



Haute école d'ingénierie et d'architecture Fribourg
Hochschule für Technik und Architektur Freiburg

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Game Design & Development

Experience + Game

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

Section 1

- Who is the designer?



How to become a game 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!

The most important skill

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

Section 2

- What is the game designer goal?



The experience

- 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.

The experience and the media

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

Creating the experience

- 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
- Identify **Essential Experience**
 - Emotional and physical elements making unique the experience



Bastogne (Band of Brothers)

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

Essential experience

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

Section 3

- What is a game?



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

Ludwig Wittgenstein



Game design

- 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

Internal values

Points and money
make sense in the
game economy

- Videos
- Lives
- Secret levels
- And so on



A « definition » of game

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

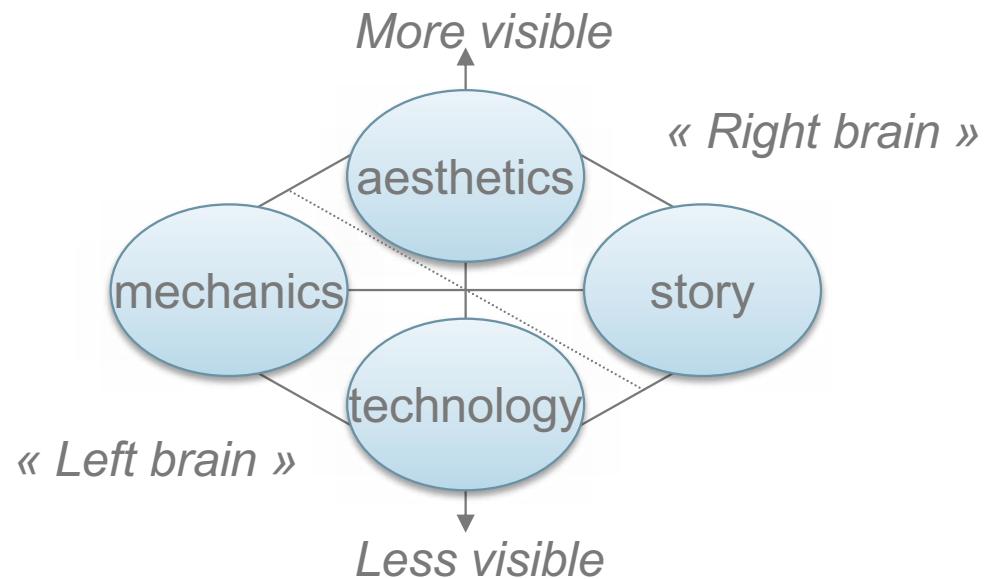
Section 4

- Anatomy of a game



What Are Games Made of?

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



Mechanics

- 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.



Story

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



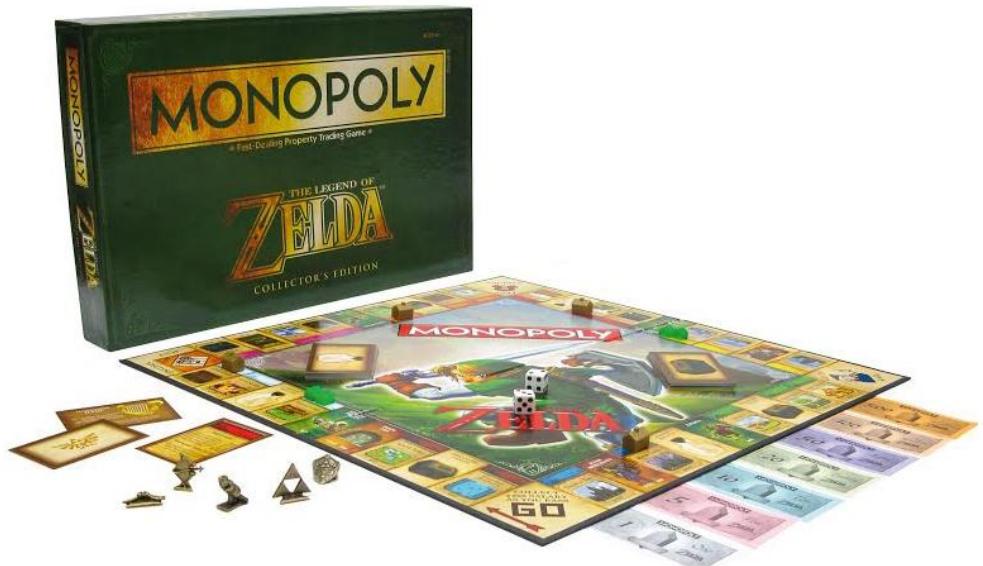
Aesthetics

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



Technology

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



Holographic design

- 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?

