

- microplastic -



microplastic pollution

Karma

Plastic is integrated into life, but with our reckless abuse, it also eats us bit by bit. Discard it at will after use, and then it disintegrates a little by itself. The land on which human beings live has been riddled with plastic pollution. Maybe these injuries are invisible to people now, but one day in the future, they will have to pay attention to it.

dangers of microplastics

The Fact of Microplastic

The millions of tons of plastic swirling around the world's oceans have garnered a lot of media attention recently. But plastic pollution arguably poses a bigger threat to the plants and animals – including humans – who are based on land.

Bad Effects of Microplastic Pollution in All Aspects



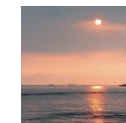
Solid particles less than 5 mm are called microplastics, and some scholars have proposed that the particle size is less than 1 mm to be called microplastics. Microplastics are insoluble and persistent, and are mainly classified into spherical particles, films, fragments and fibers according to their morphology.



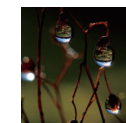
The accumulation of plastic into the soil to a certain extent will change the structure of the soil and some physical structures, such as affecting the ability to hold water. Microplastics in the soil will have a related impact on the transport of nutrients and the growth of plants. Plants currently appear to absorb nanoplastics, which will hinder growth and reduce their absorption capacity.



Microplastics also have a certain impact on soil animals. Existing scientific evidence shows that when earthworms ingest microplastics, they will grow, survive, and cause damage to their intestines.



Chlorinated plastic can release harmful chemicals into the surrounding soil, which can then seep into groundwater or other surrounding water sources, and also the ecosystem. This can cause a range of potentially harmful effects on the species that drink the water.



So much proof, I mean, what if we stretched the impact of plastic and never looked at what would happen. Will there be any species that have changed their genetic structure due to plastic? Will the water quality need to be added to filter the toxicity brought about by the decomposition of plastic before drinking? What about the cultivation of contemporary agriculture? Special processing is required to have "clean soil" for planting. What will happen to animals in nature, will they be judged on a large scale for chronic terminal illness?

how about microplastic in future ?

Core idea

The proliferation of microplastic has led to a series of factors. I want to show people what might happen in the future if the current situation is maintained on this land through this project. And these are all about us life.

