- Stevenson, H. H., & Jarillo, J. C. 1990. A paradigm of entrepreneurship: Entrepreneurial management. Strategic Management Journal, 11: 17–27.
- Wang, C. L., & Chugh, H. 2014. Entrepreneurial learning: Past research and future challenges. *International Journal of Management Reviews*, 16: 24–61.
- Watson, T. J. 2013. Entrepreneurial action and the Euro-American social science tradition: Pragmatism, realism and looking beyond "the entrepreneur." *Entrepreneurship* & Regional Development, 25: 16–33.
- Werhahn, D., Mauer, R., Flatten, T. C., & Brettel, M. 2015. Validating effectual orientation as strategic direction in the corporate context. *European Management Journal*, 33: 305–313.
- Wernerfelt, B. 1984. A resource-based view of the firm. Strategic Management Journal, 5: 171–180.
- Whittaker, D. H. 2009. Comparative entrepreneurship: The UK, Japan, and the shadow of Silicon Valley. New York: Oxford University Press.

Stuart Read (sread@willamette.edu) Willamette University

Saras D. Sarasvathy (sarasvathyS@darden.virginia.edu) University of Virginia

> Nicholas Dew (ndew@nps.edu) Naval Postgraduate School

Robert Wiltbank (wiltbank@willamette.edu) Willamette University

http://dx.doi.org/10.5465/amr.2015.0180



# Deepening the Dialogue: New Directions for the Evolution of Effectuation Theory

Arend, Sarooghi, and Burkemper (hereafter, "ASB") evaluate effectuation theory by applying a "3E" framework that they position as comprehensive and broadly applicable to business theory (2015: 11). In their dialogue response to ASB, Read, Sarasvathy, Dew, and Wiltbank (2016) argue that the 3E framework is, in fact, inapplicable to effectuation theory because it embodies positivist criteria inappropriate for effectuation's pragmatist stance. We start from the premise that theory development is an evolutionary process, an observation that fuels our approach to assessing how effectuation theory might be advanced. Highlighting the pragmatist roots of effectuation theory, we suggest that effectuation research has thus far emphasized one aspect of pragmatism—creativity—while a second aspect of pragmatism—habit—has been underexplored. We also highlight the limited attention directed to date beyond the level of the individual. Based on these observations, we outline possibilities for new directions for developing effectuation theory.

#### **EVALUATING A THEORY'S EVOLUTION**

The academic enterprise is one in which theories are constantly coconstructed and reconstructed by a collegium. That is, theories evolve through a process of selection and retention whereby revisions and modifications occur as theorists articulate, disseminate, apply, refine, and repurpose them (Weick, 1989). Moreover, the processes of theory construction and reconstruction in the social sciences can affect the phenomena about which theory is being created; this occurs as people learn from both theories and practice about their world and act on this knowledge. This type of dynamic, collaborative perspective on theory is inconsistent with the view that theories should be evaluated as though they were settled sets of assumptions, concepts, propositions, and boundary conditions proposed by an exclusive group of authors whose aim is to "capture" a focal phenomenon. Instead, it highlights that the evaluation of a theory needs to include a consideration of its evolutionary path and, potentially, the paths not yet taken. We argue that those seeking to advance a field (such as entrepreneurship) by taking stock of a pragmatist theory (such as effectuation) might better serve their scholarly peers by recognizing its dynamic nature and considering how it might fruitfully further evolve.

If scholars adopt this evolutionary view of theory, they will not ask whether theories are "ineffectual" (ASB, article title). Instead, they will assess (for example) whether constructs have become stabilized such that they are consistently defined, with clear and agreed upon scope conditions and semantic relationships to other constructs (Suddaby, 2010), or whether they are unstable and require further clarification or possibly elimination. Scholars will also examine related theories for concepts that could usefully be integrated to augment the focal theory. An approach to theory assessment that recognizes its evolutionary nature would not lead scholars to make judgments about whether a theory is "true," the apparent goal of ASB's 3E framework. Rather, it would stimulate reflection by highlighting how (un)settled elements of the theory have been over time and by outlining productive paths for the next generation of researchers.

