

© 2006 Massachusetts Institute of Technology

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

MIT Press books may be purchased at special quantity discounts for business or sales promotional use. For information, please email special_sales@mitpress.mit.edu or write to Special Sales Department, The MIT Press, 55 Hayward Street, Cambridge, MA 02142.

This book was set in Bell Gothic and Garamond 3 by Graphic Composition, Inc., Athens, Georgia, and was printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Bogost, Ian.

Unit operations : an approach to videogame criticism / Ian Bogost.

p. cm.

Includes bibliographical references and index.

ISBN 0-262-02599-X (hc : alk. paper)

1. Computer games—Design. 2. Computer games—Philosophy. 3. Computer games—Sociological aspects. I. Title.

QA76.76.C672B65 2006

794.8—dc22

2005056105

10 9 8 7 6 5 4 3 2 1

An Alternative to Fun

Film and literature touch both popular culture and the arts, even if their relationships with each domain are often troubled. Some may not particularly enjoy reading James Fenimore Cooper's *Leatherstocking Tales* or watching Fritz Lang's *Metropolis*, but the historical importance of these artifacts in their respective media histories is indisputable.¹ Some critics may decry the novels of Danielle Steel or the films of Michael Bay as pop culture drivel, pure entertainment with scarce contemplative value—at best a Rabelaisian release of unexpressed carnal pleasures, at worst a prurient surrender of introspection.

Historically, a culture's art has often been read as a cipher for its values. Walter Benjamin articulated a particular property of the work of art that resists reproduction, its presence in time and space, its "unique existence at the place where it happens to be."² Benjamin uses the example of a statue of Venus, which the Greeks revered as an homage to the divine and the medievals saw as an portentous figure of idolatry. The ritualistic uses of art can be traced back to the earliest man-made artworks, in the cave paintings of Lascaux and Chauvet, created between 15,000 and 30,000 years ago. These works of art expose what Benjamin calls **cult value**; they serve as ceremonial works, instruments of magic meant to speak to the spirits, not to man. These artifacts become artworks only retrospectively, viewed through a historical lens that distances their cult value from their exposition value. Earlier I discussed aura as it relates to human experience in Baudelaire's modern Paris. Benjamin also names this exalted uniqueness of the artwork *aura*; aura is that which integrates the artwork in a tradition, "the unique phenomenon of a distance, however close it may be."

As artworks become reproducible, exposition value becomes paramount and cult value recedes. Benjamin calls this recession of cult value in artwork the *decline* or *withering* of the aura, although he intends for this withering to serve a liberating function. Mechanical reproducibility, says Benjamin, “emancipates the work of art from its parasitical dependence on ritual.”³ As art breaks from cult practice, it gains a new function, that of politics. In particular, mechanically reproducible art “changes the reaction of the masses toward art.” Especially in the case of film, art becomes accessible as a new kind of collective social criticism. Says Benjamin:

The reactionary attitude toward a Picasso painting changes into the progressive reaction toward a Chaplin movie. The progressive reaction is characterized by the direct, intimate fusion of visual and emotional enjoyment with the orientation of the expert. Such fusion is of great social significance. The greater the decrease in the social significance of an art form, the sharper the distinction between criticism and enjoyment by the public. The conventional is uncritically enjoyed, and the truly new is criticized with aversion. With regard to the screen the critical and the receptive attitudes of the public coincide. The decisive reason for this is that individual reactions are predetermined by the mass audience response they are about to produce, and this is nowhere more pronounced than in the film.⁴

In particular, Benjamin observes that film has enlarged the representational possibility space. Benjamin underscores film’s ability to illustrate Freudian theory in particular, but more generally he means to draw attention to film’s capacity to create more subtly analyzable behavior than arts like theater and painting, primarily thanks to the camera’s ability to isolate individual statements, movements, and situations. Earlier I drew a correlation between unit operations, psychoanalytic practice, and the structures of object technology; Benjamin suggests a further ligature between psychoanalysis as a unit-operational practice and film as a unit-operational practice. For Benjamin, film’s importance rests less in its service of narrative expression, and more in its ability to penetrate into individual units of human activity:

By close-ups of the things around us, by focusing on hidden details of familiar objects, by exploring commonplace milieus under the ingenious guidance of the camera, the film, on the one hand, extends our comprehension of the necessities which rule our lives; on the other hand, it manages to assure us of an immense and unexpected field of action.⁵

In particular, Benjamin highlights film's ability to uncover the mechanics behind specific everyday actions:

Even if one has a general knowledge of the way people walk, one knows nothing of a person's posture during the fractional second of a stride. The act of reaching for a lighter or a spoon is familiar routine, yet we hardly know what really goes on between hand and metal, not to mention how this fluctuates with our moods. Here the camera intervenes with the resources of its lowerings and liftings, its interruptions and isolations, its extensions and accelerations, its enlargements and reductions. The camera introduces us to unconscious optics as does psychoanalysis to unconscious impulses.⁶

In essence, Benjamin is articulating the film camera's properties of procedural recombination, which make possible unit-operational visual observations of the lifting of a spoon, the lighting of a cigarette, the stride of a step.

