FACING AMBIGUITY IN ORGANIZATIONAL CREATIVITY RESEARCH: CHOICES MADE IN THE MUD

Mark D. Agars and James C. Kaufman

ABSTRACT

As the preceding chapter and commentaries reveal, the field of organizational creativity and innovation is both complex and multi-faceted. Many core constructs are ambiguously defined, and levels issues are often confounded within constructs and among proposed relationships. When attempting to advance the understanding of social influence factors and organizational creativity and innovation, multi-level perspectives are particularly well suited to address these complexities. The commentaries of Dionne and Runco represent alternative approaches to facing these challenges. This response to their commentaries discusses our perspective on their recommendations and presents some final thoughts on how multi-level approaches should form the basis for moving the field forward.
INTRODUCTION

Addressing ambiguity in a field of research is a lot like dealing with a truck that has gotten stuck in the mud. You have only a few choices for how you respond to the crisis, and the right solution is not always readily apparent. It is also easy to become frustrated and make matters worse, not better. One of your choices is to sit where you are and step on the gas in the hope that the shock of the force may dislodge the truck. Although this technique works on rare occasions, most of the time it leads to spinning wheels, making the situation even more challenging. Your second choice is to look for ideas, tools, and other resources (e.g., tire chains, wood planks) that may help get the truck unstuck. Although neither solution eliminates the mud, both provide a means to deal with it and, ideally, move the truck forward.

As we described in our original chapter (Agars, Kaufman, & Locke, this volume), the field of creativity and innovation in organizations is filled with ambiguities (i.e., it is a murky area). After reviewing the commentaries by Dionne (this volume) and Runco (this volume), as well as the ideas presented in our original chapter, we find the mud metaphor a particularly useful guideline for considering ways to advance research on social influence on organizational creativity and innovation. We all have choices regarding how to deal with the ambiguity, but how can the multi-level perspective best serve us in this muddy area?

As researchers, we are all too familiar with ambiguity. Indeed, the scientific pursuit is predicated upon (among other things) the existence of ill-defined constructs, unknown or misunderstood relationships, and a lack of basic clarity around an explicit path to knowledge. If no such ambiguity existed, of course, we would all soon be searching for work. In our world, ambiguity represents opportunity; fortunately, we are not lacking for it. Within the field of organizational behavior, the topics of creativity and innovation are, for better and worse, rife with ambiguity. As we described in our initial chapter, this ambiguity presents challenges for researchers and practitioners alike, but these challenges are ones that multi-level approaches are well suited to address. A major point of emphasis in our chapter was illustrating how the application of a multi-level perspective could inform the development of new theories, assist us in integrating existing approaches, and more completely and clearly capture the complexities of creativity and innovation in an organizational context.

In their commentaries, Dionne (this volume) and Runco (this volume) reiterate the existence of complexities within creativity and innovation, and both present thoughts about ways to address these challenges. Consistent
with the ideas we present, Dionne identifies a number of ways to move forward. Runco adds to our message by identifying other examples of the points we raise, but may misconstrue our central point: We see ambiguity and complexities within the field as opportunities for multi-level researchers, rather than as concerns. We do note, however, that ambiguity in the field is an issue worthy of address. Perhaps this is what Runco means when he emphasizes that many organizations value the individual characteristic “tolerance for ambiguity.” Consistent with that interpretation, the call from the business world for developing such tolerance is clear (Oblinger & Verville, 1998; Rosen, 2006).

Tolerance for ambiguity, however, should not be equated with a desire for ambiguity. Indeed, what makes tolerance for ambiguity such a desirable individual characteristic is the expectation that those who have it are able to function effectively in the midst of such ambiguity and, ultimately, may reduce ambiguity while maintaining high levels of performance. In other words, even the value we place on tolerance for ambiguity depends in part on its relationship to the subsequent management and clarification of ambiguity.

PRESSING FORWARD THROUGH THE MUD

The most effective methods of dealing with ambiguity, we believe, lie in offering solutions and clarifying theory development. Consistent with the spirit of our review, Dionne identifies three broad suggestions for advancing the field, and provides specific examples of how each approach may be implemented in research and/or theory development.