To a considerable extent, the approach we suggest is consistent with Read et al.'s (2016) response to ASB's critique in that they focus on identifying aspects of effectuation theory that have not yet stabilized (e.g., the concepts of effectual control and of means and resources; the unit of deliberate practice) and suggest constructs from other theories that could usefully be incorporated into effectuation theory (e.g., goals and cocreated equity). However, a close examination of effectuation theory's roots in pragmatism reveals that the theory's evolutionary trajectory to date has focused on one aspect of pragmatism—creativity—to the exclusion of another aspect-habit. Moreover, effectuation research has been conducted primarily at the individual level of analysis. And since entrepreneurial behavior has the potential to shape and be shaped by organizational actions and institutional norms, there are opportunities for effectuation research at other levels of analysis.

In the sections that follow we first highlight how habit has been conceptualized within pragmatist perspectives. We then suggest new directions for research that would integrate pragmatist principles more fully into effectuation theory at the individual, organizational, and institutional levels of analysis.

## SITUATING EFFECTUATION AS A PRAGMATIST THEORY

Sarasvathy (2001: 254) explicitly noted that the intellectual lineage of effectuation theory includes pragmatist philosophers such as Peirce (1878), as well as scholars of management and economics who have been influenced by them (e.g., Simon, 1959; Weick, 1979). Pragmatism is characterized by the view that human actors experience "situated freedom" (Joas, 1993: 4), and pragmatist theories eschew determinism in favor of understanding human action as creative action. Thus, actors' agency is oriented toward the future, because actors can creatively understand the situations they face and act on those understandings. At the same time, pragmatists also view human agency as having a habitual or habituated aspect. That is, actors' agency is informed by the past-taken-for-granted understandings and habits. As argued by Gross, "Alternation between habit and creativity is at the heart of pragmatism" (2009: 369).

In its original and most current incarnations, effectuation theory embraces the principles of action orientation, problem solving, and situated freedom from the pragmatist tradition. For example, it challenges the notion that only certain people with special abilities or traits can successfully engage in entrepreneurship. It also promotes the view that people acting effectually can shape the world they cocreate (e.g., Read et al., 2016; Sarasvathy, 2001). However, less evident in effectuation theory research is explicit consideration of how, and under what conditions, habituated aspects of human agency factor into effectual thought processes and behavior. We make this observation because it appears that the emphasis in research based on effectuation theory is on the mindful and creative actions of entrepreneurs with regard to available means, possible effects, and stakeholder commitments. The role of habituated responses is, to the best of our knowledge, as yet unclear.

We considered the possibility that the alternation between effectual and causal approaches (as discussed by Sarasvathy, 1998) might be relevant to the alternation between creativity and habit associated with pragmatist theory. However, most characterizations of predictive causal approaches do not reconcile with the notions of habituated agency that are part of the pragmatist perspective. Thus, it appears that the dominant strand in the evolution of effectuation theory stems in a path-dependent fashion from the emphasis on creative action in Sarasvathy's (2001) early discussion of the effectual logic of entrepreneurs. This observation raises the following questions: What useful new insights might be gained by incorporating into effectuation theory the notion of habituated response? How does habit interact with creativity in entrepreneurial action at the individual, organizational, and institutional levels?

## OPENING NEW DIRECTIONS FOR DEVELOPING EFFECTUATION THEORY

In suggesting new possibilities for future research on effectuation that integrates pragmatism's emphasis on creativity and habit, we begin by recognizing that they are a duality rather than a dichotomy. Pragmatists do not regard creativity and habit as opposites, one mindful and the other mechanical; rather, they see them as potentially complementary and intertwined (Glăveanu, 2012). For example, Dewey argued that "habit means special sensitiveness or accessibility to certain classes of stimuli, standing predilections and aversions, rather than bare recurrence of specific acts. It means will" (1922: 42). As stressed by Dewey and by pragmatists who have followed on from his work, creativity stems from the intelligent adaptation of customs to conditions.

