

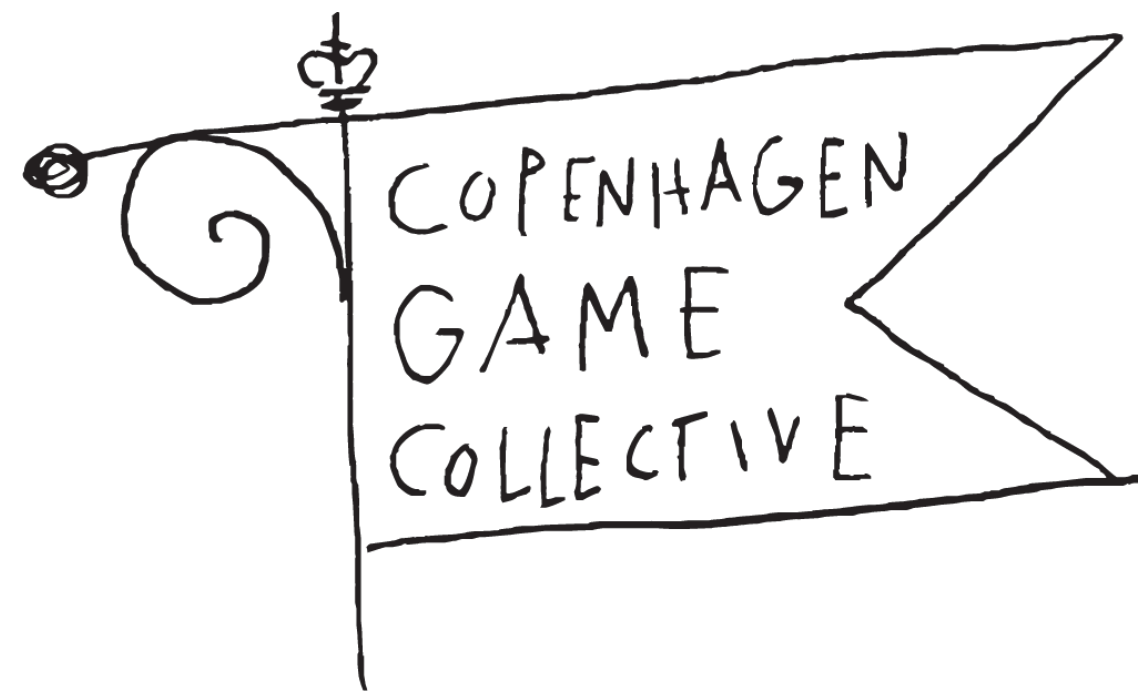
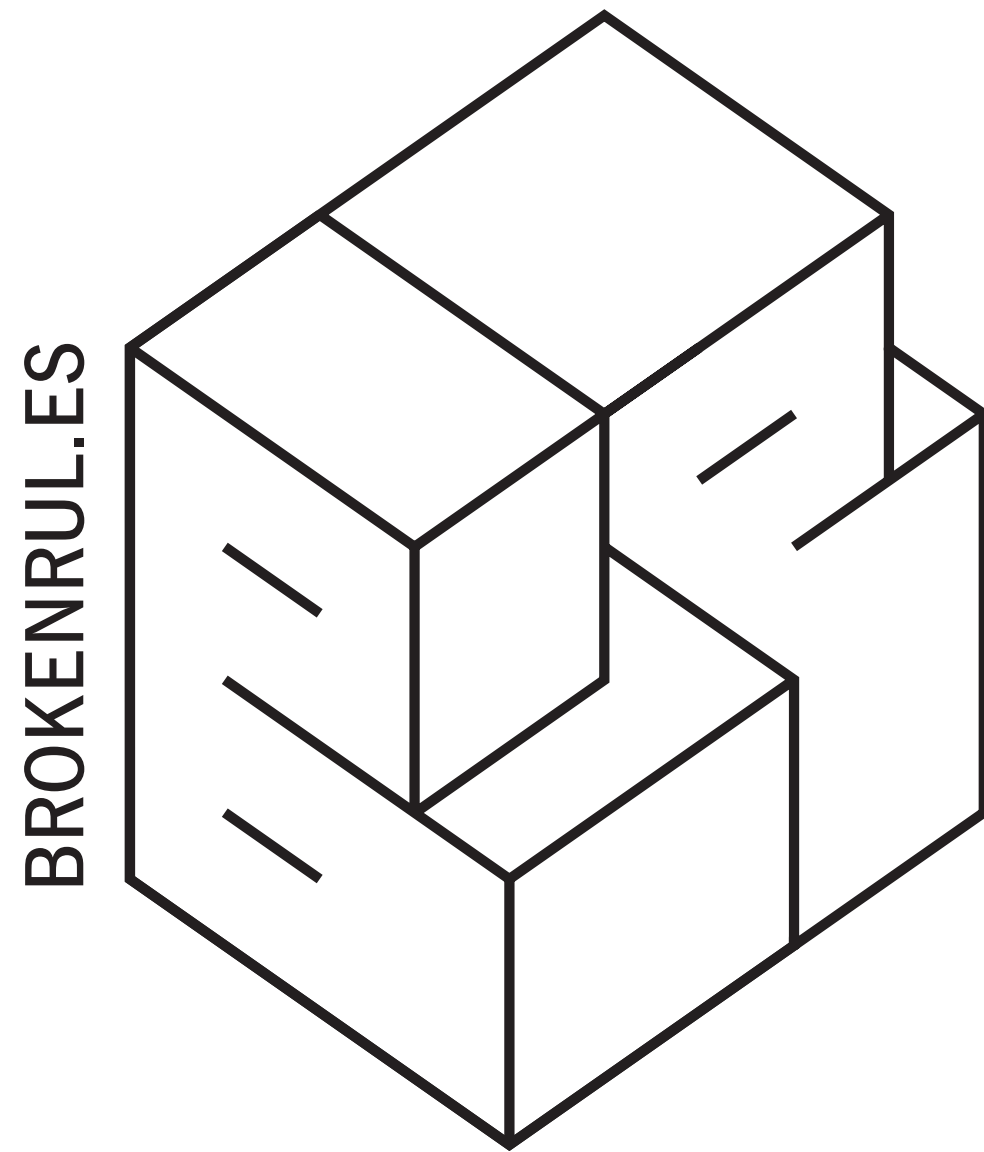


