

THE MYSTICAL



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Introduction

The Mystical Codes that have mystical properties, that are arcane or illegible.

“The Mystical” project developed for the “V&A Lates: Systems and Secrets” event that took place on 26th January 2018. As “MA Interaction Design Communication” students, we had the opportunity to produce a project for the specific event that takes place on the last Friday of every month. The theme of the exhibition was “Code” and “The Mystical” is a specific aspect of this. The aim of this collaborative unit was to work in a group of seven people, to research mystical codes and to produce an engaging and interactive outcome for the museum’s visitors. Thousands of people attend the specific event and it lasts three to four hours. This creates a challenge, as you need to communicate your idea quickly and to create something educative and playful for them. Another difficulty of the project was that we had to cooperate and take into account the fact that the project is student-driven. During a 3-week-period we had to do project management, brainstorming, research, development of our ideas, creation of prototypes, presentation of them, critique analysis, decision of the materials and implementation, taking into account the importance of the museum’s rules, the available funding, the transportability and the quick set up of our project.

Schedule Brief WEEK I

Feedback Prototype Ideation Research Brainstorming

WEEK II

Crit

Implementation

WEEK III

Exhibition

Process

Everything starting from meeting at the museum, where we learned the brief, the available exhibition space and the rules of the museum. Then our tutors explained us in detail what “codes” are and separated us into five groups, where each group had a different type of code – universal, secret, algorithmic, unknown and mystical.

During the first meeting with my team, we defined the following skills:

Lydia - Graphic Design

Yurik - Coding, Graphic Design, 3D modelling

Lili - Mechanics and Electronics

Eleni - Management, Technology and Constructions

Gary - Product Design

Aviral - Product Design

Jane - 3D modelling and rendering

We also set the first week's **schedule**, defining the tasks that we have to do and the time that we need to meet every day so as to be on time and finish the project smoothly. Then, we started **brainstorming** so as to define what Mystical Code is. We decided that we want to focus on the spiritual and cultural side of some mystical symbols.

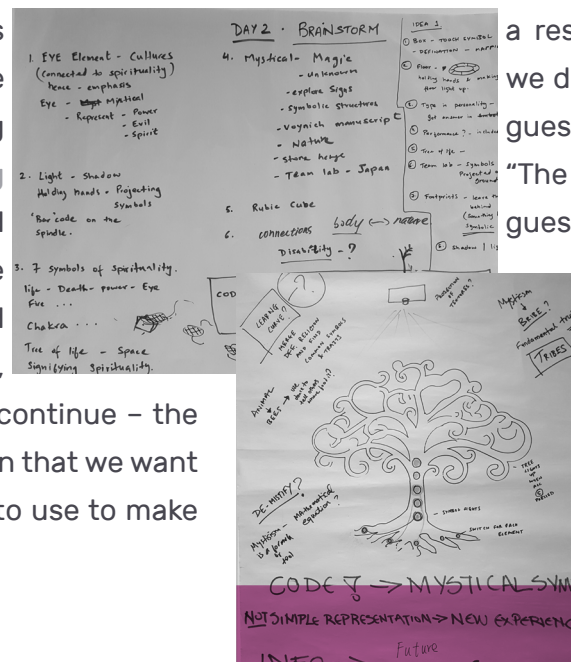
During the first week, each one made individual **research** and presented some projects from which we took inspiration so as to make a concept and develop an **idea**. After Tobias' **feedback**, we realized

that the interesting part that we have to focus on is the history behind the symbols. We had to teach the audience and at the same time to create something playful. After individual **research** and **brainstorming** with the team, we defined two **ideas** and we decided to make **prototypes**. But from Tobias' **feedback**, we realized that our ideas were very representative and they don't offer a new experience to the audience. So, it was mandatory to define three things in order to continue – the mystical symbols that we want to use, the information that we want to teach them and the kind of design that we want to use to make the experience interactive and engaging.

An this moment, we were really stuck and what happened was an eternal loop of **research**, **brainstorming**, **ideation**, **feedback** and back to the beginning. After Nicola's **feedback**, I realized that it is probably better if we separate in two sub-groups and try to work separately until to find some ideas and then discuss them all together and develop some of them.

