P1 Project Report

#### **VASES INSPIRED BY TAMIL LETTERFORMS**

by Tarun Karthick, 18U130011 under the guidance of Prof. Avinash Shende

#### **DECLARATION**

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Tarun Karthick, 18U130011 IDC School of Design, IIT Bombay

#### **ACKNOWLEDGMENTS**

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#### **ABSTRACT**

The aim of the project was to create ceramic vases taking inspiration from Tamil letter forms. Looked at various aspects of Tamil culture before choosing the letter forms. The vases were slip cast and slab built. Most time was spent in exploration and learning to make the molds.

#### **INTRODUCTION**

Vases because I wanted a product with a lot of freedom for exploration but at the same time I wanted a finished product at the end of the project.

Learning to slip cast was the secondary objective. It allows for more freedom in terms of the form and it is repeatable.

Early inspirations were the works of Valentine Schlegal, Jerilyn Virden and Ettore Sottsas.







#### **TAMIL CULTURE**

Looked at various aspects of Tamil material culture as sources of inspiration.

Historically flowers have played a very important role in Tamil history. Different terrain were named after the flowers commonly found in that region.

The prominent kingdoms also had official flowers which they sported on their flags.

Chola bronzes and traditional ornaments.

Looked at works of various Tamil contemporary artists. Mythology, women and animals a common theme.

Looked at various type from early print to rickshaw decals.













#### **CHOOSING ONE**

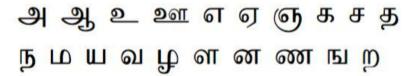
After looking at the different aspects of the material culture it was decided that choosing one to go forward would make life easier. So different criteria were taken into consideration and the letter form was chosen.

	UNIQUE TO TAMIL	HOW TAMIL IS IT	PEOPLES' PERCEPTION	FEASIBILITY
FLOWERS		<b>•</b>		
METAL WORK				
CONTEMPO RARY			•	
GLYPH				

## UNDERSTANDING THE LETTERFORMS

Categorized the letterforms into 3 groups: straight letterforms, curved letterforms and the combination of the two. Incidentally this also divided them according to their complexities. Straight being the simplest, curved being complex and combined in the middle. Choose to work with combined letterforms as they had theright mount of complexity.

Straight and Curved Letterforms



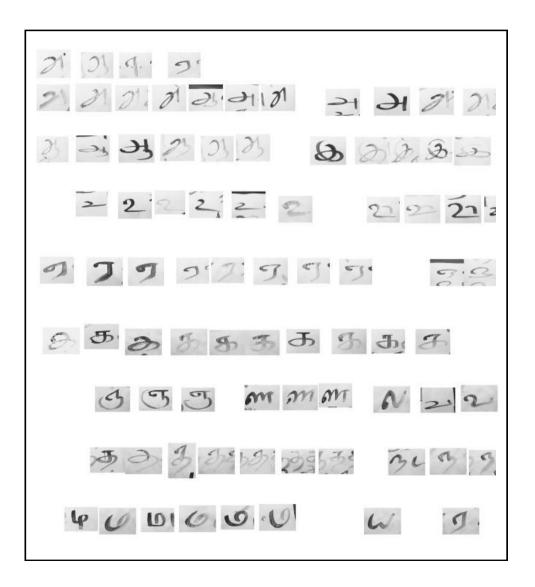
**Curved Letterforms** 



**Straight Letterforms** 

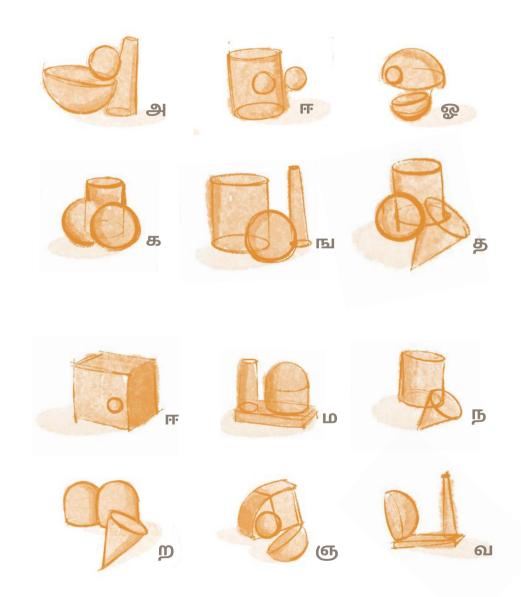
## **CALLIGRAPHIC EXPLORATIONS**

In an effort to better understand the letters I tried my hand at calligraphy. Both traditional and digital brushes were used to get to know how the letters flowed. The objective was to derive the form that can be used to design the vases.



