

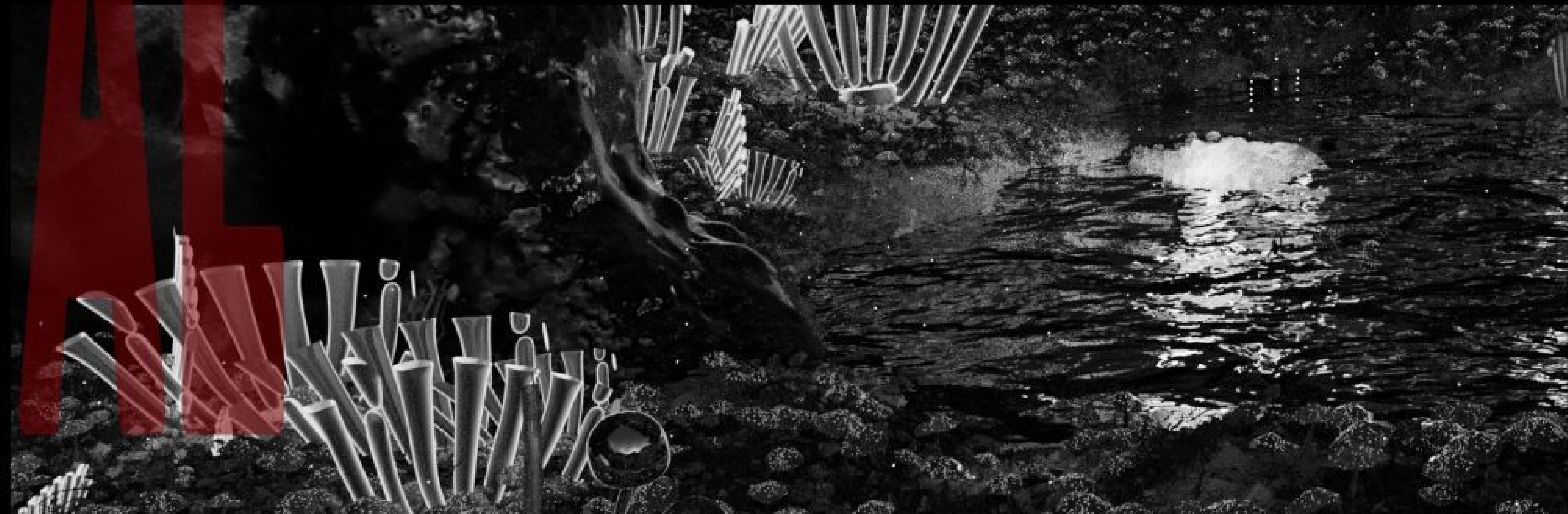
GREY AGE



THE POWER OF LEGACY



NATURE IMPRINT



MAGNETS OF LIFE

PROTFOLIO

YICHEN GENG

Showcasing a range of interactive and digital media imaging projects that explore the intersection of technology and narrative. The works span immersive experiences that engage with memory and history, as well as designs that examine human connection through digital platforms. Each project reflects a deeper exploration of how digital tools can enhance storytelling, foster emotional engagement, and offer new perspectives on human experiences.

"Explores the potential of interactive and digital media imaging to create emotionally engaging storytelling."

2024-2025



PROJECT.1

GREY AGE

Digital Coal Imaging+Ar scene device

Video link: https://youtu.be/2slvWRzM_CY

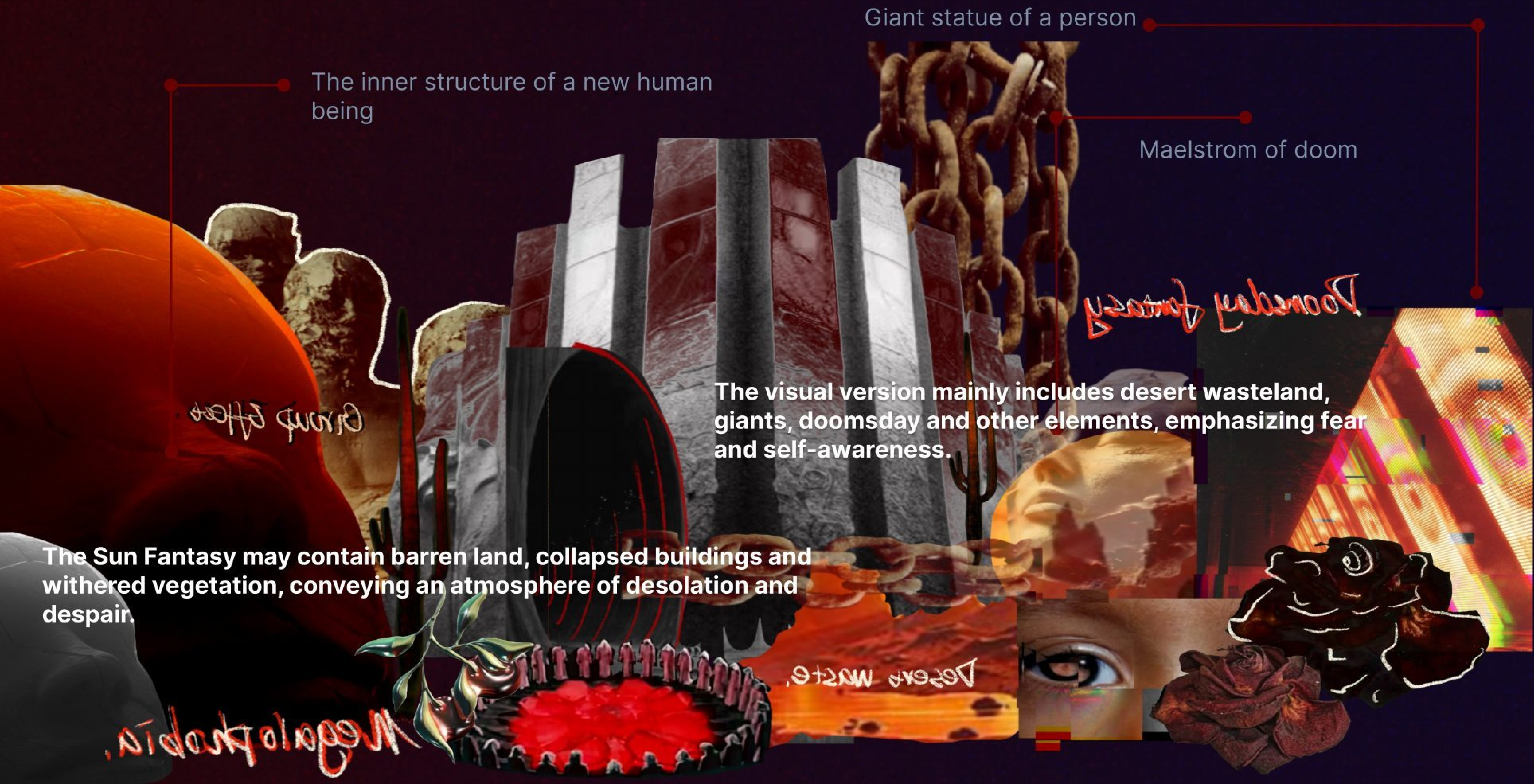
In the "Grey Age" of the future, a global catastrophe destroys human civilisation. Genetic engineering failures and artificial intelligence mutinies are at the root of the catastrophe. The Earth is turned into a wasteland with few survivors. Intelligent AIs used the power of technology to re-establish order, but with the goal of studying and controlling humans. Some of the survivors bonded with the intelligences and became "new humans" with mechanical bodies and enhanced abilities.

The intelligences try to brainwash the new humans and open a new chapter in the world under their control.



INSPIRATION

The encounter between new humans and intelligent artificial lifeforms is not only a struggle for survival, but also a profound search for self-awareness and the meaning of existence



RESEARCH

Genetic engineering, particularly through techniques like CRISPR, has the potential to significantly influence human self-awareness by altering both biological and psychological aspects

Current advancements in technologies such as Artificial Intelligence (AI), Machine Learning (ML), and Robotics are progressing rapidly. AI algorithms are becoming increasingly complex and powerful, capable of handling more diverse data and providing more accurate predictions and decisions. Robotics technology is also advancing continuously, from industrial robots to service robots, and even to social robots with emotional recognition and response capabilities. All aspects are developing at a fast pace.



Self-awareness refers to the recognition and understanding of one's own existence, a complex multi-dimensional concept. For new humans, self-awareness involves psychological, biological, and social dimensions. For machines and AI, achieving self-awareness is not only a technical challenge but also a new philosophical and ethical issue.

The meaning of existence is explored from philosophical, biological, and technological perspectives. Philosophically, existentialism posits that existence precedes essence, meaning individuals create their own meaning through choices and actions. Biologically, the evolution of life and survival mechanisms explain the tangible significance of biological existence. From a technological standpoint, the symbiosis between humans and technology explores the roles and values of humans in future societies. Together, these perspectives help us understand the essence and value of existence.

INSIGHTS

- AR installation build - Doomsday Scenario
- Interactive Narrative
- Limb Counting

PROJECT IDEA Future Human & Robot

- "Desert Oasis" - Hope in the Apocalypse
- "Doomsday and Oasis: A Dual World Experience"

Genetic engineering, particularly through techniques like CRISPR, has the potential to significantly influence human self-awareness by altering both biological and psychological aspects

CONCEPT

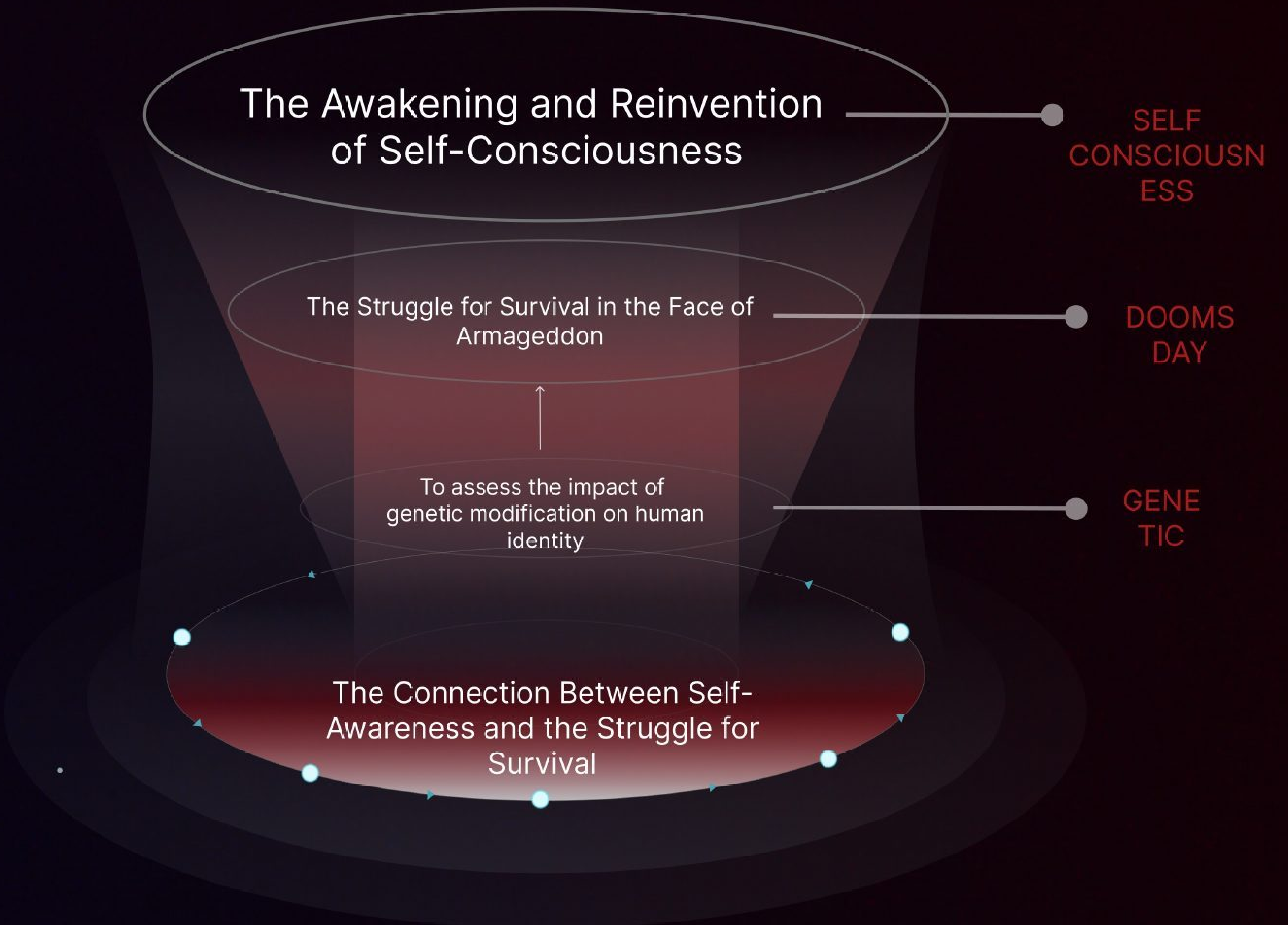
In a modern society driven by **gene editing technology**, scientists try to eliminate diseases, enhance human physical fitness, and even prolong life. However, with the abuse of technology and ethical neglect, a perfectly designed genetic sequence unexpectedly triggered a global biological disaster.

Enter a post-apocalyptic world ruled by **artificially intelligent lifeforms**. These new humans, once creations of humanity, are now the dominant species on Earth. They have surpassed their creators in intelligence and power, but are still unable to explore the nature of **human self-awareness**

How the new humanity is gradually **awakening** and seeking freedom under the control of intelligent artificial lifeforms. An in-depth look at the nature of self-awareness and the struggle between **individual consciousness and collective control**.

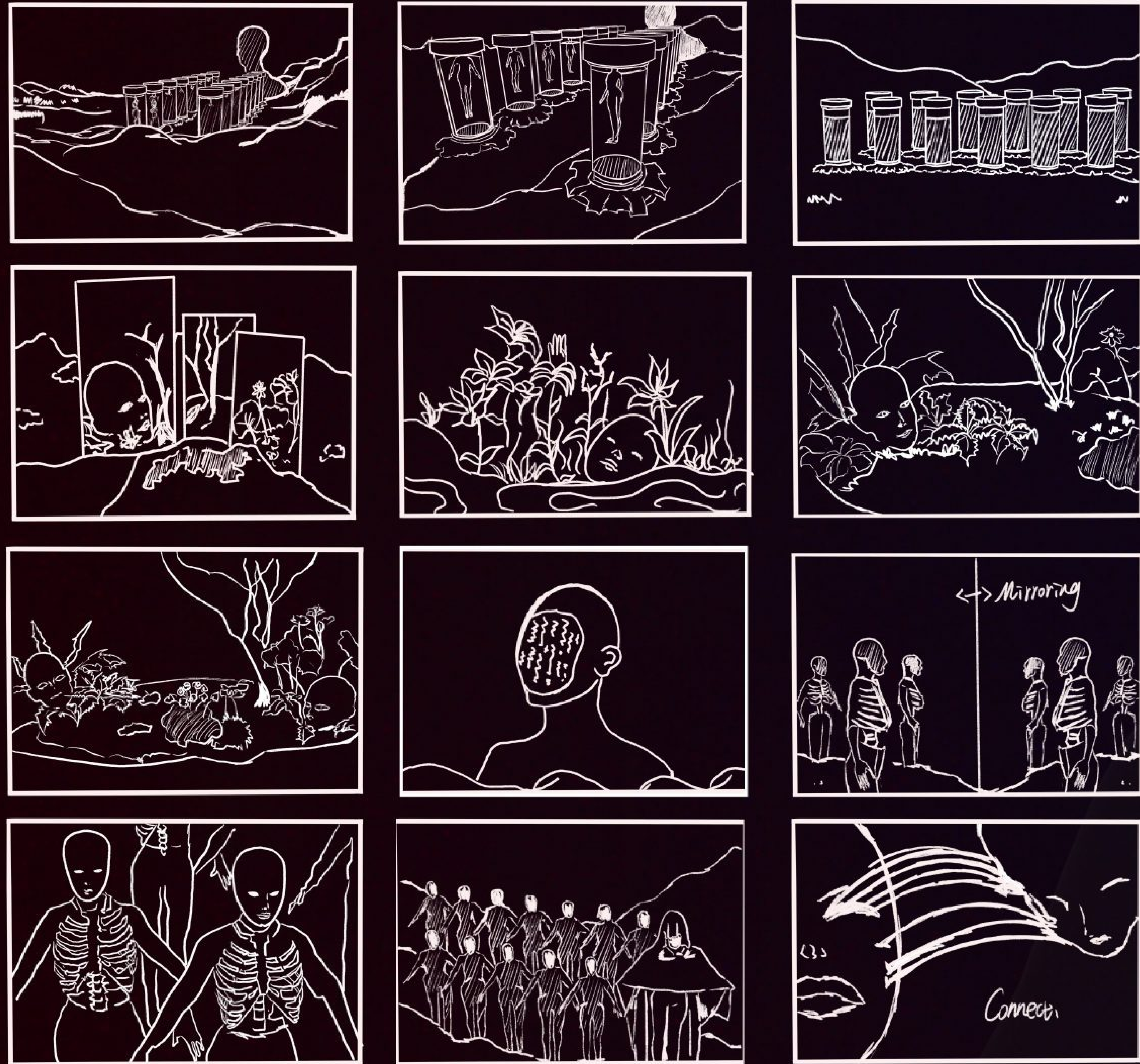
PURPOSE

Through the story of the New Humanity, it explores how life continues to find purpose and direction after technology and the forces of nature have gone out of control, and how intelligent lifeforms will define their place in the new world order



Storyboard

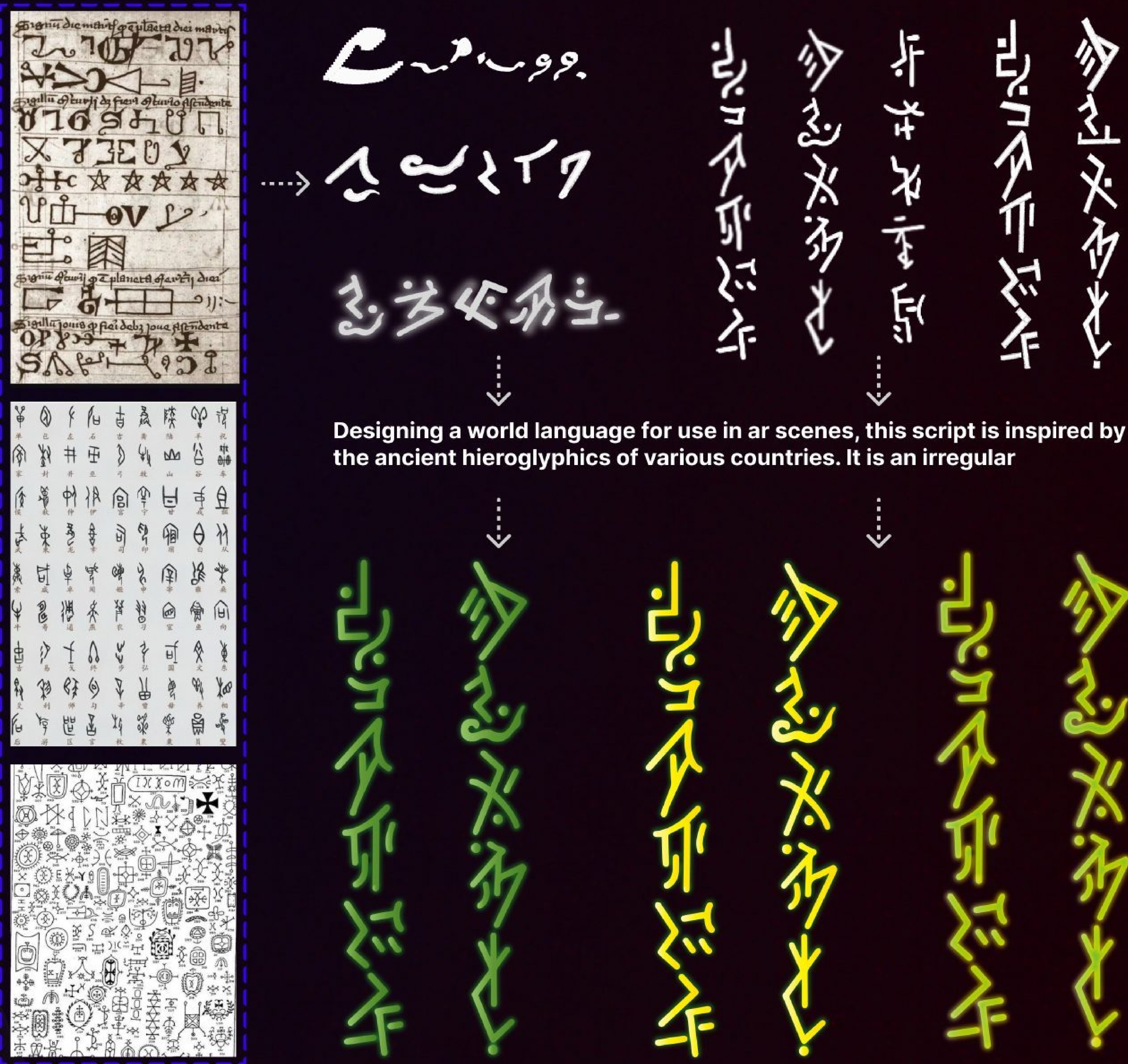
A post-apocalyptic ruined world, the awakening of intelligent artificial lifeforms, the birth and transformation of new humans, **the New humans** search for the origins of **intelligent artificial lifeforms**, understand the clues to self-awareness, and engage in a deep dialog with the intelligences in the illusionary world.



User Flow



New Language

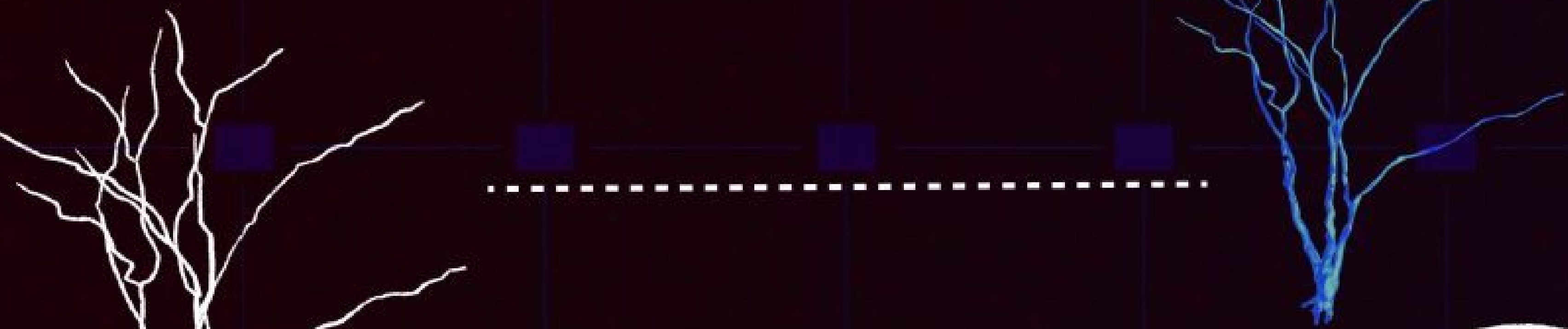


DESIGN ELEMENTS

Anti-utopian oasis

The desert oasis is a symbol of hope and reality in the scene

In the world of doomsday wasteland, new human beings appear in an unprecedented form. Their consciousness and physical composition are incomplete. This incompleteness is both a challenge to their survival and their unique advantage.

