Narrative and Conversation

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CMPS 80K, Winter 2006

February 17, 2006

Upcoming

- No class Monday
  - President's Day
  - What would it be like to have a video game about Washington, or Lincoln?
- Task breakdown document due on Wednesday (next class)
  - Details online
- No penalty for individual projects
  - Change from policy announced in class on Monday
  - Other "powerups" remain the same
- CS 161 implementation of your game
  - Interest in having a CS 161 team implement your game concept? Talk to me afterwards.

Demonstration: Interactive Fiction

- Demo of Zork
  - www.batmantis.com/zorks/
- Book and Volume
  - www.auto-mata.org
  - Nick Montfort
    - Author of “Twisty Little Passages: An Approach to Interactive Fiction,” MIT Press, 2003
    - Academic treatment of interactive fiction

Inverse Parser in Siboot

- One challenge in Zork and Book and Volume is grabbing meaning from the phrases entered.
  - Façade only looks for subphrases of meaning, and doesn't parse the entire sentence
  - Also a problem for games of Interactive Fiction
- A solution to this is to use a more limited language
  - Permits a controlled vocabulary, which can be perfectly understood
  - Make the user translate their thoughts into the limited language

Conventional Parser

- User enters a sentence (a string)
- Parser
  - Bursts this out into a sequence of words
  - Looks for words and structures it understands
    - Look for verbs, nouns, adjectives, etc.
    - See if they fit together in a meaningful way
      - Usually by looking for predefined patterns, like *verb noun* (get lantern, go north) or *verb noun "on" noun* (put sword on table)
  - If an understood structure is found, change the state of the game world according to user wishes
  - Problem: many interesting things people want to say don't fit these simple patterns, especially when conveying complex emotions, or having a conversation

Inverse Parser

- Computer figures out which commands are possible given the current game state
  - If you don't have a sword, don't permit actions using the sword
- User is presented a list of current possible actions or statements
  - Doesn't scale to large numbers of words, due to limited screen real estate
- In Siboot, the language had 128 words
- Created a 128x128 grid
  - If word X appeared, could check grid to see which following words were allowed.
  - If word 1 was "eat" then word 2 could be "cheese" but not "eat" or "sword".
  - Also had logic expressions to represent which expressions were valid at specific places in the code
- Show figure on page 329 of Crawford

Tension Between Narrative and Interactivity

- Games provide rule-driven worlds
  - Explicit goal to provide real-time photo-realism
- Narrative involves telling a 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”

Emergent Narrative

- How might strong storytelling and rule-based worlds be integrated?
  - Need to have the story be more rule-based
- Emergent narrative
  - Provide a rich framework within which individual players can construct their own narratives
  - Autonomous characters can have interactions among autonomous characters and the player

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.

Demonstration: Facade

- Façade
  - Michael Mateas, Andrew Stern
  - www.interactivestory.net
  - State of the art in interactive narrative