Lecture 10: Build It To Understand It

CM 148
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Errant Signal - The Debate That Never Took Place

https://www.youtube.com/watch?v=xBN3R0m31bA
"If you've ever seen a kid first learn how to walk, the look of joy on that toddler's face -- it's fun. They're playing a game," Koster said. People feel compelled to learn and play "games" like this even if we have to work hard to accomplish our goal. We want to overcome the obstacles games put in front of us simply because we're having fun."

But where does this nebulous idea of "fun" come from? According to Koster, it's simple: fun is the brain's way of making us want to learn. We're constantly learning while playing games, and the chemical reactions in our brain become a "neurochemical reward to encourage us to keep trying," he said.
Raph Koster’s *A Theory of Fun* (2)

• Kids learn through play
  – Learning is fun?

• Learning is a big part of games
  – Is that what makes games fun?

• “There's more and more evidence to show we do in fact engage in significant, difficult learning with games, that gamers are predisposed toward learning”

• “Everything that is a system is something we can approach as a game. And since games are about teaching systems and we now intentionally create them and these systems literally modify the wiring in our brains, that means that we have an art form that rewrites people's brains. We have the power. That means we have to be responsible.”

More Game Studies topics arising from Ludology vs. Narratology debate

• Time in games
  – Markku Eskelinen

• Narrative Architecture
  – Henry Jenkins

• Internal/External and Exploratory/Ontological
  – Marie-Laure Ryan
Time in games (Eskelinen)

- **Order** – relationship between user time and time in the game (there may be multiple levels)
  - Tetris, Flappy Bird (last as long as possible against the clock) vs. Doom, exploratory games

- **Frequency** – whether events and actions happen only once, an unlimited number of times, with some limit, are *undoable* or not
  - Passage (irreversible) vs. Angry Birds (lots of chances to try again....)

- **Speed** – the pace of the game, and whether pace is controlled by system, player, or both
  - Dimensions: steadiness and its importance as a goal in itself

- **Duration** – the player’s relationship to the duration of the game and individual game events
  - Mario vs. Dolphin Olympics 2 (2 minute games)

- **Time of action** – when the player is allowed to act
  - Difference between turn-based and real-time strategy games

- **Simultaneity** – player’s relationship to simultaneous events
Dichotomies (Ryan)

• **Internal** interactivity projects the user as a member of the fictional world.
• **External** interactivity situates the user outside of the world.

• In *exploratory* interaction, the user can not change the destiny of the fictional world.
• In *ontological* interaction, the players actions send the virtual world on different forking paths.
Combinations

• External/exploratory
  – Canonical example: hypertext literature
  – Michael Joyce, Stuart Moulthrop, or Mark Amerika

• Internal/exploratory
  – Canonical example: mystery story games
  – You’re a detective/confidante/traveler...

• External/ontological
  – Canonical example: Choose your Own Adventure, SimCity

• Internal/ontological
  – Canonical example: Holodeck, RPGs
  – User is cast as a character who determines their own fate
  – Affordances (agency) usually must be restricted to move the narrative along
Narrative Architecture (Jenkins)

• Like designing an urban space
  – Keita Takahashi designing playground at Woodthorpe Grange.
- Doughnut Slide
MINI TRAMPOLINE
Narrative Architecture (Jenkins)

• Trying to find middle ground between games/stories debate: “Games will not tell stories in the same way as other media”

• Types of narratives:
  – Evoked
  – Enacted
  – Embedded
  – Emergent
Evocative Spaces

• “The most compelling amusement park attractions build upon stories or genre traditions already well-known to visitors, allowing them to enter physically into spaces they have visited many times before in their fantasies.”
Enacting Stories

• Games that either enable players to perform or witness narrative events
• Many games get you to follow the Hero’s Journey
• *Heavy Rain* has you act out specific events
Embedded Narratives

• The distinction between story and discourse exists in games as well
  – The story is recovered through the active work of recovering information distributed across the game space

• Two possible kinds of narratives
  – Relatively unstructured and controlled by the player as they explore the game and unlock its secrets
    • Myst
  – Prestructured but embedded within the mise-en-scene awaiting discovery
    • Prince of Persia: Sands of Time
Emergent Narratives

• Emergent narratives are not prestructured or preprogrammed, taking shape through the gameplay, yet they are not as unstructured, chaotic, and frustrating as life itself.
  – Sandbox games
  – The Sims, Minecraft

• Could also include multi-player games where story emerges from interaction between players
  – Starcraft, WoW, Leeroy Jenkins
Words of caution from a narratologist

• The myth of the aleph
• The myth of the holodeck
The myth of the Aleph

• “The Aleph is a small, bound object that expands into an infinity of spectacles, and the experiencer could therefore devote a lifetime to its contemplation.”

• Myth: Hypertext presents the reader with many (potentially infinite) narratives
Composition No. 1 (Marc Saporta)
Shuffle the pages into any order you want and read the story
The myth of the Aleph

• Ryan disagrees:
  – Hypertext doesn’t really present the reader with tons of different potential narratives

• Being able to experience the same lexia (units of text) in different orders only matters if sequence is critical in determining meaning.
  – We’re really good at piecing together out-of-order snippets of information

• Further, the units of text must be written to fit together. Many possible combinations won’t make sense to the reader.
The myth of the Holodeck

• The Holodeck is probably not the ultimate interactive experience
• Differences between first-person and third-person emotional experiences
  – Third-person player/audience: empathize with the characters
  – First-person: actually feel the pain/anger/guilt/triumph yourself
If you do experience it first-hand..

