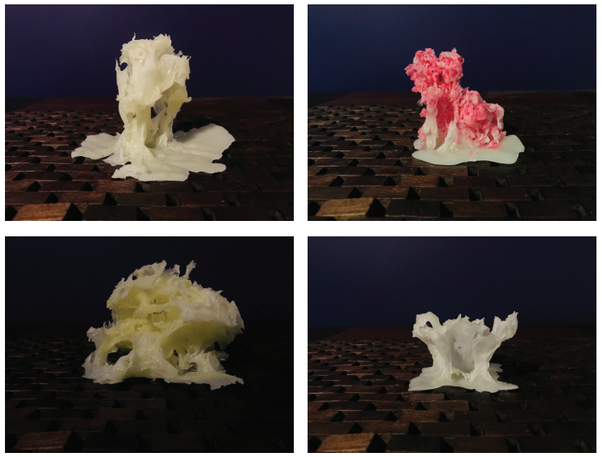
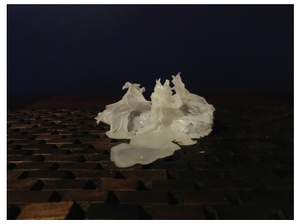
Material Fragment





Fragment Analysis 2 -

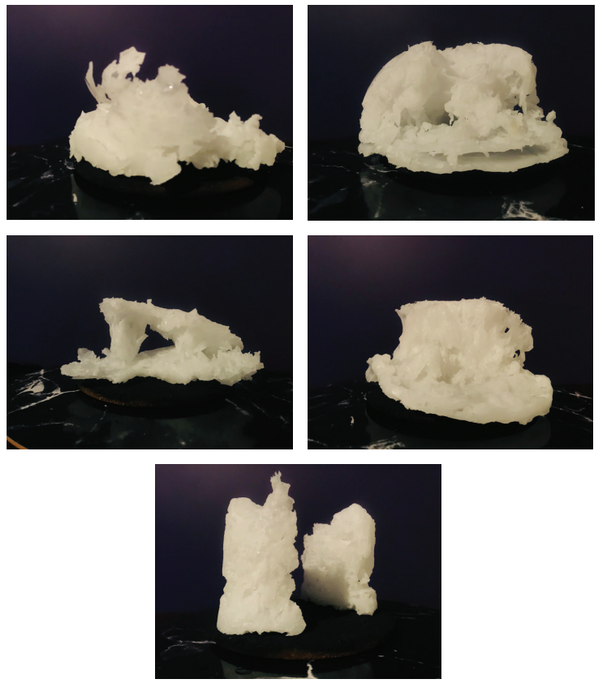
The larger created sets allow for the capability of spatial forms to appear through careful control methods. The utilisation of four times more wax further allows for the appearance of structural columns that support the structures from differing points, whilst allowing for internal space to be partitioned as a result. The manipulation of wax under experimental method controls had been realised, resulting in the necessity for fragment layering to be introduced. This resulted in the necessity to introduce gelatin at a larger scale.

Ingredients: - 500g Pillar Candle 68mm x 150mm
- 3L Mixing Bowl (Water 18ºc 2.5L Filled)
- 3 - 250ml Cups (Filled evenly)
- 700ml Stove Pot
- 400ml (Water 18ºc)
Mold: - 1.5L Mixing Bowl
Method: - High, 60cm Free-Hand Pour Triangulation, converging
Steps: - Melt 500g of wax into stove pot on low heat
- Once immediately melted at 40ºc pour immediately into 3 250ml cups to even fill
- Fill 2.5L into 3L mixing bowl with 18ºc chilled water
- Individually pour each cup at a 60cm height, free hand into the mixing bowl. each in a
triangulated, converging to centre pattern
- Shake the bowl continually, whilst slowly adding 400ml of 18ºc water to settle the wax

Fragment Analysis 1 -

The initial fragment pours involved small scale experimentation into the form capability of paraffin wax. The experimentation illustrated the controlled results of early material binding through gelatin and wax, with further conclusions of structural potential through ceramic plate and bowl dips. The results of these experiments allowed for an insight into the necessity to control form through specific techniques of method manipulation, illustrating the requirement to create a dynamic process of creation, being the constant change of ingredients, molds, methods and steps of application. The further essential element of design is thought within the importance of scale as well as the operation of wax when utilised on a larger scale. Therefore by doing so, all elements of design will need to be scaled up in order to accommodate for the new experimentation models.