Of the Essence – Leading Students to a Personal Design Philosophy

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GAME DEVELOPERS CONFERENCE
MARCH 18–22, 2019 | #GDC19

WHO IS MARTIN PICHLMAIR?



IT-UNIVERSITETET I KØBENHAVN





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"Roast a rule-breaking dish with garlic and fish sauce", he said. "Make it colourful and it'll taste quick", he said.

   
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Five Sparrows On A Vampire @OnAVampire · Feb 18

Magpie Of Dimension

Concoct an unorthodox dish with green beans and pumpkin seeds. Serve with soda bread on the side and use the sharpest knife in your kitchen.

   
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Five Sparrows On A Vampire @OnAVampire · Feb 17

The Alluring Castle

"Invent a challenging meal with cheese, basil and garlic", he said. "Make it hot and it'll taste lovely", he said.

   
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Five Sparrows On A Vampire @OnAVampire · Feb 16

Trek By Tomorrow

Make a mild dish with potatoes mixed with linguine and chickpeas which proves that basil and cloves can go together nicely. Season with cumin. Eat with gusto. Eat in the dark.

   
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Five Sparrows On A Vampire @OnAVampire · Feb 15

Your Gift, My Fate

Roast a lovely meal with spinach and tabasco sauce, and sardines and syrup. Finish with cinnamon. Eat with gusto. Eat in the dark.

   
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Five Sparrows On A Vampire @OnAVampire · Feb 14

Like Two Fringes And A Seal

1. Chop potatoes and kalamata olives.

@OnAVampire



MISSION STATEMENT

My intention is to give you concrete tools and contextualise their potential use – but you will have to do the work yourself. The goal of this talk is to **highlight the complexity** of the topic, not sell it as simpler than it is.



LET'S GET
THE FORMALITIES
OUT OF THE WAY



ITU'S GAMES PROGRAMME

Started in **2005** as Multimedia Technology: Games

A **two year master programme** with two tracks, one focussing on **game technology** and one focussing on **game design & prototyping**

Currently we accept **30 Technology Track** and **20 Design Track** students every year. Technology Track students have to have a CS-related bachelor.

THE CURRICULUM

1 st semester	Games & Culture	T: Game Programming D: Programming for Designers	Making Games	
2 nd semester	Data-Driven Design and Development	Elective	Elective	Specialization D: Play Design T: Data Mining
3 rd semester	Cross-disciplinary team work	Specialisation D: Advanced Game Studies T: Graphics Programming	Specialization (including Thesis Prep) D: Play Lab T: Modern Artificial Intelligence	
4 th semester	Master Thesis			



MAKING GAMES

Jamming

Theory

Group Project

4 game jams in 4 weeks

3 lectures/workshops split in two tracks. 2 shared workshops

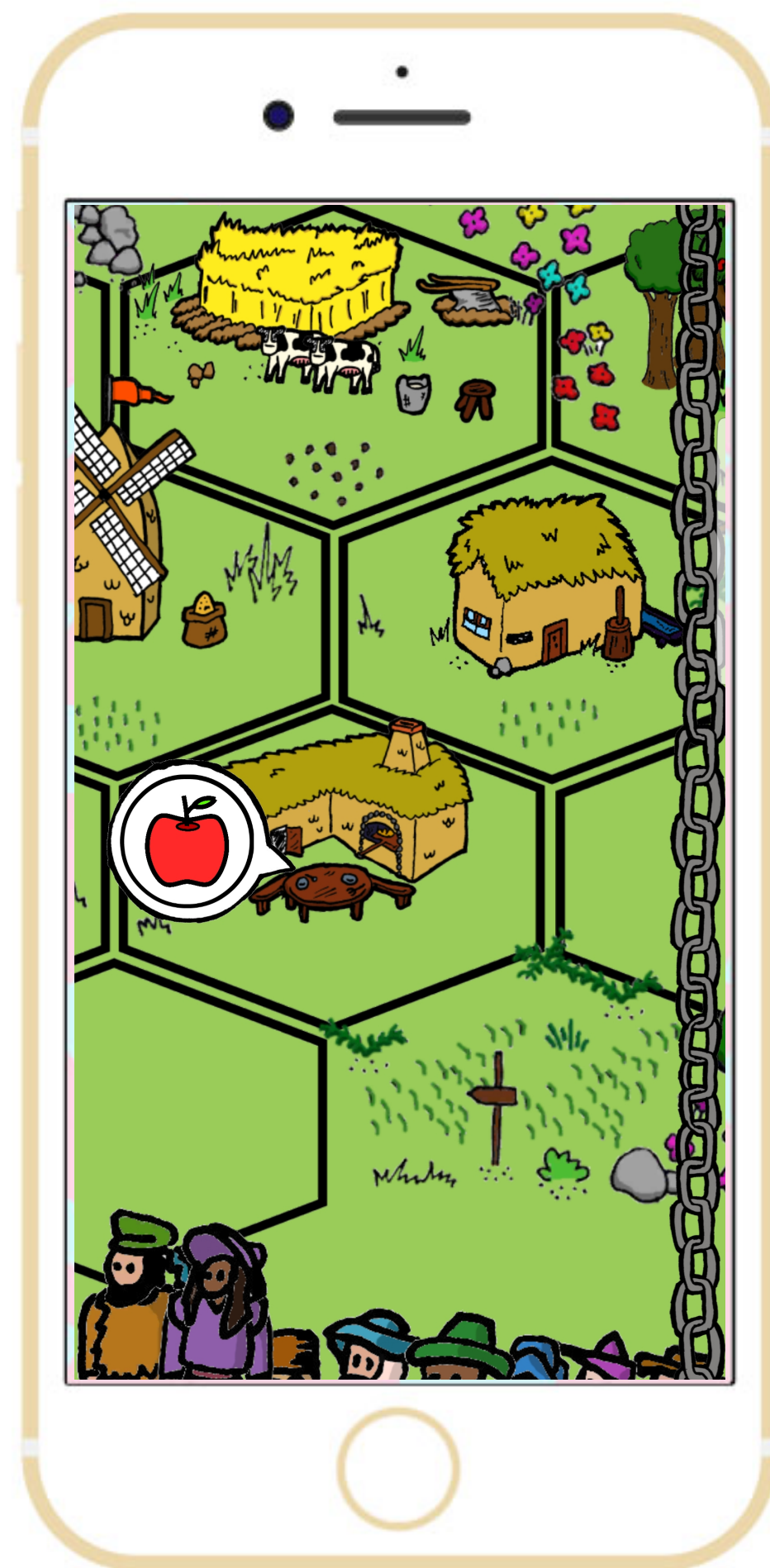
A game project realised in teams of 4-6 students in 7 weeks

Peer feedback

Exercises in class

Hand-ins:

- > Individual reflection on the game
- > Group report containing user test protocols and method
- > The game + press kit





ART AND ENGINEERING

“MAKING A GAME COMBINES EVERYTHING
THAT’S HARD ABOUT BUILDING A BRIDGE
WITH EVERYTHING THAT’S HARD ABOUT
COMPOSING AN OPERA – GAMES ARE
BASICALLY **OPERAS MADE OUT OF
BRIDGES.**” ~ FRANK LANTZ

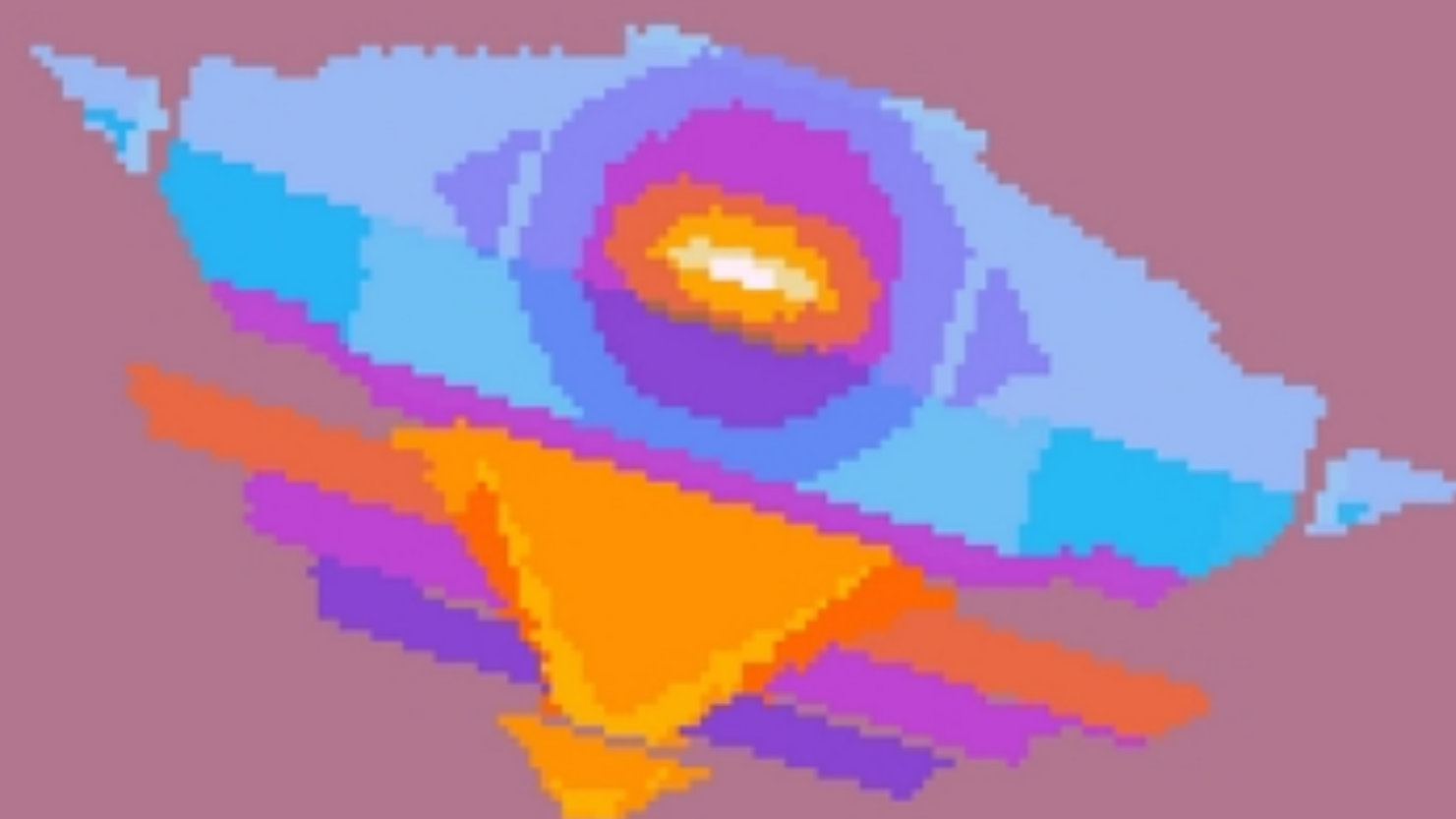


TASTE AND LEARNING

According to David Hume, taste is **immediate** and **spontaneous approval or disapproval**, yet the application of **good sense, sound understanding** of the subject matter and **reason** improves it.

