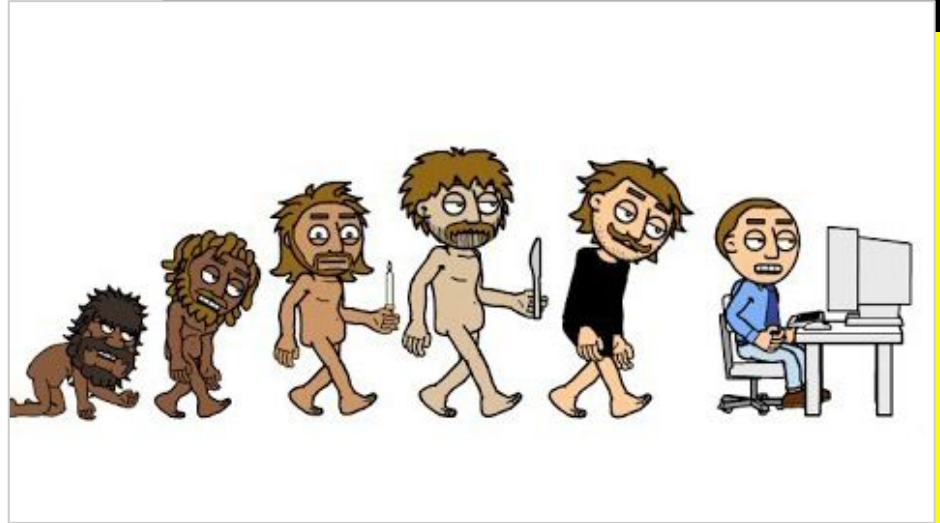


Computer Games



The Human Species

The human species has evolved
based on the ability to adapt...



Natural Basis of Game Design



Homo Ludens

The Romans used the same word “**Ludos**” both for **fun** and **elementary school**.
It's innate to learn by playing.



Homo Narrans

“Evidence strongly suggests that humans in all cultures come to cast their own identity in some sort of narrative form. We are inveterate storytellers.”

Owen Flanagan

Why People Play?

Gratifications in Video Games

Gratifications Sought by Players

- Recognition
- Competition
- Empowerment
- Leadership
- Socialization
- Challenge



Uses and Gratifications Theory

Needs Gratified by Video Games

Affective: Role-Playing and Customization

Personal Integrative: Advancement, Mechanics, Competition, and Discovery

Social Integrative: Socializing, Relationship, and Teamwork

Tension Release: Discovery, Role-Playing, Customization, and Escapism

From Yee (2007)

Game Elements

What is a game?

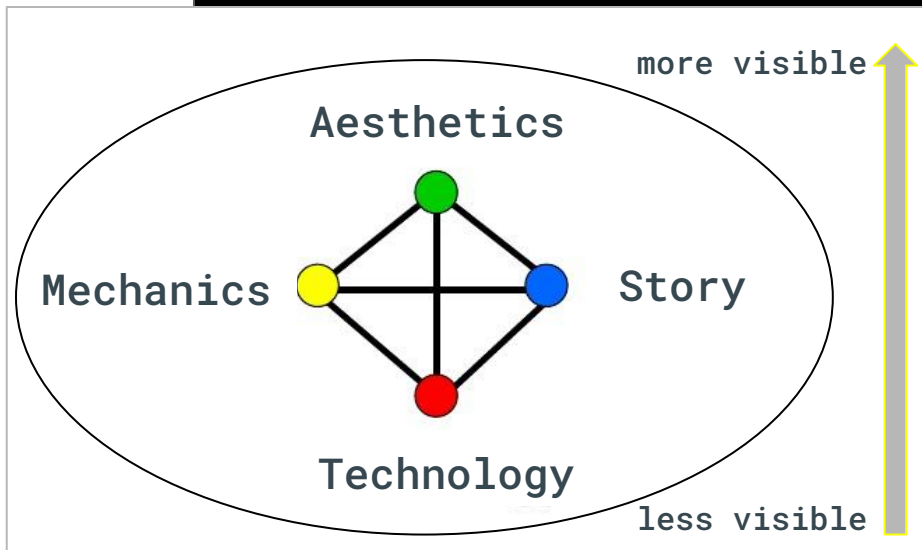
A game, like most artistic mediums, is just a means to create an **Experience**.