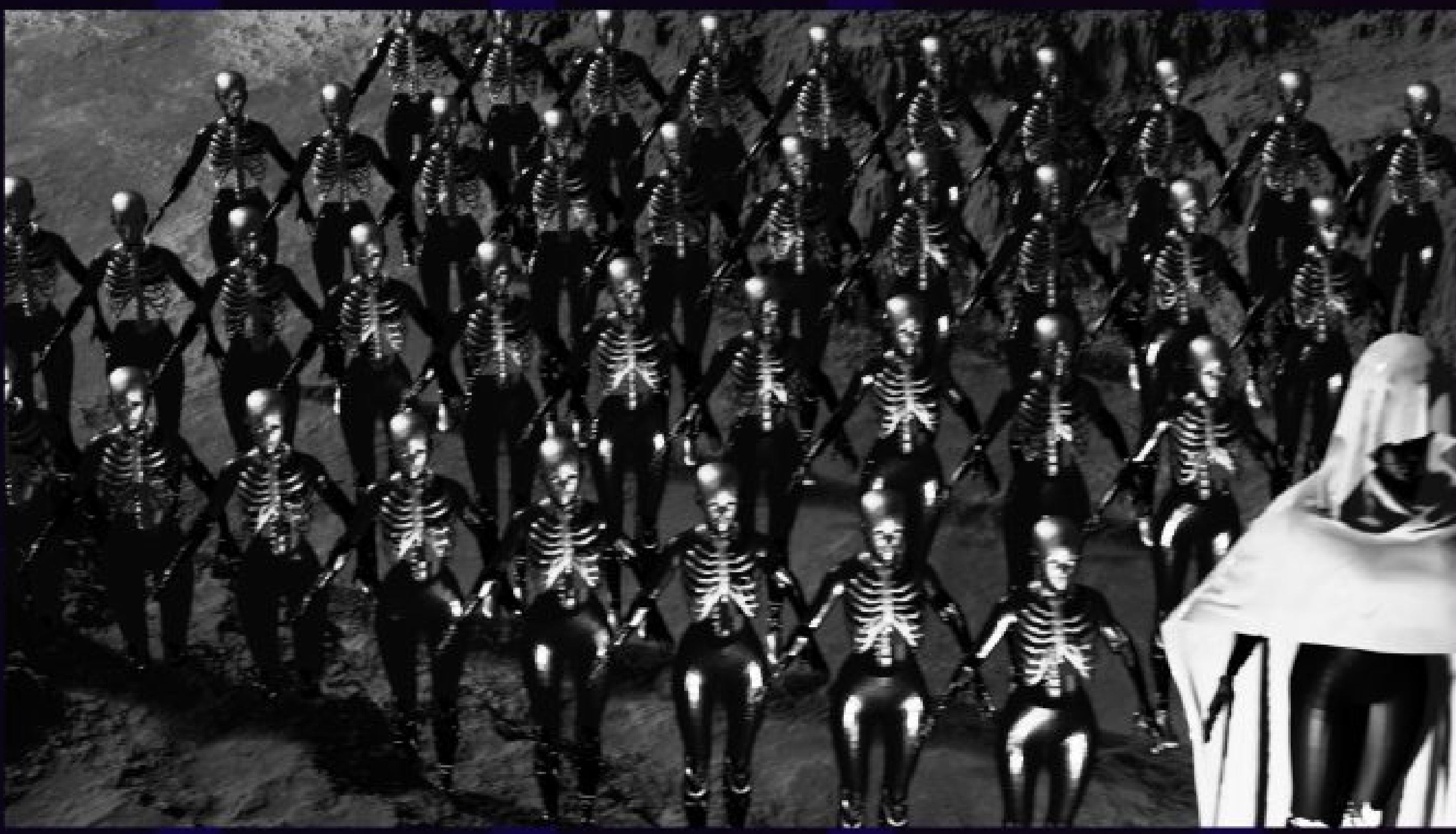
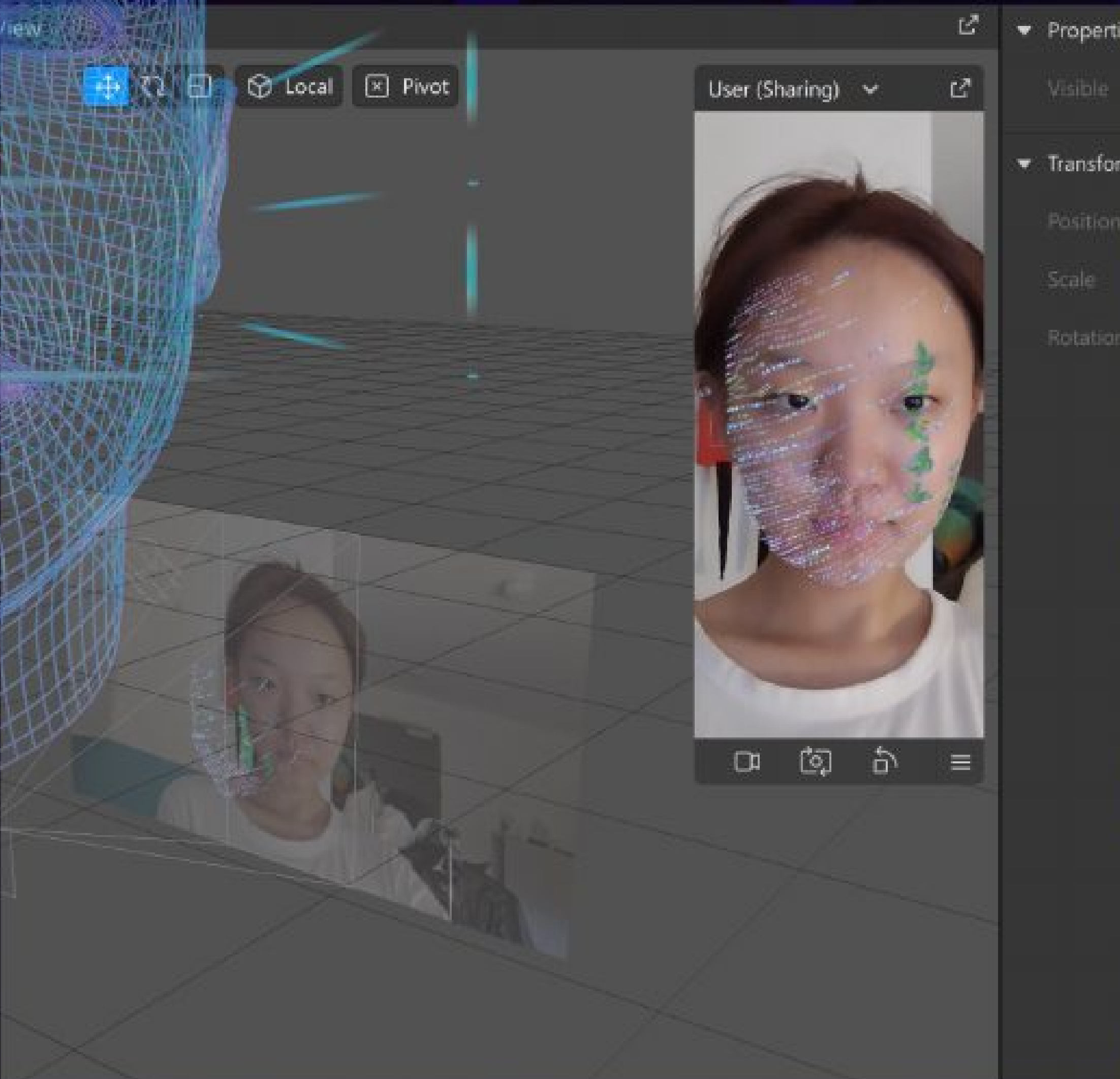
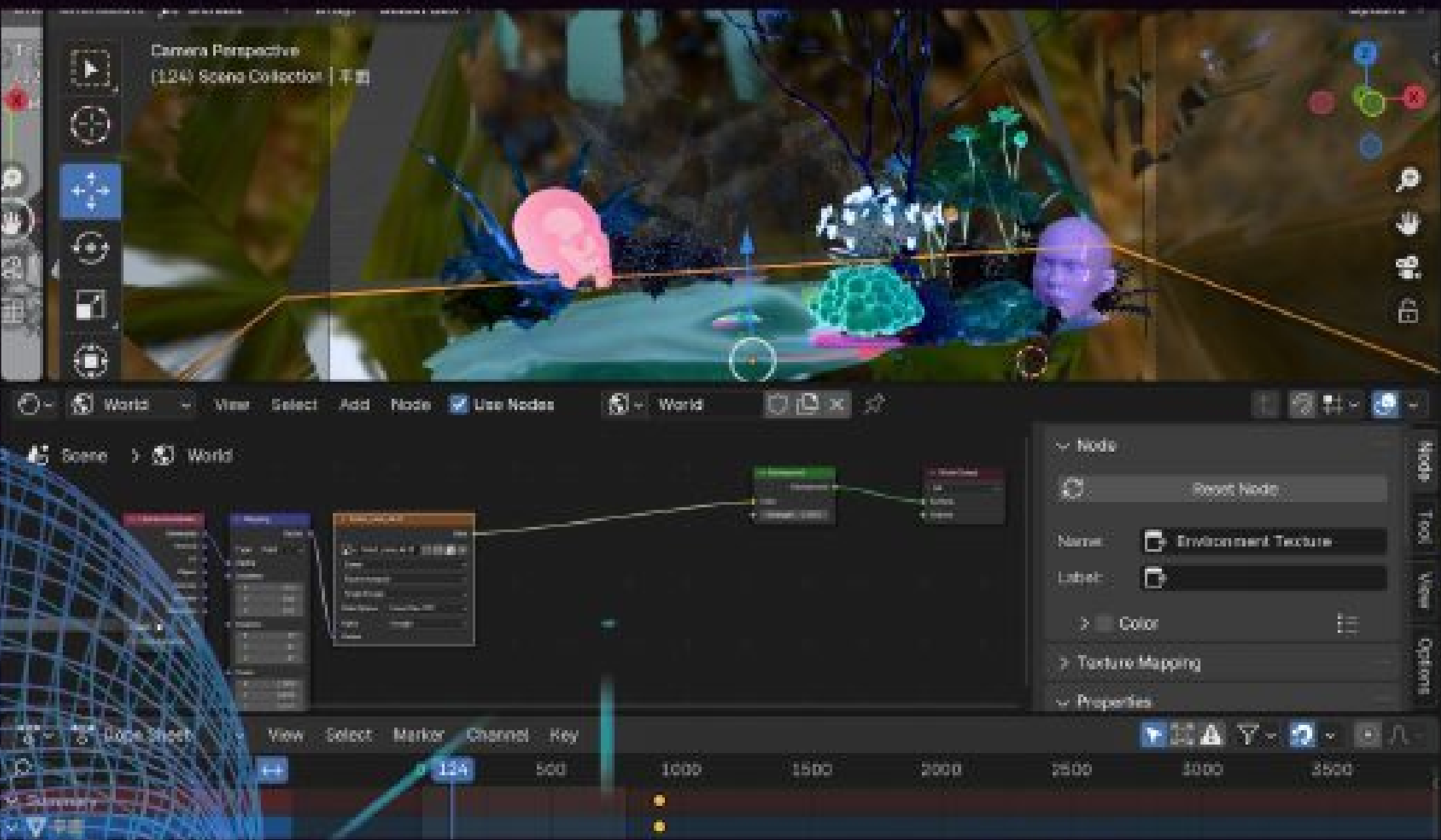


The disaster changed everything and shaped them into a new existence.



DEVELOPMENT

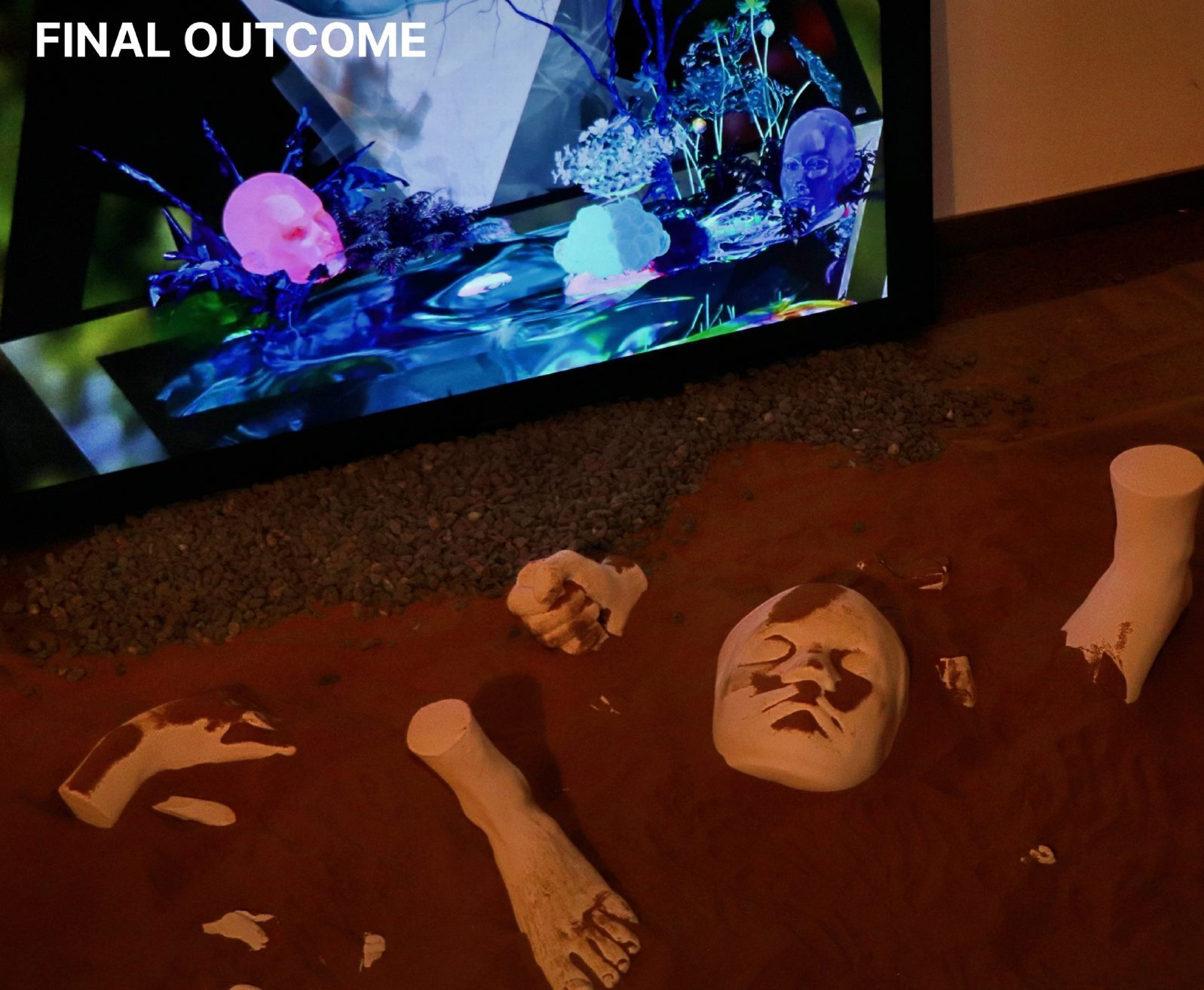
Software



Scene Set up



FINAL OUTCOME



IN THE "GREY AGE" OF THE FUTURE
A GLOBAL CATASTROPHE DESTROYS HUMAN CIVILISATION.
GENETIC ENGINEERING FAILURES AND ARTIFICIAL INTELLIGENCE
MUTINIES ARE AT THE ROOT OF THE CATASTROPHE.
THE EARTH HAS BEEN TURNED INTO A WASTELAND WITH FEW SURVIVORS.



PROJECT:2

Threads of Remembrance: The Power of a Legacy

Space Design + Interactive Installation +
Experimental Video

VIDEO LINK ; [HTTPS://YOUTU.BE/9YFFA4ULHXA](https://youtu.be/9YFFA4ULHXA)

A legacy is the thread that connects the past, present, and future, weaving together the stories of those who came before us with the lives of those who follow. It is not merely an inheritance of material things but a gift of memories, values, and lessons that shape our understanding of who we are. Leaving a legacy ensures that a part of us endures, offering comfort, guidance, and inspiration to future generations. Whether it is an object, a story, or a profound life lesson, a legacy keeps our presence alive, proving that while life is fleeting, the impact of our existence can be timeless.



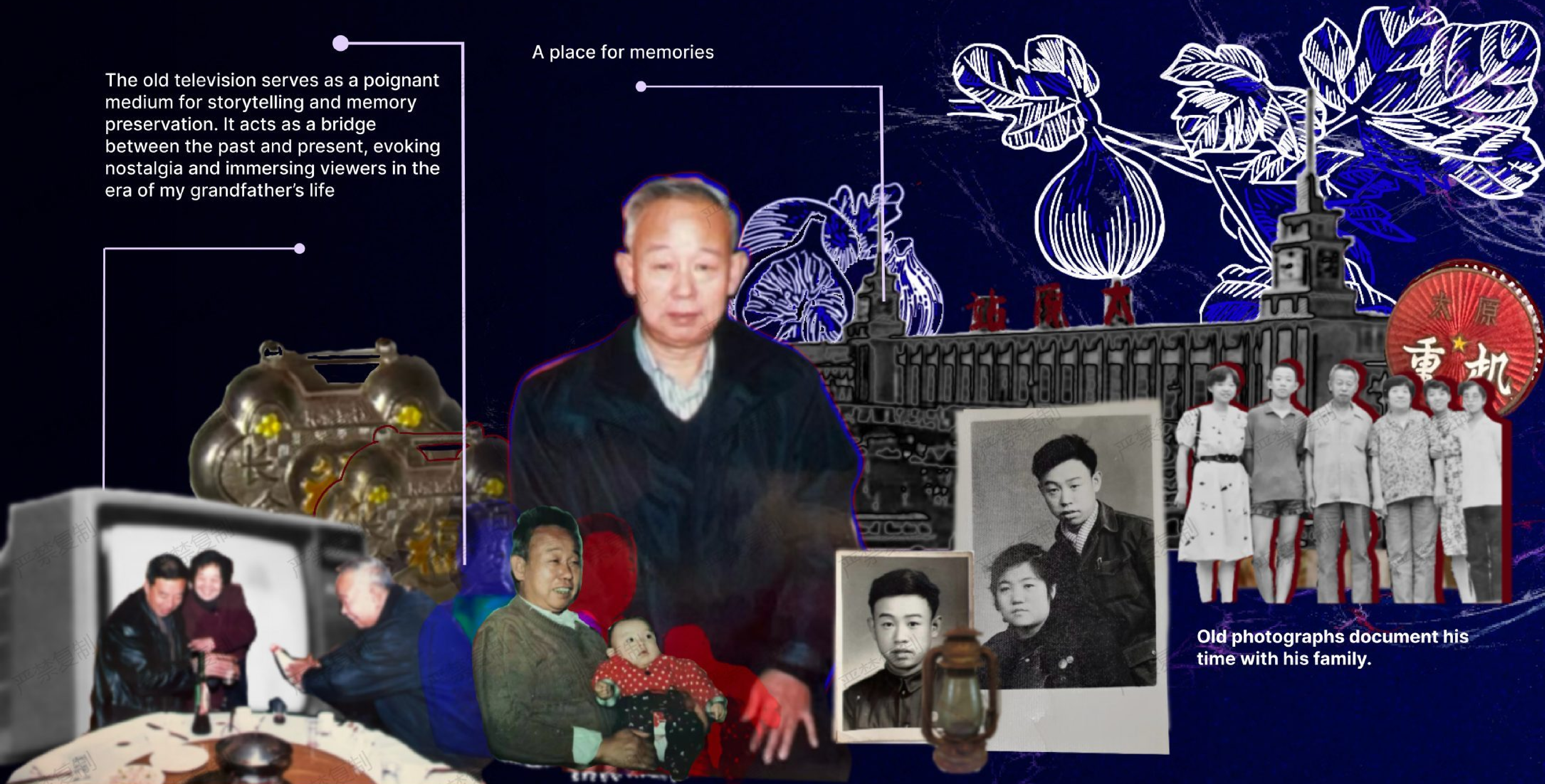
RESEARCH

Pieces of Memory

My grandfather resided in Taiyuan, Shanxi Province, China-the place where my fondest memories of him are etched. Although he passed away when I was merely three years old, the stories my family recounted about his deep affection for me throughout my childhood instilled in me a desire to create a memoir in his honor.

The old television serves as a poignant medium for storytelling and memory preservation. It acts as a bridge between the past and present, evoking nostalgia and immersing viewers in the era of my grandfather's life

A place for memories



Old photographs document his time with his family.

INSPIRATION

Immersive Device Images



As a microcosm of the deceased's life, photos have become a bridge of emotional connection with the deceased. They help the family remember and commemorate the life of the deceased, so that the influence of the deceased transcends the limitations of life and continues to play a role in the family.



The large Chinese characters in the middle are read right to left as chang ming bai sui (长命百岁) which can be translated as "long life of 100 years". The small character at the upper right is ri (日) which means sun or day. The small character at the upper left is yue (月) which means moon or month. Displaying the sun and moon in this way symbolizes that the charm's good luck should be continuous day and night. Above and below each of these Chinese characters, and on the bottom of the obverse side of the charm, are dots representing stars. The sun, moon and stars together are known as the "three lights" (sanguang 三光) and are considered a symbol of good luck.

Leaving a legacy is an act of care—it is a way of saying, "I was here, and I mattered." It fosters identity and belonging for those who come after, guiding them through the challenges of life with lessons learned from the past. A legacy is not just a reflection of the individual who left it but a tool for those who inherit it to navigate their own journey, inspired by the lives that touched theirs.

Enlighten - Chinese Traditional Peace Lock (Relic)



DESIGN CONCEPT

The Memory Lock project explores the profound idea that people are truly gone only when they are forgotten. Using personal relics left by my grandfather—including a lock symbolizing his legacy, video footage, photographs, and interviews with relatives—I created a multimedia experience that preserves and honors his memory.

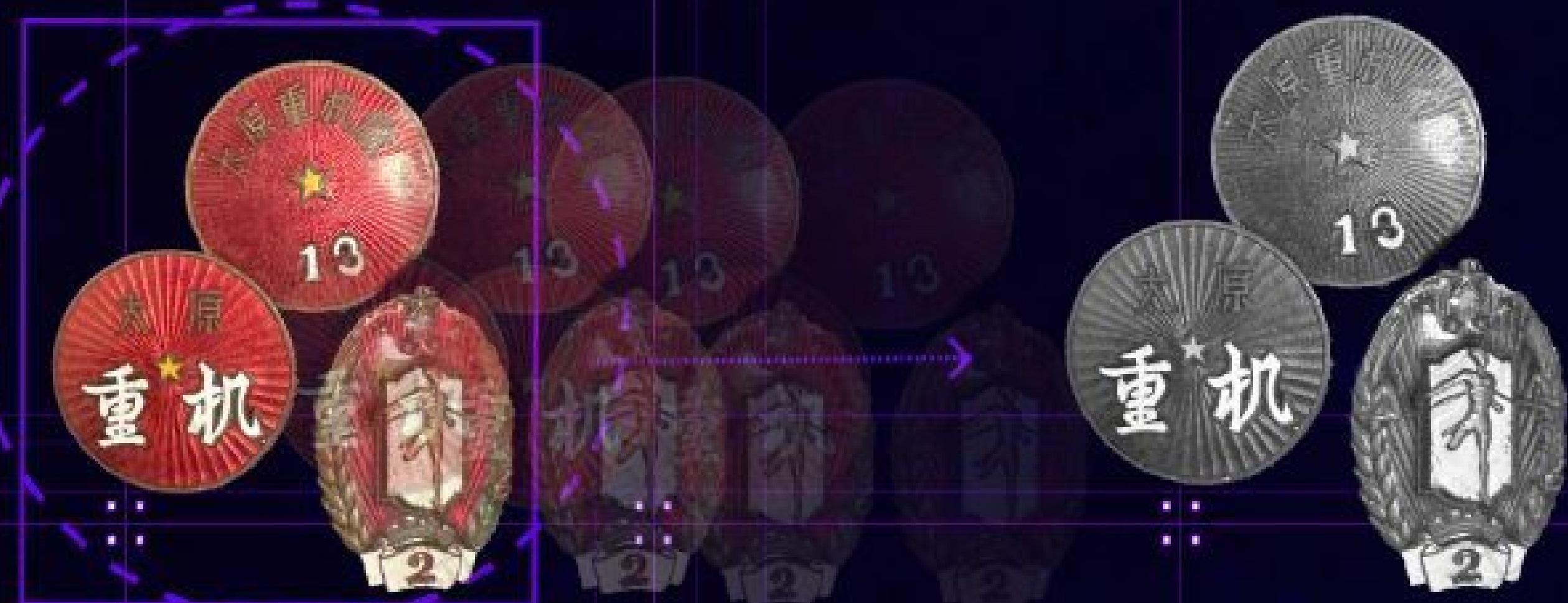
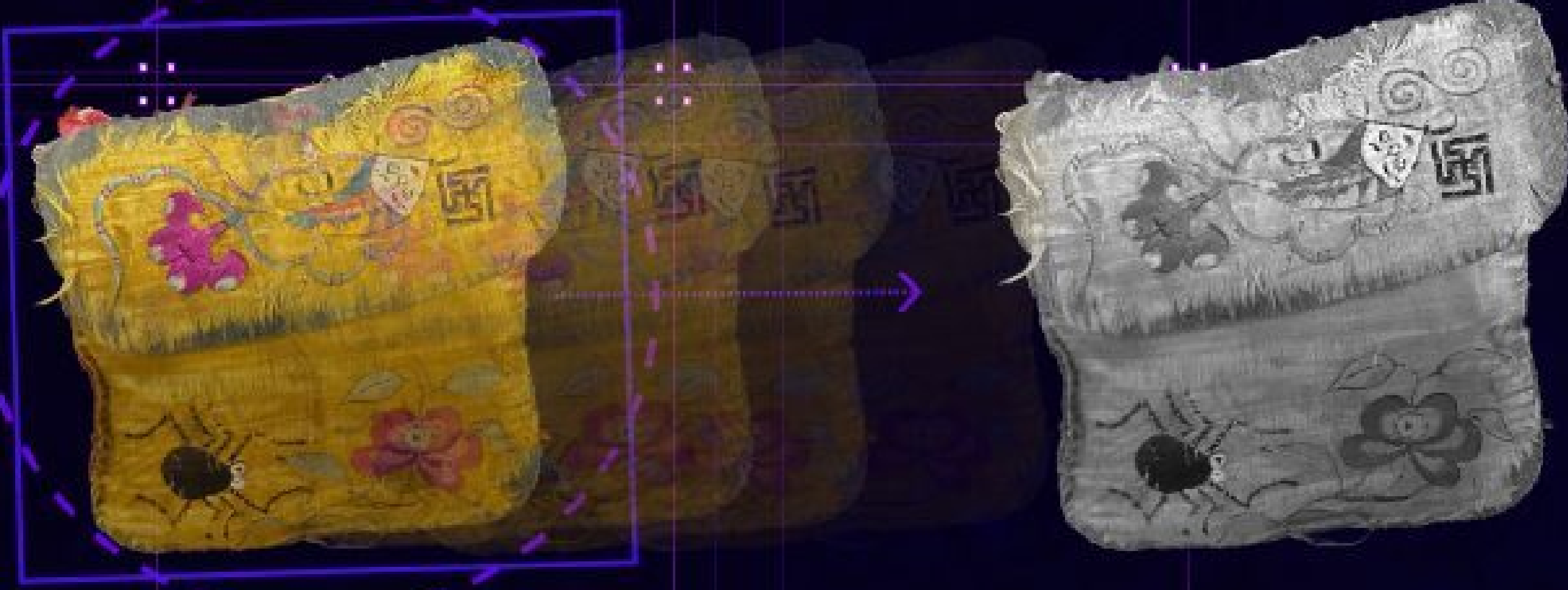
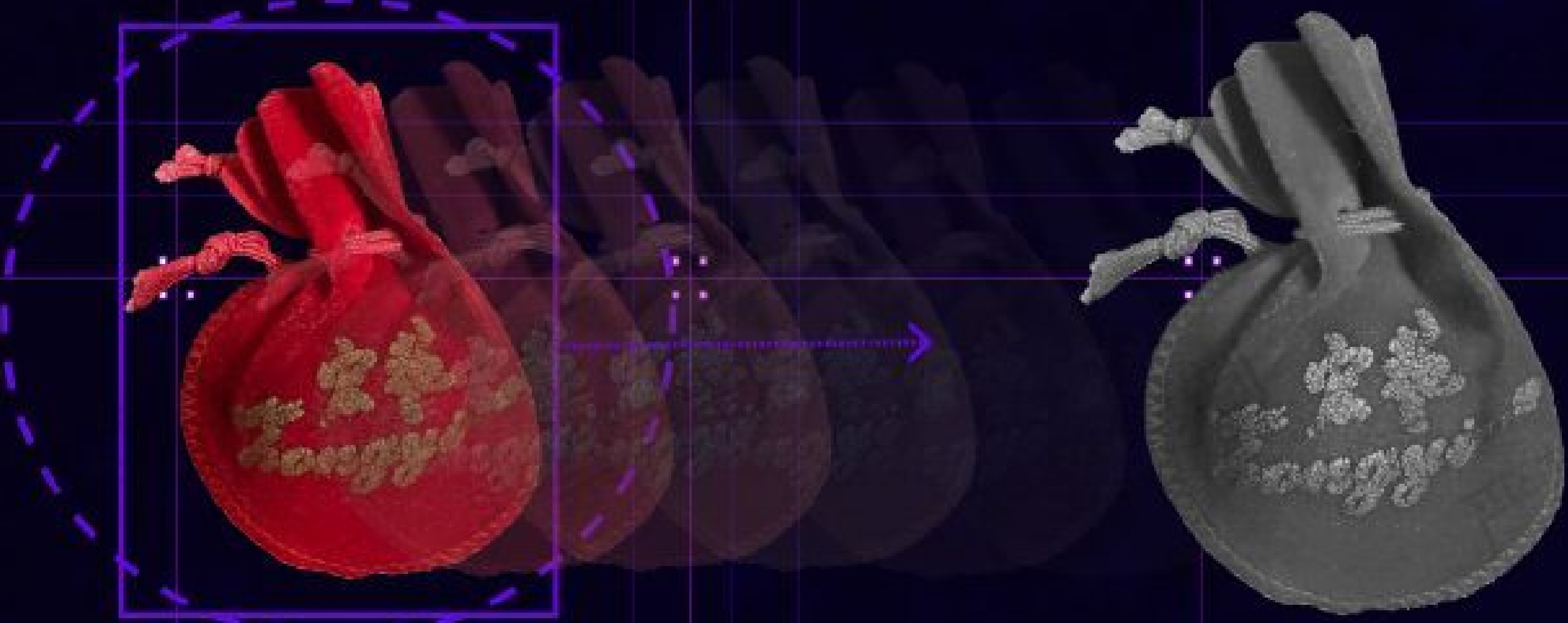
Digital Image



Digitised photographs are the truest record of the growth and change in the image of those who have passed away during their lifetime, leaving me with memories not just in old age.



