

focuses primarily on evidence concerning links between exposure to violence on television and children's play and imagination development. Experiments with children playing video games with violent themes, primarily conducted in the United States, have largely confirmed that the games were derived from research into televised violence. Both boys and girls have been found to display enhanced aggressive thoughts and behaviours contingent on playing violently themed video games.

Play of all kinds, though, can benefit children as they develop. Playing with electronic games is no different. Electronic games that promote cognitive development and the adoption of pro-social behavioral choices by children have been created. Computer and video games have also been devised to support educational programs in schools. The Singers present scientific evidence from a range of relevant studies demonstrating that computer games not only enable children to acquire computer skills, but also to practice and develop other linguistic and numerical competencies essential to academic achievement in general.

Taken together these books provide a collection of helpful insights into the potential benefits of computer- and video-game playing by children while at the same time recognizing that parents do have real concerns about these activities on behalf of their children. To some degree, there is empirical evidence—most notably cited by the Singers in their book—that some electronic games with violent themes can cultivate antisocial mindsets among youngsters who play these games a lot. At the same time, such empirical evidence should not be accepted uncritically and, perhaps in the case of *Imagination and*

Play in the Electronic Age, the experimental research on video-game violence was taken too liberally at face value.

There are genuine public anxieties about electronic games that once could have been dismissed on the grounds that most of these products combined crude production quality with simplistic or non-existent narratives. Thus, though they may have been interactively engaging, they could not involve players emotionally the way high-end movies or TV dramas did. This situation has now changed. Computer power has grown and triggered much more coherent narratives that, accompanied by an enhanced visual clarity, engage players interactively and emotionally. Yet there are also many electronic game forms that cultivate cognitive competencies, impulse control, and the adoption of positive social scripts. As such, electronic games can be conceived as an extension of play that is known to be so important to the development of rounded personalities.

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Play from Birth to Twelve: Contexts, Perspectives, and Meanings

Doris Pronin Fromberg and Doris Bergen, eds.

New York: Routledge, 2006. 2nd ed.

Index. 455 pp. \$41.95 paper. ISBN: 9780415951128.

The first edition of this work has become a standard reference for those interested in play, especially children's play. Now, Doris Pronin Fromberg and Doris Ber-

gen have revised and supplemented it with new articles. The result is a work that offers a multitude of perspectives on play, varying from play's relation to cognitive, linguistic, social, and creative development to the communicative meaning of play in a sociocultural context. The book's forty short articles from play researchers in the United States are an excellent resource for those interested in exploring the many dimensions of play.

Part I provides a variety of useful points of view on play development. Some articles in this section approach the topic from the perspectives of different age ranges (zero to four, four to eight, and eight to twelve years), while an essay by Valeria J. Freysinger places play in the context of the entire life span. Other essays in this part explore play within the contexts of language, gender, and emotion. These are important topics for our times. When there is so much political pressure for more academic, formal education, even for four- to eight-year-olds, it is vital that more educators and politicians discover the important information about learning and play found in these articles. But in order to change the beliefs of those in power who emphasize test-driven approaches, I am afraid we need more straightforward articles than these, articles showing that "play does pay" in terms of such academic results and economic benefits as those David P. Weikart demonstrated with his long-run studies. Publishing some European examples might also have helped. In England, formal test scores have declined after abandoning the predominant playful, informal teaching approach in the English Primary school (ages five to eleven). In the United Kingdom now the debate is about cancelling the national tests.

Part II of Fromberg and Bergen's collection explores the divergent meanings of play. The articles provide a satisfying balance between play categories: object play, constructive play, sociodramatic play, games, and rough and tumble play. George Forman's article on constructive play is especially important. This form of play, so predominant in preschool, has been little researched in comparison to role play. A Google Scholar search returned 33,700 results for entries about role play and only 400 concerning construction/constructive play. Constructive play, which reflects children's divergent and convergent thinking and problem solving, is fundamental to science, design, engineering, and computer education. Play really does pay when we calculate the educational advantages of this play-based approach. Anthony D. Pellegrini's article about rough and tumble play is likewise important with its helpful clarification of the differences between rough and tumble play and aggression.

Articles in Part III explore play in educational contexts. The essays range from an exploration of a Vygotskian approach to play to the connection between play and literacy development and the impact of play on mathematics, science, technology, and computer learning. The various authors convincingly make the case that play is essential for learning. In general, they raise the question: if the evidence is so strong for the educational value of play, why don't school administrators heed this research? One large barrier, of course, is the role of testing, and the last articles take up the challenges posed by assessment. Doris Bergen, for example, shows that the standardized tests put in place by the No Child Left Behind Act have had the ironic effect of leaving many

children behind. As a possible alternative, she recommends a portfolio-based, process-oriented approach to assessment. A European trend now replaces traditional academic exams with digital portfolios for better assessment of students. Might we, too, hope that play assessment could replace standardized tests on narrow parts of the curriculum for children?