The **experience** is **key** to good game design.

When **someone plays** a game they are **experiencing** something.

The **Elemental Tetrad** is a way to **balance** the **parts** of a **game** to create a satisfying experience. And what are these parts?

Elemental Tetrad



Another Definition

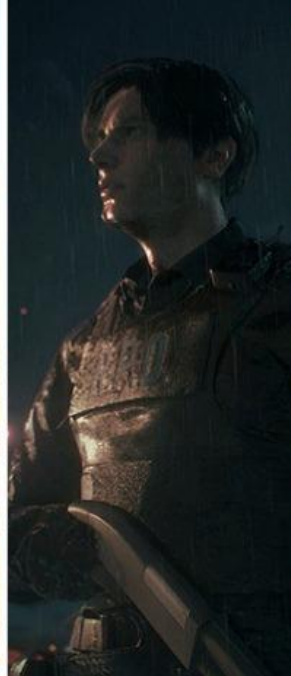
“A game is a form of **interactive entertainment** where players must overcome **challenges**, by taking actions that are **governed by rules**, in order to meet a **victory condition**.”

Rollings & Adams “on Game Design”



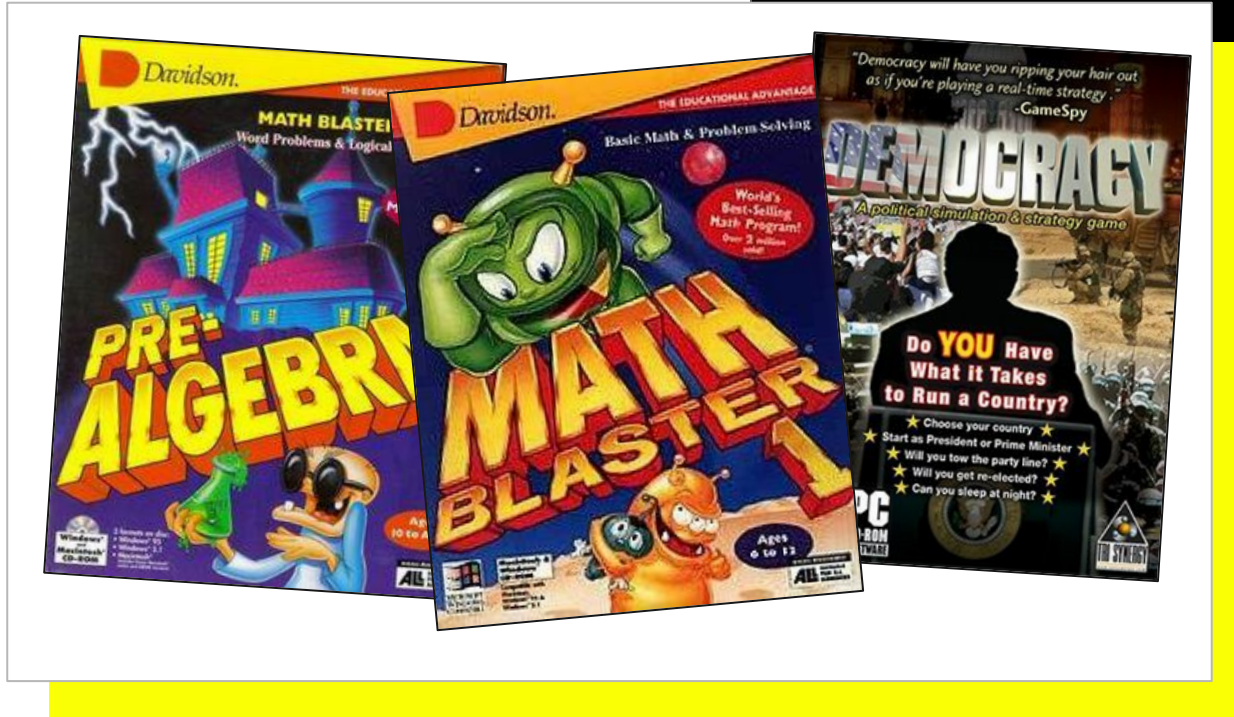
Video Game Markets

Entertainment



Is it all just for fun?

