

Re-Connecting to Sustainable Food Systems.

Processes, People & Place.







Contents Page

Introduction:

Initial Research.....	3
Community Engagement	6
Process Development.....	10

Projects:

Old Tree Brewery.....	25
The Sussex Peasant	40
The Brighton Permaculture Trust	53
The Brighthelm Centre.....	62

Summary.....	76
--------------	----

Introduction

This project aims to challenge the ways that we relate to food within a system geared towards mass production. The commercialisation of agriculture has caused many regenerative ecosystems systems to become fragmented and disconnected.

For this body of work, I have been exploring the ways in which different grassroots organisations have been working towards creating more sustainable agricultural solutions across Brighton.

As a maker, I have been specifically interested in the tools and functional objects that play a role in physically re-connecting people to food.

I have been working collaboratively with each group to create a set of objects that help to draw attention to their processes and methods. The wood for each object has been carefully sourced in meaningful ways that materially engage with their individual actions.

I hope that these objects will help to share their stories and inspire others to join this growing movement.



OUR RELATIONSHIP WITH FOOD

“Food arrives on our plate s as if by magic, and we rarely stop to wonder how it got there.”

Carolyn Steel

Author of ‘Hungry City’

Few of us in the west are conscious of the process the time and care it takes to grow crops. .

“Growing your own food is a life skill that we have to get back.”

Rob Finley

Ecologist

In today’s society it often feels alien for a child to plant a seed in the ground even though this is one of the most fundamental processes needed for existence.

“Foods became more like commodities, rather than matters of life and death.”

Geoff Tansey and Tony Worsely

Authors of ‘The Food System’.

The consequence of our current commercialised food system is that it makes food part of a production line, not an ecosystem.





OUR RELATIONSHIP WITH MATERIALS

‘With the general public there is a real and growing distance from making on all kinds of levels.’

Daniel Charney

Curator of ‘The Power of Making’ exhibition at the V&A
‘Craft Communities’- Panel discussion talk at the Design Museum
Discusses the social implications of technology and mass production.

‘Through making things and sharing them in the world, we increase our engagement and connection with our social and physical environments.’

David Gauntlett

Author of ‘Making is Connecting’
There are similarities between making and growing that help us to understand and connect to these processes and the objects around us.

‘The disappearance of tools from our common education is the first step towards a wider ignorance of the world of artefacts we inhabit.’

Matthew Crawford,

Author of ‘The Case for Working with your Hands’
Notes the loss of making taught in schools and the implications this has on understanding the material world.



Drawing Inspiration from Others

M
A
T
E
R
I
A
L
I
T
Y



L
O
C
A
L
I
T
Y

P
L
A
C
E

Stewart Walker

The Spirit of Design

Objects, Environments and meaning:

Walker explores how objects can hold sentimental meaning and be directly linked to places, histories and memories through the materials and processes used to create them. In an age of technology, this sensitivity to material is often lacking when products are so generic and monotonous.

Initial influences and research

Through an analysis of several current theorists and designers, I began to construct methodologies and ideas for how to create objects that hold significance and deeper meaning.

Stories can be told through objects using selective choice of forms, materials and making processes that all contain symbolisms and identities.

Simon Kidd

Ceramics

Kidd creates ceramic objects that explore specific places through his use of found local, natural materials from the site which he then takes and works into the ceramics.

By sourcing my materials from specific sites it can help to create objects which tangibly connect to certain places, people and processes.

'Ground, 2018. 24x33x33cm.



How to Create Meaningful Objects?

P
U
R
P
O
S
E

U
S
E



Grayson Perry Rites of Passage– Documentary series

Grayson Perry works with various groups of people to create ceramic vessels which meaningfully document specific cultural behaviours and rituals. He generates his ideas by spending time with the people he is expressing, to gather imagery, icons, drawings and forms that hold meaning and significance. He then works these into his pieces to create ceramic works that contain a depth of narrative.

By studying his working process I have developed my own way to trace, document and symbolise people through my selection of objects and imagery.

Pascal Anson

Ordinary Made Extraordinary

Anson draws together various different non-matching objects and unites them through the application of consistent and repeating designs. For this cutlery collection, he brings together random pieces by adding a colour to make a set.

From this I drew the idea to create a consistent visual theme running through every piece in order to unite the various objects together through repeating colours, textures and materials.



C
O
L
O
U
R

F
O
R
M



Seedy Sunday

Brighton Agriculture Organisations.

I researched to find various sustainable agriculture organisations in Brighton by actively finding events and talks to go to.

One of the places I visited was Seedy Sunday, an annual community seed swap in Brighton. This event brings together various growers and allotment communities from across the city, to

exchange tools, ideas, tips and seeds.

This kind of event holds onto locality and helps to re-enforce growing communities.

I used this event to connect to organisation and to discover what various groups are doing in Brighton to reclaim a connection to food in a sustainable way.



Brighton's Growing Community

'Feeding the City' Workshop

I also attended a 'Feeding the City' Ideas workshop held at Silo, in Brighton.

The event shared stories and advice between social, environmental and sustainable food enterprises.

My main aim was to find out more about pre-industrial food systems and the other organisations who would be attending.



Mapping Out Various Organisations

I started my research by mapping out some of the sustainable agriculture organisations that interested me most.

Next, I researched each them online and through events, volunteer sessions and meetings with people to find out more about each organisation.

Through this, I created an initial plan, thinking through the various objects, tools and processes that are specific to each group.

What Issues are they Tackling?

What Processes are Integral?

What is the Main Motivation of Each Organisation?



Fork and Dig It.

The Brighton Permaculture Trust.

Special Branch Tree Nursery

The Gleaning Network.

sussex



Pesticide Free Action Network

The Brighthelm Centre.

Silo, Pre-Industrial Restaraunt.

The Real Junk Food Project.

Old Tree Brewery.

The Sussex Peasant

Aecre Honey.

Lewes → ...

Tools and Functional Objects

Each of these objects links to a specific organisation in Brighton.

They map some of the functional objects and tools which are used in different way to communicate actions and processes that connect people to agriculture.

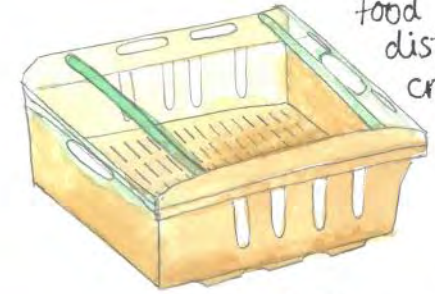
The **green** areas mark sections which could be made in ceramics.

The **brown** areas mark aspects which could be made from wood.

This helped me to see how the different material parts could be created to work together.



Chalk board.



Food distribution crates.



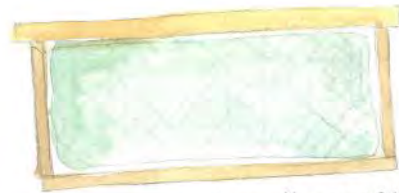
Watering can.



tableware.



Honey Dippers.



Apiary slides - Honeycombe



Garden spade.



Trowel.



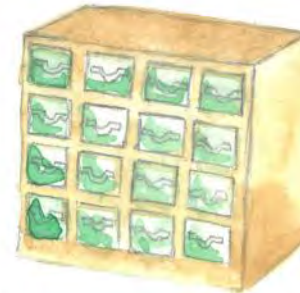
Kombucha spoon.



Wall pocket hanging modular planter.



Banneton birchwood cane bread proving basket.



Seed storage chest of draws.

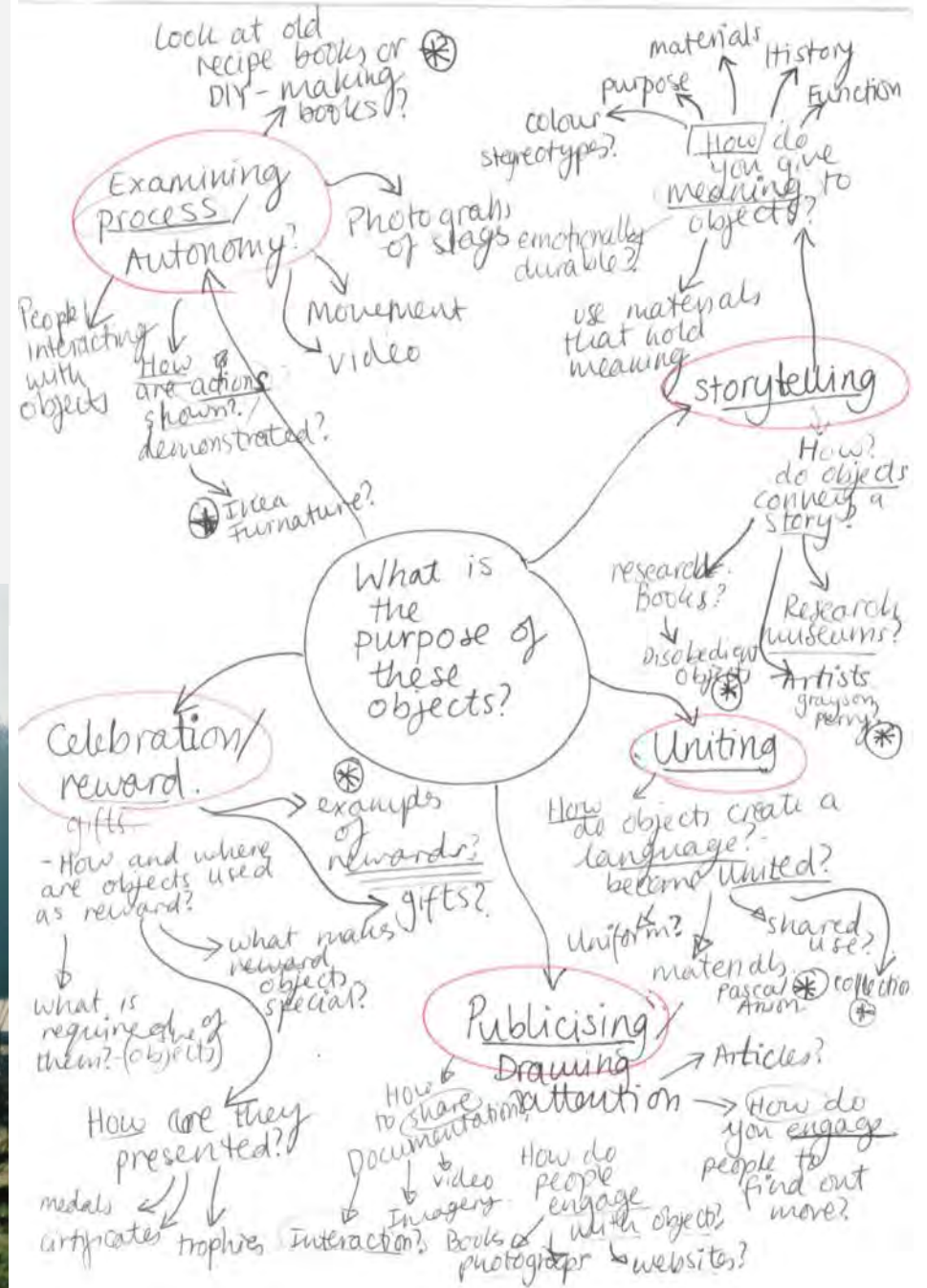


Seed germination container

“By better understanding the tangible things in our lives, we better understand our fellow humans.”

-Glen Adamson

Author of ‘Fewer, Better Things’



Research Trip– Apple Fest



Making Bio-Char

On an early research trip with Old Tree Brewery, I discovered the sustainable process of Carbon Trapping.

This is made by burning wood at an incredibly high temperatures whilst blocking out oxygen to create a carbon dense charcoal called Bio-Char, which can be mixed with compost and fixed into the earth.

This process lead on to early tests and ideas exploring the relationship between ceramics and wood and how fire transforms each material.

B
U
R
N
I
N
G

W
O
O

Carbon Trapping



C A R B O N



A
R
B
O
N



G
N
I
P
A
R

T R A P I N G

WOOD

TREES

CLAY

EARTH





Biochar Clay Experiments

This research trip sparked a stream of experimental process developments.

Initially, I explored using biochar to grind down into a powder and mix into clay at different percentages.

This process resulted in sieving out the rusty burned metal nails from the pallet wood which were interesting skeletal remains from the wood's previous use.

I was interested to see how combining these raw materials could affect the properties or colours of the clay, but found that it only affected the texture and consistency by creating air pockets as the charcoal burnt away during firing.



Burning,

Charring,

Scouring,

Heating,

Casting,

Revealing.

Experimental and Playful Exploration of
Wood Natural Textures and Patterns.

Early Experimentation - Reflections

I began to generate an understanding of the different textures I could create by treating, cutting and scrubbing away at the surface in different ways.

