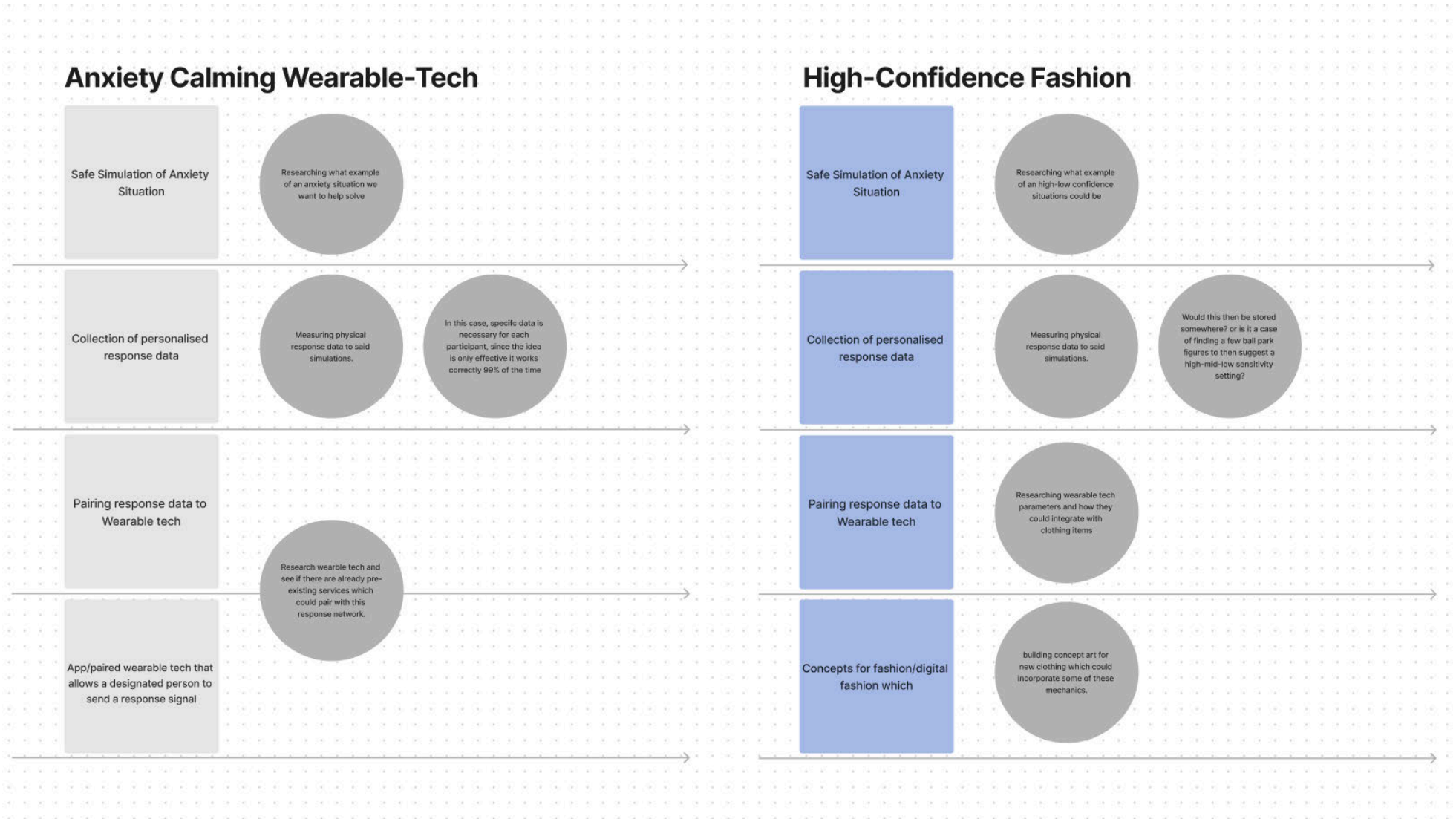




SHOW-E-MOTIONS

Tsu Chutong Li, Cameron Jarvie, Desara Husha, Oliver Wu

Critical Question: It is possible to collect and measure physical response data that informs us of our emotions.
How could we apply this in a way which makes our lives better?



Existing References to Smart-Tech



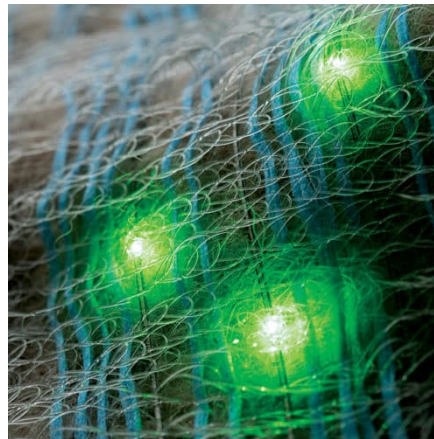
<https://www.cardiosport.com/smart-biometric-clothing-sensors#:~:text=The%20Cardiosport%20SMART%20BioVest%20was,Navy%20Blue%20and%20Electric%20Blue.>



<https://www.techtimes.com/articles/264786/20210831/smart-shirt-now-monitor-heart-rate-conduct-ecg-thanks-carbon.htm>



<https://edu.rsc.org/feature/the-science-of-smartwatches/4013008.article>



<https://www.electronicsforu.com/technology-trends/tech-focus/smart-fabrics-boost-smart-wearable-industry>

Some measurable physical responses

- Heart rate
- Blood pressure
- Step count
- Sleep quality
- Skin temperature
- Oxygen saturation (SpO2) – the percentage of haemoglobin bound to oxygen in your blood

In the healthcare domain, devices are being embedded into blankets, shirts and other essential tools. Data from the devices allows tracking of physiological status of patients efficiently. The biggest advantage of wireless, sensors-embedded garments is that these can remotely monitor the health of terminally ill patients.

