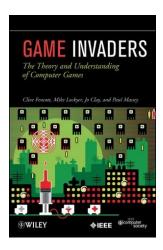
Clive Fencott, Jo Clay, Mike Lockyer, and Paul Massey, **Game Invaders: The Theory and Understanding of Computer Games**, Hoboken, NJ: John Wiley & Sons, 2012, 217 pp., \$54.95 (paperback).

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According to the perennial, popular collegiate yardstick/burden that is *U.S. News & World Report*, computer game design is one of the fastest growing curricula that college and universities are adding to satisfy the estimated \$82.4 billion game industry by 2015 (Gearon, 2012). Obviously, there is a market and need for a book such as *Game Invaders*, but thankfully, its ambitions extend past vocational competencies. Beyond just showing expected undergraduate readers how to play with expensive modeling software, the University of Teesside authors challenge them to understand games as the intersection between creativity and technology. *Game Invaders'* intention is to provide a pack of theories and models from which the reader can draw to better understand (and potentially create) computer games.



Mercifully, these authors spare their readers from unnecessary academic jargon as they convey the importance of utilizing models and theories when thinking about computer games as a medium. Somewhat surprisingly, Salen and Zimmerman's *Rules of Play* (2004) is absent from the book's bibliography, since, 10 years later, this current work could be viewed as the intentional theoretical descendant of that now canonical tome— albeit in a much condensed form and focused solely on computer games. In particular, Mateas and Stern's (2004) views on interaction and narrative would have been interesting to reference in the *Game Invaders* chapter on pleasure and narrative, while Caillois' (2004) thoughts on the classification of games could have provided an alternative context for genre construction. The niche that this book attempts to fit into is defined by the authors' own statement from Chapter 5: "[T]he graphics have become a lot more sophisticated but in many ways the gameplay has not developed nearly as much" (p. 61). Teaching students to understand gameplay and how to analyze it are the backbone for this effort. For communication scholars, the book's focus on defining games as implementations of the code of interaction is especially valuable.

The theoretical pack is comprised of: genre, activity profiles (what one actually does within a particular game), sources of aesthetic pleasures (contrasted to other communication media), emotional models of play, player types, perceptual opportunities, semiotics, and the code of interaction. The thread running throughout this theoretical tapestry, however, is the discussion of agency and how computer games rely on our "belief in the myth of interaction" to satisfy the players' desire/acquiescence for a limited form of involvement. This focus on agency within the interaction and the way meanings are constructed within the player-game dynamic is particularly useful for communication scholars.

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The book's other strengths lie in its deviating little from its intended origins— namely, as a software and database package *Game Invaders Live* (GIL) consisting of game analysis data that is comprised of both genre and in-game activity (e.g., driving/piloting/crewing). Chapter 2's comparative film and computer game genre maps and Chapter 3's generated activity profiles (utilizing GIL) logically progress and provide a valuable tool for students to understand how to organize and understand the basic structures of games. Similarly, Chapter 7's discussion of perceptual opportunities (POs) is expressed via perceptual mapping and is well-moored in Fencott's (2001) previous published work on the topic.

Perceptual opportunities (POs) are Fencott's term for his theory on how to understand in-game objects' connotative and denotative meanings; a chair is a chair, but a chair can also be a weapon within the game world. This thoroughly developed concept will be of interest to communication students with its focus on sureties, surprises, unrealisms, and opportunities to decode the meanings that objects possess and with which they confront the player. The concept of POs is applied through a comparative analysis in Chapter 8 by analyzing *Driver* and *Sin City*. In addition, the book's overall feel—and its title—scream out to rigorously engage with theory. Unfortunately, the publisher's choice (assumedly) of the organization of chapters saps much of that robust theorizing by situating theory toward the end of the book, leading to the work's largest weakness.

This 12-chapter book is divided into two parts: "Why Do People Play Games?" (Chapters 1–6) and "What is a Game?" (Chapters 7–12). In the last chapter, the authors write that "the game starts when we begin to imagine what that point of presence can do . . . this is the place to start. Imagine the simplest possible interactive sign and nothing else." This statement comes on the heels of some relatively theoretical heavy lifting as they introduce semiotics in Chapter 10, examine the nature of work that players must perform to find the meanings they need to play games in Chapter 11, and then define this code of interaction in the last chapter. So, the question for some readers (and for this reviewer) is: Why did the authors not begin here or at least with their most complete chapter—that would be Chapter 9's thorough analysis of *Shenmue*—and then proceed to deconstruct and demonstrate the individual analytical components—in essence, to explain the magic trick? Unfortunately, it is often these later chapters that get short shrift on the part of lecturers during a U.S. collegiate semester.

These last three chapters are significant because they answer the "why?" of the focus on interaction and player agency. That is, because they construct meaning. It is literally meaningful play, and the authors' choice to focus on semiotics is a good one. Understanding games as texts containing a multitude of signs is an appropriate gateway for undergraduates to easily digest semiotics and add it to their theoretical tool belt. The choice of *Pac-Man* as the case study in Chapter 10 seems a double-edged sword. On the one hand, using *Pac-Man* is smart because it is almost universally known (though generational ignorance may occur), simplistic, and as classic an example of gaming as *Casablanca* would be of movies in a film theory course. On the other hand, *Pac-Man* as a solitary example may not be as strong as when it is used in conjunction with *Shenmue* in Chapter 11.

This is not to say that the book's first six chapters are not important. The first part's discussion of genre, activity profiles, and aesthetics conceptually work well together. Though as the authors admit in Chapter 7, these methodologies provide only generic descriptors and indices for understanding games.

Chapter 4's discussion of pleasure provides an easy-to-grasp comparative study of film and computer games, focusing on issues of agency, narrative potential, and transformation while mooring the discussion with canonical reference literature, including Murray (1997). However, this chapter's suggested tasks—aesthetic analysis and activity profiles—may have missed an opportunity to include an intermediate exercise to discuss the inclusion of cinematic cutscenes within computer games and how they function within this context. Otherwise, most chapters' suggested case studies and tasks will be appreciated by students whose instructors incorporate them into the curriculum.

The other outlier from the first part is Chapter 6's question: "Why don't people play games?" Constructed from a focus on emotional models of play and player types, this chapter also delves into a political economic commentary on the state of the commercial gaming industry. Intended as a matching bookend for the introductory question ("Why do people play games?"), this chapter instead feels out of place as it follows Chapter 5's comparison of two rail shooters—Star Fox and Rez—utilizing the analytical tools developed in Chapters 2–4. The overall effect is, at best, one of being out of place and, at worst, tacked on.

Game Invaders also includes a generous amount of color images in the book's middle that illustrate GIL analytics, emotional models of play, screenshots, semiotics vocabulary, and the code of interaction. Unfortunately, the activity profiles acting as charts in a textbook lack a legend to define the score ranges on the x axis, making interpretation difficult because charts are not integrated within chapters.

Overall, *Game Invaders* is both a useful and needed theoretical handbook for undergraduate students interested in thinking rigorously about computer games or for game designers who need a stronger theoretical foundation moored in agency and interaction. Only the book's organization and lack of focus on more recent "blockbuster" franchise releases (i.e., Activision or EA) hurts its otherwise strong initial effort. Thankfully, though, given the growing popularity of the computer game industry, sequels to this book are both expected and anticipated.

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