In spite of pragmatism's creativity-habit duality, research on effectual thought and action by individuals has emphasized creativity and even imagination, with little attention to habit. From a pragmatist perspective, incorporating notions of habitual response into effectuation theory would involve examining the interplay between creativity and habit, rather than viewing them as substitutes. Because there is no assumption about trade-offs, this is a perspective that is fundamentally different from those underlying theories of experientially acquired expertise, where experience is associated with skillful, consistent problem solving but also with a loss of flexibility with respect to adaptability and creativity (Dane, 2010). We expect experienced effectual entrepreneurs to follow certain habitual patterns, and research in a pragmatist tradition would examine how these patterns are adapted and under what conditions. An example of such a pattern is that effectual entrepreneurs pay more attention to affordable loss than to expected return (Read, Dew, Sarasvathy, Song, & Wiltbank, 2009), yet we have little understanding of the variability of this behavior and how entrepreneurs resolve the hybridity of these two objectives.

Interesting new directions for developing effectuation theory are also revealed by considering how, and to what extent, the core constructs, relationships, and processes of effectuation theory can be extended to collectivities such as founding teams and organizations. This would go beyond the insights gained by assessing effectuation versus causation at the firm level (e.g., Chandler, DeTienne, McKelvie, & Mumford, 2011), to considering how habit and creativity are intertwined in collective effectual processes. Furthermore, the duality of creative and habituated responses in pragmatist theory is consistent with organizations' need to be innovative and flexible while also being reliable and consistent (Farjoun, 2010).

These observations suggest new possibilities for extending effectuation theory by considering both how creative and habituated responses are intertwined in collective effectual processes and that these might vary across different contexts. As one example, effectuation theory is based explicitly on a logic of control—"to the extent we can control...[the] future, we do not need to predict it" (Sarasvathy, 2001: 251)—and we expect that controlling the future will be more complex when multiple people are enacting it. This is because there are likely to be differing levels of creativity and habit within effectual responses, as well as differing degrees of comfort with effectual versus predictive processes. Moreover, different people will engage in different internal and external interactions. As a result of this diversity, interactions are likely to stabilize and destabilize, in varying ways, the shared understandings associated with the key criteria by which entrepreneurs take stock of the means they believe are available to them: "who I am, what I know and who I know" (Read et al., 2009: 4). We expect this variation among relevant decision makers within a single firm to be particularly true for rapidgrowth firms that quickly transition from a small, tight-knit founding team to a much broader set of decision makers facing the pressures of a constant influx of newcomers, many decisions to be made, and friction over turf battles (see Hambrick & Crozier, 1985).

Also at the organizational level, in considering how attention to habit might enhance effectuation theory, we believe research on organizational routines can provide new directions for effectuation research, given that routines are habitual patterns of actions involving multiple organizational actors (Feldman & Pentland, 2003: 96). Although Coviello and Joseph (2012) have illustrated the fruitful role of effectuation in innovation, we have little knowledge of how effectual processes are embedded in organizational routines so that creativity and habit can interact and provide scaffolding for each other. We also lack knowledge of the consequences of this embeddedness, in terms of stability and efficacy. Indeed, Fischer and Reuber (2011), in their study of how engagement with stakeholders via the Twitter social media platform affects entrepreneurs' effectual thinking, identify "effectual churn" as a continuous but unproductive cycling through effectual processes, suggesting that embedded effectual processes are not always related to beneficial outcomes.

Turning to research at the institutional level, Read et al.'s (2016) Table 1 highlights the adoption of effectuation theory by educators and authors of practitioner books. We are unaware, however, of explicit study of effectuation as an institutionalor field-level phenomenon, and we believe that attention here could make a valuable contribution to the construction of effectuation theory. We have little knowledge of the impact of effectuation theory on entrepreneurial practice in differing contexts. Such an impact could be a result of explicitly exposing fledgling entrepreneurs to the ideas of effectuation through an educational intervention. It could also be a result of the ideas of effectuation being codified into start-up methodologies such as those popular in Silicon Valley.

