

Introduction to Game design

Trust me! It's just an introduction ;-)



Nana Tian 21/02/2022

Explosion of MetaVerse

Users use metaverse to comm

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“When you live in a shithole, there's always the **Metaverse**, and in the Metaverse, Hiro Protagonist is a warrior prince.”
— Snow Crash by Neal Stephenson



MetaVerse from a game perspective



Second life



Minecraft



Fornite



Core mechanisms of MetaVerse



- Immersive experiences



- Virtual Identity

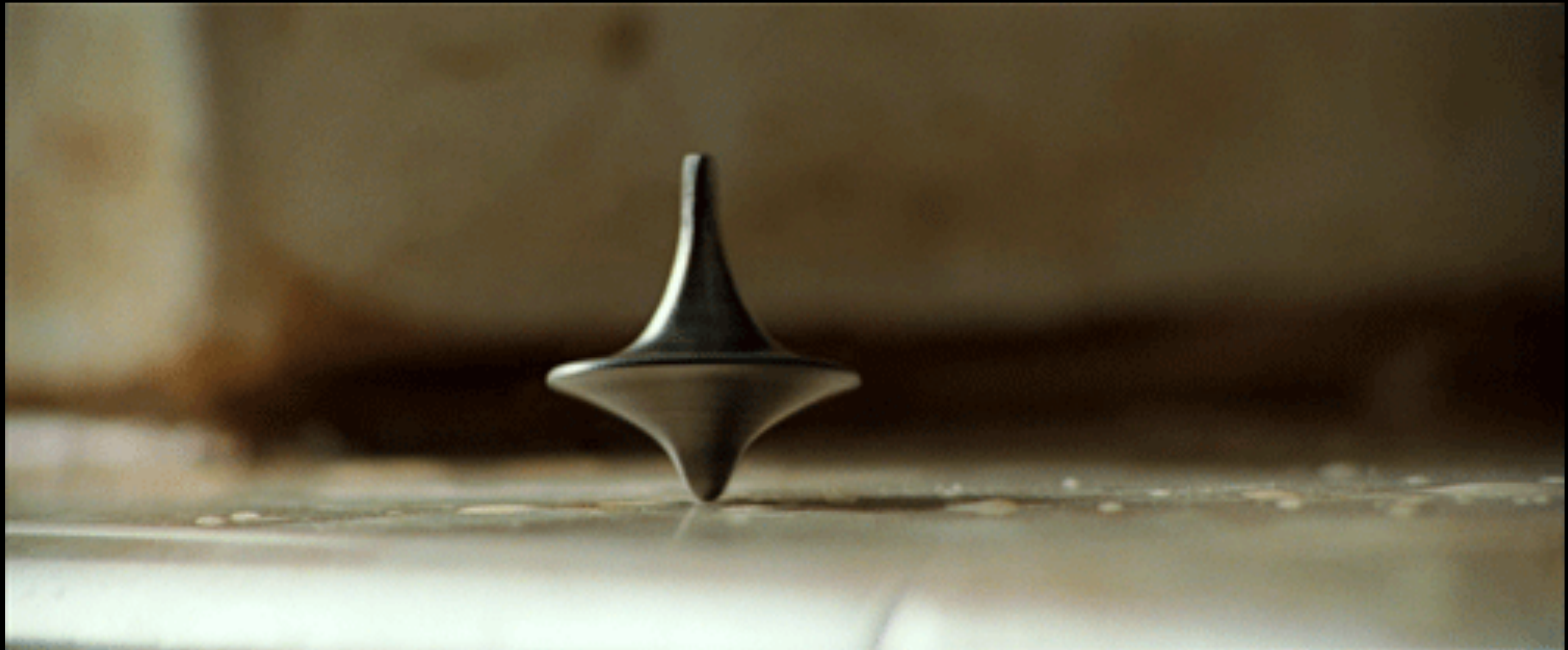


- Virtual Economy

