

Spring 2020

GAME DESIGN

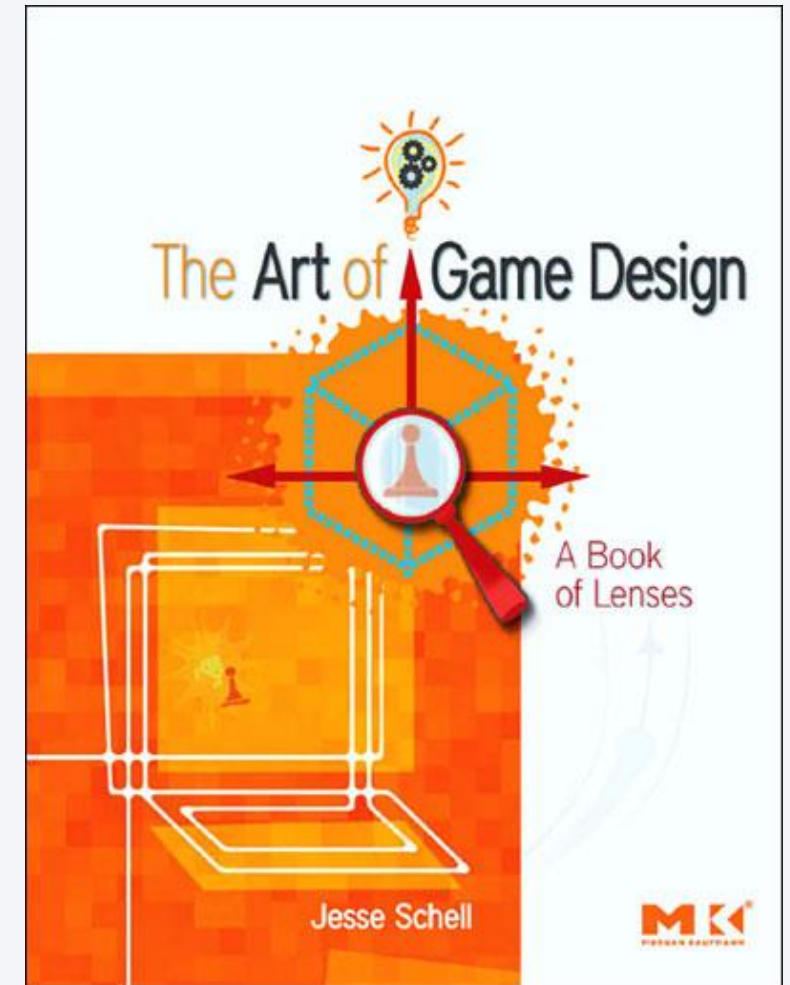
ACT 1

Maurizio Rigamonti

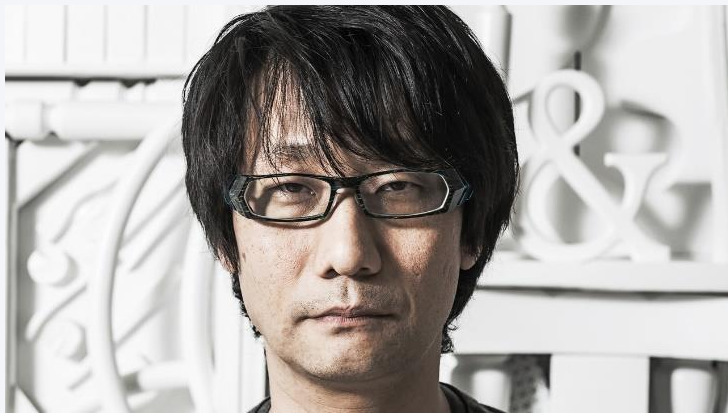
SOME REFERENCES

Schell, Jesse. *The Art of Game Design – A Book of Lenses*. Morgan Kaufmann, USA 2008

Fullerton, Tracy. *Game design workshop: a playcentric approach to creating innovative games*. CRC press, 2014



Who is the designer?



I'm a game designer.

“Design games. Start now!”

“People become what they pretend to be.”

“You will fail again, and again, and again.”

[J. Schell]

REQUIRED SKILLS

- Animation
- Anthropology
- Architecture
- Brainstorming
- Business
- Cinematography
- Communication
- Creative writing
- Economics
- Engineering
- History
- Management
- Mathematics
- Music
- Psychology
- Public speaking
- Sound design
- Technical writing
- Visual arts
- And so on!

- **Listening**
- 5 Categories
 - Team
 - Audience
 - Game
 - [Client]
 - Self

What is the game designer goal?



- Designer's goal is to create an experience
- Games are simply artifacts
- Experiences are part of us, but hard –impossible ? - to describe
- The game **enables** the experience, but it is not the experience.

- In all type of entertainment : books, movies, music, and so on. *[linear]*
- More interaction in videogames *[complex]*

- Psychology, anthropology and design -> introspection
- **Peril 1:** false conclusions
 - Greek philosophers
- **Peril 2:** subjectivity VS objectivity
 - “I only design for people like me”
 - “Personal opinion can be trusted”
- **Listen!!!!**

HOW TO « CORRECTLY » USE INTROSPECTION?

- Dissect your feelings
- Observe yourself during experiences
 - Analyze memories
 - Two passes
 - Short glances
 - Continuous observation
- **Essential Experience**



- How the essential experience is reproduced:
 - Boredom => low rhythm of the episode
 - Cold => colors, breath, snow, actors
 - Loneliness => Field of view, colors

- What experience do I want the player to have?
- What is essential to that experience?
- How can my game capture that essence?

What is a game?

But what a....????



It is impossible to define what a game is but it is easy to recognize a game in the reality.

[Not really a citation]



- Lack of terms
- Game designers follow instincts
- Difficult to explicitly identify good and bad aspects in a design

IS THAT A GAME?



WHAT IS A GAME?

- Something you play with
- They are not toys
- They generate **fun**
- They **surprise** the players
 - Crucial in entertainment
 - Root of humor, strategy, problem solving, etc.

GAMES CHARACTERISTICS

- Games are entered willfully
- Games have **goals**
- Games have conflicts
- Games have **rules**
- Games can be **won or lost**
- Games are interactive
- Games have **challenges**
- Games can create their own **internal value**
- Games engage players
- Games are closed, formal systems