It comes as no surprise that Benjamin would see film as a tool of unit-operational expression, given his great uncompleted work, *The Arcades Project* (*Das Passagenwerk*), a massive montage of quotes, observations, and aphorisms about nineteenth-century Paris arcades—a kind of covered street, the predecessor of the shopping mall—that helped constitute the modern experience, underwriting the movement of the *flâneur* as Baudelaire recorded it.⁷ Benjamin committed suicide trying to escape Nazi Germany in 1940, and the work was never finished; exists only as a massive collection of meticulously compiled notes. Some presume that the manuscript was merely a collection of notes and citations, a kind of notebook for a book to be written. But given his affinity for units of structural meaning, it is reasonable to conclude that Benjamin had this very structure in mind, an experiment in a text of reconfigurable, unit-operational aphorisms. It is clear that the figure of the montage served some kind of purposeful, structural frame for *Passagenwerk*. Like the filmmaker, Benjamin endeavored to connect numerous individual commentaries on important social and cultural referents of the nineteenth century. Critic Susan Buck-Morss takes this latter view, arguing that *Passagenwerk* is inherently a work of disjointed units:

Because of the deliberate unconnectedness of these constructions, Benjamin's insights are not—and never would have been—lodged in a rigid narrational or discursive structure. Instead, they are easily moved about in changing arrangements and trial combinations, in response to the altered demands of the changing “present.”⁸

Fragmentary representation allowed Benjamin to unpack his social and cultural referents as abstract ideas, as aphorisms that broke from their particular contexts and took on the role of cultural unit operations, rather than cultural histories. Buck-Morss calls these images “politically charged monads,” a merger of Leibnizian unary being and discursive cultural production.⁹ Benjamin’s project was to uncover and concretize general cultural moments through repetitive, individually constructed examples—the prostitute, the *flâneur*, the arcade, their shocking disconnections mirroring the very cultural form he sought to critique.¹⁰ Benjamin’s ultimate form of cultural criticism was to take the same form as the art forms he valorized, and indeed he intended this work to serve the same ends as mechanically reproducible art—political critique. In Buck-Morss’s words, *Passagenwerk* is “intended to provide a political education for Benjamin’s own generation.”¹¹

The profusion of videogames in contemporary popular culture shares parallels with film under Benjamin’s analytical eye. Like film, videogames also underwrite what Benjamin called “progressive reaction,” the increased confluence of criticism and enjoyment. As procedural systems, videogames extend Benjamin’s unit-operational logic of film—games create abstract representations of precise units of human experience. Where videogames and the film of Benjamin’s writing diverge is in their material practice. Already in the 1930s, Benjamin observed film evolving into a capitalist business practice more than a form of revolutionary art: “So long as the movie-makers’ capital sets the fashion as a rule no other revolutionary merit can be accredited to today’s film than the promotion of a revolutionary criticism of traditional concepts of art.”¹²

Despite Benjamin’s hopes for art’s ability to spur widespread Marxist revolution, today the forces of capital are orders of magnitude more pronounced than they were seventy years ago. In 2004, videogame software contributed \$7.3 billion of the \$28 billion “entertainment software” industry.¹³ The industry’s major U.S. lobbying association, the Entertainment Software Association (ESA) explicitly aligns itself with the production of leisure, not revolution. If the ESA’s name implies a direct correlation between videogames and entertainment, the organization’s mission statement seals their affinity: “The Entertainment Software Association (ESA) is the U.S. association exclusively dedicated to serving the business and public affairs needs of companies that publish video and computer games for video game consoles, personal computers, and the Internet.”¹⁴ In the spirit of the Hollywood film industry, the ESA’s unspoken ligature between “entertainment software” and “video and computer games” reveals con-

temporary culture's inherited ideology for games: they are amusements, distractions that have no place provoking thought.

