YANGYANG HE × SHUYU ZHANG × RUONAN FAN

TRAP:
Mind Uploading

Upload consciousness
to the cloud

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Inspiration

Current technology

It now allows machines and people to coexist, such as mechanical hearts, mechanical legs and so on, but many of these technologies were designed to treat patients. In other words, these technologies are designed to prolong a patient's life and essentially turn a person into a cyborg.

Semi-digitization

The emergence of extensive social media platforms, the emergence of human virtual ICONS, and even the use of real human voices as voice assistants. People are already in the process of entering semi-digitization.

Fully digital

First it's mechanized, then it's semi-digital, and then the next phase is going to be all digital, using all sorts of unknown technologies, uploading everything you own to the cloud.

Company research

Nectome is dedicated to the propagation of human consciousness

Artist's Work

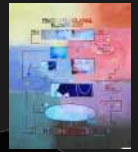
I summarize the views of these people, which are diverse, involving the body, philosophy, formal expression, and the exploration of the fear of the unknown. Their approach is also different, there are film and television works, there are virtual accessories, there are installation works.

Common ground

Thoughts on immortality.

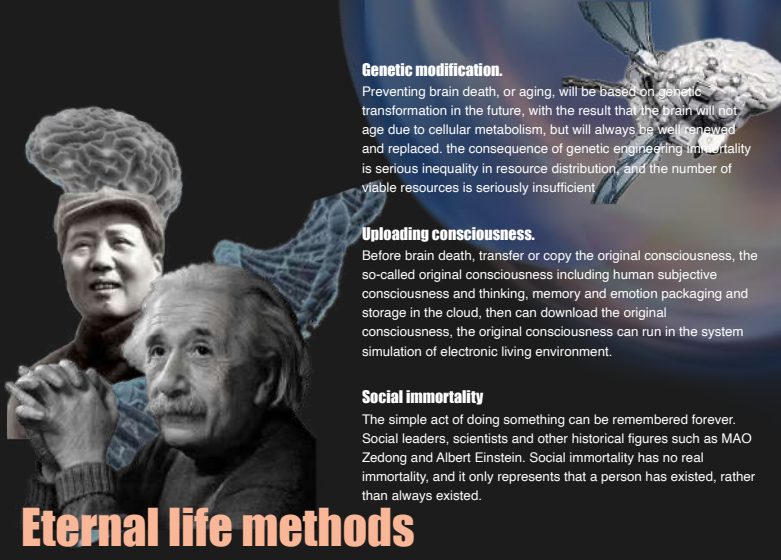
Through these references, I became interested in the idea of immortality.

NECTOME



Reference

Mind Uploading



Eternal life methods

Genetic modification.

Preventing brain death, or aging, will be based on genetic transformation in the future, with the result that the brain will not age due to cellular metabolism, but will always be well renewed and replaced. the consequence of genetic engineering immortality is serious inequality in resource distribution, and the number of viable resources is seriously insufficient

Uploading consciousness.

Before brain death, transfer or copy the original consciousness, the so-called original consciousness including human subjective consciousness and thinking, memory and emotion packaging and storage in the cloud, then can download the original consciousness, the original consciousness can run in the system simulation of electronic living environment.

Social immortality

The simple act of doing something can be remembered forever. Social leaders, scientists and other historical figures such as MAO Zedong and Albert Einstein. Social immortality has no real immortality, and it only represents that a person has existed, rather than always existed.

Concept

Mind uploading is a technology that **uploads** human brain **consciousness** to a computer to **achieve digital immortality** of human beings. It converts someone's brain consciousness into digital data and "uploads" it to a computer system with unlimited functions, allowing you to **live in a world of unlimited virtual experience**.

Philosophical basis

Consciousness is embedded in the brain's information processing, and its essence is an emergence from a network of neurons with advanced patterns that can be realized in other processing devices.