Eduainment



Is it all just for fun?

Training



Is it all just for fun?

Health



Is it all just for fun?

But **FUN** is Still Important!

Serious Games

- Edutainment /Games-Based Learning
- Simulations or Simulation Games
- Games for Health
- Persuasive Games
- Organizational-dynamic games
- Militainment
- Art Games
- News Game
- Advergames / Edumarket Games



Gaming for a Better World?

Jane McGonigal

We spend 3 billion hours a week as a planet playing videogames. Is it worth it? How could it be MORE worth it?

TED Talk



[Jane McGonigal | TED2010](#)

["Gaming can make a better world"](#)

Digital Game Industry



**64% OF US HOUSEHOLDS OWN A DEVICE
THAT THEY USE TO PLAY VIDEO GAMES.**

The average gamer is **34 YEARS OLD.**

Gamers age 18 or older represent
more than **70 PERCENT** of
the video game-playing population.

60 PERCENT of Americans play video games daily.

2018

SALES, DEMOGRAPHIC,
AND USAGE DATA

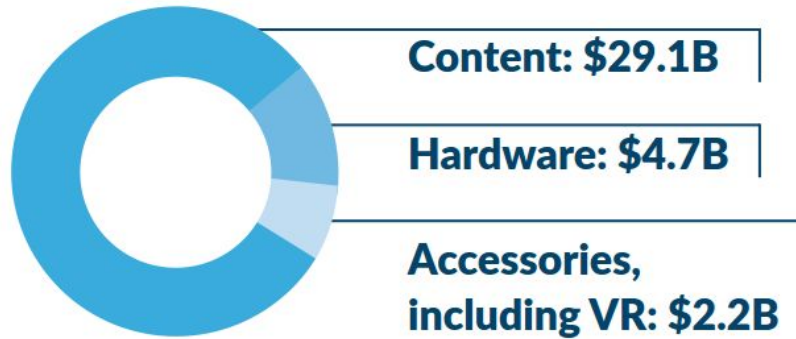
ESSENTIAL FACTS

ABOUT THE COMPUTER
AND VIDEO GAME INDUSTRY



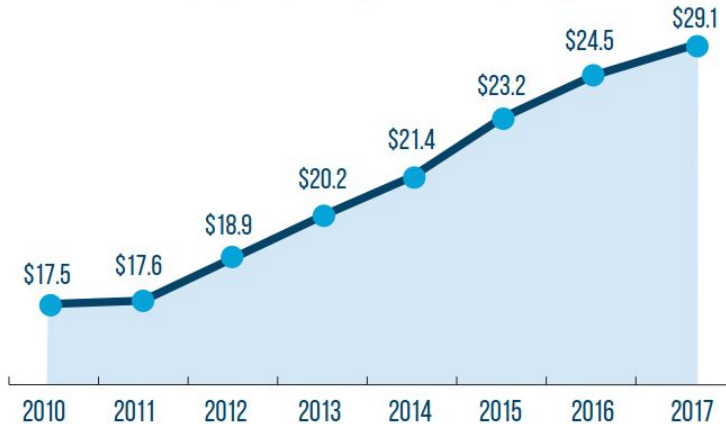
entertainment[®]
software
association

Games Industry Sales



Source: The NPD Group

ANNUAL US VIDEO GAME CONTENT SPEND,
2010 - 2017 (IN BILLIONS)



Source: The NPD Group

Boys vs Girls?

