Project V - Mock Scenario Conception (on Pentalogy of Cantrell)

In this project I will simulate a small scenario based on a congenital disease called pentalogy of cantrell that allows a normal person to feel the difficulties of the patient. The intention is that by experiencing the difficulties of the patient first hand, normal people will be able to care more about the patients around them and sincerely hope that people with congenital disorders will be able to spend their days as happy as normal people.

Research on Pentalogy of Cantrell

(Pentalogy of Cantrell, a rare congenital malformation first described by Cantrell in 1958, includes five features: sternal defect, partial pericardial defect, anterior diaphragmatic defect, midline defect of the supraumbilical abdominal wall with cardiac bulge, and cardiovascular malformation. The disease causes the patient to suffer from cardiopulmonary deficits resulting in poor breathing, unstable air and blood flow, and poor stamina.


To simulate this condition I first wrote down the effects I needed to achieve

- Prominent heart
- Respiratory distress
- Realism of the heart (inhalation becomes smaller and exhalation becomes larger)
- Inability to move vigorously (an otherwise simple terrain becomes complex)
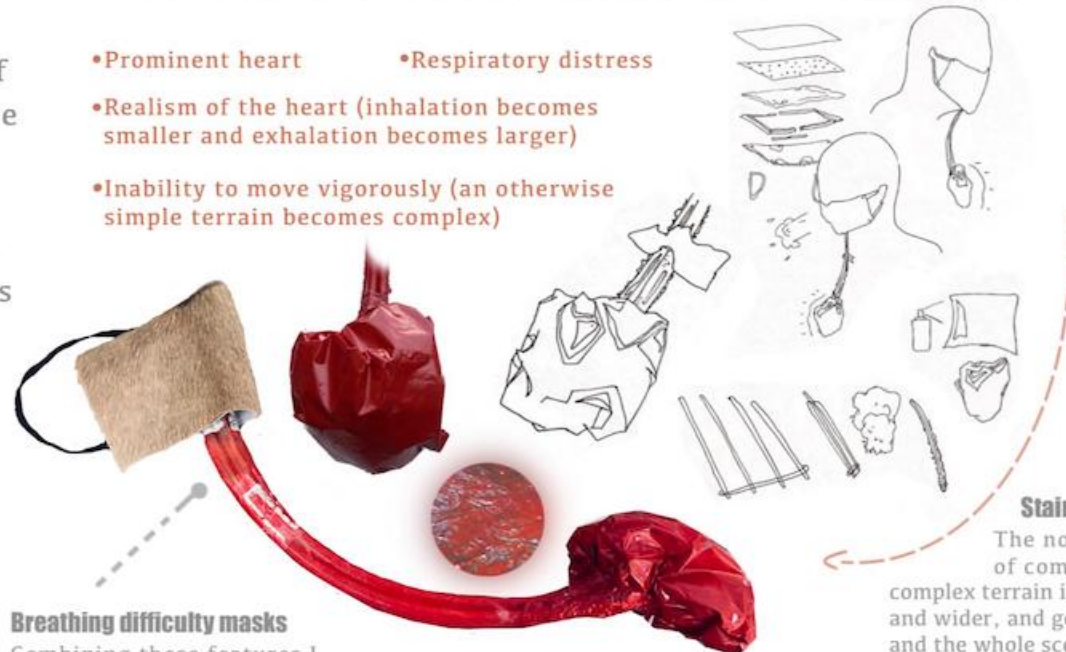
Breathing difficulty masks

Combining these features I have created a device that turns a normal person into a patient, (a leather surface with a built-in circulation device to keep the mask sealed and a cotton and water tube to simulate blood vessels connected to a 'heart' sprayed with red paint) the wearer can experience breathing difficulties and the 'heart' 'grows larger and smaller' as they breathe.
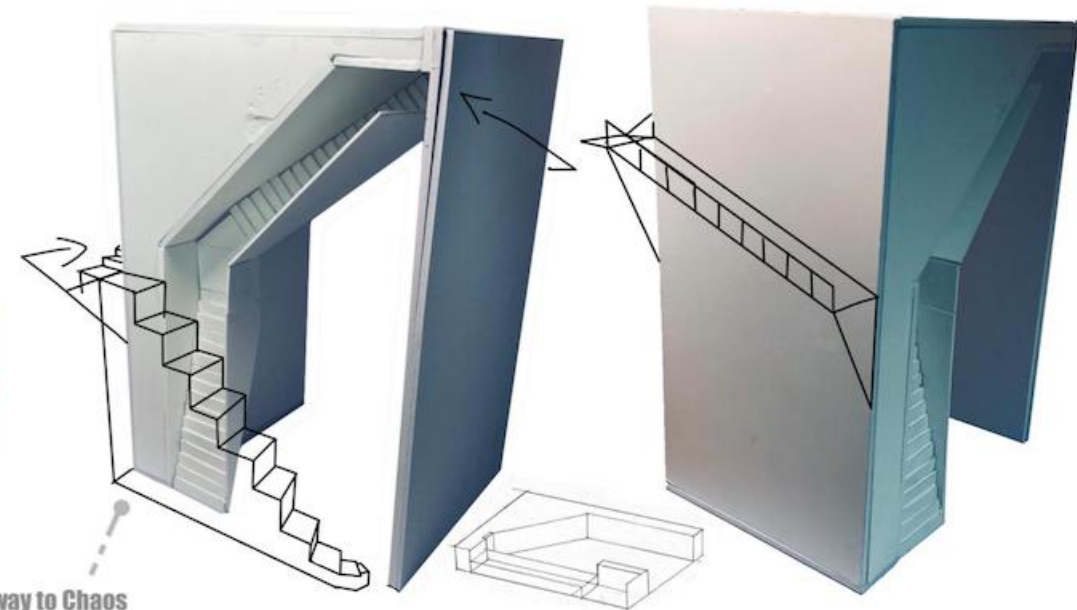
Stairway to Chaos

The normal steps that should allow people to walk become decorative in the scene, providing a sense of complexity to the scene and representing the way in which the normal environment becomes a complex terrain in the eyes of the person with the condition, giving the stairs that people walk up towards become larger and wider, and going up the stairs takes on a sense of heaviness. People will be asked to wear a special respiratory mask, and the whole scene will be a part of the Pentalogy of cantrell experience for normal people under these conditions.

Scene 2.5d model

I first tried to make a 2.5d model of the scene before making the final model. In this scene there will be a number of staircases leading up to the front door, some of which are real and some are not, and the people experiencing them will have to search many times to find the real door and keep going up to the next scene upstairs.