What makes a game fun

Introduction to game design

PRESS START

Jean-Baptiste Boin
What we won’t discuss today

• Many elements are needed to make a great game
  – Story
  – Artwork
  – Genre

• We will mainly focus on the gameplay in general
What is a game?

- A game ≠ a toy → problem solving
- A game ≠ work → playful attitude

“A game is a problem solving activity, approached with a playful attitude”

(Jesse Schell)
A set of rules

- Game designer: creates/organizes these rules
- Board games vs. computer games
Case study: Super Mario Bros. (lvl 1)

Released in 1985 on NES
Sold 40.24 million copies (fourth best-selling game ever)
Case study: Super Mario Bros. (lvl 1)

Nice article: [http://auntiepixelante.com/?p=465](http://auntiepixelante.com/?p=465)
Affordance
Affordance

- Concept coming from the design world (*The Design of Everyday Things*, Donald Norman)
- Making things “obvious” to use
Affordance

Rayman Origins (PS3, Xbox360, Wii), 2010
Affordance

*Fantasia* (Mega Drive), 1991
Core mechanics

• One core gameplay

Super Mario Bros. (NES), 1985

Sonic the Hedgehog (Mega Drive), 1991
Core mechanics

- One core gameplay

Gran Turismo 6 (PS3), 2013

Mario Kart 8 (Wii U), 2014
Core mechanics

- One core gameplay

*Call of Duty: Black Ops* (Xbox 360, PS3, Wii, Windows, Mac), 2010

*Pokemon Snap* (Nintendo 64), 1999
Core mechanics

- Dual-core

*Tomb Raider* (Windows, Mac, PS3, Xbox360), 2013

*Final Fantasy VII* (PS), 1997
Core mechanics

• Multi-core

*The Legend of Zelda: The Wind Waker* (GameCube), 2002
Core mechanics

• “Many”-core

Mario Party 9 (Wii), 2012
Gameplay loops

Micro

Medium

Macro

*The Legend of Zelda: Skyward Sword (Wii), 2011*
Gameplay loops

Objective  Challenge  Reward

Super Mario Bros. (NES), 1985
Gameplay loops

- Specificity of “sandbox games”
Risk and reward

Pacman (arcade), 1980

Credit: Edmund McMillen
Risk and reward

Super Meat Boy (Xbox, Windows, Mac), 2010

Credit: Edmund McMillen
Managing difficulty

Credit: Jesse Schell
Managing difficulty

Credit: Jesse Schell
Managing difficulty

Credit: Jesse Schell
A cautionary tale

US

UK

Direct feedback!
Feedback

• Used as a reward
• Hierarchy in actions

Super Street Fighter IV (PS3, Xbox 360), 2010
Feedback: make your game juicy!

Credit: M. Jonasson, P. Purho
Bad feedback

*Link: Faces of Evil (Philips CD-i), 1993*
Great feedback

*Fruit Ninja* (mobile), 2010

*Angry Birds* (mobile), 2009
Great feedback

Rayman Legends (Wii U, PS3, Xbox 360, Windows), 2013
Tips for a successful game

• Easy to understand rules/world
• Polished core gameplay
• Work on different level of achievements
• Nice difficulty curve
• Feedback
For going further

*The Art of Game Design: A Book of Lenses*, Jesse Schell

*A Theory of Fun for Game Design*, Raph Koster
Last words

- The human brain is not so evolved
- Play games!
- Bad games can teach a lot too
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GAME OVER

Jean-Baptiste Boin