The articles in Part IV of Fromberg and Bergen cover the social and physical contexts for play. Jaipaul Roopnarine and Aimbika Krishnakumar discuss the Western, middle-class bias of many play theories and offer small glimpses of the very different play concepts found in other parts of the world. Interesting articles explore such topics as play among children with disabilities, clinical perspectives on play, and play's value to children in hospitals. The essays provide important information for people in the health care sector. Mary S. Rivkin's article documents the diminishing level of outdoor play, while Joe L. Frost and Irma C. Woods give an overview of the history of playground development and offer a vigorous defense of the value of playgrounds. They note the complex balancing act that adventure playgrounds from Denmark and England have struck between demanding safety and safely providing demanding activities. Unfortunately, too many playground designers have ignored these results from play research as they have created commercialized, standardized playgrounds.

Part V of the book lacks the cohesiveness of some of its other sections. Superb pieces like Dorothy G. Singer and Jerome L. Singer's exploration of fantasy and imagination and Alice Sterling Honig's discussion about gender-role in play might well have been placed in Part II. Diane E. Levin's article "Play and Violence: Understanding

and Responding Effectively" might also have been placed in Part II alongside Pellegrini's discussion of rough and tumble play. Karen VanderVen's comparison of the impact of chaos theory on physics to the impact of chaos and complexity theory on play research builds on insights raised by Brian Sutton-Smith in *The Ambiguity of Play*. Functional, constructive, dramatic, project play is chaotic, complex, and social with multiple, unpredictable pathways and frameworks. This gives inspiring new arguments for the necessity of play in education if children are going to grow up to handle safely the expanding complexities of science and society.

The editors' epilogue asks: what will be the position of play in 2050? They note that many futurists make opposing predictions even when drawing on the same data. They likewise see many different possible futures. More leisure, communication, traveling, technological development, and knowledge generation in psychobiology, cognitive science, and personality psychology might give more play activities for adults while requiring children to do more hard work at school. On the other hand, a heightened respect for play among adults might mean they give children more space for play in an unsure, future, chaotic, complicated world. The actions we take now will affect the future of play. United Nations Article 31, "The Child's Right to Play," is important, but—just as the United States has not joined the international community on the climate crisis—it is the only Western country that has not ratified Article 31. Adding that to the trend in Western schools to go "back to basics" testing makes it hard sometimes to be optimistic about the future of play. But the authors remain hopeful that technology will enhance play, not destroy it. The problem is this:

real play in the concrete world is diminishing, and it is becoming harder to balance the virtual and real worlds. Sometimes the editors seem too optimistic about the positive effects of technological development, if we consider the destructive effects of the same technology on children's play today. Perhaps the best trend might be to follow children's play in poor developing countries like India or Africa where children often play with found objects and toys they produce on their own, an approach at odds with the consumerist mentality of Western countries.

In general, the articles in this volume are of a high quality in content and formulation from well-known American play researchers, though it is surprising that the most important "playboy" in the world, Brian Sutton-Smith, is not represented here. Overall, the book is an interesting catalog, one that can inspire readers to attempt a more comprehensive study. Although I might have organized the work differently (for instance, Jane Ilene Freeman Davidson's article "Language and Play: Natural Partners" might have been better placed in Part III, along with James F. Christie's article on play and literacy), my bigger concern is that too many short articles might give a confusing picture. The book offers a rich start for deeper study, but I would have preferred fewer, longer articles. For that reason, such works, for example, as James E. Johnson, James F. Christie, and Francis Wardle's *Play, Development, and Early Education* or Joe L. Frost, Sue C. Wortham, and Stuart Reifel's *Play and Child Development* function better for students.

Finally, only the article by Roopnarine and Krishnakumar criticizes the ethnocentric American view of play, and there is

not a single article from European play research. The huge mass of research written in German presents language problems for American researchers, Nordic play research seldom appears in English, and very little Russian research gets translated, but English play research would have been easy to include and would have made this book an even better resource.

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Contested Waters: A Social History of Swimming Pools in America

Jeff Wiltse

Chapel Hill: University of North Carolina Press, 2007. 276 pp. \$29.95 cloth. ISBN: 9780807831007.

This well-illustrated and highly accessible history takes us from the first municipal swimming pool in Boston in 1868 across a century of change in a largely summer activity that at times surpassed the popularity of most other forms of physical play. The author, a young historian at the University of Montana, focuses on public swimming in the North. In the tradition of American social history, the book focuses on the issues of class, race, gender, and, to a lesser extent, age in the "contested" space of the pool, a site of bared bodies, cooled on hot summer days, in a setting that (compared with sports) was relatively hard to regulate. One of the most imaginative works that I've seen in this genre in years, it compares very favorably to the social histories of leisure that appeared in the late 1970s and the 1980s.