

FROM THE EDITORS

BEYOND CONTEXTUALIZATION: USING CONTEXT THEORIES TO NARROW THE MICRO-MACRO GAP IN MANAGEMENT RESEARCH

Amazing how technology can awaken us to the world around us. No, I'm not talking about the latest electronic gadget allowing us to experience, in real time, the sights, sounds (and even smells) of Calcutta from the comfort of our own living rooms or offices. Rather, I'm talking about recent advances in statistical methods and software facilitating the analysis of random coefficient (or multilevel) models and the impact that these advances are beginning to have on management scholars' interest in and ability to give greater consideration to the role of context—that amorphous concept capturing theory-relevant, surrounding phenomena or temporal conditions—in their research. Such advances are beginning to generate nothing short of a revolution in management theory, one based on the simple notion that *context counts* and, where possible, should be given theoretical consideration.

Because, as Rousseau and Fried (2001) suggested, one researcher's context is another's career, this revolution is already beginning to blur the division between “micro” and “macro” work, resulting in more robust theories that better capture the increasing complexity of organizational phenomena and relations and offering greater predictive power and real-world relevance (Hitt, Beamish, Jackson, & Mathieu, 2007). Indeed, though my very cursory search of *Academy of Management Journal (AMJ)* articles using any of the multilevel methodologies typically applied to examine the role of context identified no more than three or four articles in each of the years from 2000 to 2003, Hitt et al. (2007: 1393) noted that 25 percent of all articles published in *AMJ* between August 2006 and July 2007 did. Certainly not all studies adopting a multilevel approach are context-focused, yet it is clear that the number of context-relevant analyses is on the rise.

Despite this obvious increase in researcher awareness of how context, at all levels of analysis, may both emerge from and play a role in shaping

the phenomena and relationships we study, I believe that two significant challenges remain, namely: (1) the need to accelerate the transition from the contextualization of research findings to the generation and testing of context theories of management, and (2) the need to expand the range of context theories that we explore in our research. I discuss these two challenges in more detail in the sections immediately following. I then turn my attention to (1) the methodological, epistemological, and institutional obstacles slowing the transition to context theorizing, and (2) what we as management scholars are likely to have to do to find a way around these obstacles.

Context and Contextualization

Over the past 30 years, numerous appeals for the greater consideration of context in management theory have appeared in the literature (e.g., Cappelli & Sherer, 1991; Johns, 2006; Roberts, Hulin, & Rousseau, 1978). In each case, the underlying message has been rather similar: that a greater consideration of context is required to prevent further fracturing of the field of management (Pfeffer, 1993). But looking at these appeals over time, it's the subtle shift in the conceptualization of context and its role in management theory that I find most interesting. For example, viewing a general understanding of behavior in and of organizations as “being beyond our abilities,” Roberts et al. (1978: 6) called on organizational researchers to narrow their focus and concentrate their efforts on observing and explaining behavior within particular, specified contexts, leaving the search for cross-context patterns and regularities for later. Just over a decade later, Cappelli and Sherer defined context as those “surroundings associated with phenomena which help to *illuminate* that phenomena [*sic*], typically factors associated with units of analysis above those expressly under investigation” (1991: 56). More recently, Johns defined context as those “situational opportunities and constraints that *affect* the occurrence and meaning of organizational behavior as well as functional relationships between variables” (2006: 386). For those seeking to

I wish to thank Samuel Bacharach, Julian Barling, Jason Colquitt, Dov Eden, Duane Ireland, Dovev Lavie, Michael Pratt, Inbal Nahum-Shani, Arie Ullmann, and Dov Zohar for their helpful comments and suggestions.

explain individual behavior in organizations, such situational factors may include physical workplace conditions (e.g., Elsbach & Pratt, 2007), broader social or normative environments (including various dimensions of organizational or national culture, or unit or organizational climate) (e.g., Bamberger & Biron, 2007), or even external labor markets (e.g., Bacharach & Bamberger, 2004). For those seeking to explain the behavior of organizations, such situational factors may include industry-, sector-, or economy-wide characteristics, as well as other normative and institutional structures and regimes (e.g., Rowley, Behrens, & Krackhardt, 2000). In line with the perspective of Roberts et al. (1978), Cappelli and Sherer's definition reflects a notion of context as a sensitizing device, providing insights into how particular environmental factors may serve as temporal and/or spatial boundary conditions governing observed phenomena. In contrast, Johns's definition reflects a notion of context as a critical driver of cognition, attitudes, and behavior, or moderator of relations among such lower-level phenomena.