This method didn't work so well and due to the press of time to develop and present our work to V&A guests, we had to work separately. As

a result, five of us developed a different idea that we discussed and we presented to the guests. From guests' **crit**, we realized that the idea of Yurik, called "The soul of man" was the most attractive for the guests. The critic that we received was to make our project interesting for the audience and try to answer the question "why should they care?"



The idea was that we will create a mystical symbol, in which visitors can talk. If they pronounce the given phrases loud and clearly then something magical will happen. Starting the implementation, we had to define the following points:

The design of our product.

The materials that we are going to use.

The code development.

The narrative of the concept.

Space and equipment requirements.

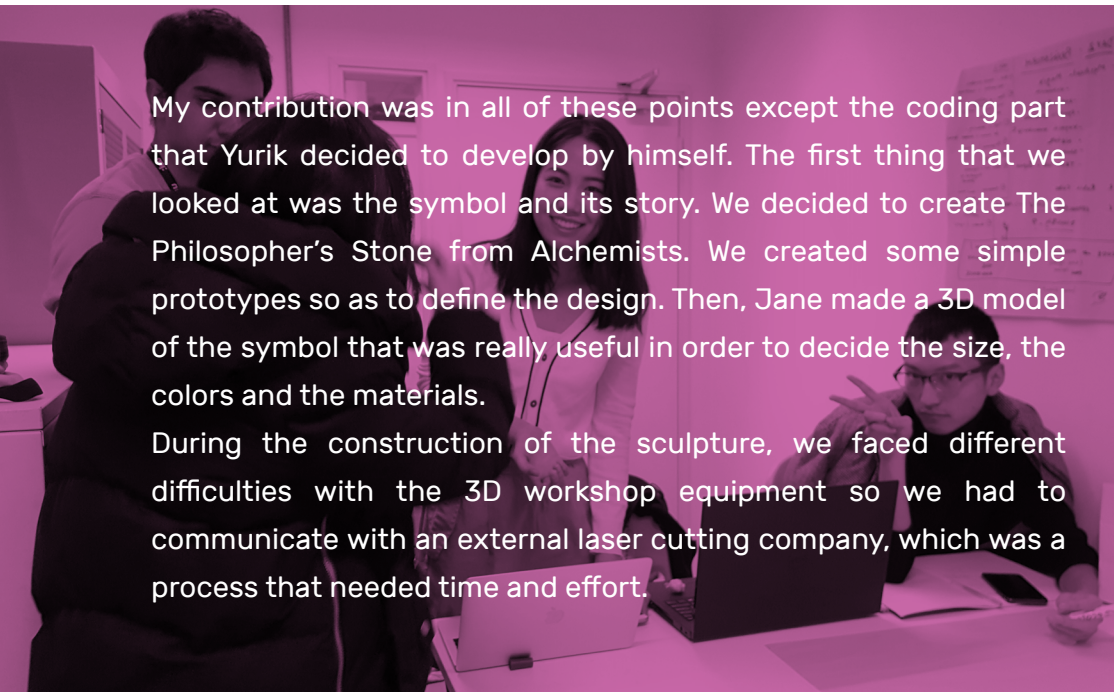
My contribution was in all of these points except the coding part that Yurik decided to develop by himself. The first thing that we looked at was the symbol and its story. We decided to create The Philosopher's Stone from Alchemists. We created some simple prototypes so as to define the design. Then, Jane made a 3D model of the symbol that was really useful in order to decide the size, the colors and the materials.

During the construction of the sculpture, we faced different difficulties with the 3D workshop equipment so we had to communicate with an external laser cutting company, which was a process that needed time and effort.

We had also to buy some equipment online and to require some equipment from the museum and the college.

Due to limited implementation time, we realized that the idea of speaking recognition couldn't implement. So, Yurick proposed to work with leap motion, a technology that recognizes gestures and hand movement. So, we had to change the concept and the narrative. After listening to a radio broadcast called "Haunted Machines: Alchemy" by Tobias Revell and Natalie Kane, I inspired for the concept that our installation could have. After discussing with Lili we wrote the information that we wanted to provide to our audience.

The day of the exhibition we had to package everything so as to transfer them to the museum. Then we composed again our sculpture, we connected the speaker that V&A provided to us and we prepared and tested our installation so as to be ready. The exhibition was a really interesting experience. People were impressed by the sculpture and its meaning. They interacted with that, took photos and videos, and asked us questions for the Alchemists and the way that leap motion works. At the end, we had to unset everything and package them to transfer them back to college.



