shows the Nintendo game developers of the 1980s to be creative visionaries—not just programmers of game play but also composers for the novel instrument of the Famicom processor.

This book is highly revealing and informative, but given its topic, it can also get exceedingly technical and hard to grasp for an outsider to the field of computer programming. In chapter 1, for instance, the reader encounters the terms polysilicon mask, addressable memory, binary coded decimal mode, sprite over-flow flag, address bus, CHR-ROM, palette index, pattern table bitplanes, and PPU I/O control registers. Some of these terms make sense in context or in consultation with the appended glossary. I confess there were pages where I found myself lost in codespeak, though this says as much about me as it says about the book. Most passages like these are concerned with explaining how the Nintendo console made its pictures appear and move on television screens, and one especially impressive and illuminating chapter does the same for sound. Less is said about interactive game play and the experience of the Famicom/NES for typical players and even less about the contexts of play in everyday life. But this kind of book is more about looking under the hood and less about taking the hot rod out for a spin. We learn a lot by looking, and Altice is an expert guide.

—Michael Z. Newman, *University of Wisconsin-Milwaukee, Milwaukee, WI*

Values at Play in Digital Games
Mary Flanagan and Helen Nissenbaum

Cambridge, MA: MIT Press, 2014. Notes, references, game references, index, images. 207 pp. $25.00 cloth. ISBN: 9780262027663

At 207 pages, Mary Flanagan and Helen Nissenbaum's *Values at Play in Digital Games* is a light volume that packs a hefty punch. In this book, divided into three sections with a total of nine chapters, the authors present a framework for thinking about the ways in which games can communicate values, how to analyze the values a particular game might express, and how to guide a game development process such that its output is effective at presenting the values intended by its developers.

The first section of the book serves as an extended introduction to the notion that games can, and do, reflect, communicate, and include values. It argues for why a designer would want to include values in a game's design, provides sample analyses of some of the values embedded in different games, and also presents an overview of fifteen different game elements that can (and probably should) be examined from a values perspective. The second section discusses how game developers can purposefully incorporate values in their games and how to verify that they have succeeded at this goal. In the final section the authors argue for why this all matters: talking and thinking about values in games leads to better, more innovative games.

Readers familiar with the authors' prior work will find that this book serves as a capstone for the publications and research that have been conducted over the last ten years as part of the Values at Play project. Earlier findings and ideas have been iterated upon, streamlined, clar-

ified, and condensed and are now brought together in a concise and accessible way. As an added bonus there are five guest contributions intermixed with some of the chapters that provide further commentary, insight, and greater depth to many of the topics discussed. These welcome additions provide refreshing perspectives, often drawn from the practical experiences of their authors, which strengthen and add value to the core argument of the book.

Readers new to the notion that games can represent, embody, and express values will find this is an eye-opening book that is also eminently approachable. It provides a big picture perspective that does not require much knowledge or experience in game development nor in ethics and philosophy. As an entry point to some of the larger and bigger issues of game studies, readers will probably also find the book inspiring as it illustrates the potential and role that games will have in the coming decades as major cornerstones in popular culture. Also, thanks to the eclectic mix of examples provided, such as traditional large-scale game industry productions, small independent games, research-focused educational games, and more, readers will have a fantastic list of games to start playing, analyzing, and discussing. In a way, this book models some of the discussions and conversations we

should have about games, and I almost wish the analyses and examples went into greater depth, especially for some of the more obscure games.

In a sense, this is a book I wish we had available ten years ago. It would have shaped and guided many of the discussions and questions we have been wrestling with in highly productive ways. I cannot fault the authors for that though. After all, we have spent years grappling with these issues, and Flanagan and Nissenbaum have been leading the charge that got us to where we are now.

This book is also incredibly timely. The game industry is currently in the throes of yet another seismic shift in how it operates, and there are louder and more frequent calls for it to address its production and business practices. This book provides a great opportunity to reflect on these issues at a moment when perhaps small changes in vision and focus might have the most impact. A game industry that is reinventing itself is perhaps especially primed to reenvision its processes in such a way that they benefit from the ideas of the mindful and conscientious designers and game developers this book advocates for.

—Jose P. Zagal, *University of Utah, Salt Lake City, UT*