



Feedback Loops and Balance

CSC430/HCI530

Feedback loops: a special dynamic

- Positive: reinforcing
- Destabilize a game
- Cause a game to end faster
- Emphasis on the early game
- Examples: 4X games
- Negative: balancing
- Stabilize a game
- Cause the game to take longer
- Emphasis on the late game
- Examples: football, basketball (minor – after scoring, the ball is given to opponent)

Feedback loops: good or bad?

- Positive: end the game quickly when someone starts to emerge as a winner
- Frustrating for others, who feel they no longer have a chance
- Negative: prevent a dominant early strategy
- Keep players feeling that they have a chance to win
- Frustrating, because can be seen as punishment for winning

Components of feedback loops

- A sensor that monitors the game state
- A comparator that decides whether to take action based on the sensor
- An activator that modifies the game state when the comparator decides so

Introduce/eliminate a feedback loop

- Be aware of your game mechanics
- Introduction is easy: find a parameter (or a set), based on its value (or combination of values) change another parameter (or a set)
- Elimination: modify the sensor, comparator, or activator
- Reduction of the effect: introduce another feedback loop of the opposite type

Challenge

- You likely had some interesting play experiences last time (hi Sean). Change the rules of the game you played to introduce/remove a feedback loop in order to alter the aesthetics.
- Playtest. Did you succeed? What else can you tweak? How about a feedback loop of the opposite type?