In thinking about the impact of effectuation theory on practice, it is important to remember Zbaracki's (1998) documentation of differences between the rhetoric of total quality management and the way it is practiced. Although total quality management is a more elaborate and institutionalized practice than effectuation, his study raises two important points that are consistent with an evolutionary view of theory development. First, it is likely that the meaning of important effectuation concepts could be altered through their implementation in differing contexts. Second, the ways in which effectuation is understood and enacted may deviate from the precepts emphasized in scholarly work.

Also at the institutional level, we could seek to learn how entrepreneurial practice might contribute to new ways of thinking about effectuation theory. One opportunity for theory development lies in examining conflicting institutional logics within this domain. Such conflict is likely, for example, when entrepreneurs are acting on the basis of effectual reasoning while the decision makers from whom they are trying to acquire resources (e.g., managers in potential partner firms, investors, or bankers) are acting on the basis of institutional logics centered on prediction and expected return.

Finally, and returning to the argument that theory evolves, the possibilities for effectual action may change as entrepreneurship as a field changes, revealing new constructs and relationships relevant to effectuation theory. It is possible, for instance, that the high-net-worth individuals who made their money by starting firms and are now investing in new ventures ("super angels") will have a propensity toward new kinds of investment logics if they are habituated to effectual thinking. Additionally, crowd-funding platforms such as KickStarter, Indiegogo, and AngelList may enable effectual behavior in terms of gaining financial commitments from hordes of others, but, in doing so, they may also limit an entrepreneur's attention to acquiring more deep-rooted commitment to his or her new venture. Such emerging institutional phenomena are likely to impact both the development and practice of effectuation theory.

## CONCLUDING OBSERVATIONS

ASB have made a valuable contribution by stimulating reflection both on how theories can be assessed and on novel research directions for effectuation theory. Their contribution has inspired us to take a different direction, a direction that considers theory development as evolutionary and offers possibilities for the future development of effectuation theory, given its roots in pragmatism. Thus, although we take issue with ASB's approach and assumptions, we thank them for providing an opportunity to pause and reflect on theory evaluation in general and on the evolution of effectuation theory in particular.

#### REFERENCES

- Arend, R. J., Sarooghi, H., & Burkemper, A. 2015. Effectuation as ineffectual? Applying the 3E theory-assessment framework to a proposed new theory of entrepreneurship. Academy of Management Review, 40: 630–651.
- Chandler, G. N., DeTienne, D. R., McKelvie, A., & Mumford, T. V. 2011. Causation and effectuation processes: A validation study. *Journal of Business Venturing*, 26: 375–390.
- Coviello, N. E., & Joseph, R. M. 2012. Creating major innovations with customers: Insights from small and young technology firms. *Journal of Marketing*, 76(6): 87–104.
- Dane, E. 2010. Reconsidering the trade-off between expertise and flexibility: A cognitive entrenchment perspective. *Academy of Management Review*, 35: 579–603.
- Dewey, J. 1922. Human nature and conduct: An introduction to social psychology. New York: Modern Library.
- Farjoun, M. 2010. Beyond dualism: Stability and change as a duality. *Academy of Management Review*, 35: 202–225.
- Feldman, M. S., & Pentland, B. T. 2003. Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly*, 48: 94–118.
- Fischer, E. M., & Reuber, A. R. 2011. Social interaction via new social media: How can interactions on Twitter affect effectual thinking and behavior? *Journal of Business Venturing*, 26: 1–18.
- Glăveanu, V. P. 2012. Habitual creativity: Revising habit, reconceptualizing creativity. *Review of General Psychol*ogy, 16: 78–92.

