

HAPPY BIRTHDAY, AMD!

The Academy of Management Discoveries (AMD) has just completed its first calendar year of publishing articles. *Happy Birthday, AMD!!!* The first year in the life of *AMD* has been an exciting and challenging journey in developing *AMD*'s editorial mission and pioneering electronic media.¹ We are positioning *AMD*'s mission as being unique among and complementary with all Academy of Management (AOM) journals. We are innovating with the use of electronic media to communicate social science knowledge in ways that go beyond the limits of text-based papers. The purpose of this editorial is to share some insights from this journey in hopes that it motivates you to submit a comment with suggestions for further journal enhancements, or better yet, a manuscript reporting your own discovery!

AMD'S EDITORIAL MISSION

AMD seeks to promote phenomenon-driven empirical research that our theories of management and organizations neither adequately predict nor explain. Data on these poorly understood phenomena can come from any source, including ethnographic observations, lab and field experiments, field surveys, meta-analyses, and replication studies. *AMD* welcomes exploratory studies at the pre-theory stage of knowledge development, where it is premature to specify hypotheses. This research must be grounded in rigorous state-of-the-art methods, present strong and persuasive evidence, and offer interesting and important implications for management theory and practice.

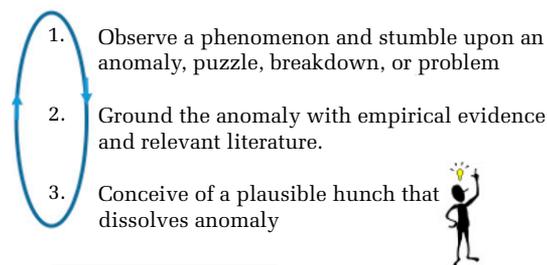
The common theme among the many types of research that *AMD* publishes is the exploratory process of uncovering and providing deep insight into managerial phenomena that are poorly understood. If knowledge progresses through stages of identifying important phenomena and then developing and testing theories about them, *AMD* focuses on the

initial stage. We view *AMD* as a source journal that empirically describes and diagnoses poorly understood phenomena, and that conceives of hunches and conjectures for subsequent theory development and testing in other AOM journals. Although a deductive mode of reasoning is typically used to develop and elaborate theories in the *Academy of Management Review (AMR)*, and empirical induction is used to test theories in the *Academy of Management Journal (AMJ)*, papers published in *AMD* tend to be grounded with an abductive process of reasoning as a basis for observing poorly understood phenomena and conceiving plausible conjectures about them.

As introduced by the American pragmatist, Charles Peirce (1931–1958), abduction is a process of reasoning that begins by recognizing an anomaly or breakdown in our understanding of phenomena and proceeds by creating a hunch or a conjecture that dissolves the puzzle by providing a coherent resolution to the problem. Although there are different patterns of abductive reasoning (Burks, 1946; Hanson, 1958; Magnani, 2001), *AMD* papers tend to reflect a recurrent three-step process as illustrated in the Figure. Describing and diagnosing a complex phenomenon may require several repetitions of the three steps.

The first step typically consists of observing a phenomenon and noticing an anomaly, a puzzle, or problem about it. None of us view the world with a blank slate. Instead, we view reality with our heads filled with specific expectations or perspectives that were gained from prior learning experiences. Thus, instead of thinking of knowledge creation as being analogous to drafting on a clean sheet of paper, it is more helpful to think of it as one

Figure. Abductive Process of Reasoning in AMD



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Refer to other journals theory development through deduction and theory testing through induction

¹ It has been a great honor and privilege to undertake this journey with *AMD*'s editorial team members, Soon Ang (Nanyang Technological University, Singapore), Africa Ariño (University of Navarra, IESE, Spain), Peter Bamberger (Tel Aviv University, Israel), Curtis LeBaron (Brigham Young University, Provo, UT), Chet Miller (University of Houston, Houston, TX), and Frances Milliken (New York University, New York, NY). I greatly appreciate their suggestions in this editorial.

of erasing, inserting, revising, and reconnecting ideas scattered in our heads that are scribbled full of experiences, insights, and musings from us and others (Van de Ven, 2007). As Peirce (1931–1958) and Hanson (1958) argued, abduction begins by recognizing an anomaly or breakdown in our understanding of a phenomenon.

The second step involves verifying that the anomaly actually exists. In legal proceedings, establishing the case is mandatory for pursuing it. Merton (1987) cautioned that an important first element in the practice of science is *establishing the phenomenon*. The Results section of *AMD* papers should present clear evidence and arguments that the phenomenon in its context has enough importance or regularity to require explanation. In this way, pseudo facts that induce pseudo problems are avoided. *AMD* papers should reflect not only strong empirical evidence of the particulars of the phenomenon in its indigenous context, but also a deep appreciation of the relevant knowledge in the literature that does not adequately explain the anomaly. By definition, an anomaly is not a discovery if it is already adequately explained.