Research

My research was mainly based on online observation. At the beginning, I tried to find different mystical symbols and to categorize them. The main categories that I looked at are the following:

Spiritual symbols (Tree of life, Yin Yang, Pentacle, Eye of Providence, Eye of Horus, Ohm, Ankh, Flower of life, Lotus, Dharma, Hamsa, Buddha Eyes). These symbols have interesting stories and positive meanings like enlightenment, rebirth, balance and life force.

Religion symbols (Christian, Hinduism, Buddhism, Islam, Jewish). Despite the difference in each person's belief, it is worth to say that all of these different religions have many common meanings about protection from the god, faith, enlightenment etc.

Alchemists' symbols (Metals, 5 Elements, Philosopher stone). Alchemists always referred to as the first chemists. They were trying to transport metals to gold, to find the Elixir of immortality, to find the perfection between body and soul and to reach the gnosis-knowledge.

The 4 (or 5) elements (Ancient Greece, Alchemists, Chinese medicine Wu Xing, Hinduism, Buddhism, Japan). These elements represent the fundamental elements of nature. In most cultures, the main forces are these of Air, Earth, Fire and Water. Some of these cultures believe also in the fifth element, which is the Void, the Aether, the Spirit or the Metal. These are connected with different symbols, shapes, colors, planets, personality traits, depending on the culture or the religion.

Masonic symbols (All seeing eye of God, Compass) Freemasonry has borrowed and modified a variety of religious symbols. They illustrate a broad allegorical story of morality, fraternal association and life lessons from which the newly made Mason may come to understand the teachings of the organization.

Ancient Greek symbols (Minotaur, Labrys, Labyrinth, Caduceus). Greeks have many symbols from the mythology which is rich of interesting moral stories and are associated with various things, like personality traits, places etc. Nowadays, they still use some of these symbols.

Egyptian symbols (Ankh, The Eye of Horus, The Lotus). There are numerous Egyptian hieroglyphs, which was the writing system in ancient Egypt. Their content is mainly connected with the religion.

Mayans symbols (Jaguar, Eagle). The Mayans left hundreds of symbols carved on stone, which allow archaeologists to gain an understanding of their culture. Mayan's writing system is called glyphs. Some of them appear on the walls of the temples in Mayan cities, revealing their importance to the culture.

Zodiac signs (Western, Chinese, Mayan Egyptian, Hindu, Celtic). Astrology is a belief system built on using observation of the heavens. In the most astrological systems, the most heavy significance is placed on Zodiac types - the position of various stars, heavenly bodies, and constellations at the time of a person's birth.

I also rode some interesting things in the book "**Techgnosis: Myth, Magic and Mysticism in the Age of Information**" by Erik Davis. In this book, the writer claims that esoteric and religious impulses have spread through technological communication. He uncovers connections between topics such as electricity and alchemy; online roleplaying games and religious; virtual reality and mythology; programming languages and Kabbalah. The haunt technology, provide new ways to think about a future defined by the deviant mix of mind and machine, nightmare and fantasy.

Many information that complete our narrative came from the radio broadcast called "**Haunted Machines: Alchemy**" by Tobias Revell and Natalie Kane. This radio broadcast features practitioners from different fields that express their opinion about alchemy and the connection of this magical art with their fields.

Inspiration

A Comma, A Jim Sanborn

Jim Sanborn has made many public projects similar to this. He uses language texts and light in cylinder structures. The letters are projecting all around the space and create a mystical atmosphere that creates curiosity for the audience.

Tree of life Enviral Design

The artist has created a tree with modular, 3D pixel mapped, LED tubes. Each one reactive to touch, giving to the audience an interactive experience that they can be a part of.