Also, these reduce the number of visits to healthcare centres as the devices themselves provide updates on the health status of patients.

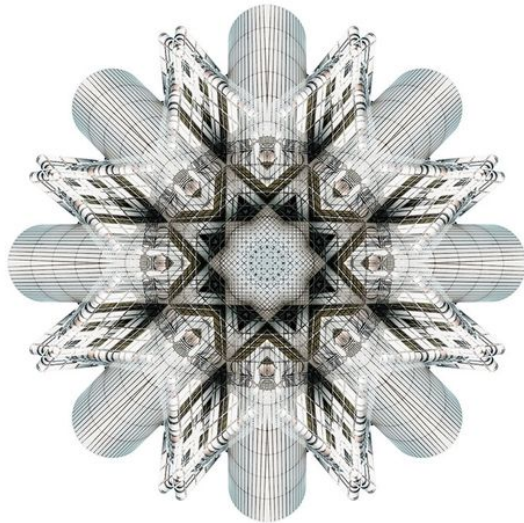
Kaleidoscopes

Originally referring to a tubular optical device which uses tilted mirrors to produce symmetry-based patterns. These patterns would be easily changeable by rotating the cells of the tube.

Nowadays, 'kaleidoscopic' refers to any form of pattern making that utilises multiple lines of symmetry around a Centrepoin.

Kaleidoscopes form a useful point of reference for our project owing to how they interlink geometry with pattern. Geometry, being mathematical, provides a very easy set of variables which could respond to changing input data to produce differing outcomes. Pattern is a means by which human cultures typical express themselves.

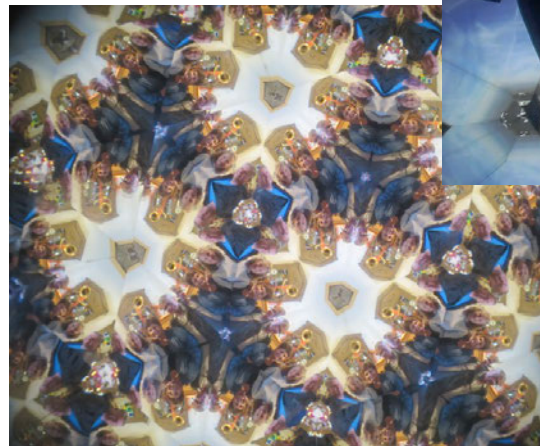
They also tie incredibly neatly with our research on the mandala, another geometry-based form of pattern with more of a history relating to emotion.



Cory Stevens

Typical Digital Kaleidoscope Variables:

- Number of reflections
- Angle of reflection
- Scale
- Zoom
- Hue
- Saturation

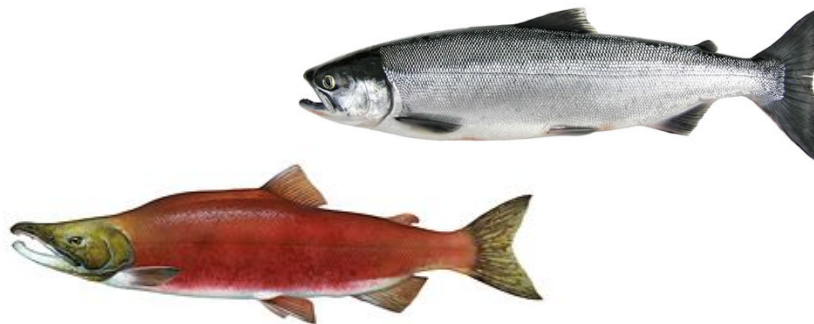


Nellie Bly

Dynamic expression through variable colour and pattern in the natural world.

Many animals exhibit dynamic colour changing traits to express information about their internal state. Some examples include:

The Sockeye Salmon, which like many other ocean salmon, loses its more camouflaged silvery tones in favour of bright red (with the face going sap green) when spawning. This occurs in both sexes, signalling to other salmon that they are ready to reproduce.



Similarly, The Chameleon, which although of course known for using colour change to camouflage, also produces wild colourful displays in a variety of hues. Male Chameleons will do this in order to attract a mate, as a display of good genetics.

On a different note, The Trinidadian Guppy uses melanin to display a dark stripe and blacker eyes to signify to other guppies that it is feeding. This is done to warn other fish when it's feeling aggressive.



Many animals exhibit dynamic physical appearance traits to express information about their internal state. Some examples include:

The Frilled Lizard, and Cobras, which have expanding hoods that expand out when threatened. Similarly, Pufferfish and Porcupinefish expand their whole bodies when threatened.

