Foundations of Interactive Game Design (80K)

week five, lecture two
Today

• Return to discussion of agency and design
• Demos of Atari VCS games
• Completing discussion of platforms
• Demo of Façade
• Completing discussion of Fullerton’s dramatic elements
• Preview of next week
Agency

Agency is the term I use to distinguish the pleasure of interactivity, which arises from the two properties of the procedural and the participatory. When the world responds expressively and coherently to our engagement with it, then we experience agency. Agency requires that we script the interactor as well as the world, so that we know how to engage the world, and so that we build up the appropriate expectations.

— Murray in First Person
One way this relates to design
Action–Outcome

- S&Z analyze interactive systems by looking at choices
- Macro and micro choices
- Micro choices via action–outcome stages
Stages

• What happened before the player was given the choice?

• How was the possibility of choice conveyed to the player?

• How did the player make the choice?

• What is the result and future impact?

• How is the result conveyed?
Diagnosing design problems

• Choices feel arbitrary — problem with results of choices
• Not knowing what to do next — problem with representing choices
• Losing without knowing why — results of choices not communicated
Last week’s text game demos

• The great frustration of *Adventure* and other text-based games is knowing what is possible to type — only a few things work.

• This is S&Z’s second stage of action–outcome: conveying the possibility of choice.

• *Ad Verbum* takes this frustration and turns it into the game’s source of puzzles.
Platforms
Combat Demo
Pitfall! Demo
Combat

Playfield: low rez

Missile: high rez

Sprite: high rez

Entire game on one screen

Only other element is *Pong*-style ball
Pitfall!

How is this possible?

Tree detail: high rez

Vine: high rez

Harry: high rez

Logs

Scorpions

255 screens!

Activision Logo
Atari VCS

- No frame buffer
- Key component: the Television Interface Adapter (“Stella”)
- Drawing line-by-line, calculating in horizontal/vertical blanks
- How to create Pitfall!?
Pitfall!

- A founder of the “platformer” genre, 1982
- VCS required drawing each line — so moved high-resolution sprites during every frame (two sprites are tree details and Harry, etc)
- Also moved ball graphic during drawing to create vines that are on same line
- Technical and game design tour de force, created by one person: David Crane
River Raid

- Carol Shaw, Activision, also 1982
- Also pushed platform boundaries
- Also defined genre conventions
- Let’s take a look...
River Raid

- It scrolls — like tutorial! (One of the first vertical scrollers for any platform, big challenge on VCS)
- Fuel gauge (or points)
- Carol Shaw one of the first women in computer game design
You don’t have to push your platform this far

But thinking carefully about your platform’s capabilities and affordances is part of your job as a game designer.
Dramatic elements
Game fictions

- A great variety of fictions.
- But only two major approaches to how the fictional elements are implemented.
- Two examples: *Prince of Persia: The Sands of Time* and *Fable*. 
Prince of Persia
The Sands of Time

Linear story, with side trips
(playing a cinematic story)
Fable

Putting it together

Linear story, good and evil choices
NPC logics same for animation and language

Renown: none, disdain, friend, respect, fear, awe, worship
Morality: none, friendly, respect, awe, fear, worship
What is the next step?
Façade
an interactive drama

- Michael Mateas and Andrew Stern — writers, designers, and implementers
- Interactive characters, drama manager, and “bag of beats/mix-ins”
- A neo-Aristotelian one-act play, different every time
- Released summer 2005. NY Times says: “This is the future of video games.”
the characters
the drama manager chooses next “beat” by rules, not graph
sample beats
coordinated actions, possible reactions
sample mix-ins
for non-beat reactions and transitions
bringing it together
Are all games with meaningful fictions single-player?
Massively Multiplayer Online Role Playing Games (MMORPGs)

- Other characters are smart, unpredictable — they’re real people
- Related to tabletop RPGs (Dungeons & Dragons)
- Freedom to roam and adventure, but no GM (or drama manager)
MMORPG Fictions

• Local performance — event teams (e.g., starting battles) and player events (e.g., weddings)

• Global stories — *Asheron’s Call* updates, SWG’s Galactic Civil War

• Story-centric MMORPG — *A Tale in the Desert* (no combat, scheduled end)

• *The Old Republic* will move to a model of voice acting, companions, etc
What about multiplayer fictions that aren’t in a role playing game?
Gaming the real world

promotional game for the movie A.I.
“The Beast”

- Elan Lee (puzzles), Sean Stewart (writing), and Jordan Weisman (concept)
- Murder mystery; denied its own existence; spread through internet text, movies (and phone, fax, USPS, bathroom walls, live events)
- Required massive player collaboration (Cloudmakers had 7,500 members)

Nearly 150 characters, nearly 4,000 documents, four languages, nightmare database, Enigma code, etc.
Finally
Next week

- Turning in computational prototype — must demo in section
- Start building your games
- Start in on your multi-game analysis essays