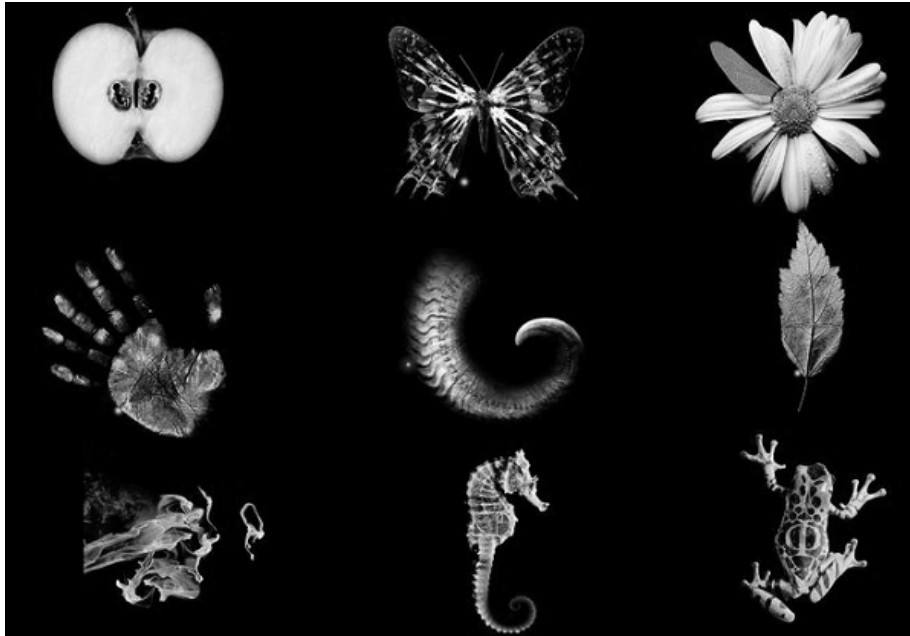
Yuzhòu Brut Deluxe

Yuzhòu is an immersive light installation, which consists of a maze based on a triangular geometry and built of acrylic glass. Light rays along the entire color range of a rainbow while the spectator moves in the installation. The panels on the outer perimeter are provided with a mirror film converting the interior in an infinity room – a unique cosmos of overlapping light patterns and constantly changing colors.

The Great Turbine Challenge Charlie Tymms

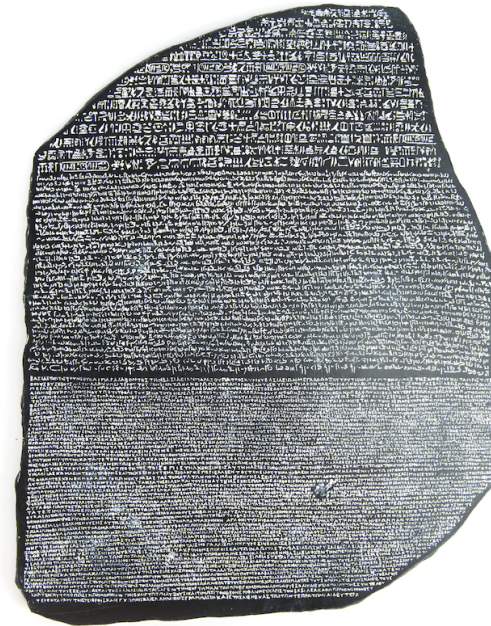
TATE Lead Artist created a giant interactive board game. Each sculpture was based on an artwork in the Tate Modern but was made interactive and designed for any age group to use.





Fringe Glyph Cipher

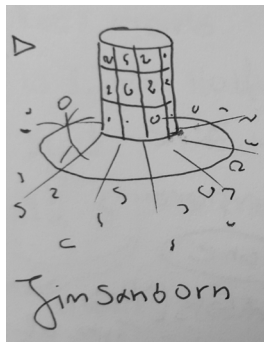
The Glyphs have been shown on the “Fringe” show, on posters, and on the Internet. Each glyph shows a natural element, generally with some unnatural change that is easy to miss at the first look. The symbols are also used, along with the dots, to make a code. The code usually makes a reference to some aspect of the overarching storyline or holds a clue to the next episode. The glyphs were deciphered by fans of the show without aid from the production team. As such, it took many episodes to develop the alphabet as new glyphs were being constantly introduced during the first season as different letters were used.



Rosetta stone British museum

The top and middle texts are in Ancient Egyptian using hieroglyphic script and Demotic script, respectively, while the bottom is in Ancient Greek. As the decree has only minor differences between the three versions, the Rosetta Stone proved to be the key to deciphering Egyptian hieroglyphs.