The chasm between videogames and revolutionary art is most helpfully unpacked through the notion of *play*. Dutch historian Johan Huizinga serves an important role in the prehistory of our received notion of games *qua* entertainment. In *Homo ludens*, his study of play and culture, Huizinga offers a definition of play that separates the playful and the serious. For Huizinga, play is

a free activity standing quite consciously outside “ordinary” life as being “not serious,” but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings, which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means.¹⁵

At first glance, Huizinga's understanding of play seems clearly aligned against cultural production of the material and political type. Play, he argues, is “not serious” and moreover is disconnected from matters of material gain; such categories would seem utterly at odds with Benjamin's understanding of reproducible art as a progenitor of political revolution. At the same time, Huizinga seeks to expose play as a metacultural phenomenon where entirely serious practices like law, war, and politics find root. Despite Huizinga's attempt to undermine the dichotomy of seriousness and play, his readers sometimes fail to take into account the scare quotes around “not serious” in Huizinga's definition. Although Huizinga has become required reading among scholars interested in the ontology of games, the complex relationship between play and seriousness is frequently trivialized. In Eric Zimmerman and Katie Salen's comprehensive study of game design, Huizinga's definition is unpacked into a bullet list of properties of play, of which “not serious” is left unanalyzed.¹⁶

But rather than contrasting play and seriousness, Huizinga's characterization of play bears more similarity to the kind of ritualistic activity Benjamin calls cult practice. Huizinga asserts that play “promotes the formation of social groupings,” groups whose cultural meanings persist after, or outside, the place of play itself. The construction of social groups in games suggests a potential correlation between the uses of play and the uses of art.

Unfortunately, later play theorists further increased the conceptual divide between games and cultural production. French sociologist Roger Callois

expanded on Huizinga's work, offering his own concept of play in *Man, Play, and Games*. Most notably, Callois extends Huizinga's argument that play resides "outside everyday life." For Callois, play is *make-believe*, "accompanied by a special awareness of a second reality or of a free unreality, as *against real life*."¹⁷ There is clearly an affinity between the idea of play as separate from and contrary to everyday life. Functionalist perspectives on religion such as Emile Durkheim's notion of the sacred and the profane¹⁸ or Rudolf Otto's concept of the numinous are obvious examples.¹⁹ Despite both Callois's and Huizinga's insistence that play structures and organizes human culture, both segregate play into a "pure space" freed from daily production. Huizinga calls this isolated space the "magic circle," a concept that has become central to many contemporary theories of games and to which I will return later.

In Huizinga's and Callois's struggle to locate play at the very foundation of human culture, they threaten to separate these two domains at their very junction. Unlike Huizinga and Callois, Hans Gadamer focuses on the role of play in the work of art. Gadamer limits his interest in play to aesthetics, borrowing Huizinga's idea of play as a system of "fixed rules" and applying such structure to the work of art. Play, argues Gadamer, serves as the artwork's "transformation into structure," or in Heideggerian terms its "unconcealment."²⁰ Unlike Derrida's understanding of play as the catalyst for deconstruction, Gadamer retains Huizinga's important gesture of the unit-operational nature of play—"fixed rules"—but disputes the isolationist view that play and cultural production remain separate.

In our contemporary situation, the relationship between play and cultural production inherits this basic segregationism. The ESA has made important strides to extend the reach of videogames, but it still implicitly aligns videogames of any kind with "entertainment," a testament to our deeply ideological relationship with play.²¹ Neil Postman first traced this trend of a "media-metaphor shift" in relation to television. Postman argued that the shift from books to television has created a public discourse of increasingly "dangerous nonsense."²² Although Postman does not share Benjamin's vision for the political applications of mechanically reproducible art, he does acknowledge that such imagery has begun to overtake written language as our primary means for "construing, understanding, and testing reality."²³ Interestingly, Postman relates this social change to a form of play, and more specifically a child's game; he calls the post-typographic era the "Peek-a-Boo World," a world in which me-

chanically reproduced images appear and disappear rapidly as in a game of peek-a-boo. This progression reaches a pinnacle of “dangerous perfection” in television.²⁴ The quality that isolates television from the actionable world is strikingly similar to that which isolates play: it is a safe space, without consequence, that is entirely self-contained. With the space of television, according to Postman, we sacrifice interrogation and dissent for entertainment, for fun. Benjamin had already begun to critique the capitalist renovation of film into show business, and Postman takes up this critique at a time that segues seamlessly into the contemporary culture of videogames. Bizarrely, Huizinga’s own words help dissolve the relationship between play and social structures. “The fun of playing,” wrote Huizinga, “resists all analysis, all logical interpretation. As a concept, it cannot be reduced to any other mental category.”²⁵ Although the purpose of this sentiment serves to underscore Huizinga’s radical claim that play precedes all cultural structures, it could just as easily be mustered in support of Postman’s apocalyptic vision of the death of self-reflection and cultural interrogation at the hands of television.