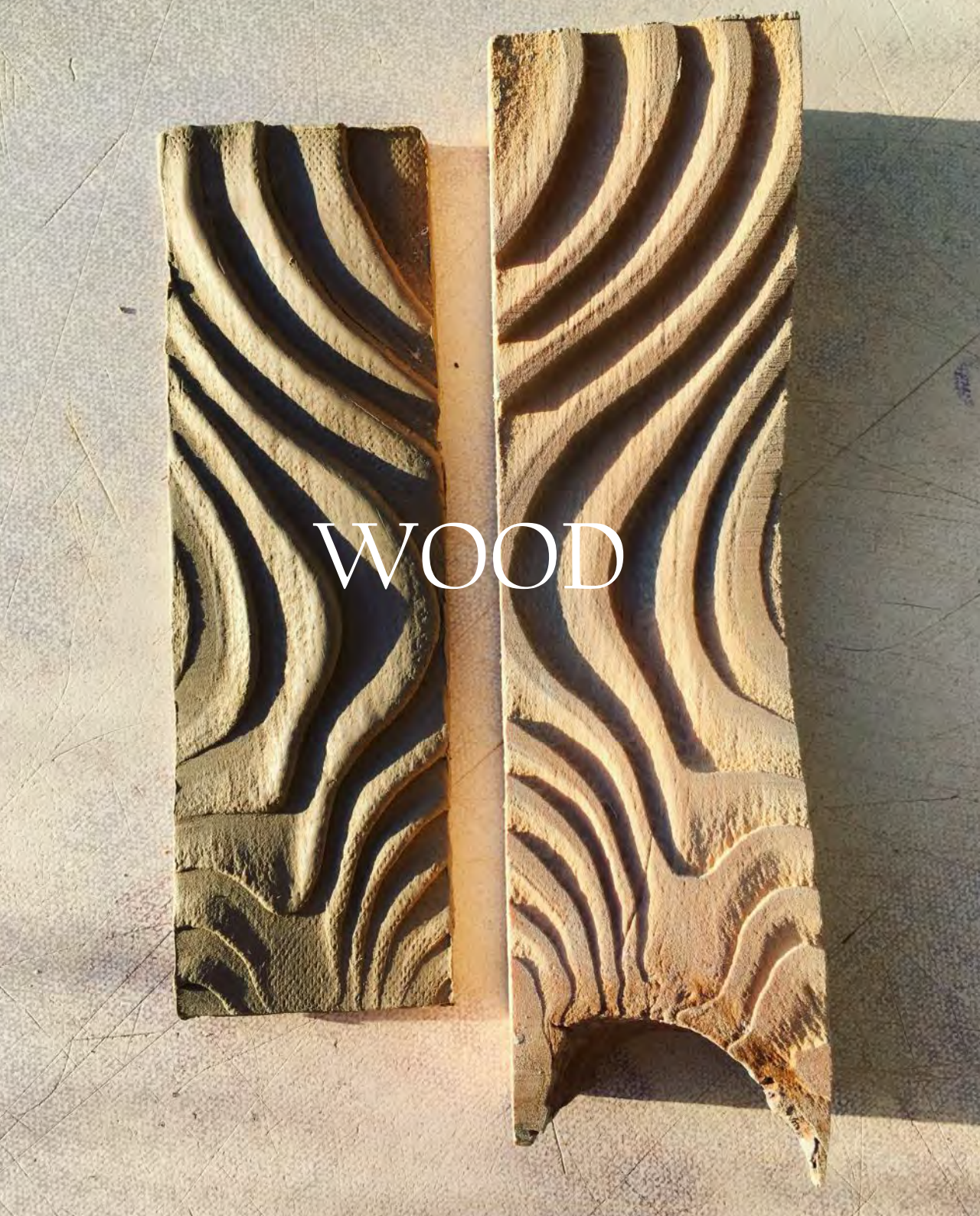
This method involved using a polypropane torch burner to blacken the surface layers of the piece and scrape back the excess using steel wire which removed the soft grained layers of summer growth.

This process sparked my interest in the textural the patterns within wood which I then explored using alternative methods.



Material Exploration





WOOD

Developing a Unique Material Language

Next I Sandblasted the wood to achieve a more refined and detailed texture.

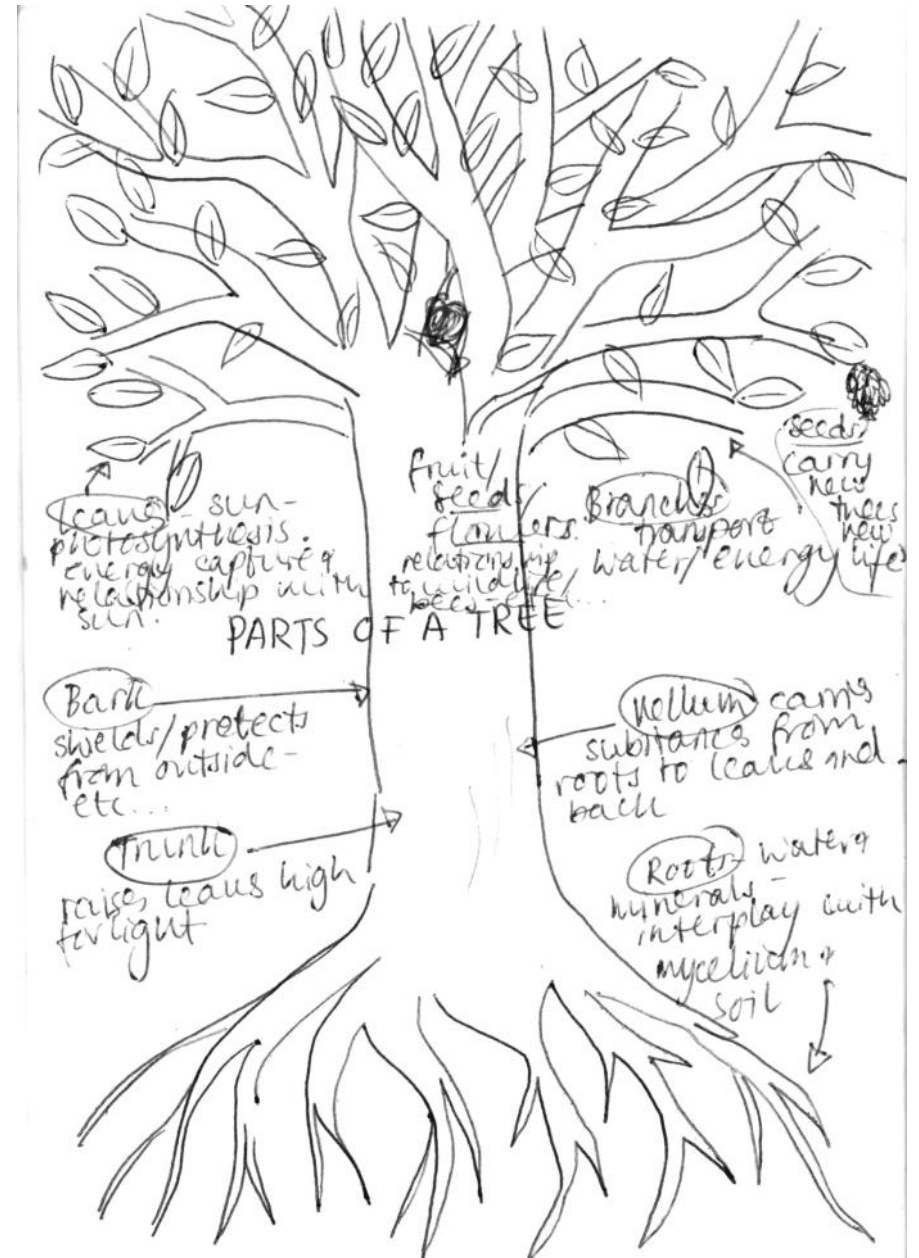
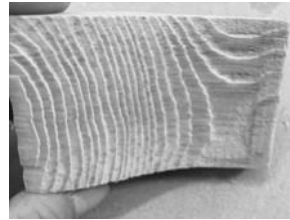
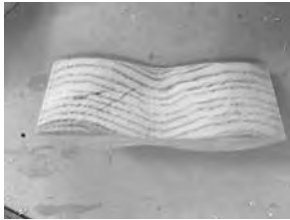
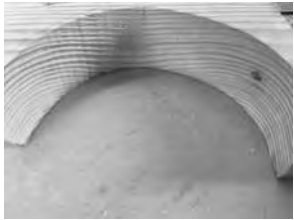
By cutting across the grain in different ways, I was able to unearth incredible curved patterns within the layers.

**How could this process be applied to
different forms?**

The natural wood grain texture instantly evokes a strong organic quality and directly links these ceramic forms to the natural world was exciting and captivating.



CERAMIC



Exploring Textural Wood Grain

Wood Species– Material Properties

Through a process of testing I developed an understanding of how grain pattern, texture and density varies across different species of wood.

- **Hardwoods such as Oak, Ash and Sycamore.**
- **Softwoods, such as Larch, Pine, Cedar and Douglas Fir.**

These woods were extremely dense and close grained. This made them too hard to sandblast effectively as there was vary detailed or small patterns within the grain.

These pine trees have a much softer grain, through a vast growth across the summer seasons– Widely spaced rings in the wood creates a more visible structure.



Ash

Fir

Pine

Oak

Elm

Birch

Cedar

Larch

Hazel

Material Explorations of Wood - Influential Makers

Sculptors and designers are equally re-claiming a relationship to the natural world through their creative expression using natural materials. In an age of mass production this relationship with materials are becoming ever more distant.

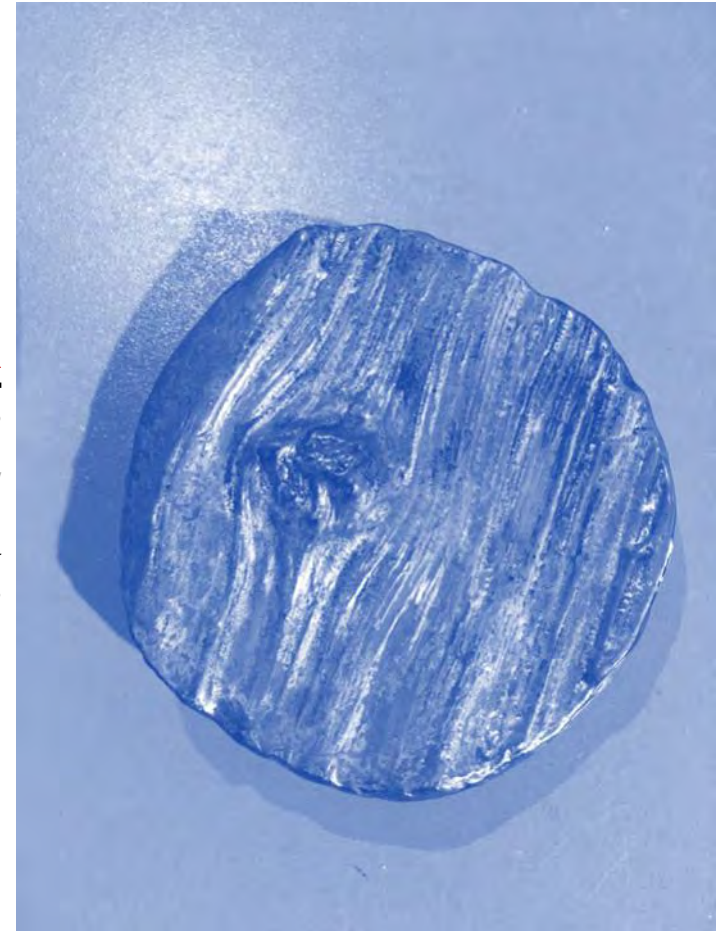
These are key pieces of work which inspired me to push the boundaries and really expose the properties of this material. I discovered two of these designers during my research trip to Dutch Design Week.

Nane Sophie- Bergmann

'Making and Metal'

<http://nanesophiebergmann.com/>

Bergman translates between wood and Metal through transposing small details of wood into cast metal orbs.





Sho Ota

'According to the grain,

Knot Stool'

Wood, Epoxy, Beewax,

2018,

<https://shootadesign.com/>

Instead of working the wood until it's smooth, Sho Ota Carves around the knots, accentuates the grain and extends where the branches would have grown to make objects that expose the natural wooden objects that surround us.

Richard Deacon

'What Could Make Me Feel This Way'

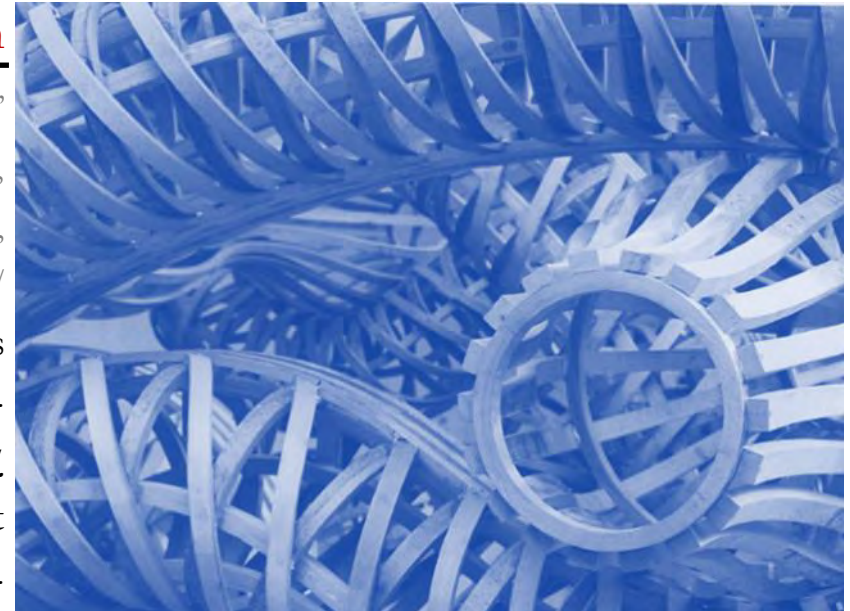
Laminated and bent wood,

1993,

<http://richarddeacon.net/>

Richard deacon uses steam bending to create wooden sculptures that interact with space.

He stated that *"The work's about being alive and being dead. Being alive is curvy and being dead is straight."* The way that he uses wood gets closer and closer to the tree itself.



Press
Squash
Peel
Bend
Slice
Scrape
Wet
Smooth



Press Moulding and Hand Building

I initially started developing this process by testing out various press moulding techniques by directly rolling slabs and pressing the clay into the wood texture.

However, I found that this process only works for relatively flat slabs, building with grain as a repeated pattern. In order to create more complex, three dimensional objects, I had to explore casting straight from the wooden master.

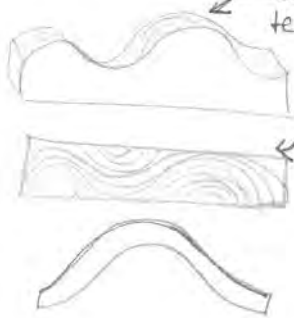


What could I do with this idea?

cut unusual sections to expose textural patterns in grain.

Roll this to make flat ceramic sheets -

then place these flat sheets over new hump moulds to create new forms with them?



Could I then mould this around a separate hump mould to make wall pockets?



