

FROM THE EDITORS

NEW WAYS OF SEEING: THEORY INTEGRATION ACROSS DISCIPLINES

The notion of cross-disciplinary theory integration is, perhaps, a romantic one. A management scholar pursues a resolution to a pressing theoretical issue in the literature, or seeks to solve a phenomenon-based problem that has perplexed prior researchers. Combining and integrating common management explanations with a view from outside presents a clear resolution and solves a conceptual conundrum. In the ideal situation, the missing puzzle pieces fit together perfectly, the new integrative theory is rich, elegant, or nuanced, and, importantly, accepted by researchers for further testing within our literature and beyond. Romanticism aside, theory integration is certainly a popular approach and viewed by many as a good way to make an impact on the literature. For example, Zahra and Newey (2009) made cogent arguments that theory development in contexts in which management intersects with other fields can result in multilayered impact—for development of the theory, field, stakeholder, discipline, and even for the researcher.

The history of cross-disciplinary theory integration in management is nearly as long as the existence of our scholarly literature. It is beyond our scope to review this history (see Agarwal & Hoetker, 2007), but, in a fledgling field, management researchers frequently sought legitimacy and a scientific foundation by using and combining base-discipline theories. Stand-alone management theories eventually became more prevalent, but, throughout the years, management researchers continued to engage in, as well as to extol the virtues of, cross-discipline theory integration. Our goal here is not to preach the doctrine of theory integration as zealots, but, rather, to offer some effective principles or guidelines for these endeavors. In a sense, we take an integrative approach here as well; we searched the literature for commentary, reviews, and “how-tos” for cross-disciplinary integration, seeking out the best ideas and paying heed to the naysayers (e.g., Markóczy & Deeds, 2009) as well.

In line with this editorial team’s “New Ways of Seeing” theme, we contend that cross-disciplinary

theory integration is, when accomplished well, one potential avenue for researchers to pursue to advance the field and offer novelty and insight that has yet to appear in the management literature. We begin this essay by examining the motivations for undertaking cross-disciplinary integrations. Next, we offer a set of principles or “best practices” for integrating theory: What does good cross-disciplinary integration look like? Following this, we elaborate on some caveats, the pitfalls that researchers should avoid. We conclude with summary comments and suggest implications for the “New Ways of Seeing” theme.

MOTIVATIONS FOR CROSS-DISCIPLINARY THEORIZING

Management scholars may find themselves in various situations in which it makes sense to draw on and integrate theory from other disciplines. The impetus to explore theory in other academic disciplines may arise at any point in the research process—curiosity about a view or findings in another discipline, puzzlement over a potentially new phenomenon or observation, a desire to make sense of a recurring, but unexpected, pattern of findings in one’s research or in the literature, etc. Although motives for cross-disciplinary theory integration are varied, they coalesce around the desire of researchers to develop knowledge. It may be possible to categorize the motivations into three broad categories: cross-disciplinary theories that seek (1) to solve a puzzle in the management literature, where no adequate explanation exists; and/or (2) to explain a recurring pattern of findings or “stylized facts” that have appeared in the management literature or elsewhere; and/or (3) to offer a new way of seeing an existing issue or phenomenon.

First, management scholars may turn to outside disciplines to explain new phenomena, observations, and occurrences that are inexplicable with existing management theory. Consider, for example, Plowman, Baker, Beck, Kulkarni, Solansky, and Travis’s (2007) reflection about why and how a small decision (to offer breakfast to the homeless) led to radical change in a church and its surrounding environment. These authors noted that

our discipline's "existing theories of change do not fully explain" (Plowman et al., 2007: 515) and sought answers in theoretical perspectives of other disciplines. In this particular case, they turned to complexity theory, with its roots in physical and biological sciences, in order to explain the development of the observed radical change.

Second, management scholars may reach across disciplines in search of theoretical perspectives to crystallize thinking about a particular phenomenon. For example, an emergent pattern of "stylized facts"—empirical trends or consistently observed anomalies—not adequately captured by management theory may lead scholars in search of theory from other disciplines. Maltarich, Nyberg, Reilly, Abdulsalam, and Martin (2017) recently attempted to explain why pay-for-performance outcomes were sometimes less positive than expected. They integrated economic and psychological theory to highlight how the pay system context moderates the effects of financial incentives on employee performance. Through such theorizing, Maltarich et al. (2017) were able to better delineate how and why pay-for-performance functions.

Third, scholars may also seek to integrate theory from outside disciplines in order to offer a new way of seeing an issue or phenomenon altogether. For example, Albert and Bell (2002) applied music theory—tonality, rhythm, musical shape, and harmony—to gain insight into the timing of when people and organizations act. They shed new light on the issue of decisions and actions by incorporating theory from the arts, and, in doing so, shifted the way we think about business actions. As they said, "from a music theory perspective, individuals and organizations act and enact an unfolding musical performance" (Albert & Bell, 2002: 574).