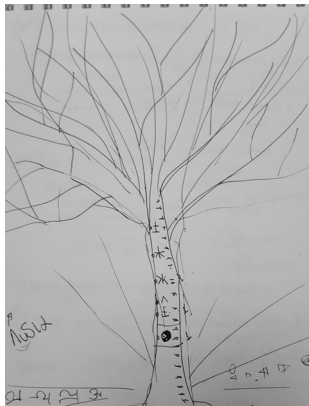
Concepts



- Column with symbols from different cultures
- Projection Mapping in the floor
- Connection of the symbols with the personality
- Rotating columns

The connection of spiritual symbols from different cultures.

Inspired by the work of Jim Sanborn, I thought that we could make a similar cylinder construction with projection mapping on the floor. Using symbols from different cultures with meanings that visitor could connect with his or her personality. The audience would interact with the rotating columns of the artwork so as to reveal information of the different symbols. After Tobias' feedback, we realized that this is very representative and over symbolizing so we gave up this idea.

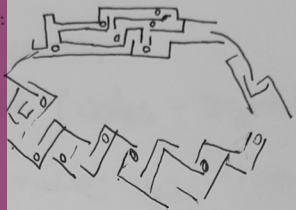


5 Elements - Tree of life

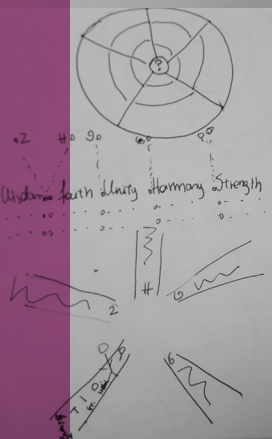
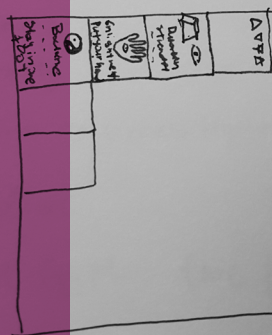
Finding out that the tree of life and the 5 elements are presented in many different cultures, I thought for an installation in which we can build this tree, and curve in each side of this the 5 elements symbols of 5 different countries. This installation would be interactive as the audience should cooperate pressing the sensors that would be around the tree, which would activate each element. When all the elements would be activated the tree would start get light from the roots to the top leaves, which would express the rebirth of life. Tobias suggested us to go deeper because these symbols are already known to people and that interaction is not pressing button and magic happens, but gain new information and experience something new.

New Ideas

- Maze:



- Giant Board Game



Maze

Through research, I realized that there are different symbols with the same meaning. For example, there are many symbols that mean life- birth – rebirth (Tree of life, Ankh, Lotus, Flower of life). It is interesting the fact that different religion and cultures have the same beliefs and qualities for important ideas like life and birth. But also the same symbol, like the star in a different context has a different meaning (Star of David, 4th chakra, hexagrams, Anti-Semitism). So, inspired from the maze by Brut Deluxe, I thought that would be a nice way to make audience travel through a maze in which they would find out the similarities and differences for these symbols trying to find the way out of the maze. The problem with this idea was that the exhibition space was limited and we couldn't fit a maze inside. Also, the available budget wouldn't be enough for a contraction like that.

Giant Board Game

This is kind of the opposite of the previous ideas. Looking at the same symbol in a different context from past to present, like the eye (Eye of Horus, All seeing eye of God,

Great Seal of US, Free masons) and the fish (Pagans, Egypt, Greco-Roman, Celtic, Indian, Africa, Christianity). Different people in different time used the same symbol that means something else each time. Specifically, the eye of Providence at the beginning had to do with God and divinity. And now with some changes in the design of the symbol, its meaning is strength and duration.

Looking at The Great Turbine Challenge in Tate museum, I thought that we can create a giant board game, in which through playing with tangible elements, the information of the use of some symbols through time would reveal to the audience. The idea wasn't so appealing for the rest of the group because they preferred to create something using technology.