Could I turn wooden sections on a lathe, then sandblast the patterns to create direct-multiple casts

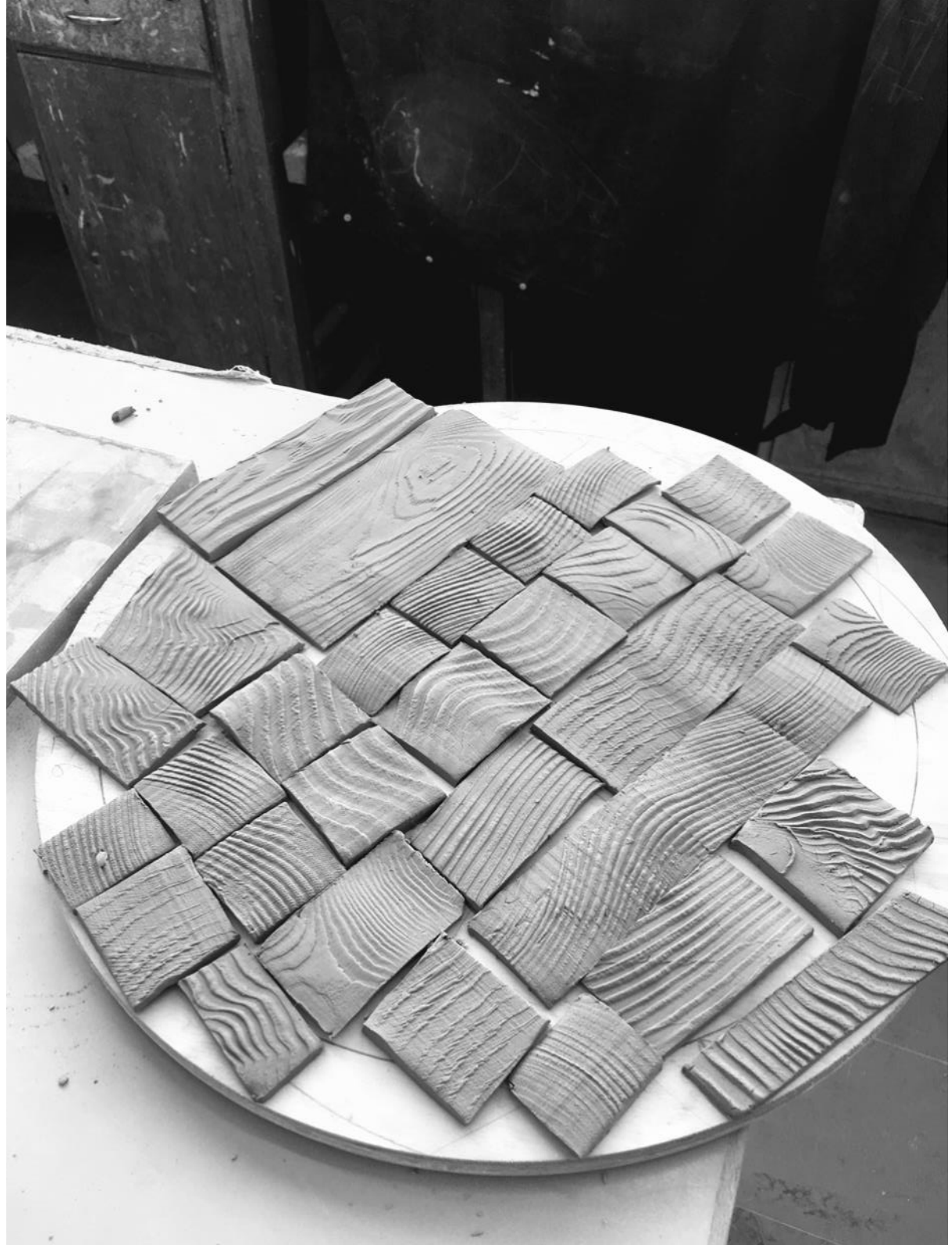
Note - of?
Difficulties will be in creating undercut for drop off mould.



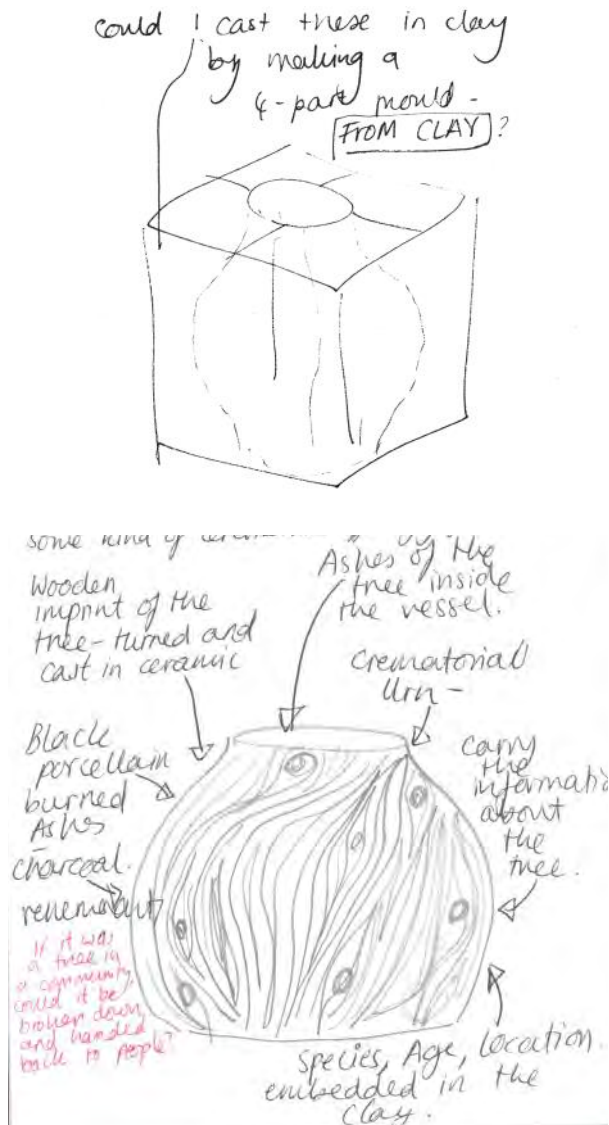
Vessel to create part moulds around for slip casting?

Could I form clay around the vessel to get a negative cast - then pour plaster into to get a plaster version? - then make 2/3/4-part moulds of the piece for slip casting from this ceramic section.

or silicon?



Reflecting On Early Experimentation



This stage of my making process was varied and experimental and I was beginning to unearth some extremely promising processes. However, I struggled at this stage to connect my making with my concepts and ideas.

This allowed me to test diverse techniques without the boundaries and constraints of pre-filled ideas.

However, I found myself feeling unsatisfied by the decorative vessels I was creating and started searching for meaningful ways to reconnect the two.





Uniting Processes with Concepts

Farm to Table

By creating table wear, I could begin to unite these making processes with food.

A fundamental part of our relationship with plants occurs through cooking and engaging with crops through taste.

By creating bowls and eating vessels as part of my 'set' of objects, I aim to include the domestic home environment within the agricultural conversation by encouraging people to question their actions food choices.

Focused Making

I found that focusing on making functional outcomes rather than open-ended experimentation helped to refine my testing and development.

Setting boundaries and having intentional aims of making table wear forced me to deal with many more difficulties and complexities within the making process as I had to work around various issues with the making process.

For example how to deal with undercuts, shrinkage and mould making processes.





Using a Jigger Jolly

I combined wood lathing with ceramics batch production table wear processes to try and make wooden masters for table wear production.

Traditional Wooden Moulds

I was very interested by the way that wood could be used as a mould directly. I discovered that traditional ceramic moulds used to be made out of wood because of its water absorbent properties. This led me to thinking about the ways I could use wood directly as a casting material, instead of plaster, which is extremely unsustainable.



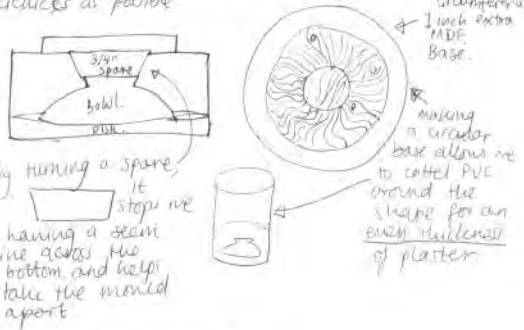
Introducing Plaster



Slip-casting wood- 3-part-mould.

The idea of being able to slip cast and batch-produce ceramic (wood) grain - could these objects be transformed into tableware / other forms e.g. lighting vase? (Dometic)

After initially turning my bowl on the wood lathe + then sandblasting it, I coated it in 2 layers of wood stainer then painted / siped varnish thru. as many circles as possible



By turning a spare it stops me having a seam line across the bottom and help take the mould apart

Technical scale-drawings for turning my spare on the lathe

I found that press moulding only allowed me to pick up the negatives of the wood. In order to create more complex Three-Dimensional objects in ceramics, I tried casting these forms into plaster.

Reflectively, for this test I used pine- detailed and intricate grain texture- this lead to many undercuts which broke off in the mould.

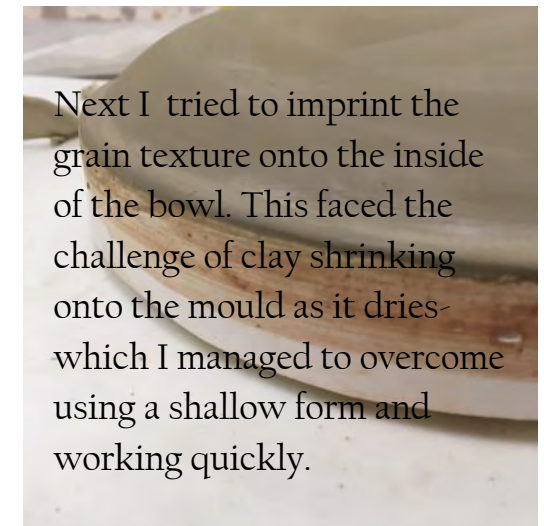
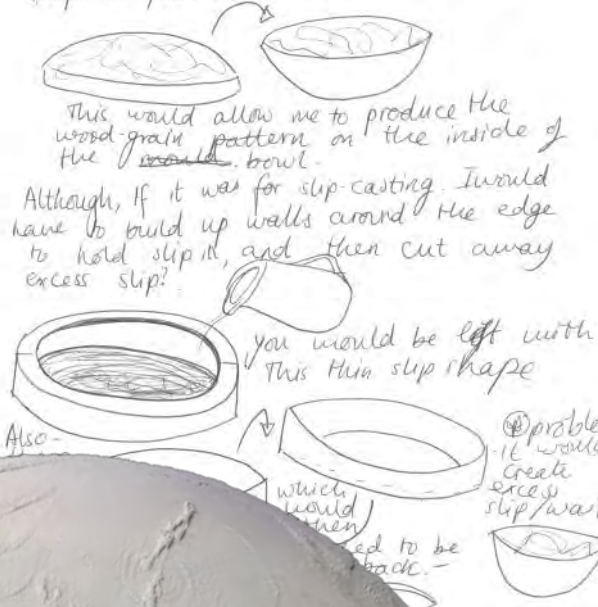
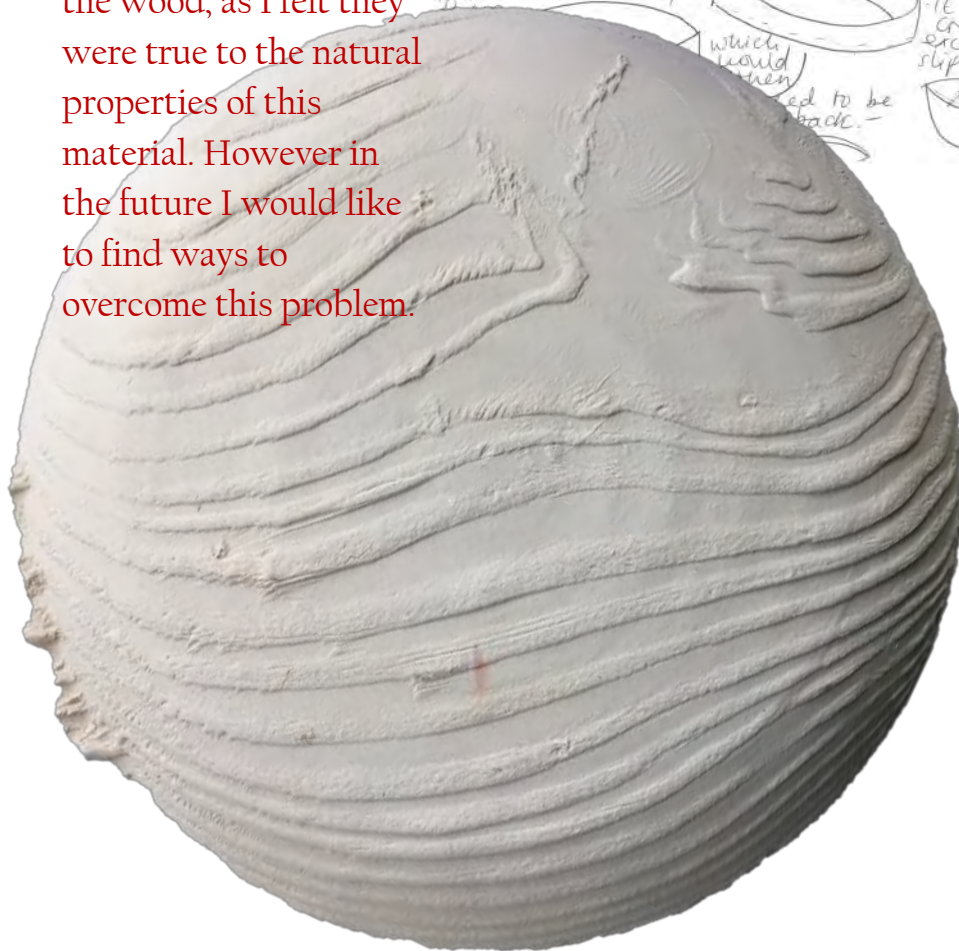
I progressed to using Douglas fir, with shallower, wider layers to avoid casting minute details.



Facing Conflicts in the Process

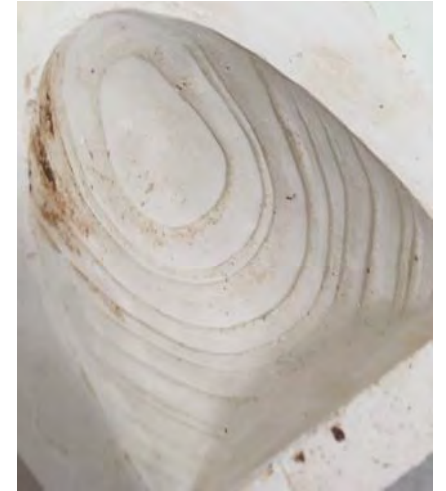
Although softwoods sandblast well, they lack the density and strength to turn on the lathe without chipping.

I embraced the rips in the wood, as I felt they were true to the natural properties of this material. However in the future I would like to find ways to overcome this problem.



Next I tried to imprint the grain texture onto the inside of the bowl. This faced the challenge of clay shrinking onto the mould as it dries - which I managed to overcome using a shallow form and working quickly.

Translating Wood into Porcelain.