Videogames are thus subject to two equally strong forces opposing their use as tools for social commentary, social change, or other more “revolutionary” matters. On the one hand, the anthropological history of games has set the precedent for their separation from the material world. On the other hand, videogames inherit a mass-market entertainment culture whose primary purpose is the production of low-reflection, high-gloss entertainment.

Even earnest attempts by game critics and developers to overturn this received conception of videogames can be shown to reinforce rather than challenge the status quo. **Raph Koster**, Sony Online Entertainment Chief Creative Officer and lead designer of popular massively multiplayer online games *Ultima Online* and *Star Wars Galaxies*, offered a recent such effort, a unique book of cartoon sketches and semi-aphoristic insights called *A Theory of Fun for Game Design*. The book’s title already implies Koster’s adoption of “fun” as a yardstick for games, but, in an attempt fraught with hazard, **he tries to recuperate the term for broader purposes than the production of anonymous desire.**

In his attempt to preserve “fun” at the center of the experience of games, Koster musters loose principles from cognitive science; fun, he argues, is the sensation of “our brains feeling good.”²⁶ Koster opposes critiques of fun like Postman’s, arguing that we “migrate” fun into contexts.²⁷ In particular, the primary kind of fun that games produce comes from mastery of a task. In their

representational form, what I call unit operations Koster calls “abstract models of reality.”²⁸ For Koster, fun is very nearly a pedagogical category, “the feedback the brain gives us when we are absorbing patterns for learning purposes.”²⁹

This general approach allows Koster to mount a welcome argument in favor of expanded purposes for games. Like Huizinga, Koster argues that games structure cultural behavior, but Koster explicitly maps such behavior to practice-oriented mental mastery of problems of a general kind. Admirably, Koster uses this position to issue a call for videogames that attempt to build unit-operational models for situations beyond the current genres of war, alien invasions, driving, and sports. He issues a call for the use of games as an “expressive medium,” offering *Beowulf* and *Guernica* as legitimate models for game-based expression. “No other artistic medium,” argues Koster, “defines itself around an intended *effect* on the user, such as ‘fun.’ They all embrace a wider array of emotional impact.”³⁰ One of Koster’s cartoon illustrations depicts a well-dressed bearded man at the counter of a videogame store. “Hey, is *Custody Battle 3* out yet?” he asks. A poster of top sellers behind the cashier suggests other potential games: *Hamlet*, *Sim Gandhi*, *Against Racism*.³¹

Unfortunately, Koster’s reliance on fun as a first principle for games forces him into a corner. On the one hand, he makes a convincing call for games that fulfill goals beyond mere entertainment. This call is especially constructive given Koster’s relative celebrity in the game design community. On the other hand, he argues that the effect games produce in their players—all games, and all players—is “fun.” This reliance on a single output for games contradicts his earlier, apparently reproachful observation that a singular expressive goal limits the medium. The reliance on fun poses a conceptual problem for Koster, who must retrofit the revolutionary potential of games to mate properly with the concept of fun that serves as his engine. Anticipating possible objections to games that go beyond fun in the usual and popular sense, Koster finds himself attributing a wide array of possible responses to the realm of the fun. “One of the commonest points I hear about why videogames are not an art form,” says Koster, “is that they are just for fun. They are just entertainment. Hopefully I’ve made it clear why that is a dangerous underestimation of fun.”³² This moment marks Koster’s inversion of games and their expressive output; here fun becomes the primary term, with videogame-based expression enslaved to it. Koster admits that “we may be running into definitional questions for the word ‘fun’ here,” but he prefers a “formalist perspective to actually arrive at the basic building blocks of the medium.”³³ Like Benjamin, Koster hopes to open a space be-

tween uncritical enjoyment and antagonistic critique. Despite these intentions, Koster is hard pressed to avoid the rhetoric of fun as the superficial conveyance of capital so often associated with the entertainment industry, the goal that Benjamin foresees and Postman critiques.

