

ingful contributions to all of these fields is a testament to the insight and creativity of its author.

—Susan J. Matt, *Weber State University, Ogden, UT*

Pretend Play in Childhood: Foundation of Adult Creativity

Sandra W. Russ

Washington, DC: American Psychological Association, 2013. Images, appendix, references, index. 241 pp. \$69.95 cloth. ISBN: 9781433815614

Whether pretend play in childhood is essential for—or even promotes—creativity in adulthood has been long debated. In *Pretend Play in Childhood: Foundation of Adult Creativity*, Sandra Russ has made an ambitious attempt to review the theories and research about pretend play to show its impact on creativity while also noting the controversies and obscurities involved. She begins by defining play and creativity, and she presents a comprehensive description of the scholarship that supports the connections between the two. In later chapters, she addresses the cognitive and affective connections between them and buttresses her view of these connections with data derived from her own research using the Affect in Play Scale, which she designed. She offers suggestions based on training programs to facilitate the connection between play and creativity, describes studies by well-known scientists and famous artists, and concludes with examples from her work in the United States and Italy about the cultural dimension of

the differences between play and creativity.

Russ only briefly addresses—primarily to dismiss—critiques of pretense-creativity studies based on what she calls flawed research or too-small samples. Her own research using the Affect in Play Scale provides some of the strongest material in the book. In particular, her analysis of her child-pretense transcripts illuminates the creativity she found in child play. Although she discusses briefly the effects of video games on play and creativity, she does not address the dynamic between technology and the two in any depth.

Russ attempts to connect childhood experiences of play and creativity to later adult creativity in the sciences and the arts. To do so, she relies primarily on descriptions of celebrated scientists and artists, probably because few if any longitudinal case studies linking child and adult creativity exist. For instance, she cites a retrospective study of early, small world-play of MacArthur award recipients. But, primarily, she describes the lives of these talented individuals to support the connection she claims for play and creativity. The attempt may be valiant, but the chapter in which it occurs seems only loosely related to earlier chapters covering the research. She could have strengthened this account with a further discussion of the need for longitudinal research and studies that might clarify whether pretense and creativity co-existed from childhood forward for creative adults. Whether the opportunities for pretense facilitate creativity, or whether individuals are creative throughout life and simply exhibit such creativity differently in childhood (through pretense) and adulthood (through creative works) remains a question for further study.

Russ's writing is clear but matter of fact: and the chapters reviewing research and theory are not especially fun to read, although the connection between play and creativity—with all of controversies—could have made for an exciting book. There is no question Russ comprehensively covers the extensive relevant literature; but because she covers so many studies, she does so in less depth than the typical undergraduate or even graduate student would find especially useful. Instead, the book might provide an incentive for more in-depth reading as well as the impetus to focus on the connection between play and creativity.

By compiling a large body of data that addresses the interface between play and creativity, by providing examples from her own work in which she has investigated this connection, by pointing out the varied sources from which evidence for this connection arises, and by indicating that the evidence at present is not robust, Russ has raised the issue to a greater level of awareness. In spite of the diffuse results from various studies, she seems convinced that the connection between pretense and creativity is strong, and she bases her view on her clinical research. If readers of the book are inspired to undertake a new round of research examining the connection between play and creativity, then the book will have served a good purpose.

—Doris Bergen, *Miami University, Oxford, OH*

Play, Playfulness, Creativity, and Innovation

Patrick Bateson and Paul Martin

New York: Cambridge University Press, 2013. Notes, references, index. 162 pp. \$34.99 paper. ISBN: 9781107689343

Patrick Bateson and Paul Martin's *Play, Playfulness, Creativity, and Innovation* is a fine short book, especially for two groups of readers of this journal: those who want an introduction to some of the most recent work on play in animals and its relevance to understanding play in the human animal, and those interested in the relationship of play with creativity. Both topics are currently important in biology and psychology. In eleven short chapters, a great number of topics are addressed. Recent years have seen a resurgence of interest in the play of nonhuman animals. Scholars and practitioners primarily focused on play in humans, especially children, should be aware of this rapidly accumulating body of knowledge. Those studying nonhuman animals are also becoming more aware of the important contributions from work on human play. Psychologists such as Anthony Pellegrini, Peter Smith, and others have facilitated these connections, particularly in relation to rough-and-tumble play and social play in general, although the literature on object, artistic, and physical play provides useful linkages as well. This book complements these efforts in that its focus moves largely toward play as a source of creativity. However, it does not shy away from broader issues, especially in the earlier chapters.

The first four chapters provide a brief overview of the history, biology, functions, and evolution of play. Brief and selective, the information is up to date and authoritative overall, but I think the authors