

Man Zou
Professor Elio Bidinost
CART 360
23-09-2022

Étude One

I: Discover

Thing 1: Cosmos bipinnatus

Cosmos bipinnatus, better known as garden cosmos or Mexican aster in English and Gesang flower in Chinese, is a very regularly seen plant, and a plant I know as the highway plant. The family of cosmos yields many species, highly similar in their appearance. Due to this similarity, I characterized all cosmos species that look like the cosmos bipinnatus as the highway plant. In order to elaborate its meaning to me, I will need to dive in with the sentimental value the flower provided to me.

The highway flowers are named so because they surround the highways in China, more specifically in Yunnan province where the weather is stable and favorable to vegetation growth. As a child, I naturally associated those flowers with the roads and imagined the bushes to be the home of little humans like Thumbelina. I liked their beauty, their vividness. I still do, but feel at the same time an underlying shadow swallowing its allure. Back then when I was around eight, one day I was traveling with my aunt and my cousin, on the highway roads laid a broken car. We were the only car passing by and as we approached the car, we quickly realized there was an accident. The car's door was weirdly folded and next to it stands a man with an arm covered with blood. He came to our car and asked for a phone to call the police and ambulance, when he returned the phone, it was also covered with blood. From what I remember, he is not the only one in that car, a pregnant woman was also trapped inside and someone was laying unconscious on the ground. That day, the flowers were covering both sides of the road, they were beautiful and were the only beautiful imagery I remember from that traumatic experience. As years passed, the highway flowers became a symbol of homeland, freedom, and trauma.

		
Source: my own photo documentation	Source: https://youimg1.c-ctrip.com/target/100818000013m239D056_R_640_10000_Q90.jpg	Source: http://n.sinaimg.cn/jiangsu/transform/162/w550h412/20201019/3b43-kaqzmiw8496829.jpg

Physical qualities: complex forms in the leaves area due to the juxtaposition of long and narrow leaves, near human-height size makes it easily noticeable from afar.

Conductive potential: the living tissues of plants are conductive and electricity can be created and stored inside plants. However, it is not an ideal electricity conductor as an artificial introduction of electric current might damage the plant.

Structural integrity: the fragility of the plant makes it a weak construction material, but its interesting morphology and the lively colour combination could inspire a product's aesthetic development.

Perceptual and aesthetic properties: soft and smooth at touch with a light scent at smell. Overall aesthetic suggests the beauty in messiness, and the contrast between the hot colour and heaviness in the flower with the cold colour and lightness in the leaves create a balanced focus center on the flower.

Thing 2: Water

Water is an element of the Five Elements, and is a symbol given to me that builds my early understanding of the self. My grandfather believes in I Ching or Yi Jing, translated as the Book of Change, which is an ancient Chinese divination text in the Western Zhou period (1000–750 BC). The text studies nature to explain change and phenomenon cycles, and documents diverse methods to foresee or understand those changes, the action of performing those methods is commonly called the calculation of divinatory trigram in Chinese, which can be understood as fortune telling.

When I was born, my grandfather did a calculation for me and stated that I lack the water element in my life. Thus, he named me Man, which means overflowing water, to counter this lack. A name is a tool to understand the self in the early life stage, and the connotation between water and my identity was established very early. I like to observe the movement of waves and think of it as the happy expression of freedom, I like to not understand the unpredictable reflection of light in a glass of water as it makes me think of the randomness of humans, and I like to know the diverse lives living inside water as their existence are often unseen. Water has always been my source of metaphoric learning: it is special because it can be anything.

		
Source: my own photo documentation	Source: my own photo documentation	Source: https://cdn.britannica.com/65/161665-050-C4B1FA75/Waves-North-Shore-Oahu-Hawaiian-Islands.jpg

Physical qualities: fluid form-change depending on external and internal physical force applied to it, highly reactive to the surrounding, namely in its temperature conductivity, light transmission and in its form-adaptation.