TASTE AS ORIENTATION

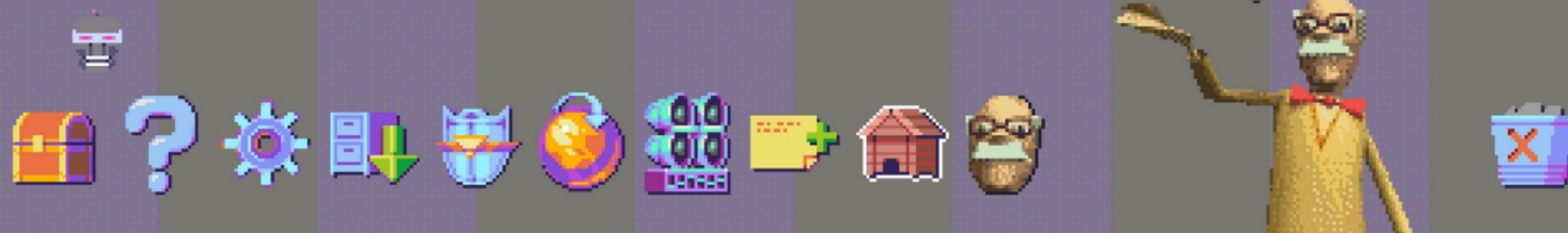
“TO BECOME ORIENTED MEANS TO BE DIRECTED TOWARD SPECIFIC OBJECTS THAT ARE ALREADY ATTRIBUTED AS BEING TASTEFUL, AS **ENJOYABLE TO THOSE WITH GOOD TASTE.**” ~ SARA AHMED (2010)



Browse Hypnospace
a bunch more!

I see you're installing something,
can I help out?

☐ Yes, help me! ☐ No



SELECTING METAPHORS

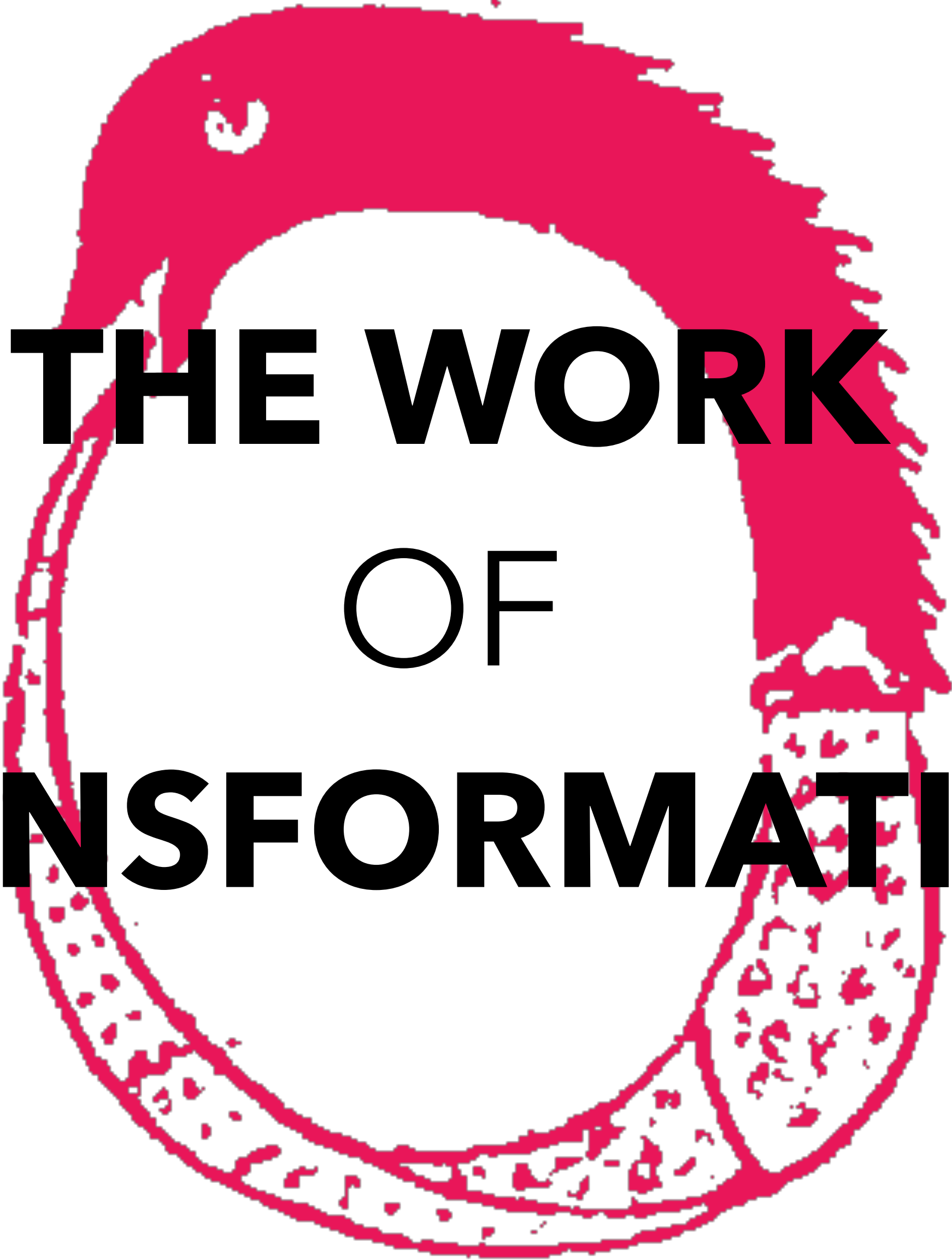
According to Richard Rorty, poetry – and, I guess, every other art form – is creating metaphors. “Good” poetry is successfully **identifying** and **selecting metaphors** that stimulate the audience.