These porcelain test tiles allowed me to explore the effect of various glazes on my wood grain texture.





Glaze Development - Reflections



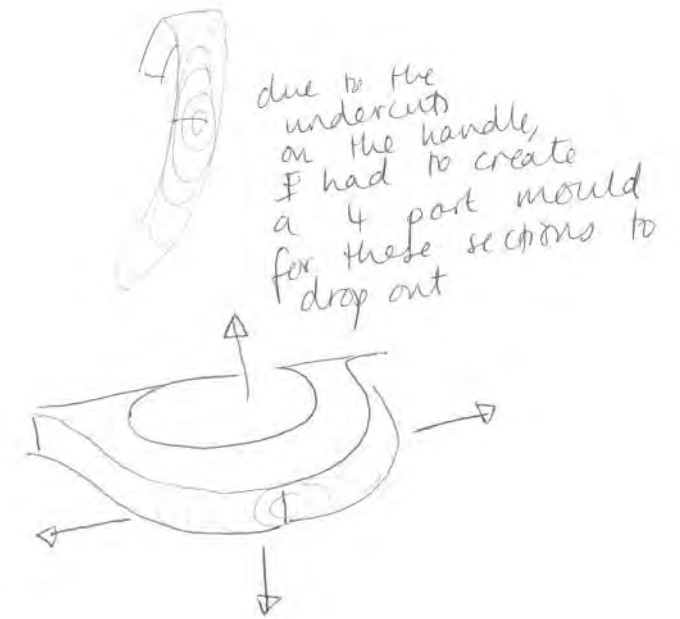
I created my own set of glazes— drawing the colours from my photography of the Sussex Landscape. I focused on creating earthy green, brown and blue rustic tones that are evocative of the natural landscape.

I found that Rutile-based glazes work best for creating this effect as the colour fade and variation gives the ceramics extra layers and complexities. However, it is important for the glaze to accentuate the texture of the wood grain, rather than cover or distract from it. Therefore, it was a challenge to find the right balance of this.



Developing my Mould Making Techniques

Making a complex 4-part mould mug.



I simplified my casting process to tackle complex undercuts by controlling my angles and filling in groves with clay before sealing the wood.



Sandblasting in sections.



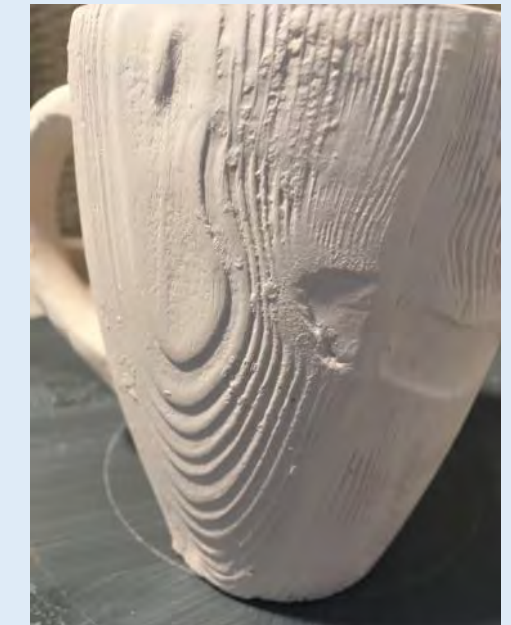
Casting a 4 Part mould to avoid undercuts.



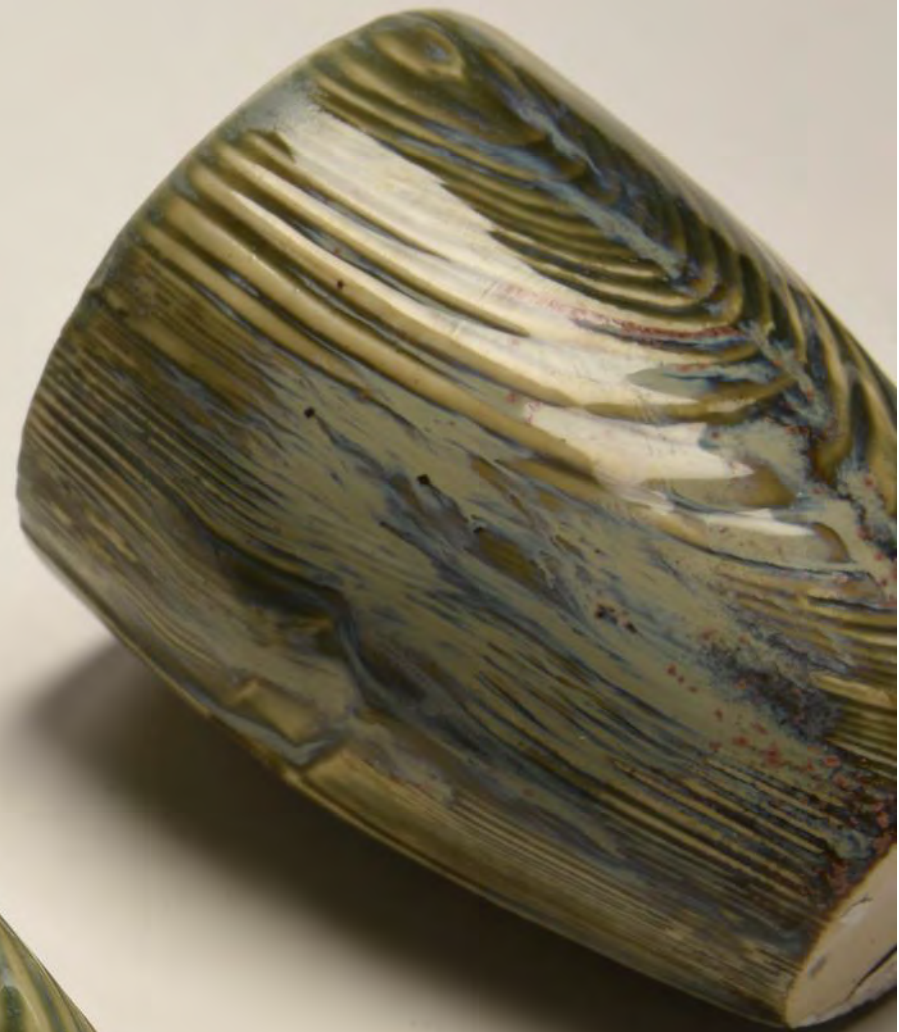
In the future— make sections at right angles



Casting a handle on 4 parts.



Textural detail lost in moulding-
Form too complex.



Complex Processes

This complex mould making process was extremely valuable as it gave me a very clear insight into the technical problems and complexities of casting a complex three dimensional form.

Although this produced some interesting outcomes, the thin detail of the wood grain was too detailed to successfully cast in plaster which resulted in a broken texture.



Reconnecting to Community Harvesting

In October I went to an 'Apple Fest' - an apple harvesting festival run by Old Tree Brewery. It is an annual community cider making festival that works to re-connect people to the harvesting process. Orchards across the UK are diminishing because it is cheaper to commercially farm and import apples from overseas.

Apple Fest works to harvest forgotten orchards in the UK to keep them alive.

This trip was an initial insight into the real and current impacts of commercial agriculture that farmers are facing today.

Encouraging people to take a more active role in harvesting and caring for our orchards helps to support local food systems

I used film photography to document this, focusing on the people and the interactions with the process.



Connecting
to our
Local
Environments
Through
Food.

P
E
O
P
L
E
S

H A R V E S T





Localised agriculture can positively impact humans by creating a sense of community whilst also engaging with the natural world.





Old Tree Brewery



Who are they?

One company I've found that integrating sustainable agriculture methods into mainstream society is the 'Old Tree Brewery' in Brighton. They are a Brighton Based Kombucha Brewery working to revive the ancient art of Fermentation using sustainable methods on a local scale.



What is Kombucha?

Kombucha is a fermented, living tea that acts as a probiotic and a natural digestive to support gut health. Fermentation is an ancient tradition used throughout history to preserve food beyond its natural edible life.

I researched this further through books, as well as attempting to make kombucha myself to learn and understand the processes.



<https://oldtree.house/oldtreedrinks>

Interview with Tom from Old Tree Brewery

Key Quotes.

How do you create a sustainable system?

“One of the things that’s exciting for all tree is that we just put in a new refill station which is actually going to create demand for second-hand bottles because people can get the Kombucha 30% cheaper now if they refill their bottle. So, we’re making in the economic interests of people as well as their personal or social interest.”

How do you source produce locally?

“It’s about building a network of gardeners and getting them interested in the low alcohol, botanical drinks. They can swap us bags of rosemary for Kombucha, and that kind of trade is really exciting.

But there is also what can be cultivated and grown locally, with the gardening community, and then there’s also what can be foraged, which is from the wild areas around different people’s hedgerows and back gardens.”

What does Localisation allow you to achieve?

“One of the reasons of having a brewery in the centre of Brighton, when there are not many other breweries in the middle of cities, is so that we can deliver everything locally, so we wouldn’t have to depend on vans or lorries to ship our drinks into cities. We can actually make them here, and we love the fact that about 30% of our regular orders we can just walk the crates over ourselves. It just takes us 20 minutes and is completely sustainable.”

What do you think is the best solution to having more sustainable food systems?

“There’s only one real solution, and that is enabling people to have more time to grow their own food.”

“Growing food in cities makes so much sense, you can grow more food with more attention to detail, and more eyes per acre.”





“Closed-loop for us is composting everything and making sure that all of the nutrients involved in the brewing process are going to feed local gardens and hedgerows.”

- Tom Daniells

Co-Founder of Old Tree Brewery.

Using Sustainable Methods

Old Tree forage ingredients found in hedgerows, and capitalise on the variety of medicinal plants and ingredients that can be easily accessed and underused.

Their drinks change throughout the seasons to adapt to whatever is available, working in a way that is in tune with nature, rather than against it.

Their methods demonstrate the possibilities of utilising the plants growing in our local environments.

I designed a pattern to engrave these herbs into the wood of my object to tell this part of their story. However, after later testing I decided it could make the object look to unrefined.



Research Trip- Volunteer day with Old Tree Brewery

What is a Forrest Garden System?

A Forrest Garden is a type of sustainable agricultural system that mimics the complex interrelation of plants and species within a forest.

This system of growing crops starkly opposes the cropping methods used by many industrial agriculture companies.

In contrast to monoculture cropping, a forest gardens encourage different species and plant diversity to create a holistic and regenerative ecosystem.



Creating a Forest Garden

Old Tree Brewery are working to cultivate a forest garden at Rock Farm in Sussex.

The herbs grown will be used as ingredients for their various drinks.

This aims to encourage ecosystem regeneration as well as human reconnections to the natural world through volunteer growing days.





Analysing the Process Through Identifying Tools.

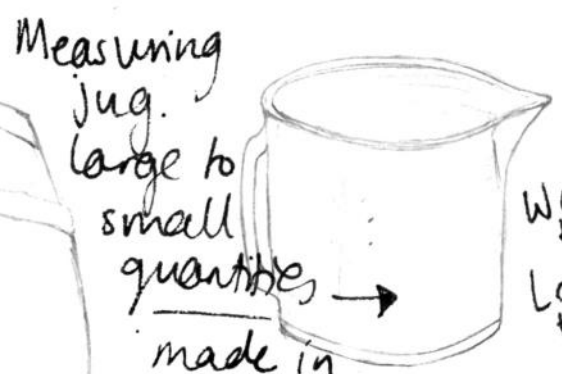
As part of my initial research. I visited the brewery to speak to the head brewer, Eve about the process of making Kombucha.

This is my documentation of the tools and objects used at different stages of brewing.





Kegs - transporting large volumes of liquid.
Object maybe associated first with wine/beer.



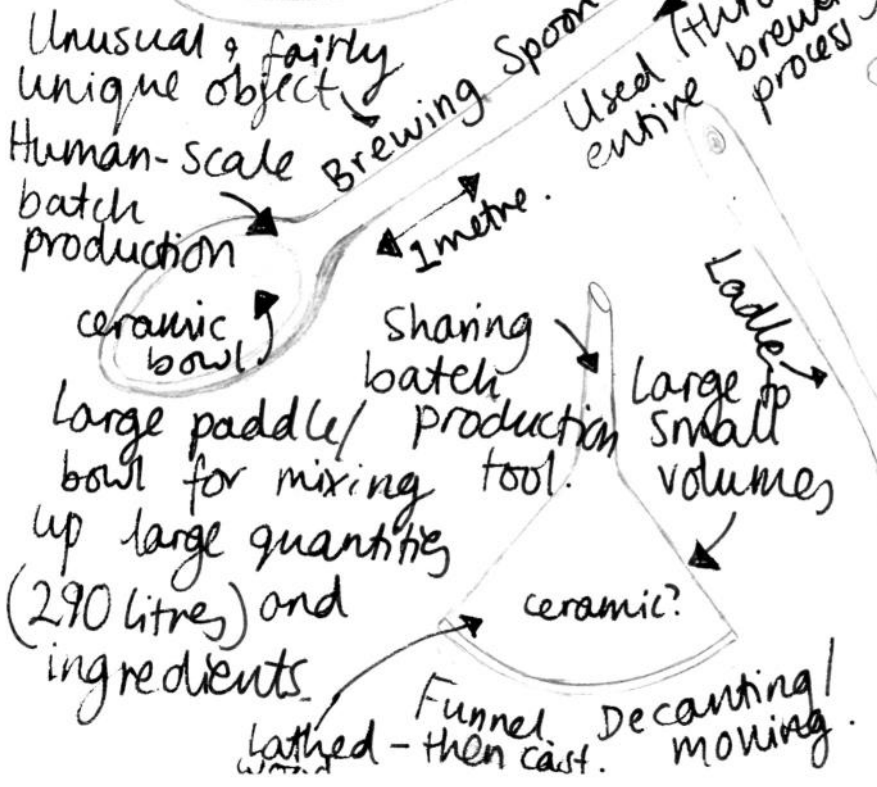
Measuring Jug. Large to small quantities.
made in 3 sections? joined.



Re-use
Wooden tops - Lathe turned?
Ceramic Bottles?
wood grain? on Lathe? Cast



Hand-Held Tool.
Glass Linked to Circular Design systems.
Bottling - Human-scale machines/systems.
sieving, ingredients. Herbs, scoby.