The third step in the abductive process is conceiving a creative hunch that may resolve the anomaly. Although this abductive step is a logic for discovering hunches or conjectures about complex phenomena, it does not produce simple or clear answers. Locke, Golden-Biddle, and Feldman (2008: 907) note that “deduction proves that something *must* be, induction shows that something *actually is* operative; abduction merely suggests that something *may be*.” Thus, as Weick (1989: 525) argues, “*plausibility is a substitute for validity*” in selecting conjectures. At the time of its conception, it is often not possible to determine the validity or truth of a conjecture. Logical validity becomes an important criterion for assessing a theory once it is deduced, as in papers published in *AMR* or the *Academy of Management Annals*. Empirical truth cannot be determined until hypotheses are tested by induction, as in papers published in *AMJ*. In the case of *AMD*, the criterion for evaluating abductive reasoning is the plausibility and coherence of the conjecture. This becomes evident when *AMD* authors present a coherent argument at the end of the paper for the plausibility of their conjecture. This argument should

- show why the conjecture is better than other resolutions that can be imagined,
- situate the conjecture into its relevant body of knowledge in the management literature, and
- clarify and enlighten, eliciting an “aha” reaction from *AMD* readers (Agar, 1986: 22).

MEDIA FOR BETTER SCIENCE

AMD was founded as AOM’s first all-electronic journal. This has presented an opportunity and challenge for *AMD* to be on the frontier of social scientific publishing. During the past year, the following features have become available for each article published in *AMD*: digital whiteboards, author voice audio, and editor’s comments that communicate the central discovery and author motivations in each article in informative and interesting ways to a general audience. In addition, each article contains hyperlinks to a variety of multimedia content such as interview excerpts, video clips, pictures, illustrations, and dynamic simulations. Digital technologies also make possible new kinds of evidence and experience, giving authors ways to present their data on phenomena without text-based constraints. *AMD* has also introduced “Paper Commentaries” to stimulate interactions among members of our scientific community (see below). Our goal in introducing these media features is to advance social scientific knowledge in ways that transcend the limits of paper text. It is not about making pretty pictures—it is about doing better social science.

Scientific knowledge is that which a scientific community views as being plausible. The purpose of scientific journals is to provide a means for members of the community to publish their findings, express their perspectives on the findings, and foster debate. Unfortunately, the one-way communications from authors to readers in most scientific journals inhibit this process of feedback, critique, and debate among scientific community members. With the goal of fostering more dialogue within our scientific community, *AMD* has launched Paper Commentaries, which give both readers and authors the opportunity to have public conversations about scholarly issues. We invite *AMD* readers to collaborate in the process of knowledge production by submitting commentary about articles published in *AMD*. Possibilities for commentaries include

- celebrating and augmenting scholarly discoveries,
- reanalyzing data and coding schemes,
- providing alternative interpretations of research findings,
- questioning the standards and values reflected in an article, and
- identifying and encouraging new lines of inquiry or future research.

As Dougherty (2016: 50–51) argues, advancing scientific knowledge of poorly understood complex phenomena depends on thousands of people

interacting together to surface different ideas and develop a variety of options to tackle problems. We think that *AMD* Paper Commentaries can be a small but important step for advancing scholarly discourse among members of our scientific community. Those commentaries that *AMD* editors judge to advance scientific knowledge will be published as important scholarly contributions that others might read and cite.

CONCLUSION

Discovery of poorly understood complex phenomena requires a community of scholars. “Groups composed of individuals with distributed . . . partial . . . images of a complex environment can, through interaction, synthetically construct a representation . . . that works; one which, in its interactive complexity, outstrips the capacity of any single individual in the network to represent and discriminate events. Out of the interconnections, there emerges a representation of the world that none of those involved individually possessed or could possess” (Taylor & Van Every (2000: 207). *AMD* is honored and privileged to provide a journal that facilitates scientific discoveries among our community of management scholars. Thank you for your participation and help!

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REFERENCES

- Agar, M. H. 1986. *Speaking of ethnography. Qualitative research methods series*, vol. 2, Beverly Hills, CA: Sage Publications.
- Burks, A. W. 1946. Peirce’s theory of abduction. *Philosophy of Science*, 13: 301–306.
- Dougherty, D. 2016. *Taking advantage of emergence: Productively innovating in complex innovation systems*. Oxford, UK: Oxford University Press.
- Hanson, N. R. 1958. The logic of discovery. *Journal of Philosophy*, 55: 1073–1089.
- Locke, K., Golden-Biddle, K., & Feldman, M. 2008. Making doubt generative: Rethinking the role of doubt in the research process. *Organization Science*, 19: 907.
- Magnani, I. 2001. *Abduction, reason, and science: Processes of discovery and explanation*. New York, NY: Springer.
- Merton, R. K. 1987. Three fragments from a sociologist’s notebooks: Establishing the phenomenon, Specified ignorance, and Strategic research materials. *Annual Review of Sociology*, 13: 1–28.
- Peirce, C. Y. 1931–1958. In C. Hartshorne, P. Weiss, & A. W. Burks (Eds.), *Collected papers of Charles Sanders Peirce, Volumes I–VIII*. Cambridge, MA: Harvard University Press.
- Taylor, J., & Van Every. 2000. *The emergent organization: Communication as its site and surface*. Mahwah, NJ: Erlbaum.
- Van de Ven, A. H. 2007. *Engaged scholarship: A guide for organizational and social research*. Oxford, UK: Oxford University Press.
- Weick, K. E. 1989. Theory construction as disciplined imagination. *Academy of Management Review*, 14: 516–531.