### **3D TRANSFORMATION**

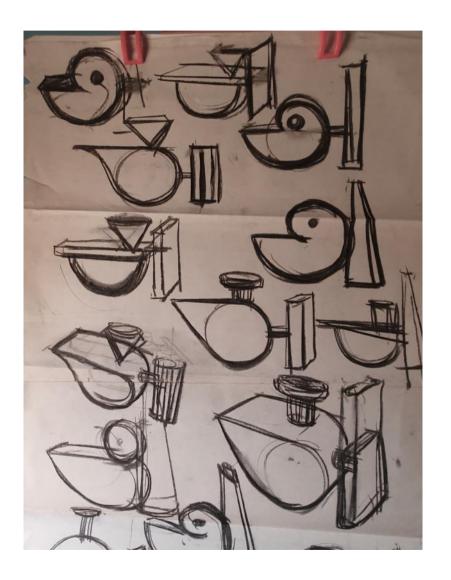
Basic forms like spheres and cubes were composed and combined to create the letter forms in 3D. Thought of this as a warm up exercise.



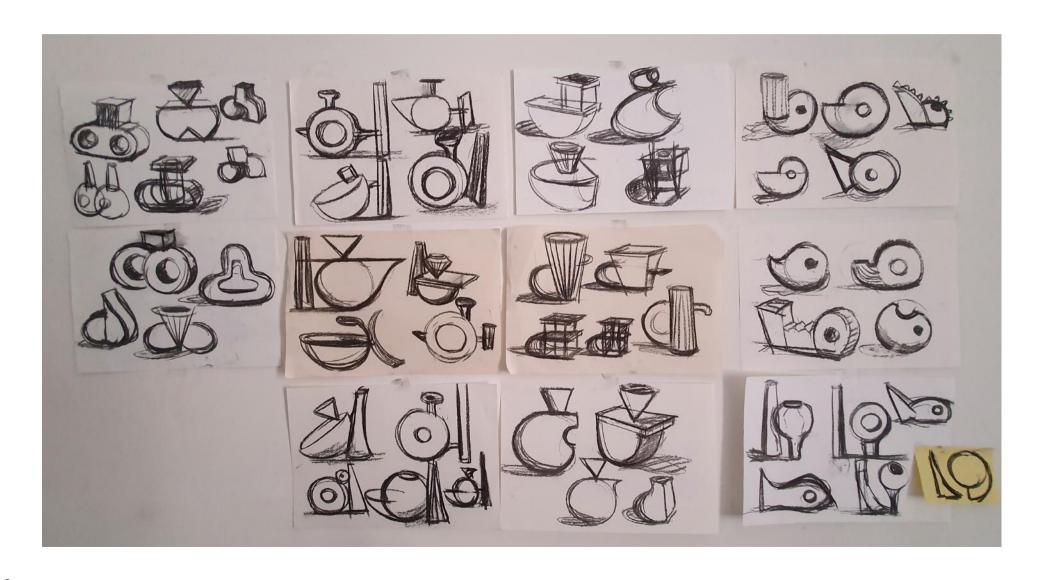
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#### **EXPLORATIONS**

Exploratory sketches were carried out pretty much through the entirety of the project. The goal was to not make them look like simple extrusion but at the same time not to lose the essence of letter.



## **EXPLORATIONS**





## EXPLORATIONS &



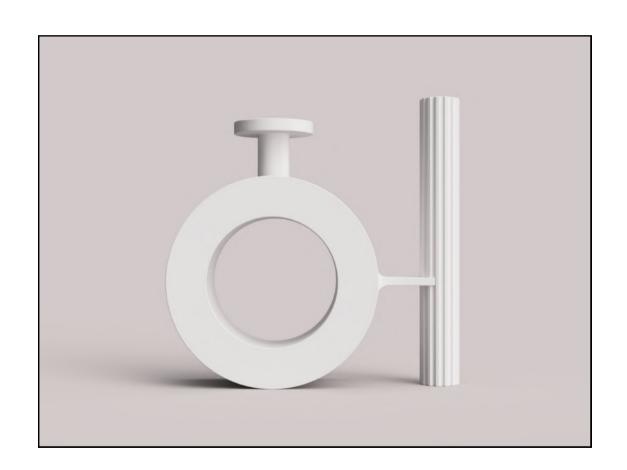
## **EXPLORATIONS** LO



## **FINAL CONCEPTS**

These three were the concepts chosen to go ahead with.

