

this may not be the *only* viable method, perhaps it could be an additional avenue. In other words, Ubisoft should enable *different* paths to a desired outcome and not be concerned with that a player may only see a few of them. The designer is not offering a single adventure, but an experience of figuring out how to accomplish a task. That is the contingent experiential aspect of this kind of game, rather than the predictable sequence of events in linear media. The story remains, and is important, but the methods by which the player-character advances from point to point can be made much more flexible, especially in a game such as *Assassin's Creed 2* – or perhaps in the next installment of the series.

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THE TRANSFORMATION OF EVERYDAY LIFE THROUGH PERVASIVE PLAY

Pervasive Games: Theory and Design, Markus Montola, Jaakko Stenros and Annika Waern (2009), New York: Morgan Kaufmann, 336pp., ISBN: 978-0-12-374853-9, Paperback, \$49.95 (USD)

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A gamer approaches the attendant at the Institute of Contemporary Art in London and mentions that she'd like to play the game *Uncle Roy All Around You*. The attendant hands her a mobile device and sends her out onto the streets with 60 minutes to find 'Uncle Roy'. The street player is matched with another player who sits at a computer in a command station at the museum. The online player sitting at the computer can see details of the player's location on a virtual 3D model of the city, which also contains clues about Uncle

Roy's whereabouts. This online player can thus help the player on the streets by giving guidance via text and voice messages on the mobile device. The players are given several tasks, including gathering information from someone out on the street (who is actually another player who has to be spotted among bystanders in a public park) and finding Uncle Roy's office. The game's climax comes when the street player is asked to get into a limousine and meets a stranger who gets into the back of a car with her. This stranger, an in-game actor, says in vague terms that Uncle Roy would like the player to give a commitment to another player 'who was having a personal crisis at anytime in the next 12 months' (p. 232). Upon agreeing, the stranger writes down the player's telephone number and drops her off.

Uncle Roy All Around You, which was designed by Blast Theory (2003), is a striking example of a 'pervasive game' discussed in *Pervasive Games: Theory and Design* by Markus Montola, Jaakko Stenros, and Annika Waern. Defining this mode of gaming as 'combining bits and pieces from various contexts to produce a new play experience', pervasive games blend the boundaries between game space and everyday life (p. 7). Pervasive games are played intentionally alongside everyday life, often throughout the day, and thus serve as 'an activity [that] is allowed to carry over into other areas of life' (p. 226). *Pervasive Games* covers a broad range of topics and an equally extensive chronicle of the various games that fall under the designation of 'pervasive', and offers readers an ambitious study of this increasingly popular form.

The book smartly prefaces each chapter with a 'Case Study' of a relevant game that is subsequently analysed. These case studies were authored by a selection of scholars and designers and cover a range of pervasive games from the university campus game *Assassin* to the alternate reality game (ARG) *The Beast* (2001), designed for the film *A.I.: Artificial Intelligence* (2001). These case studies, though widely varied in their clarity and organizational structure, offer readers an important view into the broad category and history of this genre. As noted by the authors, '[t]races of pervasive playfulness can probably be found in all civilizations. [...] Mysteries, scavenger hunts, and ludic pranks have long been a part of modern society. Yet it was the recent advances in communication technologies – in particular the adoption of the Internet, mobile communication, and positioning technologies – that opened new design spaces for pervasive play' (p. xix). Thus, the book as a whole rests on the historical roots of pervasive gaming and does well to avoid fetishizing games that utilize digital devices. Grounded in their own experience as pervasive gamers and their extensive knowledge of the field, the authors offer readers a look at the history, theory and design considerations of pervasive gaming.

The chapters are divided into three major sections: Theory and Design, which both converge in the final section of the book on Society. Rather than begin the book with the history of pervasive games, the authors wisely start with an exploration of one of the key distinctions of this category of gaming: the expansion of space and time. Drawing on Johan Huizinga's (1949) theory of the 'magic circle', the authors argue that, '[i]n pervasive games, the magic circle is *expanded* in one or more ways: The game no longer takes place in certain times or certain places, and the participants are no longer certain. Pervasive games pervade, blend, and blur the traditional boundaries of game, bleeding from the domain of the game to the domain of the ordinary' (p. 12). While the motif of 'blending and blurring boundaries' tends to get repeated (rather than developed) throughout the book, the authors point to the larger consequences of these emerging game spaces along the way.