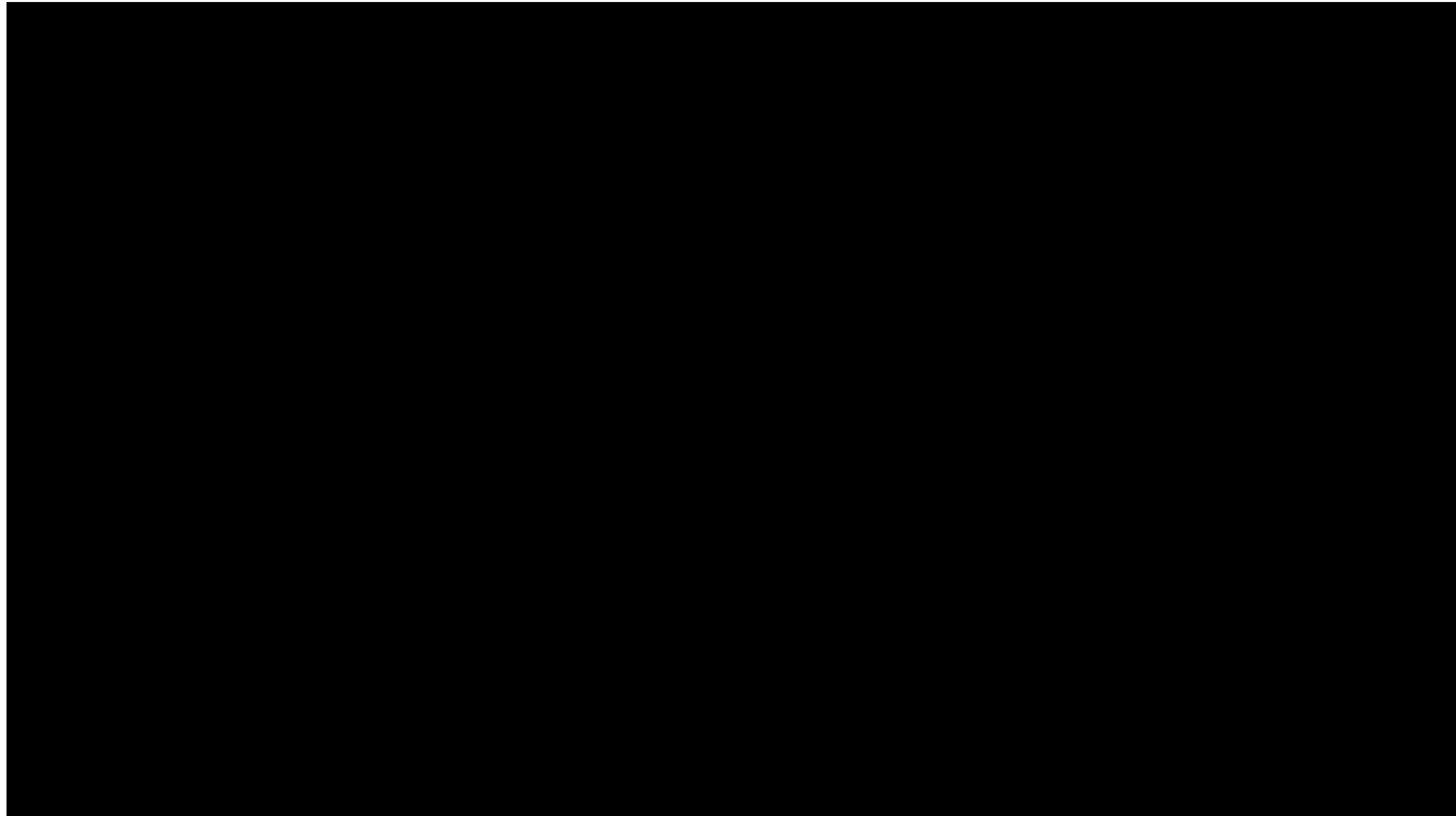


- Virtual community rules

Back to the Reality (Limitations)



Back to the Reality (Limitations)



Expected

Back to the Reality (Limitations)



True Reality

This is just an
Introduction!

Game Design is a pretty broad topic!



What is Game Design?

The Million Dollar Question.



Game design is the act of deciding what a game should be¹.

¹The Art of Game Design by Jesse Schell, CRC Press (2008)

What is Game Design?

我们经常交流想法
We bounce ideas off each other.



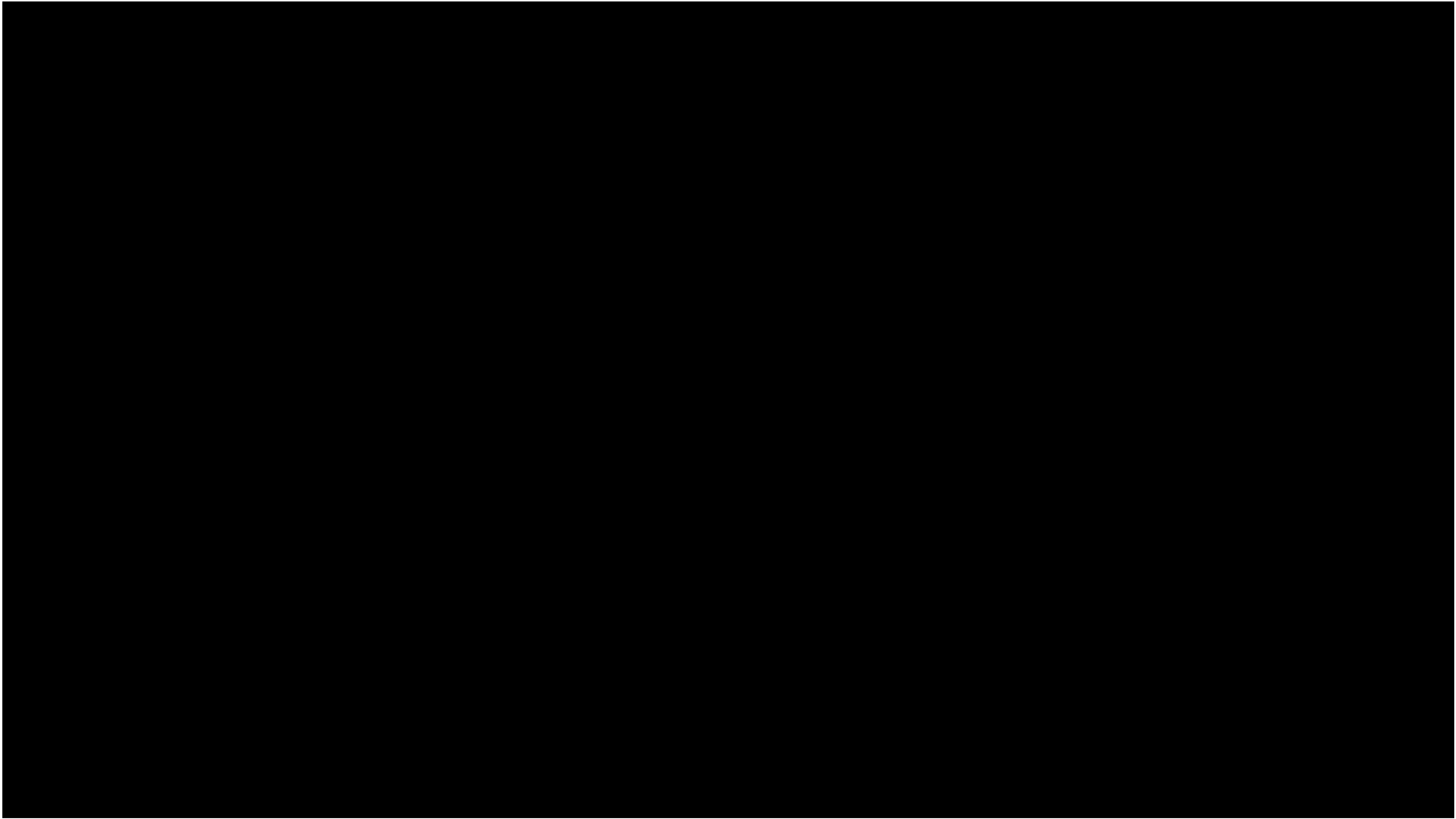
Inspiration: The tricks are to constantly listen and observe.