Time – Zodiac riddle

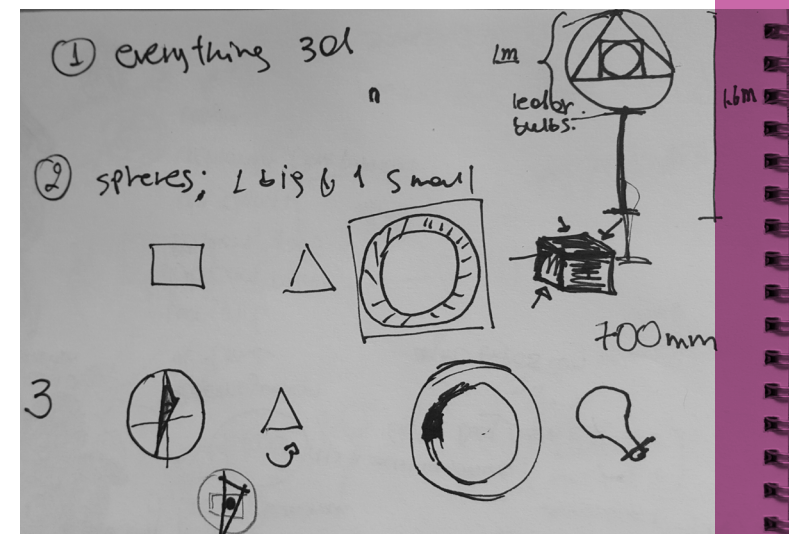
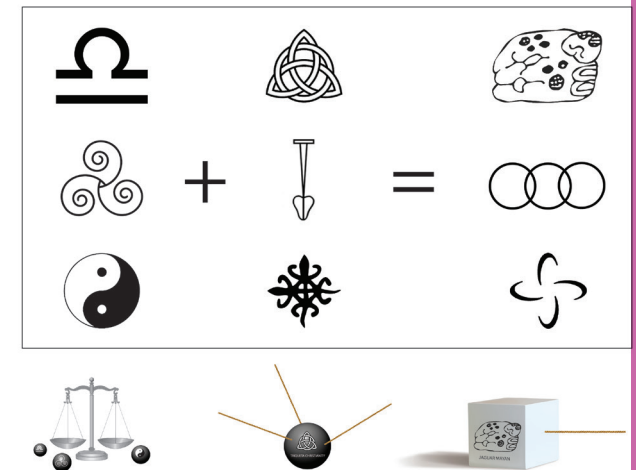
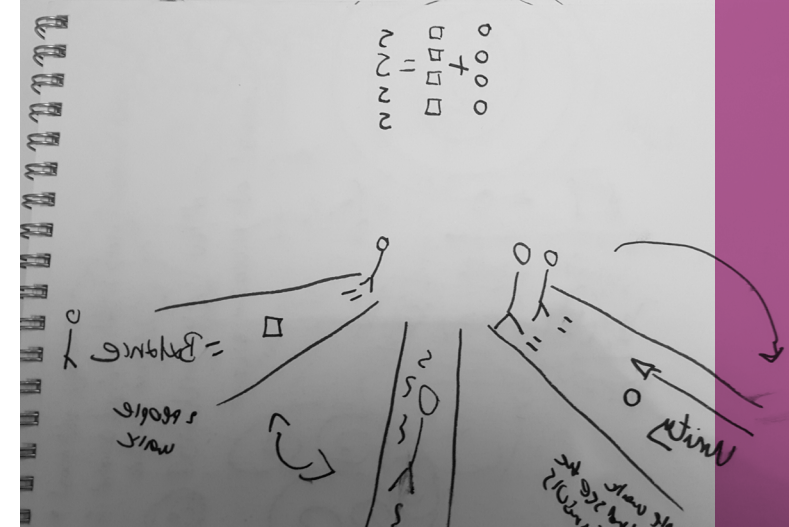
Nicolas gave me inspiration with his suggestion to make a gryph. Giving to the audience a code and some clues with which they could decode it in order to take a reward. Having searched for different astrological systems, I thought that we can make a cyclic stone in which we can curve the different zodiac symbols from different cultures. Giving clues to the audience for the meaning of some symbols they would turn the parts of the cycle in the right direction and then the reward would be revealed. Nowadays the time is perceived linear, but during the Hellenistic Period in Ancient Greece, there were gods associated with eternity and everlasting time. So, I thought that the reward for the visitor could be a projection mapping showing the visitor, who would be recorded during trying to solve the puzzle, travel through time. Finally, we decided that this is probably very complicated for the audience.

Riddle: Code, Decoding, Playful, Learning

Based on the idea to create a puzzle for the audience I thought to make a code with spiritual symbols from different cultures. So, when people would decode this puzzle the message Balance + Unity = Power would reveal to them. Each column of the puzzle would have a game which through playing the audience would learn the meaning of the column. For example, in the first column, the visitor would have to play with a libra so as to balance some elements. The second game would demand teamwork and the third one strength, so as to find the meanings of unity and power respectively. The feedback that I had from Natalie – the V&A guest- was that I should teach the audience how a game works and then to raise the difficulty in order to make them engage and want to play.

