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SI 410 ETHICS AND INFORMATION TECHNOLOGY
Week 11b: Ethical Game Play
THEMES

- Infosphere and game play
- Game code
- Ethical game play
INFORMATIONAL SYSTEMS AND INFOSPHERE

1. Infosphere
2. Code
3. Ethics

- Informational system = rules and context of their use
- Ludic action = any interaction in a gameworld that produces an outcome
- Infosphere = gameworld
GAMES AS INFOSPHERES (SYSTEMS)

- A construction of rules and mechanics of the game, how they interact, and form behavioral patterns.
- Floridi’s IE: moral action modeled as an information process:
  - Messages (M) invoked by agent (A) that brings a transformation of states directly affecting patient (P)
  - P responds to M with other changes or messages, “depending on how M is interpreted by P’s methods.”
- The act of playing a game is an act of agency within an infosphere.
- Ethical values and agency in-game and through simulation.
GAMEPLAY LEVELS OF ABSTRACTION

1. Infosphere
2. Code
3. Ethics

· Sicart, “Banality of Simulated Evil,” 2009

Fig. 1 An information ethics model for computer games

Miguel Sicart, The banality of simulated evil: designing ethical gameplay, Ethics and Information Technology, v11, 3, PD-INEL
CODE DEFINED

1. Collection of statutes, laws
2. Rules or regulations on a subject
3. Symbols –
1. Military or naval signals
2. Codewords for encryption
3. Cybernetics. Any system of symbols and rules for expressing information or instructions in a form usable by a computer or other machine for processing or transmitting information.
4. Bioinformatics – e.g. Genetic code
RULES AND VALUES: THOUGH SHALL NOT...

1. Harass
2. Bad language
3. Impersonate Sony
4. Break law
5. Modify software
6. Pirate
7. Obey
8. Espouse “anti”-philosophy
9. Lie
10. Upload porn or copyrighted materials
11. Hack software
12. Exploit bugs
13. Mimic
14. Emulate
1. Invisible hand of cyberspace is building an architecture that perfects control
2. Recognizing how code regulates (not necessarily transparently)
3. Protection of values
   1. Structural (checks and balances)
   2. Substantive (outcomes)
4. Intellectual property, privacy, free speech, sovereignty
5. Pessimistic conclusion
SYNTHETIC WORLDS

1. Concept of membrane – porous border between synthetic and real
   1. eBay sales of virtual world objects
   2. End User Licenses

2. Governance “isolated moments of oppressive tyranny embedded in widespread anarchy.” (p. 207)

3. Requirements: institutions of collective decision making; power; AI (code for Non-Player Characters)

- Castronova, Synthetic Worlds (2005)
SERVER COMPONENTS OF VIRTUAL ENVIRONMENT

1. Infosphere
2. Code
3. Ethics

- Driver
  - Memory, parsing, data structures
- Mudlib (game physics)
  - timers, movement, magic, mechanisms
- World model
  - Maps, objects, avatars, [fully descriptive]
- Instantiation [runtime]
  - E.g., Everquest, WoW

COMBINATION TECHNIQUES

1. Infosphere
2. Code
3. Ethics

- Coding [C, C++, Python, etc.]
- Scripting [e.g., MUF] [multi-user forth]
- Data [database(s)]

FuzzBall MUCK: http://www.belfry.com/fuzzball/
ENGINES AND DATABASES

- Engine = hard-coded rules
- Database = everything else
  - Scripting language
  - Template database
    - Definition of objects [and avatars]
    - Functions, performance limitations
  - Instantiation database
    - Player character data

1. Infosphere
2. Code
3. Ethics

# CODEBASE DIFFERENCES

1. Infosphere
2. Code
3. Ethics

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CODE TECHNIQUE VARIATION

1. Infosphere
2. Code
3. Ethics


SERVER COMMUNICATION

1. Infosphere
2. Code
3. Ethics
OVERALL ARCHITECTURE

1. Infosphere
2. Code
3. Ethics

SERVER CLUSTER ARCHITECTURE

1. Infosphere
2. Code
3. Ethics

Figure 2.2  Server cluster architecture.

Richard Bartle, Designing Virtual Worlds
ETHICAL PLAYERS

- Agents having the capacity and the duty within a “ludic infosphere” to constitute themselves as ethical agents.
  - Playing configures the game state
  - Playing also configures
    - the agent’s ethical capacities and relationships
    - the infosphere itself
    - the impact of playing the game as perceived from outside

- Example: Manhunt

· Sicart, “Banality of Simulated Evil,” 2009
ETHICAL GAME PLAY

- The outcome of designing the relations between the mechanical and semantic levels of abstraction

- Most “ethical” games fail because they focus on capabilities and capacities at the mechanical level.

- Ethical game play can exploit the tension between player as agent (avatar) within the gameworld and player as input provider for the “state machine”.

• Sicart, “Banality of Simulated Evil,” 2009
ETHICAL GAME DESIGN

1. Create an ethically relevant game world.
   - Introduce ethics as important part of world (eg not Tetris or Mario).

2. Do not quantize your player’s actions: let them live in a world that reacts to their values.
   - World reacts to ethical choices. (e.g., Manhunt)

3. Exploit the tension of being an ethical player.
   - Push the boundaries of ethical conventions while letting players exert full ethical agency. (e.g., September 12th, Dues Ex, Shadow of the Colossus)

4. Insert other agents with constructivist capacities and possibilities.
   - Open to players creating and implementing their own values. (e.g., Eve Online)

5. Challenge the poietic capacities of players, by expanding or constraining them.
   - Limit ability to do what is wrong in the gameworld. (e.g., Manhunt)

• Sicart, “Banality of Simulated Evil,” 2009
MILITARY-ENTERTAINMENT COMPLEX

1. Infosphere
2. Code
3. Ethics

Nexus of computer simulation and virtual reality (35 year history)

Research-Entertainment Complex

Visible realism, “physics” abstractions, 3D data abstractions
Economic forces fuel the revolving door (Atari-NASA 1982)
Desire for fusion of digital and real preceded the full availability of technology (p. 305)

Networks and simulation: SIMNET
Selective functional fidelity, collective training, high environment-low display
Importance of government procurement processes
Battle simulation to arcade games to PC games (p. 322)

Institute for Creative Technologies. [http://ict.usc.edu/](http://ict.usc.edu/)

GAMES

- Eve Online: http://www.eveonline.com/
- Manhunt: http://www.rockstargames.com/manhunt/
- DefCon: http://www.introversion.co.uk/defcon/
- GTA4: http://www.rockstargames.com/IV/
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Slide 7, Image 1: Miguel Sicart, The banality of simulated evil: designing ethical gameplay, Ethics and Information Technology, v11, 3, PD-INEL

Slide 15, Image 1: Richard Bartle, Designing Virtual Worlds, PD-INEL

Slide 16, Image 1: Richard Bartle, Designing Virtual Worlds, PD-INEL

Slide 17, Image 1: Richard Bartle, Designing Virtual Worlds, PD-INEL

Slide 18, Image 1: Richard Bartle, Designing Virtual Worlds, PD-INEL

Slide 19, Image 1: Richard Bartle, Designing Virtual Worlds, PD-INEL