COMP08035 Computer Games Design

Week 08 Lecture – Fun and Balance In Games Design

Are We Having Fun Yet?

Stephen King's IT
InfiniteCoolness.com

"If the…game designer is having more fun than the player, you have made a terrible mistake."

Sid Meier

What Is Fun? - Dictionary

fun *n.* **1.** A source of enjoyment, amusement, or pleasure.
2. Enjoyment; amusement: have fun at the beach.
3. Playful, often noisy, activity.

intr.v. **funned**, **fun·ning**, **funs** *Informal* To behave playfully; joke.
adj. Informal Enjoyable; amusing: "You're a real fun guy" (Margaret Truman).
Idiom: for/in fun As a joke; playfully.

[Possibly from fon, *to make a fool of*, from Middle English fonnen, *to fool*, possibly from fonne, *fool*.]

What Is Fun?

- Very easy to list activities that are fun <u>for you</u>, or are not fun <u>for you</u>

- Abstract concept that is impossible to define with any real meaning

- If you asked most people why they play computer games, they would say "it's fun", but they'd be unable to explain what they mean by "fun"

More About Fun (1/4)

- Tends to suggest excitement and pleasure, e.g. roller coaster, joking around with friends, playing cards

- What about anger, jealousy, sorrow, guilt, regret etc?

- A movie with a sad ending isn't fun, it's entertainment

- Is "entertainment" a better word than "fun" for our purposes?

More About Fun (2/4)

Is fun in games about problem solving?

- Sid Meier claims that "A [good] game is a series of interesting choices" (Rollings & Morris 2000, p. 38)

- Koster (2005) claims that fun arises from trying to understand the pattern of a game

More About Fun (3/4)

Or is it a combination of a number of different types of fun, where different games emphasize different types of fun?

- Hunicke, LeBlanc, and Zubek (2004) list 8 types of fun: Sensation, Fantasy, Narrative, Challenge, Fellowship, Discovery, Expression, and Submission

- Garneau (2001) list 14 forms of fun: Beauty, Immersion, Intellectual Problem Solving, Competition, Social Interaction, Comedy, Thrill of Danger, Physical Activity, Love, Creation, Power, Discovery, Advancement and Completion, Application of an Ability

- For a game designer light enjoyment (fun) is relatively easy to inspire in the player
- Complex emotional issues are far more difficult
- In particular, unpleasant or painful emotions are a challenge

Theory Of Un-Fun

- According to Rogers (2010), "you have no guarantee that your game idea is going to be fun"

- An idea that looks like fun on paper might not actually be fun once it's in a game

- As developers continually work on and play their game they lose all sight of whether or not it's fun to play

Theory Of Un-Fun

Rogers' Theory of Un-Fun:

"…start with a "fun" idea. As you develop the game, if you find something in the game that is not fun (or un-fun), then remove it. When you have removed all the un-fun, then all that should be left is the fun."
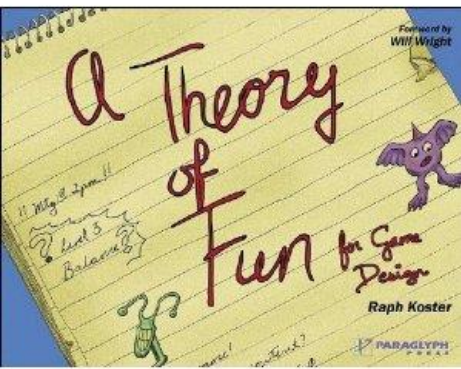
Raph Koster

- Games are fun because they teach us interesting things and they do it in a way that our brains prefer – through systems and puzzles

- "with games, learning is the drug" (Koster 2005 p40)

- People need to feel free to try things and to learn without being judged or penalised
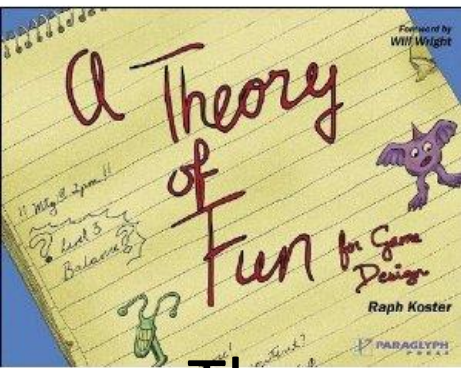
Raph Koster

- The most successful games are the ones that provide us with interesting tools such as weapons or magic (or even angry birds) and allow us time to experiment with them

- The "acquire, test, master" model is intrinsic to good game design

- There is constant progress and a continually evolving challenge, but there is always room to experiment and to figure things out through intuition

What is Game Balance?