Ethical issues

Developing consciousness uploading requires animal experiments, from invertebrates, to small mammals, and finally to humans. Process is not always a guarantee of ethics

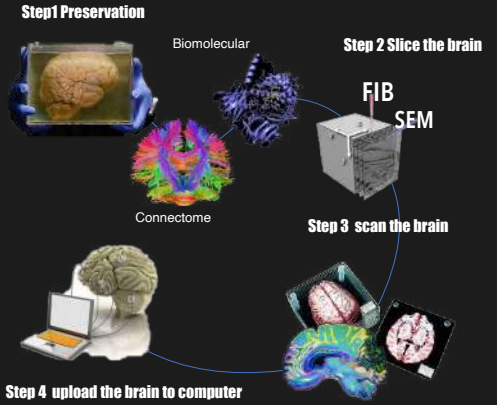
Virus problem

The uploaded electronic brain of consciousness can be easily erased by a virus or malware, since direct damage to the hardware is no longer required. It would make murder easier.

Privacy issues

Something in your mind like your memories could be stolen, tampered with, and make it public.

Uploading Process



Step 1

Protect proteins and Connectome and Bimolecular the idea that glutaraldehyde fixation may be able to preserve in a comprehensive way the information that encodes an organism's long-term memories.

Step 2

Biological information storage mechanisms use biochemical "cycles" and spatially-distributed engrams to implement physically robust long-term memories

Step 3

An engram is a unit of cognitive information imprinted in a physical substance, theorized to be the means by which memories are stored as biophysical or biochemical[2] changes in the brain or other biological tissue, in response to external stimuli.

Step 4

The exact mechanism and location of neurologically defined engrams has been a focus of persistent research for many decades.

Firstly

It is not necessarily well preserved. There is no scientific evidence that it retains its full properties after thawing. Not to mention protecting your brain during the upload process, although Nectome recommends using glutaraldehyde, the chemical is still toxic.

Secondly

you have to cut the brain open before the scan, and there is no sophisticated enough equipment to cut the brain down to 20 microns for FIBSEM imaging.

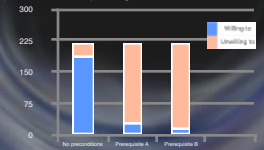
Thirdly

It is not certain whether it is possible to upload or copy human consciousness by accurately scanning the brain.

Fourthly

the consciousness after uploading cannot be confirmed as the consciousness of the uploaded person

People's attitudes to uploading consciousness under different conditions



when no precondition, more than 85 percent of people said they were willing to upload their consciousness.

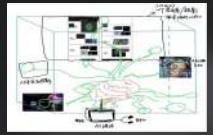
When prerequisite A I gave was the death of the body, nearly 90% of people chose not to upload consciousness

When prerequisite B I gave was to give up everything about yourself (body, connection to the world, touch), more than 90% of people refused to upload consciousness.

From a scientific point of view, there is uncertainty at every stage of uploading consciousness, and people are unwilling to accept the risk of uploading consciousness. Until each stage of conscious uploading is determined, all this is an uncertain fantasy. I hope to bring people back to reality by puncturing this fantasy.

RESEARCH CONCLUSION

Original plan & design



Installation

We initially wanted to build a large spatial device to simulate the uploading process of consciousness. In the middle of the space, we wanted to make a brain that branched out, and these branches were luminous tubes, like brain nerves, like medical device tubes, leading to different terminals. These different types of terminals represent different dimensions of life experience.

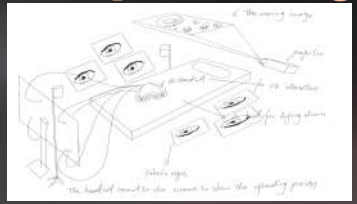
Storyboard

This is a detailed motion image segmentation shot. It tells the story of the protagonist uploading his consciousness, thinking he has entered heaven, but gradually discovering that the digital world is not as perfect as he had imagined. He will spend his life in this fake real world, his privacy completely exposed to the digital world.

Time arrangement

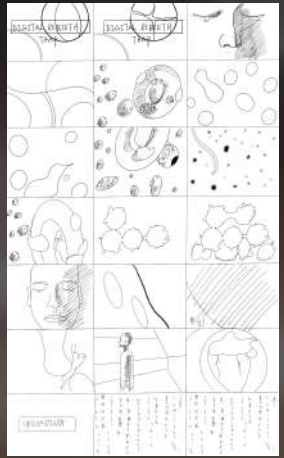
I also planned a schedule, but it was difficult due to late deadlines for different courses and changes in the time available to team members.