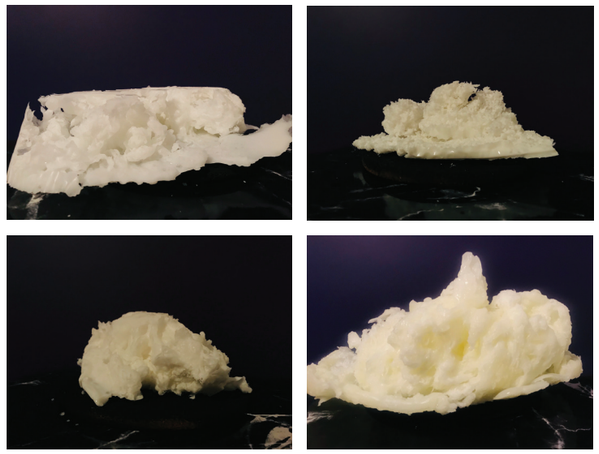
Ingredients:
- 100g Pillar Candle 68mm x 150mm
- 120mm Diameter Ceramic Cup
- 175mm Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- 700ml Stove Pot
- Safety Gloves
Mold: - 175mm Diameter, 150mm Deep Bowl
Method: - Quick drop into deep bowl
Steps: - Melt 100g of wax into stove pot on low heat
- Once immediately melted pour immediately into the 70mm Diameter Ceramic Cup to fill
- Wearing the safety gloves, quickly drop the 70mm Diameter Ceramic Cup into the 175mm
Diameter, 150mm Deep Bowl (Water 18ºc Filled)
- Wait 4 - 5 minutes for the wax to cool and settle
- Remove the mold

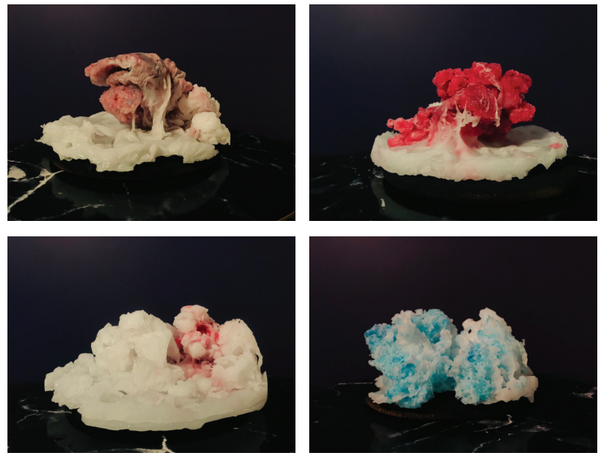


Fragment Analysis 3 -

The introduction of gelatin doesn't completely mix within the wax, reprimanding any form of material solubility, resulting in a series of quick mix pours. The resulting structures become considerably stronger and more dense, whilst retaining more internal water. The structures however lack the internal structural necessities to be considered habital space as well as having a specific control method that can efficiently and effectively pour the wax. This insight brought about the necessity for armature research and development.

Ingredients: - 500g Pillar Candle 68mm x 150mm - 3L Mixing Bowl (Water 18ºc 2.5L Filled) -
700ml Stove Pot - 400ml (Water 18ºc) - 170g A. Jelly (Gelatin) (2 packs Red) - 600ml Plastic
Vertical Container - 200g Pillar Candle 68mm x 150mm - Mixing Spoon
Mold: - 3L Mixing Bowl (Water 18ºc 2.5L Filled)
Method: - High to Low pour from 600ml Container into Mixing Bowl
Steps: - Melt 700g of wax into stove pot on low heat, only use 400g - Once melted, free pour
400g wax into 3L mixing bowl (Water 18ºc) - Use the remaining 300g of wax to pour into 600ml
Plastic Vertical Container - Once melted wax is contained, add 170g of Gelatin (2 packs) to the
wax mixture and mix vigorously
- Whilst mixing, begin to pour the mixture into the 3L mixing bowl which containers semi-settled
400g of wax. Pour the mixture from a higher point and begin to lower.
- Pour 400ml (Water 18ºc) slowly into the mixture whilst shaking to allow residual hot wax to
settle before taking from the mold.





Fragment Analysis 4 -

The final experimentation designs utilised severly different methods of creation in order to achieve and internal, column space. The previous models had been essential in understanding the materiality, however vary considerably in success depending on the methods used which were constantly changing. These designs introduced the drastic change in mold, tempreture and specific pouring methods, this was utilised in order to confirm any final material speculations before intiating use of the armiture to create the final spectrum of models. These experiments confirmed certain control methods in order to achieve a stable spatial construct, as well as the primary amount of wax necessary to achieve the perfect structural scale. The final implementation of gelatin would be added within the final models in order to confirm effect of gelatin on the structural form.

Ingredients: - 500g House Hold Singular Candles 190mm - 4L Crumpled, Molded Aluminium
Oven Tray (Water 18ºc)
- 700ml Stove Pot
- 300ml (Water 18ºc)
Mold: - 4L Crumpled, Molded Aluminium Oven Tray (Water 18ºc)
Method: - High, 60cm Singular Free Hand Pour
Steps: - Melt 500g of wax into stove pot on low heat
- Once melted, allow for 1 minute to pass with wax still burning
- Begin the high, 60cm singular free hand pour into the Aluminium Oven Tray
- Allow the melted wax to settle for 2 minutes
- Once semi-settled, begin to slowly add the 300ml (Water 18ºc) to the top of the tray whilst
shaking.
- Allow to completely settle before removing the wax from the mold.