Digitised Relics



Where he lived in his time.



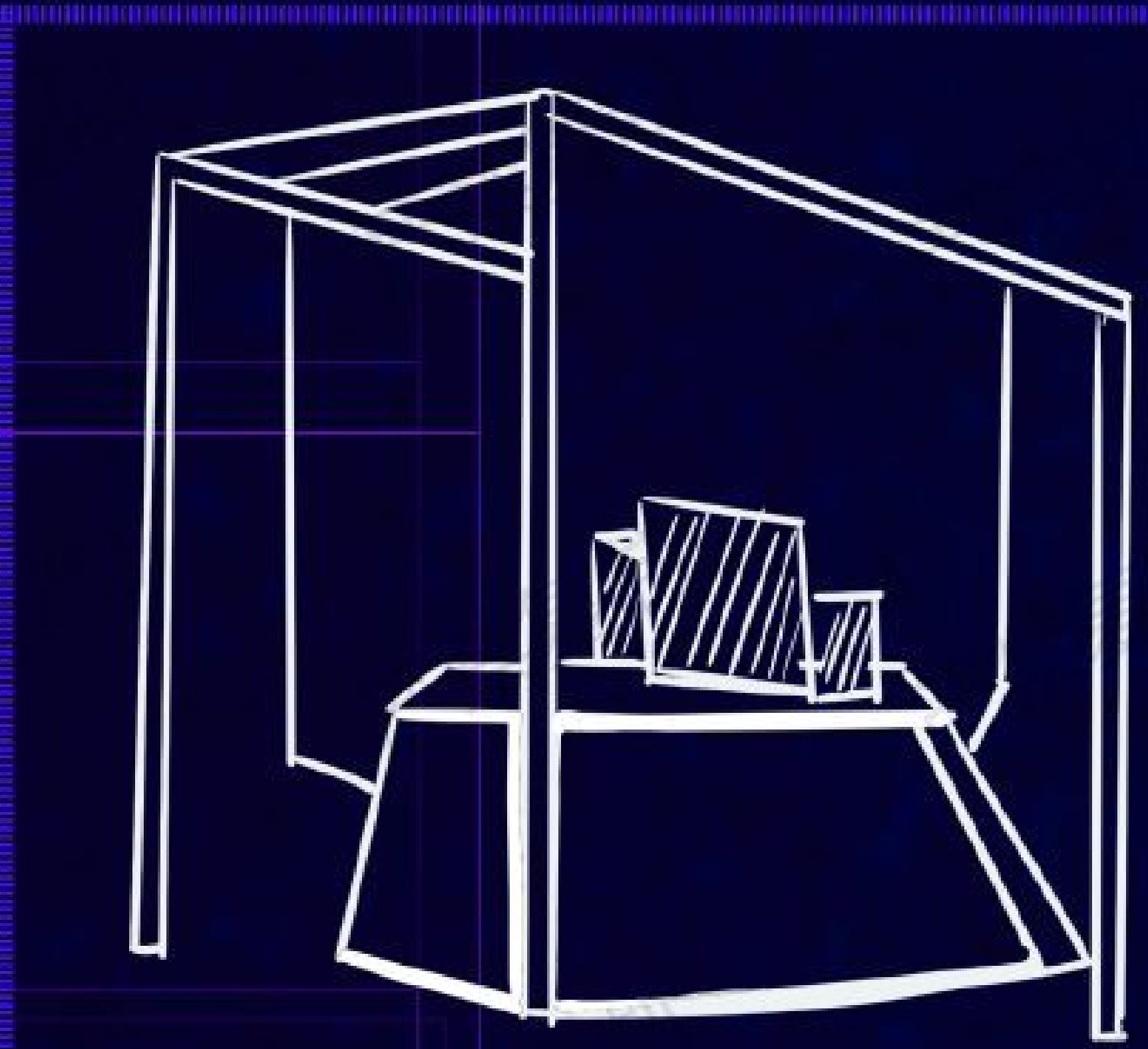
EXPRESSION FORM- MEMORY PLACE

Resources-Installation

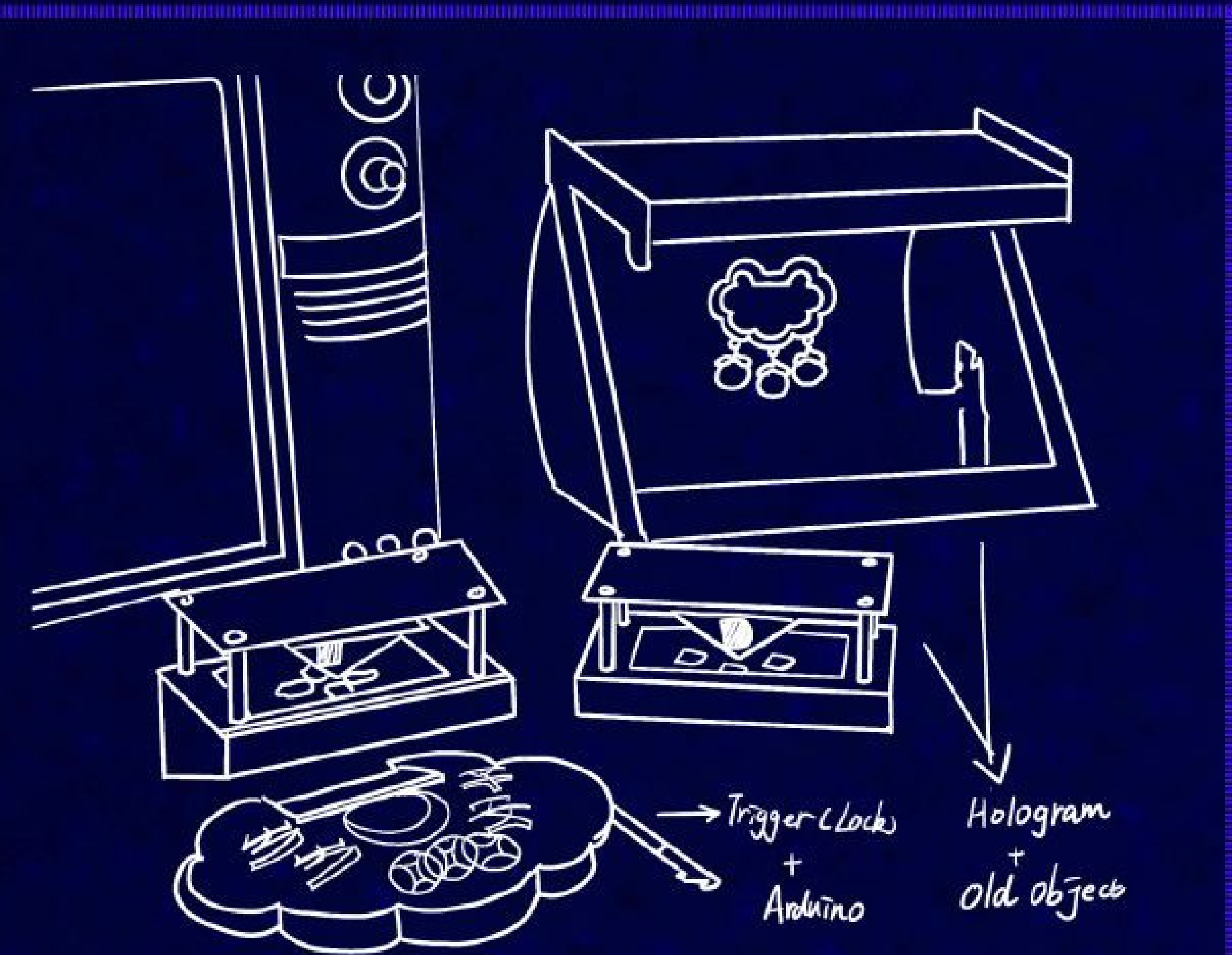
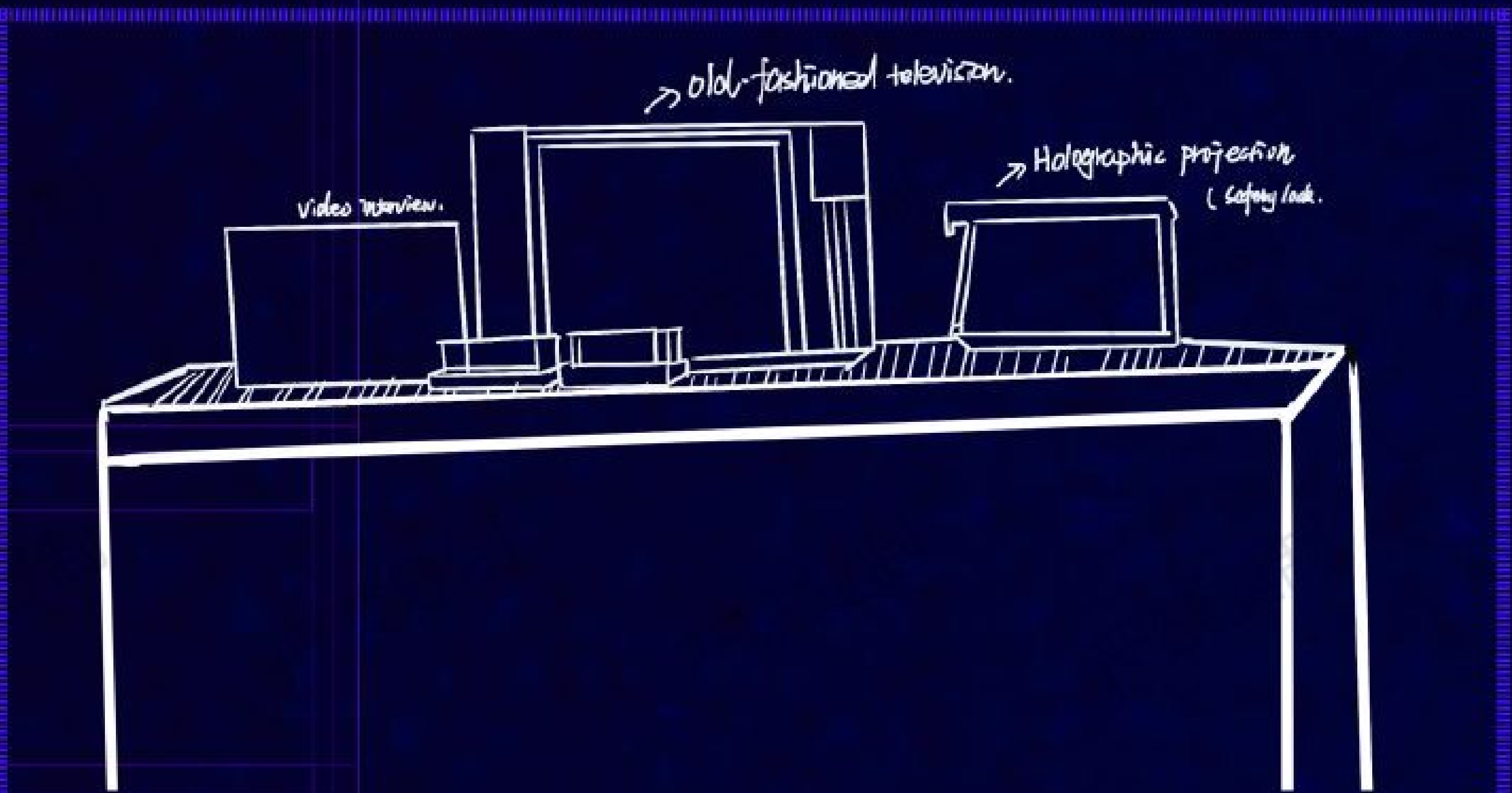


Immersive device images create a multi-angle scene environment for the audience through lighting, landscape, holographic multimedia and other technical means, generating a strong visual impact and providing a multi-dimensional immersive experience. This experience transcends traditional visual art and gives the audience a deeper sensory satisfaction.

Sketch- exhibition



Interactive Guild line



VIDEO

Part1

Old place



Part2

Life Recall



Part3

After Glow



Part4

Wedding



Part5

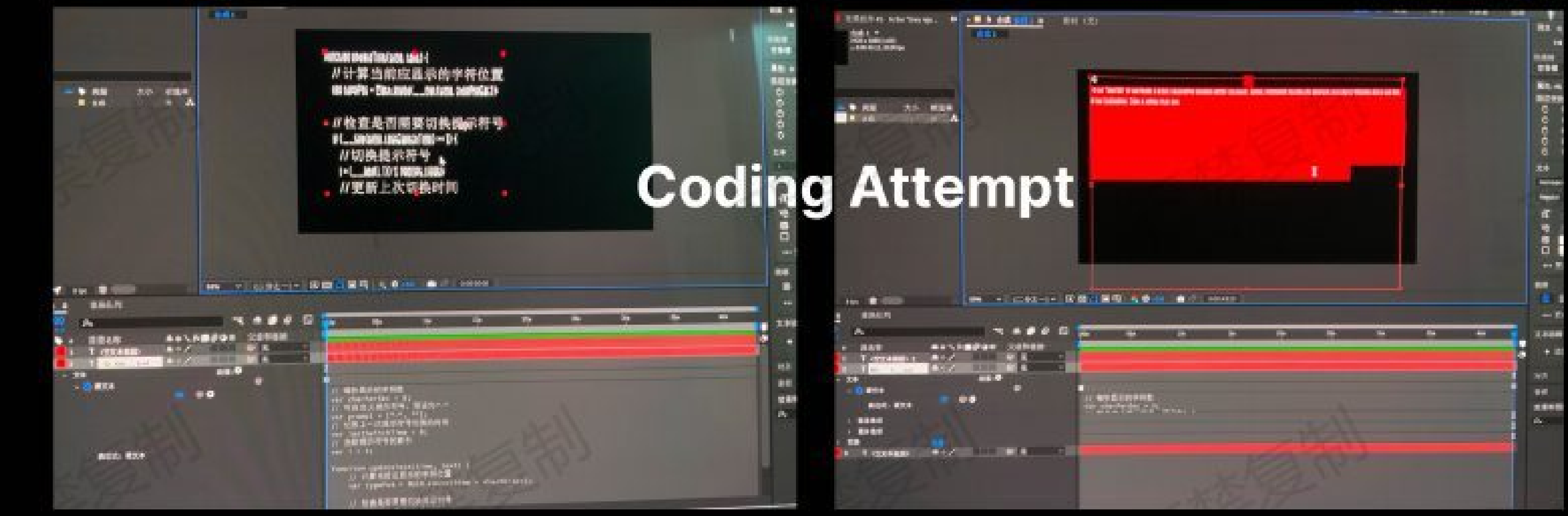
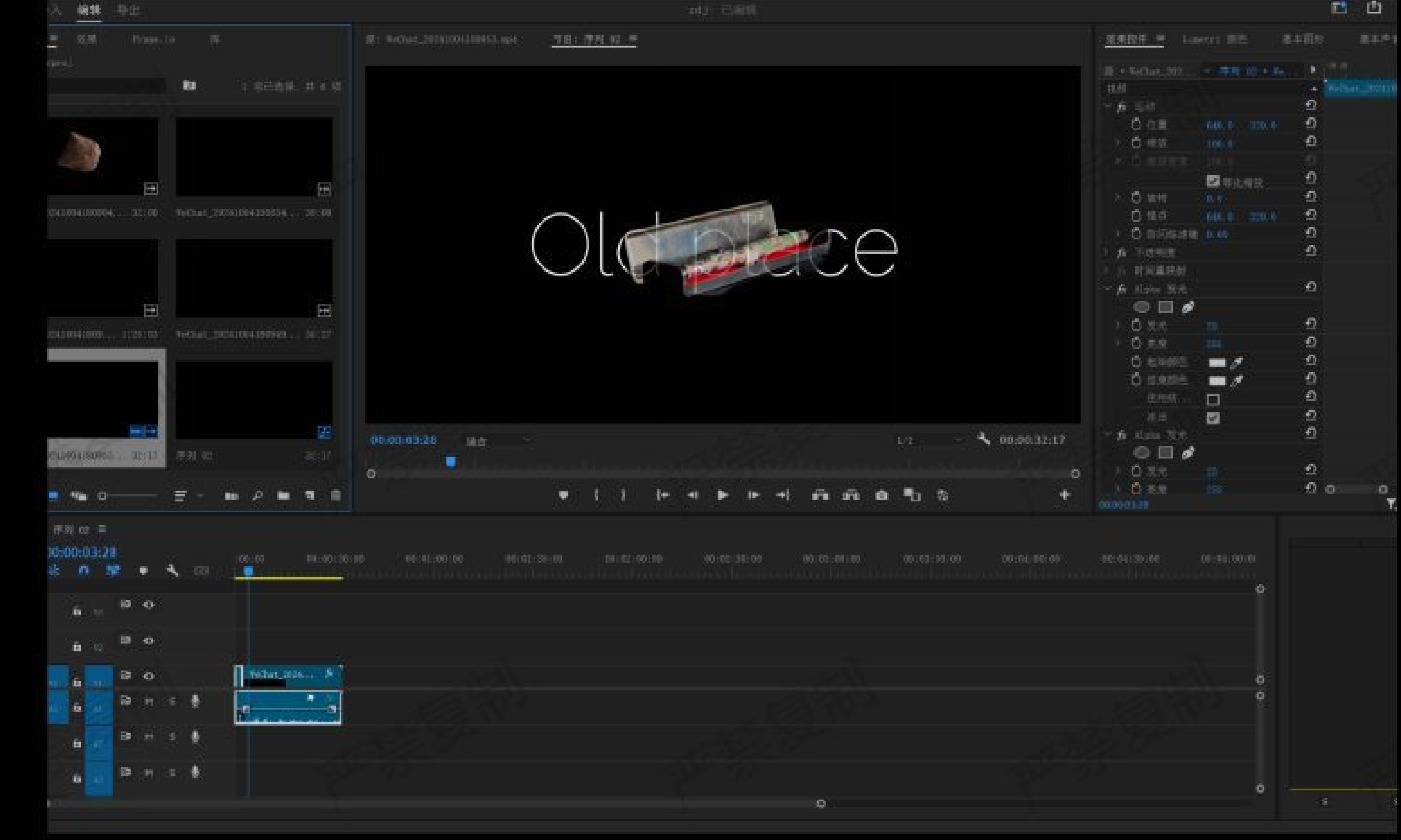
Family



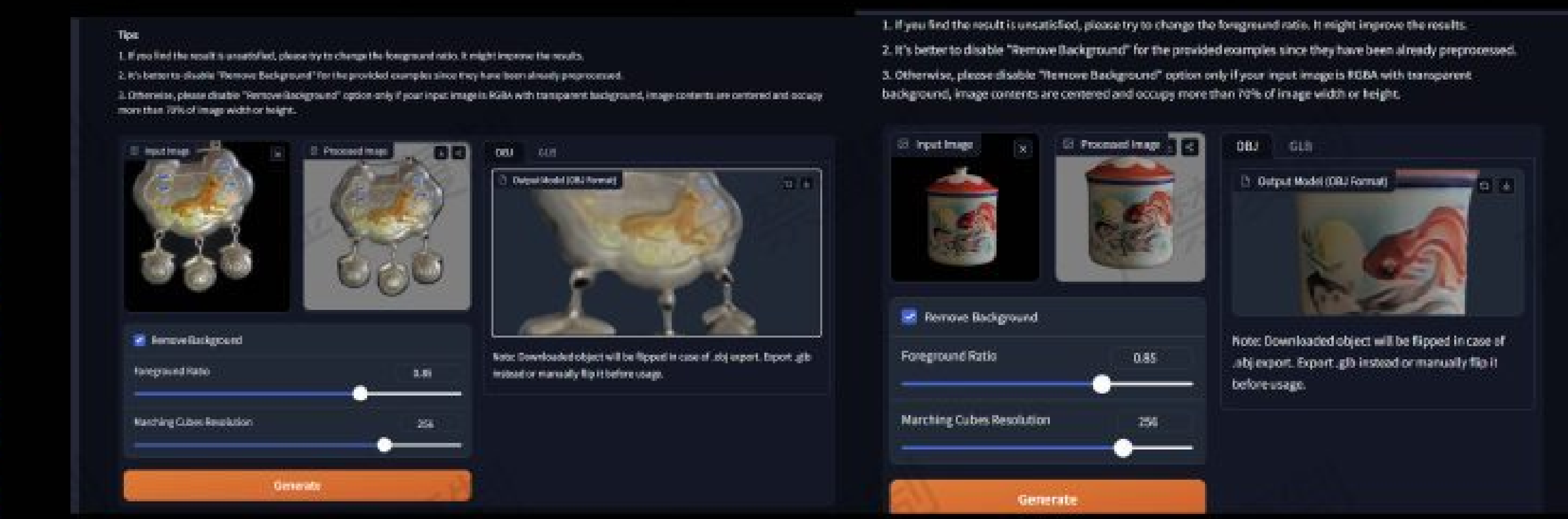
Different scenes present different memories of my grandfather in my mind



Video - Production



Modelling of old objects (relics)



