Book Reviews

Explaining Creativity: The Science of Human Innovation by R. Keith Sawyer. Oxford University Press, 2006, 368 pp. ISBN 0195304454. \$35.00

Reviewed by Scott Barry Kaufman, Yale University DOI: 10.1037/1931-3896.1.1.47

Explaining Creativity is a refreshing analysis of creativity within a broad range of creative domains that are often neglected in scientific treatments of creativity. The book casts a wide net of perspectives, including psychology, sociology, culture, and history. It is extremely comprehensive in scope and presents fresh, cutting-edge studies that go beyond the individual, domain general view of creativity that has dominated much of the 20th century.

The book is divided into five parts. In the first part, Sawyer reviews previous conceptions of creativity, such as "creativity comes from the unconscious," and "everyone is creative" and claims many such conceptions are myths. What is remarkable about this first section is its breadth of conceptions. Most reviews of creativity tend to overuse the definition of creativity that psychologists have put forward: novelty and usefulness. Sawyer does a fine job here of offering a taste of the many different conceptions of creativity put forward from the days of Aristotle, to the English Romantic Movement, to definitions of creativity that include the group and society. By including such a review, Sawyer shows just how nuanced the standard psychological definition of creativity really is.

The second part of the book reviews individualist approaches to creativity. This section of the book is essentially a short review of psychological research on the creative person and process. He reviews here psychological investigations of creative personalities, such as the large body of research done by the Institute of Personality Research (IPAR) team in Berkeley, California. He also reviews various other personality individual difference variables, such as birth order, changes over the life span, and motivation and flow. He then discusses how cognitive psychologists have attempted to study the creative process. Sawyer emphasizes here the importance of finding problems. This was quite nice to see, especially considering most creativity reviews tend to focus on the process of creative problem solving, to the neglect of creative problem *finding*, which is an important but often neglected aspect of the creative process. Probably the weakest chapter in this section is on biology, where he discusses the evolution of creativity and the link between mental illness and creativity. Specific criticisms of this chapter will be further discussed below. He ends the section on a high note, however, by presenting some very interesting, cutting-edge research on artificial intelligence systems that can learn math concepts, paint a picture, play orchestral music, and even write a poem. I was not aware of such research and was appreciative that it received attention in the book.

The real "meat" of the book, and that which is central to Sawyer's main thesis, consists of the last three parts. In the third part of the book, Sawyer reviews evidence from sociology, culture, and history to show how researchers from various perspectives all converge on the importance of context for recognizing creativity. The fourth part reviews the creative process of performance-based, collaborative artistic forms of creativity, such as installation art, screenwriting, sitcom writing, jazz improvisation, and comedy improvisation. The fifth section shows how science and business creativity are also embedded in a social context and can be even more reliant on collaboration than artistic creativity. The book then ends with tips for being more creative.

Even though the book is comprehensive and is commended for its inclusion of the nature of real-life creative domains, it clearly has an agenda. A more appropriate title for Sawyer's book would be *Explaining the Sociocultural View of Creativity*. Sawyer omits important information on occasion, presumably to support his sociocultural view of creativity. For example, he frames things in the individualist section of the book in a way that makes it seem as though creativity research from an individual differences approach is dead. Indeed, he includes a heading "The failure and end of personality psychology" (p. 54) and claims that divergent thinking tests are no longer in use because they have not demonstrated validity and that "there is no evidence of a link between mental illness and creativity" (p. 95).

Even though his conclusions are consistent with the evidence he presents, he leaves out many contemporary studies that demonstrate that person-centered creativity research is still alive and well. Research has shown that divergent thinking tests do have validity for real-world creativity and are still used to measure creative potential (Cramond, 1994; Cramond, Martin, & Shaw, 1990; Cramond, Matthews-Morgan, Torrance, & Zuo, 1999), people in different creative domains do have characteristic personality traits (Feist, 1999; Feist & Barron, 2003), and there is indeed a link between various forms of mental illness and creativity (e.g., Jamison, 1989; Kaufman, 2001; Kaufman & Baer, 2002; Ludwig, 1998).

