

Outcome Display

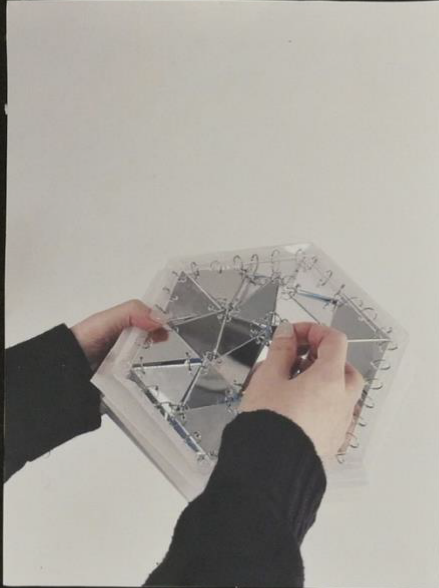
My final is a movable structure in the shape of a bee hive.

In my final I used mirror polished acrylic as the material for the surface that can deform. My model responds to the urban homogenization of future living spaces through hexagons. The hexagonal honeycomb symbolizes the collective nature and the surface treatment expresses the frailty and adaptability of human beings. At the same time the installation is mobile symbolizing the survival state of human beings in an uncertain environment in the future. The variable structure on the surface of the honeycomb represents the transition between nature and artificial.

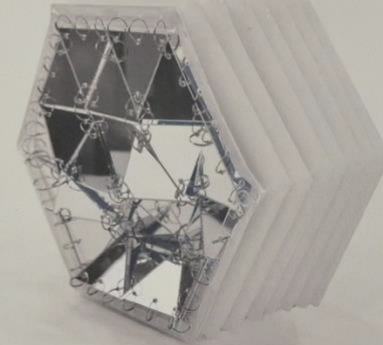
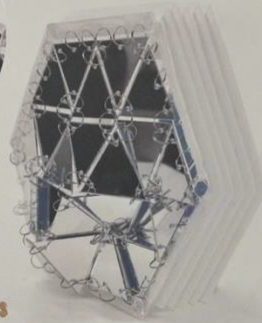
In summary, the "mobility", "variability" & "secrecy" of my installation

symbolize the uncertain rootless nomadic life style of human beings in future.

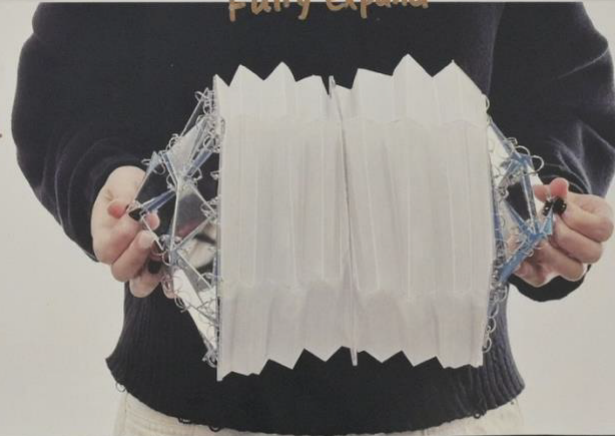
REFRACTION of Light & Shadow.



Full folding.



Fully expand



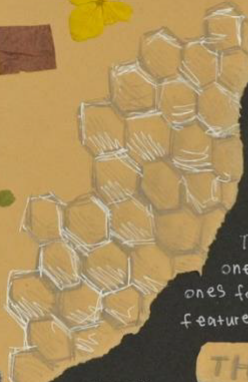
STORY & My Inspiration BOARD

I like hiking very much. Since I was a child, I will go hiking whenever I have time. When hiking, I will inevitably come into contact with cute little insects in nature. I often pick them up or squat down to observe them. Whenever I go hiking, there are always insects with me, whether it is day or night, in spring, summer, Autumn or winter. I also taken a lot photos of insects. Make specimens of past insects.

In my spare time, I focus on small creatures in the micro world and add their elements to my images. There is no pests and insects in nature, we just need to follow laws of nature.