我想 我做游戏就是为了自我表达

I make games to express myself, I guess.







EVERYONE 10+



ESRB

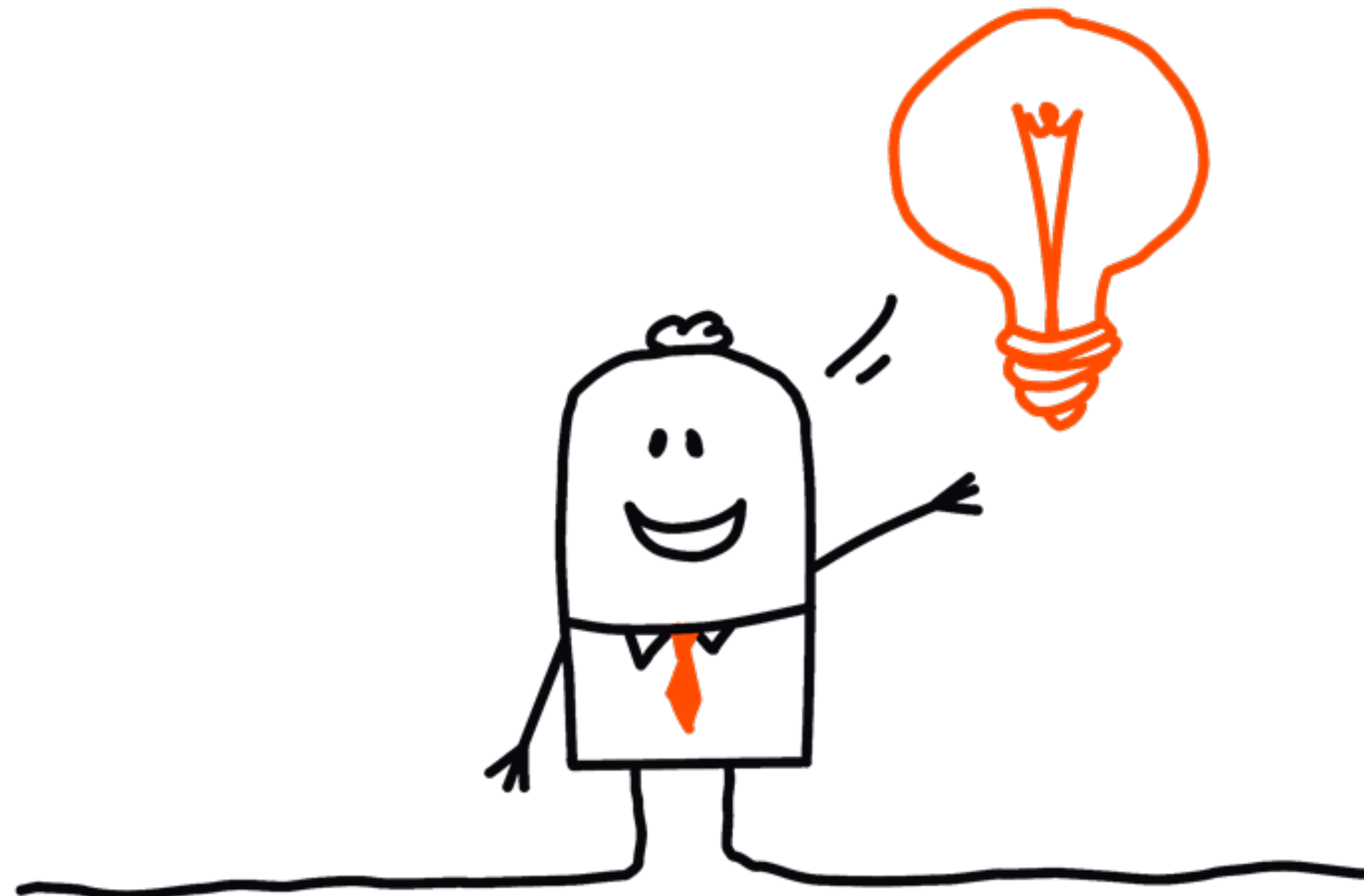
Mild Violence

Before you formulate your idea

What kind of experience you want to deliver?

