

Engineering Play: A Cultural History of Children's Software

Mizuko Ito

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If you're looking for a thrilling tale of corporate espionage and rags-to-riches (and rags-to-rags) careers, you need look no further than the business of making children's software over the past two decades. In *Engineering Play: A Cultural History of Children's Software*, cultural anthropologist Mizuko Ito opens the door for a closer look at children and technology during this time period. Limited in scope for reasons described below, the book breaks new ground in the way it attempts to interpret what happened during this period of optimism and frustration, when publishers were competing to produce and market 979 commercial products per year during the peak year (2001) and trying to market them in retail settings.

Before you start reading this book, it helps to refresh your social-cultural jargon, which Ito applies generously throughout

the five chapters. She does so because the book relies heavily on two dissertations and a handful of published journal articles. Here, for example, is how Ito frames her ambitious task: "This work draws from an interdisciplinary methodological frame that weds ethnography with approaches in technology and media studies that trace highly distributed and technological mediated forms of culture and practice" (p. 16). Whoo! While it is possible to forgive the wedding of such vast constructs in the interior pages, the use of two words in the title-cultural and history-cannot be easily passed over without more scrutiny. On the surface, they suggest a comprehensive and, perhaps, impartial accounting of events. At the very least, a clear definition of "whose culture" and "how much history" should be provided.

Unfortunately, the source material for the historical analysis of the book is relatively limited. It includes two years of *Family PC* magazine (1999 and 2000), plus searches on "children's software" in the *Wall Street Journal* and the *New York Times*. Ito also uses some Web sites she unfortunately does not specifically reference (p. 26), a fact that does little to bolster the validity of this work. Granted, for example, the children's software business in the late 1990s was terribly amorphous, and Ito accurately describes the enterprise as "the ongoing struggle, negotiation and contestation between different actors and social and cultural forces" (p. 3). Still, the author could have drawn on a more comprehensive array of sources to describe more fully the enterprise and its times.

In order to remain true to her title, Ito would have needed to define properly the social and cultural forces shaping the field. These forces included a bipolar Mac/

Windows publishing culture, the growing influence of video games, and the dawn of the Internet. Mix into this the differing theories on how children learn and a potpourri of marketing efforts, and you have the recipe for a blurry mess. Describing these important elements would have provided crucial context.

The book also fails to mention some key individuals and companies who shaped this story. Missing is any mention of Purple Moon's Brenda Laurel, Britain's Peter Kindersley (or any other European Union or Asian company for that matter), and IBM's well-documented purchase of Edmark. Part of this well-documented purchase resulted in the end of Donna Stanger's famous Thinkin' Things series, and the end of Stanger's collaborative effort with Joyce Hakanson which had produced one of the most successful children's software titles of all time: *Millie's Math House* (1993-present). Microsoft's ActiMates Early Learning System (1997) is another interesting story untold, as well as the tale of the indelible influence of the multibillion-dollar toy industry, with its associated boy/girl, pink/blue culture. These missing events include a failed but fascinating alliance between Fisher-Price and Compaq that resulted in the 1996 Wonder Tools Keyboard. While Davidson & Associates founder Jan Davidson is mentioned, the information about her comes through an improperly referenced secondary source. Last but certainly not least, the author overlooks the early work of Knowledge Adventure's Bill Gross, who single-handedly started the grade-based shootout with The Learning Company when he released *JumpStart Kindergarten*.

The book gains some traction in the

case studies of children using popular titles like *SimCity*, *The Magic School Bus* and *The Island of Dr. Brain* at Michael Cole's Fifth Dimension after-school center in Los Angeles. Here, the writing is better grounded in both play theory and the reality of childhood, but it comes at the expense of reading like a dissertation.

It also focuses exclusively on just a few better-known titles. Ito acknowledges this limitation: "My work in the 5thD has allowed me only a small glimpse into these domains" (p. 141).

In the anthropological discussions of the software advertisements, intended as illustrative, Ito delivers on her promise to provide some cultural interpretation of this period of time. While this section may fascinate industry insiders, Ito once again becomes selective, perhaps in order to support the idea of "engineering" the repackaged learning units.

Another of the book's high points is the not-to-be-missed interviews with developers, including a wonderful coffee-shop conversation with Ann McCormick Piestrup, one of the founders of The Learning Company, who provides a ring-side view of the early days.

Viewed as a selection of case studies and interviews, Ito's book skillfully fits a sociocultural framework to what is certainly a messy business. The author lays a path that others will hopefully follow. While the historical title overshoots the mark, the work is an important step in better understanding the relationship between children and technology in the late twentieth and early twenty-first centuries.

- Warren Buckleitner, *Editor, Children's Technology Review*