AI technology applications

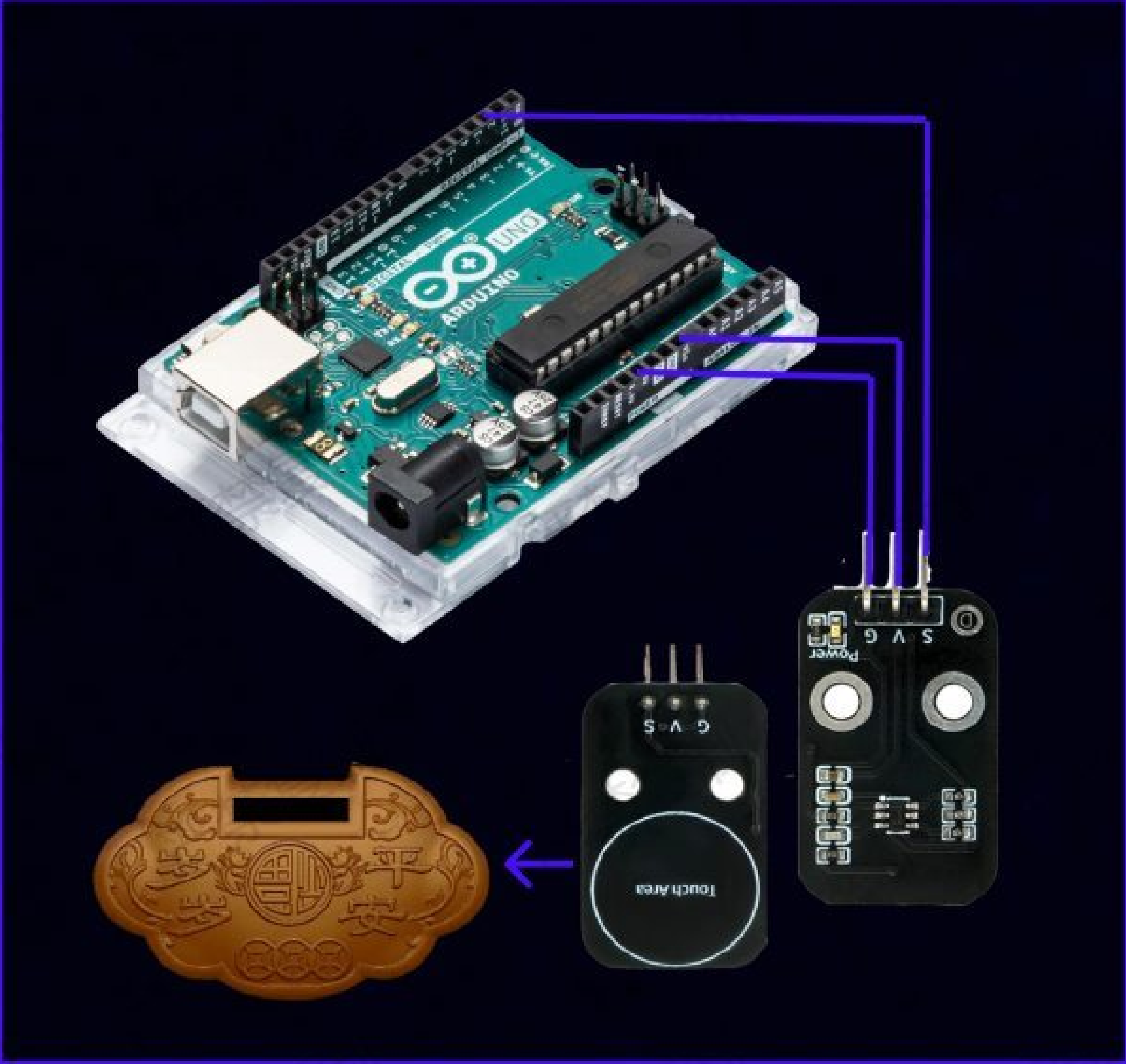
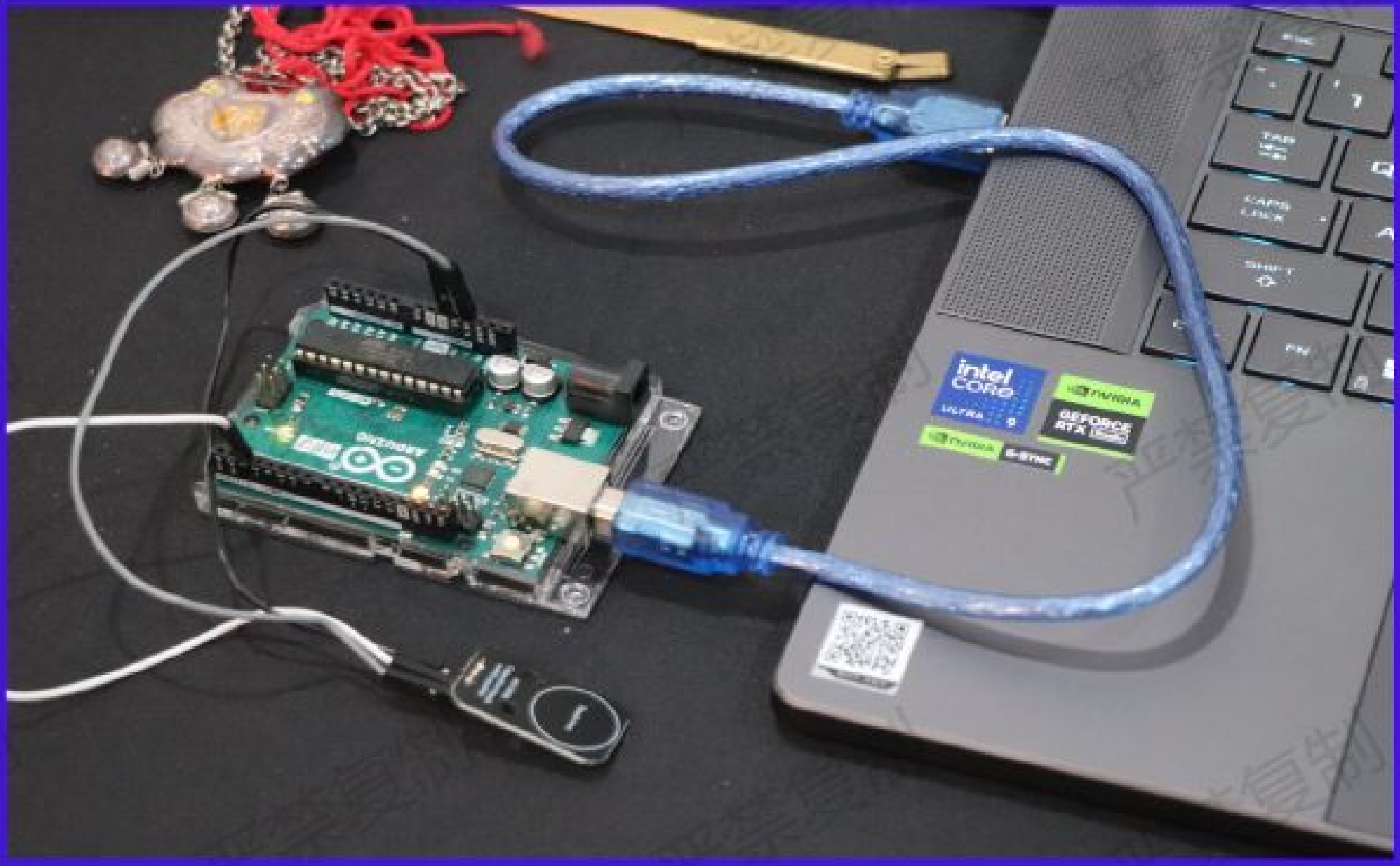
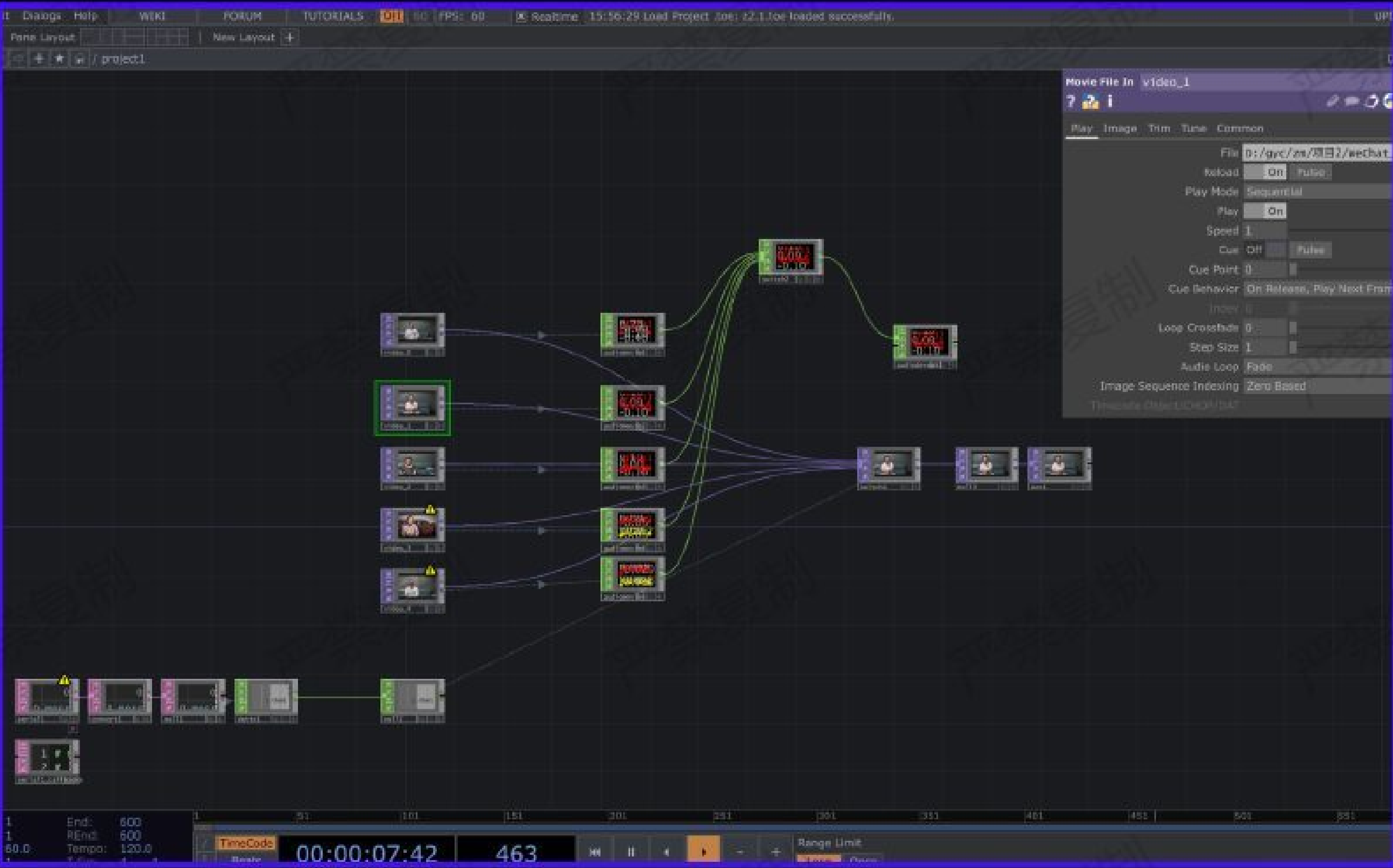
The development of ai technology is making more and more things that were not there a reality, I use ai technology to convert digitised photographs into images.



PROCESS

Interactive Device

The touch designer technology is linked to the Arduino for interactive operation, placing the touch sensor inside the lock and touching the touch area with the key to switch the video.



Coding

```
etch_aug22a.ino

1  const int touchSensorPin = 2;
2
3  // Variable to store the count of touches
4  int touchCount = 0;
5  int lastSensorState = LOW;
6  bool touched = false;
7
8  void setup() {
9      Serial.begin(9600);
10     pinMode(touchSensorPin, INPUT);
11 }
12
13 void loop() {
14     int sensorValue = digitalRead(touchSensorPin);
15
16     if (sensorValue == HIGH && !touched) {
17         touchCount++;
18         Serial.println(touchCount);
19         touched = true;
20         if (touchCount > 4) {
21             touchCount = 0;
22             Serial.println("0");
23         }
24     }
25
26     // Check if the sensor is released
27     if (sensorValue == LOW && touched) {
28         touched = false;
29     }
30 }
```

```
Arduino Uno
aug22a.ino

const int touchSensorPin = 2;

// Variable to store the count of touches
int touchCount = 0;
int lastSensorState = LOW;
bool touched = false;

void setup() {
    Serial.begin(9600);
    pinMode(touchSensorPin, INPUT);
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        if (touchCount > 4) {
            touchCount = 0;
            Serial.println("0");
        }
    }

    // Check if the sensor is released
    if (sensorValue == LOW && touched) {
        touched = false;
    }
}
```

Exhibition process

Key Interaction
Immersive Scene
Holographic Projection



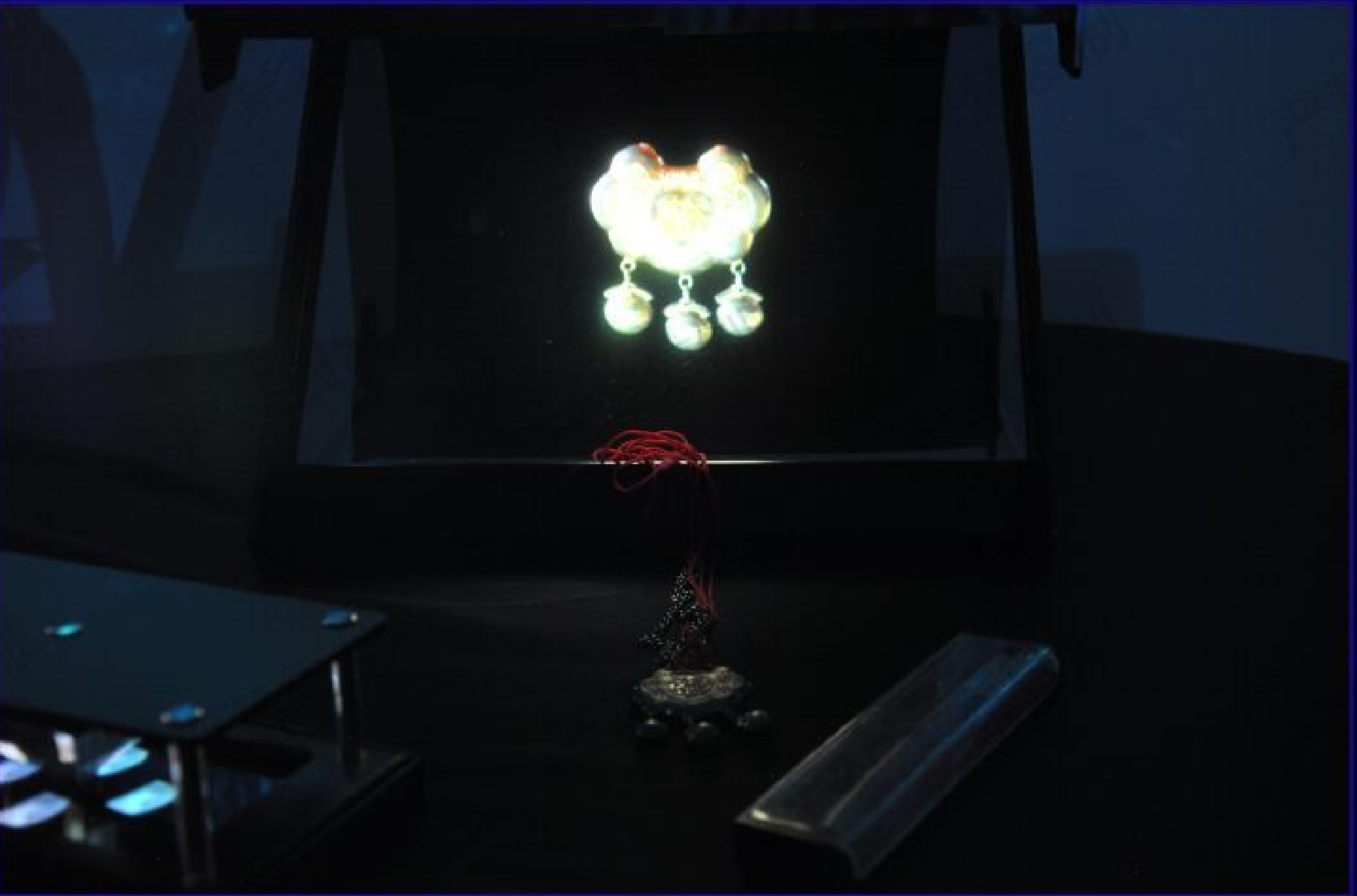
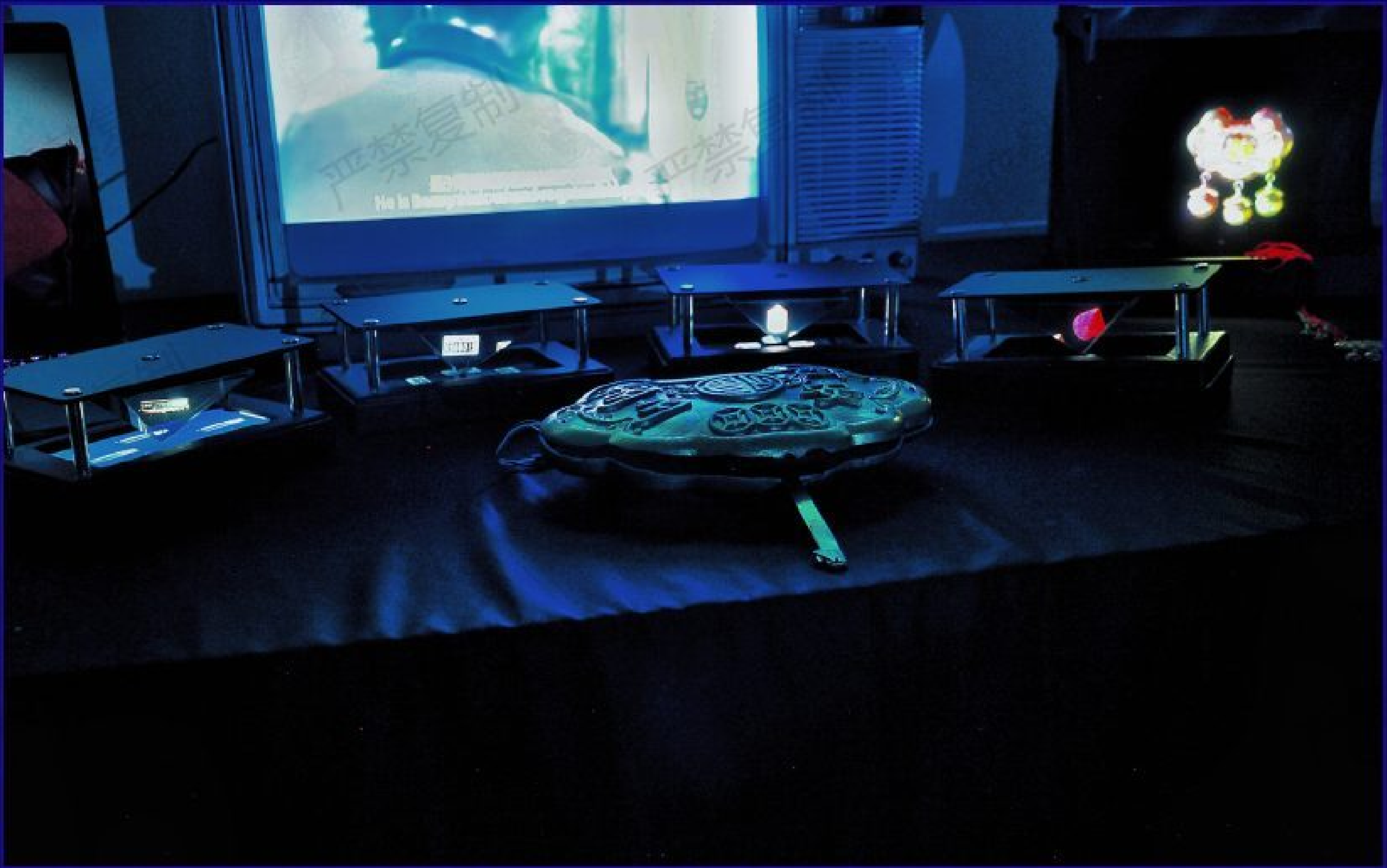
Throughout the installation process, the grandfather's artifacts were brought to life through holographic projection, effectively highlighting the tangible presence of digital heritage. A vintage television set serves as the focal point of the installation, crafting an atmosphere steeped in nostalgia. Moreover, digital imagery has been employed as a medium for conveying human sentiment, a practice that has perseverance through the ages.



FINAL OUTCOME



The installation invites viewers into a carefully designed scene where relics and digital imagery merge seamlessly, evoking a sense of nostalgia and connection. Through dynamic interaction, visitors unlock layers of memories, experiencing a narrative that reflects on the importance of preserving and honoring those who have shaped us.





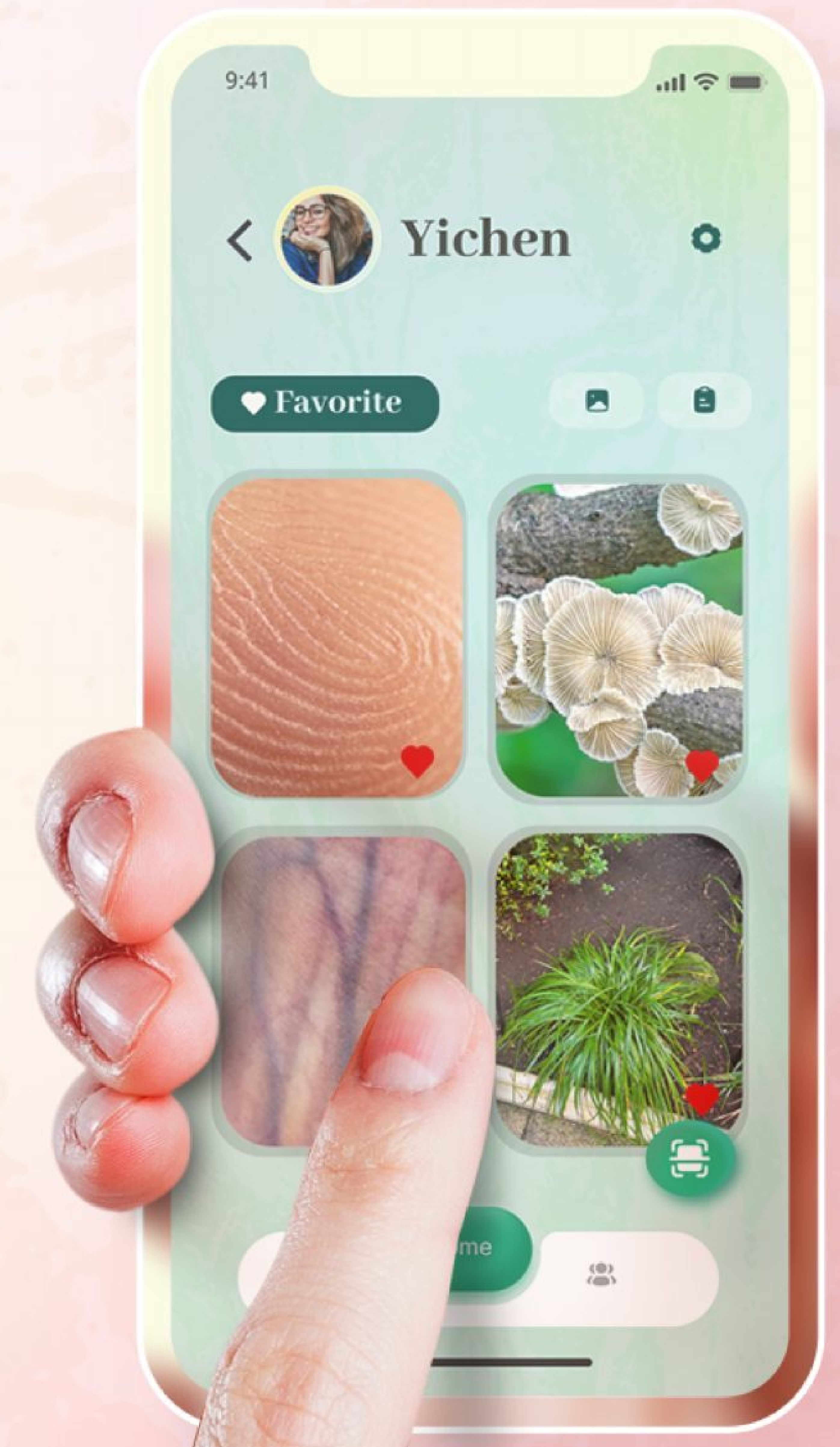
PROJECT:3

NATURE IMPRINT

Interaction Design +AR User Experience

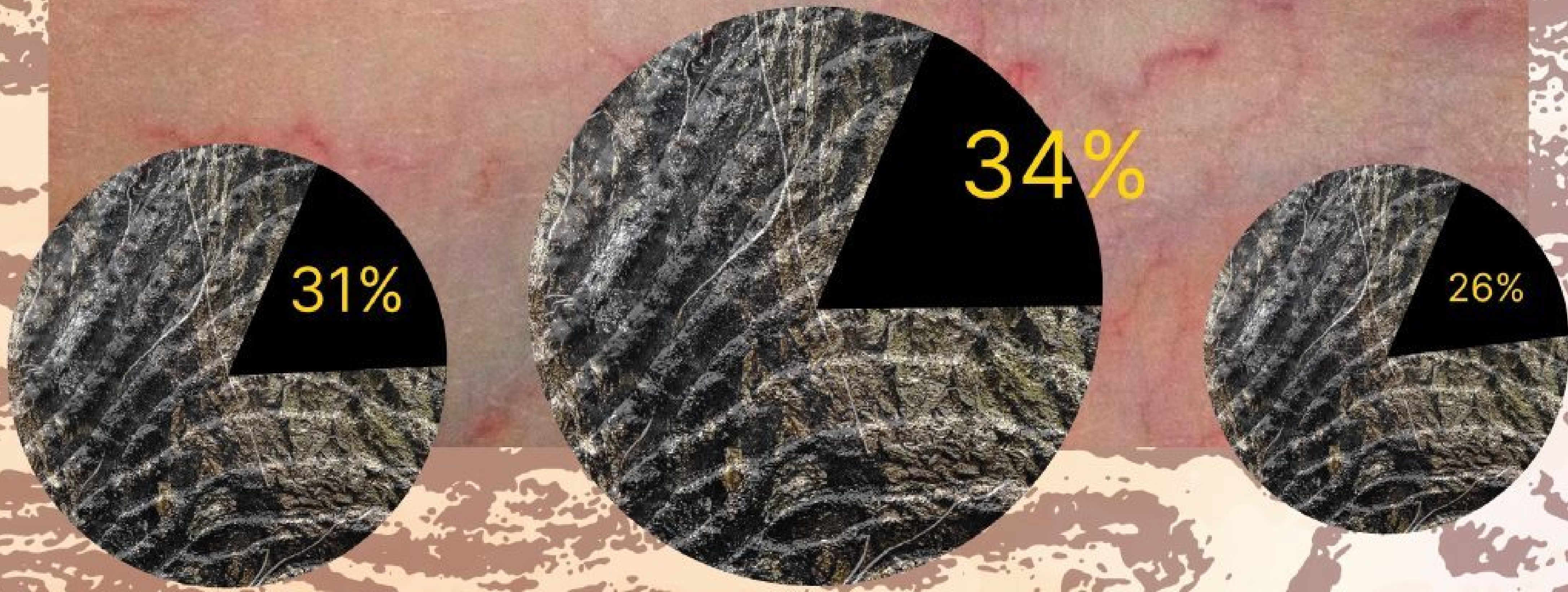
VIDEO LINK : <https://youtu.be/BloumqLD7qQ>

In a world driven by the pursuit of perfection, we often overlook the beauty in imperfections—the marks that tell our stories and connect us to the natural world. This project explores the profound relationship between human skin and nature's textures, using augmented reality to blend the two into a harmonious experience. By examining self-acceptance, inclusivity, and integration, this work invites you to embrace the unique details that define us and the world around us, reminding us that imperfection is where authenticity and connection truly reside.



BACKGROUND

It's clear from the results of our latest survey that skin and appearance play a huge part in our mental health and happiness. Whilst the skin is the body's largest organ, most people underestimate its importance



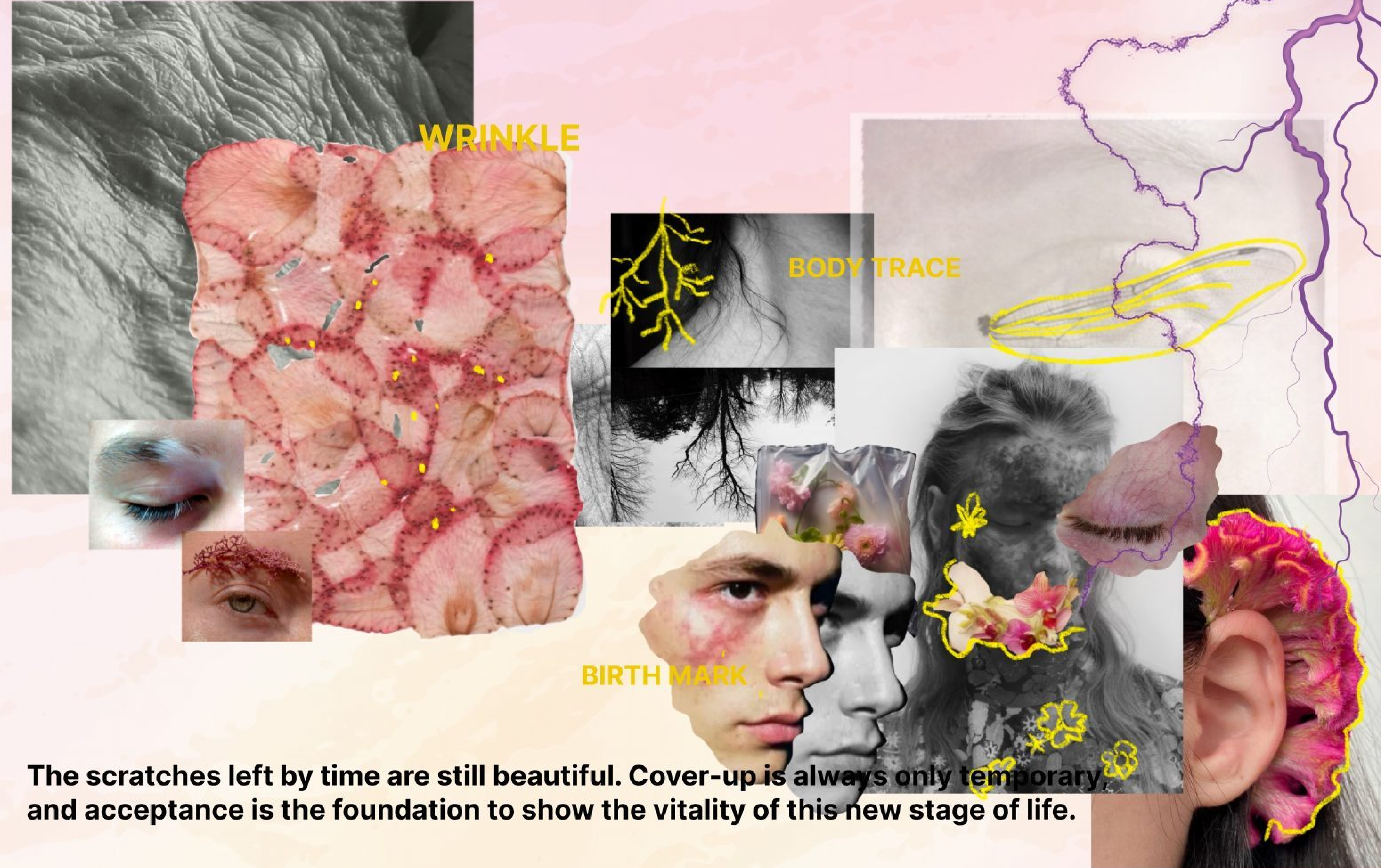
31% of people said that their skin condition affected their mental health.