## **FINAL CONCEPTS**



#### **TESTING THE SLIP**

Used one of the molds at the studio to test the stoneware slip that I had purchased. The slip, which had been sitting in my room for quite a while, had formed clumps so it had to be poured into a wider container and mixed thoroughly.

The three-piece mold was then assembled and tied together with a rubber band. Once assembled the mold was dusted with some talc. Then the slip was poured in using a mug with a spout. I then waited for five minutes before pouring the excess slip back into the container.

This resulted in a layer about 2mm thick holding on to the walls of the mold. After twenty minutes the clay looked dry enough to be taken out. But the clay form tore in the process.

The clay residue was cleaned off the mold and set out on the counter to dry for half a day(the humidity did not help with this).





#### **TESTING THE SLIP**

The second time around I waited fifteen minutes before pouring the slip out. This is related to a thickness of 4mm. After waiting another half hour for the clay to peel away from the mold walls, the mold was opened. Their clay form came out intact and leather hard.

I did notice that not all sides of the form were of even thickness. This could've been due to the mold pieces not being equally dry. It could also be the case that different plasters were used for making the pieces.



#### **RELEASE AGENT**

The release as the name suggests, helps the plaster not adhere to surfaces. The type of release depends on the material. Initially I was going to go with the furniture spray as that was what I'd seen other people use, but the studio already had some prepared, so I used that.

#### The Recipe

To make the release you start by chopping the soap into tiny bits and then soaking in water overnight (leaving it in longer would've definitely made the next step easier). Next mix thoroughly to make sure there aren't any chunks left. Then add the oil, coconut oil in my case, and stir it in good. It had the consistency of butter left out on the counter.

I usually had to add some water before applying it, as it lost some to evaporation. As for application I used a synthetic brush or a sponge. The streaks left behind by the brush gave the mold surface an organic feel.

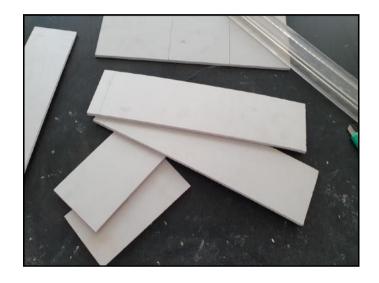




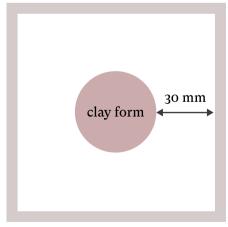
#### MAKING THE MOLD

Once I had made the clay form for the test mold I started making the box that would hold the liquid plaster.

It was going to be a two piece mold. The general rule is that the mold should be an inch or 30mm thick so the box was made taking that into consideration. The box was made out of sun board as it was to cut the drawback being that it doesn't absorb any water.



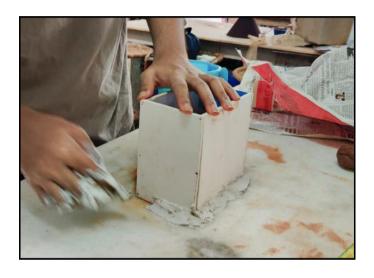
mold box

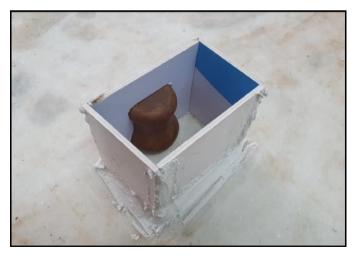


#### MAKING THE MOLD

The box was assembled with pins. The contraption was sent up on the marble counter and the outer edges covered in plaster. This had to be done quick as the plaster dries real quick. The insides were then coated with the realese agent.