Koster's understanding of fun decouples the outcome of gameplay from pleasure in the ordinary sense, enabling other kinds of responses. But in the same gesture Koster insists that these outcomes still entail fun, albeit fun of a different kind. We might call Koster's alternate fun *fun'* (fun prime), a kind of alternate-reality fun that entails the social, political, and even revolutionary critique that Benjamin first envisioned for mechanically reproducible art.³⁴ Despite this conceptual similarity, Koster's insistence on grouping meaningful responses of any kind under the rubric of "fun" is simply perverse. One need go no further than everyday experience to recognize how absurd the notion of *fun'* is: "I couldn't believe it when I walked in on her and Jim. I know our relationship has been mostly *fun'* lately, but I didn't realize it was over." Or: "I heard Mary's husband had another heart attack. And so soon after her mother died . . . they've really been going through a lot of *fun'* this year." Chris Crawford recognizes this limitation and observes its inappropriateness as a measure for the impact of a videogame. "Fun," observes Crawford, "doesn't quite fit the adult's experience."³⁵

Biased Videogames

In late 2003, Gonzalo Frasca released a small Web-based game called *September 12*, the first in a series he calls Newsgaming. The Newsgaming series is an attempt to make social and political statements with games, much like political cartoons. *September 12* is a very simple game; it depicts a Middle Eastern town, rendered in colorful cartoonlike detail. People wander around the town by foot; a few of these people are terrorists. The player controls a reticle on the screen, which can be moved around to target terrorists. Clicking the mouse sends a missile to the selected target, after a short time delay. Missiles wreak significant damage, and each missile destroys not only the targeted terrorist (if the player's timing is right), but also any nearby buildings and innocent people. When innocents die, surrounding people mourn over the body and then turn into terrorists themselves. The game's message is simple: bombing towns is not a viable response to the terrorist threat; it begets more violence. Specimens like *September 12* suggest that games can be noteworthy rhetorical devices; within the gap between game rules and subjectivity, players complete and refine their understanding of the game's representation, implicating themselves inside that

experience. This power of the medium has gone untapped because the market has focused primarily on entertaining players, rather than engaging them in important topics.

Games like *Sim City* do have the secondary effect of teaching players something about urban planning and local governance. Military simulations like *Full Spectrum Warrior* and *America's Army* and training simulation games such as *Virtual U* impart a more explicit pedagogy. *America's Army* is a military recruitment tool funded by the U.S. Army that puts the player in the shoes of a soldier in various “realistic” army missions. *Virtual U* is a university administration simulation funded by the Alfred P. Sloan foundation that teaches players about the management practices in various kinds of American universities. These games seek to create a correlation between the player’s mental model of the game rules and his understanding of the real world. The same gap between subjectivity and unit-operational rules that motivates criticism also underlies the rhetorical and educational possibilities of games.

Other game-based social commentaries have come in the form of videogame “mods,” alterations of existing commercial games. In 1999, Anne-Marie Schleiner and her collaborators designed a mod called *Velvet-Strike* for the popular multiplayer first-person shooter *Counter-Strike*.³⁶ *Velvet-Strike* allowed players to spray virtual posters with political messages such as “Hostage of an Online Fantasy” and “You are your most dangerous enemy.” In 2001, artist Josh On created *Antiwargame*, a simulation that allows the player to explore how policy decisions affect presidential popularity. The player allocates government funds to military, social, and foreign targets. On injects his own view that U.S. policy exists only for “securing the interests of the U.S. ruling class in the world” into the game’s logic.³⁷ As a result, deployed troops lean toward desertion, and the homefront populations destabilize as social spending decreases. On uses *Antiwargame* to communicate his personal perspective on U.S. foreign policy.

One commercial game that takes on a social challenge through gameplay proper was Chris Crawford’s *Balance of the Planet*. Released on Earth Day 1990, *Balance of the Planet* is a simulation game that models environmental issues and their consequences. In Crawford’s words, the game deals with “the complexity of environmental issues and their entwinement with each other and with economic issues. . . .everything is connected, [and] simplistic approaches always fail.”³⁸ In the game, the player makes choices about a multitude of settings, from lake acidity to radiation to oil spills. The game even requires the player to place a value on human lives—and separate values for third-world lives and urban

industrial lives. *Sim Health*, a 1994 game from the designers of *Sim City*, allows the player to model the kind of health care system the United States should have. Games like *Balance of the Planet* and *Sim Health* allow the player to simulate an adjustable value system, to witness the effects of that value system, and to carry that perception beyond the gameplay experience.

