

## FROM THE EDITORS

### PUBLISHING IN *AMJ*—PART 3: SETTING THE HOOK

#### Editor's Note:

*This editorial continues a seven-part series, "Publishing in AMJ," in which the editors give suggestions and advice for improving the quality of submissions to the Journal. The series offers "bumper to bumper" coverage, with installments ranging from topic choice to crafting a Discussion section. The series will continue in December with "Part 4: Grounding Hypotheses." -J.A.C.*

Ten times.

If this were *AMJ Jeopardy*, the category would be "introductions," and "ten" would be the answer. What's the question?

You might be thinking of one, but this is actually the correct answer to two questions:

- (1) On average, how many times do winners of the *AMJ* Best Article Award rewrite the introductions to their work?
- (2) How many times did we rewrite this introduction? (Disclaimer: we're still not satisfied.)

We all know that articles are like dates: first impressions matter. Although it is typically the shortest section of an article, the introduction (i.e., the opening few pages, before the literature review) determines whether or not readers will continue reading. The introduction provides the interpretive frame that shapes how reviewers read a manuscript during the review process. If reviewers are intrigued by the research question, appreciate its importance, and understand how the study advances understanding of the topic, they are more likely to look for reasons to recommend revision. If reviewers are not excited after reading the introduction, they are more inclined to look for reasons to reject.

Despite the importance of introductions, surprisingly little explicit guidance exists on presenting the essentials of your study in a way that captures reader interest, identifies the "conversation" (Huff, 1999) you are joining, explains what your study contributes, and articulates how you will accomplish your goals. To identify tacit knowledge and make it more explicit, we surveyed 22 winners of the *AMJ* Best Article Award about how they develop their introductions. We also surveyed 20 of the most recent recipients of the *AMJ* Outstanding Reviewer Award. What we learned surprised us, and it may surprise you too.

But let's begin with the basics. Our aim is to discuss how to write an introduction that "sets the hook" and helps readers fully recognize and appreciate what your research has to offer and intrigues

them enough to read further. We'll start with the product: What does an effective introduction entail? Then, we'll unpack the process. How do eminent scholars develop their introductions, and what are best practices and pitfalls?

#### The Product

In our view, an effective introduction answers three sets of questions:

- (1) **Who cares?** What is the topic or research question, and why is it interesting and important in theory and practice?
- (2) **What do we know, what don't we know, and so what?** What key theoretical perspectives and empirical findings have already informed the topic or question? What major, unaddressed puzzle, controversy, or paradox does this study address, and why does it need to be addressed?
- (3) **What will we learn?** How does your study fundamentally change, challenge, or advance scholars' understanding?

**Who cares?** An effective introduction captures attention and interest, making readers curious to read on. The central objective is to highlight why the study's topic matters for both theory and practice, planting the study's roots firmly in "Pasteur's quadrant" (Stokes, 1997), where it can contribute to both basic and applied knowledge. The most effective introductions share the same features as ideas and teaching that "stick" (Heath & Heath, 2007): simplicity, unexpectedness, concreteness, credibility, emotionality, and story. To understand the strategies that successful authors employ, we examined the introductions of the 25 *AMJ* Best Article Award winners. We identified two archetypal hooks for opening an article: the quote and the trend.

One hook involves using a provocative quotation or vignette to engage the reader in the intriguing and practical nature of their topic. Ferrier, Smith, and Grimm (1999) examined erosion of market

leaders' market shares by industry challengers. They hooked readers with media headlines: "Kellogg's cutting prices . . . to check loss of market share" and "Amoco scrambles to remain king of the polyester hill." Some authors take the quote approach even further, opening with a captivating story (e.g., Plowman et al., 2007).

The other hook involves highlighting trends on Main Street or in the Ivory Tower. In the former case, authors describe recent changes in the workplace or broader social environment, noting that their causes or effects remain a mystery. Elsbach and Kramer (2003: 283) lamented that despite a "virtual cottage industry of management books and business school courses that extol the virtues of creativity and provide suggestions for eliciting higher levels of creativity," scholars had accumulated little insight into how expert decision makers judge creative potential in high-stakes situations. Margolis and Walsh (2003: 268) opened with a startling observation: "The world cries out for repair. While some people in the world are well off, many more live in misery. Ironically, the magnitude of the problem defies easy recognition." Alternatively, some authors describe trends in academic literature and identify limitations or contradictions. Barkema and Vermeulen (1998) identified two trends in research on foreign direct investment (FDI). One focused on ownership had received considerable attention; the other, focused on whether the FDI was started from scratch or occurred via acquisition, had received less attention. They further subdivided the second trend to identify their contribution.