Conductive potential: pure water is not a good conductor of electricity, however, conductive minerals and ions are generally found in natural water, which makes it a conductive material.

Structural integrity: water can act as a conductive element and it can transmit easily electricity, temperature and directional force applied to it. However, its unstable structure makes it hard to manipulate. It is vulnerable to external influences, making it a complex material to work with.

Perceptual and aesthetic properties: soft and fluid at touch with a no smell. Overall aesthetic suggests the unpredictability and adaptive quality that could lead to interesting abstract forms and patterns.

Thing 3: Guzheng

Guzheng is a music instrument composed with a standard of 21 strings, tied over moveable bridges. The soundboard is around 1.6 meters long and are usually made with Paulownia, a class of trees with large heart-shaped leaves, soft and fast-growing wood. The instrument is designed so the user can easily form an emotional connection with it, as every Guzheng is named by its owner or creator with an unique name, according to the mood created by the sound notes and its aesthetic forms. Each of them is decorated with paint, wood-carved motif and the soundboard is designed differently according to different region if its fabrication. Some have round edges other have a rather sharp form and different colors for finishing that accentuate the identity of a guzheng. For instance, an instrument with a softer and smoother sound would be painted darker while the one with a higher and more vibrant sound would be painted lighter brown. Those representations allow the artifact to embody a highly personal visual identity from the start, which continuously changes and grow as it gets played.

As a guzheng player, the reactive feedback it can provide to me is highly vivid. While the instrument has its own sound quality, the melody can easily be shaped by my mood. This sonic interaction connects us in a deeper level where we both reacted to the feedback of the other (my mood on the music and the sound quality of the instrument on my level of enjoyment) and resonated with each other. The process of knowing and reknowing my instrument can take years before I truly feel familiar with it, and this notion of time adds to its meaningful importance.

		
Source: my own photo documentation	Source: my own photo documentation	Source: my own photo documentation

Physical qualities: hard body with a well-balanced asymmetry makes the artifact visually attractive. Its ability to produce a large range of sound also gives a certain flexibility on the reaction it can provide when an influence is introduced.

Conductive potential: the wooden core of the instrument is non-conductive, however, the strings are often made with metal wires, thus making this part of Guzheng conductive to electricity.

Structural integrity: Guzheng has a very stable structure: its flat bottom allows a stable balance and the design of its string support is solid while allowing a certain room for manipulation.

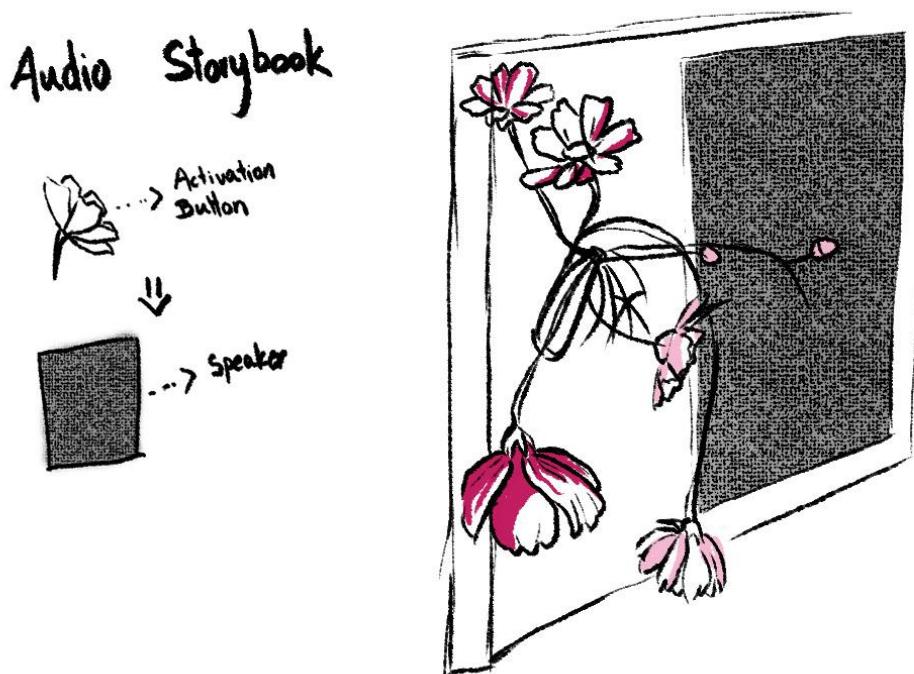
Perceptual and aesthetic properties: hard and smooth at touch with a light scent of wood at smell. Overall aesthetic suggests the union of craftsmanship with nature, as we can still see the wood's texture and smell its scent. The music it generates provides a source of imagination and drags the player deeper in the experience when combined with the touch sensation of hands on strings.