Not all theory integration papers fall neatly into these categories. We note here that many excellent examples appear in the literature. For example, Mayer (2006) integrated transaction cost theory and the knowledge-based view to examine governance of transaction with spillovers. Vissa (2011) integrated the theory of planned behavior with network theory to examine how entrepreneurs form new network ties. Similarly, although they merged two theories from within the general management domain, Lee, Pitesa, Thau, and Pillutla's (2015) article containing an integration of stereotype fit and interdependence theories to understand selection in an organizational context is another exemplar that illustrates well some of the principles we outline.

CHARACTERISTICS OF EFFECTIVE CROSS-DISCIPLINARY INTEGRATION

In this section, we elaborate on some "better" or "best" characteristics of cross-disciplinary theorizing practices, with an emphasis on those practices likely to lead to success for submissions to *Academy of Management Journal*.

Disciplined Integration

First, insights that span disciplines should be disciplined (Agarwal & Hoetker, 2007). Researchers should explicitly articulate the *differences* in assumptions of the theories or disciplines that constitute the basis for integration. This involves not only identifying points of congruence, but points of divergence as well. They should explain how their intersections take the literature forward or serve as boundary conditions of the new theory. Often, in the process of resolving *why* multiple disciplinary perspectives provide conflicting explanations for a phenomenon, scholars can help derive new insights or solutions that have been eluding researchers in the field. Such conflicting explanations may result from different underlying assumptions. By unpacking such assumptions, authors can, to borrow a phrase from surgeons, illuminate the field.

Integration at Theoretical Intersections

Second, often (although not always), disciplines have non-overlapping domains. Hence, cross-disciplinary theorizing becomes important at places where those domains intersect (Zahra & Newey, 2009). Domains of base disciplines are segregated frequently by conceptual levels (e.g., social institutions and organizational systems for sociology, small groups or individuals for psychology, economies or nations in macroeconomics). Thus, cross-disciplinary theorizing frequently involves cross-level theorizing (e.g., how changes in institutional structures impact individual employee attitudes or behavior) (Hitt, Beamish, Jackson, & Mathieu, 2007; Mathieu & Chen, 2011). Theory integration can, as it were, finish conversations started by one field at one level of analysis by providing explanations and outcomes at a different level. A complete theoretical picture may therefore emerge. Alternatively, integrative efforts may "bracket" the phenomenon (Hackman, 2003)—the resulting integrative theory can explain how occurrences at one

level *above* and one level *below* the focal phenomenon influence or serve as boundaries for the manifestation of such phenomenon.

Reciprocal Integration

Third, when possible, it is important for scholars to look for true or reciprocal integration of ideas from one discipline with those in another. If management journals act merely as forums for application of ideas already present in other disciplines, they lose their ability to provide unique insights that are not already available in those disciplines. This may not always be possible. For example, it is unlikely that a music theorist would, in return, draw from the management literature in response to Albert and Bell's (2002) theorizing about music and decision-making. But, the general point is that cross-disciplinary theorizing can frequently develop insights into problems that are not merely evident within the borrowed-from disciplines. In doing so, management researchers should be able to "pay back the debt" to those disciplines by helping drive theoretical innovation within them (Zahra & Newey, 2009).

CAUTIONARY POINTS FOR CROSS-DISCIPLINARY THEORY INTEGRATION

Agarwal and Hoetker (2007) argued that disciplined integration of relevant perspectives increases the likelihood of generating novel frameworks that provide insights into real business problems faced by managers and organizational leaders. We concur, but highlight two important caveats to keep in mind when authors attempt to integrate theory across disciplines. We label these the danger zones issues of "compatibility" and "communication clarity."

Compatibility

By "compatibility," we refer to whether there are compatible assumptions involving epistemology, human nature, and level of analysis. It would be problematic to combine theories that make fundamentally incompatible assumptions on these crucial dimensions. For example, Theory A, a positivist theory, assumes feasible objective explanations in an objective world. Theory B, a constructionist one, assumes subjective understandings from the actor's view in a socially constructed world. The fundamentally different epistemological bases of Theories A and B make theory integration a sizeable, if not unsurmountable, challenge.

Integration may be problematic when assumptions on human nature are difficult to reconcile. For example, Theory A makes the assumption that some humans may exhibit opportunism with guile and it is costly to ascertain *ex ante* who is opportunistic. It may be easier and more valuable to integrate Theory A with Theory B, which assumes humans act purposefully to pursue their interests, than with Theory C, which assumes humans enact role-scripted behavior with little room for agency.

Moreover, while integrating theory across levels of analysis can be useful, cautionary notes apply. On the one hand, same-level theories typically explain different aspects of the same phenomenon; complementarity is thus straightforward. Complementarity is also possible across levels of analysis when the lower-level theory provides the explanatory process and outcomes for constructs and relationships of interest in the higher-level theory. But, researchers must be prudent and make sure the key assumptions of the theory are not violated and abandoned as the integration occurs.