What kind of problem you want the player to solve?

The Game improves through Iteration





初始版本



最终成品

Origin如果你把这个初始版本和成品比较一下

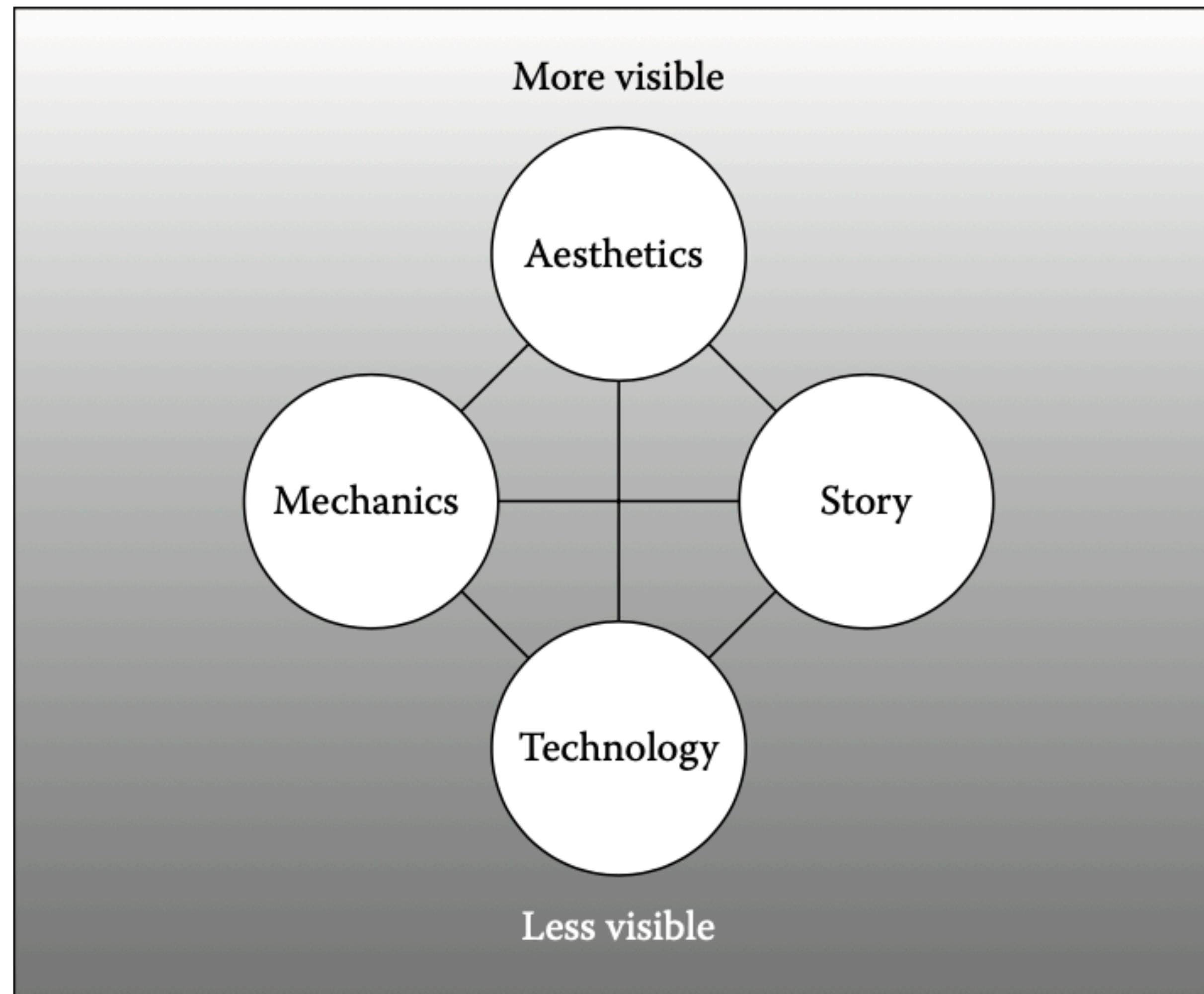
If you look at the prototype, and the final game,



Game Concepts and Structure

What makes a game... a game?

Four Basic Elements:(Theoretically)



Game mechanics

One one level, game mechanics are very objective, clearly stated sets of rules.