II: Design

For this part of the étude, I would like to choose the highway flowers as my artifact. As those flowers relate to me mainly through their ability to recall a memory in me, I want to focus on the influences between the plant and humans and see both as intertwined entities.

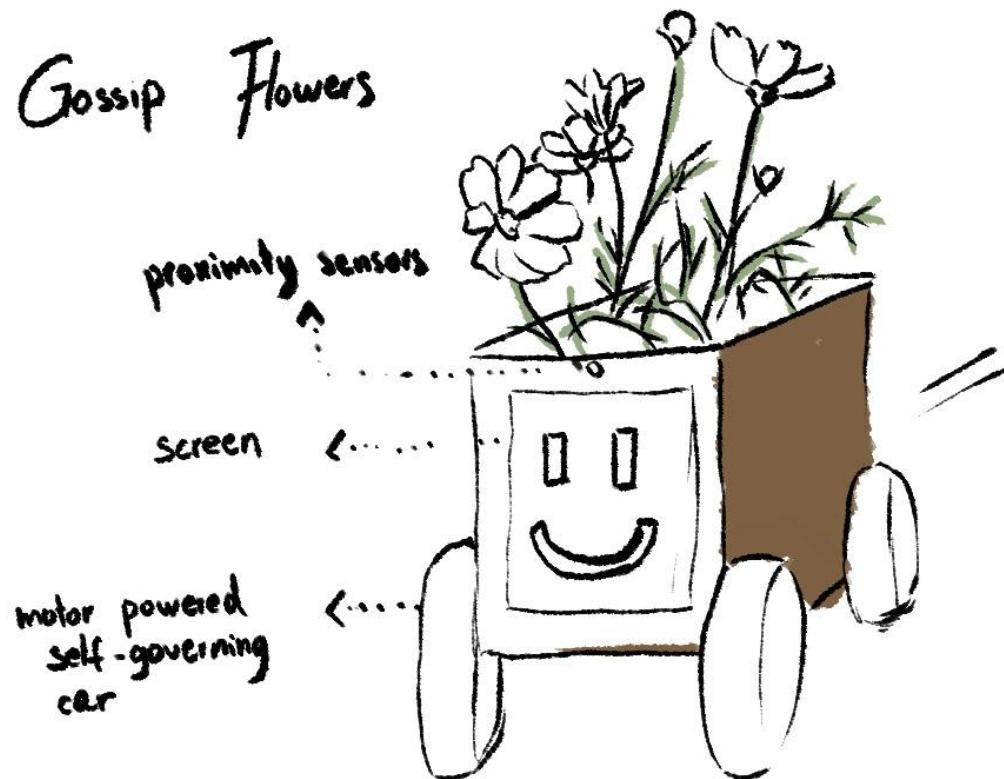
Concept 1: Audio Storybook

In this concept, a reacting (0-0) system is implemented through the user's interaction with the flowers. The flower is meant to act like a button that triggers an audio piece associated with it. A possible regulating (0-1) could be established if while the speaker tells the story, the audience reshapes their perception of that flower and empathizes with it as a deeper connection is created.