More than one-third of people (34%) have felt "depressed or depressed" because of their physical image in the past year.

25% of people said that skin diseases affect their daily lives.

INSPIRATION

"In the textures of our skin and the patterns of nature, we find harmony."



The scratches left by time are still beautiful. Cover-up is always only temporary, and acceptance is the foundation to show the vitality of this new stage of life.

ARTIST RESEARCH



INTERVIEW

A blend of biological and natural textures in a digital medium.



Do my veins look like the veins of a leaf?

Have you ever observed a human joint that looks like a hill?

I'm old and i'm wrinkled like the bark of an ancient tree.



IDEA

Self-acceptance

By overlaying natural textures on human skin, we remind ourselves that we are not separate from nature. Our bodies, with all their imperfections, are a part of the natural world.

All-inclusive

By combining human skin details with a variety of natural textures, this approach can visually symbolize the idea that all people, regardless of appearance, have intrinsic worth and belong to the greater tapestry of life.

Integration with nature

This combined representation invites us to reflect on the necessity of integrating natural elements into our lives—not just as a form of aesthetic expression but as a reminder of our interdependence with the world around us.

VISUAL DESIGN

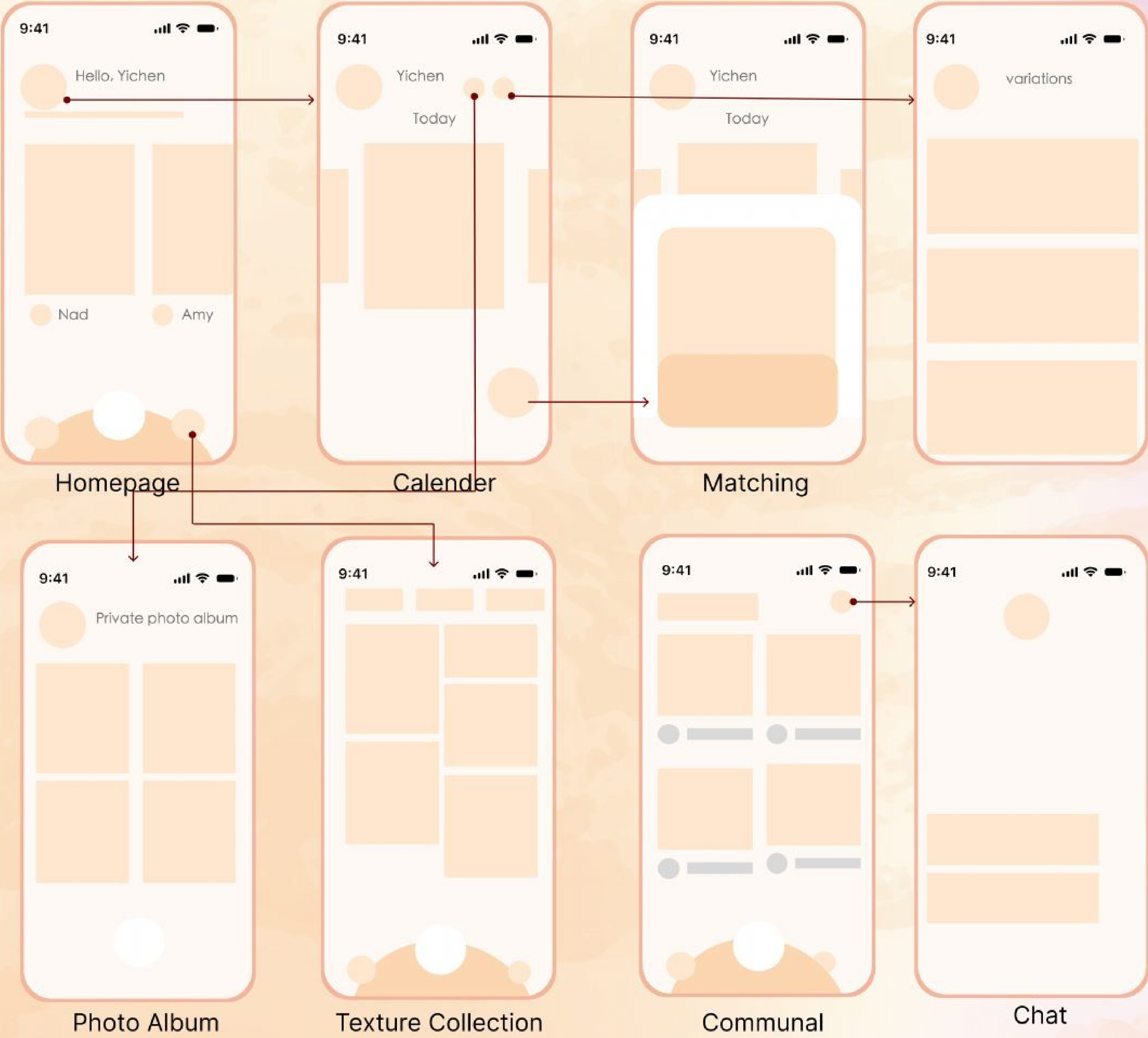


A polished, intuitive AR interface that allows users to explore the world of natural textures without technical distractions, with smooth transitions and real-time interactivity.

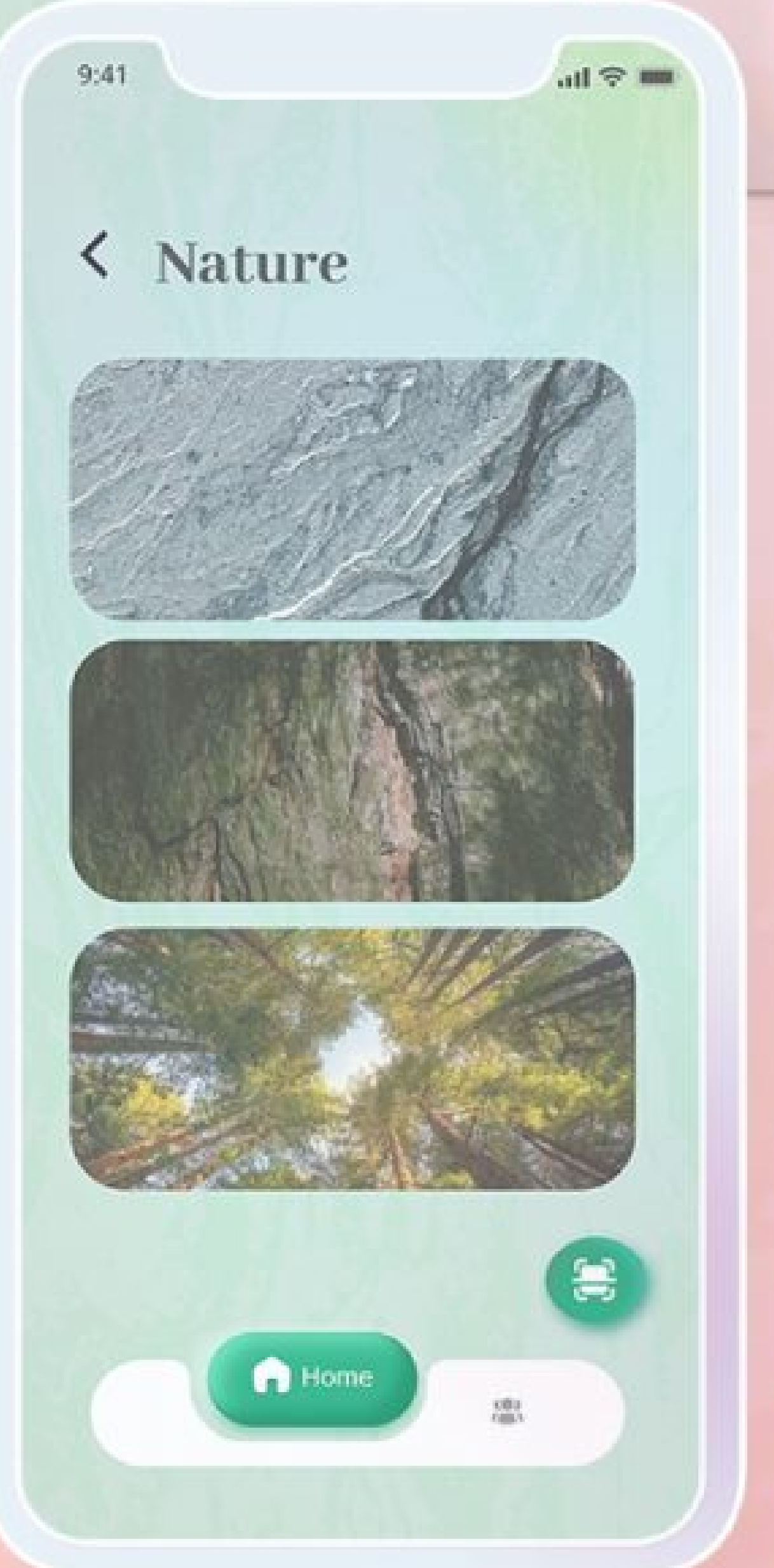
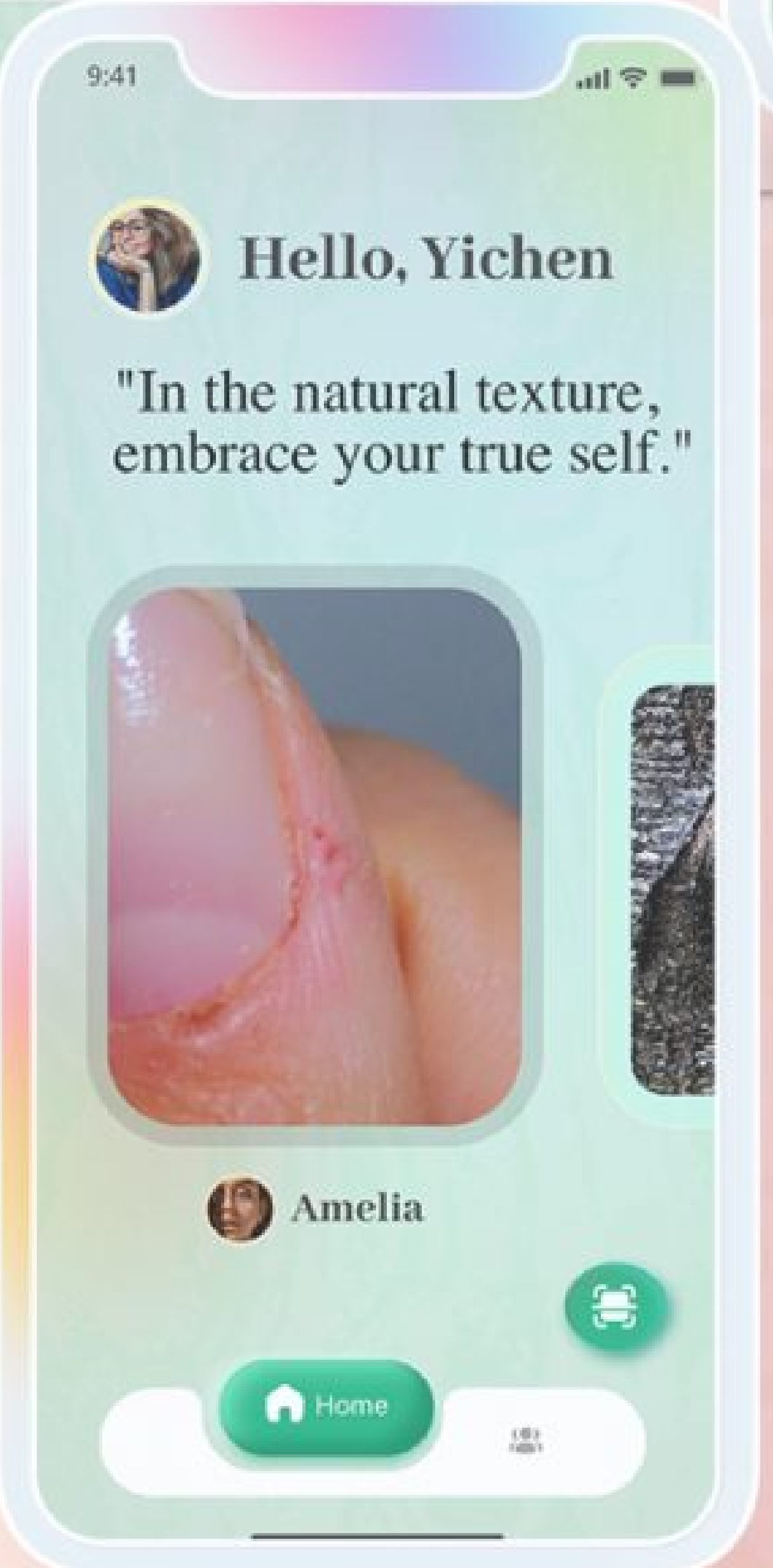
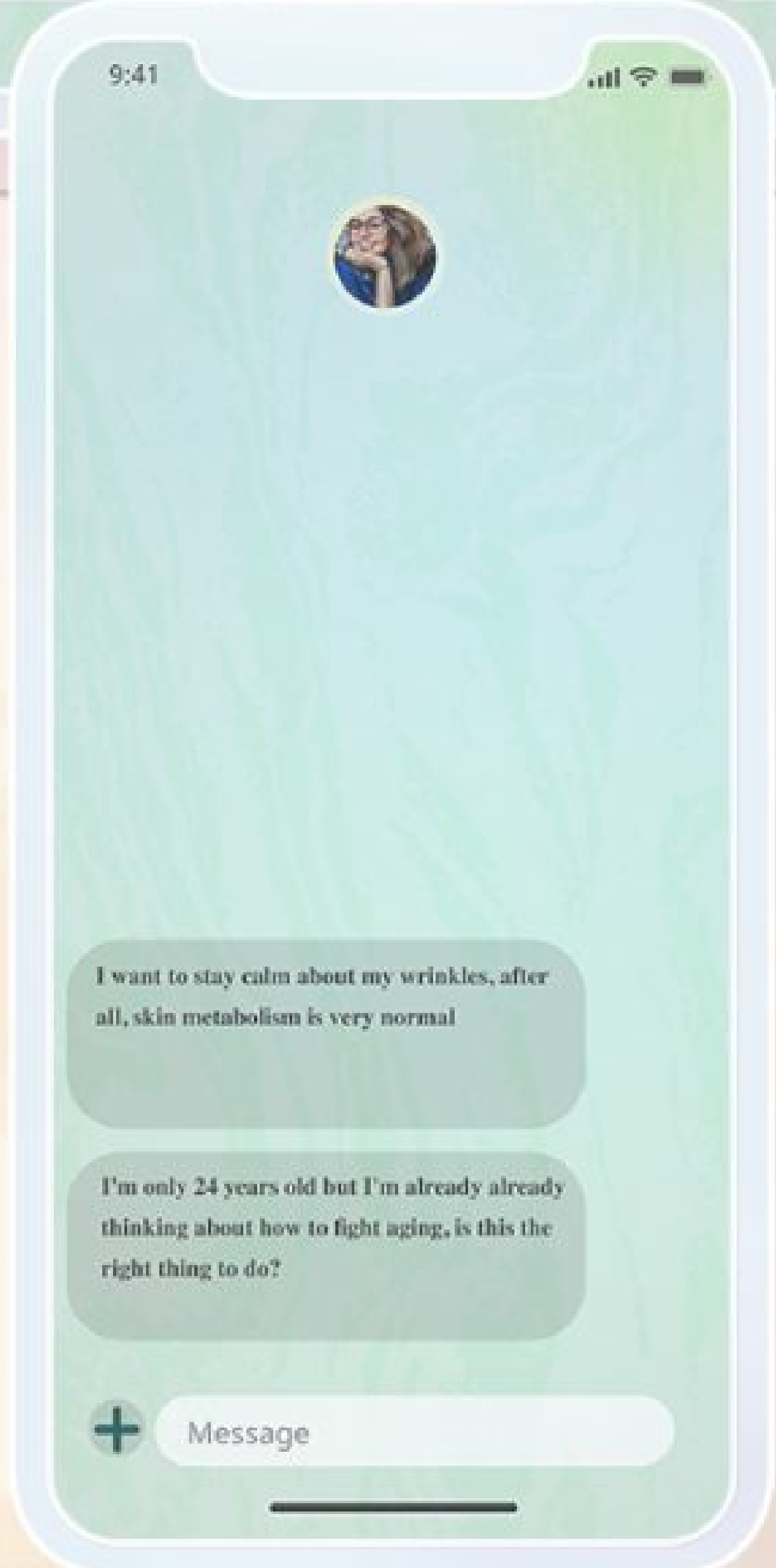
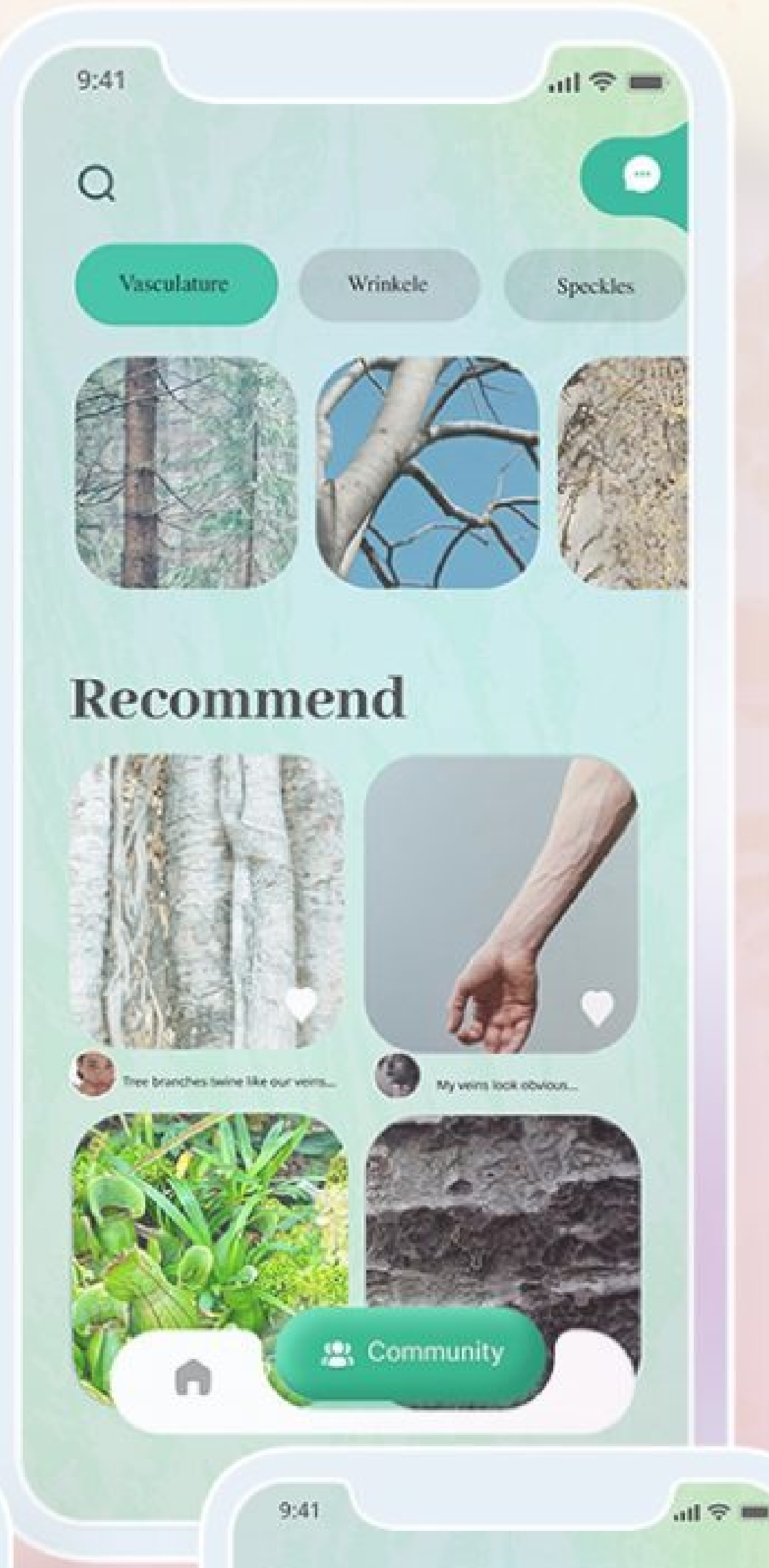
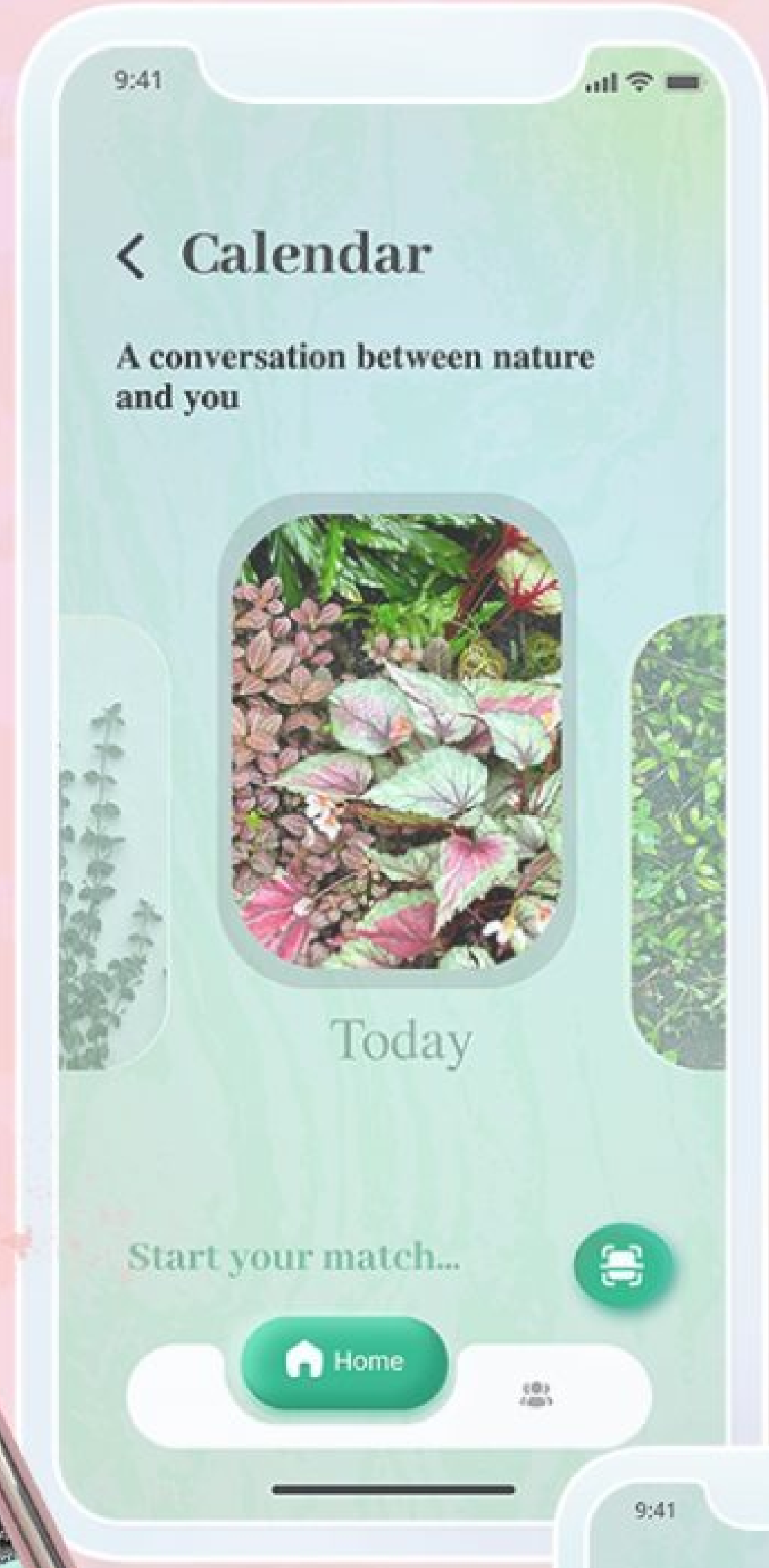
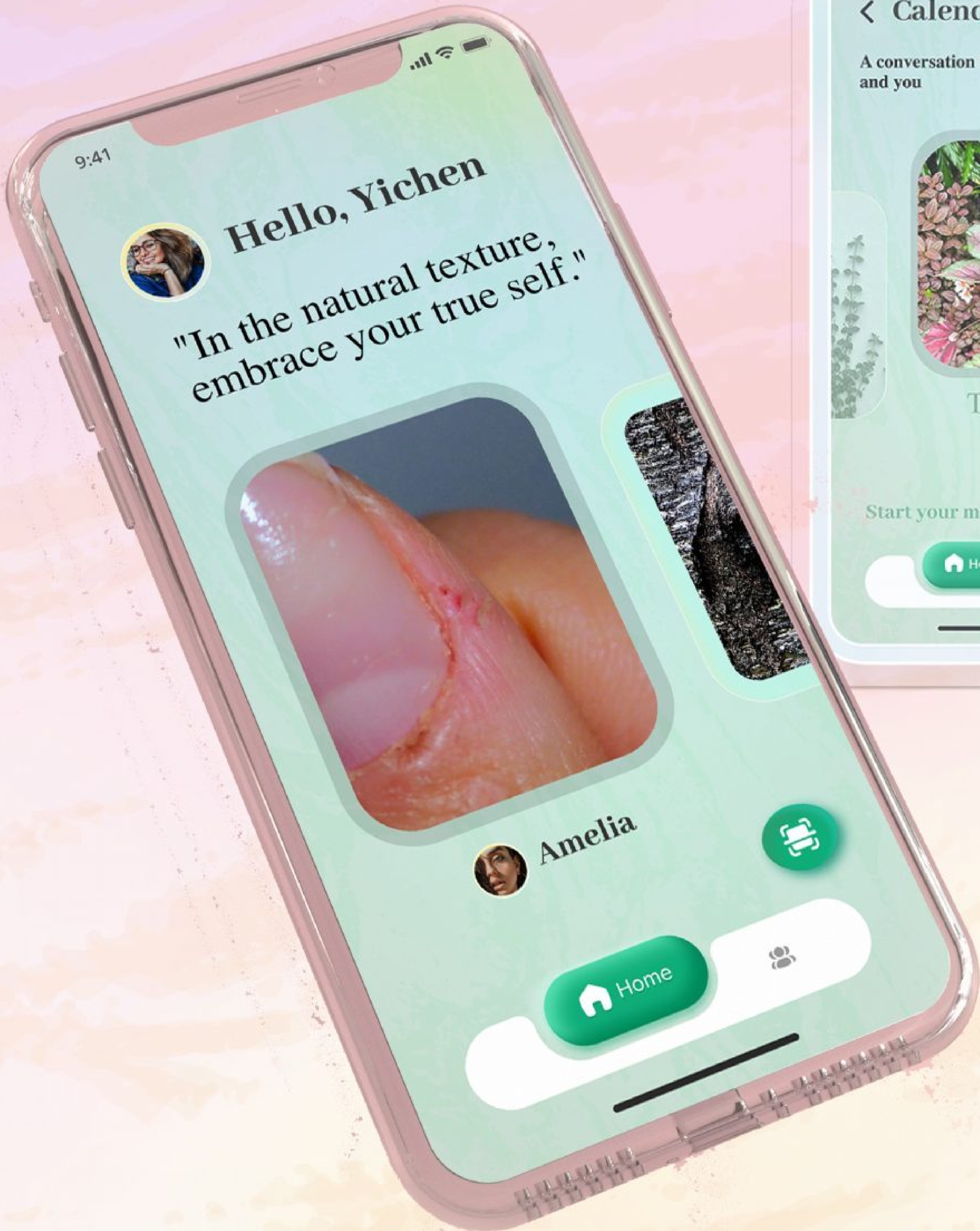
The combination of human skin details and natural textures offers a rich metaphor for exploring concepts like self-acceptance, inclusivity, and integration. When examined through these three lenses, it reflects the harmonious relationship between nature, the human body, and the broader world.