**What do we know, what don't we know, and so what?** After setting the hook, effective introductions answer the second set of questions by identifying the conversation that the study is joining, where the conversation has not yet gone, and why it should go there (Huff, 1999). Locke and Golden-Biddle (1997) referred to this sequence as establishing and problematizing the intertextual field. *Establishing the field* involves entering two different conversations and bridging them (synthesized coherence), identifying an ongoing conversation and describing how it needs to move forward (progressive coherence), or presenting competing perspectives and explaining how you will resolve them (noncoherence). *Problematizing the field* involves convincing readers that knowledge about the topic needs to be developed further (incompleteness), is deficient because it fails to incorporate important perspectives (inadequacy), or is altogether inaccurate (incommensurability).

In our experience, authors frequently use ineffective approaches to problematize an extant litera-

ture. Some are too tentative, timidly poking at prior research with the incompleteness approach: they avoid making enemies but end up constructing their own contribution as incremental or obvious. Others are too aggressive, attacking prior research with the incommensurability approach: they pique interest, but their harsh condemnations of prior research often incur confrontations and backlash. The inadequacy approach strikes a reasonable middle ground, convincing readers that we truly need a fresh look without claiming that previous studies were a waste of time. For excellent examples, see Greenwood and Suddaby (2006) for problematizing based on theoretical importance, and Tsui, Pearce, Porter, and Tripoli (1997) for problematizing based on practical importance. For more exemplars, vivid illustrations, and incisive analyses of different problematizing approaches, see Locke and Golden-Biddle (1997).

**What will we learn?** The final ingredient of an effective introduction is a preview of your work's theoretical contribution. At its heart, this preview involves giving readers a clear sense of how you will deliver on your promise to change, challenge, or advance the conversation that you have entered. This is an important step that is often overlooked by scholars who were trained outside management and organization studies. As one *AMJ* "Outstanding Reviewer" explained,

Just because a gap exists does not necessarily make the study interesting or worthwhile. Many authors write the introduction by stating that there is a gap but end there without clearly noting why filling this particular gap is important and interesting, or why this contributes to our enhanced understanding of the particular phenomenon.

Hollenbeck (2008) noted that the two most effective ways to frame a contribution are through "consensus shifting" and "consensus creation." *Consensus shifting* occurs when authors identify widely held assumptions, proceed to challenge them, and describe the implications for ongoing research (e.g., Plowman et al., 2007). *Consensus creation* occurs when authors show a lack of consensus in the literature and either clarify the lines of debate or resolve the conflict (e.g., Sherer & Lee, 2002; Wall, Kemp, Jackson, & Clegg, 1986). Summarizing these ingredients, a Best Article Award winner noted:

It should be a stand-alone "minisummary" of the paper: Clearly position the research question of the paper in the relevant literature or identify the importance of the phenomena being examined, articulate the research question succinctly, outline the main theoretical lens and empirical methodology including empirical context, and discuss in brief the contributions.

## The Process

Since the inception of an annual award a quarter century ago, committees have selected 25 papers for the *AMJ* Best Article Award. We surveyed 22 authors of 16 winning papers about how they wrote their introductions. One of the distinctive features of these articles is that their authors hooked us in their introductions, and we wanted to know how they accomplished their aims. We inquired about timing and rewriting and asked what advice they would offer.

**Timing.** At what point in the drafting process did they write their introductions? Nine percent wrote it when they first developed the idea; 23 percent wrote it at the very beginning of the drafting process; 9 percent wrote it at the very end of the process; and 59 percent wrote it somewhere in the middle of the process, often times jotting notes when they first developed the idea and/or before data collection and analysis were finished. For example, one author described “starting with a very rough draft to get the flow of the paper going, but left the honing of the ideas and major editing of the introduction until after the rest of the paper was written.”

How much time did they devote to the introduction, compared to the rest of the article? The average award winner estimated spending 24 percent of the total writing time on the introduction. This is striking, given that the introduction typically accounts for less than 10 percent of the total length of an article. Indeed, the modal award winner recommended that an introduction to an *AMJ* paper be approximately three double-spaced pages. More than a third of authors reported devoting 30 percent or more of their writing time to the introduction (maximum: 50%), and only two reported that it took less than 15 percent of their writing time.

