

- What is the player supposed to do?
- Short-term goals (maybe just survive)
- Long-term goals (find the princess)
- Best games have a mix of short, medium, long-term goals

## Progression

- Does the player accumulate resources (power, technology) further into the game?
- Computer games: gain experience, powers, equipment; access new levels, abilities
- Traditional games: often lack progression in this sense
- Powerful design tool for increasing engagement

## Variety of Encounter

- How many different situations can arise within the game?
- Computer games: different enemies, levels
  - often variety achieved by human-scripted content
- Traditional games: different scenarios arising
  - chess: different arrangements of pieces
  - bridge, poker: different hands play differently
- Greater variety of encounter -> greater replay

## Performance and Deliberation

- Performance:
  - player knows what to do, may not be able to do it
    - golf, Counterstrike
  - physical challenge
    - e.g., reaction time
  - arcade-style games; action games
- Deliberation:
  - player analyzes situation, takes time to plan the best course of action
    - chess, Civilization
  - mental challenge
    - e.g., logical reasoning
  - most board and computer games

What is a game: Elias et al.

- "whatever is labeled a game in common parlance" (Elias et al., 2013)

Rewards, anything that has a positive emotion. Spectral: rewards players with nice sights (Assassin's Creed viewpoint), completeness (purification), glory (high school, PSN trophies), sustenance: health pots, extra lives, entropy: finite resources, not replenished, Inflation (keep playing or fall behind)

# Clarity

- How does the player know what to do?
- Does the player know what actions are available?
- Does the player know the effect of actions taken?
- The player must have options
- How many options? Are the options viable?

Choice

Interlude: Hedonic Adaptation. "people get used to things" don't give out all the rewards at once; schedule them

## Resources

- Many choices involve resources: how to spend gold? Should I save up iron to buy a battleship or spend it on three destroyers?
- Resources can be tangible (crystal, gold) or intangible (time, attention)

What resources are available? What tradeoffs must the player make? *of a game* *Story*

- primarily for fun / entertainment
- measurement of success
- players make choices
- rules
- objectives / goals
- challenge / opposition
- self-contained, no impact on real world

- ### Structure of the Monomyth
- Preamble
    - before the story
    - miraculous origins
  - Departure
    - hero in the ordinary world
    - "call to adventure"
    - setting out into the perilous outside world
  - Initiation
    - trials and allies
    - supernatural gifts
    - confrontation with the main enemy
    - acquisition of the prize
  - Return
    - bringing the prize back
    - coda to overall story

## What is a game: Juul

- "A rule-based formal system, with variable and quantifiable outcomes, where different outcomes are assigned different values, where the player exerts effort to influence the outcome, and the real-world consequences are optional and negotiable." (Jesper Juul, 2005)

## Halford & Halford Reward Types

- Glory: accomplishments to be proud of
- Sustenance: get to keep going
- Access: unlock areas
- Facility: unlock abilities
- Pacing: starts low & increases quickly. needs to have highs & lows to contrast (comic relief)

## What is a game: Caillois

- Playing a game has several characteristics:
- Voluntary: you don't have to play
- Separate: takes place within predefined limits
- Uncertain: outcome unknown
- Unproductive: doesn't accomplish anything
- Governed by rules
- Make-believe: takes place in fictitious reality

## What is a game: Costikyan

- "A form of art in which participants, termed players, make decisions in order to manage resources through game tokens in the pursuit of a goal." (Greg Costikyan, 1994)
- Players, who make decisions
- Resource management
- Goal rules
- rules constrain possible/legal actions
  - not every physically possible action is legitimate
  - computer games: attempt to make illegal actions impossible, but don't (hacks, bugs)
- "playing the game" means taking actions within the framework of the rules
- designer: must create rule system so that rich variety of action sequences take place
- goals provide meaning to players' actions
- usually known to player (but different players might have different goals)
  - In Illuminati: New World Order, the Discordian player wins if enough Weird groups are in play
- achievement can signal end of the game
  - but might not: MMOs can be open-ended by design; timed games (many sports)

## LeBlanc's Taxonomy

- |  |   |
|--|---|
| • Sensation<br>– aesthetics            | • Fellowship<br>– socializing               |
| • Fantasy<br>– imagination             | • Discovery<br>– exploring, learning        |
| • Narrative<br>– story, emergent story | • Expression<br>– customization, creativity |
| • Challenge<br>– competition, agon     | • Submission<br>– immersion in the game     |

## Booker's 7 Plots

- |  |   |
|--|---|
| • <u>story</u> Overcoming the Monster<br>– mission to destroy a powerful enemy | • Comedy<br>– complex conventions: misunderstandings, undoing of division |
| • Voyage and Return<br>– excursion to wonderland                               | • Tragedy<br>– fatal flaw leads to self-destruction                       |
| • Rags to Riches<br>– from wretchedness to happily ever after                  | • Rebirth<br>– spiritual or physical imprisonment redeemed                |
| • Quest<br>– search for a prize  |   |

## What is a game: Salen/Zimmerman

- "A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome." (2003)
- Artificial: occurs in fictitious reality
- Conflict: struggle between agents
- Rules: actions are structured
- Quantifiable outcome: there is a goal and you can tell who won

*rules*

- known to the player?
  - sports, board games: yes
  - computer games: usually not
- may change over time (patches, nerfs, versioning, legal decisions, actions by governing body)
- usually static within a single game

## Positive Emotions

- Fiero • feeling of triumph
- Shadenfreude • pleasure in another's misfortune
- Delight
- Wonder • amazement and joy at mastery, novelty  
• meditating on future pleasures
- Anticipation • daydreaming about lottery ticket  
• Eureka!
- Illumination • Pleasure of insight, recognition  
• sense of inner contentment and well-being
- Peace • relaxation

## Feedback

- Negative feedback: more difficult the further ahead you are
    - pool: fewer balls to aim at
  - Positive feedback: easier when you are ahead
    - Monopoly: more property, more income
- Implementing negative feedback:
- first to advance costs extra (breaking trail)
  - bonuses for being behind (Mario Kart)

## Things to Avoid

- Tedium
  - inventory management
  - micromanagement in general (?)
- Repetition
  - going over old ground
- Helplessness
  - cutscenes, stuns
- Hostility