Mechanics(Space) – Example of Minecraft



Mechanics(Space) – Example of Fez



Mechanics(Space) – Example of Miegakure

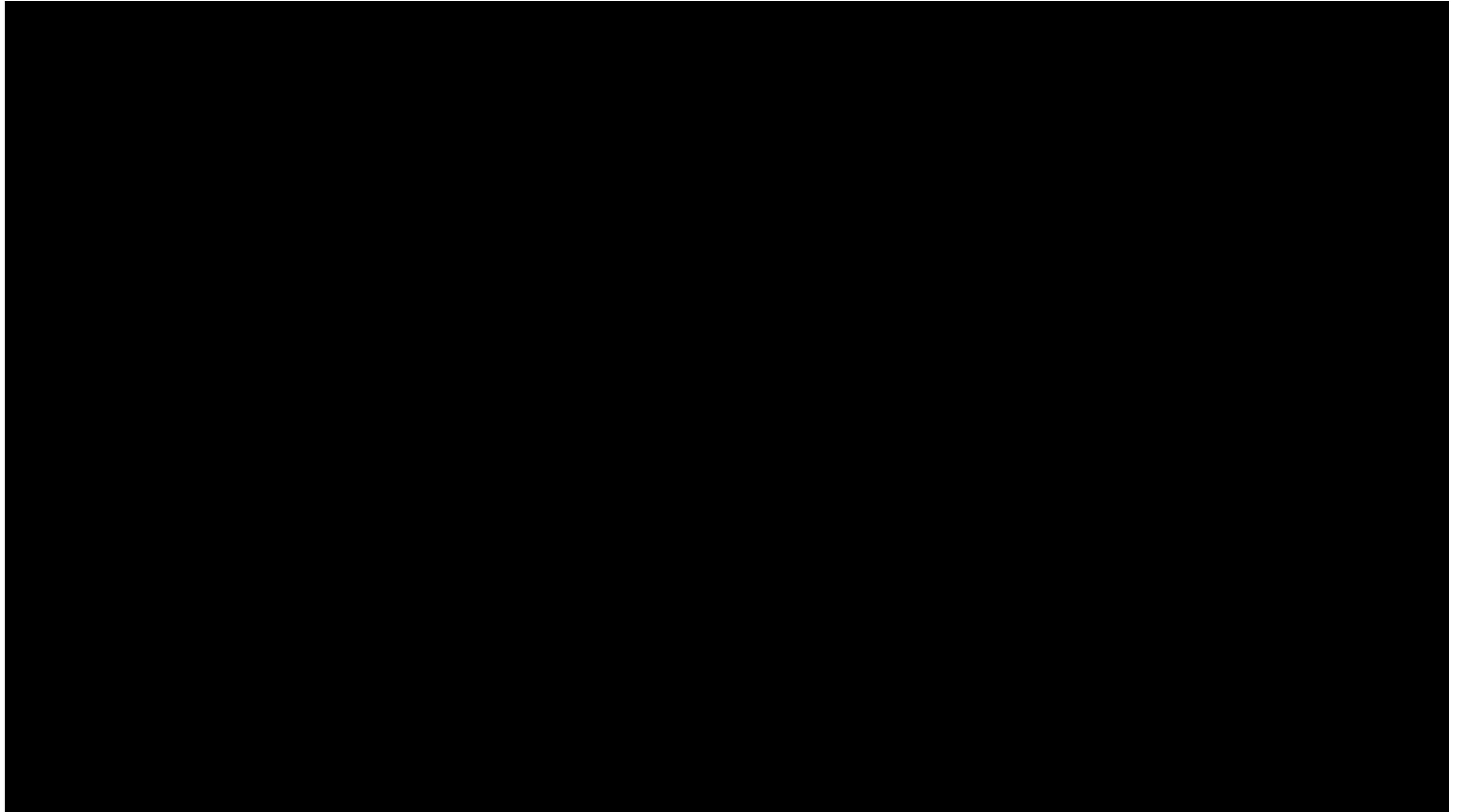


Mechanics(Time) – Example of Overcooked 2

Clear goals



Mechanics(Time) — Braid



Mechanics(Objects,Attributes,States) – Example of Don't starve



Attributes

Mechanics(Objects,Attributes,States) – Example of Baba is you

BA IS You



Mechanics (Rules)

Good Game goals

- Concrete
- Achievable
- Rewarding



Narrative (Honorable mention)