WIREFRAMES

The aim of the app design is to create an immersive, user-friendly experience that allows individuals to explore and connect with the natural world through the lens of human skin and augmented reality (AR).



APP DESIGN



User advices



"I found the app visually stunning and engaging. The concept of combining skin textures with natural elements is truly unique."

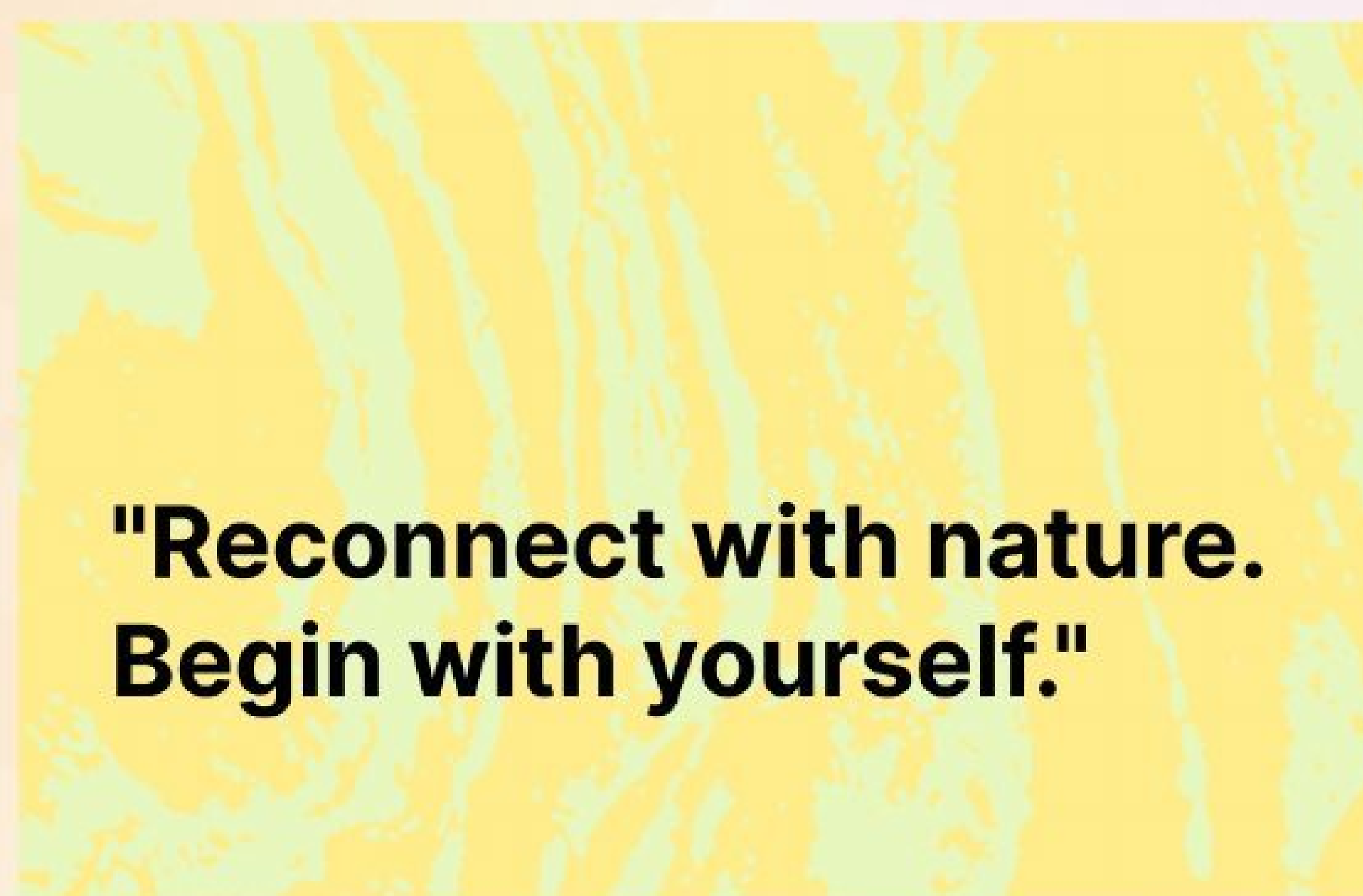
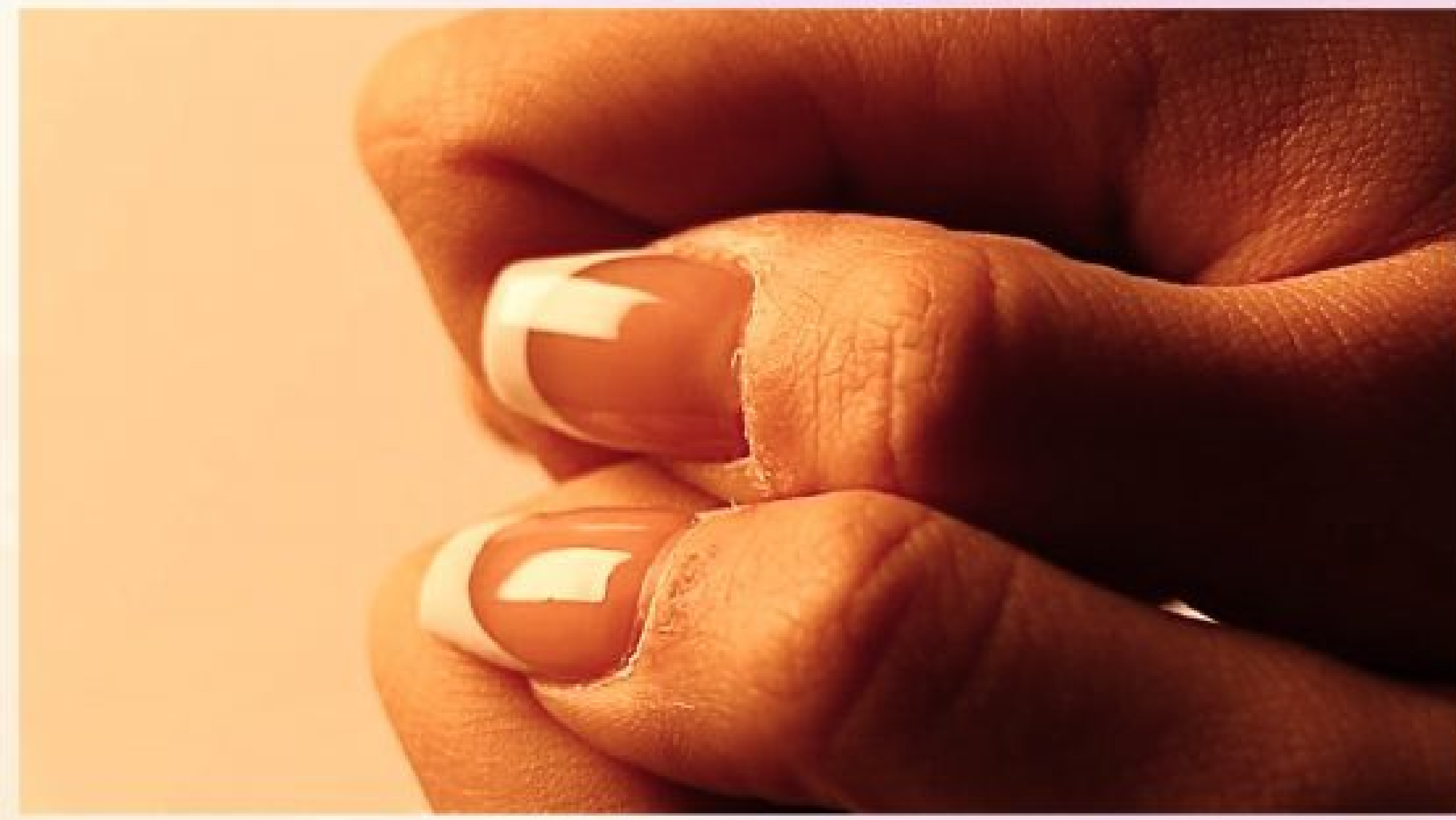
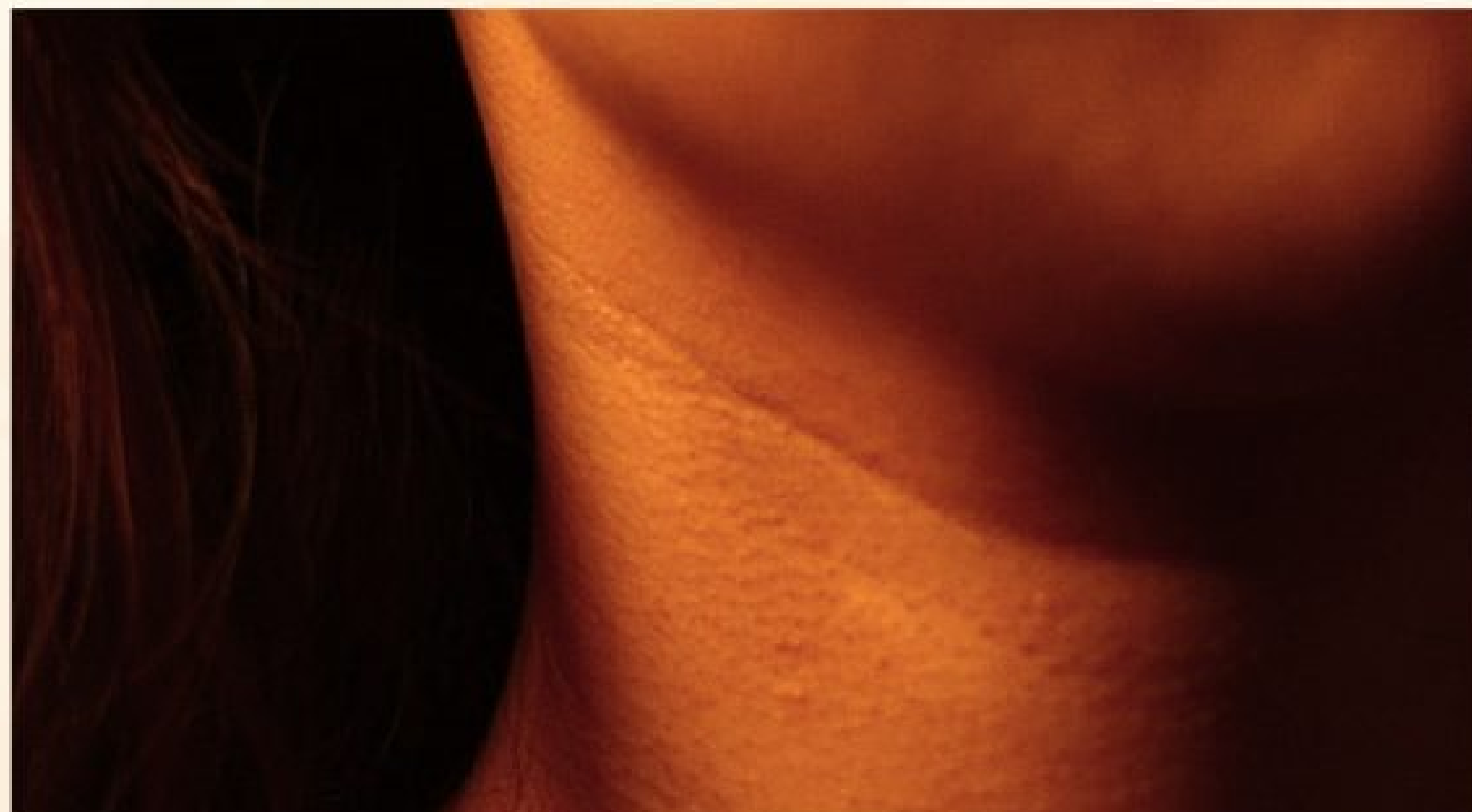


"I found it powerful—seeing the textures of nature interact with my skin"



"I think this app has the potential to make a real impact on how people view nature and their place in it."

FINAL OUTCOME



**"Reconnect with nature.
Begin with yourself."**





PROJECT :4

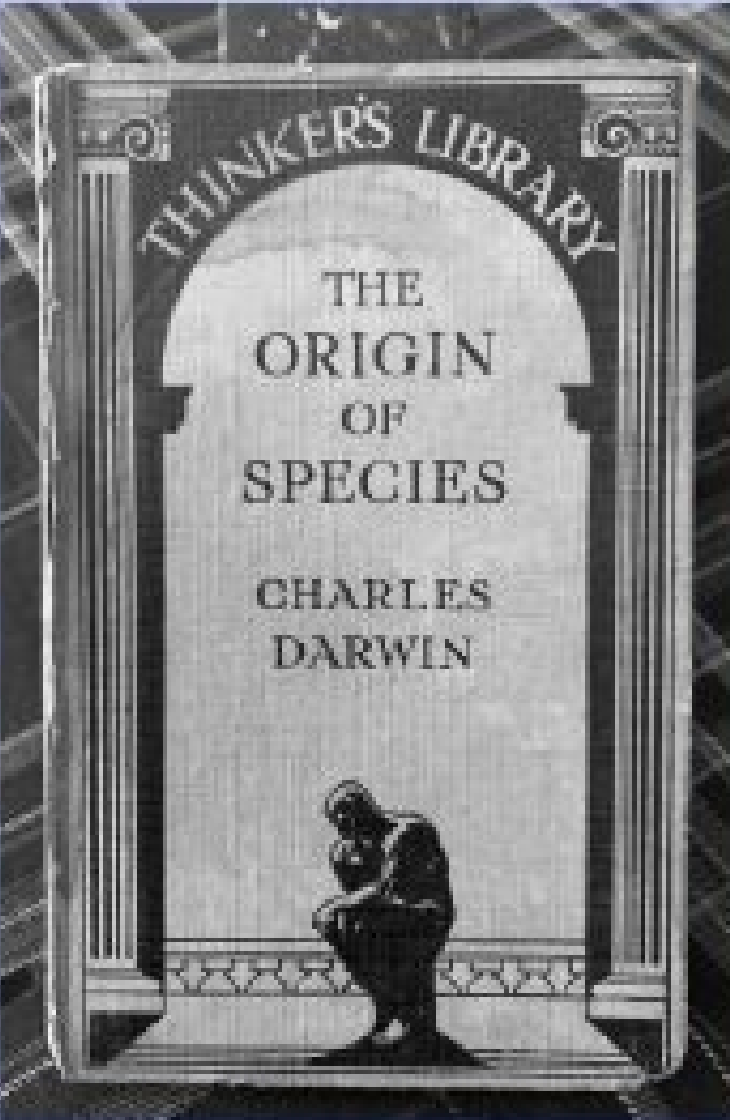
MAGNETS OF LIFE

Narrative Story Game Design

VIDEO LINK:<https://youtu.be/RR3oOw9qxwk>

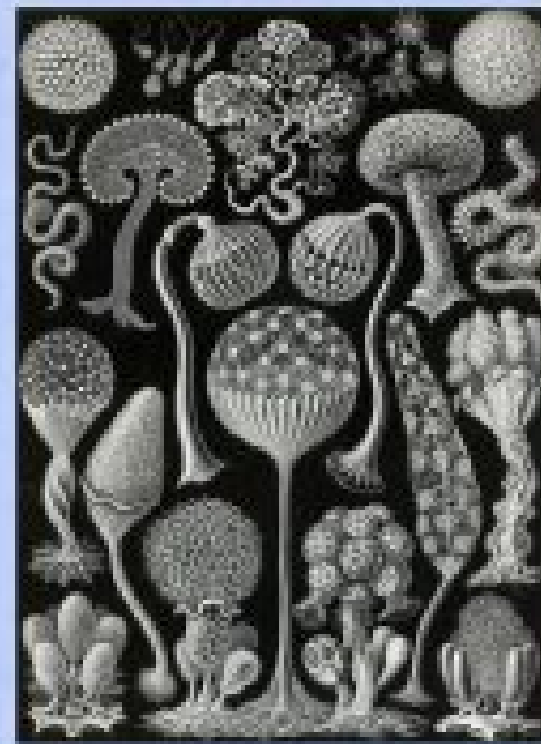
In this game, we explore a world where every living being is an integral part of a delicate, interconnected ecosystem. inspired by the microcosms of nature, particularly the fascinating worlds of mushrooms, bacteria, and invertebrates, we dive deep into the unseen, often overlooked organisms that shape the very fabric of life. these microscopic creatures embody the complex relationships of nature—symbiosis, competition, and evolution—creating a dynamic environment where survival and growth are determined by balance.

RESEARCH



• The origin of species

How did all kinds of creatures in the world come from? How did we human beings develop ourselves? In Europe before the 19th century, the unquestionable answer was that people and all creatures were created by God. However, on November 24, 1859, a green-covered book "The Origin of Species" sold in a bookstore in London, England, boldly challenged God's creation theory and fundamentally shook the foundation of the Bible.



Primary Producers

Consumers

Decomposers

Symbiotic Organisms

Evolving Organisms

Keystone Species

Human Analogues

Origin of species

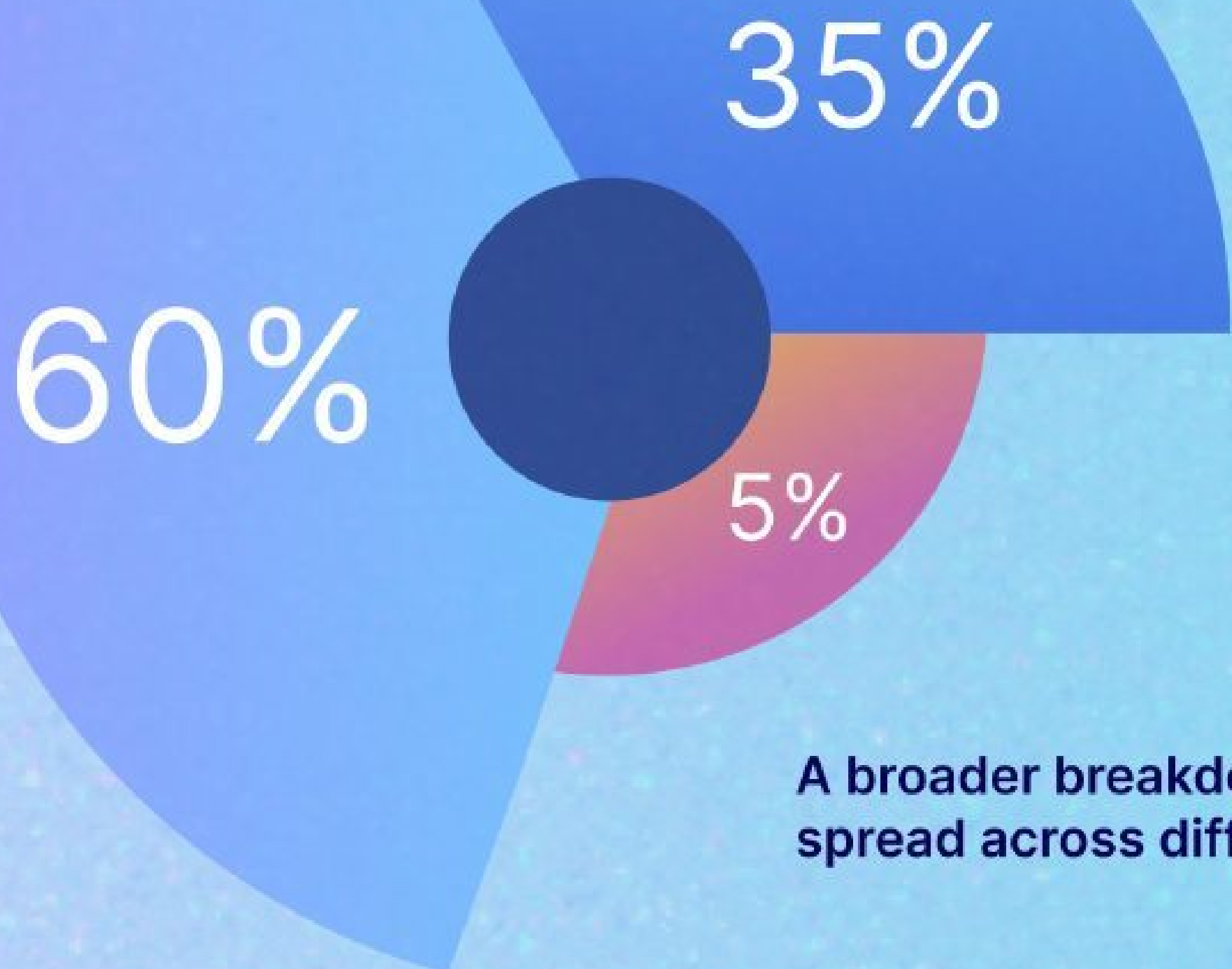
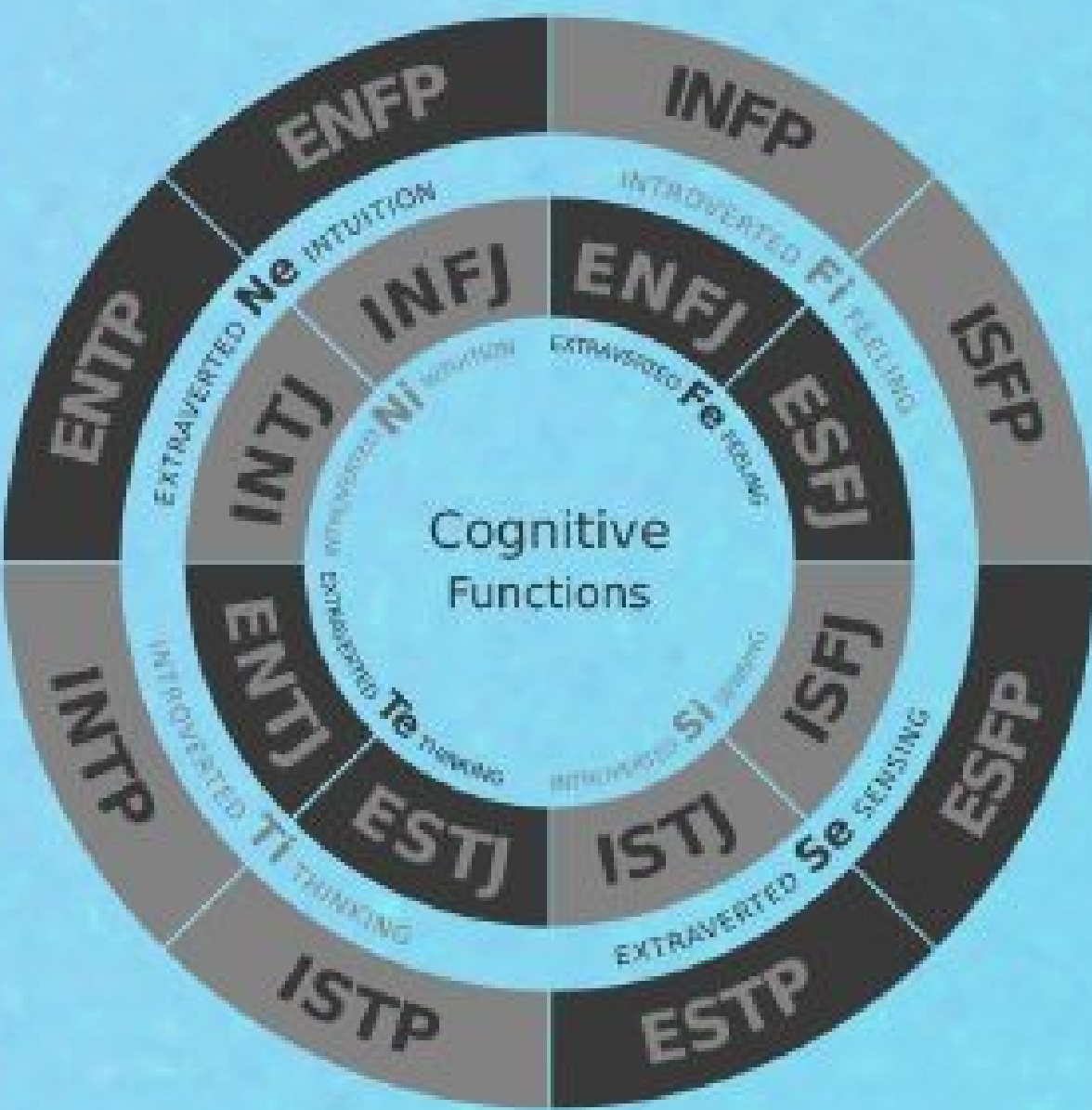
In a universe governed by unseen forces of connection and interdependence, life forms an intricate web of relationships, each species a vital thread in the fabric of existence. Inspired by Charles Darwin's Origin of Species, this project envisions a world where humans coexist alongside animals, plants, algae, and fungi as equal participants in a symbiotic ecosystem.

• Myers-Briggs Type Indicator

The MBTI has exploded in popularity on platforms like Instagram, Twitter, TikTok, and YouTube, where users often share memes, videos, and quizzes about their personality types. The #MBTI hashtag on these platforms is a massive trend, with millions of posts exploring people's types in various contexts (e.g., relationships, work, and pop culture).