The notion of context as a sensitizing device that makes us more aware of the potential situational and temporal boundary conditions to our theories serves as the basis of the movement toward contextualization in management theory. As defined by Rousseau and Fried, contextualization is the "linking of observations to a set of relevant facts, events or point of view that make possible research and theory that form part of a larger whole" (2001: 1). The primary benefit of such "situational linking" is, Rousseau and Fried suggested, it "makes our models more accurate and our interpretation of results more robust" (2001: 2). Simply put, it allows the consumers of such research to better assess the applicability of the theory or findings. Moreover, it does so without requiring researchers to sacrifice internal validity and scientific legitimacy (Johns, 2006: 404), since contextualization is typically a post hoc and largely speculative exercise, aimed at informing the development of broader-range theory at some future time. Indeed, such an approach allows an investigator to maximize generalizability and examine focal phenomena and relationships in depth, leaving the examination of contextual moderators to subsequent, meta-analytic research (Eden, 2002). Perhaps stimulated by Rousseau and Fried's call to have authors provide information on the unique organizational, worker, temporal, and extraorganizational conditions potentially influencing their studies' results, some management journals now request that authors provide "good contextualization" (Johns, 2006: 404).

However, although there is little doubt that the

contextualization of a study's findings is a good thing, the limitations of such an approach should be noted. First, such an approach defers the development and testing of broad-range (as opposed to middle-range, situation-specific) theories to that time when a sufficient amount of contextual information has been collected to allow for the development and testing of context-contingent theory. Second, though theory-grounded meta-analyses are indeed the logical means to test such context-contingent theory, because such contextualization tends to be qualitative and is often inconsistent in terms of content across studies, contextual data are often difficult to code and quantify. As a result, as Johns noted, "Many meta-analysts must often concentrate on potential moderators inherent in the research design (e.g., whose measure of commitment was used?), since they are unable to form contextual links across studies that exhibit markedly different results" (2006: 402). Finally, given that in any study, there are an infinite number of contextual parameters to consider, the decision as to which parameters along which to contextualize should be no different from the decision regarding which variables to control. Both decisions should be grounded in theory. Yet, because contextualization (unlike model specification) is typically a post hoc, descriptive exercise, investigators often contextualize along those parameters suggested by journal editors (see Table 1 of Rousseau and Fried [2001] for an example), and/or those "boiler-plate" parameters for which they have the data. One or more of these parameters may be of theoretical relevance, yet my editorial work with *AMJ* has taught me that in many cases, theoretical relevance plays less of a role than "satisficing." As a result, although contextualization may provide subtle but important hints as to which contextual contingencies to consider in future theory development, unless such contextualization is itself theory-grounded, such hints are—at best—only likely to converge into significant new integrative theoretical frameworks at a very slow pace.

Context Theory

There is little doubt that contextualization contributes to the narrowing of the micro-macro gap in management research, but the limitations noted above suggest that an alternative approach may be necessary if we are to bridge that gap any time soon. This alternative approach requires that organizational scholars go beyond simply acknowledging surrounding phenomena as more than just "error variance" and instead directly challenge the boundary assumptions of the paradigms within

which their theories are nested. Doing so requires that scholars sacrifice the comforts afforded by staying within that paradigm most tightly linked to the phenomena of interest, identify surrounding (i.e., higher-level) or nested (i.e., lower-level) phenomena typically associated with other paradigms that are likely to influence their focal constructs or relationships, and specify how those phenomena are likely do so. I refer to such an approach as *context theorizing* and define as context theories those theories that specify how surrounding phenomena or temporal conditions directly influence lower-level phenomena, condition relations between one or more variables at different levels of analysis, or are influenced by the phenomena nested within them.

