

Narrative in Games

Foundations of Interactive Game Design
Professor Jim Whitehead
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UC SANTA CRUZ



Assignments

- Due today
 - ▶ Multi-game analysis essay
 - ▶ May submit any time within next 24 hours without penalty
- Final game project
 - ▶ **Due next week on Wednesday**
 - ❖ Talk with your partner about how you will complete the project
 - ▶ Turn in working game on CDROM or USB drive
 - ❖ **Game Maker:** game source files (.GM6) and executable (.EXE), if possible
 - ❖ **RPG Maker:** game source files, executable is required
 - ❖ **Other platforms:** include source files, and executable
 - Make sure the CDROM/USB Drive indicates which computer type (PC/Mac) this is for
 - ❖ Include the minimum amount of files needed for your game
 - No random, extraneous files, previous versions, etc.

Game Maker/RPG Maker Help Sessions

- Many help sessions this week
- **Tuesday: Game Maker**
 - ▶ 12-1:10pm, Earth & Marine Sciences (E&MS) B214
 - ▶ Jacob Telleen, Jeff Brizzolara
- **Wednesday: RPG Maker**
 - ▶ 5:30-9pm, E2 280
 - ▶ Nate Emond, Nic Kent
- **Thursday: Game Maker**
 - ▶ 4-5:10pm, E&MS B214
 - ▶ David Olsen, Tim Davis

Computer Game Design Degree

- UC Santa Cruz has a four year degree program on computer game design
 - ▶ Bachelor of Science in Computer Science: Computer Game Design
 - ▶ A technically focused degree
 - ▶ Year-long game design project in senior year
- Informational session this Friday
 - ▶ Learn about the content of the degree
 - ▶ We are actively seeking students for this major
 - ▶ Job opportunities in the field
 - ▶ How to sign up
 - ▶ Friday, March 2, 2-4pm
 - ❖ Location: “Simularium”, Engineering 2, room 180

Game Design Seminar: SQ 07

- Next quarter I will be running a group independent study on game design
 - ▶ Open only to students who have completed this class
- Goal is to improve your proficiency to create computer games
 - ▶ Create three games, one every two weeks
 - ❖ Each game must meet a theme topic
 - ❖ Demonstrate games in class, receive critical feedback from me and other students
 - ▶ Take one of the three games, and polish gameplay and design for the final project.
 - ▶ May take for 2 or 5 credits (2 vs 3 games)
 - ▶ Will meet once a week, TBD
- Indicate interest on signup sheet after class

Exam #2

- The second midterm exam is this Wednesday
 - ▶ Will primarily cover material between first and second exam
 - ▶ May draw upon concepts and material from the entire class
 - ▶ No Game Maker or history of computer games
- Will give list of potential questions on following slides
- Exam #2 will be similar in difficulty and format to the first exam
 - ▶ Mostly short answer questions



Potential Exam Topics

- As Univ. of California students, you are expected to be able to assess complex material and make judgments concerning its relative importance.
- That said, it can be helpful to have some input from the Professor to help focus studying activity.
- The following are questions/material that are likely, but not guaranteed to appear on the exam.
- Anything covered in class or in the assigned readings since the last exam may appear, even if not explicitly mentioned today.



Exam #2 Potential Exam Questions and Topics

- What is a Shmup?
- Give at least three thematic elements of Shmups
 - ▶ Be able to describe how a given Shmup (either one of your choice, or one shown in class) exemplifies these thematic elements
- Be able to give one advantage and one disadvantage of fixed (top-down, single-screen) Shmups
- What is a landscape narrative?
 - ▶ Be able to give an example of this
- What are the advantages of being able to perform level design for a Shmup?
 - ▶ As compared to the disadvantages of a fixed (top-down, single-screen) Shmup?
- What is a manic (bullet-hell) shooter?
- What is a “cute-em-up”?

