

mineral = knight). Furthermore, Mitchell points out that while the toy reflects the warrior class in medieval times, it also reflects the artisan class who made not only the toy but the armor and weapons of real knights—revealing a bond of dependence between these groups (p. 64). Such connections between goods and classes obviously still have relevance today.

Occasionally, a few questionable choices appear in *Becoming Human*. Following the theme of combining past and present, the author may mix the commentaries from medieval writers and modern ones too much or too selectively, suggesting greater similarities than there are. Once—and only once—Mitchell admits (almost painfully) that “none of this is to deny that medieval and modern sciences are not sometimes worlds apart” (p. 55). Also, the nimble long jumping around in time from giants such as Augustine and Boethius to Isidore and then quickly on to William of Conches and other great thinkers of the High Middle Ages is not only dizzying but perhaps misleading when one considers the centuries between. A few smaller points, too, come across as contradictory because Mitchell refers to the fourteenth-century toy knight as “an anachronistic idea of the man-at-arms” yet also describes Geoffroi de Charny, a famous knight of the same century, writing manuals of chivalry for boys of the nobility, who presumably trained to be not-so-anachronistic men-at-arms (or knights), in the same period (p. 59).

The prose in *Becoming Human* can be rather dense in places; this book is not a quick read. Filled with studious words, some interpretations are overwrought, and the many double entendres about tables

could certainly be weeded out without loss. However, when the author leads his readers up high intellectual staircases to appreciate ideas concerning reciprocal influences and interactions in the shifting times around us, he sparks curious thoughts in the reader, and new perspectives appear. This is exactly what a scholarly book should do. *Becoming Human* delivers a remarkable return on a reader's investment of time as it offers new insights into play and society during medieval times and contributes substantially to revitalizing the study of medieval history.

—Paul Dingman, *Folger Shakespeare Library, Washington, D.C.*

The Science of Play: How to Build Playgrounds that Enhance Children's Development

Susan Solomon

Lebanon, NH: University of New England, 2014. Notes, images, selected bibliography, index. 208 pp. \$40.00, cloth. ISBN: 9781611686104

Through *The Science of Play: How to Build Playgrounds that Enhance Children's Development*, Susan G. Solomon strongly advocates for the revamping of playgrounds in the United States. According to the author, playgrounds in this country are poorly designed and a waste of funding. She makes the case for replicating the playgrounds of Europe and Japan that provide spaces for taking risks, solving problems, experiencing natural consequences, and engaging in multiple-generational social interactions.

For the most part, I concur with Solomon's premise that playgrounds in the United States stifle children's needs to challenge themselves, explore the natural world, and interact with diverse age groups. I differ with her minimization of the need for security at playgrounds and parks. Currently, I am helping build play spaces in Afghanistan and Haiti through the International Childhood Enrichment Program. In Afghanistan children have been abducted from public play areas: the boys are conscripted into warring factions, and the girls are kidnapped for the sex trade. In the United States, pedophilia and abductions create real fears, especially for parents. Additionally, without adequate safety barriers, children absorbed in their own play may spontaneously dart out into dangerous traffic without regard for their safety.

Solomon's book, significantly, lacks a deeper exploration into the history of playground development in the United States. Although the author briefly mentions that 1900s reformers built playgrounds to acculturate immigrant children, she fails to recognize that the acculturation of newly arrived immigrant children, especially those from Eastern Europe and Southern Italy, was at the heart of the American playground movement. Joseph Lee, known as the father of the American playground movement, also served as a head of the Immigration Restriction League. Lee believed that once immigrant children arrived, they required playgrounds not only to become acculturated to American mores but also to bring order to the rapidly changing social environment. Lee and other contemporary play advocates stressed the need for competent

playground supervisors because newly arrived immigrants were not "capable of carrying on strong and beneficial social institutions" (see "Preventive Work" in the July 6, 1901, volume of *Charities*).

Reform-era playground designs emerged from the prevailing play theories of the times, most notably the theory of recapitulation postulated by G. Stanley Hall. Steeped in Darwin's theory of evolution, recapitulation theory maintained that ontogeny recapitulates phylogeny (i.e., the development of the individual reenacts the development of the species). According to Hall, the purpose of play for children is to work out their primal instincts which are inappropriate in modern urban environments. Thus children needed to climb, swing, and engage in sand play. Play apparatuses were built to encourage this reenactment.

The development of adventure playgrounds in Europe, championed by Solomon, dramatically differs from the playgrounds built in twentieth-century America. Early twentieth-century play leaders built playgrounds based on growing concerns related to the rising number of immigrant children and the growing urban landscape. The adventure playgrounds built after World War II, however, incorporated open-space play areas where children could use abundant discarded materials to create their own playgrounds, allowing them to rebuild their world psychologically as well as physically.

Although Solomon makes a persuasive argument for reconceptualizing playground design in the United States, her position lacks a thorough social and historical context of the evolution of the playground movement. Currently there is

a growing number of creative approaches to play-space design. A few examples include built-rope courses or challenge courses developed by groups such as Project Adventure and High Five, youth-designed play structures developed by Planet Earth Playscapes, and playgrounds constructed for individual housing developments.

—David B. Jones, *University of Southern Maine, Portland, ME*

LEGO Studies: Examining the Building Blocks of a Transmedial Phenomenon

Mark J. P. Wolf, ed.

New York: Routledge, 2014. Figures, contributors, institutions, prolegomena, appendix, index. 320 pp. \$43.95 paper. ISBN: 9780415722919

Over more than fifty years, LEGO sets have expanded from an open-ended building system to include instructions for building specific models, themed play sets, and licensed products. More recently, the company has become a transmedia empire with books, games, educational products, a feature film, and more. *LEGO Studies* works from the premise that LEGO is a distinct medium that warrants closer consideration. The book offers fifteen essays incorporating play theory, games studies, cultural studies, media industries scholarship, fan cultures, adaptation studies, and other disciplines to articulate both LEGO's cultural significance and to explore the many complex ways that LEGO products work in play.

The book, which includes contributions by fans of both LEGO products and some of the franchises adapted into LEGO toys, games, and other merchandise, deftly balances critical and celebratory approaches to the brand, a perspective that facilitates deep readings firmly oriented in the aforementioned scholarly traditions. Despite such detail, the chapters are short and do not rely on extensive ancillary theoretical knowledge, making the book easy to read and teach.

Several essays concentrate on issues related to adaptation and play—what is made possible when popular franchises are given the LEGO treatment. Mark J. P. Wolf's and Neal Baker's chapters deal with the adaptation of *Star Wars* and *Lord of the Rings* respectively, from films to LEGO sets, while Jessica Aldred's and Robert Buerkle's contributions explore the adaptation of these films into LEGO-styled video games. Each undertakes thorough analyses of the films, toys, and—as applicable—related games to explain how LEGO works as a distinct medium, not beholden to verisimilitude, variously inhibited and liberated by aspects of its material design and discursive framing. The abstraction resulting from adapting popular culture icons into LEGO products creates successful merchandise for multiple age groups, combines irony and sincerity, and infuses the brand's playful ethos into a range of established story worlds.

In the book's consideration of LEGO as a system of play, questions surrounding modularity and units of meaning arise as a second core theme throughout the work. Lori Landay's essay describes how two of LEGO's early product lines—Ninjago and Chima—use mythical schema to generate