**Rewriting.** Why does such a short section require so much time? As noted earlier, the average winner reported rewriting the introduction ten times. The minimum was three, and 45 percent reported rewriting it ten or more times. As one winner reflected, “I never count the number of revisions to a paper (especially the introduction). It would be too depressing.” The vast majority (86%) reported rewriting the introduction more than any other part of the paper. We identified three different approaches taken: ruthless rewriting, iterative enactment, and following a map.

*Ruthless rewriting* involves multiple authors showing little pity and great trust as they better each other’s work. Consider this illustration from two authors of an award-winning paper:

Author 1: I wrote it. Author 2 ignored what I wrote and then wrote what s/he wanted. I then rewrote what Author 2 wrote. Author 2 then rewrote what I wrote. And on and on it went. . .

Author 2: Author 1 is an excellent writer, but still has certain weaknesses. I think I have offsetting strengths and weaknesses. I tended to ruthlessly rewrite Author 1’s prose and s/he did the same. Eventually we reached a point where we both agreed.

*Iterative enactment* follows the Weickian (1979) dictum, “How can I know what I think until I see what I say?” Winners rewrote their introductions multiple times until the question, gap or controversy, and contribution crystallized. This approach was especially common among authors of qualitative papers. Here are two illustrations:

We wrote it last after we figured out the “gems” from the study. We rewrote it several times trying over and over to get to the essence of the gap that would showcase what the study revealed.

It is often difficult to know what literatures to discuss in the introduction. One might think that a lack of similar prior studies would leave the author(s) with little to say, but ironically it tends to open the door to every literature or theory that could conceivably be applied to the setting. . . . I rewrote the introduction dozens of times and it changed dramatically from the initial submission to the published version.

Finally, some authors followed a *clearer map*, answering the three questions that we outlined above in a relatively linear fashion. As one author explained:

I had to think about what was new here and why anyone should care about reading the paper. I would make a list of reasons to convince myself. Next I would try to carefully identify the research gap being addressed and why someone else would find it as something really important. I also wrote a list of the positive features of the research, in terms of theoretical contributions and the uniqueness of the empirical setting. Next I would write and rewrite the introduction multiple times until I felt that the audience would truly believe that there was something novel here.

## Best Practices: Insights from Outstanding Reviewers and Best Article Award Winners

We also surveyed 20 of the 35 members of *AMJ*’s Editorial Review Board who won Outstanding Reviewer Awards between 2008 and 2010, first asking them to name the best introductions they had ever read and explain what made them so memorable.

They nominated 30 empirical papers in the management and organizational studies field, of which 7 were *AMJ* "Best Articles." The articles on which the reviewers commented are listed in Table 1,

with a few exceptions (when respondents identified multiple articles by the same author, we selected one; we dropped articles that were written by one of us or self-nominated).