The theory section continues to analyse the expansion of space and time in pervasive games by applying the study of these expansions to several game genres. Chapter 2 examines genres such as treasure hunts, live action role-playing games (LARPs), ARGs, playful public performances, urban adventure games, and the emerging category of ‘smart street sports’ that include games like Blast Theory’s *Can You See Me Now?* (2001) and urban exploration through parkour. These genres are further discussed in Chapter 3 that looks at the broader histories of these genres. The authors note that prior to the era of industrialization, ‘distinctions of game and play were quite different from ours, as such concepts are intimately connected to the way a society understands itself and the world around it. The idea of temporal expansion is strongly connected to the dichotomy between work and leisure, and many pervasive games tap their power from this distinction’ (p. 53). One example they point to is the *Big Urban Game* (Salen et al. 2003) that was played on the streets of Minneapolis and St Paul, Minnesota (USA). As they describe it, ‘[i]n the game, three huge inflated game pieces were moved through the cities once a day. The route for transporting was voted online by players and then the teams dragged the pieces at a certain time. The time it took to make a move influenced the score. The fastest team won’ (p. 41). Thus, while many pervasive games’ primary mode of play is to *not* be seen and remain hidden from the conscious awareness of bystanders (as in *Assassin* or geocaching), the *Big Urban Game* works to ‘challenge hegemonic notions of what can be done in public space and, hence, tie into a long tradition of “reclaiming the streets”’ (p. 54). The effect of this type of pervasive game is, ideally, to ‘inspire citizens to see their living areas in a different way. The huge pieces were statuesque and clearly tried to inspire a playful atmosphere’ (p. 41).

The Design section builds from the theoretical foundations of the previous section to look at the elements that either make or undo pervasive games. The design implications point toward the power of pervasive games to transform our experiences of everyday life. The authors note, ‘[w]e live in the world we perceive, and changing that perception changes the world’ (p. 115). The Design section of the book also demonstrates how the expansion of space and time discussed in the Theory section also allows for social expansion. The authors’ analysis of this social expansion in game design focuses, in part, on the various modes of participation from players to bystanders. They argue, ‘[i]n the best-case scenario, both outsiders and aware players find the interaction rewarding’ (p. 120). For example, in the genre of ‘brink games’, which provide ‘players with an excuse and an alibi to do things that break social norms’, players can interact with non-players in ways that push the status quo and offer new opportunities for collaboration (p. 124). The game design for these kinds of pervasive games creates environments in which ‘players are *empowered* by the game challenges, and they may leave the game with *insight* into what drives people in various social situations’ (p. 124).

The Society section of the book is the most loosely organized since it brings in topics relevant to both the Theory and the Design sections (and could have been folded into these two sections). The thoroughly engaging Chapter 11, ‘Marketing the Category of Pervasive Games’, offers an in-depth analysis by Mattias Svahn and Fredrik Lange on the difficulty of categorizing and broadly marketing pervasive games. This chapter, which argues that the important work of taxonomy across the genres of these games will ultimately determine how they are successfully marketed, could clearly make a strong contribution to the Design section.

Pervasive Games is largely a success because it accomplishes a nearly exhaustive chronicling of the major games within this category. Though this approach may leave both academics and designers wishing that the authors would dwell longer on the theoretical implications or the pertinent design questions, these audiences will nonetheless find the book immensely interesting. For example, one moment in which I found myself wishing the authors would pause and develop the ideas discussed was seen in the first chapter of the Society section, 'The Ethics of Pervasive Gaming'. Here, the authors discuss a misstep made during the pervasive LARP, *Momentum* (Jonsson 2006). During game play, the players mistook a homeless woman for an in-game actor. They spent half an hour trying to gain information from the woman – even going through her belongings – before they realized that she was not part of the game. The authors conclude this very short discussion by noting, '[a]s *Momentum* had established a boundary-breaking mindset and extraordinary attention to detail, going through her belongings was understandable in the context of the game. In ordinary life, however, it was quite unacceptable' (p. 199). These two sentences end the discussion of this scene and do little to develop the broader ethical implications beyond generalities such as, '[t]he player needs to know what she is prepared to do, have a clear sense of right and wrong, and set her own limits' (p. 199).

Anyone interested in the changing landscape of gaming in pervasive computing culture will be drawn to this book (despite the desire many will feel for sustained analyses in place of simplifications). The first full-length work of its kind, *Pervasive Games* lays the foundation for future work in this area, pointing scholars and designers toward an impressive collection of pervasive games and toward others working in and writing about this emerging field. The shelf life of this book will also be extensive since it seeks to develop the history and current state of the field. It is thus a snapshot of the foundation of pervasive games and will undoubtedly be the text we continue to refer to for years to come.

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