Concept 2: Gossip Flowers

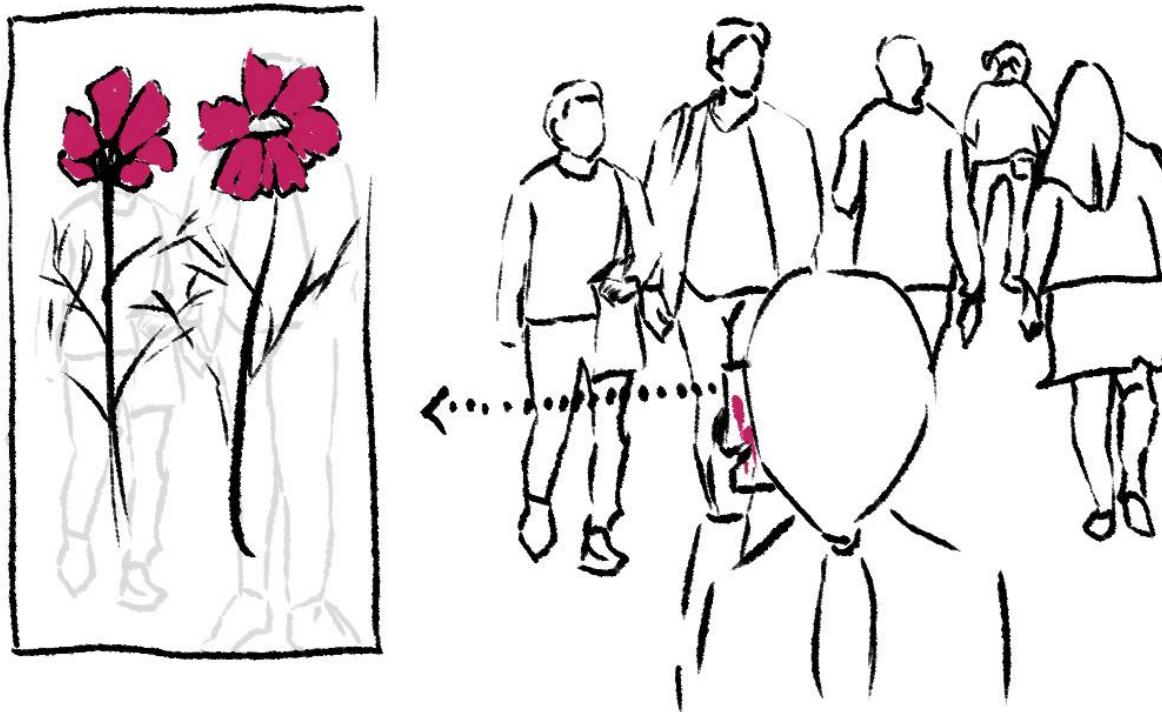
In this concept, a conversing (2-2) system is implemented. The first learning system being the audience watching and reacting to the behaviour of the car. The second learning system being the car itself which is equipped with environmental sensors. The car analyzes inputs from the environment, including the audience, and based on that information, decides where to go and what emotion to display on its front screen. The third learning system is the flower. The flowers are alive and growing in the car (which acts like a flower pot). Depending on the position of the car, the flowers are influenced by the environmental factors around them such as light, sound, temperature (and more). Depending on those influences, it flower itself will react, adapt itself, and grow.



Concept 3: Flower-Human in Augmented Reality

In this concept, a regulating (0-1) system is implemented. The learning system, which in this case is the experiencer, sees through their phone other people as walking flowers through a device's screen (ex. their phone). The portrayal of people as flowers acts as an input or disturbance to the learning system, which is the human. The idea is to imagine human behaviour under a flower's body, and in return, to think about the behavioural difference and similarities between plant and human.

Flower - Human in augmented reality



Journey map between the highway flower and myself

My interaction with the highway flowers (in this case represented as one entity), is mainly a learning system. Both of us are capable of introducing an input on the other and to learn from this input. Here below is a graphic map of that interaction.