Eye balled the amount of plaster that'll be required and filled the bucket with half that amount. The plaster was then scooped out of the bag and sprinkled into the bucket in a circular motion. This was done till the water reached its saturation point. The mixture was then stirred thoroughly.





#### **MAKING THE MOLD**

Immediately after, the plaster was poured into the box. Metal ruler was used to tap around the clay piece to get rid of trapped air bubbles.

Once the plaster had set quite a bit the excess was removed using the ruler. This was done so that it becomes easier to remove the sun board later on.

After an hour the plaster is set and the sun board was removed.

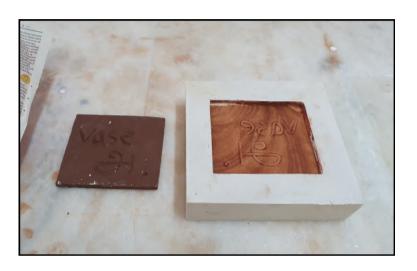




#### **TEST MOLD ONE**

This was the first successful mold that came out of the new plaster. It is of a slab of terracotta that reads 'slab a'.

On the left is the original terracotta slab and on the right is the one that has been slip cast.





## **TEST MOLD TWO**









#### **TEST MOLD TWO**

This was the was successful mold that came out of the new plaster. It is of a slab of terracotta that reads 'slab a'.

On the left is the original terracotta slab and on the right is the one that has been slip cast.





The form was made out of EPS. It was set on the marble counter and covered upto half height with clay an inch thick.

The mold box was built around it in sunboard and the edges covered in plaster. The plaster was then poured in.





Once the plaster set the clay was removed and the entire thing coated in release again for the second batch of plaster to go in.

The plaster set in an hour and the two halves were separated the next day.





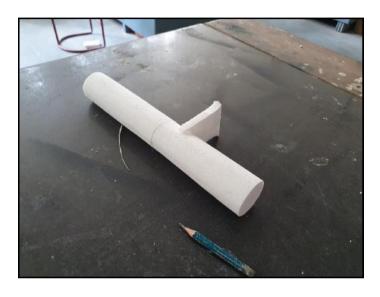
Had to wait a week for the mold to dry completely before the slip could be poured in.

The clip was allowed to sit in the mold for 20 minutes before it was poured back into the bucket.

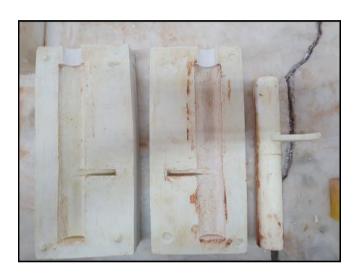




The process of making was similar to that of part 1 of the mold.













## MOLD 3

The two parts were then put together.

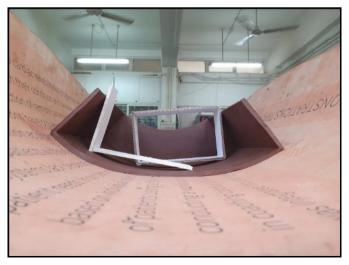


#### **SLABBING**

Slabs were rolled out of terracotta using the wooden frame to maintain uniform thickness. The pieces were cut to the desired sizes using paper templates.

The slabs were allowed to become a little firmer that leather hard before they were scored and put together with the help of the makeshift contraption for support.





### **SLABBING**

Grooves where the mirrors would slot in were made.

The mirrors were placed in the slots.





## **SLABBING**









# UNSUCCESSFUL ATTEMPTS

Attempt 1 was a complete failure as the clay form was not not secured property to the mold box and all the plaster flowed out.

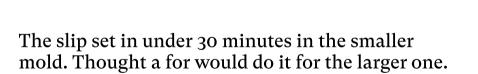
Got the plaster to water ratio wrong(or at least thought that was the case) and the excess water rose to the top of the box which had to be removed. The plaster did not set to the very end.





# UNSUCCESSFUL ATTEMPTS

Scaled down a bit and decided to make the mold for a slab. Plaster from the new bag and less water were used. This didn't set either and it was pretty conclusive that the plaster had expired.







# UNSUCCESSFUL ATTEMPTS

The biggest one so far. As the clay shrank the inner side of the donut started pressing against the mold and ended up cracking. The piece couldn't be removed earlier as it was still fragile. So it was then decided that the two halves would be done seperately and attached later on.



#### **REFERENCES**

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