- Gross, N. 2009. A pragmatist theory of social mechanisms. American Sociological Review, 74: 358–379.
- Hambrick, D. C., & Crozier, L. M. 1985. Stumblers and stars in the management of rapid growth. *Journal of Business Venturing*, 1: 31–45.
- Joas, H. 1993. *Pragmatism and social theory*. Chicago: University of Chicago Press.
- Peirce, C. S. 1878. How to make our ideas clear. Popular Science Monthly, 12: 286–302.
- Read, S., Dew, N., Sarasvathy, S. D., Song, M., & Wiltbank, R. 2009. Marketing under uncertainty: The logic of an effectual approach. *Journal of Marketing*, 73(3): 1–18.
- Read, S., Sarasvathy, S. D., Dew, N., & Wiltbank, R. 2016. Response to Arend, Sarooghi, and Burkemper (2015): Cocreating effectual entrepreneurship research. Academy of Management Review, 41: 528–536.
- Sarasvathy, S. D. 1998. How do firms come to be? Towards a theory of the prefirm. Pittsburgh: Carnegie Mellon University.
- Sarasvathy, S. D. 2001. Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. Academy of Management Review, 26: 243–263.
- Simon, H. A. 1959. Theories of decision making in economics and behavioral science. *American Economic Review*, 49: 253–283.
- Suddaby, R. 2010. Editor's comments: Construct clarity in theories of management and organization. Academy of Management Review, 35: 346–357.
- Weick, K. 1979. The social psychology of organizing. Reading, MA: Addison-Wesley.
- Weick, K. 1989. Theory construction as disciplined imagination. Academy of Management Review, 14: 516–531.
- Zbaracki, M. J. 1998. The rhetoric and reality of total quality management. Administrative Science Quarterly, 43: 602–636.

A. Rebecca Reuber (reuber@rotman.utoronto.ca) University of Toronto

Eileen Fischer (efischer@schulich.yorku.ca) York University

> Nicole Coviello (ncoviello@wlu.ca) Wilfrid Laurier University

> > http://dx.doi.org/10.5465/amr.2015.0217



# A Process Perspective on Evaluating and Conducting Effectual Entrepreneurship Research

Effectuation has emerged as an important way to think about entrepreneurship (Sarasvathy, 2001). Arend, Sarooghi, and Burkemper's (2015; hereafter, "ASB") recent critique of the effectuation literature raises several issues, both about building theory in organizational research and the status of effectuation as a theory of entrepreneurship. Positioning their article within ongoing discussions about effectuation research (e.g., Baron, 2009), ASB seek to make three major contributions. First, they propose a three-step theory-assessment framework to evaluate the status of all theories "in our field and others" in a "fair," "efficient," and "objective" manner (2015: 630). Second, they critically analyze the theoretical status of effectuation, concluding that "effectuation is underdeveloped as a new theory of entrepreneurship" (2015: 644). Third, they identify key directions for "improving and elaborating" effectuation (2015: 631).

Courpasson (2013: 1247) recently commented on the importance of fostering a culture of "passionate scholarship" in which researchers truly engage with crucial issues, deeply connect with personally meaningful topics, and freely share ideas they care about. It is in this spirit that we comment on ASB's inquiry into the status of effectuation as a theory of entrepreneurship. We are motivated by the failure to recognize and build on the process-theoretic roots of effectual logic in the body of knowledge accumulating around effectuation (Perry, Chandler, & Markova, 2012), as well as in ASB's critique of it. These oversights are surprising, especially in light of repeated reminders over the past thirty-plus years that process theory is one of two fundamental types of theory, the other being variance theory (Langley, 1999; McMullen & Dimov, 2013; Mohr, 1982; Van de Ven & Engleman, 2004).

Effectuation initially displayed an inclination toward process theory (Sarasvathy, 2001), but scholars predisposed to variance theory have neglected these process-theoretic origins. We discuss differences between variance- and processtheoretic approaches below and caution that by overlooking or ignoring process theory, ASB's theory-assessment framework becomes highly susceptible to erroneous inferences about effectuation's theoretical status and vulnerable to inadvertent misdirection of future scholarship on effectuation.

### A CATEGORY MISTAKE

Critical evaluation of theoretical systems is crucial for knowledge to progress (Kuhn, 1970). For this reason, ASB's attempt to offer a straightforward