Potential Exam #2 Topics and Questions (2)

- What is a core game mechanic?
 - ▶ Be able to define, and identify in a game of choice, or demonstrated in class
- What is the core mechanic of a platformer?
- What are the advantages of level design for platformers?
 - ▶ As compared to prior games like Pac-Man, Berzerk, etc. that had limited or no level design.
- What benefit does scrolling provide for game design
 - ▶ In Shmups, Platformers, RPGs?
- What were some of the design challenges of moving platformers from 2D to 3D?

Potential Exam #2 Topics and Questions (3)

- Describe the advantages/disadvantages of Shmups, Platformers, RPGs for storytelling
 - ▶ Consider issues such as characters, potential for dialog, breadth of story supported by genre
- For Shmups, Platformers, RPGs, be able to describe two distinctive qualities of the genre
 - ▶ Or, given two genres, be able to compare/contrast by listing distinctive aspects, and how they differ
- What is collision detection?
- What is the difference between scrolling in Shmups and Platform games?
 - ▶ Shmups are always pushing you forward, platformers typically give more freedom of movement

Potential Exam #2 Topics and Questions (4)

- What is the difference between challenge and conflict?
- Know Crawford's dimensions of challenge
 - ▶ Cerebellar, Sensorimotor, Spatial Reasoning, Pattern Recognition, Sequential Reasoning, Numerical Reasoning, Resource Management, Social Reasoning
 - ▶ Be able to give an example of each.
 - ▶ Given a game, be able to identify the kinds of challenge it provides.
- Be able to identify several forms of conflict
 - ▶ Given a game, be able to identify the types of conflict the game supports
- What is Crawford's definition of interactivity?
 - ▶ What are the four important elements of his definition?
- Given a game example, be able to describe whether it exhibits high or low interactivity (according to Crawford)

Potential Exam #2 Topics and Questions

- What two seductions must a designer accomplish in creating their game?
- How does the act of submitting to game rules lead to player pleasure?
- What is the lusory attitude?
- What is autotelic play?
 - ▶ What are some of the implications of games being mostly autotelic?
- What are the elements of a game's reward structure?
 - ▶ Types and frequency of rewards
 - ▶ Types and frequency of punishments
- Be able to give examples of types of rewards in a game
 - ▶ Given a game, be able to identify the kinds of rewards and punishments it provides.
- Be able to give examples of short and long term goals.

Workshop Highlights

- Attended Microsoft sponsored workshop last week
 - ▶ Academic Days on Game Development in Computer Science Education
 - ▶ Focus in on use of games to enhance computer science courses
 - ▶ Also, use of computer games for education across broad range of courses
- Some highlights
 - ▶ Colleen McCreary, Electronic Arts
 - ❖ EA hires about 250 people each year fresh out of college
 - ❖ About 70-80% are software engineers
 - ❖ Rest are artists, except for 1% game designers
 - ❖ Very rare to get a game design job straight out of college
 - ❖ But, relatively easier to get a game development job

Workshop Highlights (2)

- XNA Game Studio Express
 - ▶ A complete development environment for creating 2D and 3D games
 - ❖ Free tool (Windows only, of course)
 - ▶ Simplifies use of Microsoft's XNA technology stack
 - ▶ Can create games that run on Windows PC or XBox 360
 - ❖ Your game, running on your (or a friend's) XBox 360
 - This requires "Creator's Club" subscription (\$100/year)
 - ▶ Write games in C# language (easier than C++ to use)
 - ❖ Saw several very speedy demos (car racing game, flying airplane over procedural landscape)
 - ❖ Many libraries
 - ❖ Large use community
 - ▶ Comes with many demo games
 - ▶ Easy pathway to XBox Live Arcade if you wish
 - ▶ <http://msdn2.microsoft.com/en-us/directx/aa937795.aspx>