**TABLE 1**  
**Exemplary Introductions Nominated by *AMJ* Outstanding Reviewers**

Articles	What Made Them Memorable
Latham, Erez, & Locke (1988)	Consensus creation. Historically, at that moment there was complete lack of conceptual consensus on whether or not participation in goal setting led to the setting of higher or lower goals by workers. There were streams of empirical research that were coming to totally different conclusions. This paper showed how by bringing in scholars with different ideas and doing joint experiments, this could be resolved. It created almost complete consensus on the effects of participation on goal setting, and that consensus still persists today.
Schmidt, Hunter, & Pearlman (1981)	Consensus destruction. Virtually everyone believed in the theory of situational specificity of test validities. By the time they were done, almost no one did. Major theoretical shift in thinking with dramatic implications for the practice of testing in the real world. Ended the practice of "local validation" and replaced it with a practice of validity generalization . . . a huge paper for theoretical, practical and methodological reasons.
Staw, Bell, & Clausen (1986)	Consensus creation followed by consensus destruction. They start by highlighting an apparent lack of consensus on the source of job attitudes: are they caused by objective job characteristics or social information? Although these appear to be competing schools, they share the view that attitudes are caused by factors external to the individual. Thus, the authors perform consensus creation at a higher level. Then, they destroy it. The notion that attitudes are caused by external factors is incorrect. Much of the variance in attitudes is dispositional, reflecting individual differences that are stable over time—and across jobs that vary widely in terms of objective characteristics and social information. The introduction creates a new consensus, and then destroys it. Brilliant.
Barker (1993)	Told a story to ground you in the active situation.
Chatterjee & Hambrick (2007)	Memorable for its clean structure, clear direction, and teasing of the reader.
Elsbach & Kramer (2003)	They use active voice and do a great job tying the empirical context to a new theory. They also show clearly how a problem is further explained by their results and how the context can be extended to other situations.
Gersick (1989); Huselid (1995); Tsui et al. (1997)	Succinct and interesting. Identify contradictions in the literature, which is one way of identifying an important issue that needs to be resolved, and do a good job of resolving such contradiction.
Greenwood & Suddaby (2006); Madsen & Desai (2010); Sanders & Hambrick (2007)	They all addressed relevant and significant research questions (or unresolved tensions) in an interesting way. More specifically, each begins with effectively problematizing extant understanding/theory on the fundamental topic and then builds a resolution that helps to either shift a consensus or create a new consensus on the topic.
Gulati & Westphal (1999)	Masters of introductions: (1) clearly written and concise, (2) effectively identify a research gap by underscoring particular limitations of prior research, (3) convince the readers that the topic is important and relevant to study, (4) effectively explain how the study addresses the research gap, (5) clearly explain how the study will achieve its objectives—detailing the main conjectures and empirical setting, and (6) do not include references to irrelevant literature or use of ambiguous terms.
Hitt, Hoskisson, & Kim (1997); Khanna & Palepu (2000); Sanders & Tuschke (2007)	Clearly written; able to inform the readers about study motivation, research question(s), theoretical premise, and potential contributions; able to generate immense interest about the research.
Lounsbury & Glynn (2001); Rao, Monin, & Durand (2003)	(1) They are conversation starters. They are not the nth empirical study on a theory or phenomenon, but leave a certain amount of ambiguity that makes you want not only to read and understand what they are doing, but also be part of, and contribute to, this research stream. (2) They situate the work broadly, often in two (or more) literatures, but not so many to lead to confusion or dilution. (3) They think "big," connecting with often classical or canonical concerns. (4) They do not use jargon but attract, intrigue, and engage a broad readership.
Poppo & Zenger (2002)	Short but effective portrayal of the theoretical problem being solved.
Seibert, Kraimer, & Liden (2001)	First, the authors enumerate the contribution and purpose of their study very explicitly—what the two, three, or four contributions will be. Second, they briefly tell the reader where prior research has been and how their paper will contribute beyond what has already been done. It is critical to set up this contrast. Third, they write in a very accessible way . . . even someone with little expertise could understand.
van der Vegt & Bunderson (2005)	Clear identification of gaps; good explanation for why addressing the gaps would yield important contributions; elegant, well-justified theoretical development of hypotheses.
Whiteman & Cooper (2011)	Their intro was a narrative and captured my imagination. It was just good storytelling.



For further insights, we asked the Best Article Award winners for their advice on how to write a great introduction. A content analysis revealed three primary categories: focusing (45%), engaging the reader (32%), and problematizing the literature (23%). The advice the Outstanding Reviewers offered with respect to these strategies is consistent with our earlier discussions of the introduction “product.” Some also noted that writing the introduction is an act of self-persuasion (Aronson, 1999). Through motivating readers to care about the work, authors themselves become more engaged. As one winner noted,

Introductions are key: they set the tone for the rest of the manuscript, get the reader excited (or not), and help to shape expectations about what the paper will deliver. . . . I often go back to reread them if I get bogged down elsewhere. In that sense they are as much about motivating me as well as the reader.

### Pitfalls: Common Mistakes in Introductions

The winners of the Outstanding Reviewer Award also commented on the most common mistakes that authors make in writing their introductions. The mistakes fell into three categories: failing to motivate the paper and problematize the literature (60%), lacking focus (45%), and overpromising (14%).

**Failing to motivate and problematize.** The most common pitfall involves providing insufficient justification for the importance of the topic and question, and for how the paper contributes new knowledge. One reviewer wrote that “most mistakes have to do with assuming that the motivation for the paper is obvious and failing to identify a clear research gap.” Other reviewers wrote that authors often talk “only about filling a gap in the literature; not addressing the ‘so what’ question,” and using “bad frames, like ‘This has never been done before’ and ‘This fills in a gap.’” Two reviewers were especially clear. The first noted, “Some authors believe there is a ‘first mover’ advantage in our field (e.g., ‘To our knowledge, ours is the first study to examine empirically the relationship between shoe size and job satisfaction’).” The second emphatically stated, “Not all gaps need to be filled!” Another reviewer counseled avoiding the term “gap” entirely, as it is too self-limiting. Often, the strongest introductions focus on addressing questions, problems, puzzles, and paradoxes, not gap filling.