Final plan & design



Installation

We want to show moving images through a projector and have people watch them lying down. Then, audience A will wear VR glasses to experience and interact in the digital world, and connect to the display through some cables, so that others can see what audience A sees in the digital world. Through interaction, the process of uploading consciousness is simulated (the scientific process of uploading abstract meaning is shown in the VR experience video). At the same time, the eyes of the monitors on the ground represent the way people view privacy, which indicates our distrust of the world after the upload of consciousness.



Storyboard

The film uses stream-of-consciousness style editing. The film is an abstract metaphor for the uploading process of consciousness.

The whole two lines are interspersed together: one line is the huge heart in space, which represents people's fear of losing their body in the process of uploading consciousness, and they are unwilling to give up the feeling of their body; One line shows the various life processes of cellular activity, representing the primitive way of life in nature and the way organisms have always depended on reproduction. Interspersed together, the two lines express people's conflicted attitude towards the technology of consciousness uploading.

Finally, the heartbeat gradually stops in the sound of the code, marking the end of the uploading of consciousness and the separation of the physical states.

Implement

Time management

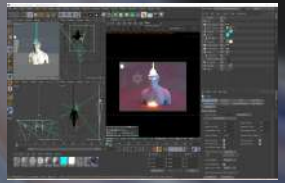
Time management is the most important thing for a project to run properly, so I split the project into two groups and focus on the last two weeks. However, due to the time planning of team members, different parts are delayed and advanced to a certain extent.

The problem

In the process of C4D production, due to unsatisfactory rendering effects and materials, the finished product of C4D was not included in the final outcome.
In addition, due to the strict equipment management of the school, we did not borrow a projection for the installation. At the same time, the site we selected did not have enough sockets. We made a few changes to the final setup and comparison drawings. Moving Image is not played.

Group work

We have a small team, but everyone is responsible. And do your best to accomplish it. All the software and operations are learned by hand. I have respect for my panelists.



Step1 C4D modeling and rendering

Step2 UE4 modeling and mirror operation

Step3 The filming of human eyes

First week

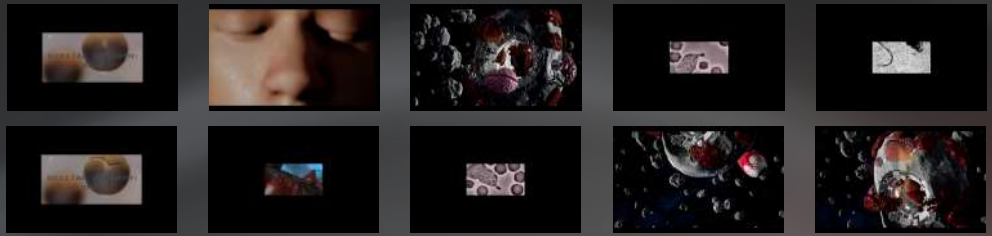
Step4 Looking for material

Step5 Editing video

Step5 Making installation

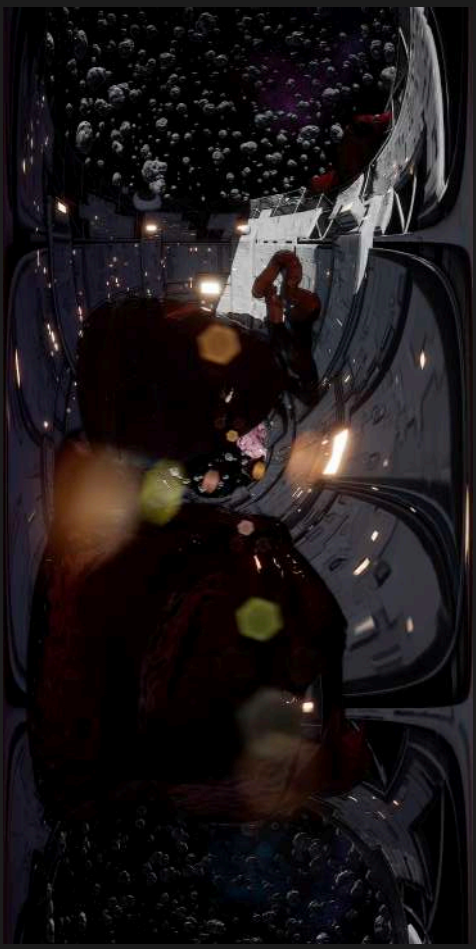
Second week

moving image



Final outcome

Final outcome UE4



Final outcome UE4

Final outcome Installation