

Game Mechanics



** with material from Cindy Poremba, OCAD U*

Defining Mechanics in MDA

(MECHANICS, AESTHETICS, DYNAMICS DESIGN MODEL)



Hunike, Leblanc, & Zubek, 2007



Driving Mechanic



Driving Mechanic



Driving Mechanic



Driving Mechanic



Mechanics → Aesthetics



- Mechanics:
 - Driving, Collecting

Studio Ghibli films:
Hayao Miyazaki

“Before any of the levels had been created Mr. Miyamoto had Mario running around and picking up objects in a small ‘garden’ which he uses in all his games to test gameplay elements. “A lot of the animation was actually in there before any of the game” explains Goddard. “Mario’s movement is based on good physics, but you have bits on top that you plug in so you can do things you shouldn’t be able to do. They spent a lot of time working on the swimming, it’s harder than running to get the feeling right, they didn’t want you to avoid the water, they wanted to make it an advantage and fun to dive in.”

Giles Goddard on Super Mario 64




Feel of the gameplay (sensation) & Feelings evoked by gameplay



- **Sensation**
 - *Game as sense-pleasure*
- **Fantasy**
 - *Game as make-believe*
- **Narrative**
 - *Game as drama*
- **Challenge**
 - *Game as obstacle course*
- **Fellowship**
 - *Game as social framework*
- **Discovery**
 - *Game as uncharted territory*
- **Expression**
 - *Game as self-discovery*
- **Submission**

Journey





*"We wanted to make an online game [that brought] an emotion that has never been done before in online games. If you look around at online games in the console market, it's pretty obvious that no other games give you this feeling of connection with each other, of understanding. **The goal was to create a game where people felt they are connected with each other, to show the positive side of humanity in them. A lot of games today have a list of quests, places to go, items to collect and rewards to receive... We just ignore each other. So in order to make players care about each other, we have to remove their power, and remove their tasks.**"*

Jenova Chen, re: Journey

Mechanics Exercise #1

- Can you identify game mechanics at work?



Examining Mechanics

- Every activity has an action that is fun in itself.
 - Step #1: Try to identify the core mechanic from the elements that provide structure or enhancements to the mechanic.
 - Example: Angry Birds
 - Core fun elements:
 - Flinging birds
 - Knocking down structures

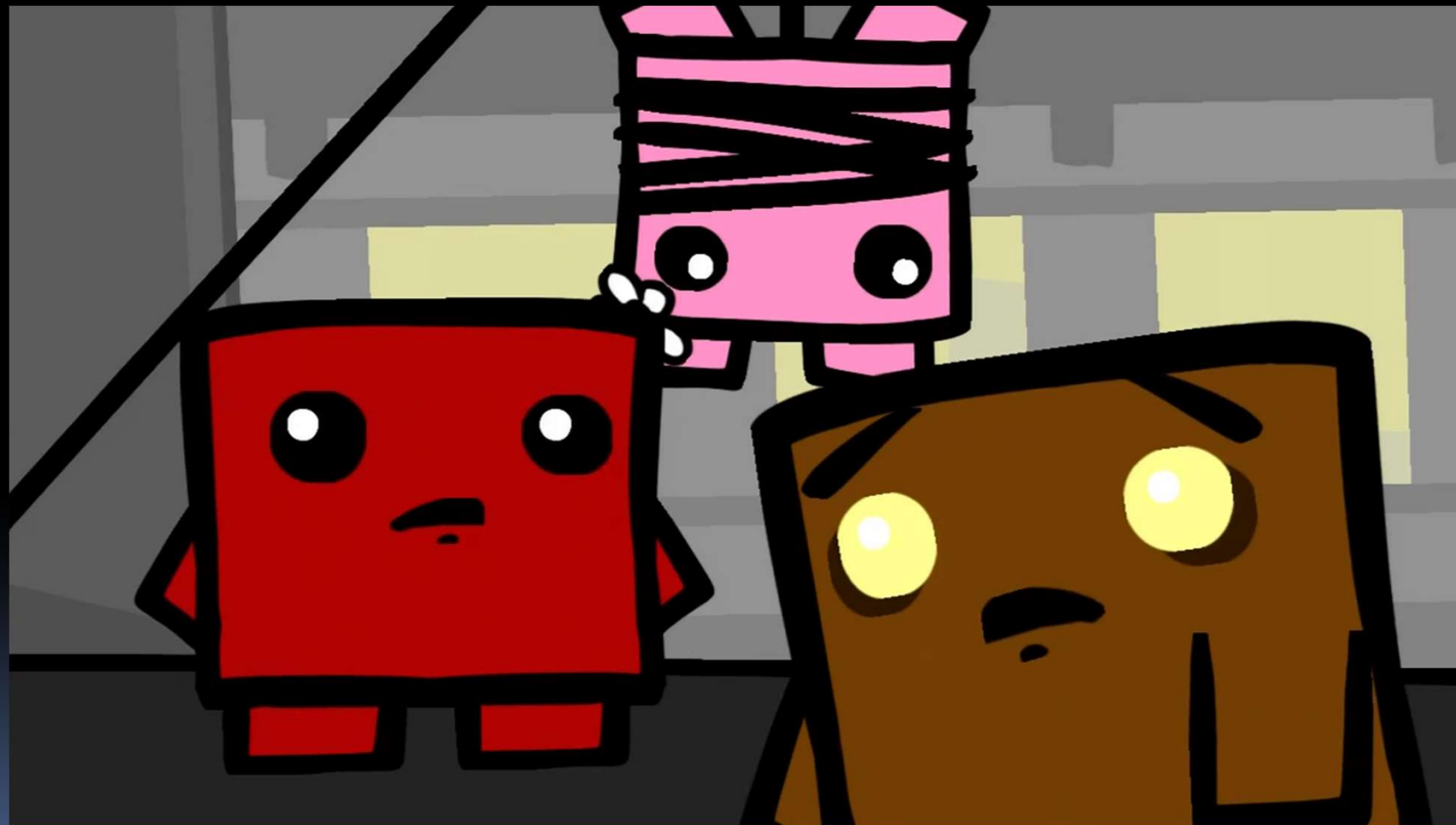
} Can't have a game without these parts
 - Enhancements:
 - Sound and visual effects
 - Cartoonish design