**Lack of focus.** This pitfall has several key symptoms. One symptom of an unfocused introduction is being too long and featuring extraneous details and asides rather than essential, interesting information about the paper’s contributions. Reviewers

often see authors trying “to cram too much of what the study covers in the intro at the expense of being compelling, intriguing, interesting” or writing introductions that are “long and rambling (needs to be short and snappy).” A second symptom is using “too many frameworks in positioning the paper,” and a third is describing “what sections of the paper will be presented, in what order,” instead of “defining the problem and laying out the contribution.” One reviewer thoughtfully counsels: “Many authors do not clearly state the goals of their paper. I like to see them enumerated because it forces the authors to identify them. Oftentimes, authors make passing references to prior work, but they do not tell me enough about what prior research has found and how their study adds importantly to our understanding.”

**Overpromising.** Some reviewers expressed their view that authors create “a mismatch between the introduction and the rest of the paper, typically setting too high expectations in the introduction and failing to meet them later on.” This occurs when authors try very hard “to convince the reader of the contributions that they subsequently come off as implausible and ridiculously self-serving” or “to be so compelling and intriguing that they never really tell you what exactly the study does.”

### Conclusion

We only get one chance to make a first impression, and in academic publishing the introduction to your submission or your article is that chance. A good introduction hooks the reader by elucidating the topic’s impact; what scholars now know, what we do not know, and why that matters; and how the research contributes to an ongoing research conversation or starts a new conversation. Effective introductions increase the likelihood readers will continue on to the remaining 90 percent of your article and fully appreciate what your research has to offer.

Good introductions also take considerable time and effort to write. We were pleasantly surprised to learn that our habits of rewriting our introductions at least ten times are not uncommon. Personally, we aim for three double-spaced pages and spend more time on the introductions than on any other parts of our manuscripts. We also generally draft them before we write the other parts of the manuscript. We have found that writing the introduction early provides a constructive outline for structuring the rest of a paper, motivating us, and making sure we stay on track as we develop our ideas. Of course, we go back and revise our introductions as our ideas and studies evolve. Our experience in writing this “From the Editors” suggests it is safe to say that

we are comfortable with the “ruthless rewriting” approach. If you can check your ego, trust your coauthors, and avoid falling in love with your own prose (at least until the tenth iteration), this approach can provide a meaningful learning experience, as well as a stronger product.

Mark Twain once said, “I would have written a short letter, but I didn’t have the time.” When writing an introduction, it’s valuable to make the time. The effort will be rewarded.