Context theorizing goes beyond the sensitization of theory to possible situational or temporal constraints or boundary conditions by directly specifying the nature and form of influence such factors are likely to have on the phenomena under investigation. Given that context has consistently been defined in terms of the “environmental forces or organizational characteristics at a higher level of analysis that *affect* a focal behavior in question” (George & Jones, 1997: 156), context theories to date have typically focused on the specification of what Kozlowski and Klein (2000) broadly referred to as “top-down processes.” These processes include (1) the downward influence of upper-level variables, such as peer support climate, on lower-level variables, such as individual strain (i.e., cross-level direct effect models), (2) the conditioning of either lower-level (e.g., individual on individual) or downward-sloping (e.g., organizational level on unit level), cross-level effects (i.e., cross-level moderation models), or (3) the influence of the position of some lower-level unit relative to that of others in the same broader social unit within which they are all nested (i.e., frog pond models). However, though far less prevalent, context theories may also be generated to explicate the role of lower-level phenomena in the emergence, change, or behavior of the units within which they are nested (see, e.g., Barden and Mitchell’s [2007] study on interorganizational exchange)—or in other words, bottom-up processes (Kozlowski & Klein, 2000).

Others have noted many of the benefits of integrating context directly into our theories. For example, Johns (2006: 389) suggested that theories incorporating contextual elements are often better able to “explain anomalous research findings” such as “sign reversals” in relations among core variables, and even reversals in causal direction. In addition, Johns (2006: 389) suggested that by integrating context directly into theory, researchers go

beyond simply accepting the natural heterogeneity and variability in the phenomena they explore (typically accomplished by the specification of control variables). Rather, they attempt to account for it and explicitly model the way in which such phenomena are relevant. Bliese and Jex (2002) suggested that theories incorporating contextual elements may ultimately prove more meaningful to managers and policy makers who tend to prefer unit- or group-level interventions (e.g., enhancing the adequacy of job resources; changing staffing practices) over individual-focused interventions (e.g., transferring an individual worker to another unit or referring him/her to an employee assistance program). But perhaps the primary benefit of context theory is that, unlike contextualization, it goes beyond simply illuminating the possible situational or temporal boundaries of proposed or just-tested hypotheses. Context theorizing requires a researcher to build situational and/or temporal conditions directly into theory and, just as importantly, to explicate the mechanisms either linking these situational and temporal conditions to embedded phenomena, or governing the conditioning of relationships between phenomena by these situational and temporal conditions. Cappelli and Sherer (1991: 56) referred to the explication of these mechanisms as “bridge statements” and viewed them as no less than the key to developing “a common paradigm for organizational behavior.”

What’s Been Achieved, What’s Still a Challenge?

As evidenced by the publication trends noted earlier, there is little doubt that management researchers have made significant progress in transitioning from *acontextual* research to the contextualization of single-level theories and, most recently, to the direct integration of context into their theories. Indeed, in view of the number and variety of manuscripts submitted to last year’s *AMJ* special research forum (SRF), “Building Theoretical and Empirical Bridges across Levels,” the editors of that SRF concluded that this transition is “well underway” (Hitt et al., 2007: 1390). As noted earlier, recent advances in statistical methodologies (e.g., random coefficient modeling) and software (e.g., HLM, Mplus) have likely played a significant role in advancing the pace of the transition from contextualization to context theory construction and testing. These methodologies have made the analysis of cross-level direct effect models rather straightforward and, consequently, context theories based on such effects (e.g., Chen, 2005; Marrone, Tesluk, & Carson, 2007) are becoming increasingly visible in the management literature. Slightly less

prevalent in the literature are context theories grounded in cross-level moderation, although several notable studies come to mind, such as Bommer, Dierdorff, and Rubin's (2007) study of how group-level OCB moderates the link between individual OCB and job performance, and Martin, Cullen, Johnson, and Parboteeah's (2007) study of how country-level social and political institutions moderate the impact of cultural norms on firm-level bribery activity.