A balanced game is one in which the principal determining factor for the player's success is his/her skill at the game
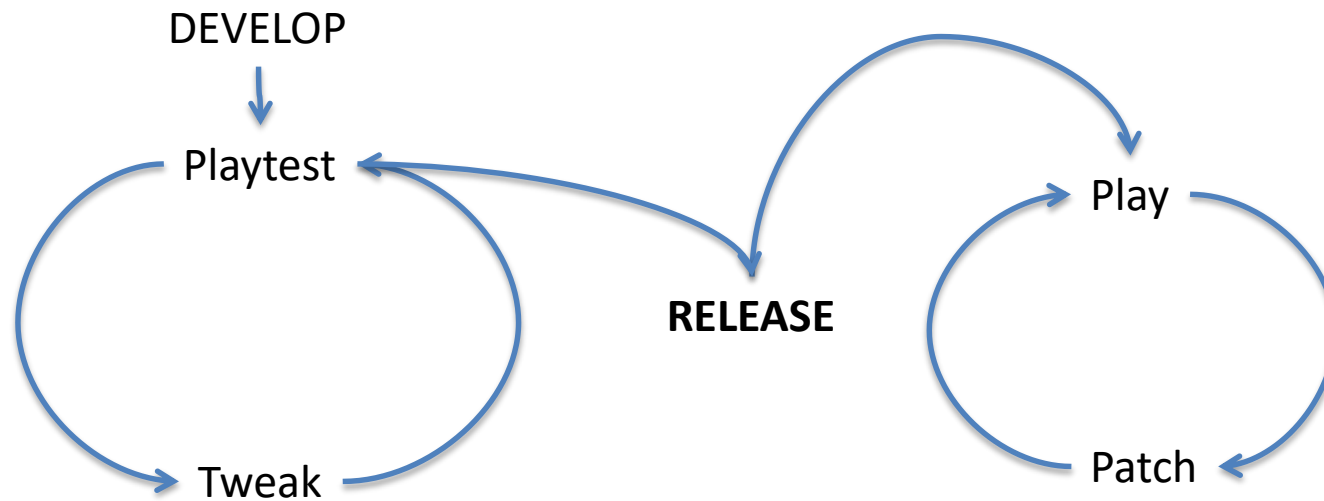
Achieving Balance

- Traditional method time-consuming, expensive and prone to error
- No formal rules govern game balancing because it's so complex
- Two broad classes of balance: *static* and *dynamic*

Achieving Balance

- Traditionally trial and error

DEVELOP

→

Playtest

Tweak

RELEASE

Play

Patch

Static Balance

- Concerned with the rules of the game and how they interact

- Aim is to ensure that the game is fair and no dominant strategy can ruin it

Dominant Strategy

- One that dominates all others by being the best one to choose under any circumstances
- Very complex to identify in game design because of the number of variables involved
- A dominant strategy can ruin a game
- Find by playtesting, playtesting, and more playtesting

Symmetry

- Easiest way to balance a game

- Players and AI all have the same starting conditions and abilities

- In most cases leads to boring gameplay

- Better to aim for a <u>form</u> of symmetry where conditions and abilities are <u>equivalent</u> rather than the same

Transitive Relationships

- One-way relationship between two or more entities
- X can beat Y, Y can beat Z, Z can't beat anyone
- Balance by giving the more effective entity a higher cost
- Cost can be anything, not just gold or points
- Very commonly used in games, especially fps
- Used to drive the player forward in the game

Intransitive Relationships

- Rock, paper, scissors – scissors cut paper, paper wraps stone, stone blunts scissors
- Two players
- Balanced, 3-way intransitive relationship
- Commonly used model for balancing rts games
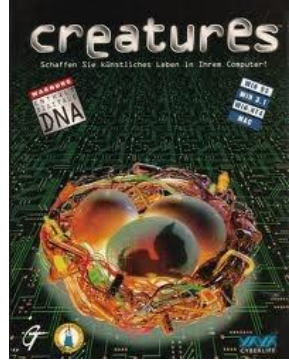- Also used for rpg and racing games

Intransitive Relationships

- Net payoff matrix for Rock, Paper, Scissors

|	Scissors	Paper	Rock
Scissors	0	1	-1
Paper	-1	0	1
Rock	1	-1	0

Emergence

- Simple rules combine to produce complex results

- Players are able to do things in the game world that were not intended by the designers

- Can be used to create a game that stands out from others

- If wrongly used, can create a dominant strategy or other serious game flaws

Feedback Loops

- Being ahead in a game can make it easier for the leading player and harder for others

- Need for care in case the followers have no way of catching up, and leader has a runaway victory

- Balance positive and negative feedback in the game to prevent this
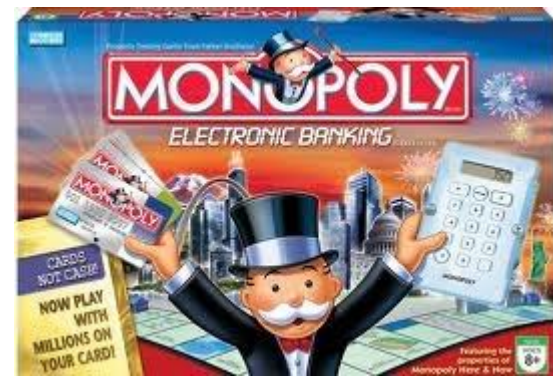
Dynamic Balance