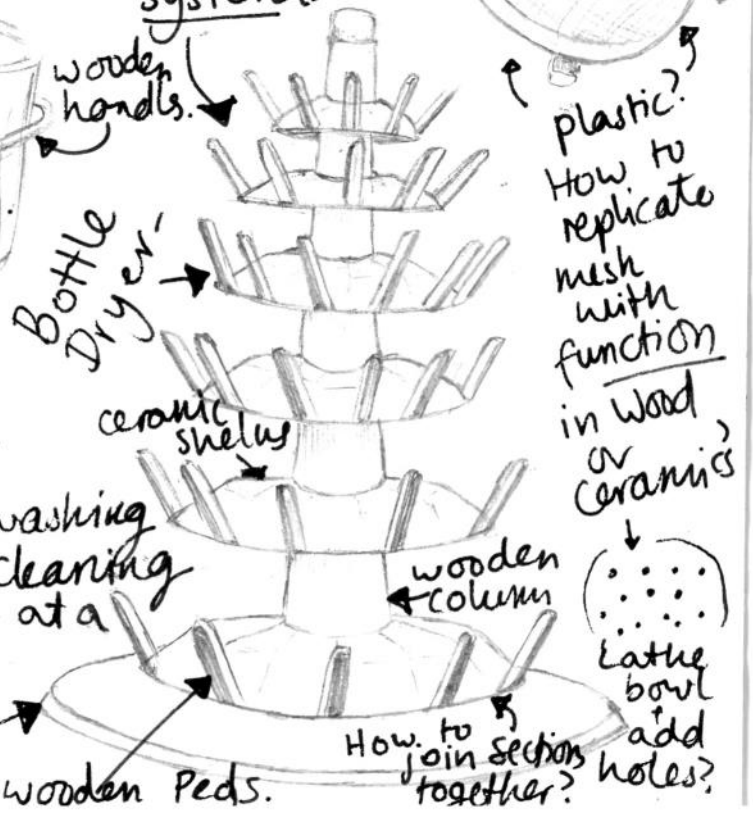


Unusual & fairly unique object.
Human-scale batch production.
Brewing Spoon. Used throughout entire brewing process.
1 metre.
ceramic bowl.
Large paddle/bowl for mixing up large quantities (290 litres) and ingredients.
Sharing batch production tool.
Large to small volumes.
Ladle.
ceramic? Funnel. Decanting/moving.
lathed - then cast.



Large saucepan.
wooden handles.

less integral to core processes or linked to old tree methods



Bottle Dryer.
ceramic shelves.
wooden column.
wooden Peds.
How to join sections together?
plastic? How to replicate mesh with function in wood or ceramic?
Lathe bowl add holes?

A woman with short blonde hair, wearing a blue sleeveless top and a black and white striped apron, is working in a brewery. She is standing next to a large stainless steel tank that is wrapped in aluminum foil insulation. The tank has a black motor and various hoses attached to it. In the background, there are other tanks, a yellow rack, and a wooden stand with a burlap bag. The text "HUMAN SCALE PRODUCTION" is overlaid in the center of the image.

HUMAN
SCALE
PRODUCTION

Reflecting on my Findings

From my research, I have gained a much fuller understanding of how this organisation works. They have many different sustainable processes which tackle with issues in different ways. Therefore, this object will focus on finding the defining aspects of their organisation.

One key strength is that by keeping the organisation on a small, local scale they have been able to control over their entire process.

From farming, to producing, to transporting, selling and even disposing of waste.



Developing Designs: The Brewing Spoon

One object which stood out to me was the 1 Metre long brewing spoon used to mix ingredients when making Kombucha in their large, 300 Litre brewing tanks.

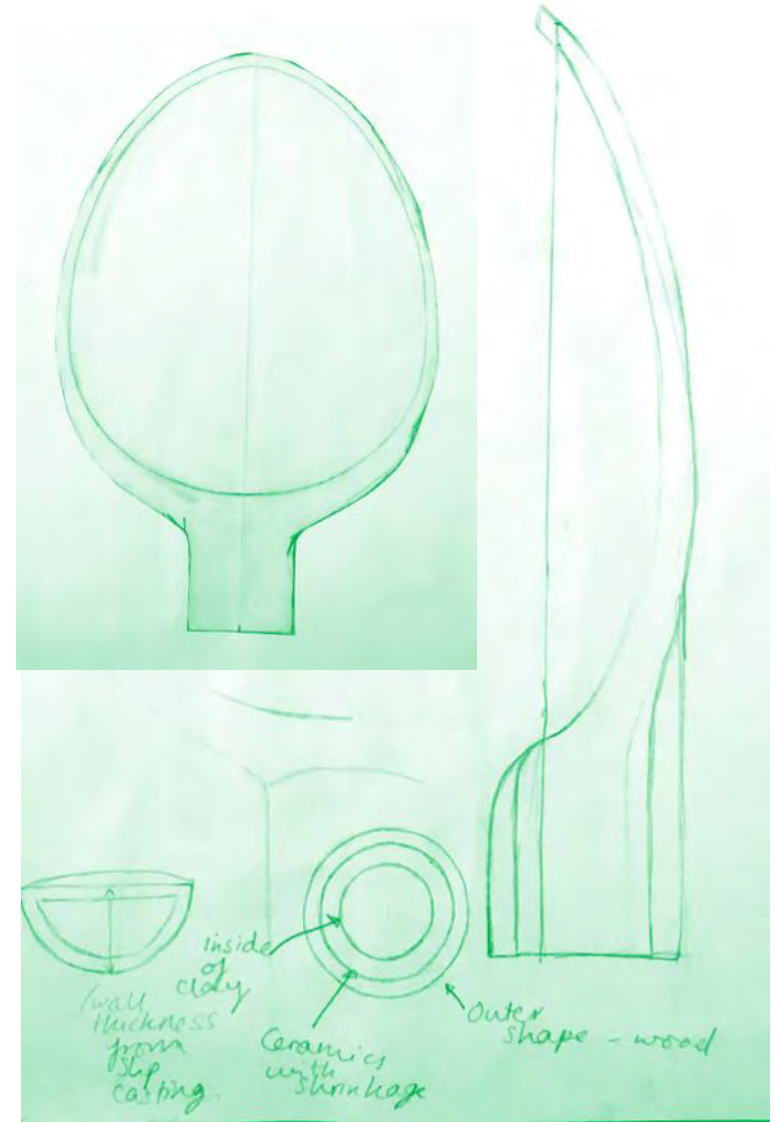
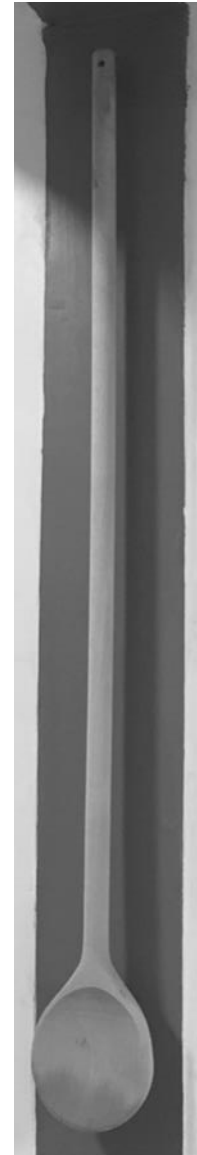
I have carefully selected this object to handmake for the brewery.

WHY?

The unusual size of the spoon reflects the volume and HUMAN SCALE OF PRODUCTION.

Rather than using mass- industrialised processes, this object is held by human hands to physically mix ingredients themselves. This element of having a human scale operation gives them the ability to be more adaptive to the seasons and their locality.

The spoon plays an active role in the PROCESS. This connection to processes is an integral aspect of Old Tree which I wanted to focus on.





Sourcing the Wood

Material Meaning

I decided to source the wood for this piece from Old Tree's Forest Garden for multiple reasons:

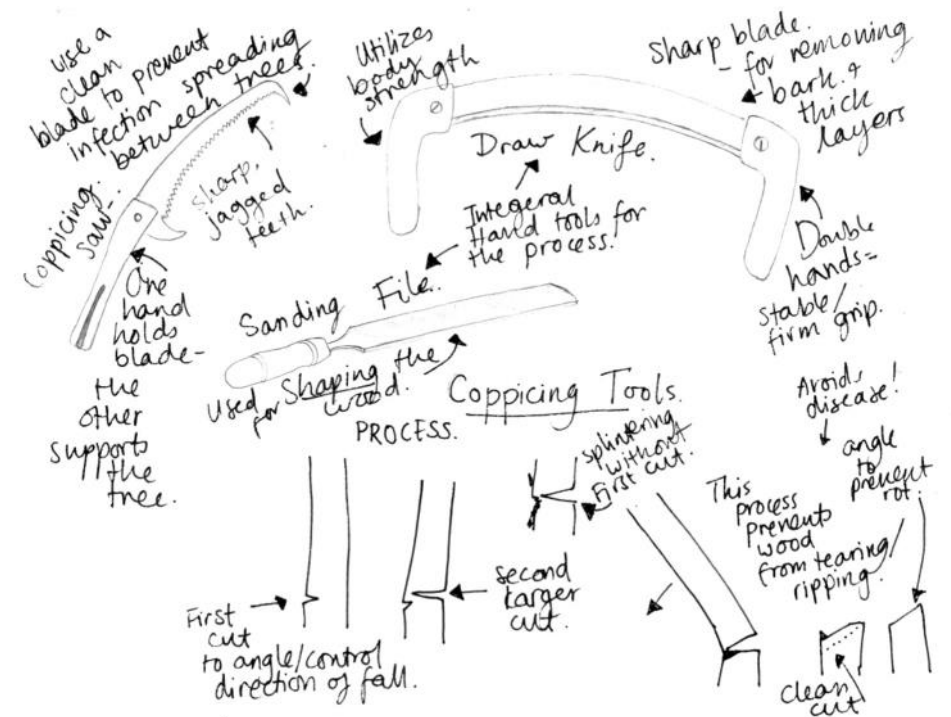
- To give the object more personal value when I give it to Old Tree Brewery by embodying physical aspects of their processes.
 - To show how they source ingredients and brew their drinks are fundamentally connected (unlike many other fragmented commercial industries.)
 - To help tell their story when people interact with the spoon– this acts as a visual way to engage in conversation about forest gardening and locally sourcing ingredients.
-





Copping

Copping- an ancient woodland management technique of cutting off branches of a tree to revitalise the rootstock and give the tree a new, longer boost of growth. It takes place in the winter months when the tree is more dormant and energy supplies have been channelled down into the roots for safe storage.



I felt this regenerative process for sourcing wood reflected the sustainable aims of the organisation.



Draw Knife-

I used traditional hand processes to whittle the wood down to the desired thickness and shape. I chose to making the tool by hand, using slow processes, care and craftsmanship. I wanted the act of making to reflect the care and time taken by Old Tree throughout their brewing and foraging processes.

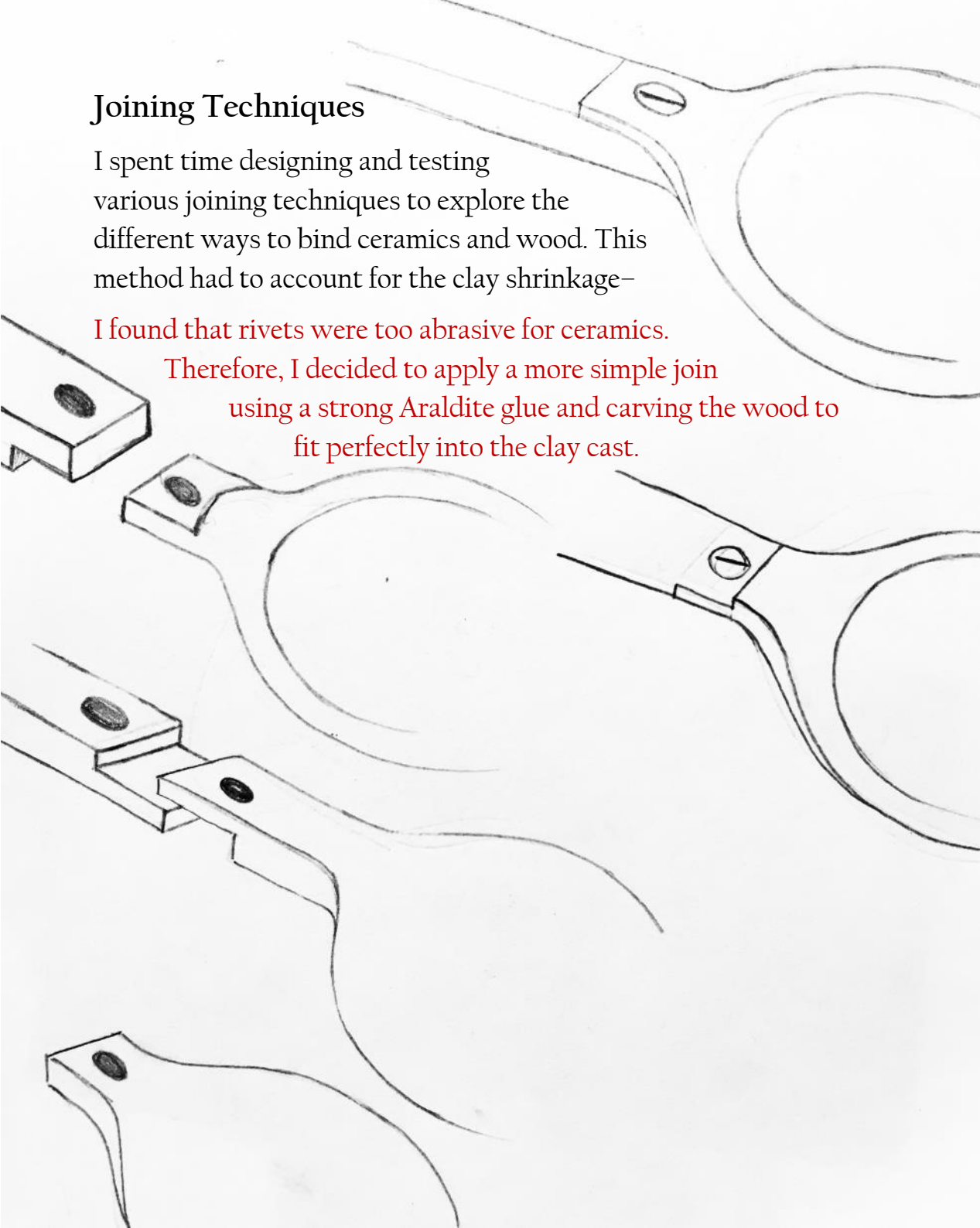


Joining Techniques

I spent time designing and testing various joining techniques to explore the different ways to bind ceramics and wood. This method had to account for the clay shrinkage—

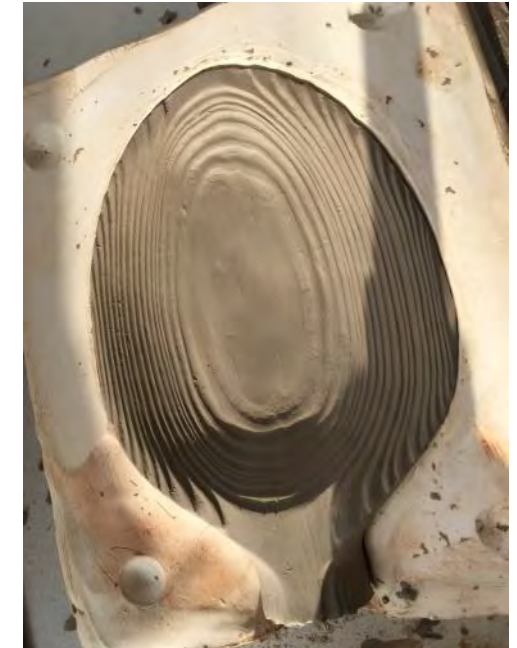
I found that rivets were too abrasive for ceramics.

