

# Art 380: Game Theory

Neal McDonald, M.S., M.F.A.  
[mcdo@umbc.edu](mailto:mcdo@umbc.edu)

Seventh Lecture

# Schedule

1. Test
2. Chapter 8
3. Card games

# The Test

- chess questions refer to the boards on the same page
- 15 questions \*6 points each
  - =90 => you got 10 free points
- 4 pages, put your name on each

# Chapter 8: Defining Digital Games

- Digital games are distinct from their platforms
  - Of course: emulators work

# Chapter 8: 4 traits

What computers can do that other game media cannot:

1. Immediate Interactivity
2. Information Manipulation
3. Automated Complex Systems
4. Networked Communications

# 1/4: Immediate but narrow interactivity

- Continuous feedback, continuous motion
- Input is quite limited: buttons, mice, voice
  - complex input usually just gets converted into keypresses
  - mocap is hard
- Even mechanical interaction can be interesting at 30FPS

## 2/4: Information Manipulation

- Generally, the game has more data than it can reveal
  - sometimes 1000s of times more
- Rules are data
- Data disclosure can be rationed
  - fog of war
  - goals of non-player characters

## 3/4: Automated Complex Systems

- Overcomes rule-set-complexity limits due to human brains
  - though limits are still present; people must participate, and they'll want to know what's going on.
- Different from "Intelligent Systems"
  - insects are smarter than any game AI
  - thank goodness
- Complexity as theater
  - fire, Zerg Swarms, smart missiles

## 4/4: Networked Communication

- Say, you can connect your computing machine to others, with wires!
- “Social Gaming” is a current focus
  - player vs. player – earliest form
  - WoW/MUD: clans, quests, collaboration
  - trophies, gamer score, etc.

# For Next Time

- Chapter 9
- Brothers in Arms postmortem