<br/>perspectives differ</li> <li>-Alternative model or conceptual<br/>framework that is contrasted with more</li> </ul> | As an example, Scherer and Palazzo (2011)<br>use the avenue of <i>exposing emerging</i><br><i>perspectives</i> to analyze the literature on<br>corporate social responsibility. They<br>synthesize their findings with a <i>taxonomy</i><br>of instrumental CSR (established<br>perspectives) and political CSR (emerging<br>perspective) and with a detailed <i>research</i> |
|   |   | traditional frameworks<br>- <i>Meta-theory</i> : expanding the emerging<br>perspective to explain other organizational<br>phenomena   | <i>agenda</i> for the emerging perspective.   |

<sup>2</sup> Based on Torraco's 2009 and 2016 frameworks

| <u> </u> |               |                            |   |   |
|----------|---------------|----------------------------|---|---|
|          | 2. Analyzing  | Analyzes underlying        | -A research agenda on research that is          | As an example, Karhunen et al. (2018) us              |
|          | assumptions   | assumptions in a body of   | based on different assumptions or relaxes       | the avenue of assessing assumptions to                |
|          |               | literature, demonstrating  | previously used assumptions                     | analyze the literature on language-sensiti            |
|          |               | the consequences of such   | -A taxonomy that shows the key                  | research in international management.                 |
| 5        |               | assumptions or             | dimensions along which assumptions vary         | They synthesize the findings with the                 |
|          |               | alternative assumptions    | -Alternative models or conceptual               | taxonomy form of synthesis to reveal three            |
|          |               | on theorizing              | frameworks based on different                   | different views of language (language as              |
|          |               |                            | assumptions                                     | top-management problem, language as an                |
|          |               |                            | -Meta-theory: key underlying assumptions        | individual characteristic of employees, an            |
|          |               |                            | in management theory                            | language as social practice) and with a               |
|          |               |                            |   | research agenda that advocates the score              |
|          |               |                            |   | practice view.  |
|          |               | <b>T 1</b>                 |   |   |
|          | 3. Clarifying | Locates potential          | -A research agenda that offers suggestions      | As an example, Simsek et al. (2009) use               |
|          | constructs    | ambiguity around a         | on what aspects of the construct studies        | the avenue of establishing construct clar             |
|          | (             | construct and provides     | should focus on, report and clarify             | to analyze the literature on organizationa            |
|          |               | construct clarification in | -A <i>taxonomy</i> that depicts the key aspects | ambidexterity and synthesize their findin             |
|          |               | a way that extends         | along which constructs differ                   | with the <i>taxonomy</i> and <i>alternative model</i> |
|          |               | theory.                    | -Alternative models or conceptual               | forms of synthesis: The taxonomy reveal               |
|          |               |                            | frameworks of the phenomena based on            | four archetypes of ambidexterity                      |

different constructs -*Meta-theory*: key conceptual ambiguities in management theory -*Meta-analysis*: showing how empirical results differ across main measurement types (harmonic, cyclical, partitional, and reciprocal), which are then presented as alternative models with different theoretical groundings, antecedents, and outcomes. This is followed by a *research agenda* stemming from the taxonomy.

4. Establishing Theorizes alternative or boundary shifting
 conditions (expanding/contracting) boundaries
 phenomenologically,
 contextually or across
 disciplinary boundaries.

-A *research agenda* that shows boundary conditions and how to further examine them

-A *taxonomy* of boundary conditions
-An *alternative model or a conceptual framework of* the phenomena that integrates important boundary conditions
-*Meta-theory*: theorizing boundary conditions across phenomena, contexts, and disciplinary boundaries
-*Meta-analysis*: revealing moderators that As an example, Whiteman et al. (2013) use the avenue of *establishing boundary conditions* to analyze the literature on corporate sustainability and synthesize the findings by using a *metatheory* of nine "planetary boundaries" derived from ecology: chemical pollution, climate change, fresh water use, rate of biodiversity loss, land use, global nitrogen and phosphorus cycles, atmospheric aerosol loading, ozone depletion, and

# explain conflicting results

ocean acidification. This is followed by a *research agenda* concerning each planetary boundary.

5. *Testing new theory* 

Exploits accumulated research to derive new frameworks and empirically test new insights. -A research agenda that is developed and empirically tested using prior studies
-A taxonomy that is tested on prior studies to show how it explains key aspect
-Alternative model or a conceptual framework is confirmed by its ability to organize and explain prior research findings
-Meta-theory: Showing how the new theory applies across prior research findings in different theoretical domains As an example, Cornelissen and Durand (2014) use the avenue of *testing new theory* to analyze the literature on theory building and synthesized their findings with the *taxonomy* form of synthesis. The taxonomy is based on different modes of reasoning and is tested by conducting a content analysis of management theories to show how the taxonomy explains theory building.

6. Theorizing

Adopts a system as the

-A research agenda that flows from As an example, Schleicher et al. (2018) use

with systems theory 

unit of analysis and theorizes about its system states, their trajectories, transformational conditions of a system, or values of units in a system

looking at a phenomenon as a system -A *conceptual classification* of states or stages in a system

-Alternative model or a conceptual framework that depicts a phenomenon as a system and identifies its key elements -Meta-analysis to evaluate the relative importance of different system states and conditions

*-Meta-theory*: Using the elements of the system to depict other phenomena

the avenue of theorizing with systems theory to analyze the literature on performance management. They synthesize the findings using a taxonomy of system performance components (tasks of management, individuals involved in performance management, formal processes of performance management, and informal processes of performance management) and by creating an alternative model that conceptually depicts performance management as a system. Based on the taxonomy, the authors offer a research agenda for each system component.