Points and money
make sense in the
game economy

- Videos
- Lives
- Secret levels
- And so on



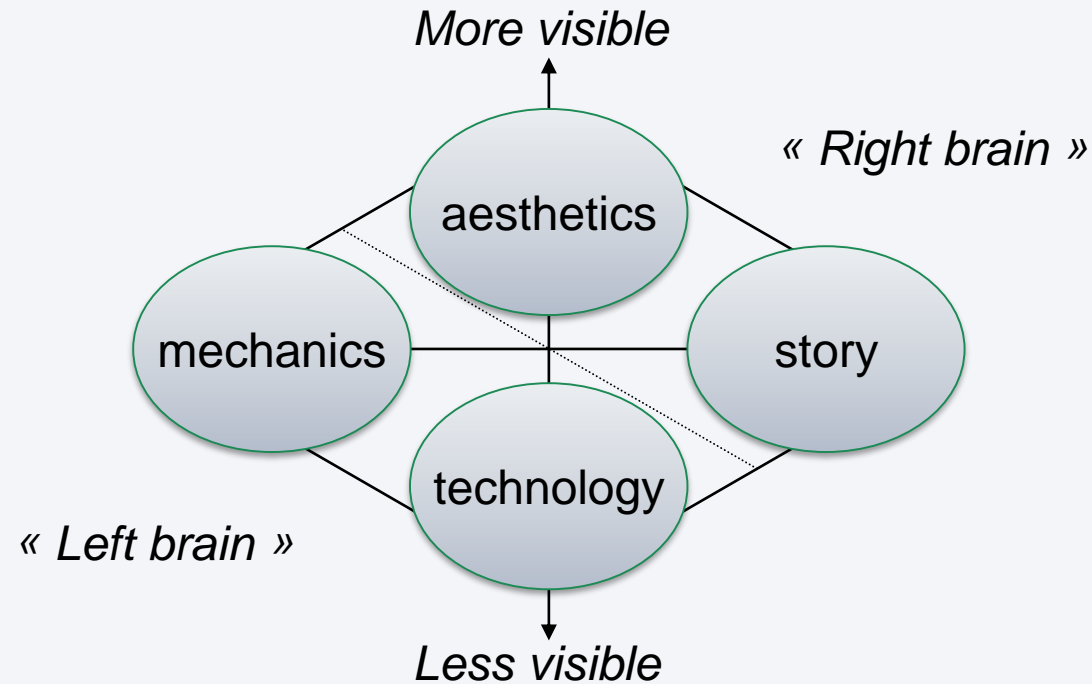
Marioooooo ❤️ ❤️ ❤️

A game is a problem-solving activity,
approached with a playful attitude.

What Are Games Made of?



ANATOMY OF A GAME



- Elemental **tetrad**
- Those components are related, influence themselves, and have exactly the **same** importance

- Procedures and rules of the game
- **Goals**
- Players opportunities to achieve the goals
- Globally, it does not exist in movies, music, books, and so on.



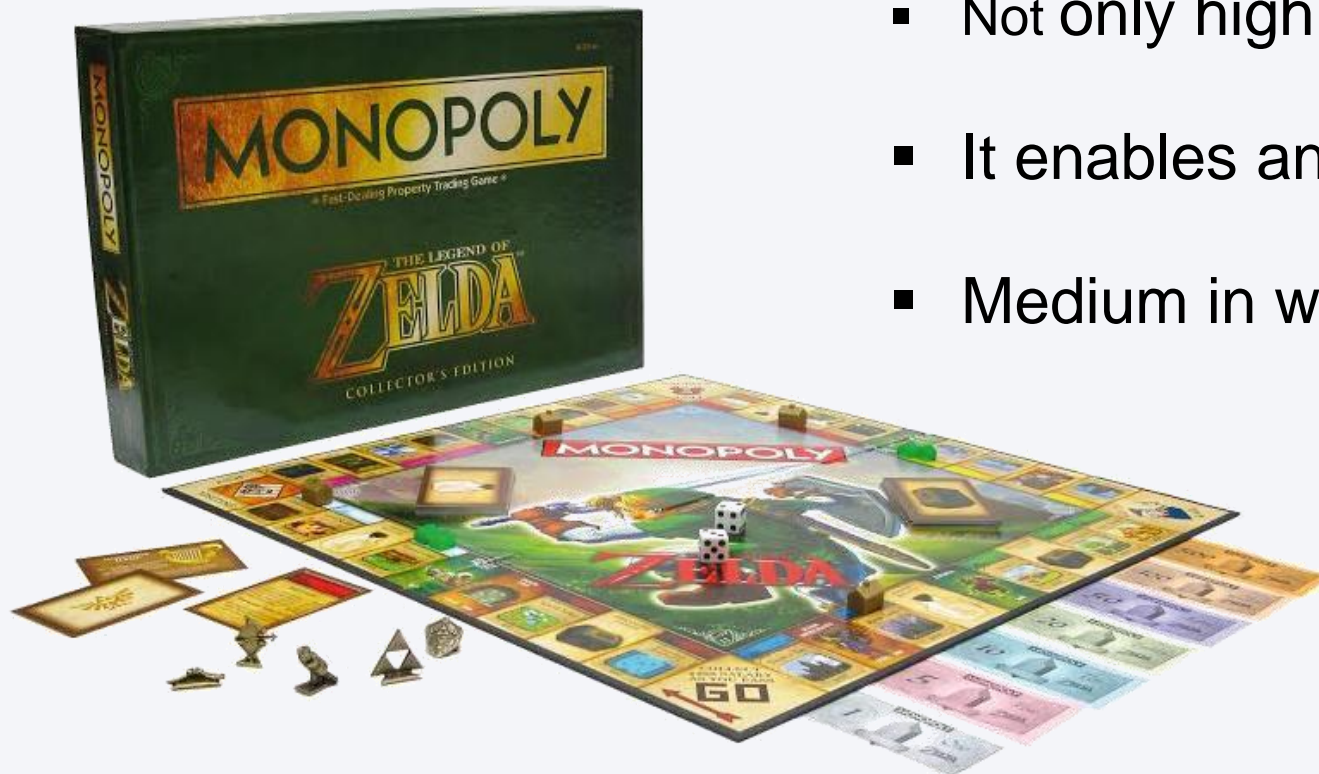
- Sequence of events
- **Linear and pre-scripted or branching and emergent**



AESTHETICS

- How the game looks, sounds, feels, etc.
- Directly and strictly related to player's experience





- Not only high technology
- It enables and prohibits things to do
- Medium in which the aesthetics take place

- What elements of the game make the **experience enjoyable**?
- What elements of the game detract from the experience?
- How can I change game elements to improve the experience?