What microplastics might make of the future

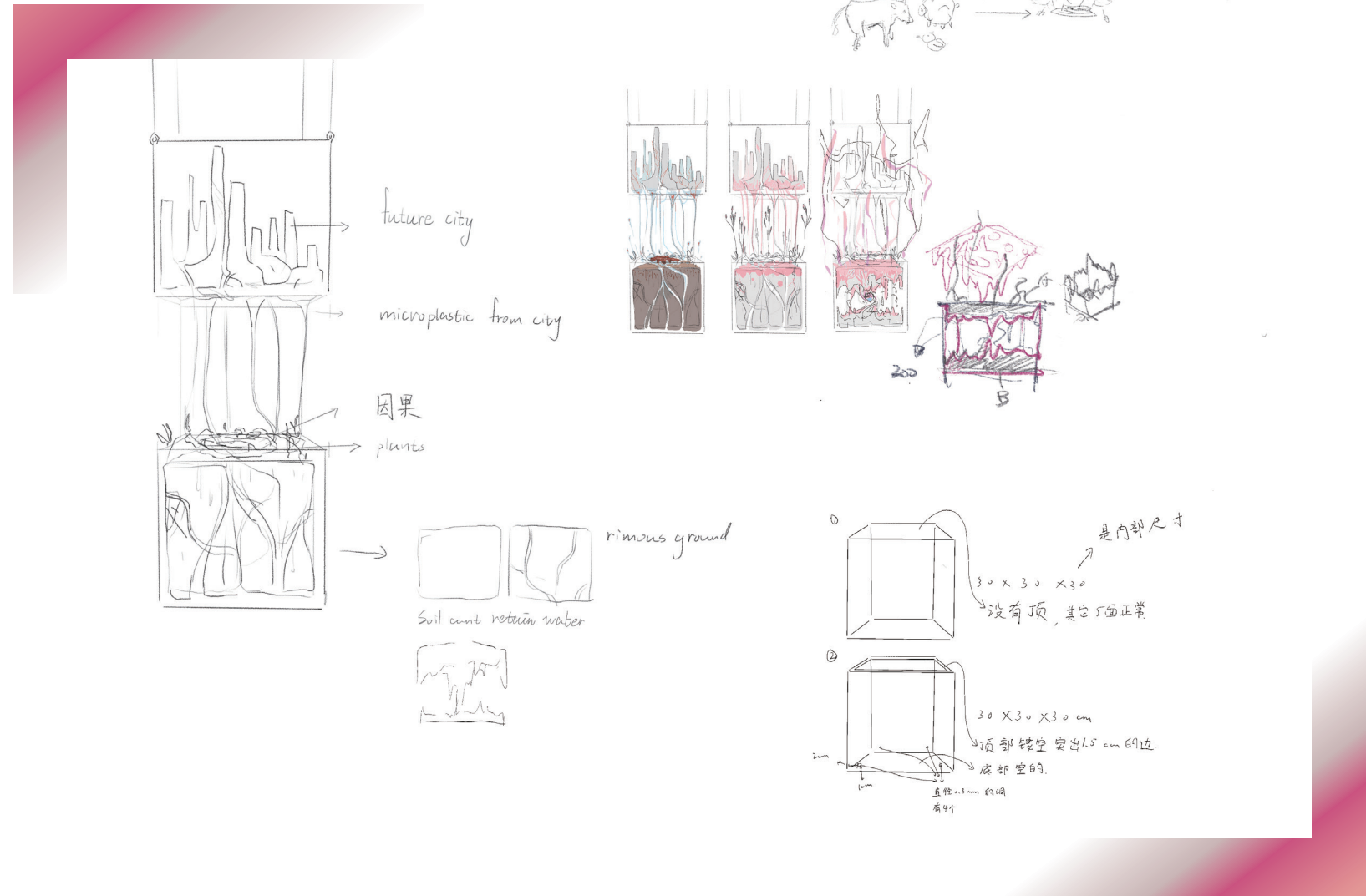
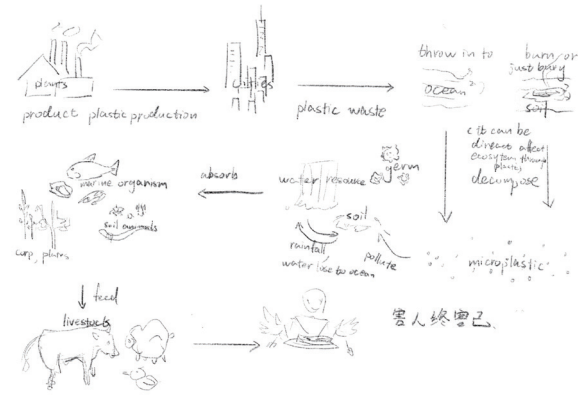
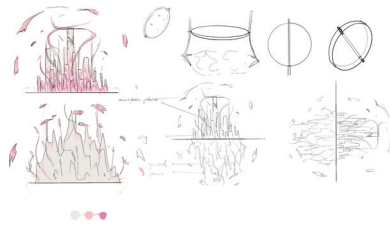
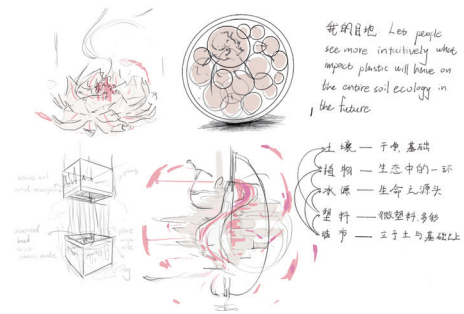
The based of everything on land is the soil. The impact of microplastics on soil caused by the decomposition of soil after being used for a large number of plastic landfills

Microplastics in these soils redecompose. Under the long-term influence, the soil polluted by microplastics will reduce the overall water-collecting capacity of the soil because of the rich microplastics, and the plastics are further decomposed into nanoplastics which are absorbed by plants. Over time, the plants mutate and contain toxins. An unhealthy land cannot support healthy creatures

And all the culprits, cities built on soil, have also begun to break down, food grows in plastics, and nanoplastics in the few freshwater resources are also affecting every bit of the city. People get used to it



“What happen” “What is the process” “How about the end”



concept and design draft

Concept

I wanted to make a way I artistically articulated what the future of microplastics would have on soil ecosystems.

Design parts

I think and design through what consequences the microplastics produced by the city bring to the soil, and what the consequences of the city built on the soil will be.

The last option selected is this scheme in the left border. This scheme is divided into three parts, which are very clear from top to middle and bottom.

