Interactive Drama

An “interactive drama” ... is a first-person experience within a fantasy world, in which the User may create, enact, and observe a character whose choices and actions affect the course of events just as they might in a play.

-Brenda Laurel 1986
Interactive Drama

- Interactive = ??
  - Decisions that influences the outcome
- Drama
  - Achieving a goal by overcoming obstacles
- Problems: interactive drama = oxymoron
  - How can writer control the pace, plot, etc.?
  - How can the user feel in control but be “led” through a story?
Different Approaches: Evaluation

• How many choices do you really get?
• How much drama do you really get?
• Any replay?
• Most important:
  • Find way to align player’s goals with the goals of the character
  • Player naturally does what plot demands
  • Easy for DOOM, hard for Hamlet
I. Tree from Hell

• Different plot based on each decision
• This is what people really expect
• Must create 16 scenes for only 4 decisions ($S = 2^d$)
• Very difficult to create 10 really good scenes in a movie
II. Death Trap

- Lots of “choices”
  - one takes you forward
  - some lead to death
  - some are side trips
  - some lead you back

- Usually artificially limit choices
  - Desert Island
  - Boat
  - Spaceship (Warlock)
III. Hour Glass

• Lots of choices, but choices don’t really matter
• Kinder, gentler death trap
IV. Open Environment

- Character explores and interacts with world
- D&D, role playing games
- Hard to have any plot or drama
- Hard to have interaction & interesting characters
V. Peeping Tom

- Many things happening, but can only view one at a time
- **Voyeur, NightTrap**
- Can’t change what happens
- Replay?
- Been done as a live-action play
VI. Transition Movies

- Game play followed by “reward” transition
- Lots of $$ go into transitions, less go into gameplay
- No choices on plot
VII. Hour Glass/Action Game

- Plot unfolds as user “makes” key decisions or takes specific action
- Maintains plot and story, but usually limited decisions
- Intermediate decisions can determine initial conditions for action game
- Action game may have 2-3 endings
- Often multiple endings
- Wing Commander IV
VIII. Linear with Puzzles

- Open world with puzzles that block your way
- Puzzles should be solvable from story
- No real choices in outcome (except death)
- Myst, Beyond Time, Zork, Full Throttle, Day of the Tenacle, The Dig, 7th Guest, ...
Design Sins of Linear with Puzzles

- Puzzles should be related to plot
  - 7th Guest had puzzles that had nothing to do with story
- Puzzles should be solved by what’s available in the game: “game anthropology”
- Game shouldn’t take 4 weeks, with 40 minutes of material
- Online help can avoid some frustration
IX. Online: MUDS, MOOS

- Solves problem of developing interesting characters
- Lots of choices, but what do they mean?
- Hard to control story and plot
X. Dynamically Generate Plot

- Generate choices and plot as user makes choices
- Don’t give choices that destroy overall plot
XI. Dynamically Order Plot Elements

- Have many small plot elements
- Dynamically chose from them based on user input
- Façade
XII. Computational Theater

• Mixture of computer actors and humans
• Computer/human director controls computer actors so that plot is always followed
• Online WestWorld
• Holodeck
• Beyond the state-of-the-art
  • Holy Grail on interactive drama
  • Neil Stephenson’s *Diamond Age*
Interactive Drama

Interactive game, populated by human-like AI characters with an AI director that dynamically controls an unfolding story.
Keys to Good Interaction

• Don’t make people hunt for the interaction
  • Users shouldn’t have to click on every object
  • Users shouldn’t have to talk to everybody

• In theater, lighting, sound, position leads the audience to where the action will occur

• Character to character interaction is most interesting
  • What are their goals?
  • What do they know?
  • What are they planning to do?
Character to Character

- Toughest interface
  - Must pass the Turing test
  - Full natural language isn’t there
  - Myst punted on this: no living characters
- Options:
  - Limited natural language - user guesses
  - List of specific choices - just try them all
  - List of abstract choices - in character
- Deliver the interaction you promise
Character Reaction

- Character response depends on mood, effect, ...
- Questions that you ask change mood
  - Return to Zork
- Character response changes as story progresses
  - Good way to move plot along
Characters: Video/Animation

• Video:
  • Sin of repetition -- obvious & unnatural
  • Takes lots of CD/DVD space
  • Easier for long linear scenes
  • More realistic

• Animation (Interactive Comics):
  • More flexible in action and special effects
  • Easier to splice in extra action
  • Can control detail of characters