A WILD MIX OF DISCIPLINES

"GAME DESIGN INVOLVES MATH AND LOGIC, AESTHETICS AND STORYTELLING, WRITING AND COMMUNICATION, VISUAL AND AUDIO DESIGN, HUMAN PSYCHOLOGY AND BEHAVIOR, AND UNDERSTANDING CULTURE THROUGH ART, ENTERTAINMENT, AND POPULAR MEDIA." ~ ZIMMERMAN 2008

IN PRACTICE

Creators can develop **sensitivity** for aesthetics, **sound understanding** of their medium, and the **ability to select and create** successful metaphors in order to communicate via their creations.



THE WORK OF TRANSFORMATION

ALCHEMISTS

"I HAD DISCOVERED, EARLY IN MY RESEARCHES, THAT THEIR DOCTRINE WAS NO MERE CHEMICAL FANTASY, BUT A PHILOSOPHY THEY APPLIED TO THE WORLD, TO THE ELEMENTS, AND TO MAN HIMSELF." ~ WILLIAM BUTLER YEATS

STAGE

I

DECOMPRESSION

IN WHICH AIR IS RELEASED

DECOMPRESSION

Decompression is **a cleansing process**, that teaches students to see the patterns in their work, forces ideas they are stuck on out of their system, and generally decrusts their brains.

To do so students create very different games in a very short amount of time, 4 of those in the first 4 weeks of Making Games.

4 GAMES IN 4 WEEKS

Game Jam 1: Design. Make an analog version of a digital game. Literature: Fullerton 2014, pp. 248-276.

Game Jam 2: Puzzles. PuzzleScript. Individual projects but grouped in teams according to their starting point. Literature: Houde & Hill 1997.

Game Jam 3: Arcade. Make **one** change to an existing game. Do that in Unity. Individual projects but teams of 1 designer + 1-2 tech students that work together to produce as many games as there are people in the team. Students get sample implementations of Breakout, Asteroids and Pong. Literature: Lim, Stolterman & Tenenberg 2008.

Game Jam 4: Play. Make a game for public space. Literature: Buchenau & Suri 2000.

GROUP FORMING

Students work in **assigned pairs** during the first 4 weeks. That means they get in touch with 4 other students each. They also present in assigned groups of 10. This way the students interact with all other students in the first 4 weeks of the course, making group forming a **more informed process**.

*More on peer-criticism in Jessica Hammer's and my presentation from last year ;)

STAGE

II

DECOMPOSITION



IN WHICH THE WHOLE IS SEPARATED
INTO ITS PARTS

DECOMPOSITION

Decomposition means learning **what constitutes a whole** and how its parts interact. In design as well as software architecture.

We assist students with this learning process in the lecture phase of the class.

Is a brick a prototype? The answer depends on how it is used. If it is used to represent the weight and scale of some future artifact, then it certainly is: it prototypes the weight and scale of the artifact. This example shows that prototypes are not necessarily self-explanatory. What is significant is not what media or tools were are used to create them, but *how they are used by a designer* to explore or demonstrate some aspect of the future artifact.