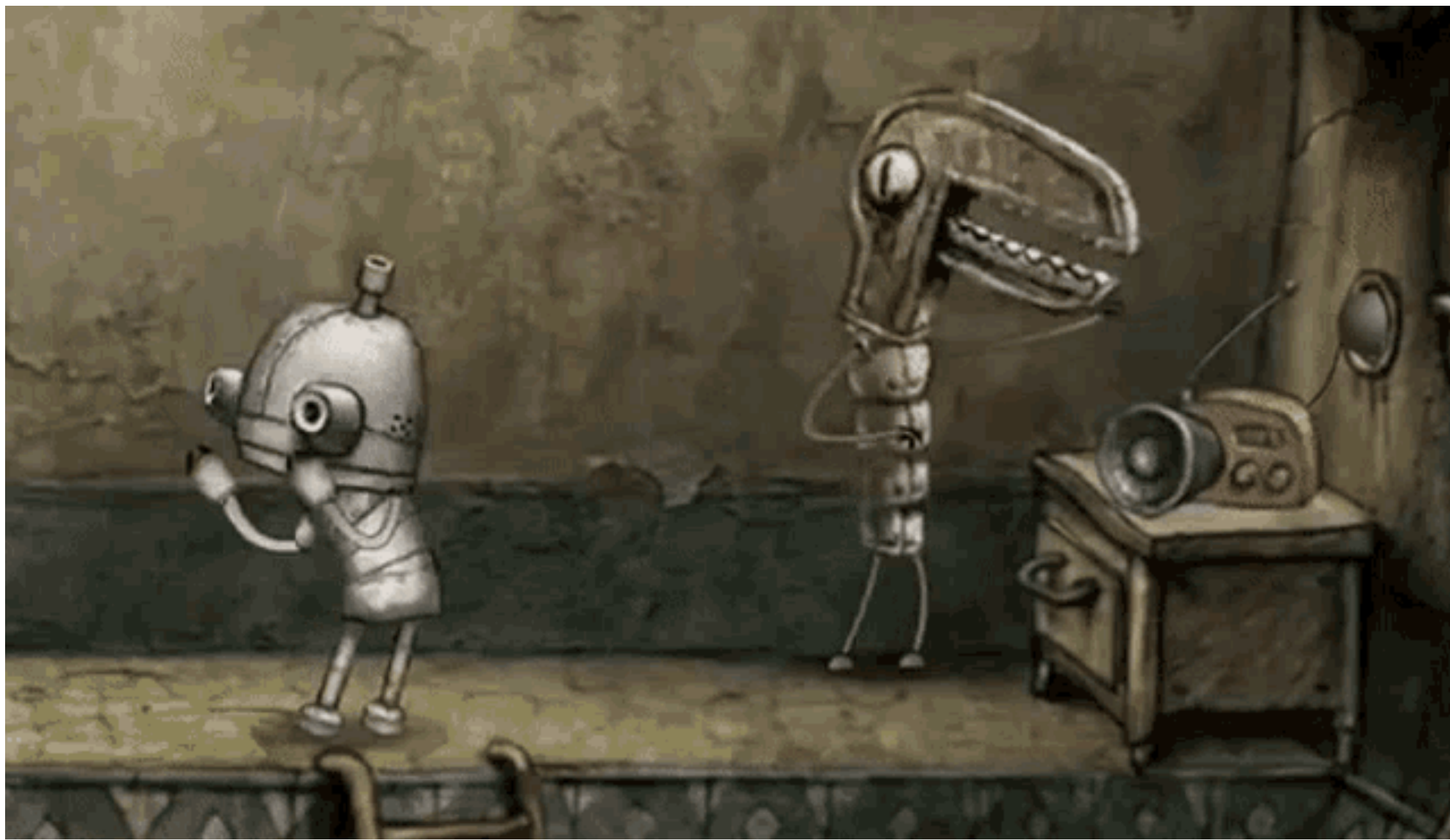
TO THE MOON

The narrative in games consists of the plot, sounds, music, atmosphere, dialogues, player choices and, of course, gameplay. It creates the overall impression of a game and allows the player to feel like part of a story.





What Remains of Edith Finch



Machinarium



Cuphead





Conclusion

“The Game Designer plans the structural elements of a system that, when set in motion by the players, creates an interactive experience.”¹

¹Tracy Fullerton in Game Design Workshop (3rd Ed.), 2014.

Play To Understand



Think about your favourite game.

Why is it so enjoyable?



Observe yourself playing and write down:

What you are **doing**?

How you are **feeling**?

Task

**The Player and the Game Design Perspectives
(Dissecting a Game)**

Super Mario (2D)

Can *you describe* this game?

What makes it *so good*?

...or what makes it *so bad*?



Super Mario (2D)

Jumping feels great!

- Intuitive Control
- Jumping is probably the most important mechanic in this game!

Challenging the player to master this *mechanic*

- Great level design
- Multiple ways to explore them
- Secrets!



Why Game Dissection is Important?

Understand and pin-point exactly what makes your game good/bad/interesting...

Ideally, understand why someone else thinks your game is good/bad/interesting...



In Two Weeks...

Brainstorming, Playtesting and Prototyping!

Advice for better VR game designs

- The **tutorial** is important!
- Interaction **Feedback** is importaataaant!
- **Less cybersickness** is importaataataataataataataataataataataant!