Therefore, I decided to apply a more simple join using a strong Araldite glue and carving the wood to fit perfectly into the clay cast.





Spoon Carving Process - From Wood to Clay.



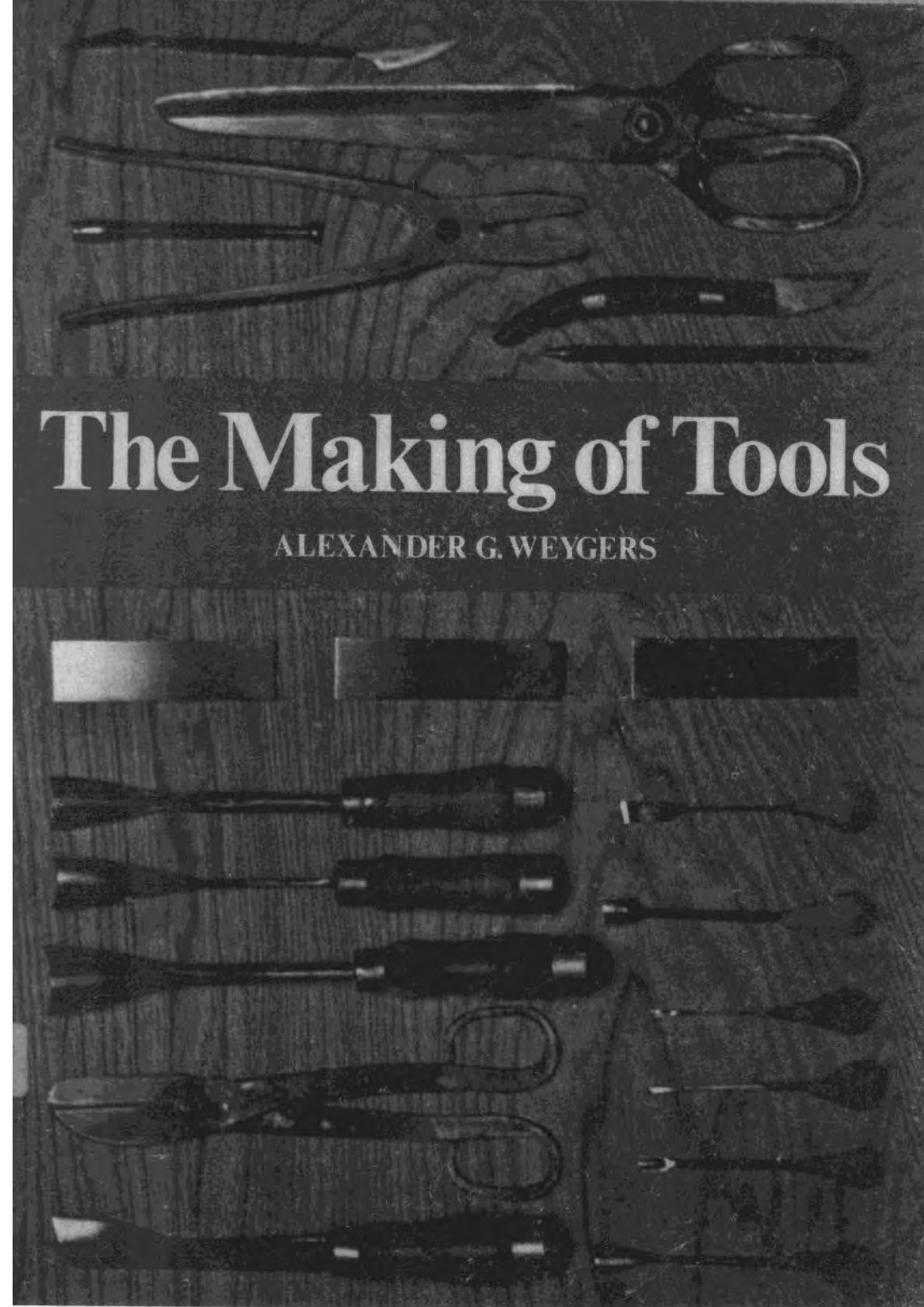


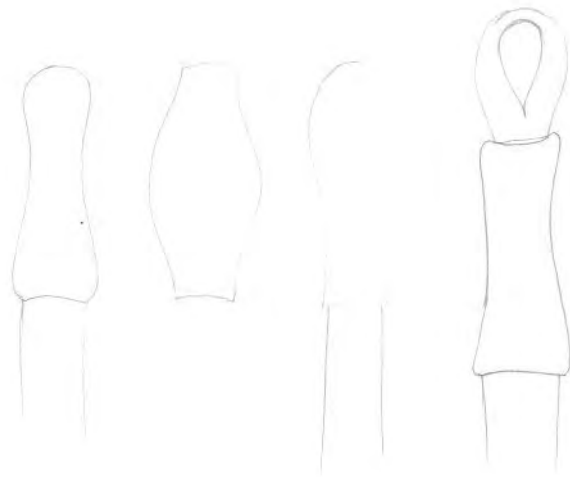
Translating Wood into Ceramics





I was pleased with the result- The ceramic pieces are instantly recognisable as wood, but have a liquid and flowing texture which changes their material properties all together.





Turning Tool Handles

I looked to traditional tool making books to research the shapes of various hand held tools. Many of these objects had ergonomic forms, traditionally turned on a wood lathe.

After testing a variety of forms I chose the most physically comfortable piece to develop into a plaster cast.

This mould could potentially used to make handles for other tools in the future.



Spoon Reflection

On reflection, I 'm glad that I made the decision to keep the wood plain and not add any pyrography drawings as feel that the simple and carefully hand-carved handle is more subtle and refined which focuses on the craftsmanship of the object.

The detail and intricacy of the ceramic sections make the piece look intriguing and unusual which I hope will help to spark curiosity and a desire to find out more about the object.

However, the only aspect that really binds the object to this Brewery is the fact that the wood is coppiced from their forest. To strengthen this, future projects could have more obvious and personal links to the groups they have been made for.





Gifting the Spoon to Old Tree Brewery

I presented the finished piece to Old Tree Brewery at the official opening of their new Fermentation Shop space.

I found that the most interesting part of this experience was passing the object around the group to hold and interact with it. As an object, it provoked a huge amount of interest and curiosity. The tactility and unusual look of it invoked many people to ask questions about why I was making it and how it was created.

This was actually an incredible way to instigate discussions about our relationship with food and explain the way the wood was sourced from the forest garden.

I feel that this is process an incredible way to physicalise issues in a tactile and sensory way.



<https://www.facebook.com/photo.php?fbid=10100157470327851&set=gm.299852267583533&type=3&theater>

Using the spoon to Brew a Batch of Kombucha



First brewing a large batch of sencha green tea and raw sugar for the Scoby culture to eat and ferment.

*S.C.O.B.Y- Symbiotic Colony Of Bacteria and Yeast.





To Function, Or Not To Function? That Is The Question.

As a purely functional object, the size and shape of the spoon was perfect for the job. However, using a fragile ceramic material is less durable than wood and could be at risk of breaking in the tank. Therefore, on reflection, this object exists more as a critical design piece than a functional tool. It is made primarily to be displayed and used to share the work of Old Tree.

Making an unfunctional tool may be an oxymoron which could make it difficult to define within the professional world as it lies between two worlds.

I am yet to fully understand its unique and possibly confusing purpose. I hope that feedback at the degree show will help to reveal a greater understanding of the value of this object.



The Sussex Peasant

Who are they?

The Sussex Peasant are an organisation who support localised agriculture by collecting produce from local farms across Sussex to sell at pop up markets around Brighton.

Within the commercial food industry there is a massive gap of invisibility between farmers and the consumers. The Sussex Peasant are trying to make the process of farming more transparent by giving people the opportunity to connect to where and how their food is being produced. They also provide a vital platform to for local farmers to sell produce outside of commercial-ly dominated supermarkets.

By connecting to local streams they reduce transport emissions, adapt to whatever is seasonally available and put all food waste back into the farming system.



"Our farming is sustainable, our food is traceable, our approach is socially and environmentally minded"

-Edward Johnstone

Founder of The Sussex Peasant



Local Produce

Documenting the Market Experience

Initially, I started my research by visiting the Sussex Peasant Market Stall simply as a customer.

I wanted to document what they were doing differently. What is this experience like as a consumer?

- No Packaging
 - Freshly picked produce with no use by dates.
 - Food displayed loose in crates, outdoors.
 - A Humanised experience- People to speak to who can tell you everything about each crop and where it has been grown/by who.
 - Different types of crops and variations of vegetables that I have never seen before.
 - Non-generic, non-perfect but real and varied shapes and sizes.
 - Different produce each time I visit, depending on whatever has been picked that week.
-

Signage and Communication

One of the main things that I noticed about their market stall was frequent the use of chalkboards and signs.

These allow them to constantly change their signs to adapt to whatever produce comes in each week.

These boards felt like a symbol of seasonal adaptation and flexibility, as well as human communication.



WE ARE
ALSO NOW
DELIVERING
IN THE WEEK
SEASONAL SUSSEX:

- VEG BOXES
- MEAT BOXES
- MIXED HAMPERS

Contact Ed for more
information:

Edward@the.sussexpeasant.co.uk







Exerts from my Interview with Edward Johnstone

Founder of the Sussex Peasant.

What do you think are the main benefits of working with local farms?

I think the main one is the transparency behind where food is coming from. I think that's really important, not only for business but also for the consumer themselves. We have a right to know where our food is coming from. At the end of the day will be put in our bodies as a matter of health, and I think because of that we need to know where things are coming from. Obviously having a direct link to the farmers that we work with means customers can go and visit the farms, see the farms.

“Food miles are pretty irrelevant to us because everything we sell has been grown within

20 miles. So that's a big thing, but also it does drive the local economy as well, which is great.


What do you do with food that doesn't get sold?

“A lot goes back into the production system to feed the pigs, feed the sheep. And then we also run the odd event as well so any waste we have left over, we put things like meat in the freezer and use at the events.”

“The farmers in which we pick up produce from on Thursday, we take the box of wastage that we have, of kale, of lettuce or whatever is, it goes back into the food system, which is then to eat. So it is that natural cycle of managing it.”

With all the benefits, why aren't more people doing this?

Ed: Well it's quite hard work! And it's a very time-consuming thing, you have to have a real interest and desire for it to work in it. It's something that doesn't ever let up. And it's every day of the week. It's up very early, bed very late. It has to become a part of your lifestyle which is not what everyone wants to do... But fundamentally my business would be a lot easier if we just bought from wholesalers, but then we lose everything that were about because the customers wouldn't have a link to the producers. “

A scenic view of a dirt road winding through a field of frost-covered plants and trees, with a body of water in the background. The road is the central focus, leading the eye from the foreground into the distance. The ground is covered in a light layer of frost, and the vegetation is a mix of dark evergreens and bare, golden-brown deciduous trees. In the background, a calm body of water stretches across the horizon under a pale, overcast sky. The overall atmosphere is quiet and serene, typical of a late autumn or early winter day.

“We harvest everything on a Thursday and Friday, and we sell it from Friday, Saturday and Sunday. Which means that even when the customer comes on a Sunday, it was only on the ground two days ago.”



Mabel, The One Eyed Dog,
Greeting us in Plumpton. 8:45am
Research Trip.

The Morning Run- Collecting Produce from Farms Around Sussex with The Sussex Peasant

I wanted to find out more about the realities and processes of working with farms around Sussex.

As an open and honest company, they were more than happy for me to see their processes and I helped with one of the early morning runs to collect veg from different farms.

My aim was to see the 'behind the scenes' workings of running a stall like this, and document the objects involved.

6:15	Meet Barnaby and leave Brighton bright and early.
6:35	Arrive at the base in Pyecombe darkness and scrape ice off the van.
7:00	First Stop collection from the Mushroom Farm in Thakeham
8:08	Arrive at Laines Farm, Cuckfield to collect seasonal root vegetables
8:45	Collect Chard and Leafy Greens at a Farm in Plumpton, greeted by the one eyed Dog.
9:15	Final Stop for the morning run, collecting Organic Eggs.
10:25	Get back to base to begin preparing the Market Stall Truck for the next day.