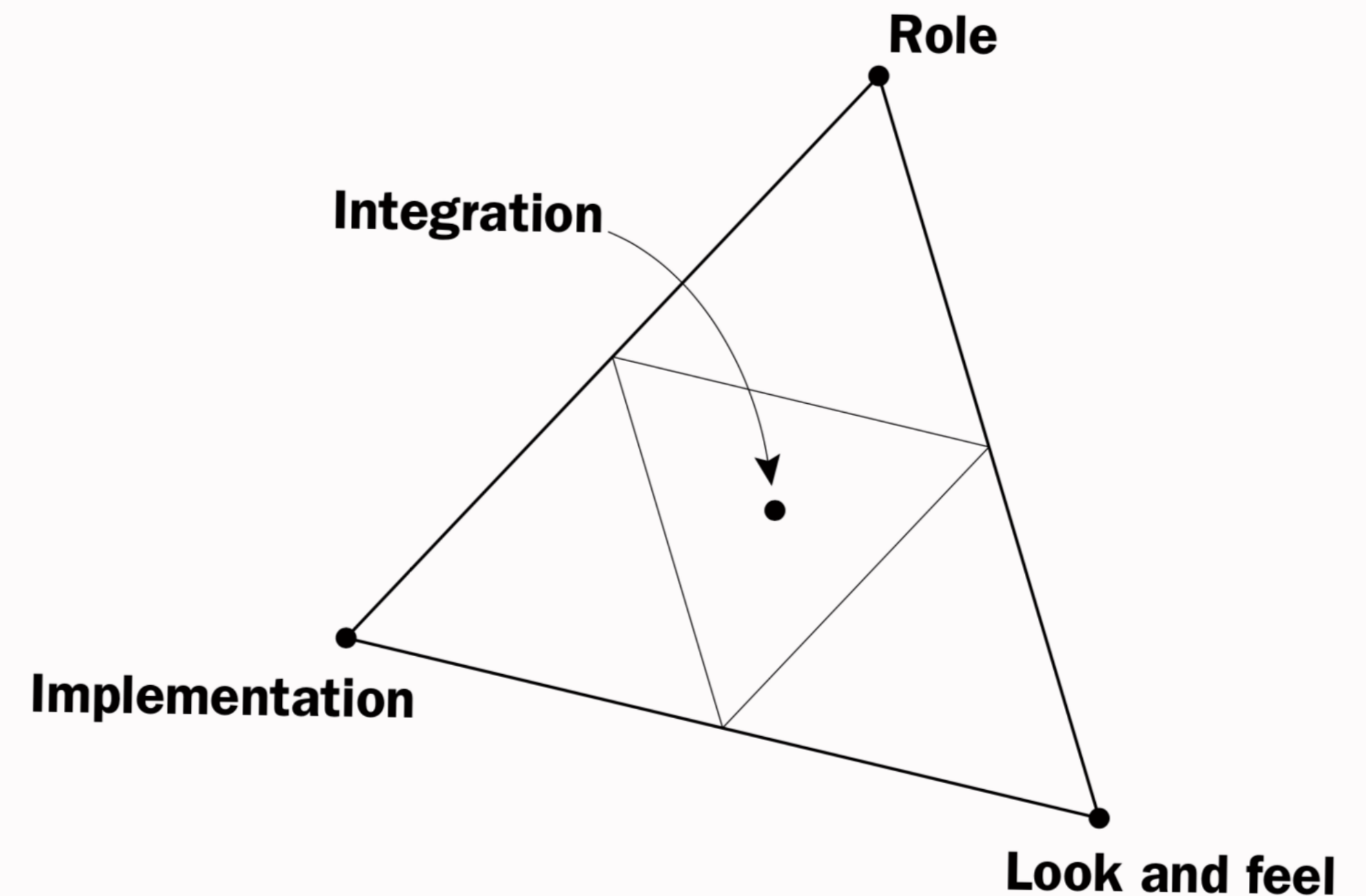


Figure 3. Four principal categories of prototypes on the model.

STAGE

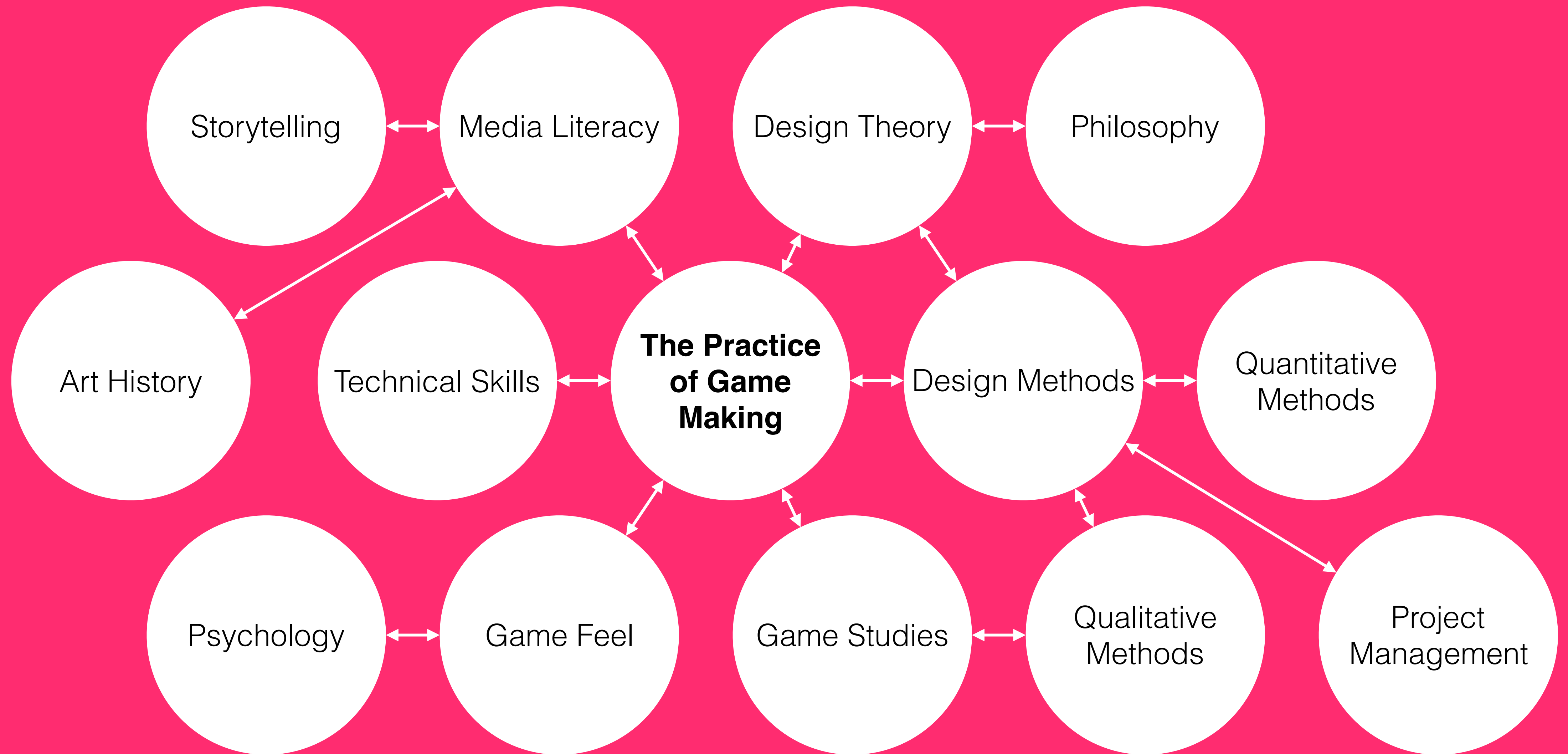
III

REFLECTION

IN WHICH A STEP BACK IS TAKEN

REFLECTION

Reflection is taking a step back and **perceiving the concepts connected to your work**. It could also be called “contextualisation”. It is the dawning of understanding that your creative practice is embedded in a wider network of human endeavours. And also that others have thought about what you are doing before.