One point noted by Dionne is that the consideration of social influence in the creativity/innovation literature is paradoxical. She notes, without a specific, theoretical levels-based focus explicitly noted and tested within these multi-level relationships, social influence is all at once a paradox – both too broad of a topic and yet not broad enough. Her example of how theories incorporating leadership concepts (e.g., Sternberg, 1999; Sternberg, Kaufman, & Pretz, 2001; Woodman, Sawyer, & Griffin, 1993) offer limited explication of specific leader behaviors and characteristics is an excellent representation of this concern. As evidenced in her illustration, even when we recognize that multi-level issues exist, we may nevertheless fail to deal with them in ways that capture their multi-level existence. As a consequence, we add further ambiguity rather than bringing new enlightenment to the field.
Dionne’s point identifies a specific shortcoming in our theoretical efforts and works at expanding our scientific approaches to the field, in contrast to what we believe is Runco’s suggestion that traditional scientific approaches cannot be applied to creativity. The shortcomings of using science to address creativity need not be fundamental to the scientific approach but rather may emerge as a result of limited specification of constructs, relationships, and contextual influences. Treating creativity from a multi-level perspective (i.e., incorporating levels issues into both our definitions and our relationships) offers the opportunity to benefit from scientific approaches. This is, perhaps, the greatest benefit of the multi-level perspective. As Dionne notes, adding specific linkages within boundaries does increase complexity, yet is a fruitful way to provide clarity. Although seemingly a paradox, the ensuing reduction in the ambiguity/vagueness that appears to be inherent in creativity theory and research may in part be simply a matter of careful specification. These ideas represent classic issues in theory development tied to comprehensiveness, parsimony, and utility (Bacharach, 1989; Whetton, 1989), with the added recognition that comprehensiveness is beneficial only when it provides greater clarity — a challenge as yet unmet in much organizational creativity work.

Dionne also suggests the use of bracketing (Hackman, 2003) as a means of advancing research in the organizational creativity domain. This suggestion is particularly well suited to the creativity/innovation field. As Hackman (2003) notes, bracketing not only helps us define constructs and relationships at the focal level of interest, but also serves to identify meaningful cross-level relationships (and eliminate others). Such bracketing increases our explanatory capacity. Indeed, we really can be “learning more by crossing levels” (p. 905). In addition to the group conflict (diversity) example provided by Dionne, comparable examples could exist in the creativity domain when looking at group composition effects on individual creativity.

Finally, Dionne encourages greater consideration of nonlinear relationships when assessing creativity. Unlike traditional approaches, multi-level models incorporating nonlinear processes afford us the opportunity to examine relationships in ways we might have otherwise missed. In contrast to what we believe is Runco’s suggestion that traditional science may be unable to move the creativity field forward, Dionne’s commentary recognizes that we need not stay stuck in the mud but rather need to think in more sophisticated ways. Nonlinear modeling represents one important way to achieve this goal. An example of where the exploration of nonlinear relationships may prove fruitful is when we examine the differential impact of social influence factors on different “levels” of creativity.
Most investigations of creativity, across a variety of cultures, tend to take one of two directions. The first direction focuses on eminent creativity, with the goals often being to learn about creative genius and discuss which creative works may last forever (Simonton, 1999). These types of studies and theories are typically referred to as studying “Big-C.” The second predominant thrust of work in this field focuses on everyday creativity, such as those creative activities in which the non-expert may participate each day (e.g., Richards, Kinney, Benet, & Merzel, 1988). The theories and studies along this line of thinking are usually said to focus on “little-c.” More recently, Beghetto and Kaufman (in press) have proposed a third direction for research into creativity. This new category, which they call “mini-c,” was designed to encompass the creativity inherent in the learning process.

Runco makes an important point when he discusses the links between psychology, economics, and creativity. This line of analysis and thought is particularly exciting in our opinion. In addition to the fine work done by Sternberg (1999), Sternberg and Lubart (1995a, 1995b, 1996), Runco (1996, 2004, 2006), and others, we are intrigued by Florida’s (2002, 2005) books that discuss the concept of the creative class (as opposed to the service class). We believe that “cross-pollination” across disciplines can, indeed, be fascinating. Notably, several of the early creativity researchers had backgrounds in art history or English literature. It will be interesting to observe the diversity of disciplines that ultimately weigh on the question of creativity and to learn which multi-level approaches are particularly well suited to multidisciplinary scholarship.

**SPINNING WHEELS IN THE MUD**

We confess to being surprised at the issues Runco drew into the discussion of creativity in his commentary. We are familiar with his important work on personal creativity (Runco, 1996) and his leadership in the field as the editor of *Creativity Research Journal*. We were excited to read his commentary, but disappointed to find that his approach did not seem to lend applicable suggestions to push our paper further along.

At several points in his commentary, Runco reiterates his concern that our discussion of the literature fails to incorporate older research specific to the field of creativity or creativity in non-organizational domains. Although his observation is correct, we believe that it misconstrues the goal of our original chapter. Our intention was not to provide a comprehensive review of research and theory in the broad field of creativity. Such a review – like
the one found in Runco’s (2006) own textbook on creativity – would likely run for several hundred pages. In the spirit of this series, our emphasis was directed toward research germane to social influence, creativity, and innovation in an organizational context. This review is, of course, informed by the larger literature, but merely identifying other research that addresses similar concerns, we believe, adds little to the discussion. Indeed, little of this work was conducted on the organizational population. In fact, Runco himself argues for the domain specificity of creativity, implying that studies that focus on artists or scientists may have poor application (if any) to the business world. We do, however, appreciate Runco’s motivation to “fill in some of the gaps” through his own work (Runco, 2004), and several of his recommendations are informative if not directly applicable to the immediate topic.