Adult Women

Represent a greater portion of video game-playing population (33%) than boys under 18 years (17%).



Who Buys Games?

The **average age** of the most **frequent** game **purchaser** is **36**.

Most Frequent
Game Purchasers

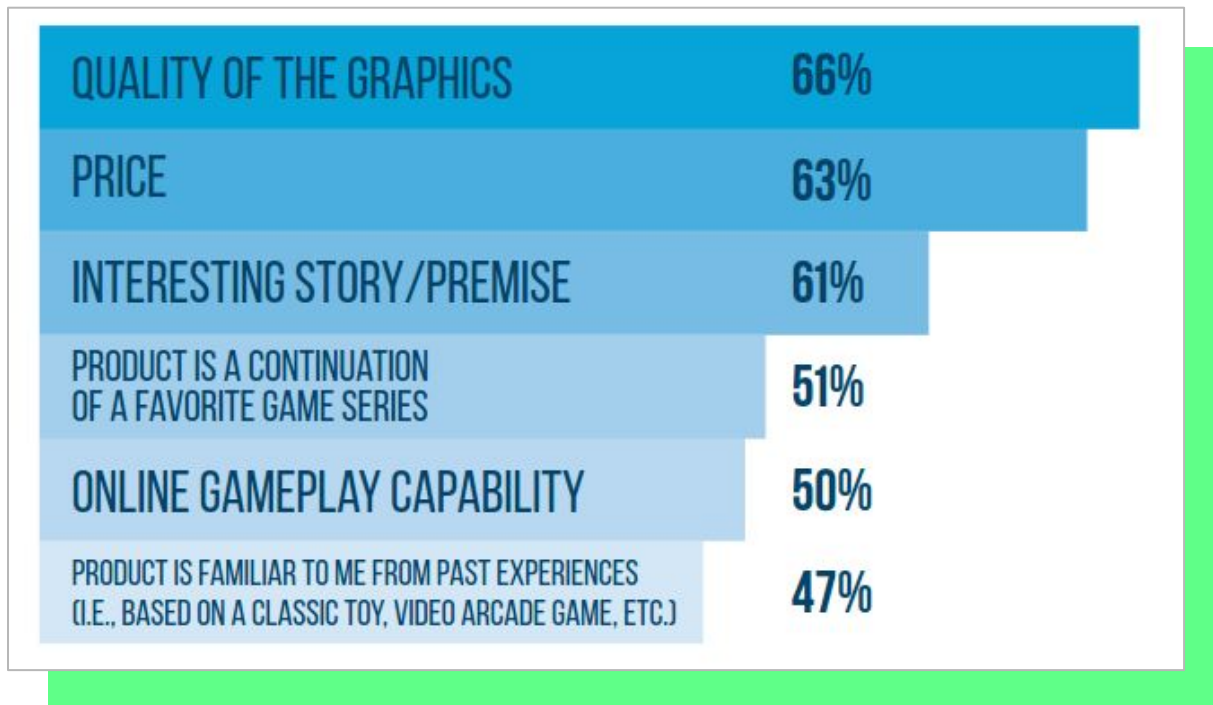
61% ARE MALE

39% ARE FEMALE



Why do They Buy Them?