- How the balance changes with time and player interaction

- Aim to provide a game that is internally consistent and fair

- Don't forget it also has to be fun!
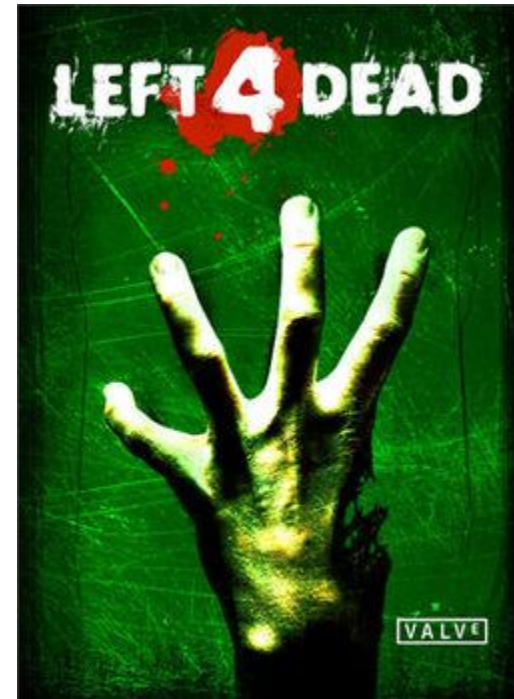
Stagnation

- Player is stuck, with no way to go on

- Player doesn't know what to do next

- Players should <u>always</u> know what to do next – if they don't, it's a failure in design

Avoiding Trivia

- Players should not be bothered with constant trivial decisions if they don't want to

- Let the player decide whether they will control all the details of the game, or whether they want the AI to do it

Difficulty Levels

- Player can select level – easy, normal, hard
- Game can tailor difficulty dynamically to suit the player's skill level, e.g.
  - Tougher enemies
  - More numerous enemies
  - More intelligent enemies

Summary

- A balanced game will:
  - Be internally consistent
  - Ensure that player skill, not random factors, determines victory
  - Ensure that all players have access to the same (or equivalent) core options
  - Ensure that attributes for which the player pays with points are orthogonal (basically, no unwanted side effects)
  - Ensure that combination and emergence don't destroy the balance
  - Provide a consistent challenge
  - Provide the player with a perceivably fair playing experience
  - Avoid stagnation
  - Avoid trivialities
  - Allow setting of difficulty level (where appropriate)

Emotions In Your Game

Some questions about emotions in your game:

1. Does my game have an emotional dimension? What emotions will my game world include?

2. Where does emotion fit in the entertainment value of my game? Is it a key element?

3. Do emotions motivate characters in the game and/or the player?

Emotions In Your Game

Some questions about emotions in your game:

4. What emotions am I trying to inspire in the player? How will I do this? What will be at stake?

5. Will the player have fun in my game world? How will I make sure they do right from the start?
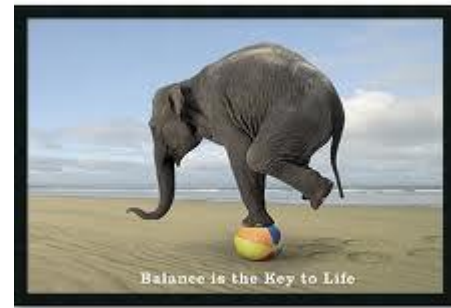
Questions About Game Balance

1. If your game includes conflict between opposing forces, are their capabilities symmetric or asymmetric? If asymmetric, how will you balance them?

2. Will the starting conditions in the game be symmetric or asymmetric?

3. Are the relationships in the game mostly transitive, intransitive, or a mixture?

Balance is the Key to Life

Questions About Game Balance

4. Try to devise a payoff matrix for your game. Do any dominant strategies appear?

5. Are your game's challenges solvable only by predefined means, or can some/all be solved by emergent means?

6. Does your game include positive feedback? If so, how will you prevent runaway victory for the first player who gets ahead?

Balance is the Key to Life

Questions About Game Balance

7. Is the player's role in your game to restore, maintain, or destroy some kind of balance?

8. Do the challenges in your game increase steadily in difficulty? Any peaks or troughs?

9. Is there any element in your game that might seem unfair to the player?

10. How will the player know what to do next? How will you prevent stagnation?

Balance is the Key to Life

Questions About Game Balance

11. Does the player have to spend time looking after trivia in the game? Can he/she choose to automate some/all of this?

12. How will difficulty levels change in your game? How will the difficulty level affect the nature of the challenges?

Balance is the Key to Life

Practical:

Work on researching and writing your Game Design Document/Pitch. **Book a time slot for your team pitch.** Record progress in your personal blogs.

Paisley students please note that your deadline for booking a date and time for your pitch is Friday of this week.