Gonzalo Frasca generalizes the social function conveyed by such games to simulations in general. “Simulation authors,” says Frasca, “do not represent a particular event, but a set of potential events. Because of this, they have to think about their objects as systems and consider which are the laws that rule their behaviors. In a similar way, people who interpret simulations create a mental model of it by inferring the rules that govern it.” In such simulations, says Frasca, “the goal of the player would be to analyze, contest and revise the model’s rules according to his personal ideas and beliefs.”³⁹ Under this rubric, games become rhetorical opinion texts whose positions players explore rather than merely take to be true.

Some might object that videogames about political and social practices risk becoming merely didactic rather than reflective.⁴⁰ Such an objection assumes that a videogame that performs a rhetorical function is a closed system, devoid of simulation fever. This objection also raises an aesthetic challenge: it proposes emergence as a design strategy for games. Earlier I discussed cellular automata as emergent systems; examples of emergence outside of games include traffic patterns, brain chemistry, and the spread of disease. Jesper Juul contrasts emergent games with what he calls “progressive games,” or games in which the player performs sequential actions to reach the game’s end, such as action/adventure games.⁴¹ Juul rightly argues that emergent games necessitate strategic tactics and therefore yield high replayability, whereas progressive games require that only the player finish all the game’s sequential challenges, and therefore yield low replayability.

There are reasons to privilege emergence over progression as a design strategy; the former inherently requires more configurative gameplay and therefore would appear to maximize the expressive affordances of the medium. But Juul risks falling into a trap: like Koster’s call for art games that maximize “fun,” Juul’s call for emergent games that maximize replayability privileges the formal quality of the game over its expressive potential. As the value proposition of entertainment gaming, fun and emergence both imply a kind of accounting, a return on investment for the player. In such an economy, a high degree of nonrepeating interactivity might indeed suggest more total “potential fun.”

However, as I have been arguing, videogames need not participate in such an economy. Rather, they may strive to make highly isolated statements that pursue specific goals through the gameplay experience.

In the context of advocacy and especially politics, replayability need not even entail a repetition of the gameplay experience, as it would in leisure games. Rather, replayability might manifest in the same way as does powerful rhetorical work of traditional art, film, or print: by causing the player to revisit the game's rhetorical claims and thereby to influence the player's judgments. Replayability in this sense implies self-reflection, debate, dispute, and a host of other contentious activities. It is a special kind of simulation fever, an openness to the unresolved crises such representations create.

Writing about responses to *September 12* in a research/practice crossover column, Frasca observes:

I think that a big part of this critique is due to the fact that political videogaming is not yet a well-established genre. Nobody would ever criticize a printed political cartoon on the basis of being too simplistic: caricatures are simplifications by definition. In spite of this, cartoons make a point and this is why they remain a useful journalistic tool.⁴²

This comment suggests that collectively, we are not yet acclimated to the conditions of simulation fever. In an online discussion about *September 12*, *Virtual U* co-designer Ben Sawyer writes, "I think that in positioning it as a 'simulation' they invite the sort of valid attacks people have already begun to make [on this blog]. If it was focused more on being pitched as an editorial cartoon in the form of game media I don't think those attacks would be as open."⁴³ Sawyer's comment, however, might be plagued by its own kind of simulation fever. He seems to suggest that games *as such* might not be able to function as highly encapsulated commentary, since simulations are by definition scientific rather than emotional systems. More likely Sawyer is pointing out the problematic nature of the word "simulation" as it applies to videogames and artifacts like Paul Starr's CBO models. Nevertheless, this problematic itself points to a highly engrained preconception about what games and simulations should and should not do. This raises a question about our understanding of games in general. Typically, the claim is, simulations like *BioChemFX* and Paul Starr's CBO tools strive for objective representation, whereas games hope only for subjective representation.⁴⁴

But as vehicles for simulation fever, I don't believe any game can make such a distinction between objective and subjective representation; **there is no such thing as an objective simulation, or an objective game.** Like literature, editorial, public oration, and countless other forms of rhetorical speech, videogames participate in the struggle between authorial intent and interpretive freedom. Videogames require players to create a subjective understanding of the synthesis of one or more unit operations. Games demand that players be capable of making this synthesis palpable in their own experience.

This process of engagement with artworks can constitute an event in Badiou's sense of the word, and in so doing it constitutes a subject and commences the process of fidelity at the heart of his theory of truth. Badiou gives special attention to poetry, whose breaks from the ordinary use of language he finds particularly disruptive.⁴⁵ Like mathematics, poetry offers formal categorizations, and in its frenzied structure poetry also enables—even invites—reconfiguration. These features of formality, abstractness, and disjointedness also characterize procedural media like videogames, allowing the kind of disruptive recombination that characterizes Badiou's understanding of the purpose of art. Videogames thus challenge any stable view of themselves as artifacts of purely commercial entertainment value. Fun' characterizes games that produce especially salient simulation fever.