Narrative

- Games tell stories
- A game's **narrative** is the aspects of a game that contributes to it telling a story
 - ▶ Questions concerning whether games are narratives, or whether narrative provides just one way to look at games are still actively debated.
- **Narrative** is also used to describe the story itself
- Computer games stretch the notion of narrative
 - ▶ The interactivity of computer games, like the interactivity of hypertext, pushes hard against existing theories of linear narrative
 - ▶ No longer just one privileged story being told; many possible ways to experience a non-linear narrative (computer game, hypertext fiction)

Structures for Game Narrative

- **Embedded narrative**

- ▶ Pre-generated narrative content that exists prior to a player's interaction with the game
- ▶ Cut scenes, back story
- ▶ Are often used to provide the fictional background for the game, motivation for actions in the game, and development of story arc

- **Emergent narrative**

- ▶ Arises from the player's interaction with the gameworld, designed levels, rule structure
- ▶ Moment-by-moment play in the game creates this emergent narrative
- ▶ Varies from play session to play session, depending on user's actions

- Game design involves employing and balancing the use of these two elements

Narrative Descriptor

- A **narrative descriptor** is an element of a game that communicates aspects of its story to the player
 - ▶ Broad concept, which encompasses most visual elements of a game and its surrounding context
 - ❖ Instructional text
 - ❖ Cut scenes
 - ❖ Interface elements (joystick, buttons, controller, and how they're used)
 - ❖ Visual elements comprising the field of view of the player
- **Example: Asteroids**
 - ▶ Instructional text places you in space
 - ▶ So do the visual elements of the game
 - ▶ Wrap-around space also contributes to this feeling
 - ▶ UFO ties into cultural understandings

Narrative Descriptors in Games

- **Fictive worlds**

- ▶ The narrative of the game world
- ▶ Creates coherent narrative spaces in which story events take place and take on meaning
- ▶ Fictional world creates affordances and limitations for what is possible in the world
 - ❖ Super Mario Bros.:
 - Cartoon world makes things like goombas and mushrooms consistent with the world
 - But, photo-realistic dog would be out of place, since it's not consistent with the world

- **Story elements**

- ▶ Individual moments of narrative play as the game progresses
- ▶ Individual actions of players and enemies also need to be consistent with, and support overall narrative goals
 - ❖ Pac-Man: chewing animation of Pac-Man supports fictional world of eating dots
 - Pac-Man uses chewing mechanic to eat ghosts when they are vulnerable, instead of, say, shooting at them (which would be inconsistent with the world)

Narrative Based Design Issues

- What story are you trying to tell?
- Internally consistent fictional world?
 - ▶ Does your gameworld allow you to easily determine what does or does not belong in the world?
 - ▶ Do the graphic elements clearly communicate expectations about the gameworld to players?
- Characters
 - ▶ How do game characters (player avatar, non-player characters) contribute to the narrative
 - ▶ Are they consistent with gameworld?
- Core game mechanic
 - ▶ Do the core actions of the player contribute to the narrative?
 - ▶ Is the core game mechanic consistent with narrative goals, and consistent with game world?

Interactive Drama

- First conceived of by Brenda Laurel in her PhD dissertation (1986)
 - ▶ Idea is to use drama as the guiding metaphor (narrative conception) for game design
 - ❖ Focuses attention on intensity, enactment, and unity
 - ▶ Player interaction deeply shapes the path and outcome of the story
 - ❖ But, while maintaining authorial control over the story structure. Not a loosey-goosey world.
- Wants the player to be immersed in the game world as a character in the story.

Tension Between Embedded and Emergent Narrative

- Games provide rule-driven worlds
 - ▶ Provides support for emergent styles of narrative
 - ❖ What the player does comprises the story
- Narrative involves telling a story
 - ▶ If the designers wants to maintain broad control over the story, involves predestination, or at least guiding towards one of a set of destinations

“Where gameplay is all about interactivity, narrative is about predestination. There is a pervasive feeling in the game design community that narrative and interactivity are antithetical.”

Mateas and Stern, “Interaction and Narrative”

Demonstration of Facade