The main part is that the upper part, that is, the urban part, causes plastics and further decomposes into microplastics that are absorbed by the soil. When microplastics are accepted by the soil, we use the benefits of the soil. The lower part, the soil part, has mutated the entire soil system because of the perennial acceptance of microplastics. And the plants that grow through this soil naturally mutate slightly, and the shape of their hands looks upwards as if they are shouting injustice.

production process

Process of Making Real-world Model

The upper and lower bodies are carved with a single cube of plastic and later colored with acrylic. But it's ridiculous that my theme this time is about microplastic pollution, but the main material I use is plastic.

In the end, the output of this installation referenced some elements of some of the design drafts that I discarded, and the overall effect was quite satisfactory.

Process of Making Electronic Model

This is the first time I have used 3D software to make a model, so many places will be more green, why do this is mainly to give my real model a comparison and reference.

Basically, while learning and doing, it is not very good that I have not yet understood how to add materials, so I have only added some simple texture materials, and some post-patterns are added by me in procreate.

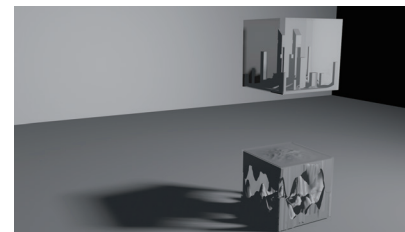
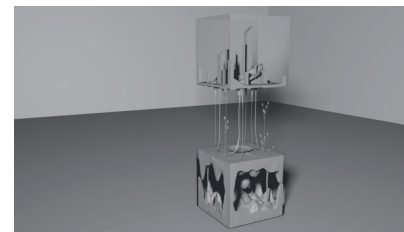
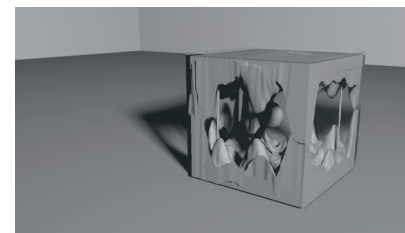
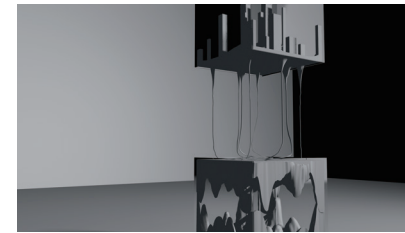


Real-world model

Process Documentation



Electronic models



Theme Colors

There are always all kinds of plastics in life, and they are colorful. The darker the color here, the more serious the pollution, as to why these colors were chosen because this theme is my imagination of the future, so I chose a more dreamy color to highlight the feeling of fantasy



