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# Comprehensive Creativity When We Need It, review of *The Cambridge Handbook of Creativity*, edited by James C. Kaufman and Robert J. Sternberg

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## Abstract

Reviews the book, *The Cambridge handbook of creativity* edited by James C. Kaufman and Robert J. Sternberg (see record 2010-21837-000)

The title suggests that *The Cambridge handbook of creativity* is an encyclopedic collection of all the major chunks of knowledge connected to creative behavior. Although it does not disappoint in that regard, the contributing authors do a superb job of capturing the coherence and the theoretical and thematic developments of their respective areas. Overall the reviewer would recommend *The Cambridge handbook of creativity* to serious researchers in creativity and anyone who wants to be seriously creative. Psychologists and educators are advised to keep a copy close by. (PsycINFO Database Record (c) 2017 APA, all rights reserved)

## Keywords

creativity; personality traits

The title suggests that *The Cambridge Handbook of Creativity* (edited by James C. Kaufman and Robert J. Sternberg) is an encyclopedic collection of all the major chunks of knowledge connected to creative behavior. Although it does not disappoint in that regard, the contributing authors do a superb job of capturing the coherence and the theoretical and thematic developments of their respective areas.

Some threads in the study of creativity and creative people stretch back to the late 19th century, and considerable progress has been made in the last decade. The *Cambridge Handbook* is one of three potentially important compendia on creativity to appear in a span of two years; the others are the *Routledge Companion to Creativity* (Rickards, Runco, & Moger, 2009), and *The Dark Side of Creativity* (Cropley, Cropley, Kaufman, & Runco, 2010).

## Changing Needs and Perspectives

The book is organized into three groups of chapters and a conclusion. The first group, Basic Concepts, includes a history of the field, a compendium of the major theories of creativity over the years, measurement, and the role of creativity in society. In the last area, the historical viewpoint (Haustein, 1981) has been that societies went through waves of promoting creative exploration followed by waves of uptake or exploitation; creative ideas that appeared in an uptake epoch were at a disadvantage because the society was too preoccupied with existing ideas to respond favorably. Current economic and social developments, however, are emphasizing continual and widespread creative production. This shift is also evident in the widening role of creative behavior and creativity training in work organizations.

The second group of chapters, Diverse Perspectives on Creativity, includes popular topics such as cognition, personality, eminent creativity, everyday creativity, development, and education. The cognitive perspective goes beyond divergent thinking to explore processes that lead to a creative idea and to demystify the phenomenon in much the same way that cognitive psychology did for other types of thinking. The trend also includes studies of how visual artists compose their images.

Gregory Feist's chapter on personality traits explains the latest thinking in the form of a flow chart that connects personality and other characteristics with creative production. I was disappointed, however, to see the role of personality traits constrained to Openness from the Big Five taxonomy and some contrary findings that not all facets of Openness contribute equally to creative behavior. If one considers personality traits from the framework of surface, source, and cardinal traits, it is clear that creative behavior is drawn from a variety of surface traits that do not correspond unilaterally to Openness and that if one were to assess the criterion-related validity of personality traits with creative behavior, the weight of the evidence favors the surface, rather than the source or Big Five, perspective (Cattell & Drevdahl, 1955; Guastello, 2009).

Another oddity throughout the book is the relative omission of cognitive styles. It is possible that some of the style concepts have morphed into other concepts over the years, such as the propulsion model described in the final chapter. Taxonomies of styles such as Kirsten's adaptors versus innovators; Byrd's

taxonomy based on interest in innovation versus risk taking; Sternberg's mental governance, field dependence, or independence; De Bono's Six Hats (which *is* mentioned); or von Oech's Whack Pack share some consistent themes, and they have differential impact on creative production (Guastello, Shissler, Driscoll, & Hyde, 1998).

