Narrative in Games

Foundations of Interactive Game Design
Professor Jim Whitehead
February 26, 2007
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
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-Mac, 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?
• 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
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 on 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 to 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
• 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 want 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