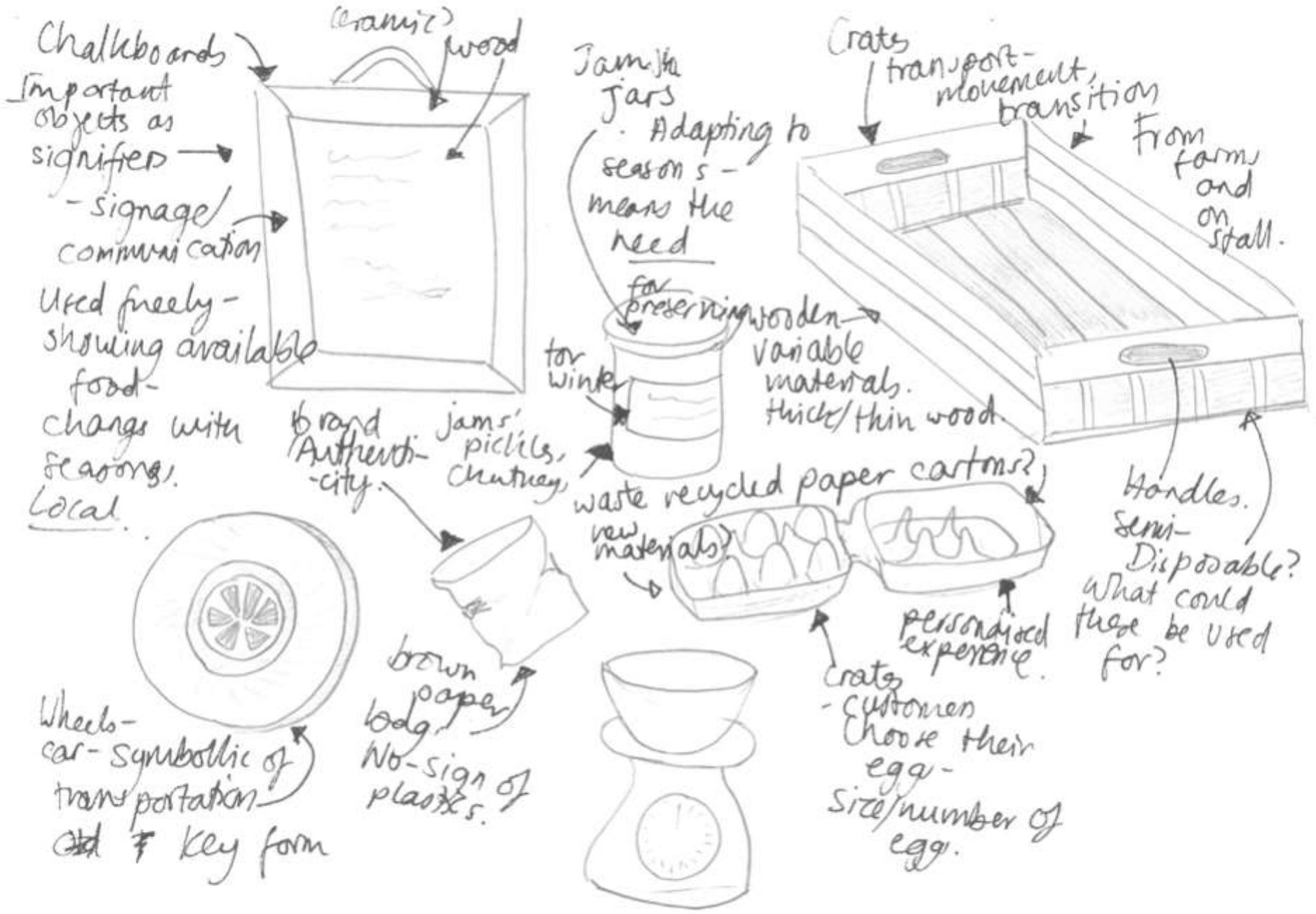


35mm Film Documenting Sussex Farms

Using photography to openly observe the colours, forms and objects tools and processes along the journey.



Analysing Important Objects





Reflecting on my Research

My initial idea was to make a chalkboard, as a symbol of transparency and communication. I feel that the main strength and power of this organisation is way that they are finding ways to reconnect producers to consumers.

They are PHYSICALLY the missing link between farmers and consumers by transporting the crops between places.

And they keep this gap on a human scale by COMMUNICATING with customers, through conversations, signs and social medial.

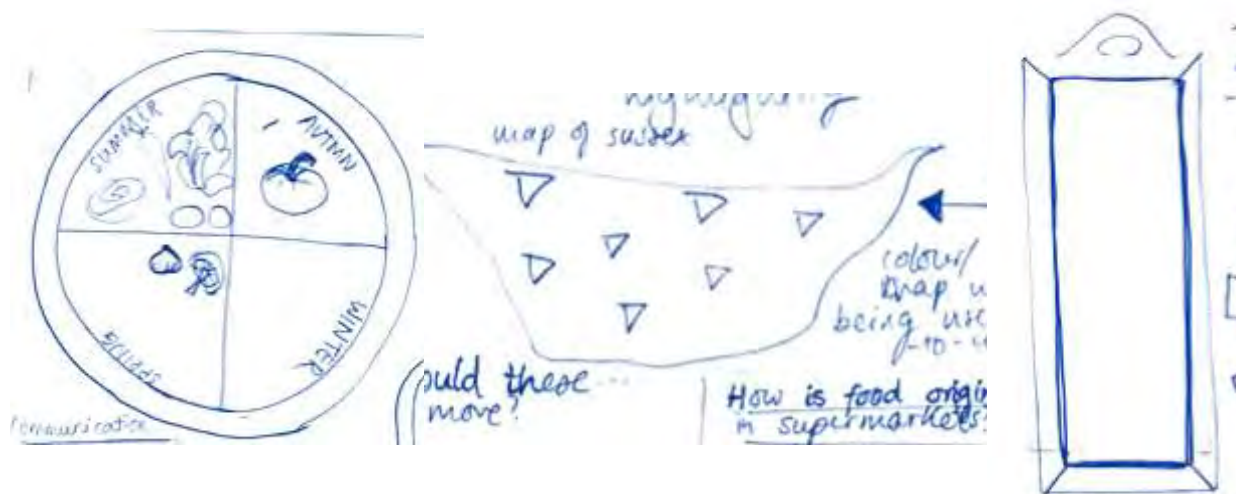
Objects, Ideas and Designs

After discussing my ideas with Ed, we collaboratively decided to alter the idea for a simple chalkboard- to instead create a map of Sussex to display the close distances and food miles of all of the farms that produce is collected from across Sussex.

I felt that this was a vitally important and strong aspect of their system which helps to connect people to their food, their locality, and makes customers think more about their control over food miles.

Furthermore, this fundamental aspect of this organisation is not clearly visually shown at their market stall.

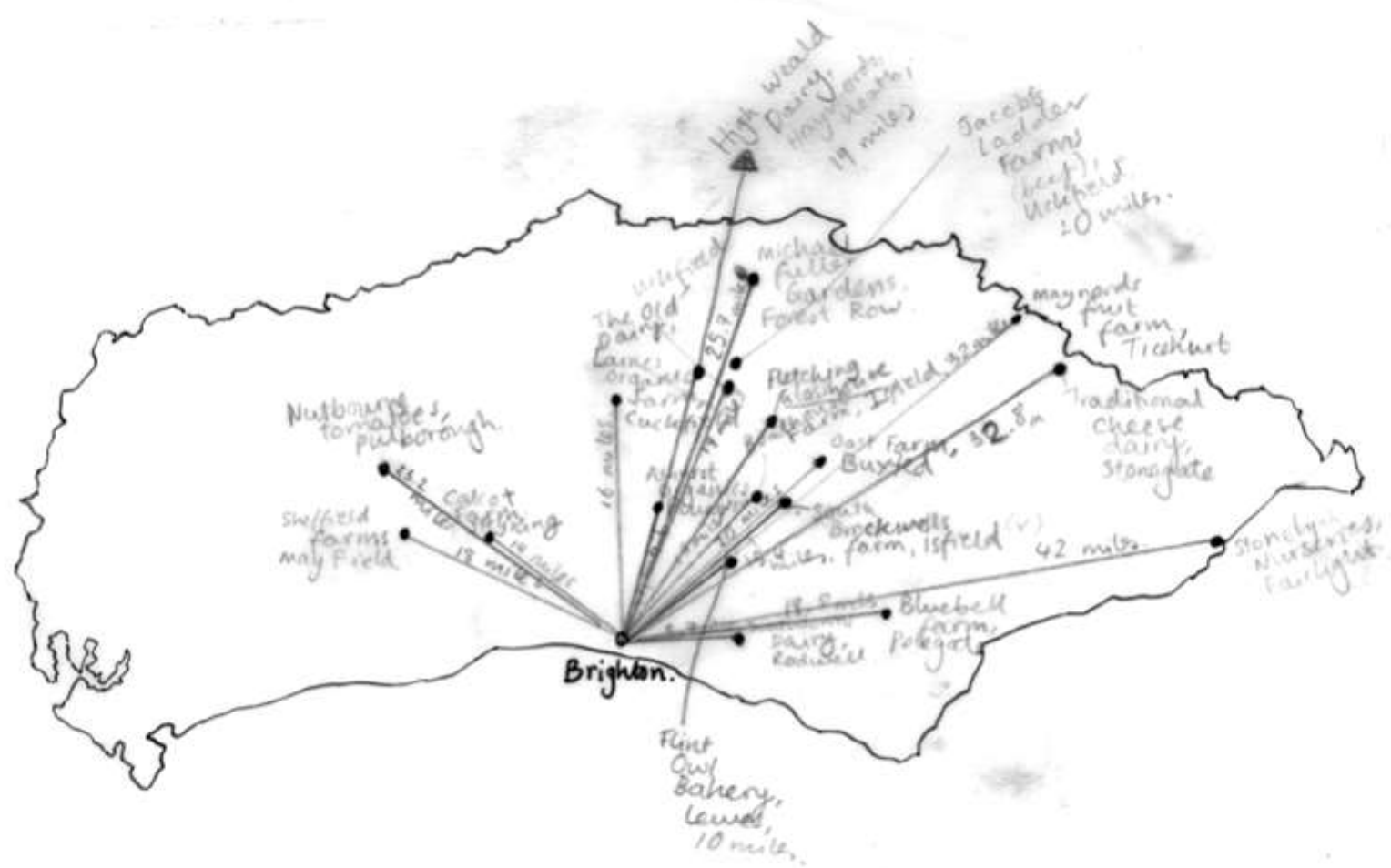
I hope that by making them a map, it will help to re-enforce this close proximity and connection to local consumers in Sussex and help to encourage more meaningful connections to the food if customers can trace on the map exactly where it is coming from.



- ✓ Sheffield farms, Mayfield ✓
- ✓ H. Horst Plumpton? ✓
- ✗ ~~B. Bonate, Novera, Bona~~
- ✓ Michael Hill Market Garden, Forest Row
- ✓ Phebe's farm, Eastham
- ✓ Calicut farm, Staying ✓
- ✓ Lane's organic, Uckfield
- ✗ ~~Michael Novera, far light~~
- ✓ Old Dairy, Dandell
- ✗ ~~Spang's farm, Bona~~
- ✓ Sotbrowells, Isfield.
- ✓ Nutbore farms, Northoe.
- ✓ Archibald Clave, ~~Waverley~~
- ✓ Southdown Dairy, Rodwell
- ✓ ~~Ben~~ Oart farm, Bosted.
- ✓ High Weald, Forest Row
- ✓ Lint Owl, Leves
- ✓ Bonthorn farm, Isfield.
- ✓ Maynards, Ticehurst
- ✗ ~~Mr. Pignott, Lutgea~~
- ✓ Jacobs Ladder, ~~Staying~~
- ✓ B. Bonate, Roneys, Bona
- ✓ Hatching glassbone - Gethin

Visually Mapping Farms and Distances

Ed wrote me a list of all the producers they connect with. I used this to visually map each farm's location and find out the food miles between each farm to Brighton where all the produce is sold.





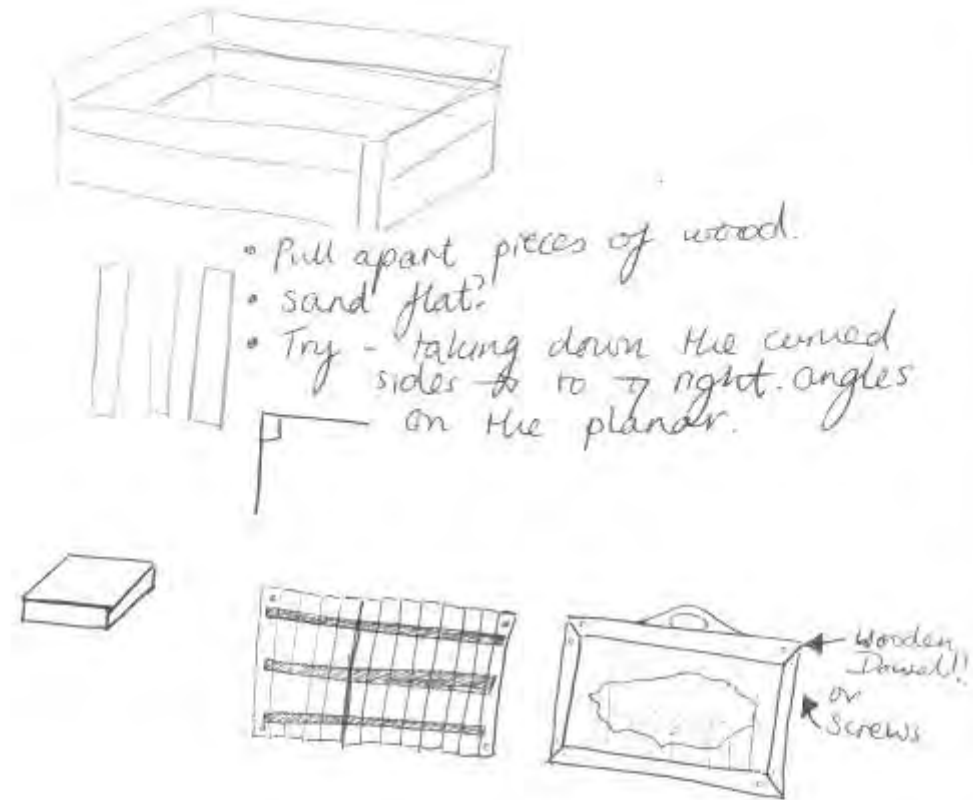
Materials from Farm to Market

Tracing the Materials back to the Root.

For the Sussex Peasant I wanted to capitalise on their close and personal connections to local farms and producers. I discussed options in a phone call with Ed about how I could source wood that would be meaningful and integral to them. We decided to re-purpose wooden pallets which were previously used by the farms to harvest and collect crops.

The wood for these was very worn and full of wood-worm which in some cases meant the that it was too weak to use. However, from the crates which were less damaged, I managed to salvage some of the struts to plane and sand them.

This visually and physically creates a direct link between the farms and the market stall.