THE HIVE



Each individual is suspended within the its orientation ground. These horizontal lines are commonly referred to as the "bee path". Each honeycomb consists of a multitude of interconnected cells, meticulously constructed by worker bees utilizing wax secreted from their own abdominal glands. The hexagonal cells vary in size, with larger ones designated for drone rearing and smaller ones for worker bees. The base of the honeycomb features a tripartite diamond-shaped structure.

THE GROWTH CYCLE

1. Queen lay egg in brood cell
2. worker feeds hatched larva.
3. Larva reaches full growth.
4. worker caps cell.
5. Larva spins cocoon and becomes pupa.
6. Adult bee leave cell



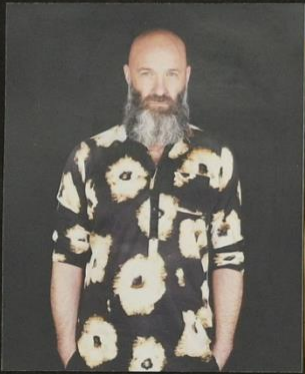
THE BEE HIERARCHY

In the bee society, there are three distinct roles; queens, workers, and drones, with clear divisions of labor. The queen bee, central to this hierarchy, is the sole reproducer, tasked with laying eggs and ensuring colony stability. Larger in size, she emits pheromones to maintain order. Worker bees are the diligent labor force, while drones mate with the queen and then perish.

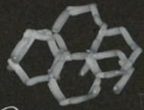


Worker bee Queen bee Drone.

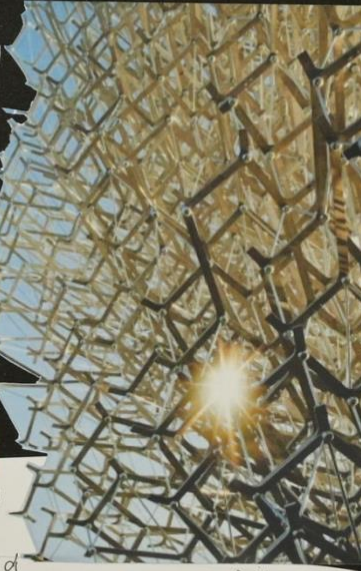
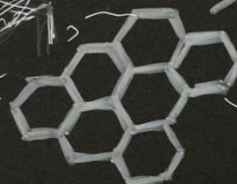
WOLFGANG BUTTRESS



Wolfgang Buttress is a British artist. He created multi-sensory works of art, drawing inspiration from our evolving relationship with the natural world. Buttress cooperates with architects, landscape designers, scientists and musicians to explore and interpret scientific discoveries and create people-oriented experiences.



Unique shape design, thousand of honeycombs made of wire hexagonal structures.



THE HIVE

At a towering 17 metres tall, The Hive is a striking installation in the heart of a wild flower meadow that recreates life inside a beehive of a real-life beehive.

The Hive, at Royal Botanic Garden Kew. It is a complex metal sculpture equipped with thousands of LED lights and microphones controlled by vibration.

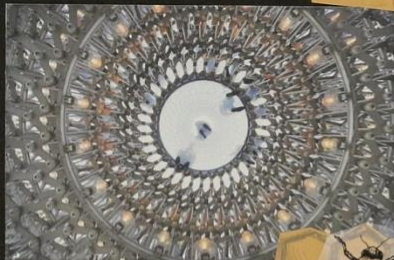
As the work's name suggests, the Hive, originally created as a building for the Milan Expo, call for the protection of bees

and the importance of the ecological environment. When visitors enter the building, the buzzing sound is like worker bees returning to the nest after hard day work, so that the sound is combined.

Structure

The device is an abstract analogue of a hive, and the dynamics formed

by rotation and distortion in its structure are reminiscent of a swarm. The overall outline of the installation is 17-metre cub standing on a column, which looks like it is suspended on the grass. Visitors can enter the hollow spherical space in the center, or walk under the sculpture and peek inside through the glass floor.



ARCHITECT



Warren Chalk, Ron Herron, Peter Cook, David Greene, Mike Webb, Dennis Crompton

Architect Telecommunications school (Archigram, 1960-1974) is an avant-garde architectural organization formed in the United Kingdom in 1960 with Peter Cook as the core. Its main members studied at the "Architectural Alliance" college in London.