*** AFFORDANCE ***

The theme

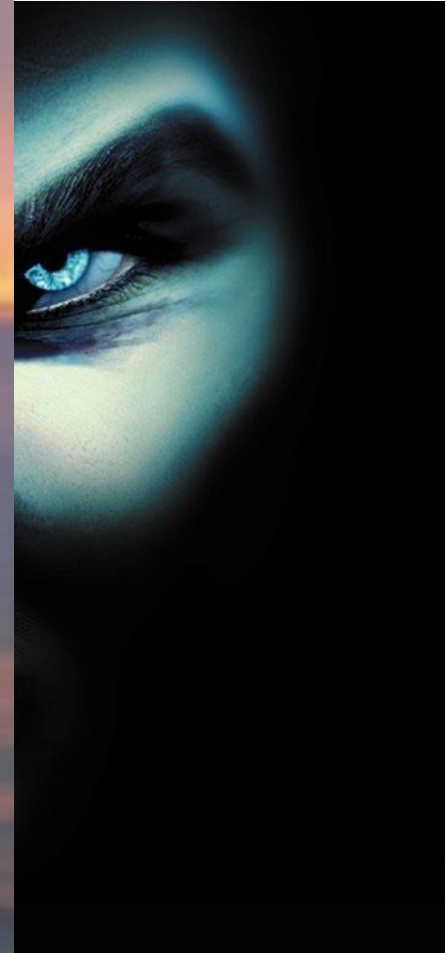
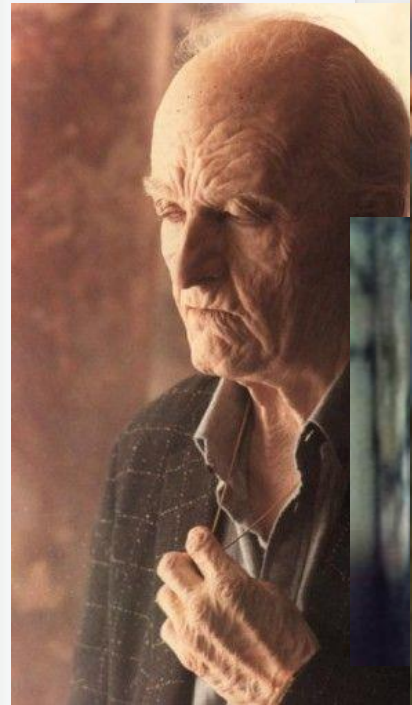


THE IMPORTANCE OF A THEME

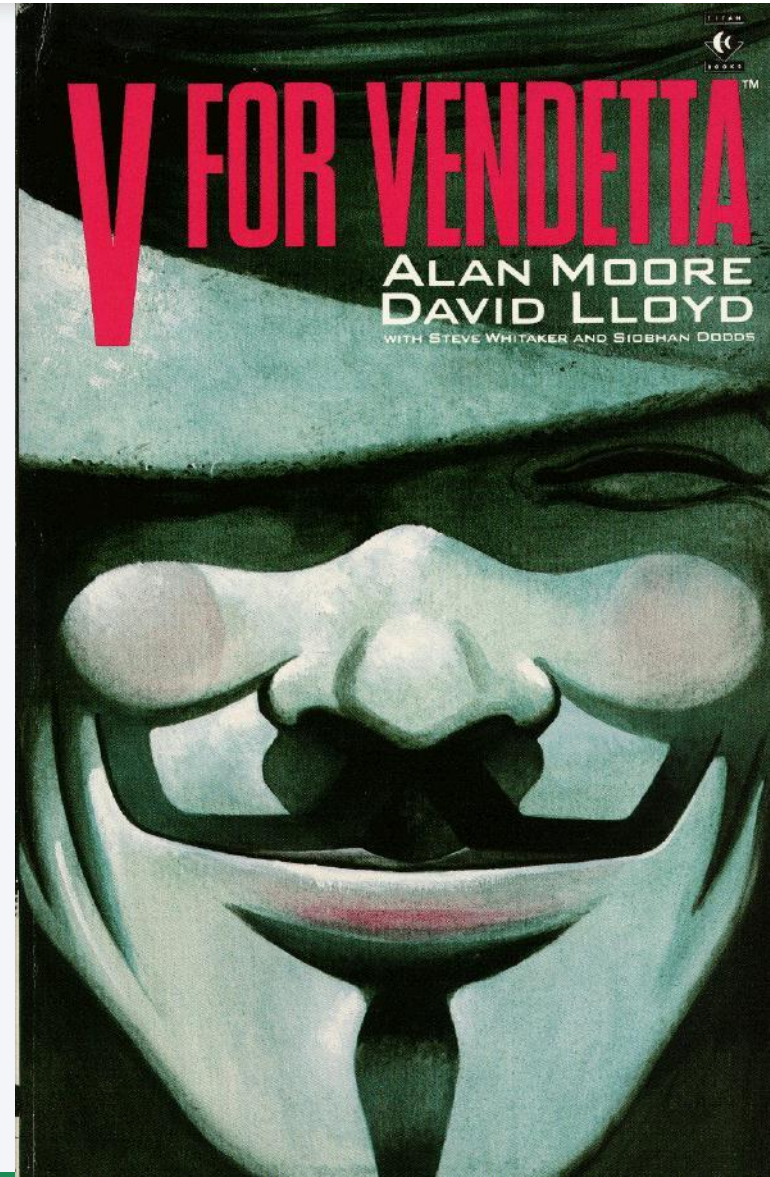
- The elements support a theme
 - Define the theme as soon as possible
 - Use every means to reinforce it
- Unifying themes = stronger experience
- Examples: **Being** a pirate -> sense of freedom