Alchemy – Philosopher's stone

The concept that we decided to implement finally was the Philosopher's stone. This was the Magnum Opus of Alchemy, so I thought that it is the ideal mystical symbol that we should construct. This consists of 4 shapes and each shape is inside the other. I thought that would be interesting to make each shape rotated, and not straight as the real sketch, so as to have a sculpture that when a visitor would look from a different angle, he or she would have a different view. The narrative that we thought at the beginning was that when people would interact with the symbol, gold would be created. But due to the limited time that we had, we couldn't create an effect like that. So the concept changed so as to fit with the interaction that Yurik developed. The audience had the opportunity to control the color lighting of the philosopher stone using their hand. This interaction symbolizes the association between the magic that can be created using today's technology and the art of alchemist's transformation.



Background

“The matter lies before the eyes of all; everybody sees it, touches it, loves it, but knows it not. It is glorious and vile, precious and of small account, and is found everywhere... But, to be brief, our Matter has as many names as there are things in this world; that is why the foolish know it not.” by an anonymous German philosopher

Alchemists

Alchemy is a philosophical and proto-scientific tradition practised throughout Europe, Africa and Asia during the 12th-18th century. It aimed to purify, mature, and perfect certain objects. Alchemists invented a mystical code of many symbols because they wanted to keep their methods secret.

Philosopher stone

The philosopher's stone was the central symbol of the mystical terminology of alchemy, symbolizing perfection at its finest, enlightenment, and heavenly bliss. Efforts to discover the philosopher's stone were known as the Magnum Opus – the Great Work of alchemy.

Connection with technology

Alchemists were trying to transform useless matter into gold. Today, it is proven that this transformation is not supernatural or magic. It actually needs a particle accelerator. Magic means that you can't see behind the curtain, how something works. Technology also hides some mysticism and magic. There is the paradox of unexpected in the desired outcome, which connects with the encrypted metaphysical recipes of Alchemists, that they can go wrong. The philosopher stone and the act of alchemy is like a black box. You see what goes in and out but never what happens inside. However, in our world, there is no secrecy. It is just a complicated world that we try to understand.





Implementation

Design, Materials and Construction

As I mentioned above the Philosopher's stone consists of four shapes. Two circles – one big and one small, one triangle and one square. Each shape is inside another shape. I thought that would be interesting the inside small circle to be replaced from a lighted sphere and the other shapes to be rotated, and not straight as the real sketch, so as to have a sculpture that when the visitor would look from a different angle, he or she would have a different view. We made two tangible prototypes to see if the idea is feasible and Jane made also two alternatives using 3D modelling.

We decided to buy the sphere because it wasn't easy to make it by ourselves. The other shapes should be laser cut. The maximum size that we could laser cut in the 3D Workshop of the university is 700mm. We chose to use plywood because the shape comes from alchemy and should look old.

We had to connect flexible LED strip, which we buy online, to the external side of each shape. But when we tried it at the prototype that we made, the result was bad, because the symbol lost the antique character that it had. So we had to find a way to hide the LED strip. We had to create a design in which each shape consists of three layers. The two outside layers would have the same height and the inside layer would be shorter in order to fit the LED strip. In this way, the strip would be hidden and the visitor could see only the lighting of this. I tried also to find a flexible LED strip with a frozen white cover instead of simple LED but it was not easy to find the width that we wanted and it was not possible to be delivered in time. So I thought that we can laser cut transparent acrylic that would have the same result. But the acrylic is more expensive and also it is hard to find the same thickness of Plexiglas and plywood. As a result, the only solution was a quick and dirty fix, using good quality paper. After searching and speaking with some people from printmaking in college and a company that sells paper I found a white frozen paper in which we added double-side tape so as to hide the LED strip.

The design of the shapes was difficult. Lydia made the illustrator file for the laser cutting and we helped her to make the calculations for the sizes because the outcome that we wanted to succeed was tricky. One difficulty that we faced was the fact that the laser cut machine in the 3D Workshop wasn't working. So we had to communicate with an external company, to send them the files, to explain to them what we want to do, to ask for price estimation, to go there with the material that we bought from the 3D Workshop and to go back to take them when they are ready. It was very stressful because it was last moment and we didn't know if we would have time to construct and test the sculpture.