Existing Visual References to Textiles and Fashion



Ying Gao



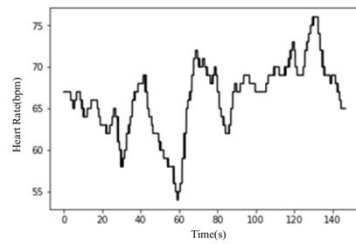
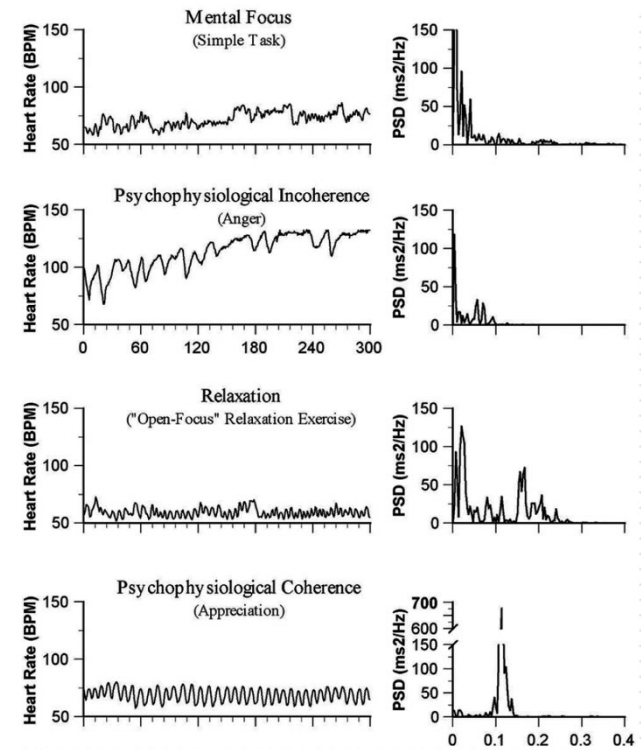
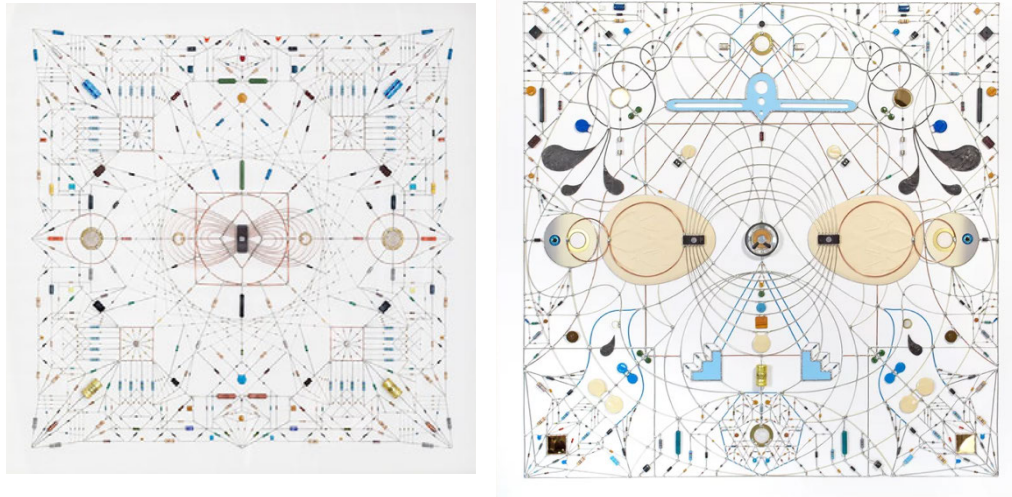
Iga Weglinska

We looked into the idea of the Super Suit, as in an increasingly isolating world, a costume which might be able to communicate inner-emotional state in an effective manner would be almost something of a superpower. Given that our project is largely speculative, as well as the nature of projection mapping meaning simple silhouettes will prove easier to work with, it feels like a sensible parallel to draw from.