} Helps the game, but doesn't make the game.

Mechanics – Donkey Kong



Mechanics – Super Meat Boy



Mechanics – Katamari Damancy



Mechanics – Dear Esther



Mechanics – Braid



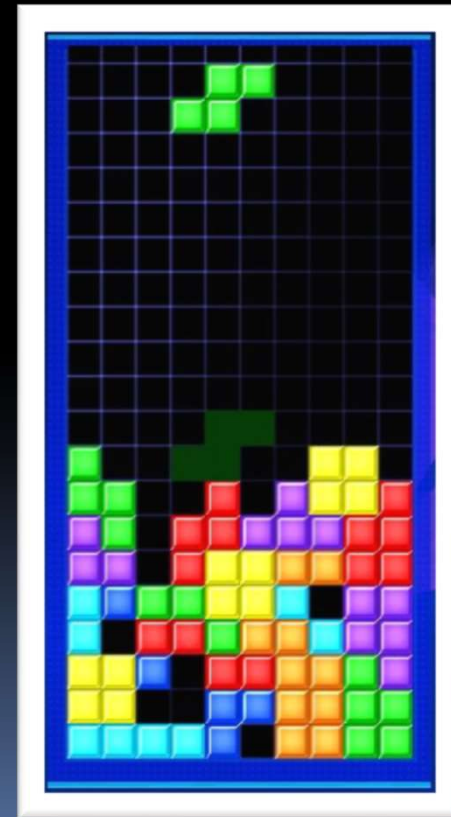
What is a Game Mechanic?

- Something fundamental that one plays with.
- Something that provides the player with a satisfying sensation.
- Something that lends itself to more extensive interactions.



The game has mechanics too

- The game itself has things that it can do to the player, that also add to the interaction.
- Examples:
 - Speeding up
 - Adding more obstacles
 - Bullet hell
 - etc.



Making a mechanic

- For these exercises:
 - Theme or Subject
 - **Mechanic**
 - Feeling, Meaning or Value
-
- ```
graph TD; A[Theme or Subject] -- USES --> B[Mechanic]; B -- TO CREATE --> C[Feeling, Meaning or Value];
```

# Exercise #2: Identify mechanics

- Little Big Planet
- Katamari Damancy
- Journey
- Prince of Persia
- Tetris
- Legend of Zelda
- Pokemon
- Grand Theft Auto
- Final Fantasy
- Tomb Raider
- Street Fighter
- Destiny
- Pac-Man
- Wii Fit
- Angry Birds
- Candy Crush
- Kingdom Hearts
- Silent Hill
- Shadow of Colossus
- Temple Run
- Madden NFL
- Space Invaders
- Rock Band
- Dance Dance Revolution
- Flappy Bird
- Donkey Kong
- Fruit Ninja
- Brick Breaker
- Mariokart
- Halo
- Smash Brothers
- Cooking Mama
- Minecraft
- Brick Breaker
- Resident Evil
- Portal
- Last of Us
- Wii Tennis
- Uncharted

# Exercise: Life is Strange

- *“Changing the past can sometimes lead to a devastating future”*