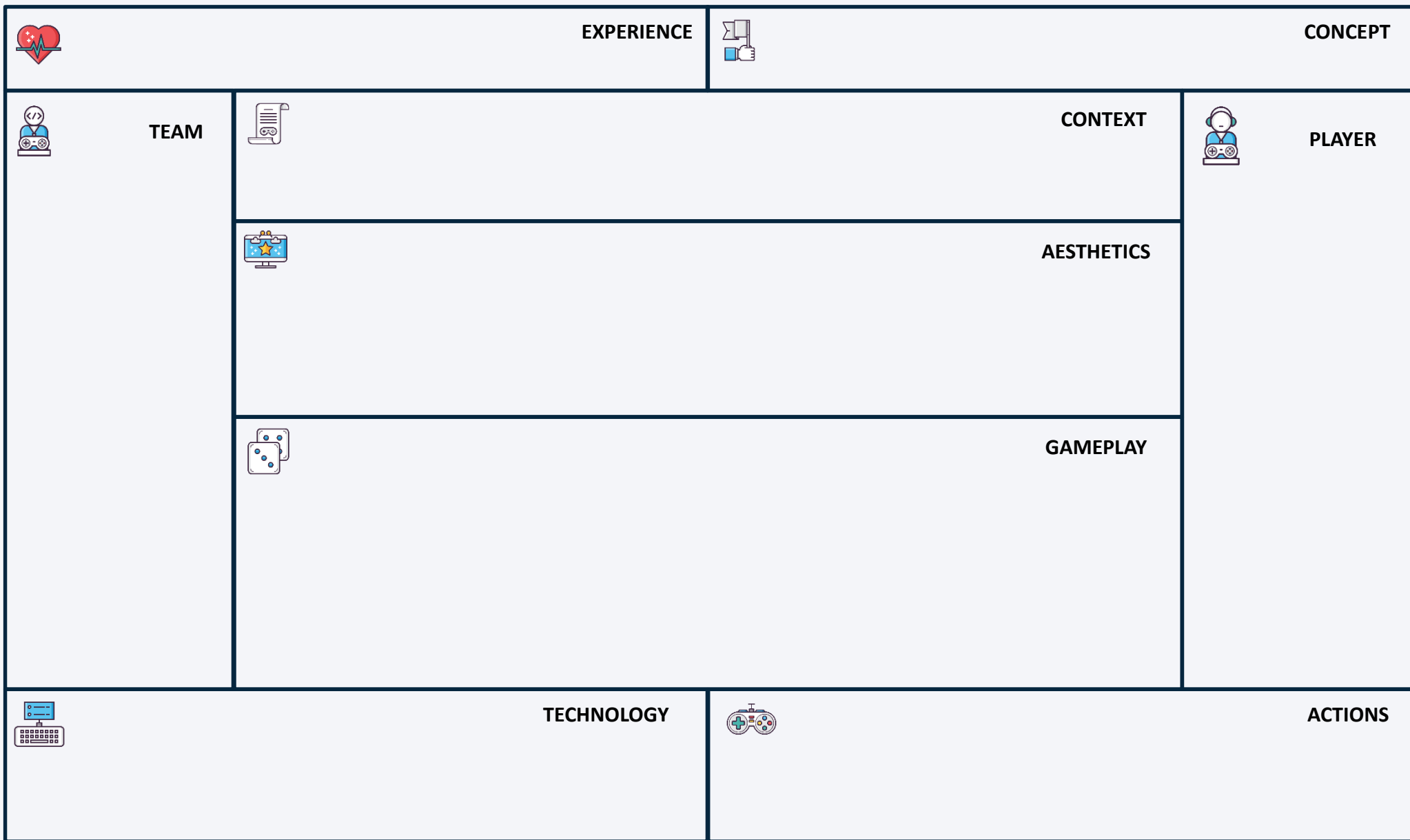


STRONG THEMES

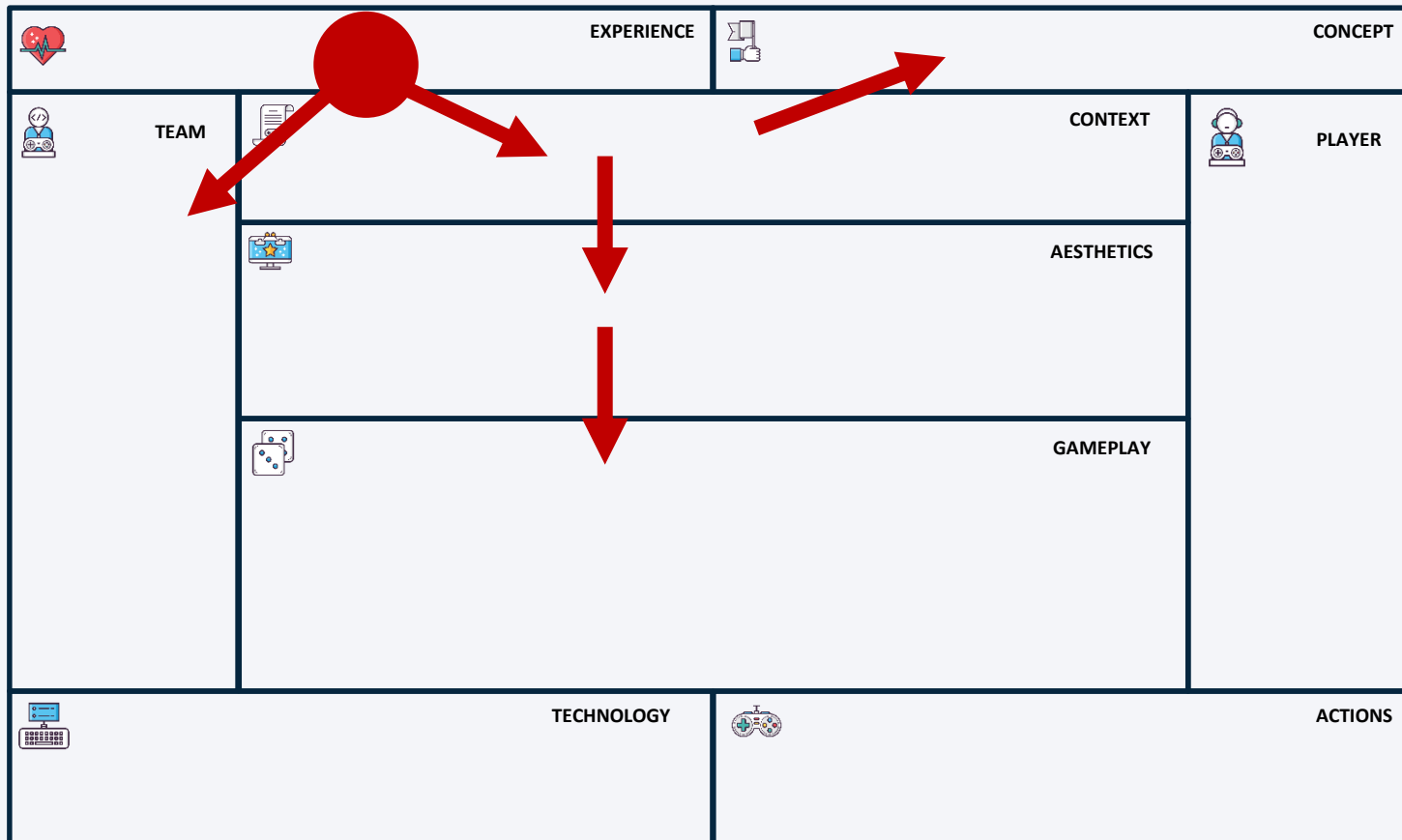


The idea



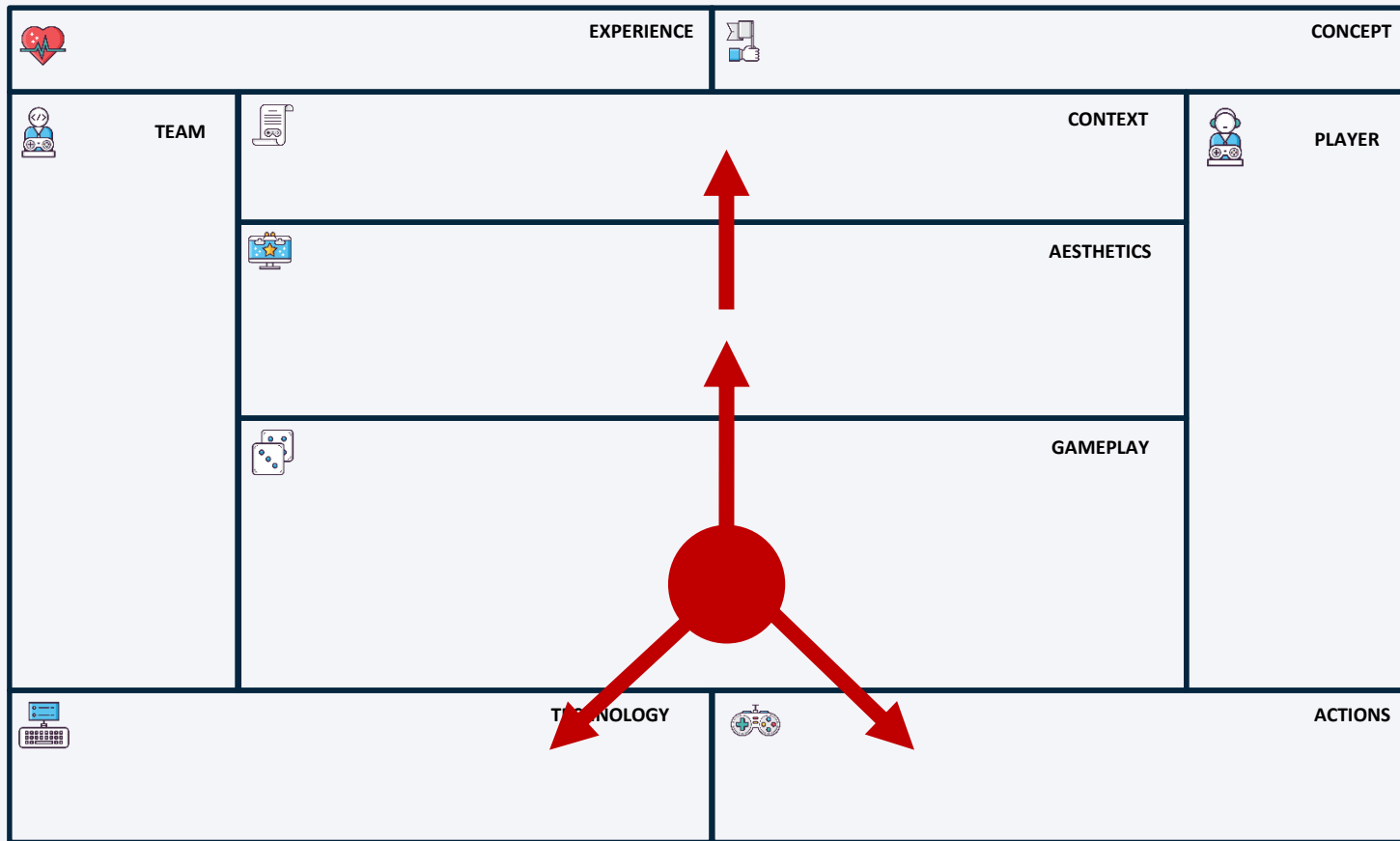


Slide:
Qui Cung



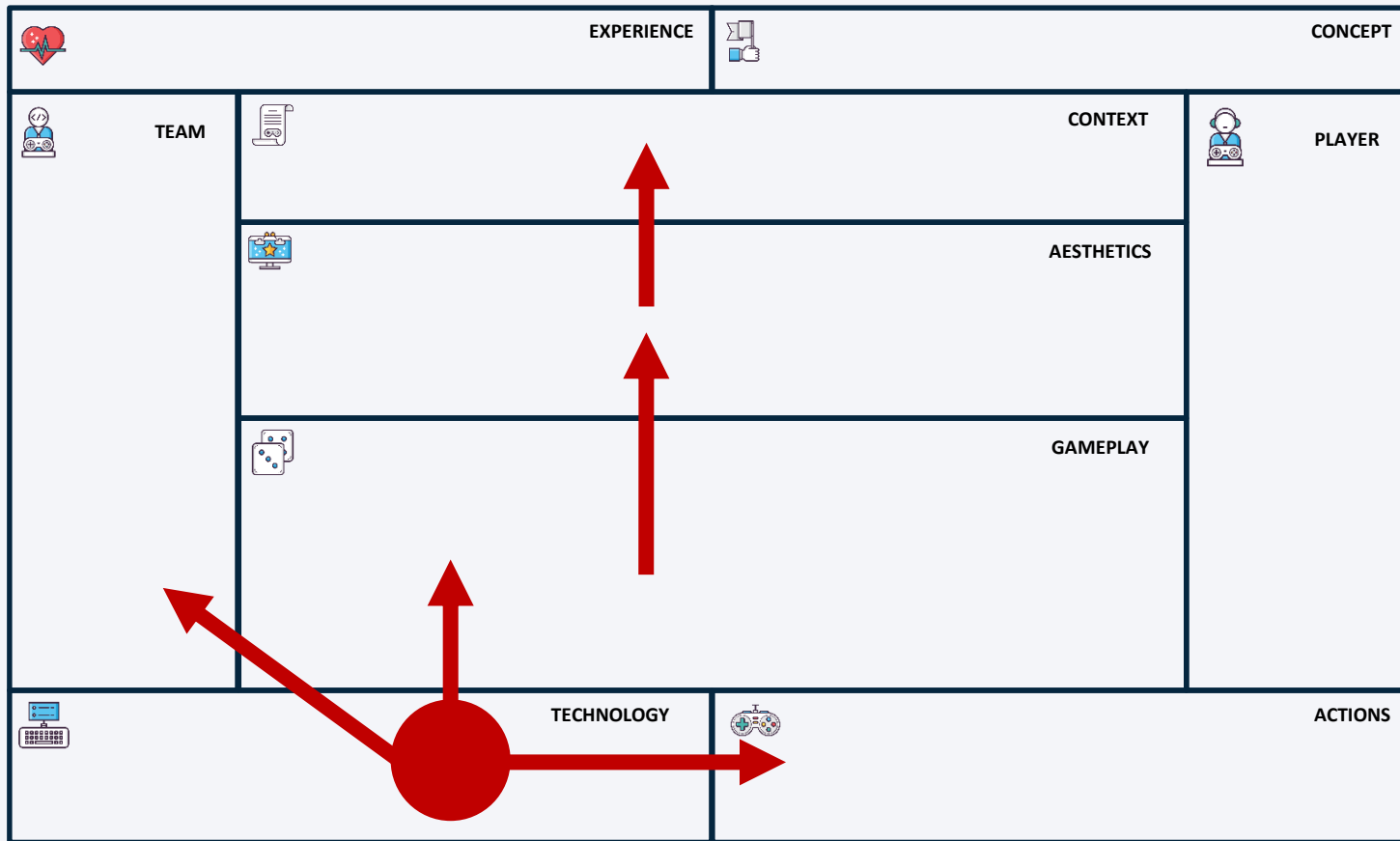
- Game design idea based on the experience

Slide:
Qui Cung



- Game design idea based on the gameplay

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- Game Design based on the technology

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Qui Cung

- Think of an idea
- Try it out
- Keep changing it and testing it until it seems good enough
 - This true for games, but also for GUIs: **evaluation cycle**.
- **Infinite inspiration.** Look everywhere!
- Listen to your subconscious

- State the problem
- Advantages
 - Broader creative space: look at the problem and not at the solution
 - Clear measurement: how well ideas solve the problem?
 - Communication
- Often the problem constrains the 4 elements

BRAINSTORMING THE IDEAS

- Write or type answers
- Sketch
- Toys and physical objects
- Change perspective
- Empathy with consumers
- Don't be frugal
- Write on the wall + space remembers
- Write everything
- Number lists (instead of bullets)
- Mix and match categories (elemental tetrad)
- Talk to yourself
- Find a partner

The iteration



GOD OF WAR



The game



The prototype

- Take a decision
- Think about it and develop it
- Be ready to reverse wrong decisions
 - **Do not fall in love with your ideas**

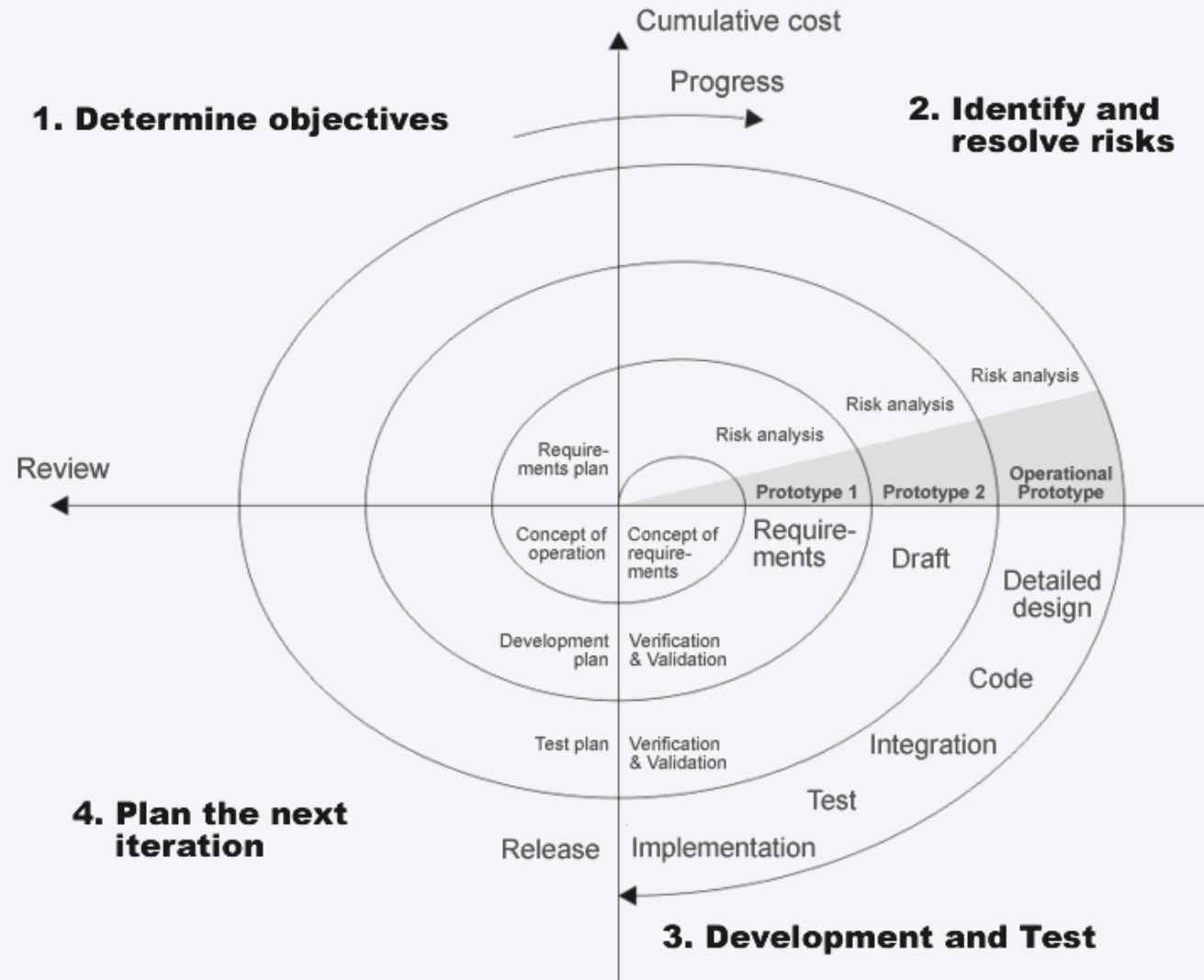
8 FILTERS TO VALIDATE IDEAS

1. Does the game feel right?
2. Will the intended audience like the game enough?
3. Is the game well-designed ? (Experience?)
4. Is this game novel enough?
5. Will this game sell? Use tools like **Steamspy!**
6. Is it technically possible to develop this game?
7. Does this game meet our social and community goals?
8. Do the playtesters enjoy the game enough?
9. Your additional or alternate filters

- An absolute truth in informatics (in life?): test and improve
- Expensive, not always applicable more and more times
- **How can I make every loop count?**
- **How can I loop as fast as possible?**

- Different models (e.g. Waterfall)
- **Boehm**
 1. Basic design
 2. Figure out greatest risks
 3. Build prototype mitigating those risks
 4. Test them
 5. Come up with a more detailed design based on what you learned
 6. Return to step 2

BOEHM'S MODEL



We invent a concept and we try to analyze it.

- **Gameplay**
- **Technical problems**
- **Artworks & story**
- **Marketing problems**

- Stop thinking **positively**!
- What could keep this game from being **great**?
- How can we stop that from happening?

8 TIPS FOR PRODUCTIVE PROTOTYPING

1. Answer a question
2. Forget quality
3. Don't get attached
4. Prioritize your prototypes (biggest risks first)
5. Parallelize prototypes
6. It doesn't have to be digital
7. « Fast loop game engine » (e.g.. Script instead of code)
8. Build toys first (and select funny ones)

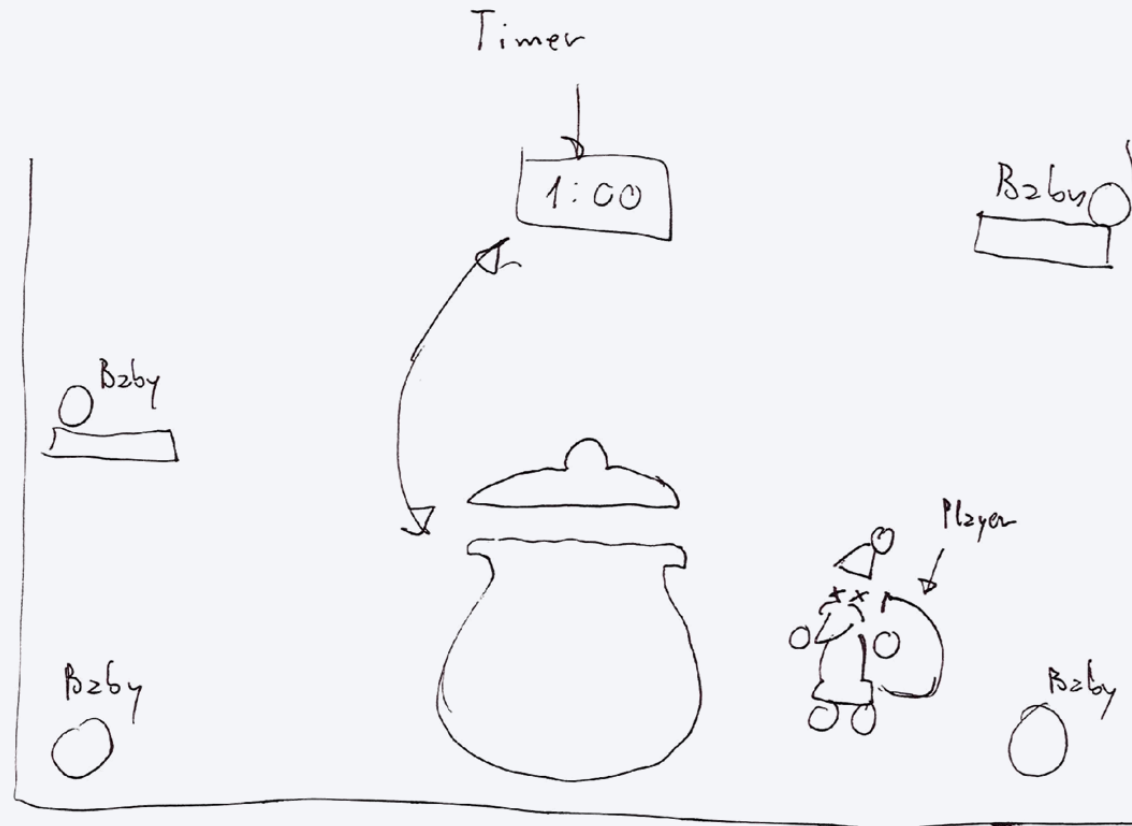
1. State the problem
2. Brainstorm solutions
3. Choose a solution
4. List the risks of using it
5. Build prototypes to mitigate risks
6. Test them. If they are good, stop.
7. State the new problem and go to step 2