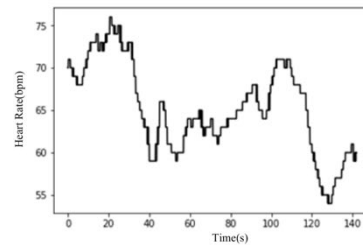


Iris Van Herpen

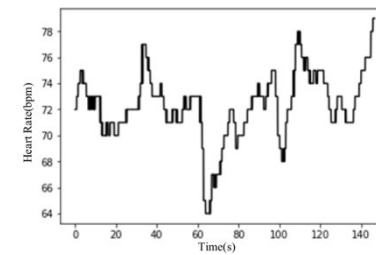
Leonardo Ulian



(a) neutral



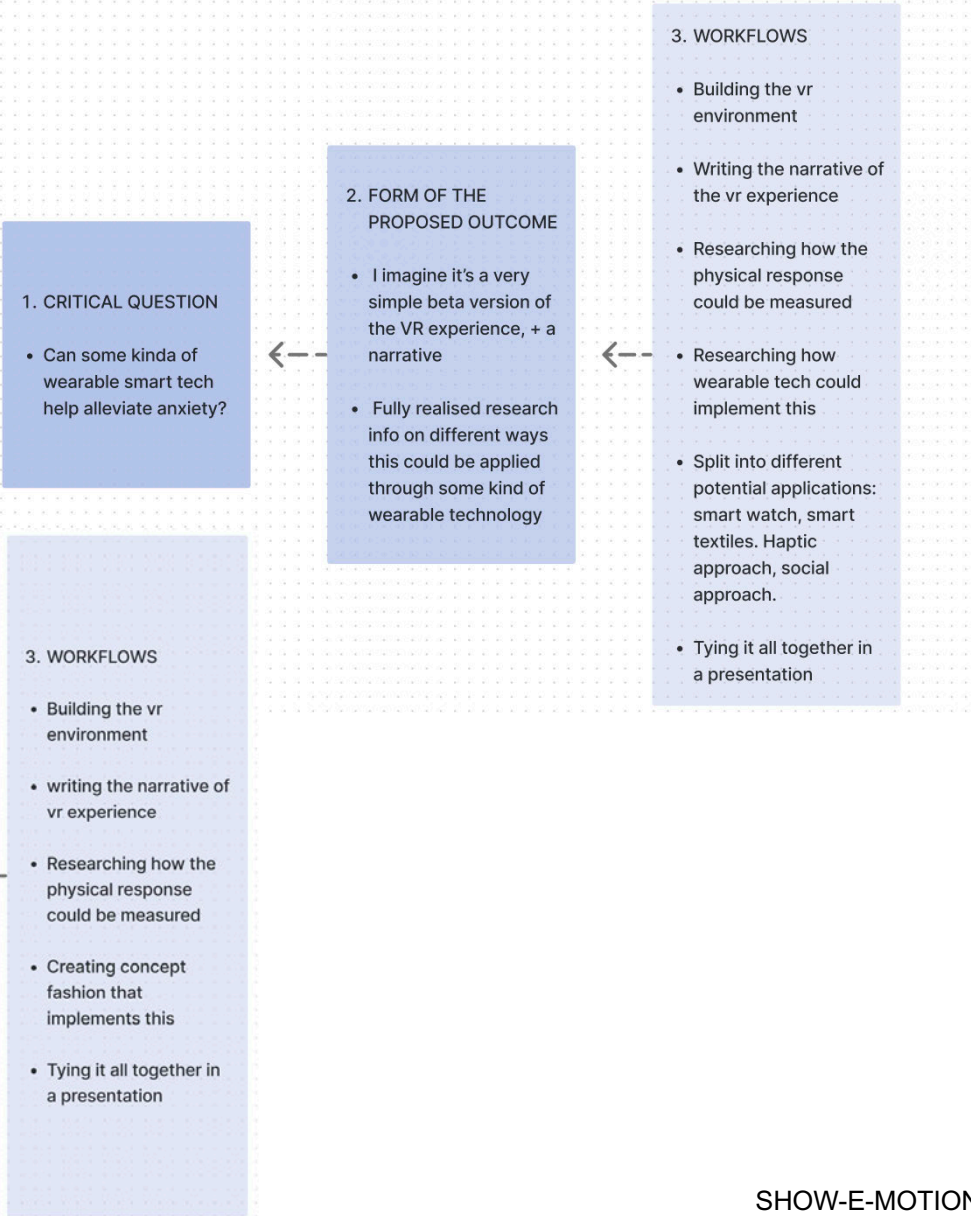
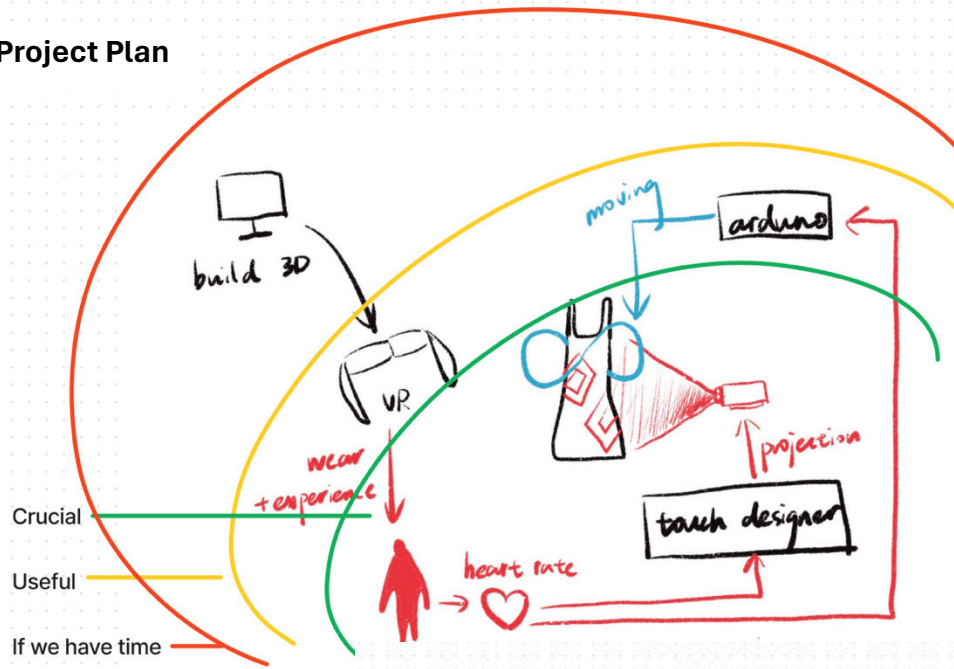
(b) happy