Factors Influencing Decisions to Purchase Video Games



Games Industry Employment

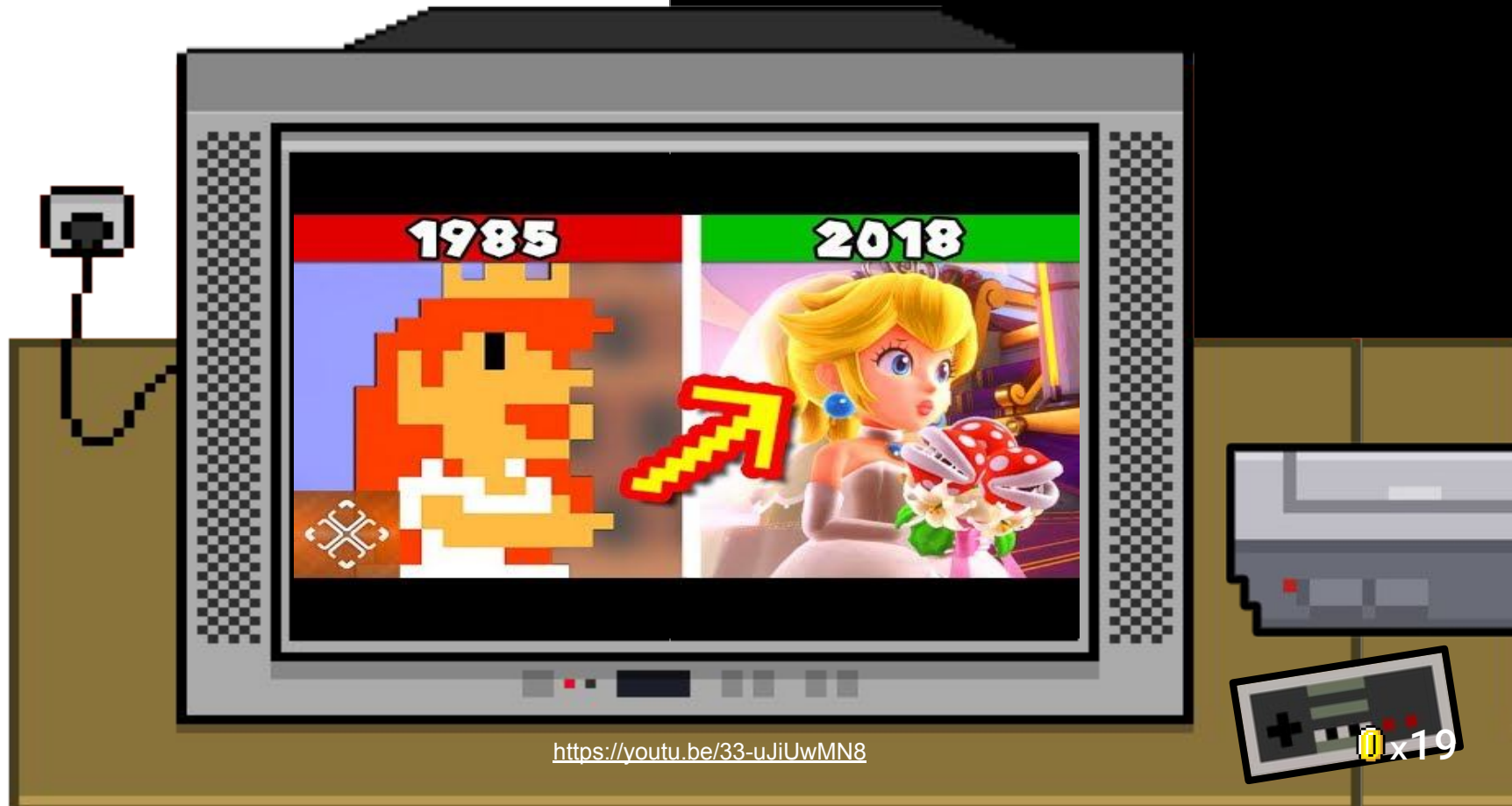
There are now over **65,000 WORKERS** directly employed at game software publisher and developer locations in the US.

Employees in the industry earned an average compensation of **\$97,000 PER YEAR.**

The US video game industry's value added to US GDP is more than **\$11.7 BILLION.**



Birth of Video Games



<https://youtu.be/33-uJiUwMN8>

Ethics in Video Games



Interfaces

Hardware and Graphics have evolved...

But the game mechanics did not keep up the pace, despite device innovation

- Wiimote
- Kinect
- AR
- VR
- ...

(you can use these here...)