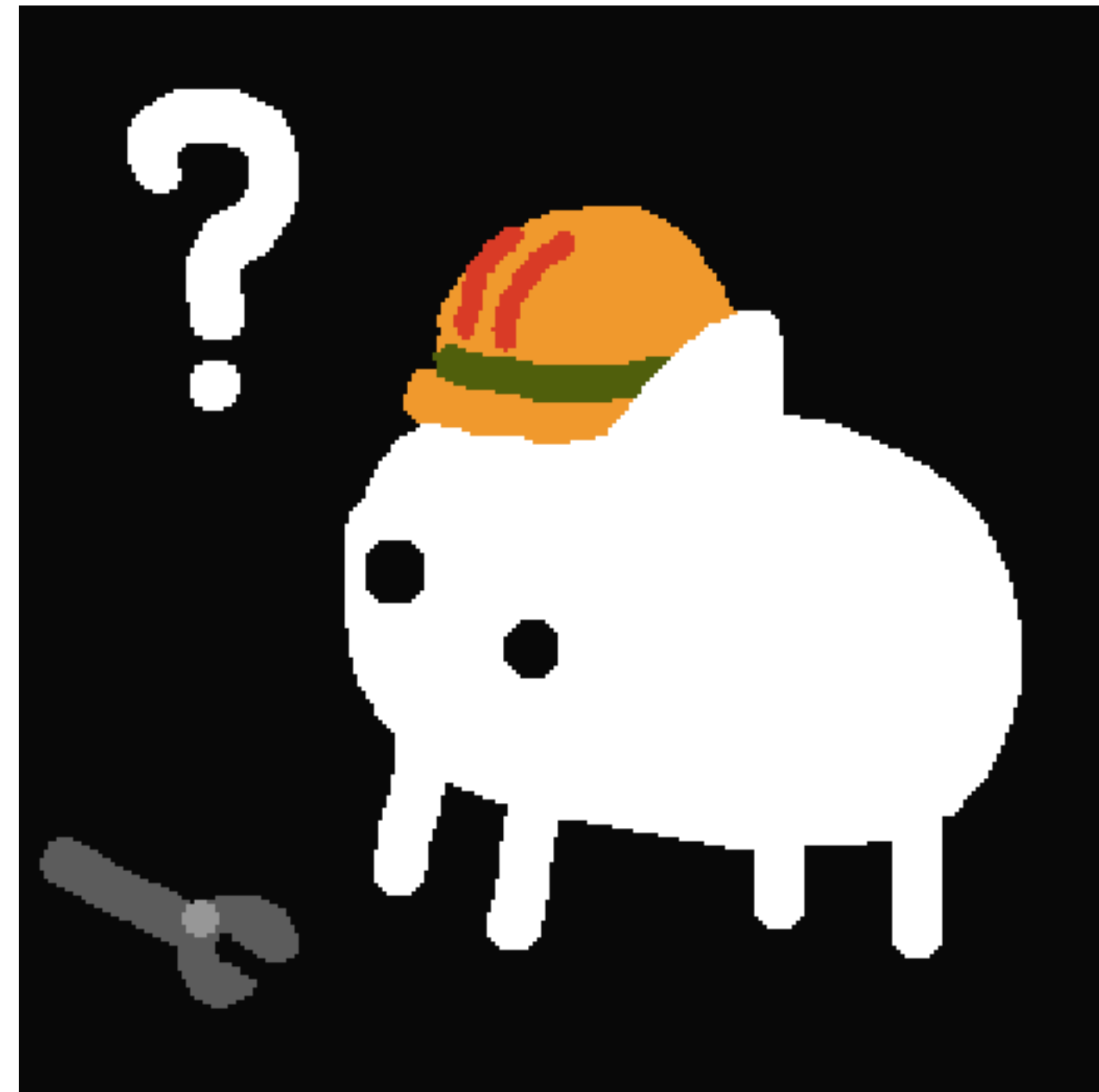
A close-up shot of a man with dark hair, a full beard, and glasses, wearing a dark shirt. He is looking slightly to the right of the camera with a neutral expression. The background is out of focus, showing colorful, abstract shapes.

Tutorials!!

在开始的关卡中 你必须教会玩家怎么玩
when you start out, you want to teach the player how to play.