In 1961, Peter Cook was only 25 years old. In London, he along with David Greene and Mike Webb, founded an independent magazine called Archigram. A word formed by combining ARCHITECTURE and TELEGRAM.



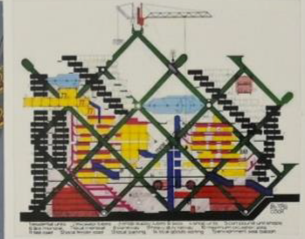
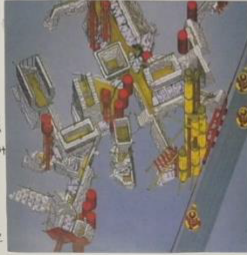
Unlike other architectural magazines, this publication contained poetry, designs, architectural concepts, as well as various art critiques and reactions.



Plug-in City Max Pressure Area.

PLUG-IN CITY

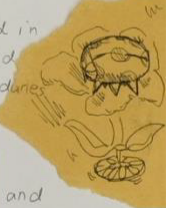
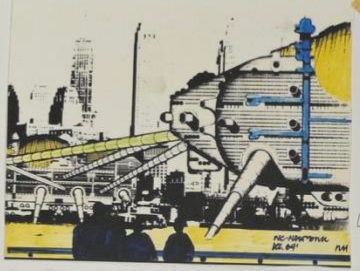
"plug-in city" was a series of studies and designs by Cook from 1962 to 1964. It used mobile cabin housing as the basic component, which could be disassembled and reassembled into mobile communities of different sizes based on population scale and plugged into the concrete "megastucture" to form a city. This concept has a nomadic style with a sense of technology and consumption, and abandons the idea of architecture as an eternal monument.



Walking



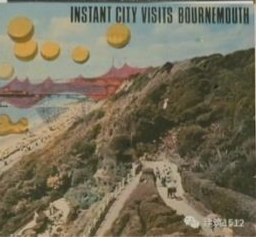
Ron Herron's "walking city" changes the concept of the city, and Archigram's emphasis on mobility, with specific mechanical structures and connections. The school hypothesized a future world in which people everywhere would abandon boundaries and boundaries.



and boundaries in favor of nomadic lifestyles.

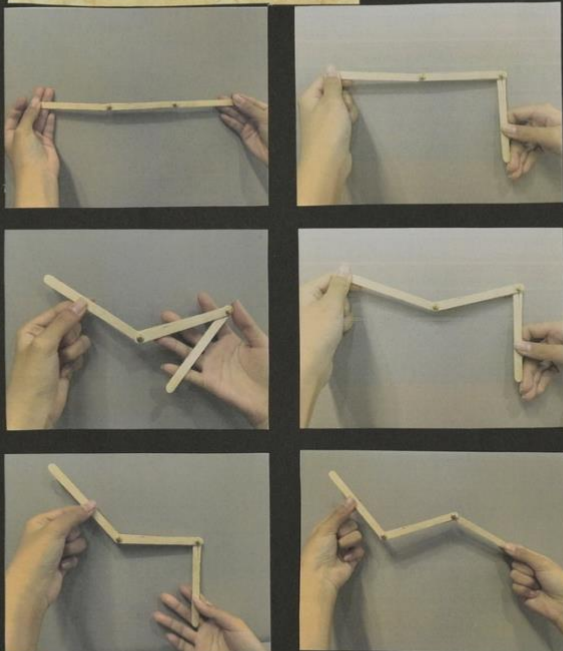
Instant City

After completing "Plug-in city" and "The walking city", Instant city was a continuation with greater practicality. It transports a portable and detachable city to underdeveloped areas. Components are loaded onto trucks and trailers, and tent float on balloons. It stays for a while and moves on to the next city.



Instant City Visit Bournemouth.

DEFORMATION EXPERIMENT



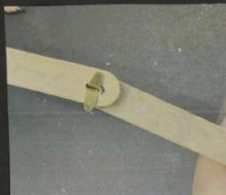
WORKING PROCESS :



① Get black pens & pencils and little sticks and little drills.



② Use small electric drill to punch holes on both side of each small stick.