Ideas @ Ivlup game jam 2016



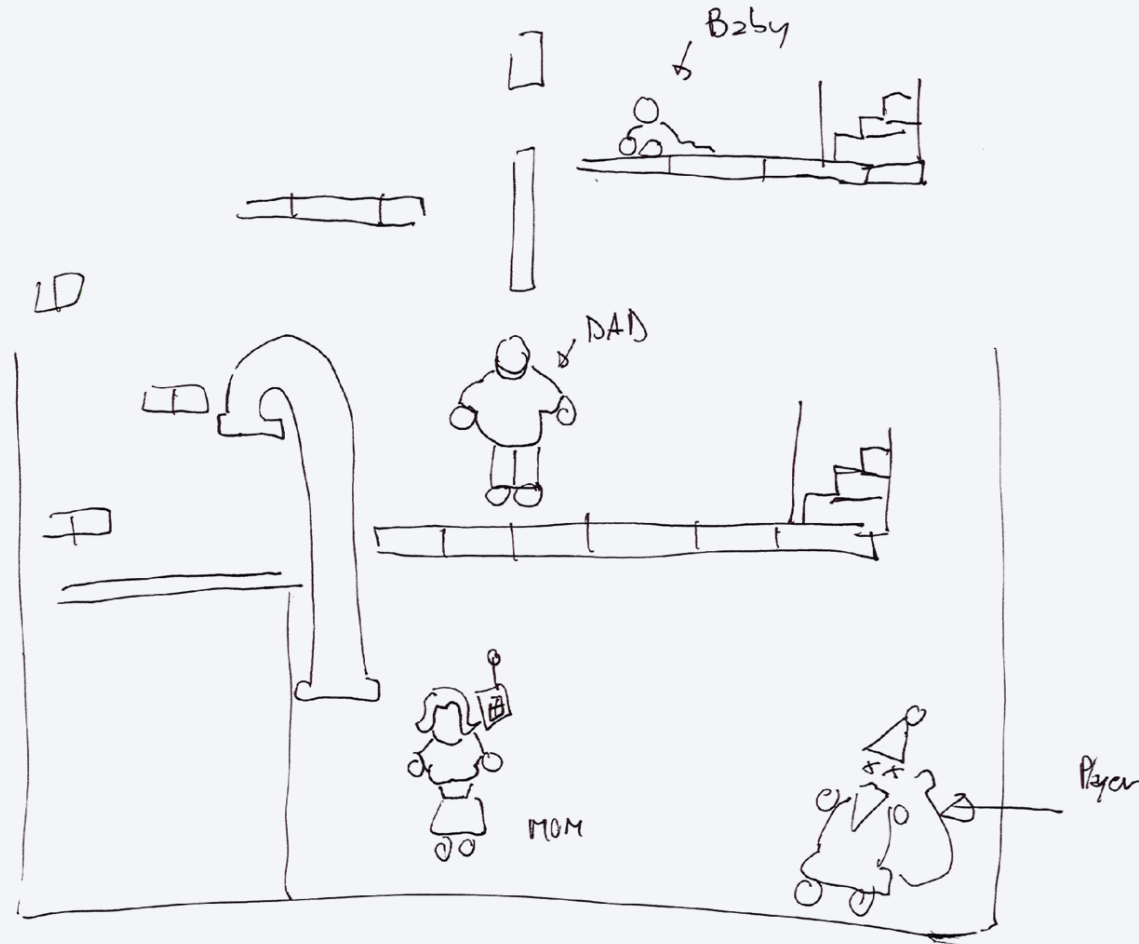
LVLUP GS 1/

Platform - Puzzle



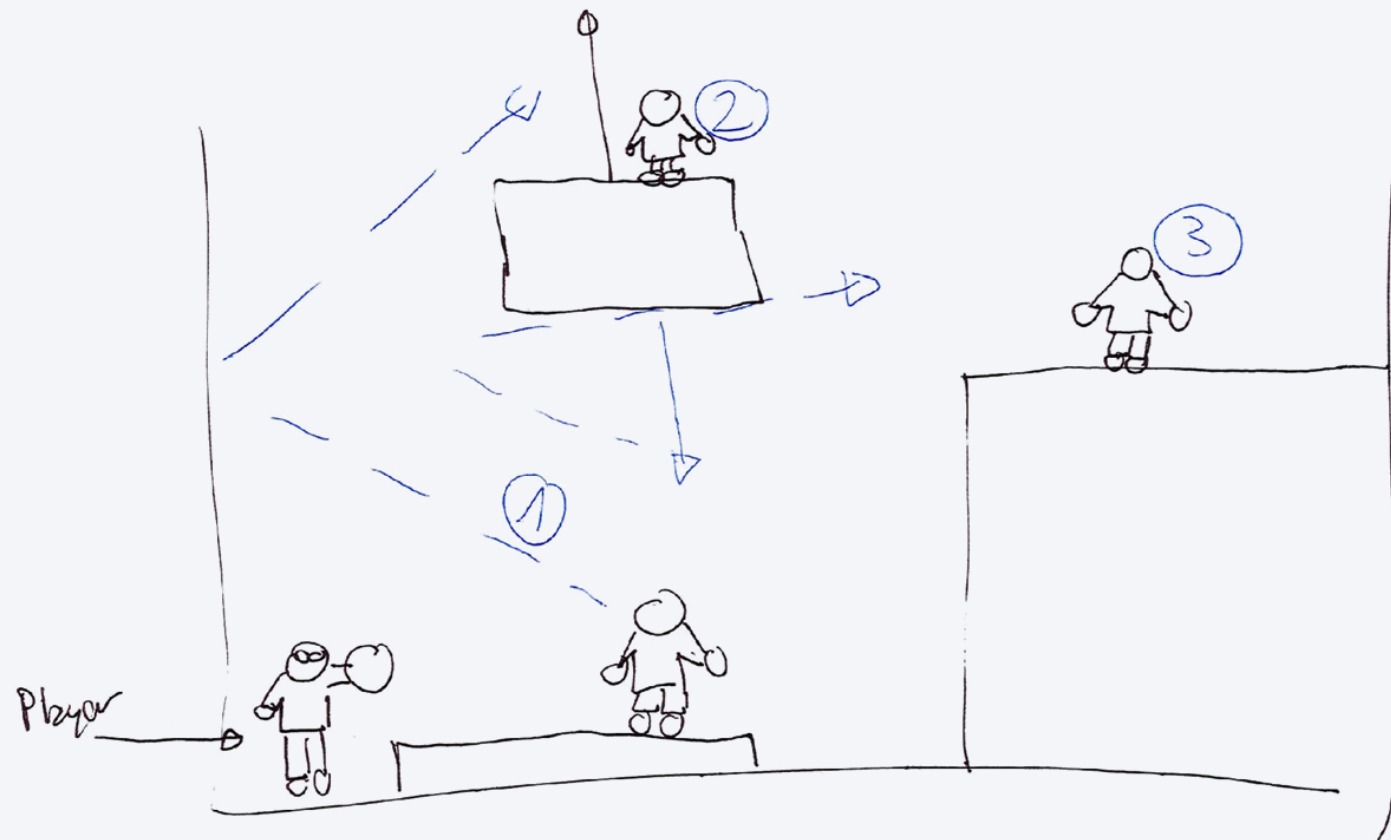
LVL UP GS 2

Sketch



LVLUP 3

Moving HB



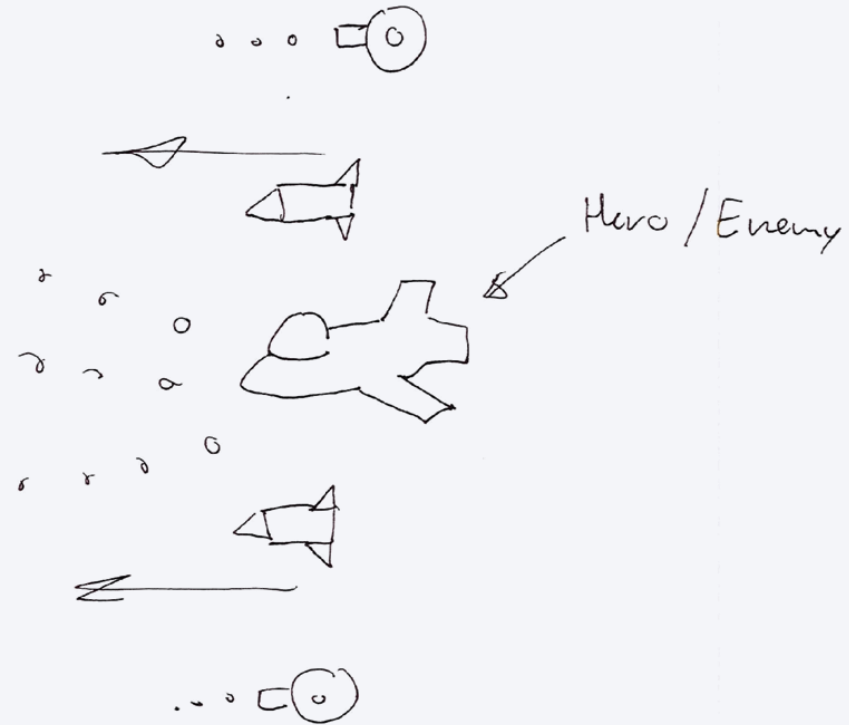
LVLUP GS 4

Shooter

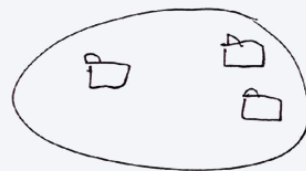
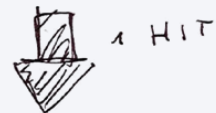
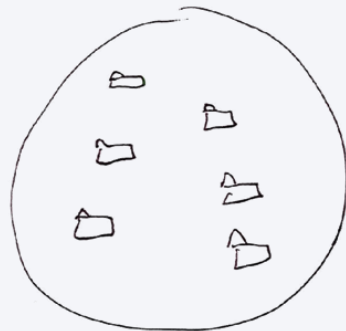