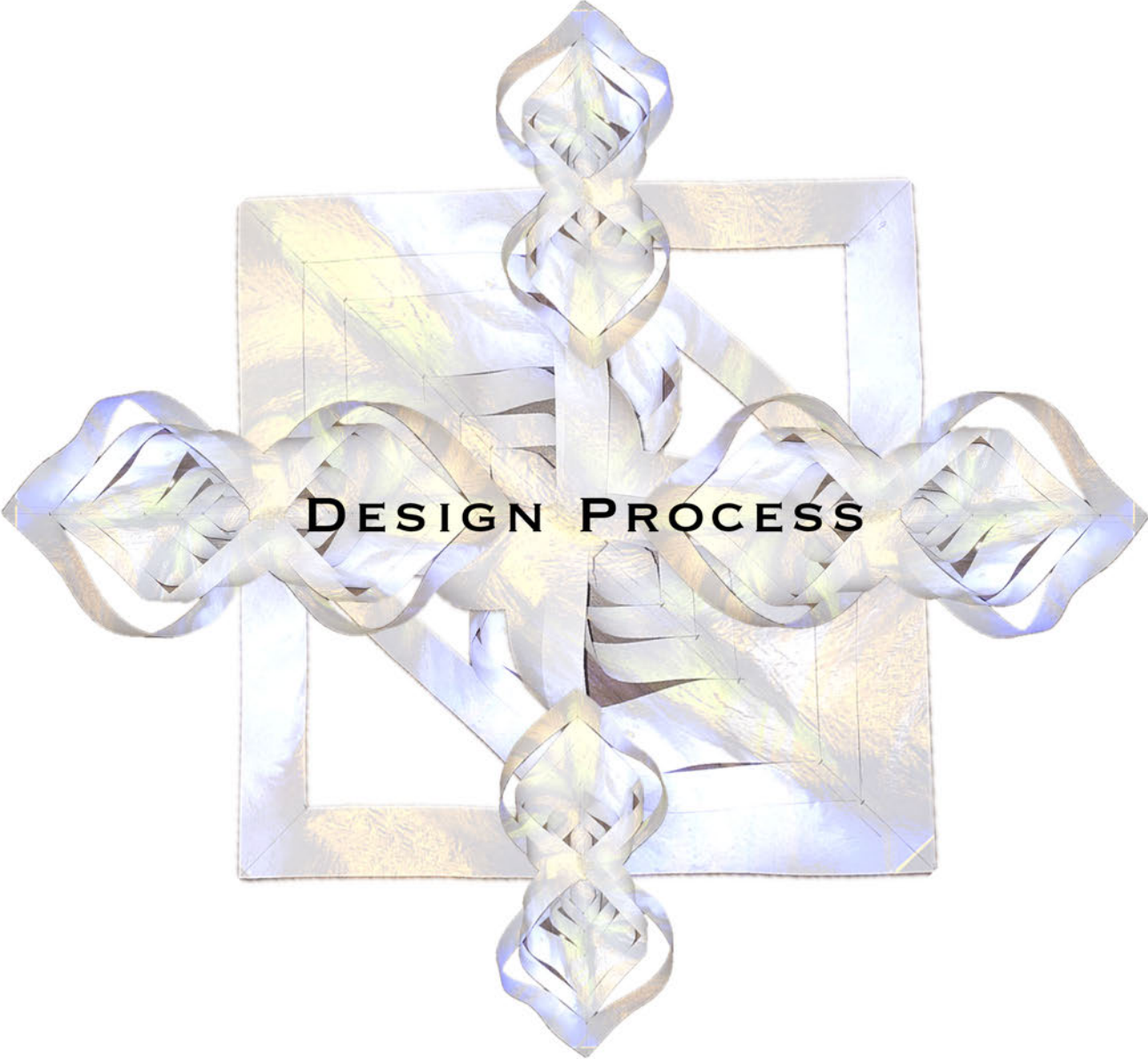


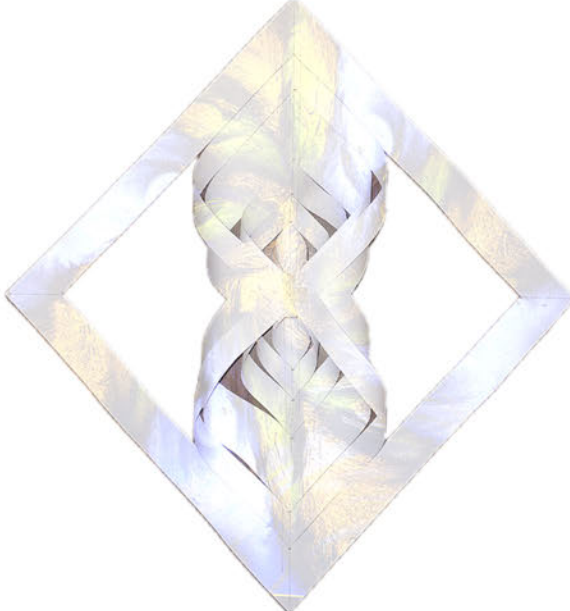
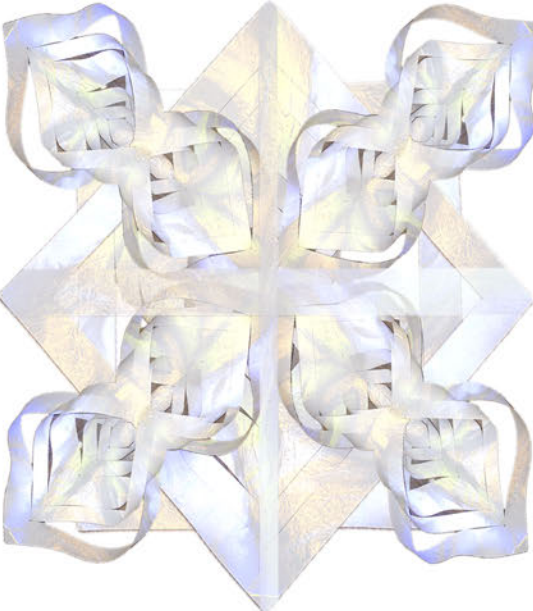
(c) sad