Against Fun

A useful example of fun' at work can be found in Raph Koster's games. Upon the publication of *A Theory of Fun for Games*, many players of his most recent game, *Star Wars Galaxies* (SWG), reviled the book in public forums and online bookseller reviews. Most of these critics responded not to the book but to Koster's design of SWG. Along with many other massively multiplayer online games (MMOGs), SWG was criticized for the tremendous amount of work required to successfully develop and advance ("level" or "level up," in MMOG jargon) a character. This attitude is perhaps best summarized in the first comment posted alongside popular Web site Slashdot.org's review of *A Theory of Fun*: "If Raph Koster is an expert on anything, as many *Star Wars Galaxies* players can attest to, it's making a game NOT fun."⁴⁶

In their analysis of sociability in SWG, Nicolas Ducheneaut, Robert J. Moore, and Eric Nickell analyze the game's attempt to engineer social interactions.⁴⁷ In particular, SWG attempts to recreate the "corner bar" in the form

of a cantina, an abstraction of the recognizable Tatooine bar first introduced in George Lucas's first *Star Wars* film. Ducheneaut et al. describe the principal function of the cantina in the game:

In the many cities of SWG . . . there is always a cantina to be found. These locations serve an important instrumental game function. Indeed, they are one of the few places where the “entertainer” character class can perform their services. Entertainers dance or play music mostly in cantinas. And as watching a dancer, or listening to a musician, are both the only ways of recuperating from “battle fatigue,” most players have to visit cantinas on a regular basis.⁴⁸

Koster and his team designed the cantinas to encourage downtime, requiring injured combatants to stay in the cantinas while they solicit the healing services of entertainers.⁴⁹ But inevitably, many players use the game's built-in macros to automate healing rather than engaging in conversation. Ducheneaut et al. call these “instrumental” players and contrast them with the “social” players who come to heal and to converse. The researchers perform an intricate quantitative analysis of unique utterances in these cantinas, finding that the majority of players use the cantinas like “battle fatigue drive-thrus,” utilities for recovering from combat.

In addition to entertainers, SWG offers another character class devoted to a noncombat profession, the artisan. Artisans are craftspeople, able to advance to professions like armorsmith, architect, tailor, or droid engineer. To create basic items, artisans must first find and extract resources and then use tools to craft artifacts. Finished products can be sold at a bazaar to other players who need armor, weapons, and the like to perform combat tasks. The bazaar serves the whole galaxy of SWG, but players do not have access to it whenever they want. To buy or sell items, players must access special terminals inside SWG cities. Brawlers and marksmen might often find themselves in SWG cities, but artisans spend much of their time searching for resources or assembling artifacts on remote planets. Artisans then must commute to cities to get their wares into the bazaar. Likewise, when a customer wants to purchase an item, he must travel to the terminal on which the item is being sold to retrieve it. In either case, artisan crafts create incentives for players to traverse the galaxy. Like the cantinas, then, the bazaar is intended as a social engineering tool, facilitating otherwise unnecessary player interactions. In practice, however, buying and selling at the bazaar requires a great deal of empty transit time, especially for artisans.

Since MMOGs often function as social spaces as much as games, it is tempting to call the cantina and bazaar design defects, failed efforts to create meaningful social spaces. The tedious, empty play that healing and commerce require seem to emulate work, not play, thus eliciting comments like that of the Slash-dot pundit. Such reactions arise mainly from the assumption that fun is a first principle of games and that SWG, as a game, must produce empty gratification.

But instead, we might think of SWG as a game that challenges certain contemporary social practices. The cantinas, filled with mindless, preprogrammed jabber, could represent a number of anonymous public social encounters; but especially it represents the unit operation of waiting tables. Etymologically, “waiter” comes from the notion of courtly attendance, as a lady-in-waiting might attend to a royal. But in more colloquial terms, waiting tables often connotes a kind of provisional occupation, a stopgap between jobs, a second job, or a supplement to other long-term work, as an actor or a student might wait tables while pursuing another more “serious” career. When considered in this context, paying a monthly subscription to perform the virtual equivalent of waiting tables in a fantasy galaxy seems rather bizarre, even perverse. But waiting tables also offers a built-in motivation—a moment-by-moment reminder and reinforcement of some external goal that justifies the job itself.

The production of such external motivation seems to be tied directly to the ambivalence of interactions between waiter and customer; although waiting tables might for some be a satisfying profession of deep interpersonal relationships, such an attitude is rare, at least in its contemporary mythology outside of high-end restaurants and clubs. Indeed, the fundamental unit operation of waiting tables needed to fulfill the waitperson’s goals outside the pub, café, or restaurant might come precisely in the form of absent, anonymous, even meaningless short-term interpersonal interactions. SWG is able to offer the apotheosis of such an experience: cantina customers controlled exclusively by simplistic preprogrammed macros meant only to service the instrumental need of healing. As a unit operation of simplistic automatism, there are few better designs than a robotic customer programmed to utter the same statement until sated. Worse yet, like a waiter, the SWG entertainer relies mostly on tips for income.

One might wonder if the SWG entertainer is actually a cynical, downtrodden player type, one meant to reveal the discouraging nature of playing the game itself and thus encourage the player to seek satisfaction elsewhere. Even within the game, an entertainer character’s player has no recourse to broader goals than the specific role in which he is cast; the game offers no recourse to a broader dream

than entertaining. By drawing attention to the unit operation of the dysfunctional waiter–customer relationship, the cantina can be understood as a meditation on the budding artist’s idealistic dream in a reality of few successes.

If the cantina underscores SWG’s critique of the idealistic goals of the artist, the bazaar emphasizes the futility of a much broader array of contemporary urbanity. In their study of cantina visitation practices on two SWG planets, Ducheneaut et al. observe that SWG’s design sets up widely distributed centers of activity with large distances in between. Player cities, they observe, “are isolated in the ‘suburbs.’ If players were allowed to live in high-density apartments close (or even above) each cantina in the main cities, patterns of visits would probably change.”⁵⁰ The difficulty in reaching cantinas could be extended to bazaar terminals, which demand similar treks across large swaths of anonymous galaxy.

Ducheneaut et al.’s observation that SWG players are “stuck in the suburbs” is a productive one. Whether or not spatial expanse was intended to enable more sociability in the game, the task of transgressing entire star systems to visit a cantina or retrieve a purchased artifact becomes a unit operation for the long-distance errand. SWG simply requires a great deal of commuting to complete simple tasks. Those of us who live or have lived in large cities are all too familiar with the dread that accompanies even the simplest of daily errands. For residents of automobile-reliant cities like Los Angeles and Atlanta, simple five-mile in-town trips might entail forty-five minutes of bumper-to-bumper traffic in either direction. By recreating empty commuting in a virtual space that could just as easily collapse distance infinitely, SWG enforces commuting as a prerequisite for successful commercialism.

Taken together, SWG’s cantina and bazaar culture could be taken as unit operations for one real-world referent in particular: Southern California. The region’s massive urban sprawl⁵¹ and lack of affordable housing—only 17 percent of Angelenos could afford a home in March 2005, compared with 53 percent for the rest of the nation—have forced more and more middle-class families to live increasingly farther away from their workplaces.⁵² Together, Los Angeles, San Bernardino, Orange County, and San Diego also have the worst traffic congestion in the nation, increasing the burden of long-distance commutes.⁵³ Moreover, the Hollywood film industry helps create and maintain a massive culture of waiting tables in Southern California; waiters and waitresses rank in the top ten occupations for job growth in Los Angeles County projected through 2008.⁵⁴ When Raph Koster was named Chief Creative Officer of Sony Online

Entertainment in 2003, he moved to the company's headquarters to work on *Star Wars Galaxies*—in San Diego, California.⁵⁵

It would be inappropriate to call SWG a complete and coherent critique of contemporary Southern Californian life. But two key design innovations in the game, cantinas and bazaar terminals, serve as convincing representations of particularly salient dissatisfactions in that region. *Star Wars Galaxies* may not service Benjamin's longing for artworks that serve revolutionary ends, but the game does break from its supposedly primary role as entertainment software and become social commentary. This type of experience would still count as "fun" for Koster—the player gains new knowledge about social structures through their representation as key unit operations in the game—but it is that perverse kind of fun I call fun'. It should be clear now that neither fun nor fun' is an appropriate moniker for the sort of critical interrogation videogames like *Star Wars Galaxies* encourage in their players. Forcing videogames to share their potential as social critique with their potential as absent-minded distraction will inevitably constrain the power of players' simulation fever to the game itself, rather than allowing that anxiety to play out in their daily lives.