Finally, when we had all the layers of the shapes we had to varnish them and glue them together. We finished with the construction and Yurik finished with the programming one day before the exhibition, when we worked all together so as to connect everything. I had also to communicate with V&A, Tobias and LCC staff so as to find a proper plinth with the right dimensions in order our construction to be at eyes level. We also laser cut the information that we wanted to share with the audience. Here follows the content that audience could read so as to understand our project.

Content

The Squared Circle is an Alchemical Symbol from the 17th century, illustrating the interplay of the four elements of matter symbolising the philosopher's stone. The philosopher's stone is a legendary alchemical substance capable of turning base metals such as mercury into gold. Alchemists were mysterious adepts exchanging messages in a coded form. They were even seen as having paranormal powers which enabled them to do all sorts of magical methods. Magic means that you can't see behind the curtain. Technology also hides some mysticism and magic. The use of technology seems like the act of alchemy. It is like a black box. You see what goes in and out but never what happens inside.

Video

The project's video was made from Yurick and shows some process of the construction and the final exhibition. You can find it here <https://youtu.be/4RrUHzCBifs>.



Critical analysis

Starting this project I was really excited because we had an interesting subject about mystical symbols, I would cooperate with my peers and we would exhibit in a worldwide famous museum with thousands of people.

Regarding the subject, I researched deeply for many different mystical codes that helped me have in mind many different concepts. The problem with the cooperation is that you have to succeed to explain the concepts with the best way in order to make other people follow your thought and then add their creativity to an idea. But what happened, in this case, was that each one of us was looking mainly for personal ideas without helping each other to develop one common. As a result, we spend all the first week in brainstorming and at the museum guests' critic, we didn't have a common idea to present. I think that this is not the ideal for collaborative work. I also observed that when we brainstormed in sub-groups of three people the conversation and the understanding was more effective.

Another observation that I had from this collaboration was that it is easy to find inspiration from other projects that you like and you want to use, but this limit your concept.

I believe that the process when you design something is first research in the field, find an interesting aspect that you want to design for, define what you want to teach the audience and then find the appropriate inspiration from other project and visualize your idea. In this case, we first aestheticize the construction and then we were trying to find the narrative. As a result, our project was mainly representative. Showing, how the Philosopher stone could be and connected the "magic" that we created with the mystery that hides behind technology.

Another limitation of this project was the time. We had to estimate better our expertise and to decide if the project we want to make is feasible in the given time. It was a three week period really stressful because we didn't have a concrete narrative, programming was hard to make in given time so it was unsure if it would work and we faced many difficulties with the construction of the sculpture. However, the last day we were happy because we connected everything, it was working and it looked good. We had also feedback from the others team that they liked it.





The exhibition day was an amazing experience. It was my first time that I exhibit my work in so many people in a museum. It was really interesting to watch people reactions to your work. A lot of them seem interested to play with it and read the information. Some of them asked us more information for Alchemists or for the technical part of the project. I believe that the result created some mystically and curiosity for people that wanted to find out what it is about.

If I did this project again I would create sub-groups from the first day, in order to work more focus on one or two concepts that come from a common idea. The collaboration didn't work very well in the research and narrative, but it was very effective in the implementation. The combination of different skills -3D modelling, graphic design, programming, building constructions and management- was the key to the completion of that project. I think that my contribution to this project was determinant in the narrative, the building and the managerial part. To be clear, I involved in all the construction process, I wrote with Lili the concept and also I managed many difficult circumstances that we faced, as the communication with the staff from 3D Workshop, Lasercut Works company, LED Technologies supplier, V&A museum and G. F Smith company.

Regarding the final outcome, we didn't synthesize any new knowledge on the field. We didn't create something that raises awareness or create debate, but a well-made sculpture that makes people curious to play with. However, the context of the project was a night event in a museum with thousands of people. This means that our work should be engaging, playful and easy to describe and I believe that we succeed to do that. What made me really happy this night was that I saw my group enjoy the exhibition and audience's correspondence. I then realized that through this process I spent three weeks with people that I never collaborated before and I created strong ties with them. I enjoyed also the opportunity to exhibit in V&A and to live this new strong experience.

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