“If we consider the whole gamut of fictional characters, which ones would we really like to play: Hamlet, Emma Bovary, Gregor Samsa in *The Metamorphosis*, Oedipus, Anna Karenina, the betrayer Brutus in *Julius Ceasar*, or would we rather be characters such as the dragon-slaying hero of Russian fairy tales, Alice in Wonderland, Harry Potter, or Sherlock Holmes?

As far as I am concerned I would pick a character from the second list: which means, a rather flat character whose involvement in the plot is not emotional, but rather a matter of exploring a world, solving problems, performing actions, competing against enemies, and above all dealing with interesting objects in a concrete environment.”
Build it to understand it

It’s limiting to only examine existing games and to “wait” for new developments in the commercial game industry
Ludologists vs. Narratologists

• It’s all about the STORY!
• It’s all about the GAMEPLAY/INTERACTIVITY/PLAYER AGENCY!

• There wasn’t an example of a good combination of both
Façade

• Push on the question of the compatibility of agency and narrative

• Is it possible to build a high-agency story?

• Have to build the whole thing
  – Can’t use off-the-shelf components because they didn’t really exist
  – What do we learn from the process of trying to build it?
Game reinforcement and feedback

- Concrete player actions directly manipulate state
- Game state is primarily numeric, relatively simple
- The score is directly communicated to the player
Story not amenable to simple numeric state

Plot structure (global constraints):
- Exposition
- Inciting incident
- Rising action
- Crisis
- Climax
- Falling action
- Denouement

Characters (consistency, inner life):
- Personality
- Emotion
- Self motivation
- Change
- Social relationships
- Consistency
- Illusion of life
"Façade" as social, dramatic game

- Abstract player actions (discourse acts) manipulate social state
- Game state is heterogeneous, multi-leveled, symbolic and numeric
- Score is indirectly communicated through dramatic performance
Façade’s social games

• Affinity game
  – Player must take sides in character disagreements

• Hot-button game
  – Player can push character hot-buttons (e.g. sex, marriage) to provoke responses

• Therapy game
  – Player can increase characters’ understanding of their problems
  – Internal score counter: how self-aware a character is

• Tension
  – Not a game, but dramatic tension increases over time and is influenced by player actions (e.g. pushing character hot-buttons can accelerate the tension)
Multiple, mixable progressions

- Each social game (affinity/therapy/hot-button), plus tension, forms a mixable progression

- A progression consists of
  - Units of procedural content (e.g. beats, beat goals)
  - A narrative sequencer that manages the progression and responds to player interaction

- Multiple progressions run simultaneously and can intermix
The progressions

Beat sequencing (overall story + tension)
Beat goal sequencing (affinity game)
Global mixins (hot button game)
Therapy game similar

Beat manager
Beat library

Canonical beat goal sequence

Handlers (ABL meta-behaviors) + discourse management

Handlers + discourse
Mix-in library
The atom of performance

• Joint dialog behaviors (JDBs) form the atom of performance

• Façade consists of ~2500 joint dialog behaviors
  – Each 1-5 lines of dialog long (5-20 secs)
  – System sequences these, including transitions between
  – Most are interruptible
  – JDBs use ABL’s joint intention framework to coordinate performance
Local agency

• Players get immediate responses
  – interruption often possible
  – context-specific <-> more general <-> deflection
  – emotional
  – information revealing

• Narrative effects
  – Which topics discussed, info revealed
  – Current affinity
  – Increase in tension
Global agency

• **Long-term sequence of events determined by the characters actions**
  – Only 27 beats in the beat library, so not as much global agency as the designers hoped

• **Player’s “score”**
  – Pattern of player’s interaction is monitored over time
  – Player’s response to key moments
  – Used to modulate beats when possible

• **Some influence over beat sequencing**
  – More if we had more beats!
  – Ending beat chosen by calculus and evaluation
Lessons for game studies

• Narrative and agency can be reconciled through intermixable, dynamic progressions
  – Progressions provide narrative structure at multiple levels
  – Progression management provides responsiveness to interaction
  – The narrative is potential – interaction evokes a specific narrative progression

• Generative narrative does not require an AI-complete “author in a box”
  – Combine human authorship and autonomous generation
Useful residue of the L. vs. N. debate so far

• “Interactive narrative” should mean something
  – Not enough just to declare all games “narrative” by fiat
  – For a specific game-story, designers must clarify what they mean by “story”

• Pushes on procedurality and agency as the essence of games
  – Any attempt to combine games and narratives should respect this

• But for a design field (like games), theoretical arguments (based, e.g. on theoretical definitions of “narrative” and “game”), will never be sufficient
  – Architecture: “what IS a building?”
  – Product design: “what IS a chair?”
Design: pushing the boundaries

*The Uncomfortable Project*
• Find and play a “persuasive” game (on Friday we’ll talk about advergames, political games, simulation games)
  – Good place to start:
    • http://www.gamesforchange.org/game_categories/newsgames/
  – Suggestions:
    • http://unmanned.molleindustria.org/
    • http://ncase.me/polygons/
    • http://jayisgames.com/games/dys4ia/

• Questions to answer
  – What game did you play? (provide a link if possible)
  – What is this game simulating?
  – What story/message is it telling?
  – What did you learn or get out of playing this game?