Unfortunately, more complex context theories examining the way in which a single or multiple contextual factors may moderate different stages of some lower-level mediation process (i.e., cross-level, moderated mediation models) are still somewhat rare. However, recent research suggests the way in which such an approach may be applied to, for example, better understand how individual-level responses to involvement in traumatic workplace incidents may be significantly influenced by the postincident work context (Bacharach & Bamberger, 2007; Bacharach, Bamberger, & Doveh, 2008). Similarly lacking are contextual theories based on the frog pond model specified by Kozlowski and Klein (2000), although Van Yperen and Snijders (2000) applied such an approach in testing an extension of Karasek's (1979) work demands-control model. Support for this classic model has been equivocal, but Van Yperen and Snijders's contextual extension demonstrated that findings are likely to be more robust when frog-pond-type contextual effects are considered. Specifically, they found that though the interaction of employee perceived demands and control had no significant effect on employee psychological health symptoms, the interaction of employee demands relative to those of the work group did interact with employee-perceived control to significantly explain these symptoms. Moreover, the most robust effects of demands and control on well-being occurred when *both* demands *and* control were group-mean-centered, or in other words, were considered in context.

New mixed-model procedures in mainstream statistical software (e.g., SAS 9.2) as well as multilevel versions of SEM software (Muthen & Muthen, 2007) are likely to further facilitate the testing of such context theories as well as those involving either latent variables or variables for which normality assumptions do not necessarily hold. These new technologies are also likely to advance the testing of context theories in which time is the contextual dimension of interest or, in other words, theories in which the focus is on explaining the unfolding of certain relationships or the time- or period-contingent nature of such relations (e.g., Barley & Kunda,

1992; Lavie & Rosenkopf, 2006). In a line of research still quite rare in the management literature, a recent study by Zyphur, Chaturvedi, and Arvey (2008) demonstrated how established autoregressive performance effects may be contingent upon individual-specific performance trajectories and suggested that—particularly where relationships are likely to be dynamic or unfold over time—it may be important to integrate such temporally driven, trajectory-based notions into our theorizing. Finally, despite the importance attributed to the enhancement of our understanding of how embedded phenomena influence the emergence, change, or behavior of the structures within which they are nested (Granovetter, 1985; Roberts & Ingram, 2000), such bottom-up context theorizing remains quite rare (Hitt et al., 2007). Moreover, although macro scholars often draw from micro theories of individual behavior to generate their theories of the firm (e.g., Cohen and Levinthal's [1990] learning-based notion of absorptive capacity), research examining how nested phenomena shape unit or organizational behavior is largely limited to network-type analyses in which the social relations among organizational members or leaders are typically operationalized as characteristics of the firm (Roberts & Ingram, 2000). In this sense, the challenge remains for researchers to generate and test bottom-up theories of context that truly break paradigmatic boundaries.

The Barriers and What We Can Do about Them

The discussion above suggests that technology or, more precisely, its historical limitations, largely explain why it has taken management scholars so long to transition from contextualizing findings to context theorizing. However, I would like to propose that two other *nontechnological* obstacles have also slowed the transition to context theorizing in the past and may continue to do so in the future.

Methodological barriers: The lack of context-oriented qualitative research. The first of these obstacles, although methodological, has nothing to do with statistical techniques. Rather, it stems from the relative absence of qualitative research aimed explicitly at generating context theories (as opposed to contextualizing quantitative research findings) in the management literature. As Gephart noted, one reason qualitative research is important for management scholarship is that "it can provide thick, detailed descriptions of actual actions in real-life contexts" (2004: 455). The insights gleaned from these often context-rich descriptions can provide important hints as to, if not grounded hypotheses regarding, how context di-

rectly shapes particular outcomes or conditions particular relationships. The power of such research stems from its spawning effect—that is, the tendency of quantitative scholars to extend and test ideas initially generated by qualitative researchers' rich descriptions. Moreover, two of the qualitative traditions highlighted by Gephart, interpretative studies and critical postmodern studies, are almost tailor-made to generate context theory.

Interpretative qualitative research, by focusing on the "production of meanings and concepts used by social actors in real settings" (Gephart, 2004: 457), is likely to be instrumental in the generation of context theory by providing important insights into how meanings and their implications are shaped by or contingent upon contextual forces. A wonderful example of such research is the article by Chreim, Williams, and Hinings (2007) examining how institutional and organizational forces combined with personal factors to reshape the professional role identities of physicians in a Canadian clinic.