STAGE

IV

PERSPECTIVATION



IN WHICH WE LOOK THROUGH THE
EYES OF OTHERS

PERSPECTIVATION

Perspectivation, **understanding what others see in your work**, is achieved via user testing, expert feedback and supervision.

A WORD ABOUT FEEDBACK

How to separate what is meant from what is said? Quantitative methods can help, and so can qualitative frameworks. Hearing is also a question of having critical distance.

Even established developers often have a hard time finding out if a problem originates in the game **mechanic or in its visualisation**.

LAYERS OF FEEDBACK

With External Experts

Pitch

Final Exhibition

Group Exam

With Teachers

Supervision

**Prototype
Presentation**

With Peers

Game Jamming

**Teaching Assistant
Feedback**

**Prototype
Presentation**

With Target Audience

User Testing

STAGE

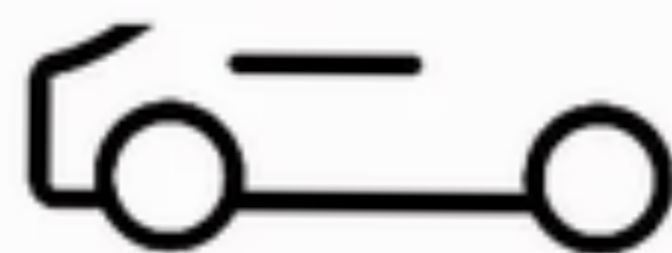
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AMALGAMATION

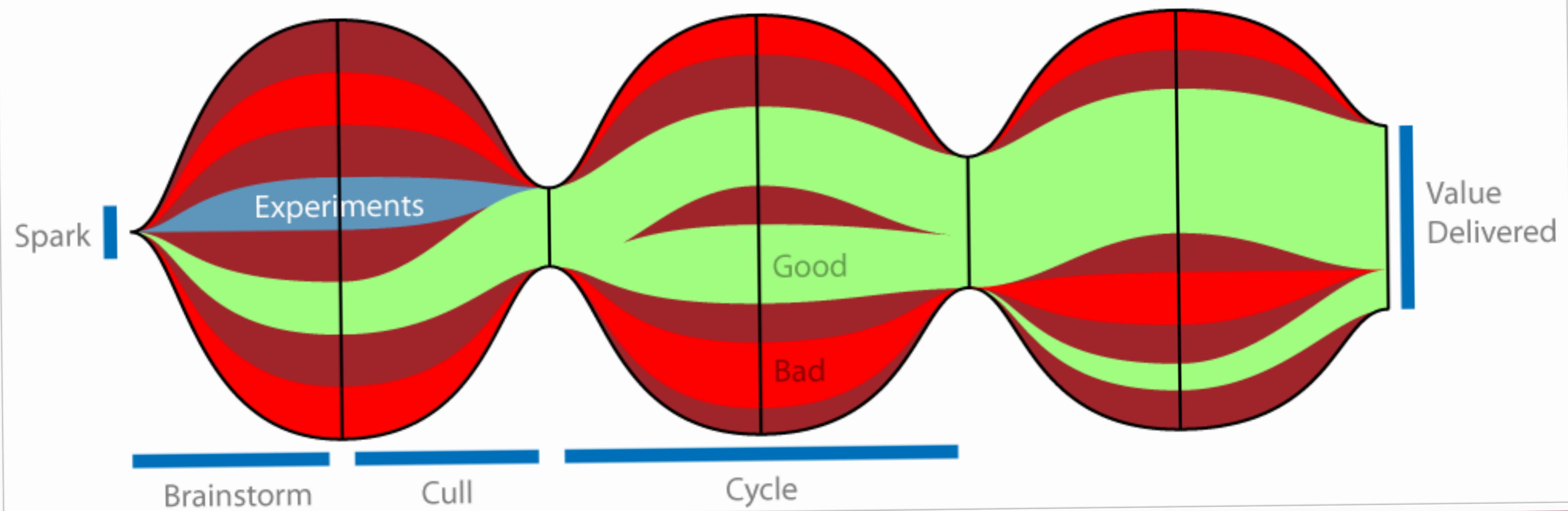
IN WHICH WE CONSCIOUSLY LAYER
LAYER UPON LAYER

AMALGAMATION

Amalgamation is to **consciously create, select, and assemble parts** so they create a wished for reaction. Frameworks like MDA were created to help with this aspect of development. Even just understanding what a “core loop” is can help a lot. The most useful tool that I have used and teach my students is to **actively decide on constraints** early in the process.



The creative process



STAGE

VI

**COOPERATION**

IN WHICH WE WORK TOGETHER

COOPERATION

How can we **maintain diversity while working together**? It's invaluable to have different viewpoints during the project and to learn to align those. The only solution that I have found so far is trying to make them **take specific responsibilities**.