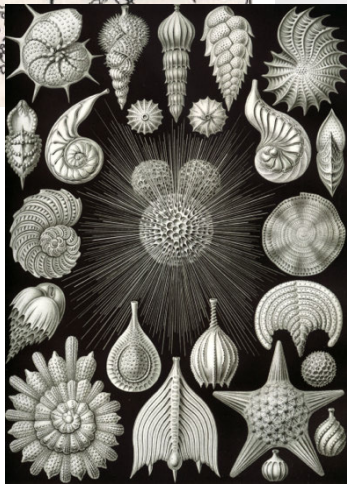
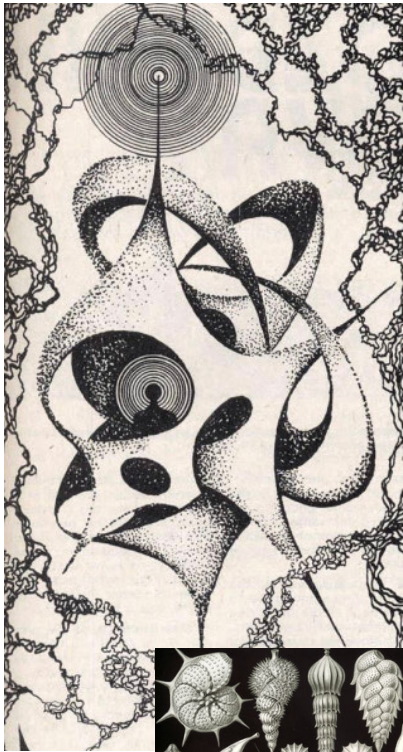
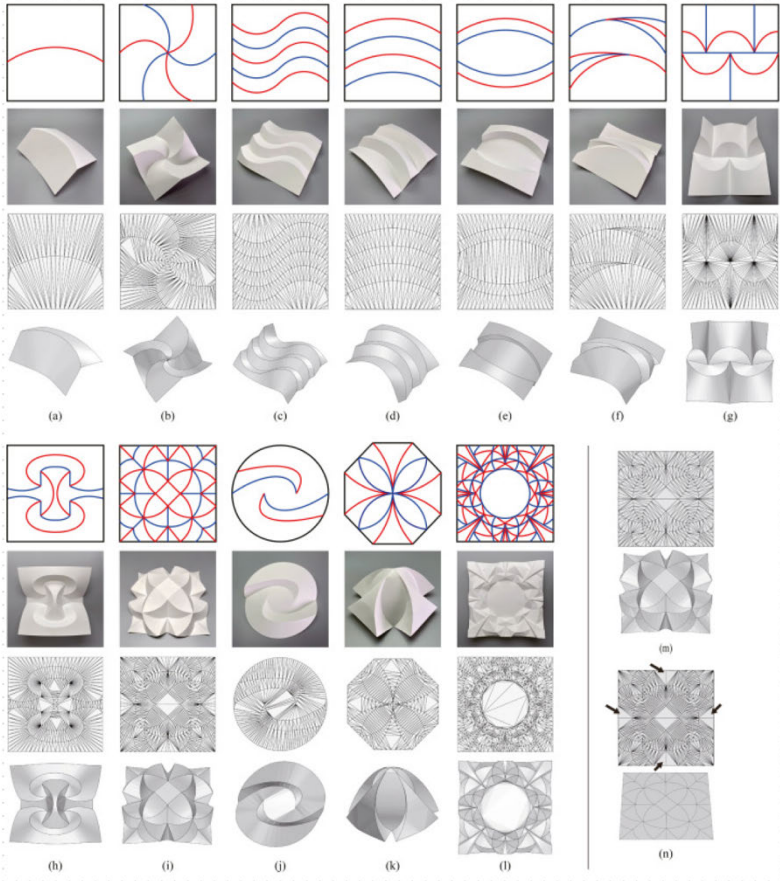
Measured heartrate alongside on emotional state