Similarly, critical postmodern qualitative research, with its focus on how higher-level phenomena such as political regimes and economic structures shape taken-for-granted power relationships, is also, at least in theory, positioned to provide important insights into the role of context in the institutionalization and deinstitutionalization of a wide variety of power-laden organizational phenomena. Such insights could potentially inform new context theories regarding a wide range of issues of interest to management scholars such as governance, change, conflict, and intergroup relations. However, given that even acontextual qualitative research of this type is rare in management (Gephart, 2004: 457), it is difficult to think of even one such study aimed at generating context theory.

Institutional and epistemological barriers. Second, nearly two decades ago, Cappelli and Sherer (1991: 80) noted that the movement toward contextualization had been blocked by a variety of epistemological and institutional barriers, including (1) the widespread assumption of management scholars that new theories should be "consistent with what is already known and accepted," (2) the assumption that a theoretical contribution can only be made to the extent that the ideas presented are widely generalizable and offer broad-scale (i.e., not context-specific) applicability, and (3) a movement by management scholars toward the extremes, with micro scholars focusing more on cognitive than structural determinants of organizational behavior and macro scholars focusing more on the impact of superstructures (e.g., fields, regimes) on organizations than on their impact on individual or group

attitudes, norms, or behavior. Johns (2006) cited many of these same obstacles as remaining 15 years later.

Tearing down the obstacles. Even the most innovative technological fixes are unlikely to help us overcome these two obstacles to a more rapid transition from contextualization to context theorizing. Rather, what is likely to be necessary is a shift in the way we management scholars (authors, reviewers, and editors alike) do our work.

For qualitative researchers, this shift might entail, for example, a focus on the development of process theories (Mohr, 1982) explicating not just how phenomena unfold, but how such unfolding processes may themselves be situation- or time-contingent. Alternatively, it might entail a greater focus on interpretive research aimed at examining how the meanings attached to different organizational phenomena vary across situations, time frames, and social units. Granted, this is likely to entail some degree of risk on the part of qualitative researchers, since journal reviewers and editors still too often confuse rigor with more positivistic variance theories and are often quick to reject approaches that deviate from this more familiar path (Pratt, 2008).

For quantitative researchers, this shift might involve giving greater consideration to context-oriented, qualitative research and, where relevant, integrating the context-oriented nuances inherent in much of this research into their own theorizing. In doing so, quantitative researchers should pay particular attention to specifying and testing (1) precisely how situational or temporal constructs are likely to come into play and (2) any mediating mechanisms through which these situational or temporal constructs may exert their influence.

Where relevant qualitative research is lacking, quantitative researchers might consider adopting grounded (e.g., theoretical samples, field observations, open-ended interviews) and/or case-based (Lincoln & Guba, 2002; Yin, 2002) qualitative methods in the early (prehypothesis development) stages of their research as a means by which to better understand the situational and/or temporal contingencies potentially shaping the phenomena of interest. The insights gleaned from such "preresearch" might result in including new context-related constructs and dropping others, not to mention respecifying a model to include possible cross-level effects of the sorts described earlier. Such an approach may offer a possible solution to the emergent "dichotomy" between quantitative and qualitative researchers described by Johns (2006: 404), in which qualitative researchers im-

merse themselves so deeply in a particular context they can't see the patterns around them, while quantitative researchers are so focused on finding generic phenomena, they can't see the variety that is often staring them in the face.

For our field's gatekeepers, the challenges likely involve no less than a shift in the mental models guiding the way in which we do our reviewing and editing. To the extent that these mental models may themselves be based on a continuing need to demonstrate the legitimacy of our field as a scientific discipline, they may be forcing us to overweight generalizability criteria and, in the process, underweight contextual sensitivity as the basis for a theoretical contribution. Although such a tendency could easily result in the rejection of comparative analyses demonstrating the context specificity of a particular phenomenon or association, is this something we really want to do? Similarly, to the extent that these mental models are paradigm-specific, to what degree do they allow us to consider paradigmatically diverse theories that might suddenly impose, for example, a more sociological worldview on what has otherwise been a highly cognitive framework? Finally, to the extent that these mental models lead us to believe that "good" research is guided by a particular overarching framework, might we be too quick to dismiss studies that necessarily integrate *multiple* theoretical frameworks to explain, for example, how the predictions suggested by one theory may be time- or situation-specific?