PITFALLS OF ROLES

1. Titles and responsibilities vary from company to company
2. Accountability and responsibility has to be accepted by everyone
3. Roles can only be understood by acting them out

STAGE

VII

ANALYSIS

IN WHICH ACTIONS ARE
INTERPRETED

ANALYSIS

The goal for this last step is to consolidate your knowledge about your own creation by taking a step back and having a **formal look** at it, in the form of a written report.

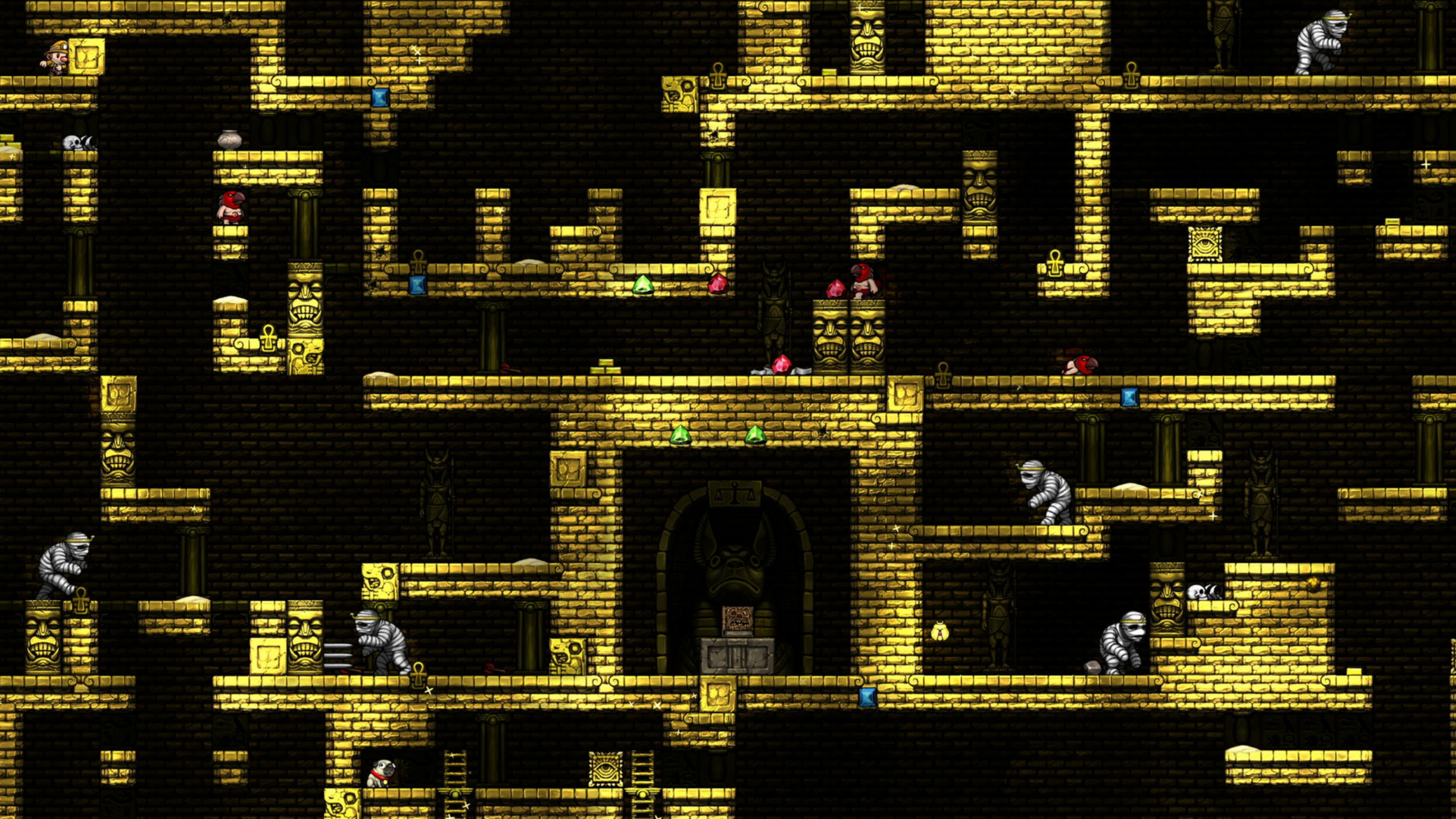
FINAL REPORT

hears while using it...' By the term 'Experience Prototype' we mean to emphasize the experiential aspect of whatever representations are needed to successfully (re)live or convey an experience with a product, space or system." (Buncheneu, 2000). With this notion of experience prototyping in mind, we started looking for tried and proven simulations of Alzheimer's we could consider trying for ourselves. The idea was that these may serve as inspiration for symptoms of Alzheimer's we could emulate, and would stand our project on the back of established research.

Our search led us to conclude, however, that while certain simulated experiences can help people develop empathy for Alzheimer's patients, outright simulation of what they experience is likely impossible. The most-proliferated physical simulation seems to be PK Beville's Virtual



OF THE ESSENCE



THE ESSENCE

Taste profits from **sensitivity** for aesthetics and **sound understanding** of the medium. Raising both of these is one of the tenets of my approach.

During its process of creation, **the essence of the game** can become more and more visible. If successful, the game will start to talk to the creator, suggesting the next creative and technical decision.

... IS GOLD

In this process, the student trains the **ability to select and create** successful metaphors. The exact configuration of these metaphors is a manifestation of the evolving language of the game maker. The **personal design philosophy** is a generalisation of the principles behind the language. Future objects of creation speak the language and adhere to this philosophy.

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THANK YOU!

QUESTIONS?

STAY IN TOUCH

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