Ultimately, the question becomes, what are the implications for multi-level work in organizational creativity and innovation? As Dionne notes, the failure to adequately articulate levels issues in our theory, even when such issues are implied in our ideas, is fundamental to the problem. By itself, noting that similar ideas and limitations are evident in creativity research in education, for example, does not especially further advance our ideas. To his credit, Runco states that he is not arguing with our overall premise, but rather filling in voids by seeking examples from other areas of creativity. For a more complete effort, we direct readers to his recent reviews of the creativity literature (Runco, 2004, 2006). We share Runco’s concern that more and more research is being published that is inadequately tied to earlier research. In fact, a key point explicitly and implicitly addressed throughout our chapter is the need to integrate ideas (e.g., theory and research) from across both contextual and content domains. This effort is essential if we hope to move forward.

Although our general disagreement with Runco’s premise is clear, such differences in perspective are not problematic. Two other pieces of Runco’s commentary, however, we believe, represent a fundamental misunderstanding of key themes in our chapter that should be rectified. Both of these themes are tied to our beliefs about the role of multi-level modeling.

First, our chapter describes multiple examples of ideas or findings in the literature, which we believe, Runco incorrectly assumes we endorse. For example, he writes that we seem to assume that creativity is necessarily a social process, but his supporting evidence comes from our discussion of Csikszentmihalyi’s (1997) systems model. We did not specifically advocate this model (and certainly did not claim to create it!), but rather sought to point out another scholar’s views on this field. In many cases, we made the
further point that other researchers' ideas by themselves were inadequate, but that by incorporating a multi-level perspective they might be more adequately addressed.

The second misunderstanding we believe relates to Runco's comments on our discussion of ways to define the creativity and innovation constructs. In our section on defining creativity (and in numerous places throughout the chapter), we discuss the complexity inherent in creativity and innovation in an organizational context. This complexity is a fundamental characteristic that necessitates multi-level efforts to further illuminate this field. In response to our discussion of this issue, Runco states that we claim it would be useful to have a singular conceptualization of creativity. This statement is, in fact, the direct opposite of our beliefs, as both implicitly and explicitly stated throughout the chapter. Indeed, early in our chapter we make precisely the opposite statement that, ultimately, a singular conceptualization of creativity is lacking both theoretically and when one considers real outcomes in the business world.

We are somewhat perplexed by the seemingly contradictory ideas presented by Runco. Although he purports to be an advocate of a "holistic" approach, we believe his critique often focuses on singular topics rather than on their integration – the latter point being something that our chapter actually emphasizes. Our message is that these advances do not stand alone, as singular and independent contributions that are unrelated to one another, but rather require integration. Multi-level theory and methodological approaches offer us exciting opportunities to study variables that exist at different levels (e.g., individual intrinsic motivation orientation and extrinsic reward systems), at different points in time, and in different forms (e.g., creative processes and creative products). By doing so, we become better able to understand the comprehensive nature of a phenomenon – in our case, creativity and innovation in organizations. These benefits are the fundamental rewards bestowed by multi-level efforts, and we encourage readers who may be less familiar with the ideas of multi-level perspectives to review any of the many outstanding introductory works in this area (e.g., Hoffman, 2002; House, Rousseau, & Thomas-Hunt, 1995; Klein & Kozlowski, 2000; Klein, Tosi, & Canella, 1999; Rousseau, 1985).

**FINAL THOUGHTS ON MOVING ON**

Runco (this volume) states that we should take a long view of creativity research. In this context, he means to emphasize the importance of looking
backward and understanding the legacy of the great researchers in years past. We agree that doing one’s homework and understanding the past is, indeed, a key component of understanding creativity. Yet we would argue that it is even more essential to take a long view of creativity research by looking forward – that is, at the approaches being used and the currently being done in relation to creativity and organizations. Further, as Dionne’s commentary notes, by informing our theory with the incorporation of levels-based constructs and by using cross-level techniques such as bracketing, the challenges presented by ambiguity become eminently workable. If the ambiguity in the creativity literature is a mud pile in which it is easy to become bogged down, this obstacle need be merely one bump on a long road.

REFERENCES


Runco, M. (this volume). Creativity research should be a social science: Comment on “Social influence and creativity in organizations.” In M. Mumford, S. Hunter & K.E. Bedell-Avers (Eds), *Multi-level issues in creativity and innovation* (Vol. 7). Oxford: Elsevier.