Use of Materials

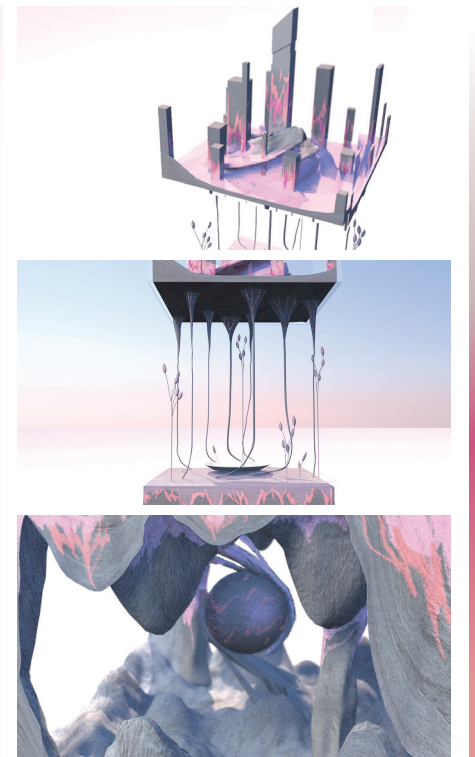
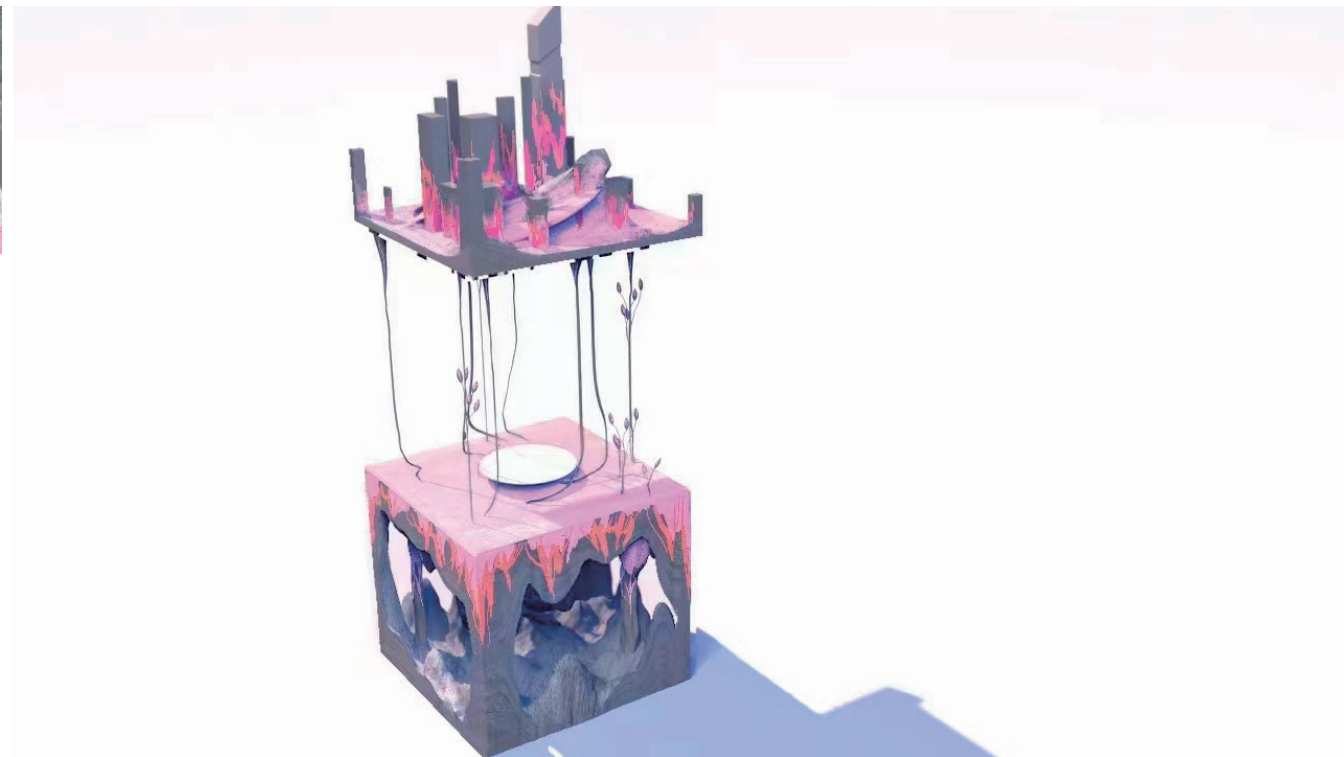
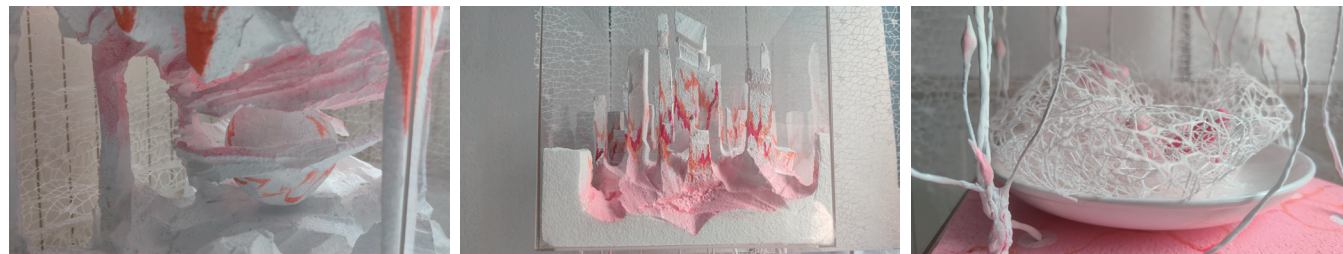
Plastic blocks, electric melt guns, acrylic, kt plates, ultra-light clay, plates, a pair of dexterous hands, c4d



In Conculsion

This installation is my conjecture of the future. What are the consequences of microplastics for the ecology of an entire soil.

From the source to the soil, the variation of the soil gives back to the mutated plants and everything rich in microplastics. And these, in turn, are the foundations on which cities are built.



final works