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## REFERENCES

- Aronson, E. 1999. The power of self-persuasion. *American Psychologist*, 54: 875–884.
- Barkema, H. G., & Vermeulen, F. 1998. International expansion through start-up or acquisition: A learning perspective. *Academy of Management Journal*, 41: 7–26.
- Barker, J. R. 1993. Tightening the iron cage: Concertive control in self-managing teams. *Administrative Science Quarterly*, 38: 408–437.
- Chatterjee, A., & Hambrick, D. 2007. It’s all about me: Narcissistic chief executive officers and their effects on company strategy and performance. *Administrative Science Quarterly*, 52: 351–386.
- Elsbach, K. D., & Kramer, R. M. 2003. Assessing creativity in Hollywood pitch meetings: Evidence for a dual-process model of creativity judgments. *Academy of Management Journal*, 46: 283–301.
- Ferrier, W. J., Smith, K. G., & Grimm, C. M. 1999. The role of competitive action in market share erosion and industry dethronement: A study of industry leaders and challengers. *Academy of Management Journal*, 42: 372–388.
- Gersick, C. J. G. 1989. Marking time: Predictable transitions in task groups. *Academy of Management Journal*, 32: 274–309.
- Greenwood, R., & Suddaby, R. 2006. Institutional entrepreneurship in mature fields: The Big Five accounting firms. *Academy of Management Journal*, 49: 27–48.
- Gulati, R., & Westphal, J. D. 1999. Cooperative or controlling? The effects of CEO-board relations and the content of interlocks on the formation of joint ventures. *Administrative Science Quarterly*, 44: 473–506.
- Heath, C., & Heath, D. 2007. *Teaching that sticks*. Accessed on August 2, 2010 at [www.heathbrothers.com/resources/](http://www.heathbrothers.com/resources/).
- Hitt, M. A., Hoskisson, R. E., & Kim, H. 1997. International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40: 767–798.
- Hollenbeck, J. R. 2008. The role of editing in knowledge development: Consensus shifting and consensus creation. In Y. Baruch, A. M. Konrad, H. Aguinis, & W. H. Starbuck (Eds.), *Journal editing: Opening the black box*: 16–26. San Francisco: Jossey Bass.
- Huff, A. S. 1999. *Writing for scholarly publication*. Thousand Oaks, CA: Sage.
- Huselid, M. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38: 635–672.
- Khanna, T., & Palepu, K. 2000. The future of business groups in emerging markets: Long-run evidence from Chile. *Academy of Management Journal*, 43: 268–285.
- Latham, G. P., Erez, M., & Locke, E. A. 1988. Resolving scientific disputes by the joint design of crucial experiments by the antagonists: Application to the Erez-Latham dispute regarding participation in goal setting. *Journal of Applied Psychology*, 73: 753–772.
- Locke, K., & Golden-Biddle, K. 1997. Constructing opportunities for contribution: Structuring intertextual coherence and “problematizing” in organizational studies. *Academy of Management Journal*, 40: 1023–1062.
- Lounsbury, M., & Glynn, M. A. 2001. Cultural entrepreneurship: Stories, legitimacy and the acquisition of resources. *Strategic Management Journal*, 22: 545–564.
- Madsen, P. M., & Desai, V. 2010. Failing to learn? The effects of failure and success on organizational learning in the global orbital launch vehicle industry. *Academy of Management Journal*, 53: 451–476.
- Margolis, J. D., & Walsh, J. P. 2003. Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48: 268–305.
- Plowman, D. A., Baker, Lakami, 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.
- Poppo, L., & Zenger, T. 2002. Do formal contracts and relational governance work as substitutes or complements? *Strategic Management Journal*, 23: 707–725.
- Rao, H., Monin, P., & Durand, R. 2003. Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy. *American Journal of Sociology*, 108: 795–843.
- Sanders, W., & Tuschke, A. 2007. The adoption of institutionally contested organizational practices: The

- emergence of stock option pay in Germany. *Academy of Management Journal*, 50: 33–56.
- Sanders, W. G., & Hambrick, D. C. 2007. Swinging for the fences: The effects of CEO stock options on company risk taking and performance. *Academy of Management Journal*, 50: 1055–1078.
- Schmidt, F. L., Hunter, J. E., & Pearlman, K. 1981. Task differences as moderators of aptitude-test validity in selection: A red herring. *Journal of Applied Psychology*, 66: 166–185.
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. 2001. A social capital theory of career success. *Academy of Management Journal*, 44: 219–237.
- Sherer, P., & Lee, K. 2002. Institutional change in large law firms: A resource dependency and institutional perspective. *Academy of Management Journal*, 45: 102–119.
- Staw, B. M., Bell, N. E., & Clausen, J. A. 1986. The dispositional approach to job attitudes: A lifetime longitudinal test. *Administrative Science Quarterly*, 31: 56–77.
- Stokes, D. 1997. *Pasteur's quadrant: Basic science and technological innovation*. Washington, DC: Brookings Institution Press.
- Tsui, A. S., Pearce, J. L., Porter, L. W., & Tripoli, A. M. 1997. Alternative approaches to the employee-organization relationship: Does investment in employees pay off? *Academy of Management Journal*, 40: 1089–1121.
- Van der Vegt, G. S., & Bunderson, J. S. 2005. Learning and performance in multidisciplinary teams: The importance of collective team identification. *Academy of Management Journal*, 48: 532–547.
- Wall, T. D., Kemp, N. J., Jackson, P. R., & Clegg, C. W. 1986. Outcomes of autonomous workgroups: A long-term field experiment. *Academy of Management Journal*, 29: 280–304.
- Weick, K. E. 1979. *The social psychology of organizing* (2nd ed.). Reading, MA: Addison-Wesley.
- Whiteman, G. M., & Cooper, W. H. 2011. Ecological sense-making. *Academy of Management Journal*, 54: 889–911.