Briggs began her research into personality in 1917. Upon meeting her future son-in-law, she observed marked differences between his personality and that of other family members. Briggs embarked on a project of reading biographies and subsequently developed a typology wherein she proposed four temperaments: meditative (or thoughtful), spontaneous, executive, and social



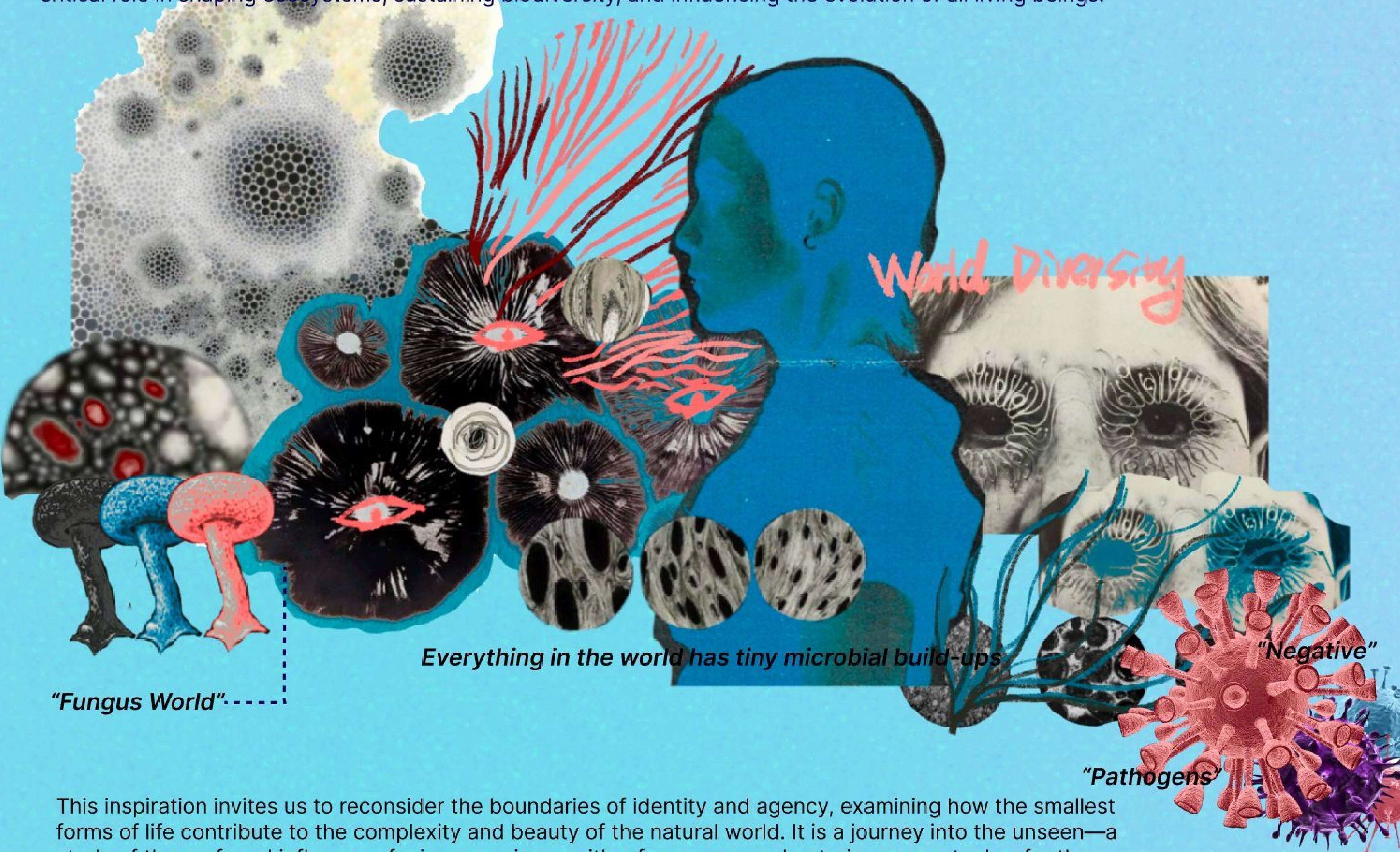
A broader breakdown of how MBTI testing and interest is spread across different groups



INSPIRATION

• VAST AND INTRICATE SYSTEM

The world as we know it is a vast and intricate system, composed of countless microorganisms that serve as the unseen architects of life. Among these, mycobacteria stand out—not only for their complex behaviors and adaptability but also for their critical role in shaping ecosystems, sustaining biodiversity, and influencing the evolution of all living beings.



Everything in the world has tiny microbial build-ups

"Fungus World"-----

"Negative"

"Pathogens"

This inspiration invites us to reconsider the boundaries of identity and agency, examining how the smallest forms of life contribute to the complexity and beauty of the natural world. It is a journey into the unseen—a study of the profound influence of microorganisms, with a focus on mycobacteria, as a metaphor for the interconnectedness of all living things.

"Primary producers"

Soil & water. Scavengers → Dead material
↓
Microbes ← Decomposers → Recycling.
Herbivores "Evolving"
↓
Carnivores
↓
Hybrids.
↓
omnivores.
↓
Consumers

Cooperation. (origin of species) ↑
Relationships Fungus world
↓
Competition
↓
predation
↓
wild life
↓
vertebrate
↓
invertebrate.

Everything in the world is made up for microorganisms.
↓
vegetative.
↓
microbiological
↓
photosynthesis
↓
Fungi-like.

Representation
↓
cycle
↓
Energy & Nutrient.

- *Scene/Colour scheme*



Personal Magnetic Signature:
Each player starts with a unique magnetic field representing their inherent traits. As they interact with other organisms, this field evolves, visualizing how relationships and choices shape identity.

Forming Symbiotic Bonds:
Conflictual Bonds: Engage in competition or defense, revealing aspects of self tied to resilience or independence.

Interdependence
Individuality:

- The game challenges players to find a balance between personal growth and their role within a larger community.

Fluidity of Identity:

- The magnetic field's ability to change represents the evolving nature of self-identity, shaped by experiences and relationships.

Reflection and Self-Awareness:

- There are no “right” or “wrong” choices, only pathways that reveal different aspects of the self.

Moral Ambiguity :

- Through gameplay, players are prompted to reflect on their real world values, decisions, and relationships.



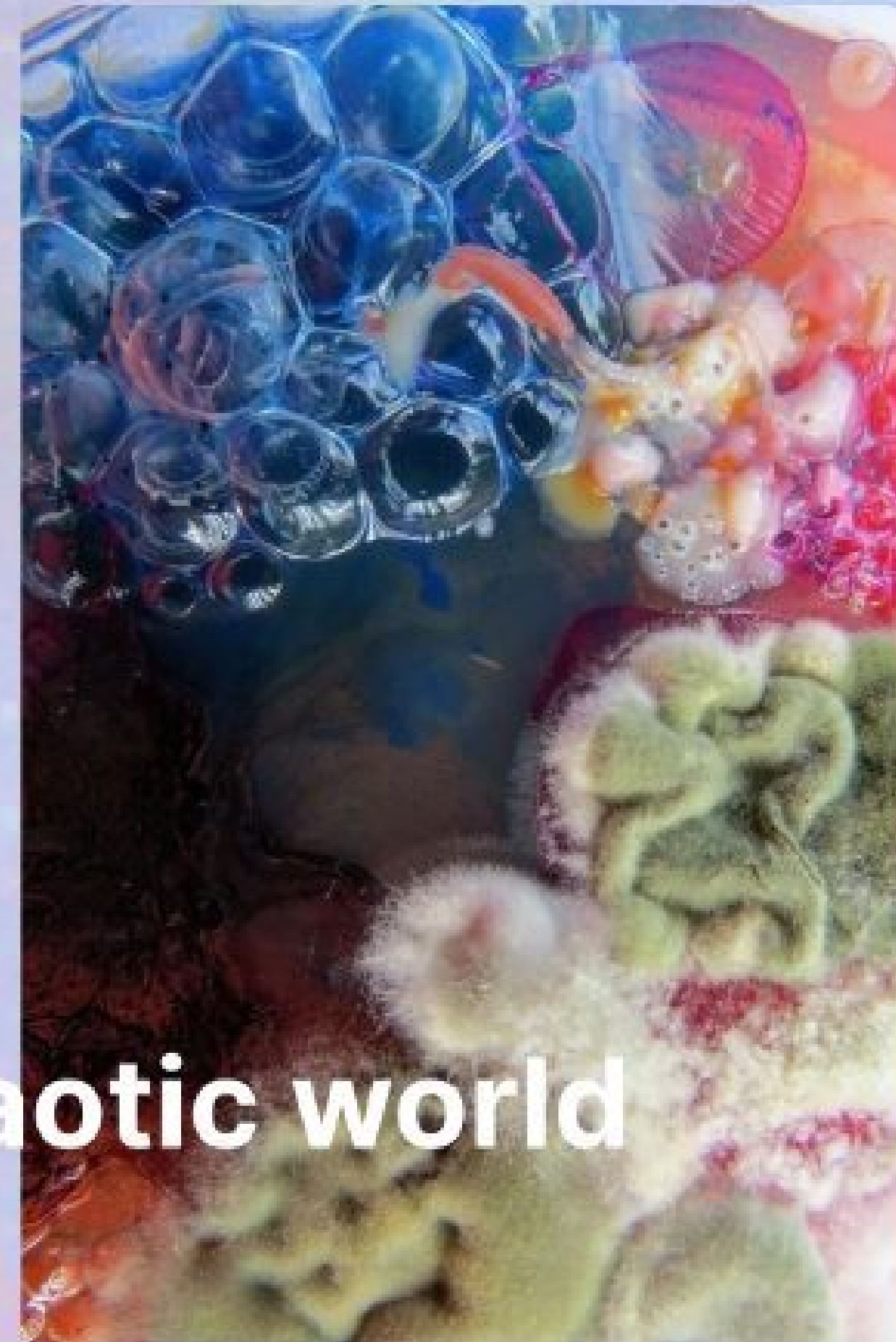
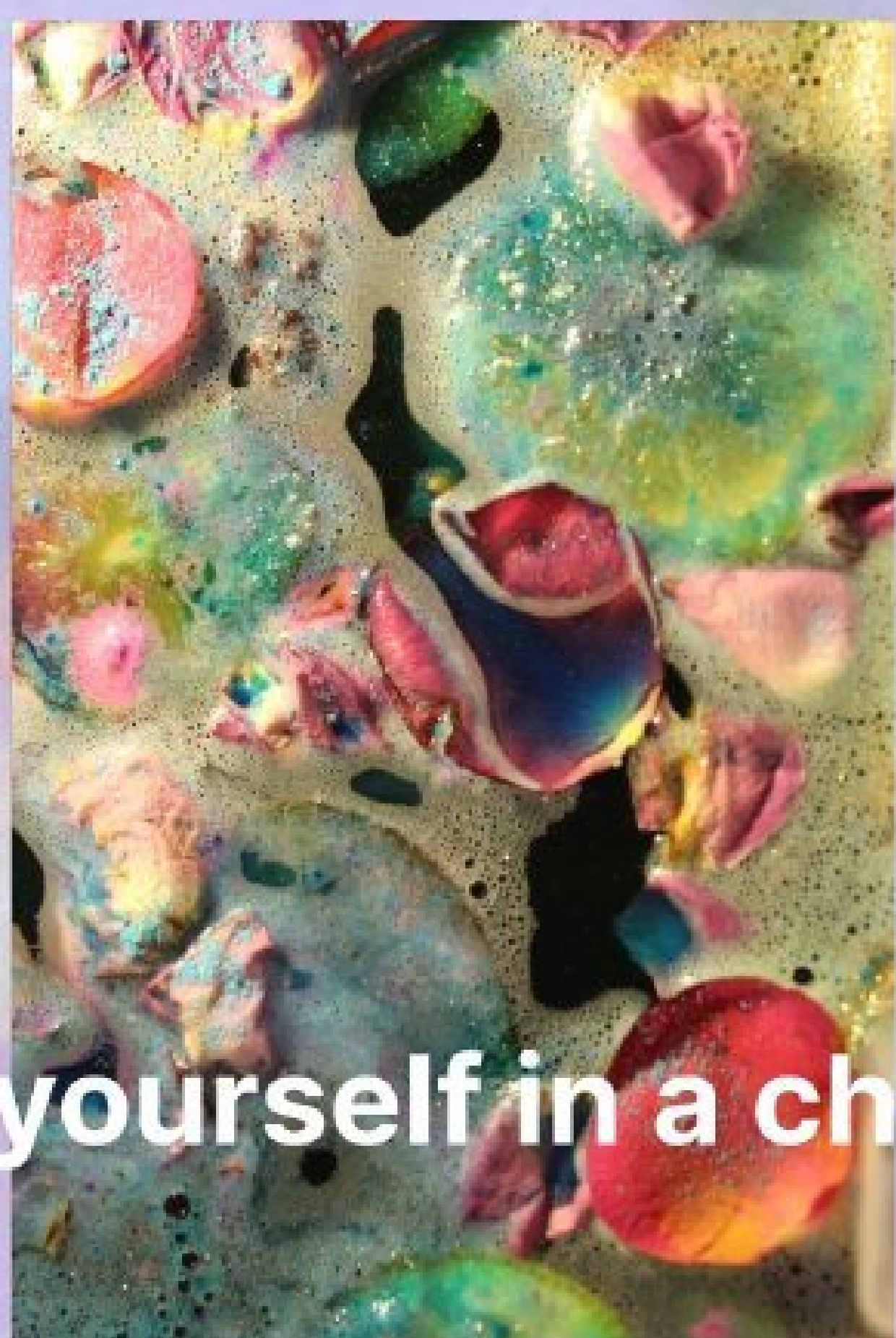
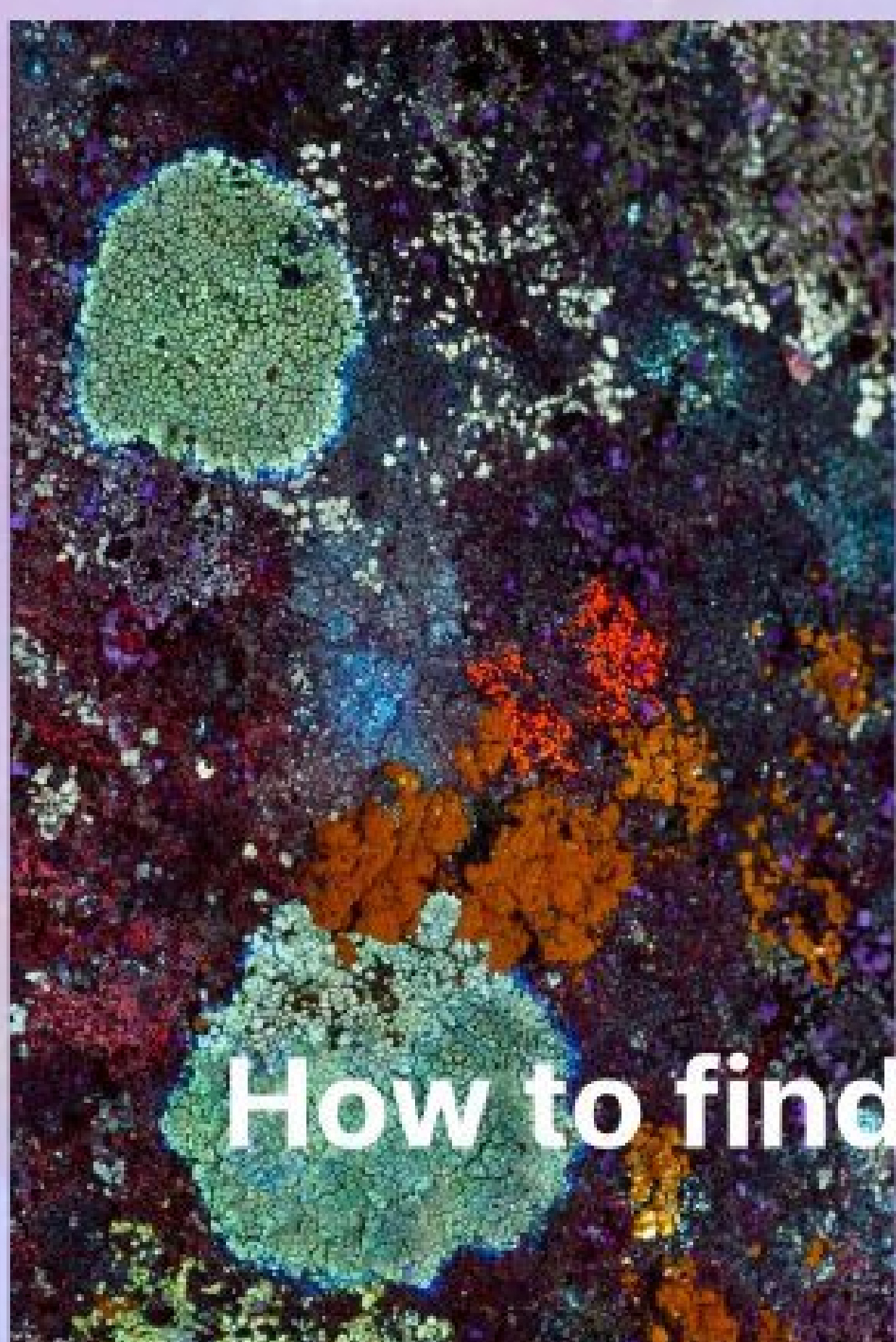
GAME SETTINGS

• World View Setting

In this world, life is a living web of connections, each organism, from the tiniest microbe to the most complex multi-celled beings, is born from an intricate system of evolutionary forces. The game explores the origin of species, not through an apocalyptic event, but through natural processes of evolution, adaptation, and symbiosis. Here, life evolves through interconnectedness and co-evolution, with all organisms thriving, adapting, and mutating based on their environment and relationships with one another.

• Ending Design

In this game, the concept of Game Ending isn't the traditional end, but rather a moment of profound reflection and self-discovery. The game's conclusion—or more accurately, its pause—serves as a space to explore the player's evolving self, choices, and identity through a dynamic journey of introspection. The game over state becomes an opportunity to reflect on the decisions made and their impacts, both within the game world and on the player's personal journey.



How to find yourself in a chaotic world

USER FLOW

Level 1: The Microbial Pool – Basic Survival

The game begins in a microscopic world, where the player is presented as a newly-formed mycobacterial organism in a complex, vibrant environment.

Gameplay Focus:

- Resource Management: Manage energy by absorbing basic nutrients from the environment.
- Cooperation: Discover how symbiosis functions through simple interactions with nearby organisms.

Level 2: The Fungal Connection

A vast underground network of plant roots, where mycorrhizal fungi and mycobacteria form symbiotic bonds.

Player Action:

- Establish mutualistic relationships with plants, exchanging nutrients for protection.
- Form mycelial networks to communicate and share resources.
- Explore the interactions between fungi, bacteria, and plant roots.

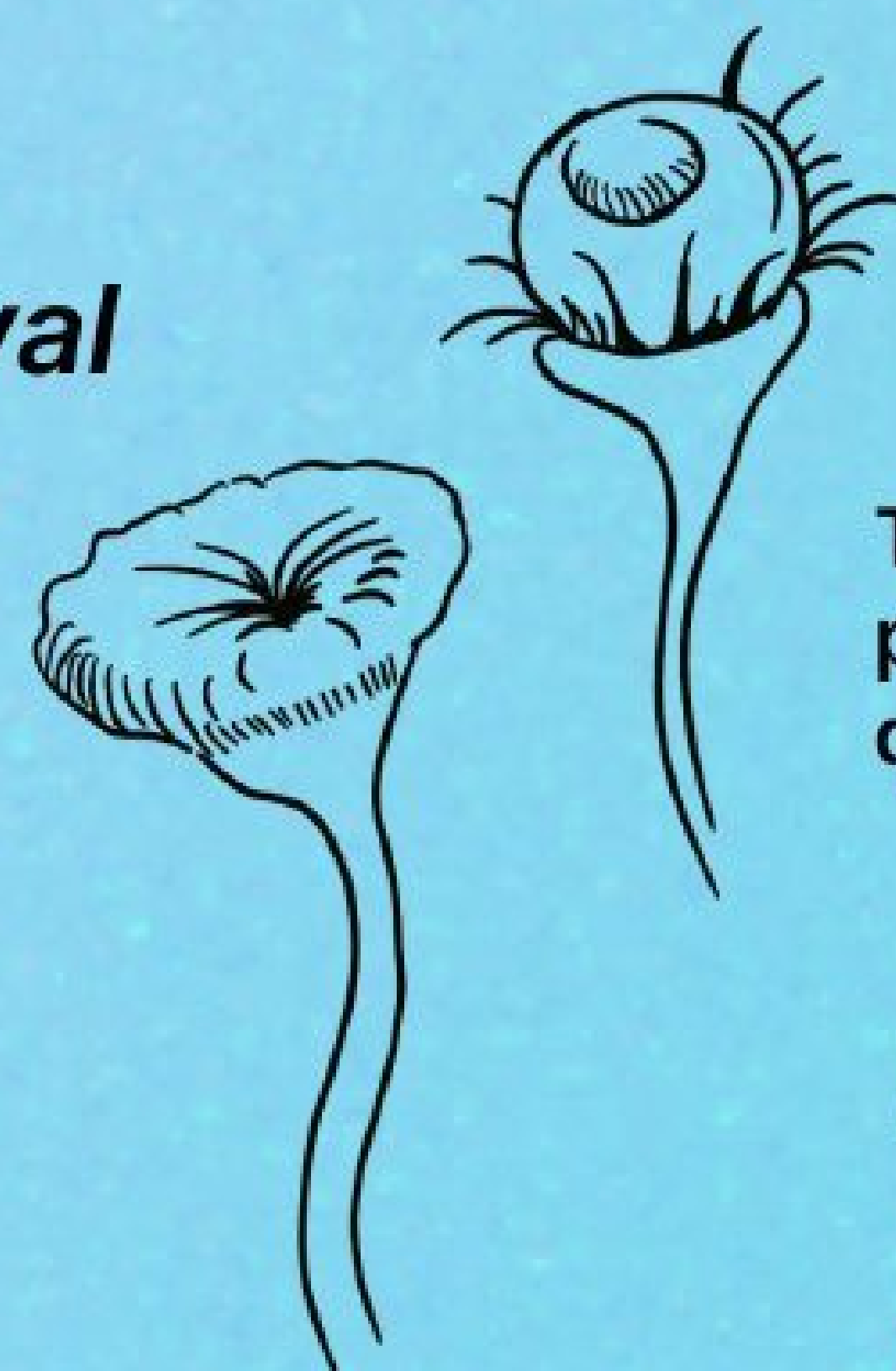


Level 3: The Swarm of the Predators

A hostile environment where predatory bacteria and viruses threaten the survival of all organisms.

Player Action :

- Engage in conflict with predatory organisms or learn to outcompete them.
- Evolve defensive traits (e.g., biofilm formation or resistance to toxins).



The player may evolve the ability to communicate with plants or fungi, enhancing collaboration and unlocking quests related to ecosystem restoration or growth.

Level 4: The Garden of Balance

A once-thriving forest ecosystem that has been overtaken by an invasive species of bacteria, threatening the food web.

Player Action :

- Adapt to environmental changes and external pressures (e.g., disease outbreaks, climate shifts).
- The player's choices shape the organism's growth and impact how they interact with the world.

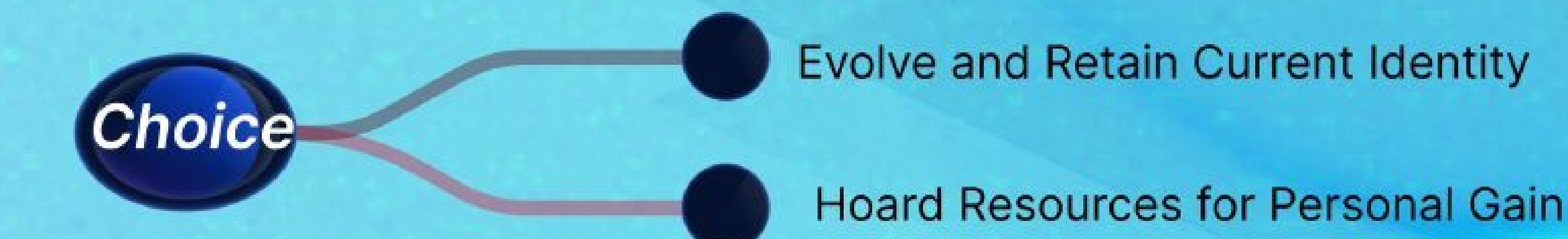


Level 5: The Abyss of Rebirth

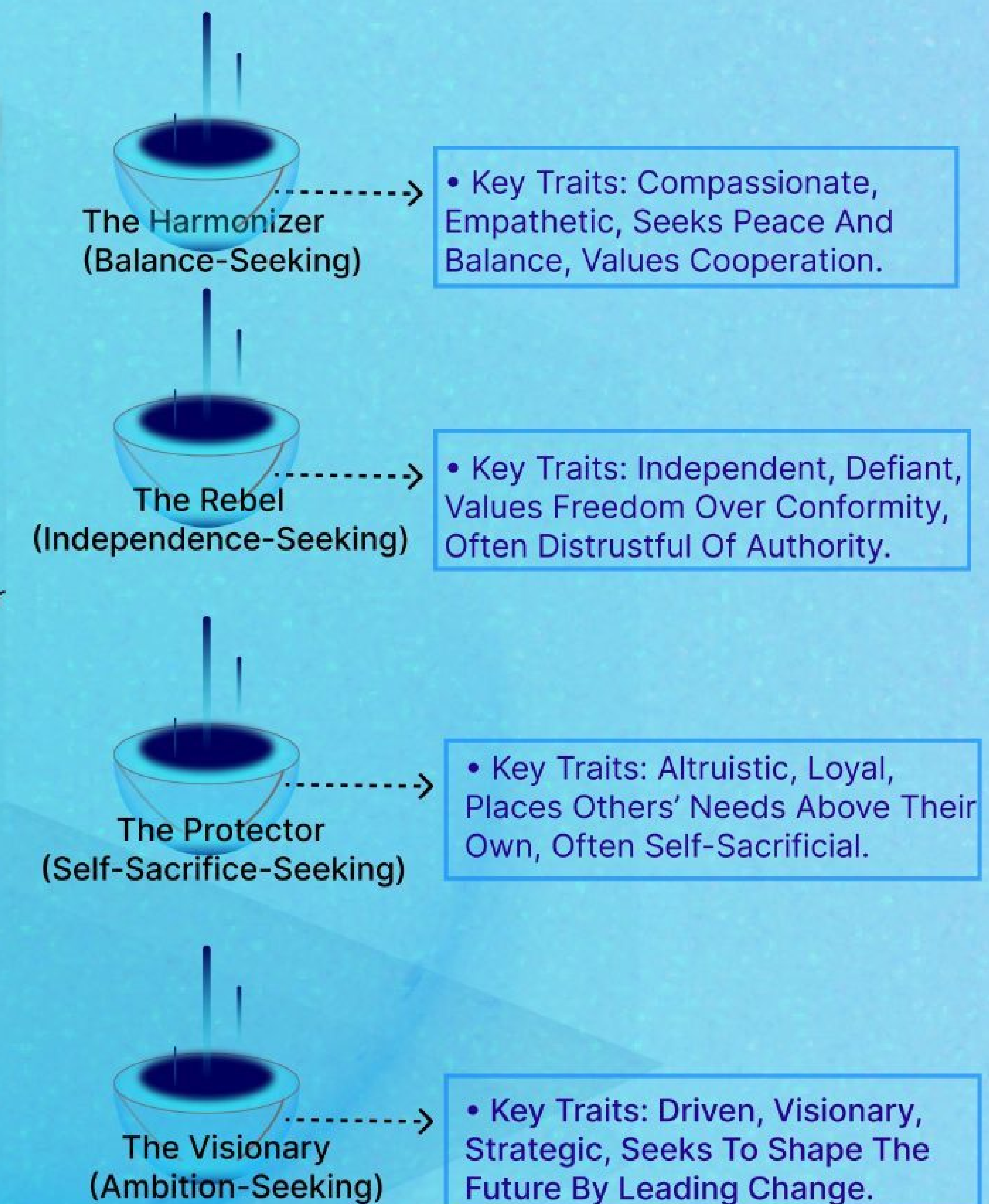
A unique and isolated environment where the ecosystem has evolved into an almost unrecognizable form, presenting the ultimate challenge for survival.