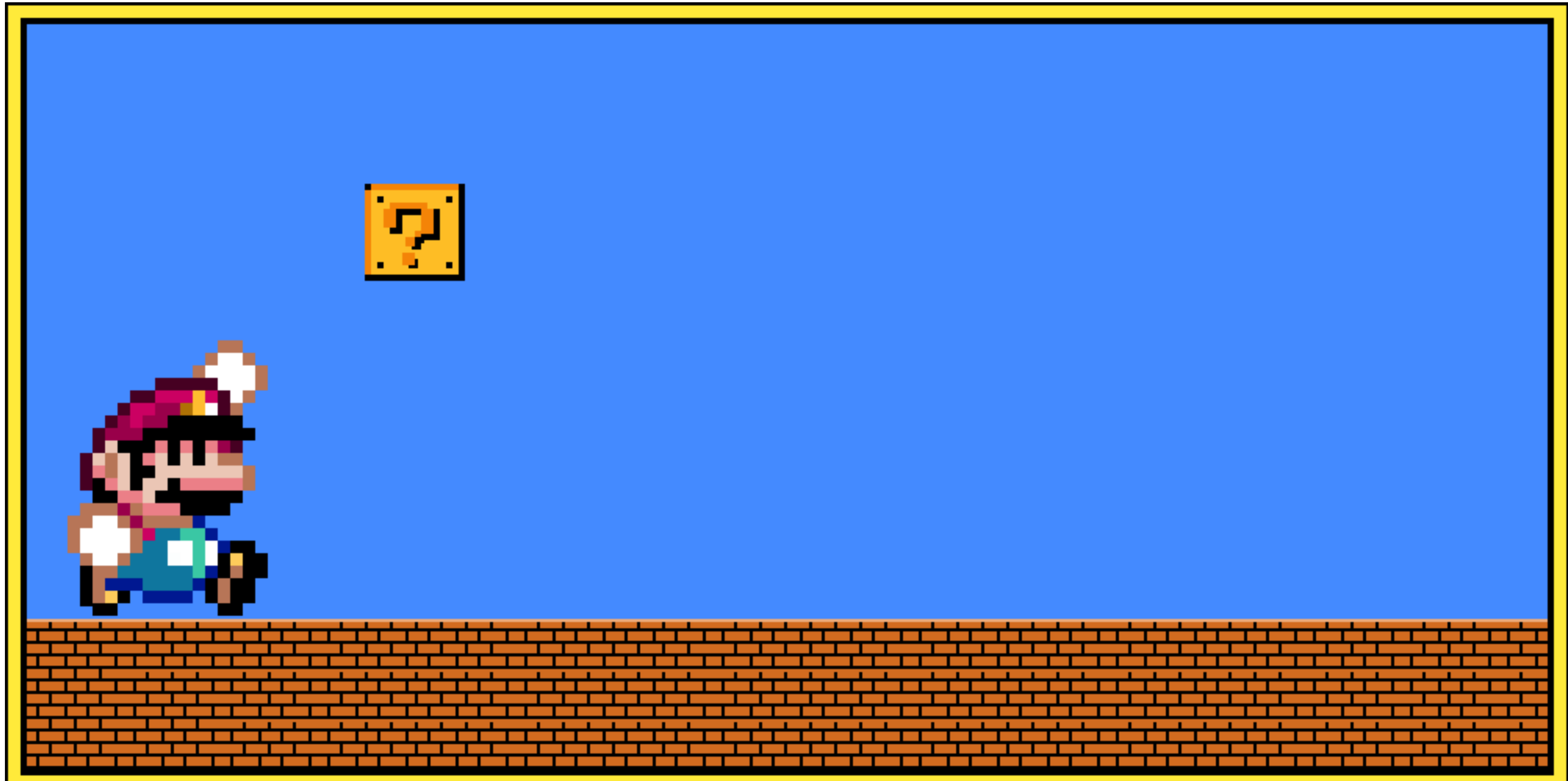
What makes a good tutorial

- Less text
- Interactive
- Don't front-load
- Make it Fun
- Play testing
- Skippable





Interaction Feedback (Visual feedback)



Interaction Feedback (Sound feedback)



Interaction Feedback (Tactile feedback)



Consideration of minimising cybersickness

Eye strain

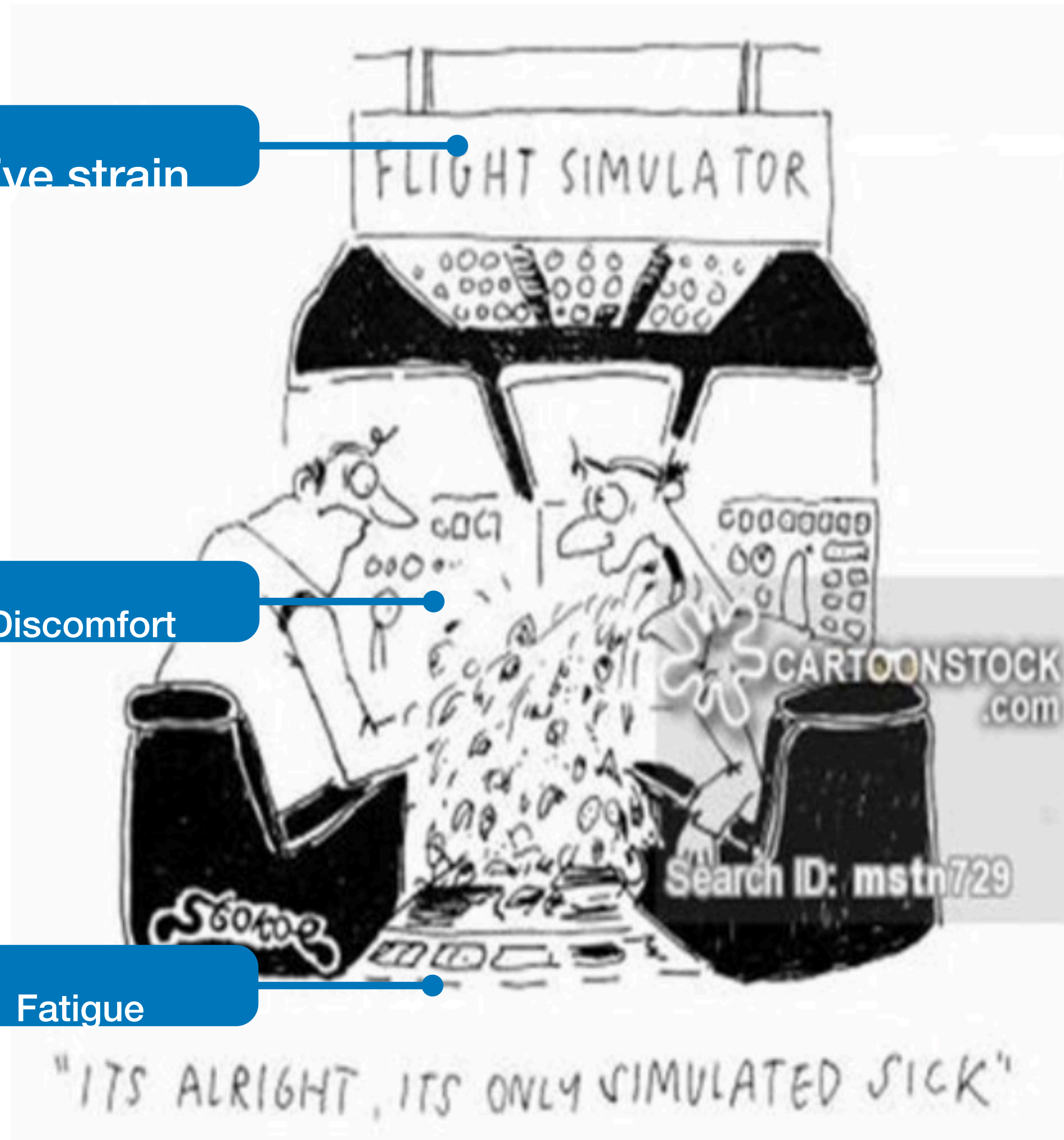
Discomfort

Fatigue

Nausea

Dizziness

Headache





Constant speed - Pistol whip

The End



EPFL



References

- **The Art of Game Design 2nd Ed. – Jesse Schell**
- **Game Design Workshop 3rd Ed. – Tracy Fullerton**
- **Indie Game: The movie. —Documentary/Drama.**