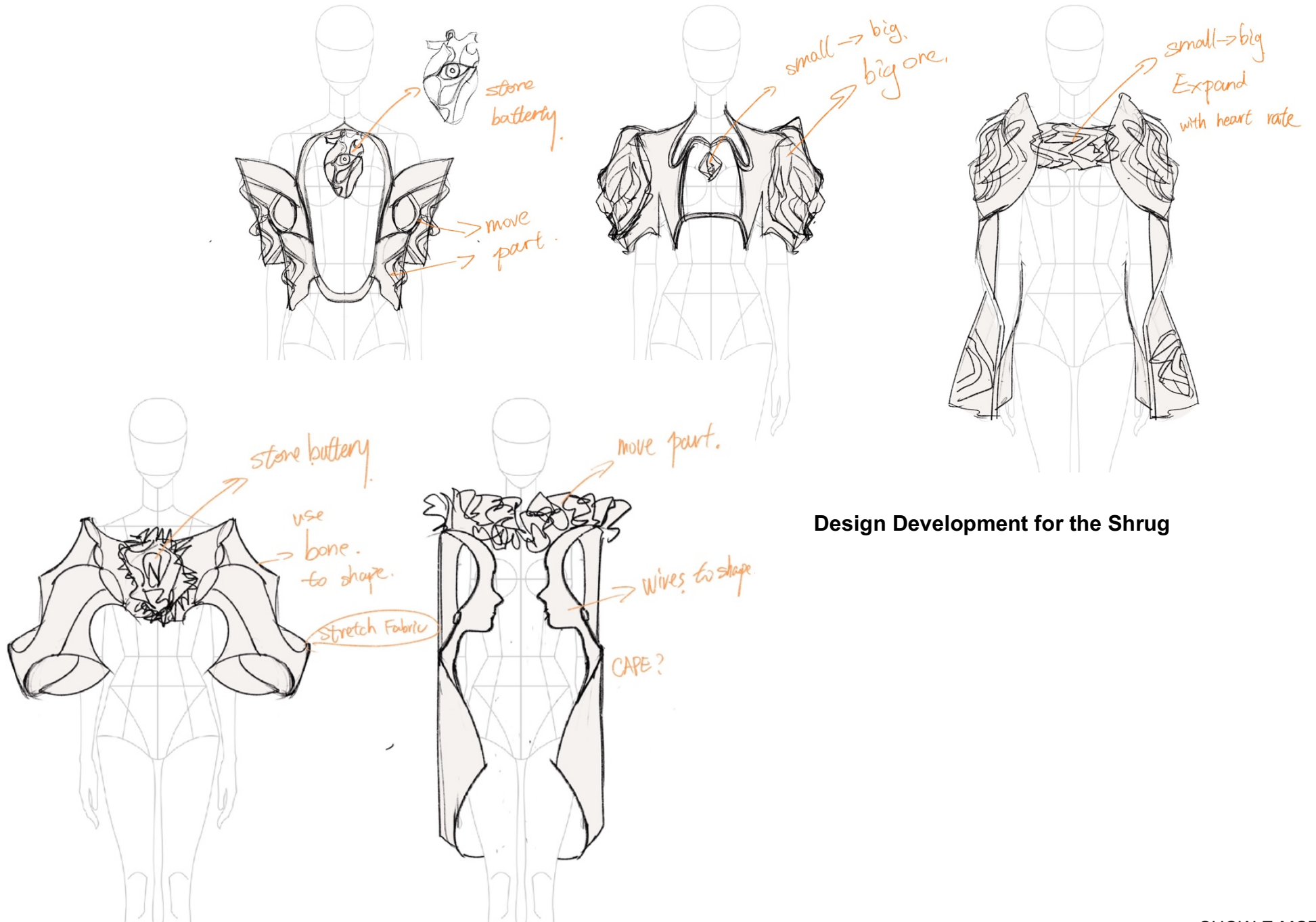
Project Plan



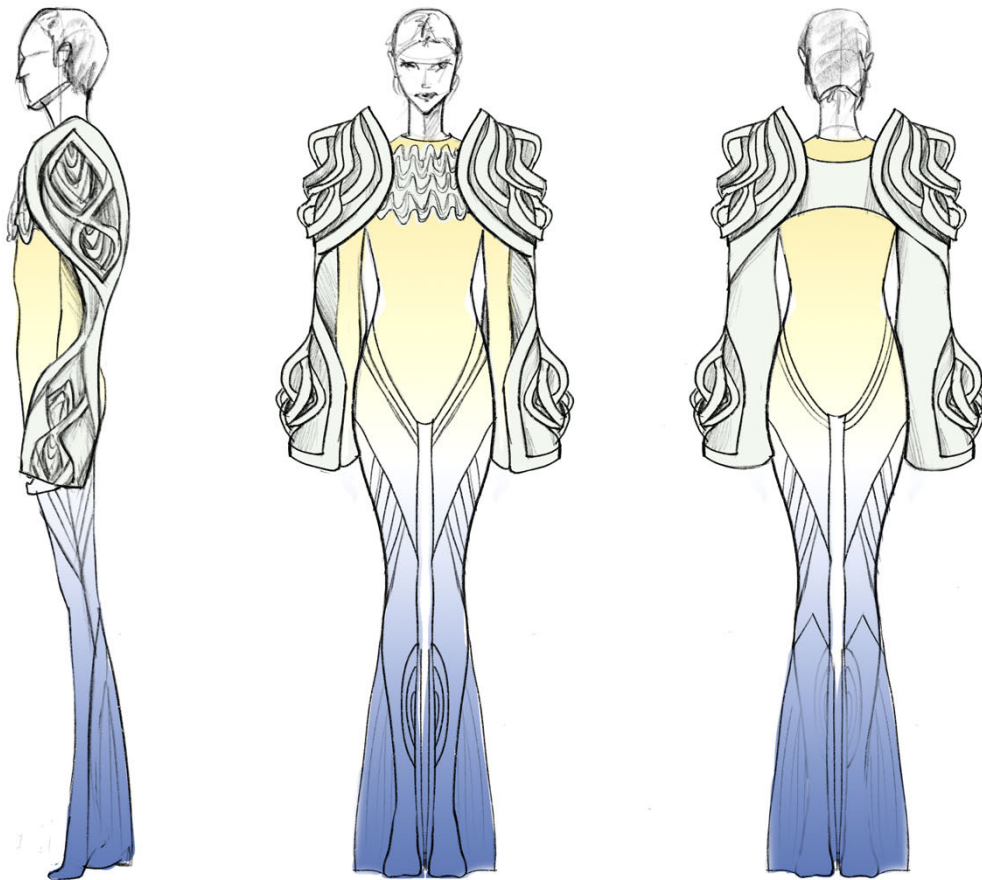




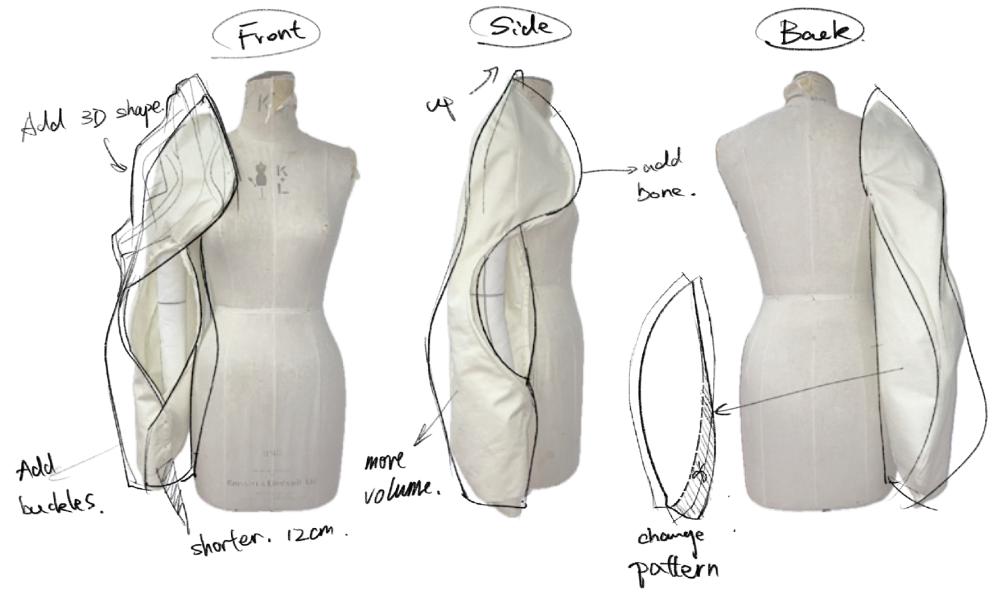




Design Development for the Shrug



Final sketch of garment



Yellow:

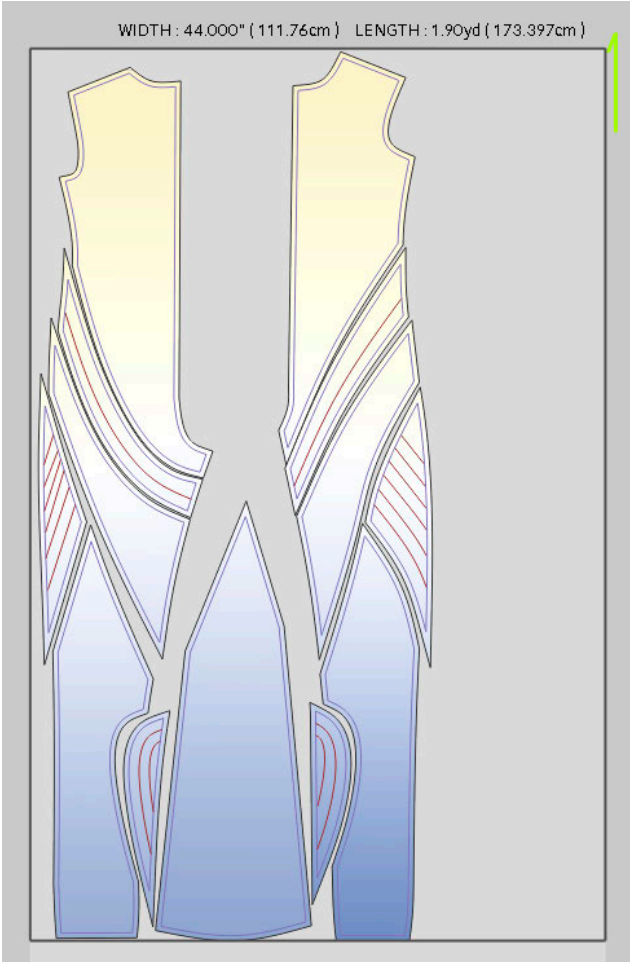
+ : Warmth, Happiness, Energy, Cheerfulness, Confidence, Health, self-esteem

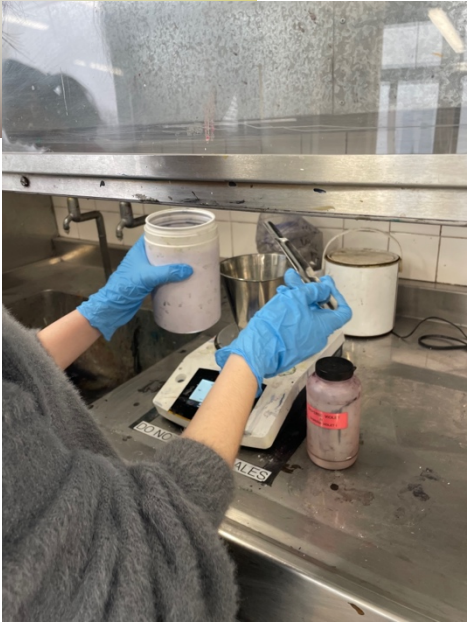
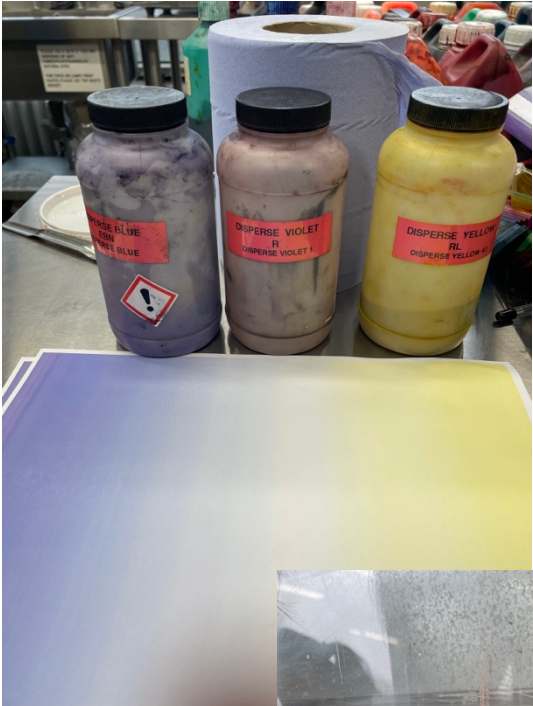
Blue:

+ : tranquillity, calm, soothing, healing, faith, heaven, trust, listening to your intuition and to others



Final bodysuit design

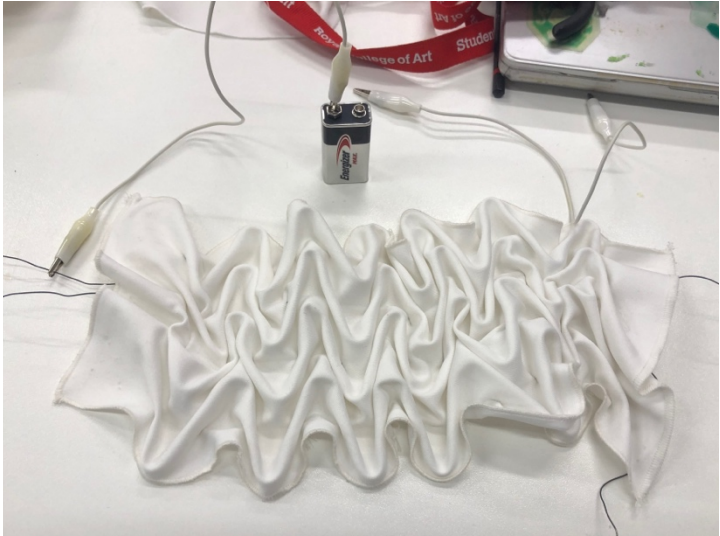




Dyeing fabric for the bodysuit process



Design process of making centre piece for shrug





Testing on Mannequin



Final Photoshoot

