

STS
145/HPS
163.

History of
Computer
Game
Design:

Technology,
Culture,
Business



Winter
2005

Source: *Softline 2* (March 1983). Front cover.

Instructor: Henry Lowood

Office: M 9.30-11; W 2.30-4, Green Library 321C

TA: Waynn Lue Grader: Douglas Wilson & Galen Davis

T 2.15-3.30; Th 2.15-4.05

Room TBA

Schedule of Lectures-2004

<FYI: 2003 Schedule>

Please prepare for lectures and guests by completing the reading assignments indicated. Articles listed as being "available in Coursework" are in PDF format and found on our Coursework page under "Course Materials." If you do not have a reader for this format,

Download the free acrobat reader here: 

If you are enrolled in one of the optional discussion sections, prepare to talk about the readings, as well. Consult **THIS WEEK IN SECTION** for specific assignments. Readings labeled SECTION are optional for students not enrolled in discussion section.

Two books are available for purchase in the bookstore: 1. Barry Atkins, *More Than a Game: The Computer Game as Fictional Form*. (Manchester and New York: Manchester Univ. Press, 2003). 2. Brad King & John Borland, *Dungeons and Dreamers: The Rise of Computer Game Culture from Geek to Chic* (New York: McGraw-Hill, 2003). These two titles are used throughout the course and are cited as *More Than a Game* and *Dungeons & Dreamers*.

Week I. Introduction

January 6. Introduction to the Class

Henry Jenkins, "Art Form for the Digital Age," *Technology Review* (Sept.-Oct. 2000). Available here: <http://www.geocities.com/lgartclass/handouts/ArtfortheDigitalAge/ArtFormfortheDigitalAge.html>.

Janet Murray, "Lord Burleigh's Kiss," *Hamlet on the Holodeck*. (Cambridge: MIT Press, 1997) -- pp. 13-26. Available in Coursework.

January 8. Game Research: What, Why, Where, How?

Geoffrey R. Loftus and Elizabeth F. Loftus, "Why Video Games Are Fun," pp. 10-42 in *Mind at Play: The Psychology of Video Games* (New York: Basic Books, 1983). Available in Coursework.

Brian Sutton-Smith, "The Toy as Machine: Video Games," pp. 57-75 in his *Toys as Culture* (New York: Gardner Press, 1986). Available in Coursework.

OPTIONAL READING: Henry Lowood, "Shall We Play a Game: Thoughts on the Computer Game Archive of the Future." (Conference Paper, Fall 2002.)

THIS WEEK IN SECTION: * NO MEETINGS THIS WEEK*

Week 2. Games as a Medium.

January 13. Games as a Medium I: Entertainment and Communication

Jay David Bolter and Richard Grusin, "Computer Games," in: *Remediation: Understanding New Media* (Cambridge: MIT Press, 1999) -- pp. 89-103. Available in Coursework.

More Than a Game -- pp. 1-26; 55-85.

January 15. Games as a Medium II: Games and Storytelling

Rene will present his ideas on gameplay as a narrative framework.

Janet Murray, "From Additive to Expressive Form," *Hamlet on the Holodeck*. (Cambridge: MIT Press, 1997) -- pp. 65-94. Available in Coursework.

Chris Crawford, "Flawed Methods for Interactive Storytelling," *Interactive Entertainment Design* 7 (1993-1994). Available here: http://www.erasmatazz.com/library/JCGD_Volume_7/Flawed_Methods.html

THIS WEEK IN SECTION: Before section, visit the exhibit, "'Fictional Worlds, Virtual Experiences: Storytelling and Computer Games" at the Cantor Center. Class discussion will focus on your reactions to the exhibit.

Week 3. Writing about Games

January 20. Writing about Games and Game Journalism

GUESTS: Michael Antonucci, San Jose Mercury News; Rob Smith, Editor-in-Chief, *PC Gamer*; and Trudy Muller, senior manager of corporate communications at Electronic Arts.

January 22. Rules of Game Design?

GUEST: Noah Falstein, The Inspiracy. Noah will talk about the 400 Project, "an ambitious attempt to collect 'The 400 Rules of Game Design.'" Please look at the 400 Project website before class.

Bernd Kreimeier, "The Case for Game Design Patterns." Gamasutra.com (13 March 2002). Available here: http://www.gamasutra.com/features/20020313/kreimeier_03.htm

THIS WEEK IN SECTION: Read and be prepared to discuss the short collection of texts titled "Savage Review Collection," available in Coursework. Post a short comment BEFORE SECTION on the class discussion forum in Coursework--briefly give your thoughts on the ethics and content

of game reviews, based if you like on these readings. These will be discussed in class.

Week 4. The First Generation

January 27. From Spacewar! to Pong and Atari

GUEST: Al Alcorn. Al was the circuit designer for Pong and VP for R&D at Atari, in addition to working at Apple and Ampex.. For some information about his career, see <http://216.239.53.104/search?sourceid=navclient-menuext&q=cache:http%3A//bb.vg-network.com/interviews/aainterview.html>. Try out a Java simulation of the original Pong here: <http://www.xnet.se/javaTest/jPong/jPong.html>.

Steward Brand, "SPACEWAR: Fanatic Life and Symbolic Death Among the Computer Bums," *Rolling Stone* (7 Dec. 1972). Available here: http://www.wheels.org/spacewar/stone/rolling_stone.html

J. M. Graetz, "The Origin of Spacewar!," *Creative Computing* (1981). Available here: <http://www.enteract.com/~enf/lore/spacewar/spacewar.html>.

Jan. 29. Origins: Adventure and Interactive Fiction

Dungeons & Dreamers -- pp. 1-8.

Graham Nelson, "46. A Short History of Interactive Fiction," "47. Realities and Origins," "48. A Triangle of Identities," and "49. Structure," from *The Inform Designer's Manual*, 4th ed. (2001. 1st ed., 1994) Available here: <http://www.inform-fiction.org/manual/html/contents.html>.

P. David Lebling, Mark S. Blank, and Timothy A. Anderson, "Zork: A Computerized Fantasy Simulation Game," *IEEE Computer* 12 (April 1979): 51-59. Available here: <http://mud.co.uk/richard/zork.html> or here: <http://www.csd.uwo.ca/Infocom/Articles/ieee.html>.

Ernest Adams, "It's Time to Bring Back Adventure Games" (1999). Available here: http://www.gamasutra.com/features/designers_notebook/19991109.htm. (Your first visit to Gamasutra will require registration; the site is free and an important resource for research on game design.)

THIS WEEK IN SECTION: Sit down at a computer with full Internet access. Without getting up, find versions of Pong and the original (Crowther/Woods) Adventure. Be prepared to discuss in class: How many different versions did you find? What is your impression of the "authenticity" of the version(s) you tried? Did you find any information or guidance on the provenance or legality of these versions? Did all the versions require emulators? Be prepared to comment on differences between Pong and Adventure with regard to these questions.

Week 5. The Game Business.

February 3. The Business: Historical Overview

Stephen Kline, Nick Dyer-Witheford, and Grieg de Peuter, "Electronic Frontiers: Branding the 'Nintendo Generation', 1985-1990," Chap. 5, pp. 109-27 in *Digital Play: The Interaction of Technology, Culture, and Marketing* (Montreal: McGill-Queen's Univ. Press, 2003). Available in Coursework.

David Sheff and Andy Eddy, "Sonic Boom," Chap. 15, pp. 349-89 in *Game Over: Press Start to Continue*. (Wilton, Ct.: GamePress, 1999.) Available in Coursework.

February 5. The Business: Game Production

GUEST: Bill Swartz, Founder and managing director of Mastiff. Bill's previous experience includes his roles as marketing manager for Koei America, as part of Koei's development group,

and then over a period of 12 years as managing director of Activision Japan.

Simon Carless, "Lost In Translation--Japanese and American Gaming's Culture Clash" (2004). Available here: http://www.gamasutra.com/features/20040121/carless_pfv.htm.

Greg Wilcox, "Did You Know? [Interview with Bill Swartz]," Digital Press: The Video Game Database (Dec. 2003). Available here: <http://www.digitpress.com/columns/didyouknow.htm>. (Link is to Google cache.)

THIS WEEK IN SECTION: Consider the two readings on Nintendo assigned for February 3. Think about what each author has to say about Nintendo and the videogame console wars ca. 1990. Now make two short lists, one for each reading, in which you write down three factors in Nintendo's competitive position in the early 1990s emphasized by the authors. Bring the lists to class for comparison and discussion.

Week 6. Diversity in Game Cultures

February 10. The International Scene (esp. Germany and Korea)

Ernest W. Adams, "Eurostylin': An American Game Designer in Europe," from Game Developers' Conference 2000. Available here: http://www.designersnotebook.com/Lectures/Eurostylin_/eurostylin_.htm

Michelle Levander, "Where Does Fantasy End? Why All of South Korea is Obsessed with an Online Game Where Ordinary Folks Can Be Arms Dealers, Murderers ... and Elves," *Time Magazine* 157, no. 22 (June 4, 2001). Available here: http://www.time.com/time/interactive/entertainment/gangs_np.html

Justin Hall, "Event Wrap-Up: Tokyo Game Show 2003." Special Report for GamaNetwork. Available here: http://www.gamasutra.com/features/20031015/hall_pfv.htm.

*** Assignments Due Feb. 10: "Games and Narrative" and Paper Proposal ***

February 12. Gender, Play, Contested Spaces

Dungeons & Dreamers -- pp. 141-147

Henry Jenkins, "'Complete Freedom of Movement': Video Games as Gendered Play Spaces." Available here: <http://web.mit.edu/21fms/www/faculty/henry3/pub/complete.html>. Orig. published as pp. 262-297 in *From Barbie to Mortal Kombat: Gender and Computer Games*, eds. Justine Cassell and Henry Jenkins (Cambridge, MIT Press, 1998).

Rebecca L. Eisenberg, "Girl Games: Adventures in Lip Gloss." Orig. published in *Ms. Magazine* (Jan. 1998). Available here: http://www.gamasutra.com/features/19980213/girl_games.htm

Stevie Case, "Women in Gaming," (2004). Available here: <http://www.microsoft.com/windowsxp/games/learnmore/womeningames.asp#top>

THIS WEEK IN SECTION: Inform yourself about the "Adventures of Josie True" project by looking at the articles "about Josie" on the project site here: <http://www.josietrue.com/>. Skim the site to learn about the project, then try out the free web-based chapter of the game (it will require that you have the free Flash Player version 6 installed on your computer). For section, consider the main points in the Jenkins and Eisenberg readings for this week and be prepared to discuss how the articles help you understand what the designers of the "Adventures of Josie True" are trying to accomplish with their game. Speculate: What would Stevie Case think of Josie True (the game)?

Week 7. High Performance Play

February 17. Competitive and Professional Play

GUESTS: Jess Cliffe, co-creator of the *Half-Life Counter Strike* mod; Team3D: David 'Moto' Geffon, team leader, and Craig 'Torbull' Levine, Team Manager; Frederic Descamps, Ultimate Arena.

Dungeons & Dreamers -- pp. 87-141; 199-210; 229-237.

February 19. Play as Performance: The Early History of Machinima and Related Forms of Subversion.

Dungeons & Dreamers -- pp. 210-219.

More Than a Game -- pp. 27-54.

Anne-Marie Schleiner, "Does Lara Croft Wear Fake Polygons? Gender Analysis of the "3rd Person Shooter/Adventure Game with Female Heroine" and Gender Role Subversion in the Game Patch." Updated version. Available here: <http://www.opensorcery.net/lara2.html>

THIS WEEK IN SECTION: Competitive multiplayer gaming demo session. Game TBA.

Week 8. Conflicts

February 24. The Violence Issue

Dungeons & Dreamers -- pp. 173-198.

Paul Keegan, "Culture Quake," *Mother Jones* (Nov.-Dec. 1999). Available here: <http://www.motherjones.com/news/feature/1999/11/quake.html>

Gerard Jones, "Violent Media is Good for Kids," *Mother Jones* (28 June 2000). Available here: http://www.motherjones.com/commentary/columns/2000/06/violent_media.html

February 26. Military Gaming and Simulation

Tim Lenoir and Henry Lowood, "Theaters of War: The Military-Entertainment Complex."

More Than a Game -- pp. 86-110.

Mark Pesce, "The Trigger Principle," *FEED Special Report* (Feb. 3, 2000). Available here: http://www.feedmag.com/essay/es288_master.html.

*** Assignment due Feb. 24: "Cultures in Game Design" ***

OPTIONAL: James F. Dunnigan, "Genealogy of Computer Wargames Technology" and "Designing Computer Wargames" from *The Complete Wargames Handbook* (1993, rev. 1997) Available here: <http://www.hyw.com/Books/WargamesHandbook/6-3-gene.htm> and <http://www.hyw.com/Books/WargamesHandbook/7-design.htm>. Provides historical background.

OPTIONAL: U.S. Army and the MOVES Institute. *America's Army PC Game: Vision and Realization*. Monterey, Calif.: MOVES Institute, 2004). Available here: <http://www.movesinstitute.org/AAbooklet.pdf>

THIS WEEK IN SECTION: "What can a game teach me about terrorism, counter-terrorism and the Middle East?" Look at these three game-related sources: (1) The *America's Army* website, esp. the "Special Forces HQ."; (2) The *Special Force* website; (3) The *Sept. 12* game (play it online). Who made each game and why? What do the authors have to say about the relationship between games, reality, and simulation? Be prepared to talk in class about the opening question in this assignment.

Week 9. Role Playing

March 2. Game Engine: The Director's Perspective.

GUEST: Jake Hughes, Crystal Dynamics (Eidos Interactive). He was director and co-creator (with Tom Hall and the Anachronox team) of "Anachronox: The Movie" (USA, 2001), which received the "Best Film" and "Best Use of Technology" awards at the first Machinima Film Festival (2002) and was also associate producer and cinematographer for *Anachronox*, the game, while at Ion Storm. Jake will be joined by Joey Liaw, who is presently a student in the Stanford C.S. Department; Joey programmed the cine scriptor and particle editor for Anachronox and is a specialist in game engine technology.

Jo Bryce & Jason Rutter, "Spectacle of the Deathmatch: Character and Narrative in First Person Shooters," pp. 66-80 in G. King & T. Krzywinska, eds, *ScreenPlay: Cinema/videogames /interfaces*, (London & New York: Wallflower Press, 2002) Available here: http://les1.man.ac.uk/cric/Jason_Rutter/papers/Spectacle.pdf

March 4. Role-Playing Genres

Dungeons & Dreamers -- pp. 11-81; 220-228.

Warren Spector, "Remodeling RPGs for the New Millennium," *Game Developer* (Feb. 1999). Available here: http://www.gamasutra.com/features/game_design/19990115/remodeling_01.htm. (Site requires free registration.)

OPTIONAL FOR ALL: Brenda Laurel, "Toward the Design of an Interactive Fantasy System: Description and Functional Requirements," Pp. 56-87 (Adobe Acrobat page numbering) in: Atari Research Memos on the Subject of Interactive Fantasy and Related Topics." Atari Sunnyvale Research Laboratory, March 1982-November 1983. Available in Coursework.

THIS WEEK IN SECTION: Discussion of your case history papers. Bring a one-page abstract of your paper (whether you have completed it yet or not) to section. Each student will read their abstract and get suggestions and questions from the rest of the participants about ways to improve the paper. (NB. Students in lecture who are not enrolled in section are welcome to join this meeting and read their abstracts to gather comments.)

Week 10. Virtual Worlds

March 9. Games of Life: Sims, God Games, A-Life

John Horton Conway, "The Fantastic Combinations of John Conway's New Solitaire Game 'Life'," *Scientific American* (1970): 120-23. Available here: http://ddi.cs.uni-potsdam.de/HyFISCH/Produzieren/lis_projekt/proj_gamelif/ConwayScientificAmerican.htm

Ted Friedman, "The Semiotics of Sim City," *First Monday* 4, no. 4 (April 5, 1999). Available here: http://www.firstmonday.dk/issues/issue4_4/friedman/

More Than a Game -- pp. 111-137.

OPTIONAL FOR ALL: Geoffrey Keighley, "Simply Divine: The Story of Maxis Software," *Gamespot*. Available here: <http://www.gamespot.com/features/maxis/>; and Daniel Sieberg, "The World according to Will," *Salon.com*. Available here: <http://www.salon.com/tech/feature/2000/02/17/wright/index.html>.

March 11. Wrapup/A Word on Massively Multiplayer Games

Richard A. Bartle, "A Voice from the Dungeon," *Practical Computing* (December 1983): 126-130. Available here: <http://mud.co.uk/richard/avftd.htm>. If you have time, take a look at other early papers on networked MUDs in Bartle's web archive, especially "MUD Advanced Project Report" (1983), here: <http://mud.co.uk/richard/mapr.htm>, and the background on this report here:

<http://mud.co.uk/richard/maprbg.htm>.

Julian Dibbell, "A Rape in Cyberspace, or How an Evil Clown, a Haitian Trickster Spirit, Two Wizards, and a Cast of Dozens Turned a Database Into a Society," *Imaginary Realities* 2, no. 4 (April 1999). Available here: http://imaginaryrealities.imaginary.com/volume2/issue4/rape_cyberspace.html. (Originally written in 1993, this essay is also available as a chapter in Dibbell's book, *My Tiny Life*.)

Dungeons & Dreamers -- pp. 148-170, 237-243.

Nicholas Yee, "The Norrathian Scrolls: A Study of Everquest." Available here: <http://www.nickyee.com/eqt/report.html>. Read the short introductory sections and follow your interests in looking over the wealth of survey data and responses.

OPTIONAL FOR ALL: Chip Morningstar and F. Randall Farmer, "The Lessons of Lucasfilm's Habitat," in: *Cyberspace: First Steps*, ed. Michael Benedikt. MIT Press, 1991. -- pp. 273-301. Available in Coursework.

THIS WEEK IN SECTION: Find a player community website. Not a game developer site, but a site maintained by and for players, with content developed by the player community. Some suggestions: sites devoted to Everquest or the Sims Online stories or game groups; Warcraft III replay sites; Neverwinter Nights community sites such as Neverwinterconnections.com; or sites maintained by multiplayer clans (Quake, Counterstrike, Starcraft, etc.). What does this site tell you about the "player community" and the social aspect of the game? Come to section prepared to talk about how the community's activities might be thought of as a "meta-game," a game outside the game.

*** Case Study due March 16 ***

- Henry Lowood, 13 Jan. 2004