## Debates or Enigmas?

The third group of chapters, Contemporary Debates, addresses questions such as whether creativity is domain specific or domain general, the real role of motivation, the relationship between creativity and mental health, individual versus group creative processes, and divergent thinking. After reading John Baer's (Chapter 17) review of all the studies supporting or critiquing the arguments for the domain-specific and domain-general positions, I was compelled to agree with a remark near the beginning of the chapter that the debate is essentially pointless.

It is very evident from the other chapters in the book that many principles of creative thinking and behavior transcend all the domain areas of art and science. Surely domain knowledge and skill are needed, but the creative process is common to all domains. Furthermore, analyses of inventories of creative works by both undergraduates and working professionals in engineering, basic science, visual arts, and music have isolated two factors. One factor grouped visual arts, music, and literature, and the other factor grouped business ventures, science, and engineering. The two factors were obliquely rotated and correlated .32 (Guastello & Shissler, 1994).

Creative people often function in very different domains such as biology and music, or computer science and art. We also have interdisciplinary and transdisciplinary science in which, for example, mathematicians contribute to psychology, physicists and biologists redevelop economics, and psychologists expand into all those areas (several departments within a university offer psychology-related courses).

The role of intrinsic and extrinsic forms of motivation on creative behavior is enigmatic. For example, social psychology experiments demonstrate that work performance is often greater under intrinsic motivation conditions but declines when extrinsic rewards are added. We now know that the two forms of reward can be additive in cases in which the initial premises of the task involve working for an extrinsic reward, and enjoying the process only helps. The type of reward or feedback, such as information versus criticism, can affect motivation differently.

Mood also affects creative performance, but the earlier assumption that positive mood always enhances creativity no longer holds. Positive mood works better than negative mood if the task is meant to be fun. However, neutral or negative mood often facilitates identifying serious problems and taking action to solve them. Meanwhile, the associations between mood and schizotypal disorders and creativity appear to be greatly overstated, at least according to the chapter by Paul Silvia and James Kaufman.

The final chapter addresses constraints on creativity. I would agree with Sternberg and Kaufman that imagination is necessary but not sufficient for science, engineering, and business products; functionality is essential, too. Yet I disagree with the deprecating tone of the authors' remark, "Those who have useful ideas that are not imaginative become . . . technicians" (p. 468). The creativity,

imagination, and energy that could go into making an idea functional can sometimes outstrip the creativity of the original idea (Haustein, 1981).

Art can generate very divergent reactions from its viewers, listeners, or readers, but I would not agree that public opinion defines whether the work is *creative* per se, as Sternberg and Kaufman suggest in the early part of the chapter. Many great contributions in science and art were not well accepted when they first appeared or even noticed by many of the opinion leaders of the day; perhaps Frank Zappa nailed the point by indicating that popular music is inherently mediocre. The authors' summary and interpretation of propulsion theory and what it takes to defy the crowd would explain how that works. Other constraints on creativity, besides dubious personal judgment, include the nature of the task or one's job and the resources available.

## An Emerging Trend?

What is likely to be new in future creativity research? Nonlinear dynamics is discussed briefly in Seana Moran's chapter concerning the role of leadership, Ruth Richards's chapter concerning divergent and convergent thinking, and Dean Keith Simonton's chapter concerning proportionality. Keith Sawyer's chapter on the emergence of meaning in improvisational theater is particularly insightful.

Connect those dots with the need to demystify the process, and one can foresee research programs in which principles of chaos and complexity theories form the core of the explanation for the elements of surprise and novelty that we associate with creativity and originality. This is not a new idea (McDaniel & Driebe, 2005), but making such a theory sufficiently complete and functional will require imagination, technical competence, thinking with both sides of the brain, and other personal and environmental influences that the *Cambridge Handbook* contributors describe.

Overall I would recommend *The Cambridge Handbook of Creativity* to serious researchers in creativity and anyone who wants to be seriously creative. Psychologists and educators are advised to keep a copy close by.

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