Interactivity, Process Intensity, and Instantial Assets

Greg Costikyan
Who is Greg Costikyan?

- American Game Designer
- Science Fiction Writer
- CEO Manifesto Games
- Works on and writes about game design
Definitions

- **Process Intensity**
  - “how much a program emphasizes processes instead of data” - crawford
  - ‘on the fly’ vs embedded

- **Instantial Assets**
  - “the smallest unit of data a program performs a process on” - crawford
Games

- All games are interactive
- Most digital games have interaction in service of a linear narrative
  - Limitation of the media
- Conventional Graphic VS FPS Engine
Conventional Graphic Driven

- Static pictures to interact
- Limited to no personal movement
- Pre-Scripted
- IE Myst
First Person Shooter Engine

- Less world interaction
- Personal movement freedom
- Unscripted
- IE Halo, Unreal
Structure Use

- Branching
  - Tree of rich instances the player can choose, but many will be unplayed (wasted time/resources)

- Linear
  - “longer, and richer, game by forcing players down a linear path of seven nodes”
Deus Ex

- Built on the Unreal engine
- Conventional graphic adventure connecting ‘sets’ to create linear narrative
  - BUT has the Unreal system movement
Algorithmically-Driven System

- Game generated minute to minute
- Players actions have relevance
- Continuous Options
- Free Form Movement