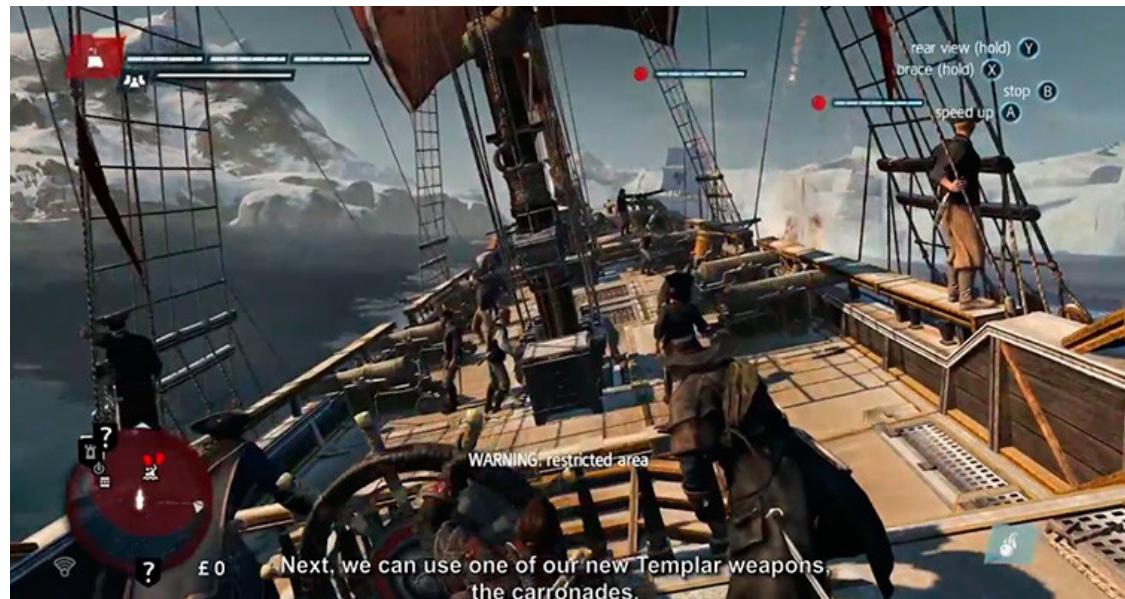
Section 5

- The theme



The importance of a theme

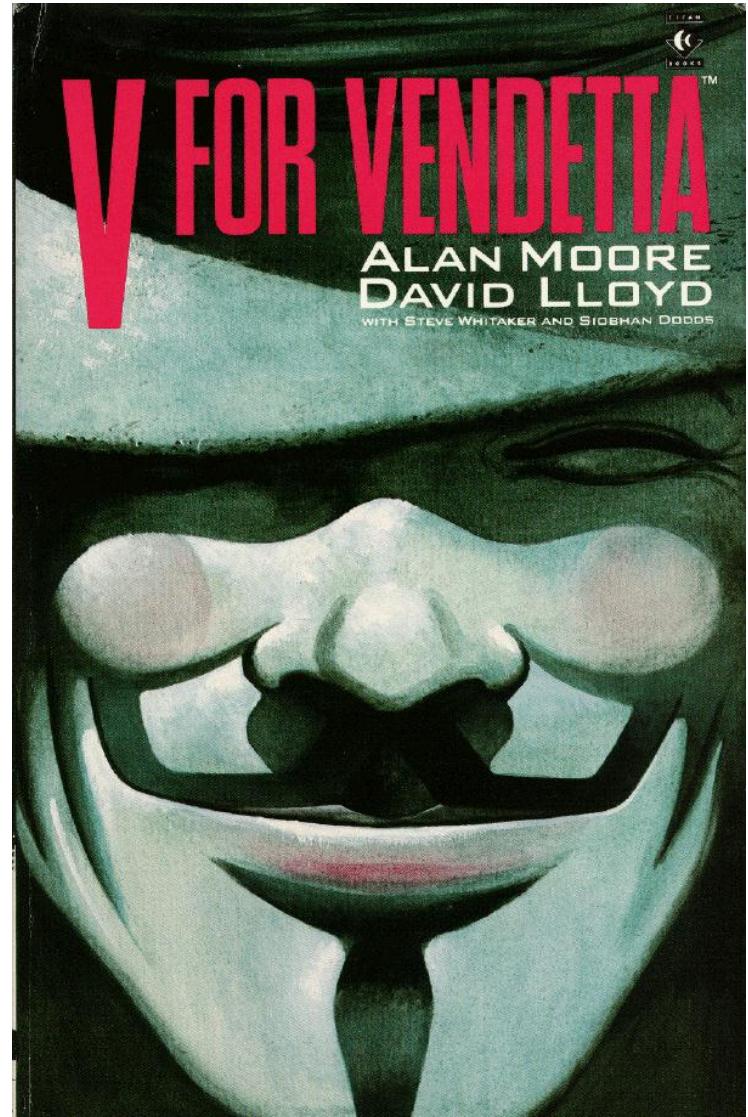
- The elements support a theme
 - Define the theme as soon as possible
 - Use every means to reinforce it
- Unifying themes = stronger experience
- Examples: **Being a pirate** -> sense of freedom