Ideally, not only should we as reviewers and editors be open to context-rich research directly challenging these mental models, but also, we should be actively encouraging such research. This might be done, for example, by recommending that authors of manuscripts deemed to offer only a limited theoretical contribution consider—where conceptually and methodologically appropriate—aggregating responses to the unit level so as to be able to explore the cross-level moderating effects of some theoretically relevant climate construct (e.g., unit safety climate) on an otherwise straightforward relationship (e.g., impact of the prevalence of safety hazards on the number of days lost due to injury). Alternatively, this might be done by suggesting that authors incorporate into their theoretical models how particular situational or temporal factors for which data may be in the public domain (e.g., regional unemployment rates, investments in R&D as a portion of GNP) might play a role in explaining the phenomena they are examining or moderate the relationships posited. This is not to say that in reviewing each other's work, we should always look for how context can

be incorporated into the theoretical model. Indeed, there is always the risk that the premature push for incorporating context could complicate rather than enrich our ability to understand complex organizational phenomena (Kozlowski & Klein, 2000). Rather, my suggestion is that reviewers/editors consider recommending context theorizing only when it is seen as likely to enhance rather than divert attention from a study's primary contribution.

Conclusion

The basic premise of all social science is that there is a dynamic interplay between micro and macro and that to appreciate the complexity of any social reality we have to examine the interplay between these two realms. Until recently, however, technological limitations restricted our ability to statistically unpack and hence make sense of such complexities. Now, with the ever-widening application of random-coefficient modeling techniques, we have a tool with which to test a whole new universe of paradigm-bridging, meso theories of management. But such techniques are just that—tools with which to test theory, tools whose utility is constrained by the content of the theories they are used to test. Put in other words, in the absence of more holistic, context theorizing on both the macro and micro levels, our new tools will likely fail to deliver the expected dividends. Such theorizing demands that we introduce our students to a broader range of paradigms and perspectives and give them the tools they need to create new theories explaining the relations between structures, environments, and time frames on the one hand, and attitudes, cognition, and behavior on the other. In going down this path, we are returning to the classical social theorists, such as Weber and Freud, who understood that micro and macro are inextricably linked and that robust theory in the social sciences demands an appreciation of how individuals both shape their context and are shaped by it.

Peter Bamberger

Technion—Israel Institute of Technology

REFERENCES

- Bacharach, S. B., & Bamberger, P. A. 2004. The power of labor to grieve: The impact of the workplace, labor market and power-dependence on employee grievance filing. *Industrial and Labor Relations Review*, 57: 518–539.
- Bacharach, S. B., & Bamberger, P. A. 2007. 9/11 and New York City firefighters' post hoc unit support and control climates: A context theory of the conse-