Another example of Sawyer's omissions is evident when he discusses "multiple discoveries" to emphasize the social properties associated with creations. He gives examples of multiple discoveries and tries to let the examples speak for themselves. Simonton (2003, 2005) has delved deeper into the phenomenon, however, and he has found that multiple discoveries actually are not as similar as they first appear and are more coincidental than inevitable. Simonton correctly points out the fact that humans often discern patterns in what are random events, and that this often happens with multiple discoveries. He has shown how the characteristics of multiple discoveries can be predicted and explained using a stochastic model, and has claimed that a sociocultural explanation of multiple discoveries violates the law of parsimony because it evokes a causal principle that simply is not necessary to explain the phenomenon. It is obvious that presenting Simonton's research would muddle Sawyer's point, and this is most likely why not even one mention of his research is included in this section.

Sawyer also leaves out the voices of evolutionary psychologists, who have argued that creative ability itself may have evolved through Darwinian mechanisms such as sexual selection to attract

mates (Miller, 2001) and, as a result, Homo sapiens may have universal biological inclinations toward certain esthetic stimuli (Pinker, 2002). Sawyer does not include this viewpoint either in "The Evolution of Creativity" section of the book, or in later discussions of the stable nature of individual creativity across centuries. It is not surprising why evolutionary theories are omitted; it would seem as though inclusion of such theories would again muddle his point. Sawyer assumes that an act is judged creative because society deems it so. Throughout the book, he downplays the role of individual biology in formation of a creative product. One could just as easily say that an act is considered creative because the individual is creative and knows how to "push the esthetic evolutionary buttons" that are inherent in everyone. If anything, evolutionary psychologists have shown how intricately linked culture and biology are and how cultural preferences are often a reflection of human nature (i.e., Wilson, 1999).

A complete textbook on creativity should be comprehensive, present all the evidence and viewpoints, and be critical of everything. This is not such a book. Even though Sawyer refers to his book as "the first textbook for a college course in creativity" (p. 315), those wanting a more balanced perspective may wish to refer instead to Robert Sternberg's (1999) *Handbook of Creativity*. Nonetheless, Sawyer is right in that the book is a first in something—it is one of the first books to go beyond the psychological study of creativity and to synthesize various different levels of analysis to understand diverse creative behaviors. To this end, the book receives my praise and is highly recommended to nearly anyone that wants to have a more complete understanding of how creativity operates in today's world.

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Meeting Movies by Norman N. Holland, Fairleigh Dickinson University Press, 2006, 201 pp. ISBN 0838640990. \$41.50

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Norman Holland is a prolific English professor from the University of Florida who may be best known to readers of *Psychology of Aesthetics, Creativity and the Arts* as founder and editor of the online journal *PsyArt: An Online Journal for the Psychological Study of the Arts* (http://www.clas.ufl.edu/ipsa/journal/index. shtml) and as moderator of the *PsyART Forum* (http:// web.clas.ufl.edu/ipsa/psyart.htm). Holland identifies himself as a psychoanalytic critic, and he has an extensive history as a book and film reviewer. His 13 books include *Psychoanalysis and Shakespeare, The Dynamics of Literary Response, Laughing: A Psychology of Humor, The Brain of Robert Frost* and *Shakespeare's Personality*.

Holland identifies with an approach known as reader-response criticism. This school emphasizes the reader's role in creating meaning out of every interaction with a book, poem, short story, film, or other literary work.

Meeting Movies is a very personal book in which Holland discusses eight films that have been personally meaningful to him. These films are *Casablanca*, *Vertigo*, *The Seventh Seal*, *Freud*, *Persona*, *Children of Paradise*, *Shakespeare in Love*, and 8½. Holland describes what he was doing with his life when he saw each of these films, and he discusses how each film affected his life and his career. Some of the movies were seen relatively recently, and some were first viewed over half a century ago. In reading the book, it becomes apparent that Holland loves films. In Holland's words, "to meet a movie is to meet oneself..." (p. 14).

I have cherished many of the movies Holland discusses, and I enjoyed reading Holland's comments about each of these films. Trained as a behavior therapist, I have little sympathy for psychoanalytic approaches. However, Freud and Jung's ideas do provide a wonderful lens through which one can discuss literature, art, and films, and I actually enjoy reading psychoanalytic criticism. Depth psychology provides a heuristic tool for discussing much of the symbolism that occurs in film. For example, I have seen *Casa-blanca* numerous times, but I never noticed that Laszlo and IIsa always wear white, while the (initial) moral ambiguity of Rick's character is illustrated by the white dinner jacket he wears with black trousers. Holland notices the fact I missed, and he explains how this symbolism can enhance one's understanding of the film.