Section 6

- The idea



The creative cycle

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

From the inspiration to the design

- 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

Section 7

- The iteration



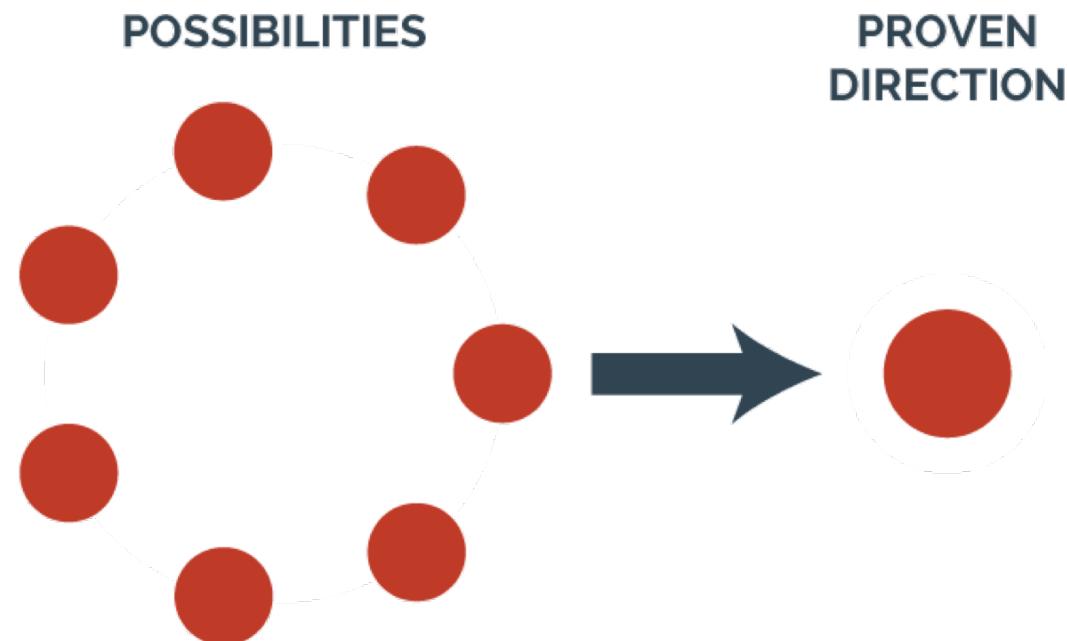
God of War



Choosing an idea

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

Explore and choose



8 filters to validate your 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?
6. Is it technically possible to develop this game?
7. Does this game meet our social and community goals?
8. Do the play testers enjoy the game enough?
9. Your additional or alternate filters

The loop

- An absolute truth in informatics: test and improve.
- Expensive, not always applicable more and more times.

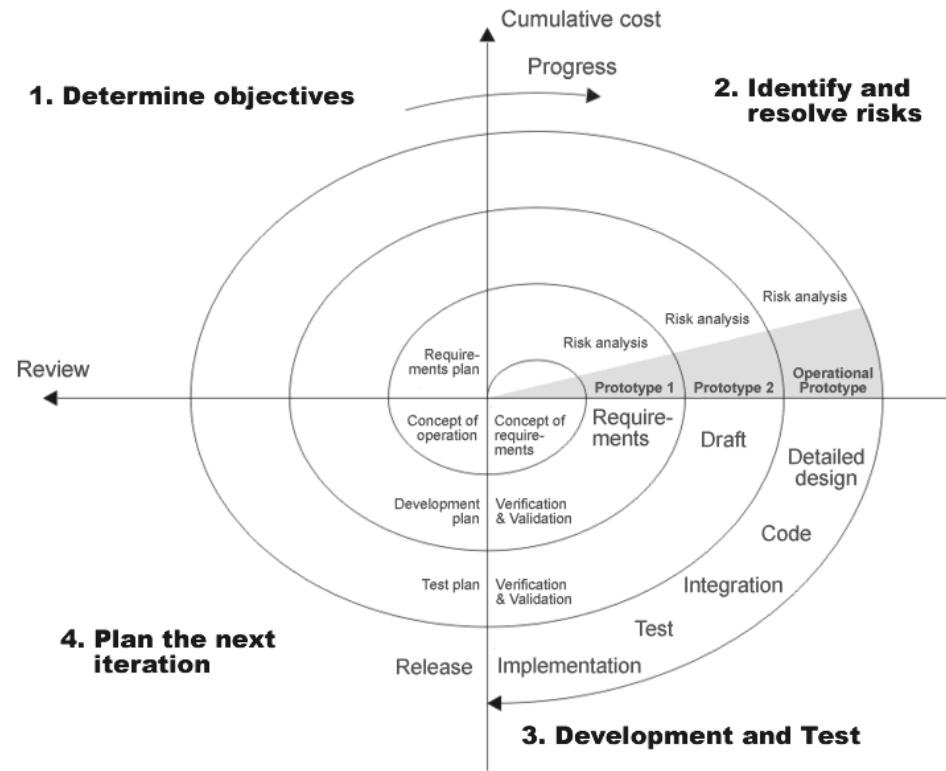
Ask yourself:

- **How can I make every loop count?**
- **How can I loop as fast as possible?**

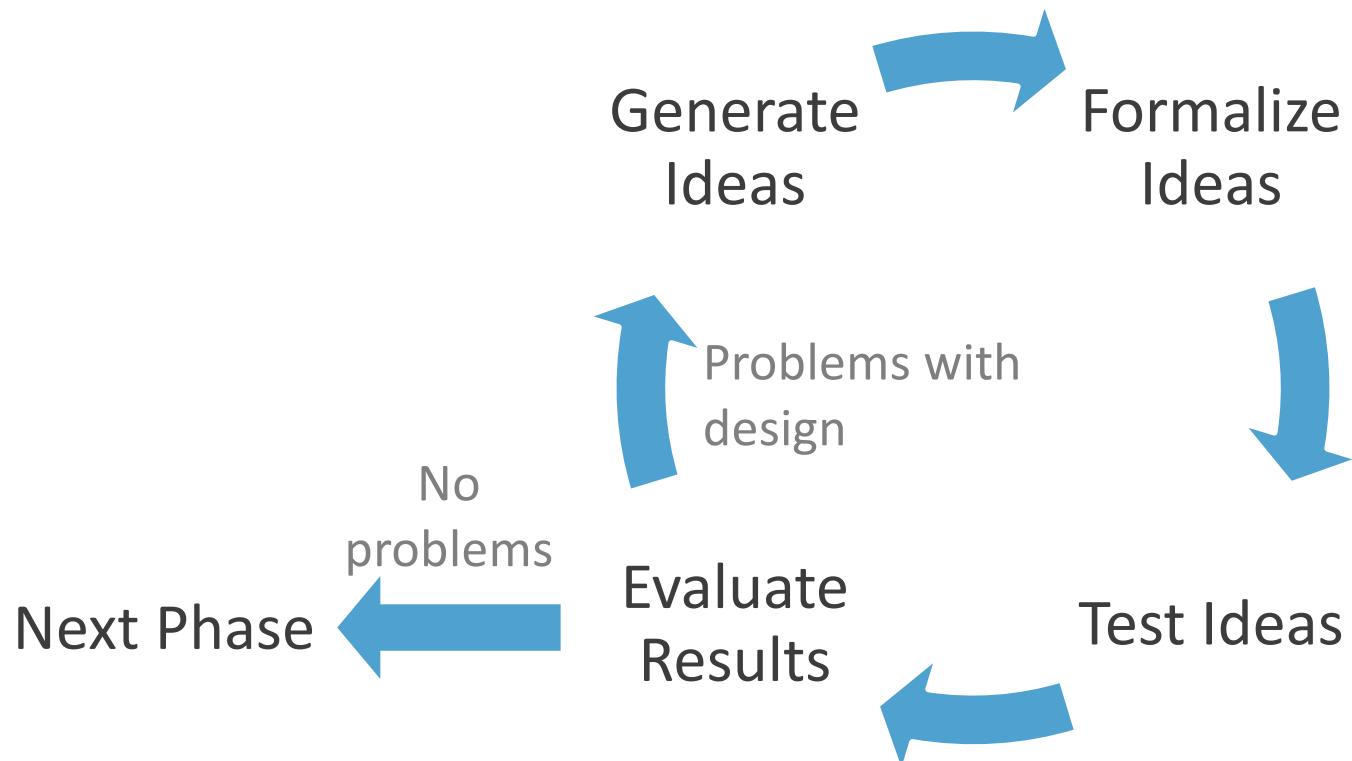
Looping model

- Different models exist (e.g., Waterfall, Prototyping, Spiral)
- 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



Iterative Process



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)

Risk mitigation

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

Fail Fast



<https://youtu.be/rDjrOaoHz9s>

Wrap up

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

Next steps

- Next class: **Unity** tutorial
- **Develop your concept**
 - Idea
 - Tetrad
- Submit your game idea before 26/02/2018 on **CyberLearn**
 - Write 1 page reporting:
 - Name of group
 - Names of group members (2 or 3)
 - Idea description