Player Action

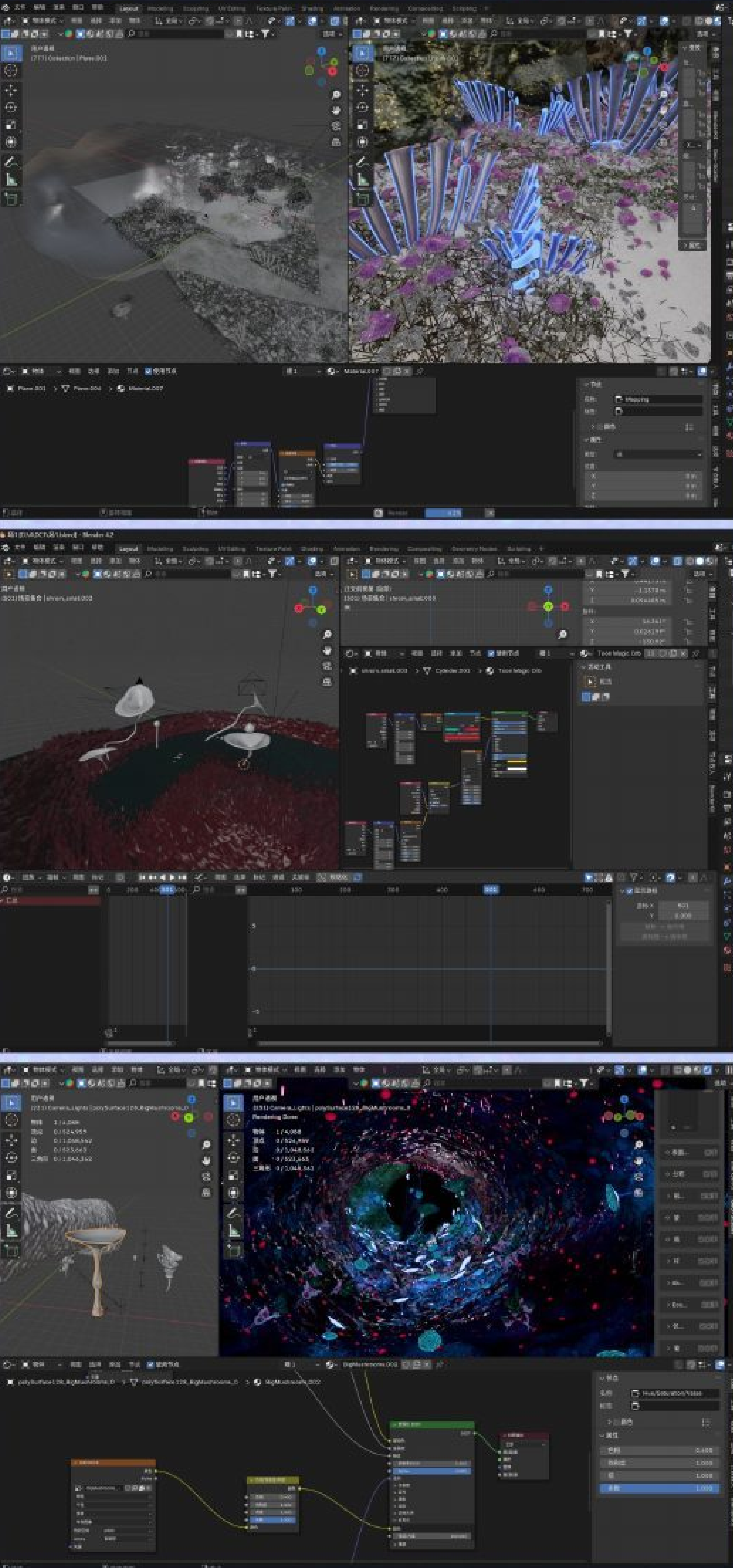
- Players face a moral choice: should they sacrifice personal identity for the collective good, or pursue personal power at the cost of the ecosystem?
- This decision reflects the player's understanding of interdependence, survival, and self-identity.



Personalized Results Based On Player Choices:



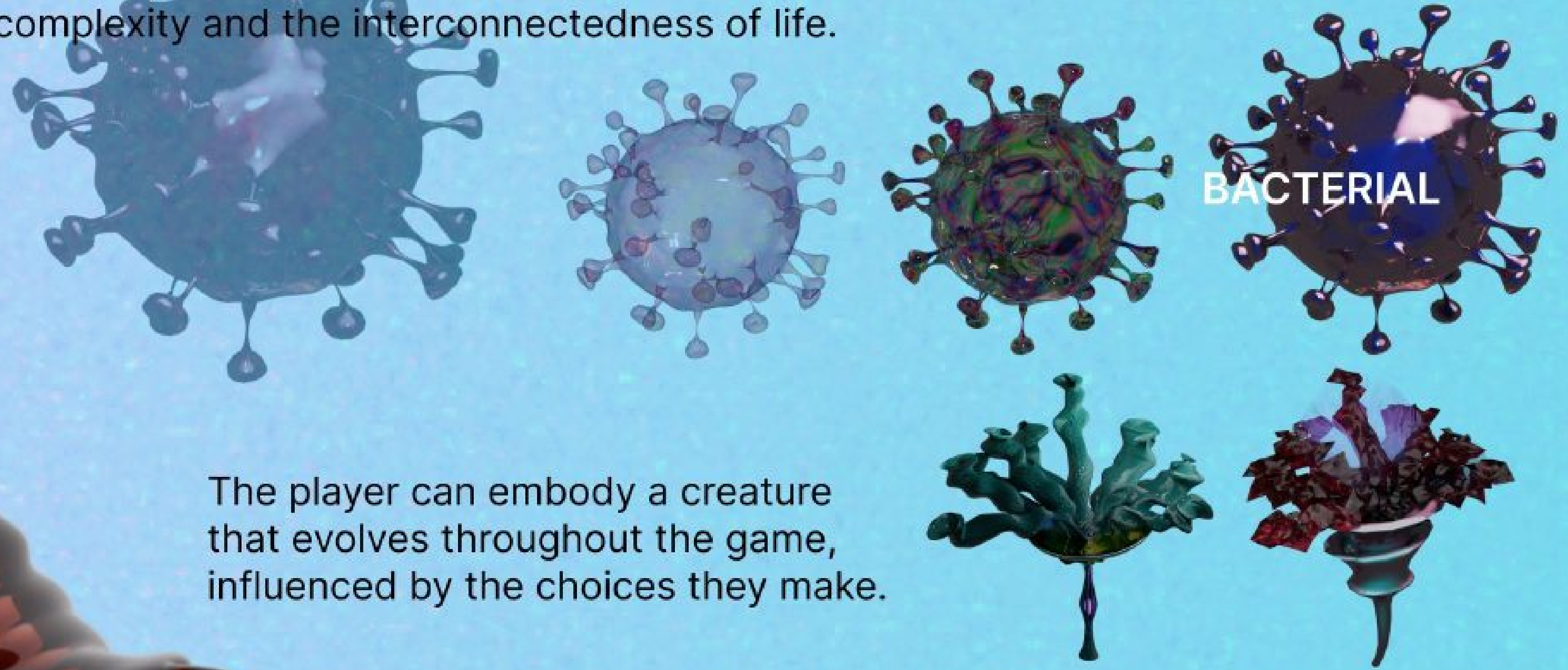
PROCESS



DESIGN ELEMENTS

Integrating Biodiversity

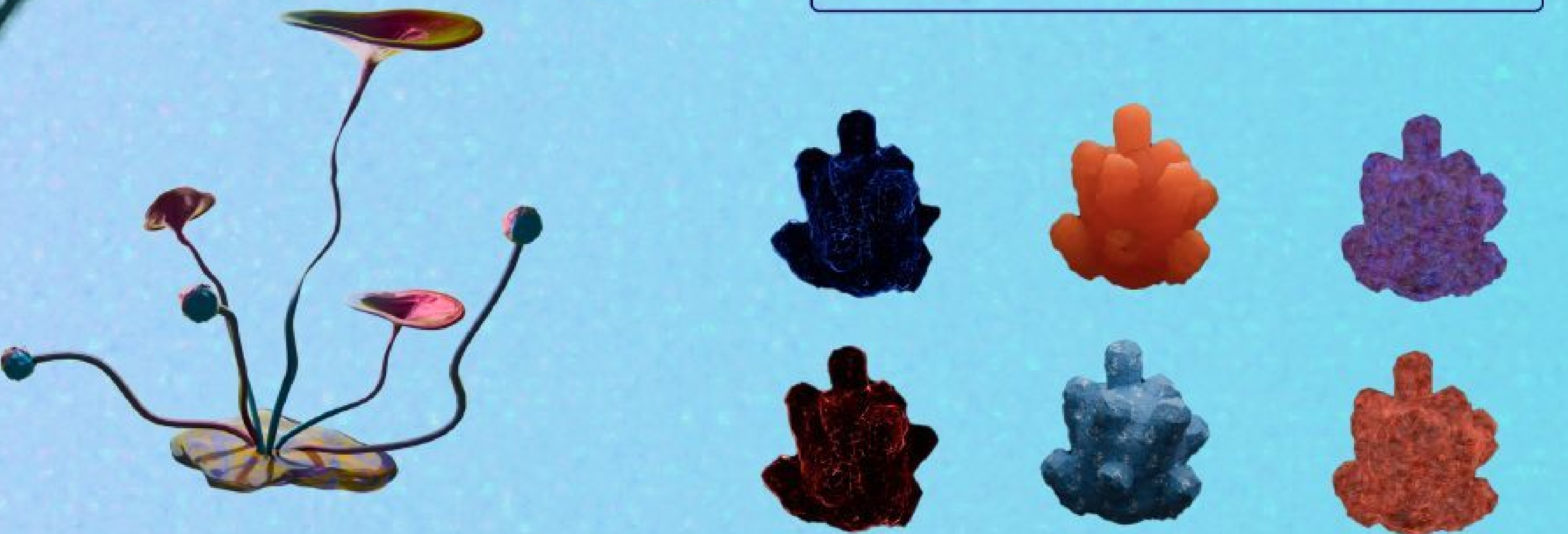
In this project, I have drawn inspiration from the vast and intricate world of biodiversity, particularly focusing on mushrooms, bacterial forms, and invertebrates. These organisms offer a rich tapestry of possibilities for creating characters, environments, and game mechanics that reflect both the complexity and the interconnectedness of life.



The player can embody a creature that evolves throughout the game, influenced by the choices they make.



Mushrooms, as part of the broader kingdom of fungi, are highly symbolic of transformation, decay, and renewal.



GAMNE OVERVIEW

The player can embody a creature that evolves throughout the game, influenced by the choices they make.



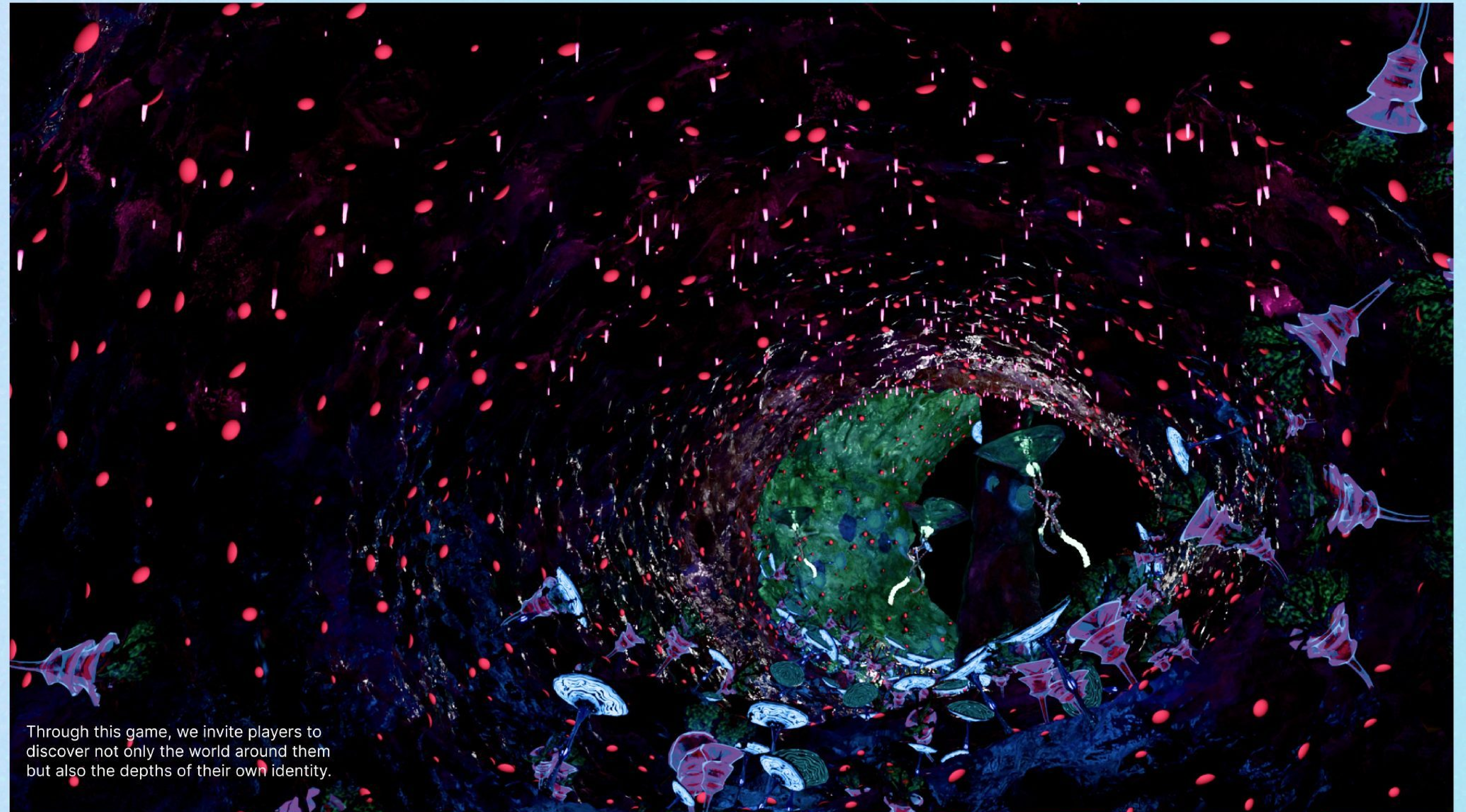
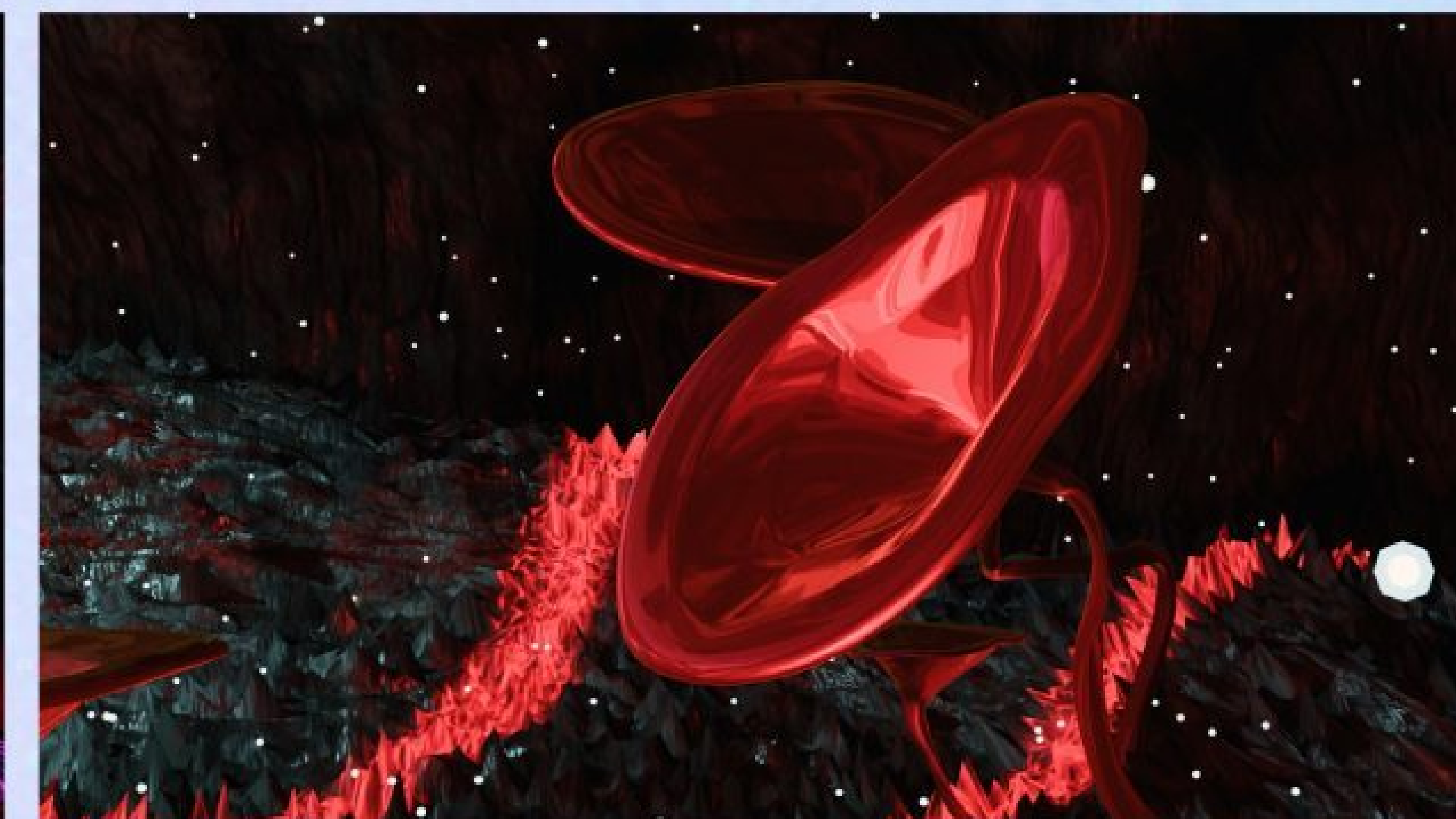
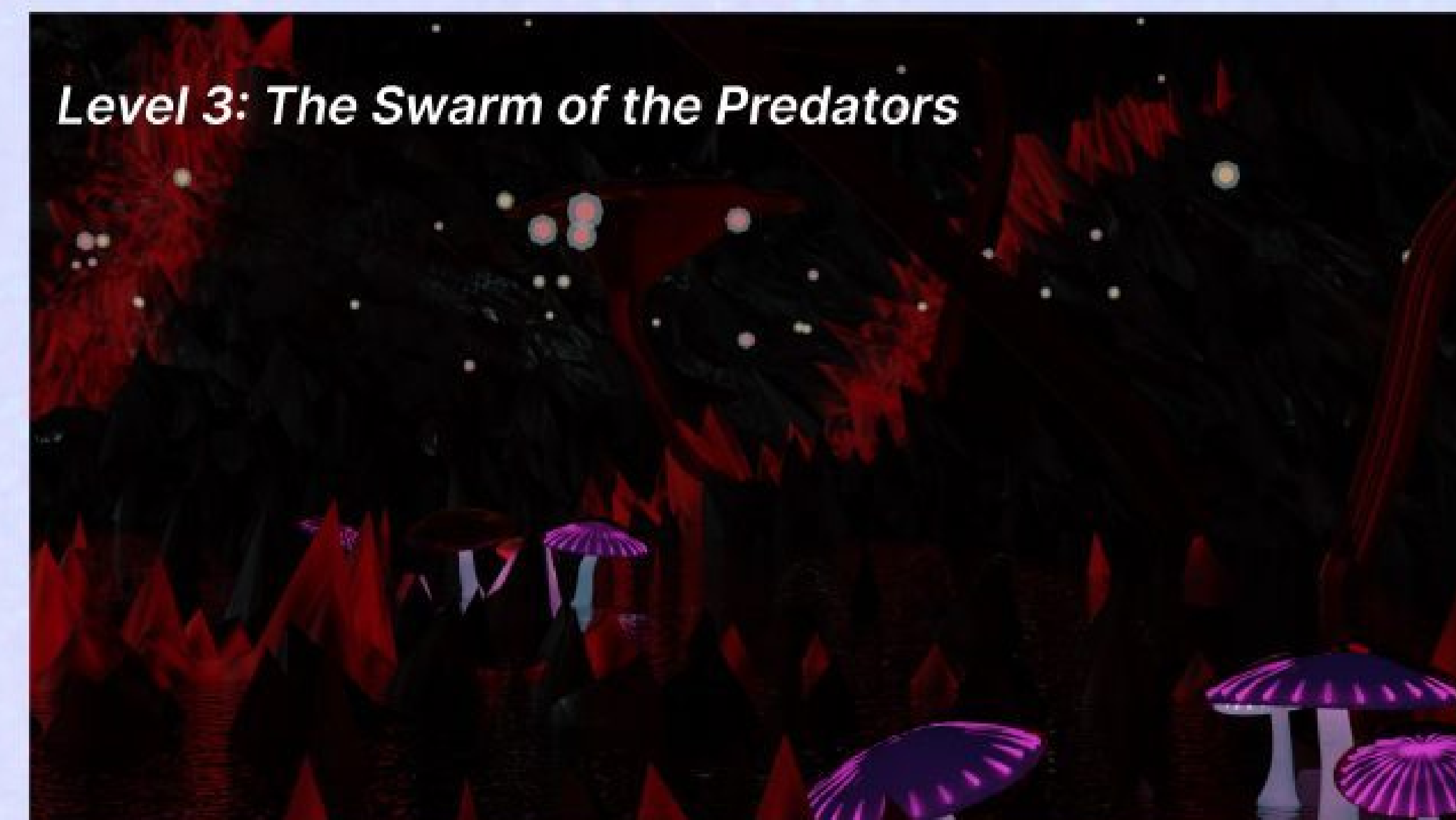
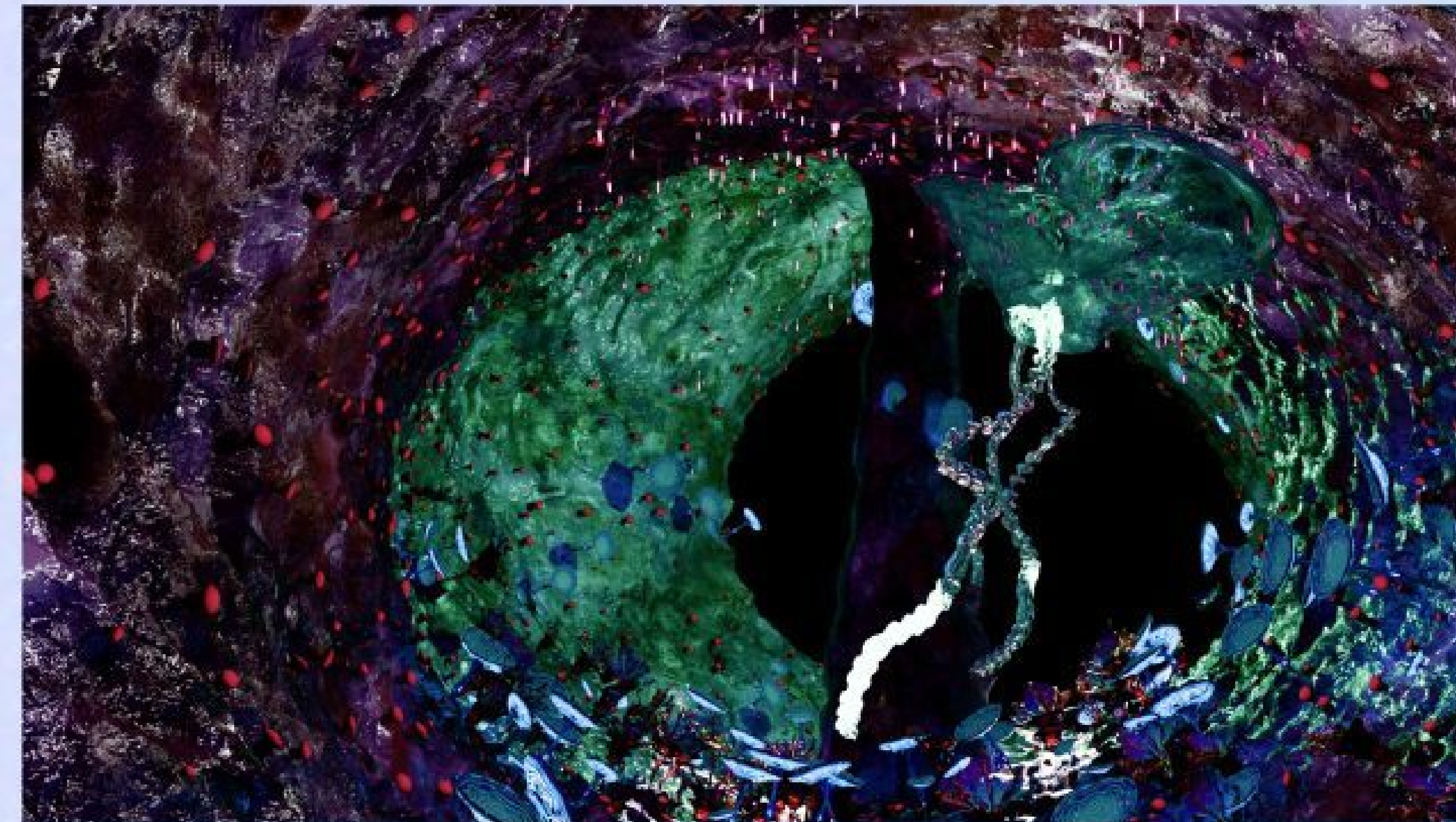
The player found a fungal pool, which is the source of radiation life energy to maintain the surrounding ecosystem. A foreign bacterial species threatens to use this resource to gain its own power, providing an alliance for players.

Two symbiotic bacterial species-Glowbinders and Sapwalkers-have coexisted for centuries, for ecosystems Provide mutual benefit. However, the scarcity of resources triggered conflicts, and their war jeopardised the environment.



Players found an ancient bacterial strain Remnibact deep in a hidden cave. This strain has magical healing ability and can cure devastating diseases that affect the ecosystem.

OUTCOME



Through this game, we invite players to discover not only the world around them but also the depths of their own identity.