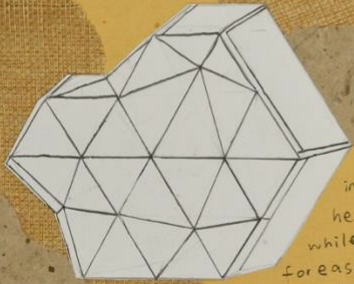
③ Put two pins through two small sticks to join them together.



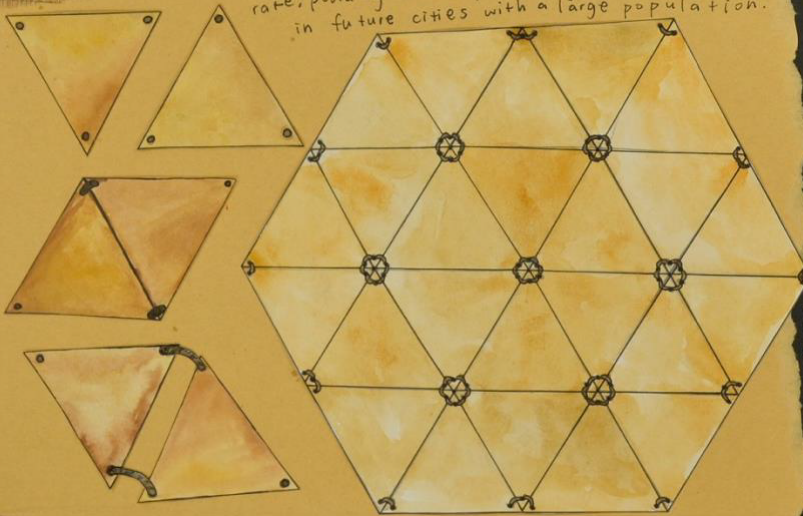
④ collect them all together for an experiment.



SPACE GENERATION



In the final output, I referred to a series of studies and designs conducted by Cook from 1962 to 1964. Including the plug-in city's ease of assembly and disassembly, the mobility of the walking city I mentioned, and the characteristics of the instant city. I employed the stable hexagonal structure of a honey comb, while also incorporating spatial flexibility for ease of the movement and assembly. This enables people to associate the building with the bees, bee hives, and insect characteristics in nature. It also enhances the space utilization rate, providing a new possibility for a living form in future cities with a large population.



When half the space

Semi expansion. and one of the rooms and bed rooms as well as bath rooms... half of the house can be used.

When folded, the thickness of the fold is the same as the size of the chair.

When folded, the space will be reduced, and it is a can orient state for transportation, but it can be the width of a chair. Can accommodate people to sit in it. The bed is fixed to a wall, and the bed also is a folding structure. So it can be transported with space.

When it all unfolds the space on both side becomes larger and all the rooms unfold. For example, guest rooms and bedrooms as well as bath rooms.

can be personalized use and living.

RECEIVING MODE

Private mode

FOLD

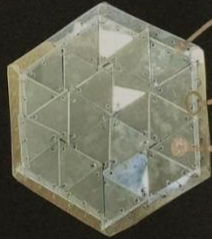
FOLD


FOLD


FULL Expansion



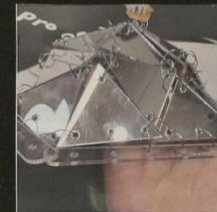
Process



Acrylic 
Connect them with small iron rings so that they can move freely.

Acrylic: Be able to remain glass. hidden in nature. 

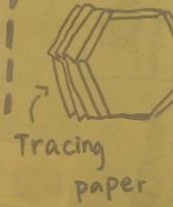
SHAPE CHANGE



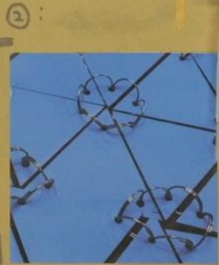
WORKING PROCESS



① Use pliers to thread the small iron ring into the acrylic triangle on the mirror surface, and then connect it with the transparent acrylic.



Tracing paper



② I used tracing paper for part where the middle fold is made. This way, it can freely fold it. And glue the Tracing paper to acrylic, by UV adhesive.

Final Look:

