Game Analysis 2: Gameplay

EECS 376 Fall 2018

Outliers

Rules

- 3 to ∞ players
- Simultaneous turns
- A choice will be announced
  - Cats or dogs, Pepsi or Coke, etc.
- Face left or right to vote
- If you face the same way as the **majority** of other players, you are out
  - Sit down :(
- Win by being in the final pair

Mechanics

The individual **rules** of a game:

- What happens on this keypress?
- What happens when my character's bounding box overlaps with that coin's bounding box?
- How long do I have to beat this level?

The **physics** of a game, figuratively speaking (sometimes, literally speaking).

Mechanics—cont.

- Mechanics tend to take effect in the short term
  - Milliseconds, seconds, individual turns
- They comprise individual components of the game...
  - Power-ups, money, units
- ...or how the player is allowed to interact with the world
  - Jumping, headshots, painting

Gameplay (Dynamics)

What happens when the mechanics and the player all hang out in the same room?

- Long-term **patterns**: how do different mechanics interact?
- **Emergent** play and **metagaming**: how does the community talk about and deliberately change gameplay?
- **Orchestrated** dynamics: how can the designer deliberately change or affect gameplay?

The Point of this Lecture (Long-winded)

Gameplay comes from the interplay among mechanics, and from the interactions between the player and the mechanics.

We as game designers mostly manipulate mechanics and specific details of the game (we can’t tell players how to play).

We can, however, learn to identify strategies, patterns, systems, etc. in our games to more richly discuss and understand **why our design choices encourage the behaviors that they do.**

Patterns of Gameplay

How do we talk about a game's mechanics?

How do we learn to do well at a game we've never played before?

Why is Rock, Paper, Scissors such a bad game?

Talking About Game Mechanics

- *Breath of the Wild* has no verb “to explore,” yet it’s reasonable to describe the gameplay as “exploring” the world
- *Minecraft* never tells you to “explore,” but its rules clearly encourage behavior that looks like exploration
- *Civ VI*, while it doesn’t have the verb “to explore” as such, clearly affords actions that are more like exploration than the first two examples, yet one rarely talks about “exploring” the world in that game

Outliers Strategy

How did you know what to do?

- You probably didn’t stop to think of a strategy
- Nor did you have to ask me for what you should do

Even though I didn’t **explicitly tell you how to play**, chances are good that you just kind of… figured it out from the rules.

How?

Isn’t that weird?

Roshambo: A Terrible Game

Rules for Roshambo:

- 2 to ∞ players
- Simultaneous turns
- Each player chooses among rock, paper, and scissors; then reveals their choice
- Players who are defeated are eliminated
    - If all players would be eliminated, everyone stays in and the round repeats

How should you play this game?*

*Assuming that victory is your end goal. Often, we participate in games for other purposes than just “winning” them, as evidenced by Roshambo’s consistent use as a tiebreaker/decider in social contexts when fair random number generators are difficult to come by. But I digress.

Roshambo++

This is really lame!

- Everything is the same, so there's no way to strategize
- There's nothing to *explore* and learn about how the game might be played
- It's effectively random who wins

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Rules for Roshambo++:

- Exactly the same as Roshambo, but
- Winning as rock earns you 10 points
- As scissors earns you 5 points
- As paper earns you 2 points
- First to 30 points ***or*** 5 victories is the winner

Gameplay Systems

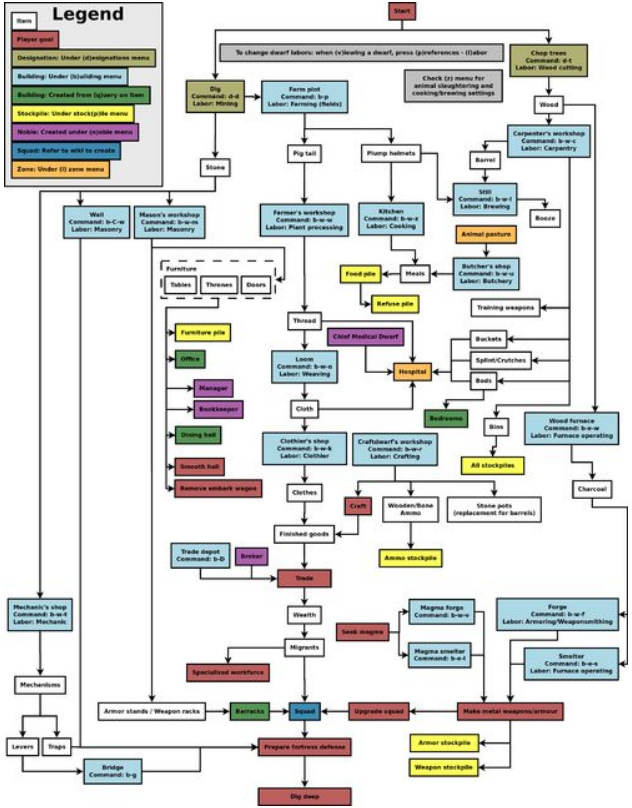
How can a game interact with itself?

How do we encourage/discourage certain behaviors on the part of our players?

Economies

Internal mechanical patterns that the player **witnesses** and **influences**, but which are separated from their behavior.

- Often complex simulations of “realistic” systems
  - Literal economies
  - Also ecological systems
  - Or social networks
- Some games (*Factorio*, *Dwarf Fortress*) lean into the joy of watching complex systems run



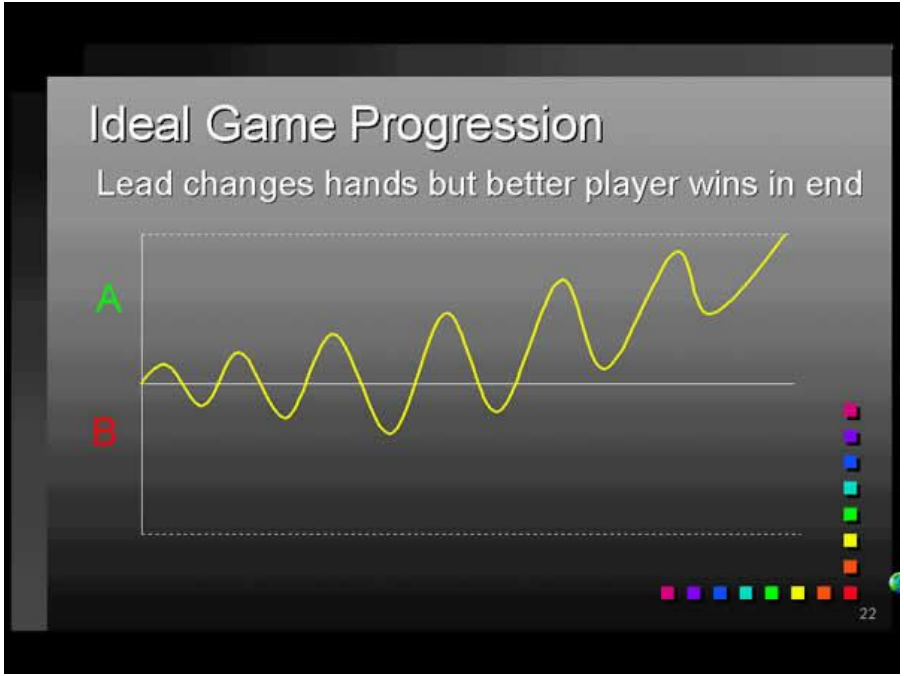
Dwarf Fortress “quickstart” guide

Positive Feedback Loops

Self-reinforcing patterns of play.

“This thing happening makes it **more likely** that this thing will happen again.”

- Outbreaks in *Pandemic* lead to more disease cubes on the board
- Killing enemies in *Blades of the Shogun* means fewer patrols
- Taking over planets in *Star Wars: Rebellion* gives the Empire more resources to build their army



Negative Feedback Loops

Self-interfering patterns of play.

“This thing happening makes it **less likely** that this thing will happen again.”

- Most cards in *Epic Spell Wars* target the strongest player
- “Rage” in *Super Smash Bros* lets characters do more damage as they become hurt
- Dirty dishes in *Overcooked!* come only after you complete orders

Feedback Loops—Commentary

As a designer, you want skill to translate to success at your game.

- Does that mean that the better player should win every round of *Skull Girls*?
- Should a skilled group of players be guaranteed to succeed when they sit down to play *Hanabi*?

Does that mean that you **must have feedback loops**?

- *Nidhogg* has almost no feedback loops—two players of equal skill could very well play endlessly
- *Super Smash Brothers* has lots of conflicting feedback loops, so it's hard to say which way it leans

Emergent Gameplay

What sorts of gameplay patterns arise from our game's design?

How do we as players interact with what we consider to be "good" or "bad" gameplay tendencies?

Interesting Strategies

Certain strategies are made available to players who have a thorough knowledge of the game's rules.

- Awareness of where enemies/other players will spawn
- Rushing to get to (and stay in) one particular spot
- Deliberately targeting the weakest or strongest player
- Grinding/gold farming

Metagaming

Other strategies require knowledge of **how other people** think about and play the game.

- Sportsmanship
  - Certain behaviors that aren't explicitly banned by the rules, but which are frowned upon by the community
  - Avoiding certain legal actions that would result in negative in-game consequences for you as a player
- Team composition
  - Choosing characters, items, etc. in such a way to compliment your teammates' choice and to counter your opponents'
- Formations
  - Physical arrangements which are determined to serve a player's goals

Cheesing

And still other strategies only work when you know that the other player is sticking strongly to a **particular meta** strategy.

This is called “cheesing.”

- Often short-term plans that work to counteract a particular aspect of the current popular strategies
- Not likely to be employed often or for the entire duration of play
  - There are **reasons why** the meta evolved how it did
- Typically high-risk, high-reward strategies
- Likely to piss your opponents off

Self-Awareness for Game Designers

Our job as designers is to create experiences for people.

- This means that we need to know what kind of experiences we want to give to folx
- But it also means that we need to think about **how people will play** our games

Pay attention to the strategies that people employ while playing your game!

Orchestrated Play

How do we teach someone to play our game?

How do we keep our game interesting to expert players?

Tutorials

How should we teach players about our game?

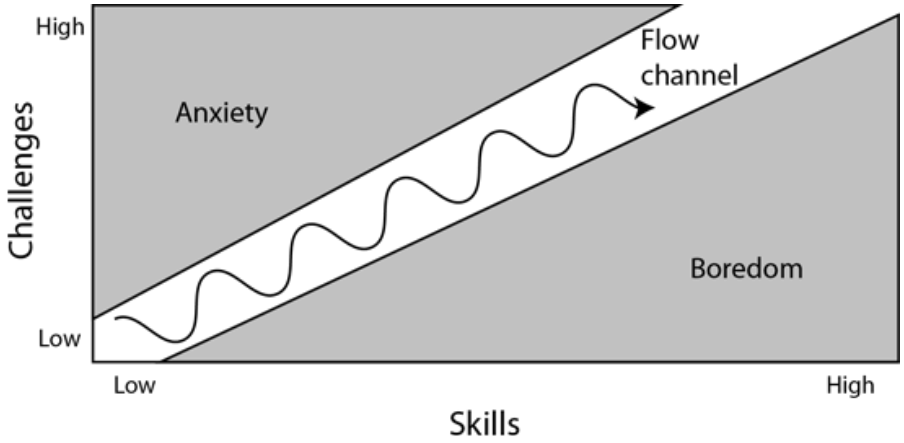
- How can we **literally teach** them?
  - i.e., what are the pedagogical structures that we can provide for them?
- How do we change the game's rules and behavior as they become more skillful?
- How do we avoid overwhelming the novices or patronizing/boring the experts?

Difficulty

How do we keep players engaged?

- How do we prevent skillful players from becoming bored?
- How do we prevent novice players from becoming overwhelmed?

Must we as designers be the **arbiters of challenge**?



Difficulty

Moderating challenge

- Difficulty settings
- Dynamic difficulty
- Accessibility options
  - e.g., *Celeste* and *Spider-Man*
- Self-imposed challenges
  - More/less powerful equipment
  - Arbitrary restrictions (speedruns, Level 1 runs, blindfold runs etc.)
  - Routing options

Players want to have fun.

- Provide them with tools to moderate difficulty
- And trust them to be wise with them

Genre and Gameplay

What is genre?

Do we describe games by their rules or by their dynamics?

Can experiential descriptors meaningfully categorize games?

Genre Definitions

This is a hard word to define, but I'm fond of Lauren Berlant's definition, from *The Female Complaint:*

> Genre is an "aesthetic structure of affective expectation."

- Games fall into a genre by acknowledging our expectations for that genre
  - This is not the same as **adhering** to those expectations
- New genres show up when we change what we care to expect or what we allow ourselves to expect

Defining a Game

We classify games by their mechanics:

- First-person shooters
- Racing games

And/or their gameplay:

- Puzzle games
- Platformers

Imagine...

- *SUPERHOT* without shooting
- *Rollcage* without driving

Or...

- *Portal* with easily-traversed levels
- *Mario* with a big, flat expanse to walk around on

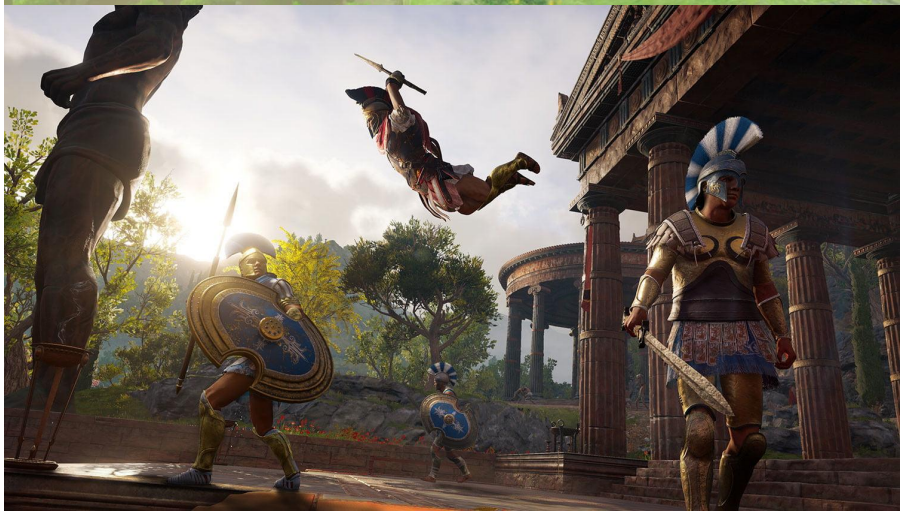
Experiential Genres

Are there ways to classify games that don’t focus on their mechanics or gameplay?

- Define the term, “Open World”
- Now do, “Sandbox”

Are these two different genres?

Are there other genres that rely on experiential descriptors for their genre?



Design Exercise

I can’t assign work, but try the following:

1. Pick your favorite game
2. What are its mechanics, its rules?
3. How does it teach you those rules?
4. What are the interesting interactions among the rules?
5. What are the descriptors that you use for important elements of play (wall-jumping, shield flashing, etc.)?
6. How did you learn those skills?