player

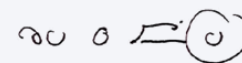
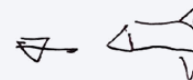
- ∞ ships
- when you are under attack, change of ship
- if hit 3 times, game over



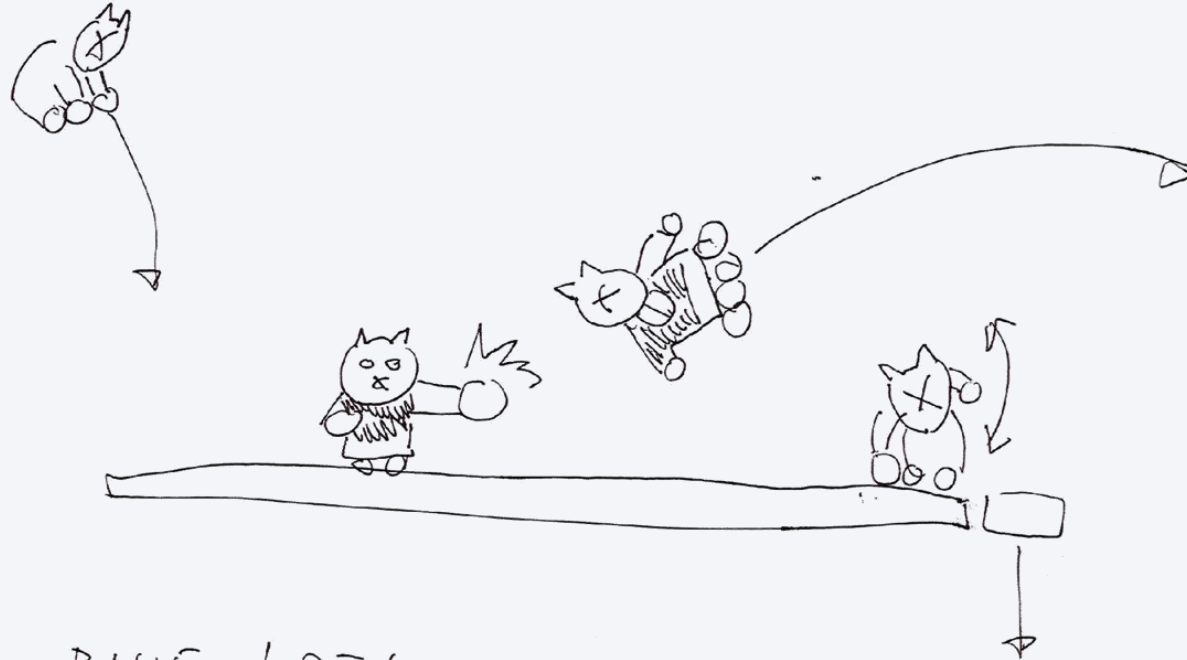
LVLUP GJ S



Sometimes new ships



LVLUP GS 6



- BLUE / RED ENEMIES

- 2 PLAYERS

Next act: who is the player?

QUESTIONS?