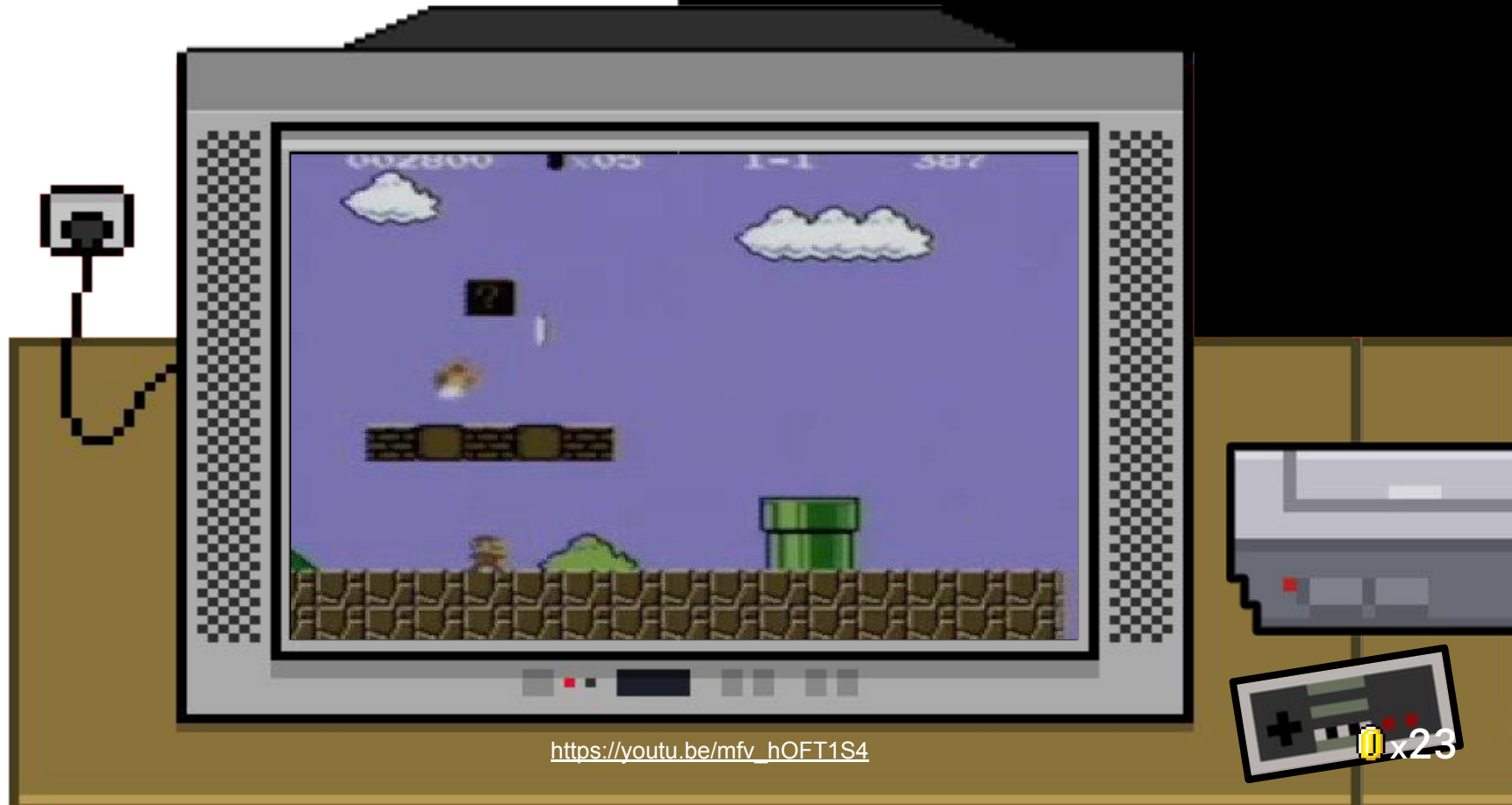


Graphical Evolution of Video Games (1950 - 2018)



<https://youtu.be/IsPPWWIV-T8>

TED Talk - David Perry on Video Games



Computer Games