Communication Clarity

As a still-maturing field, management's paradigm is somewhat weaker than that in base disciplines such as political science, economics, and psychology (Pfeffer, 1993; Shaw, Bansal, & Gruber, 2017). This variation in paradigm development across disciplines makes communication clarity critically important. First, in low-paradigm-agreement fields, many conceptual definitions exist for identical construct labels. For instance, a surfeit of definitions exists for such concepts as "business model," "social entrepreneurship," "work-family balance," "human resource management systems," and many others. Second, management, like other low-paradigm-agreement fields, suffers from construct proliferation and various forms of construct identification fallacy, including jingle (two constructs with identical names referring to two different phenomena; Thorndike, 1904) and jangle (two labels referring to the same phenomena; Kelley, 1927) (see also Larsen & Bong, 2016). As Zahra and Newey (2009) noted, integrating theories in ways that transform core fields and disciplines is rare because it requires great skill in cross-discipline or cross-field communication. Our central point here is that researchers should carefully trace conceptual definitions before any attempt to integrate the underlying overarching theories containing them.

CONCLUSION

Cross-disciplinary theory integration can be an effective way of making a significant, novel, and bold theoretical contribution, in line with the mission of *Academy of Management Journal*. Indeed, many submitters purport to take such an approach, and numerous excellent and impactful papers have appeared over the years in the journal's pages, a few of which we have highlighted here. There is perhaps not a single best way of making a theoretical contribution, and, as such, our goal is not to elevate cross-disciplinary theory integration to "holy grail" status. Rather, our contention is that, under certain conditions of flux, mystery, or existing patterns of unexplained findings, scholars may well find insights, solutions, and "New Ways of Seeing" by borrowing, juxtaposing, and merging outside perspectives with theory and/or phenomenon that exist already in the general management domain. We encourage researchers to follow general "best practices" (disciplined integration, integration at theoretical intersections, and reciprocal integration), to stay mindful of danger zones (compatibility and communication clarity), and to study exemplar contributions in the extant literature. In doing so, we hope new and exciting "New Ways of Seeing" through cross-disciplinary theory integration will appear in future issues of *Academy of Management Journal*.

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REFERENCES

- Agarwal, R., & Hoetker, G. 2007. A Faustian bargain? The growth of management and its relationship with related disciplines. *Academy of Management Journal*, 50: 1304–1322.
- Albert, S., & Bell, G. G. 2002. Timing and music. *Academy of Management Review*, 27: 574–593.
- Hackman, J. R. 2003. Learning more by crossing levels: Evidence from airplanes, hospitals, and orchestras. *Journal of Organizational Behavior*, 24: 905–922.
- Hitt, M. A., Beamish, P. W., Jackson, S. E., & Mathieu, J. E. 2007. Building theoretical and empirical bridges across levels: Multilevel research in management. *Academy of Management Journal*, 50: 1385–1399.
- Kelley, T. L. 1927. *Interpretation of educational measurements*. New York, NY: World Book Company.
- Larsen, K. R., & Bong, C. H. 2016. A tool for addressing construct identity in literature reviews and meta-analyses. *Management Information Systems Quarterly*, 40: 529–551.
- Lee, S. Y., Pitesa, M., Thau, S., & Pillutla, M. M. 2015. Discrimination in selection decisions: Integrating stereotype fit and interdependence theories. *Academy of Management Journal*, 58: 789–812.
- Maltarich, M. A., Nyberg, A. J., Reilly, G., Abdulsalam, D., & Martin, M. 2017. Pay-for-performance, sometimes: An interdisciplinary approach to integrating economic rationality with psychological emotion to predict individual performance. *Academy of Management Journal*, 60: 2155–2174.
- Markóczy, L., & Deeds, D. L. 2009. Theory building at the intersection: Recipe for impact or road to nowhere? *Journal of Management Studies*, 46: 1076–1088.
- Mathieu, J. E., & Chen, G. 2011. The etiology of the multi-level paradigm in management research. *Journal of Management*, 37: 610–641.
- Mayer, K. J. 2006. Spillovers and governance: An analysis of knowledge and reputational spillovers in information technology. *Academy of Management Journal*, 49: 69–84.
- Pfeffer, J. 1993. Barriers to the advance of organizational science: Paradigm development as a dependent variable. *Academy of Management Review*, 18: 599–620.
- Plowman, D. A., Baker, L. T., Beck, T. E., Kulkarni, M., Solansky, S. T., & Travis, D. V. 2007. Radical change accidentally: The emergence and amplification of small change. *Academy of Management Journal*, 50: 515–543.
- Shaw, J. D., Bansal, P., & Gruber, M. 2017. New ways of seeing: Elaboration on a theme. *Academy of Management Journal*, 60: 397–401.
- Thorndike, E. L. 1904. *An introduction to the theory of mental and social measurements*. New York, NY: The Science Press.
- Vissa, B. 2011. A matching theory of entrepreneurs' tie formation intentions and initiation of economic exchange. *Academy of Management Journal*, 54: 137–158.
- Zahra, S. A., & Newey, L. R. 2009. Maximizing the impact of organization science: Theory-building at the intersection of disciplines and/or fields. *Journal of Management Studies*, 46: 1059–1075.