- quences of involvement in traumatic work-related events. *Academy of Management Journal*, 50: 849–868.
- Bacharach, S. B., Bamberger, P. A., & Doveh, E. 2008. Firefighters, critical incidents, and drinking to cope: The adequacy of unit-level performance resources as a source of vulnerability and protection. *Journal of Applied Psychology*, 93: 155–169.
- Bamberger, P. A., & Biron, M. 2007. Group norms and excessive absenteeism: The role of peer referent others. *Organizational Behavior and Human Decision Processes*, 103: 179–196.
- Barden, J. Q., & Mitchell, W. 2007. Disentangling the influences of leaders' relational embeddedness on interorganizational exchange. *Academy of Management Journal*, 50: 1440–1461.
- Barley, S. R., & Kunda, G. 1992. Design and devotion: Surges of rational and normative ideologies of control in managerial discourse. *Administrative Science Quarterly*, 37: 363–399.
- Bliese, P. D., & Jex, S. M. 2002. Incorporating a multilevel perspective into occupational stress research: Theoretical, methodological and practical implications. *Journal of Occupational Health Psychology*, 7: 265–276.
- Bommer, W. H., Dierdorff, E. C., Rubin, R. S. 2007. Does prevalence mitigate relevance? The moderating effect of group-level OCB on employee performance. *Academy of Management Journal*, 50: 1481–1494.
- Cappelli, P., & Sherer, P. D. 1991. The missing role of context in OB: The need for a meso-level approach. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior*, vol. 13: 55–110. Greenwich, CT: JAI Press.
- Chen, G. 2005. Newcomer adaptation in teams: Multilevel antecedents and outcomes. *Academy of Management Journal*, 48: 101–116.
- Chreim, S., Williams, B. E., & Hinings, C. R. 2007. Interlevel influences on the reconstruction of professional role identity. *Academy of Management Journal*, 50: 1515–1539.
- Cohen, W. M., & Levinthal, D. A. 1990. Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35: 128–152.
- Eden, D. 2002. Replication, meta-analysis, scientific progress and *AMJ's* publication policy. *Academy of Management Journal*, 45: 841–846.
- Elsbach, K. D., & Pratt, M. G. 2007. The physical environment in organizations. *Academy of Management Annals*, 1: 181–224.
- George, J. M., & Jones, G. R. 1997. Organizational spontaneity in context. *Human Performance*, 10: 153–170.
- Gephart, R. P. 2004. Qualitative research and the *Academy of Management Journal*. *Academy of Management Journal*, 47: 454–462.
- Granovetter, M. S. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91: 481–510.
- 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.
- Johns, G. 2006. The essential impact of context on organizational behavior. *Academy of Management Review*, 31: 396–408.
- Karasek, R. A. 1979. Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24: 285–311.
- Kozlowski, S. J., & Klein, K. J. 2000. A multilevel approach to theory and research in organizations: Contextual, temporal and emergent processes. In K. J. Klein & S. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions and new directions*: 3–90. San Francisco: Jossey-Bass.
- Lavie, D., & Rosenkopf, L. 2006. Balancing exploration and exploitation in alliance formation. *Academy of Management Journal*, 49: 797–818.
- Lincoln, Y. S., & Guba, E. G. 2002. Judging the quality of case study reports. In M. Huberman & M. B. Miles (Eds.), *The qualitative researcher's companion*: 205–214. Thousand Oaks, CA: Sage.
- Marrone, J. A., Tesluk, P. E., & Carson, J. B. 2007. A multilevel investigation of antecedents and consequences of team member boundary-spanning behavior. *Academy of Management Journal*, 50: 1423–1439.
- Martin, K. D., Cullen, J. B., Johnson, J. L., & Parboteeah, K. P. 2007. Deciding to bribe: A cross-level analysis of firm and home country influences on bribery activity. *Academy of Management Journal*, 50: 1401–1422.
- Mohr, L. 1982. *Explaining organizational behavior*. San Francisco: Jossey-Bass.
- Muthen, L. K., & Muthen, B. O. 2007. *Mplus user's guide*. Los Angeles: Muthen & Muthen.
- Pfeffer, J. 1993. Barriers to the advance of organizational science: Paradigm development as a dependable variable. *Academy of Management Review*, 18: 599–620.
- Pratt, M. G. 2008. Fitting oval pegs into round holes: Tensions in evaluating and publishing qualitative research in top-tier North American journals. *Organizational Research Methods*, 11: 481–509.
- Roberts, K. H., Hulin, C. L., & Rousseau, D. M. 1978. *Developing an interdisciplinary science of organizations*. San Francisco: Jossey-Bass.

- Roberts, P. W., & Ingram, P. 2000. Friendships among competitors in the Sydney hotel industry. *Journal of Sociology*, 106: 387–423.
- Rousseau, D. M., & Fried, Y. 2001. Location, location, location: Contextualizing organizational research. *Journal of Organizational Behavior*, 22: 1–13.
- Rowley, T., Behrens, D., & Krackhardt, D. 2000. Redundant governance structures: An analysis of structural and relational embeddedness in the steel and semiconductor industries. *Strategic Management Journal*, 21: 369–386.
- Van Yperen, N. W., & Snijders, T. A. B. 2000. A multi-level analysis of the demands-control model: Is stress at work determined by factors at the group level or the individual level? *Journal of Occupational Health Psychology*, 5: 182–190.
- Yin, R. K. 2002. *Applications of case study research* (2nd ed.). Thousand Oaks, CA: Sage.
- Zyphur, M. J., Chaturvedi, S., & Arvey, R. D. 2008. Job performance over time is a function of latent trajectories and previous performance. *Journal of Applied Psychology*, 93: 217–224.