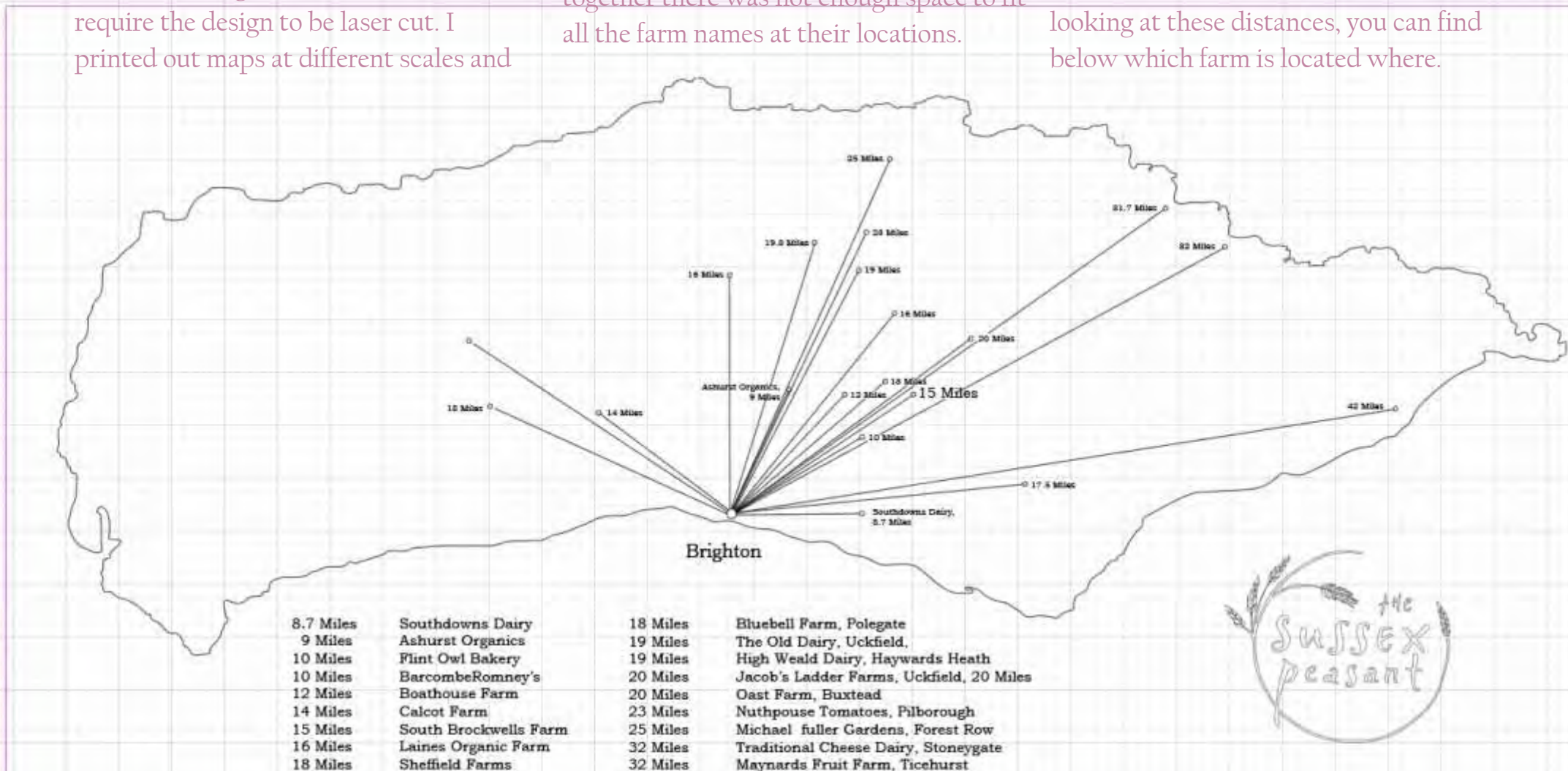
Designing the Visual Communication.

After experimenting using a pyrometric pen tool to burn the design into the wood by hand, I decided that the amount of detail and intricacy needed for clearly communicating the information would require the design to be laser cut. I printed out maps at different scales and

explored a range of different designs for communication on Rhino and Illustrator CAD modelling software.

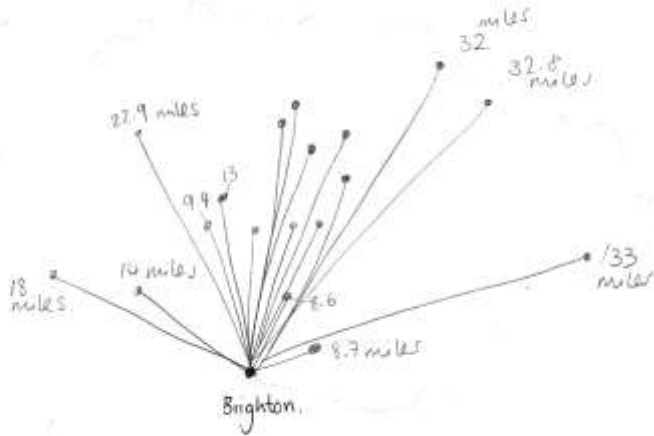
As the farms are located so tightly packed together there was not enough space to fit all the farm names at their locations.

However, instead of making a key, I decided to capitalise on the most important aspect of this which I am trying to communicate, which is the distances and food miles between locations. From looking at these distances, you can find below which farm is located where.



Trial and Testing

Working with laser cutting is a fairly distant process, which requires meticulous planning and accuracy to make sure you can visualise the piece exactly as you want it without having a connection to making it. Therefore I made tests pieces trying out different styles and letter sizes before designing my finalised piece.





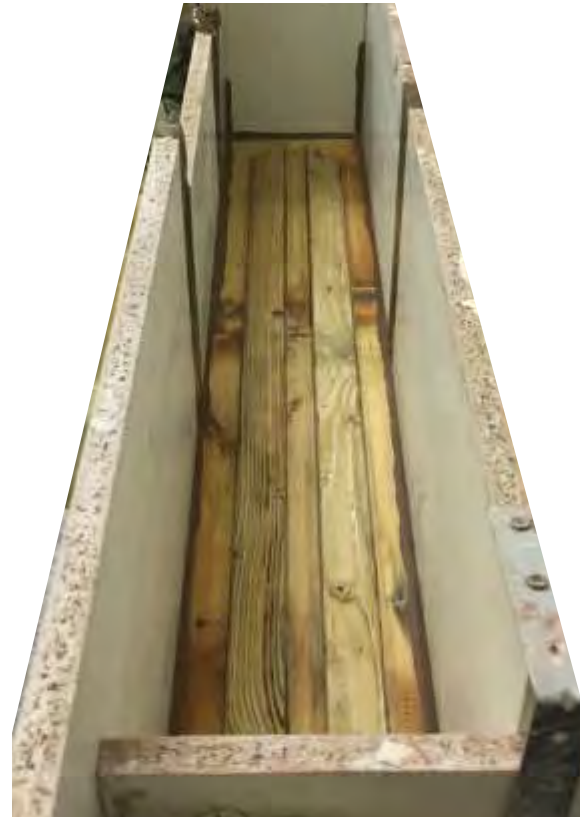
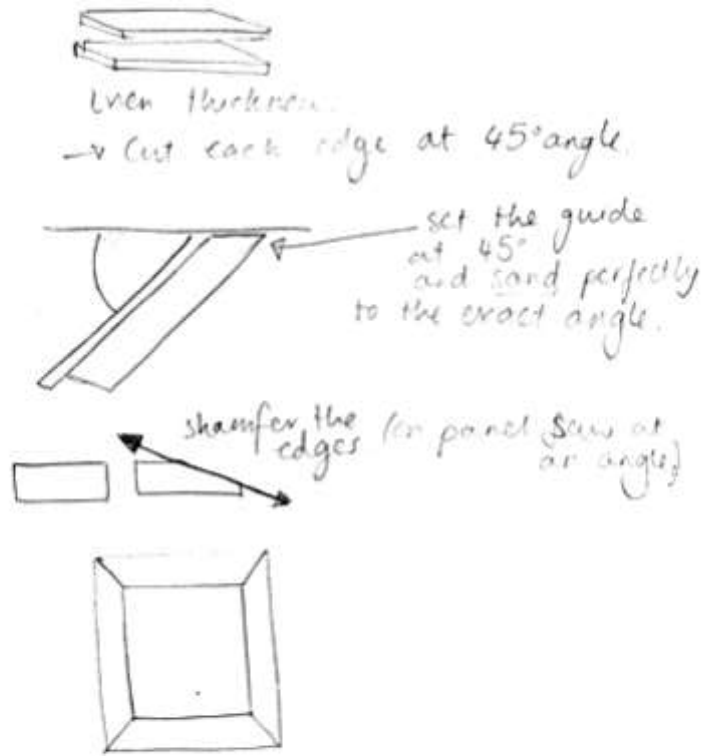
The Making Process.

Making the frame started with testing making at a smaller scale to understand the casting processes and techniques to connect the cast clay sections together. I decided to cast each side of the frame separately and join them together when leather hard.

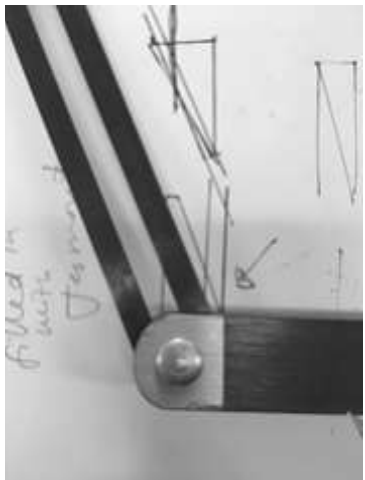
However, early tests firing these showed how delicate and fragile the thin pieces are when being moved around.



Scaling up



All angles and straight edges become heightened on a larger scale, and I worked hard to make the original wooden masters as accurately and precisely as possible.



Complex Firing Processes

Unfortunately as this piece is so fragile, I had try firing it in a variety of different ways to find a technique that would avoid cracking. As the clay will shrink rapidly in firing, I initially made a crank base fire with it for extra support underneath. Any small gaps between kiln shelves or uneven surfaces could lead to cracking. I used alumina to allow their pieces to roll smoothly over the shelves.

This entire experience has taught me so much about the limits of slip casting and fragilities of porcelain work.



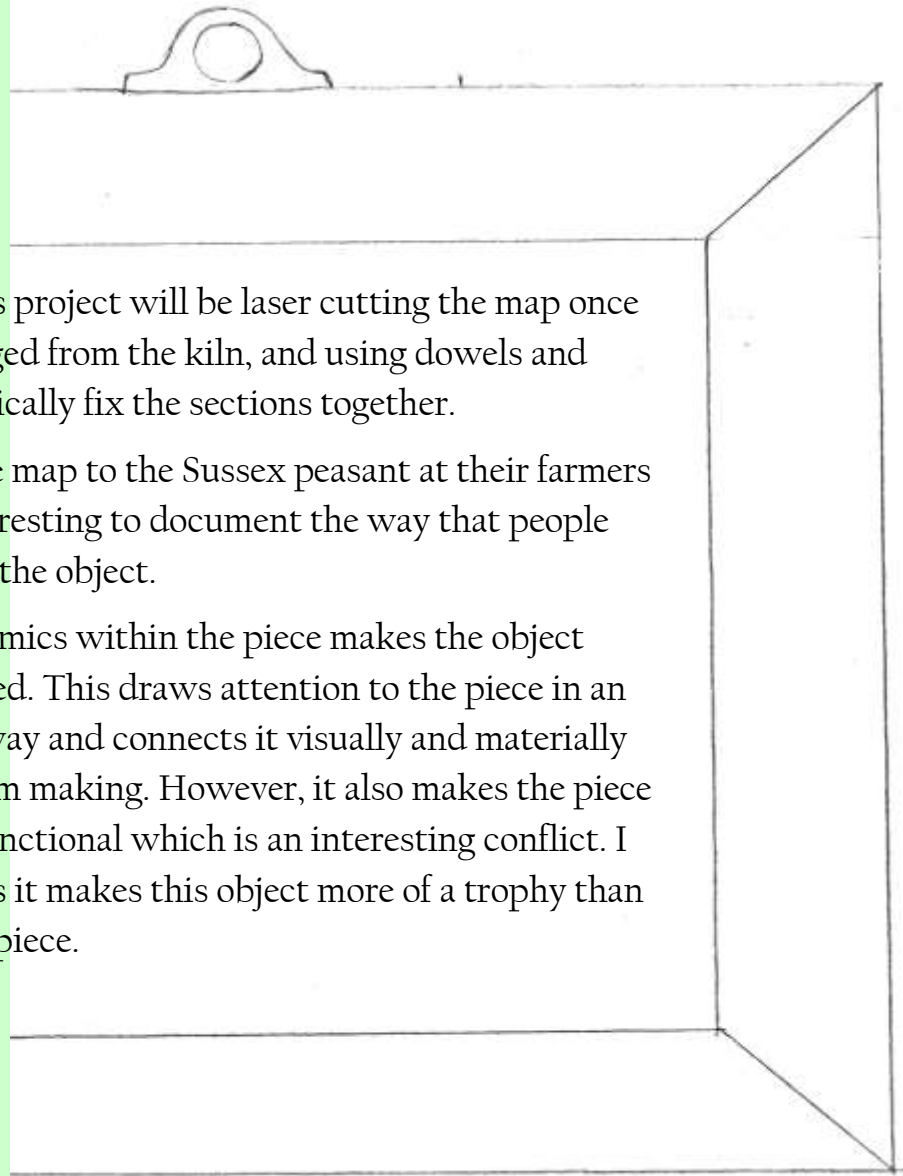


Moving Forward

The final stages of this project will be laser cutting the map once the frames have emerged from the kiln, and using dowels and glue to fix the aesthetically fix the sections together.

I will then present the map to the Sussex peasant at their farmers market. It will be interesting to document the way that people use and interact with the object.

Again, the use of Ceramics within the piece makes the object more fragile and refined. This draws attention to the piece in an unusual and artistic way and connects it visually and materially to the other pieces I am making. However, it also makes the piece less robust and less functional which is an interesting conflict. I feel that in many ways it makes this object more of a trophy than a functional working piece.



Reflecting On This Project So Far

Although laser cutting will provide a much more 'professional' outcome for the finished piece, reflectively I feel it undermines my intentions to make these objects by hand rather than using industrial production methods.

I have felt disconnected from this piece by lacking a connection to the physical materials through making. I have also found it nerve wracking to rely on software outside of my control. Once the file is completed I have no power but to wait and see what the finished result is.

Whereas, when making by hand you can physically gage by eye the forms and sizes to adjust as you work.

I fear that the finished piece could also lack this human level of connection by looking man made instead of personalised.

This has re-enforced why I think it is so important to make objects by hand. I feel even more determined to find ways of handcrafting my pieces for future projects.



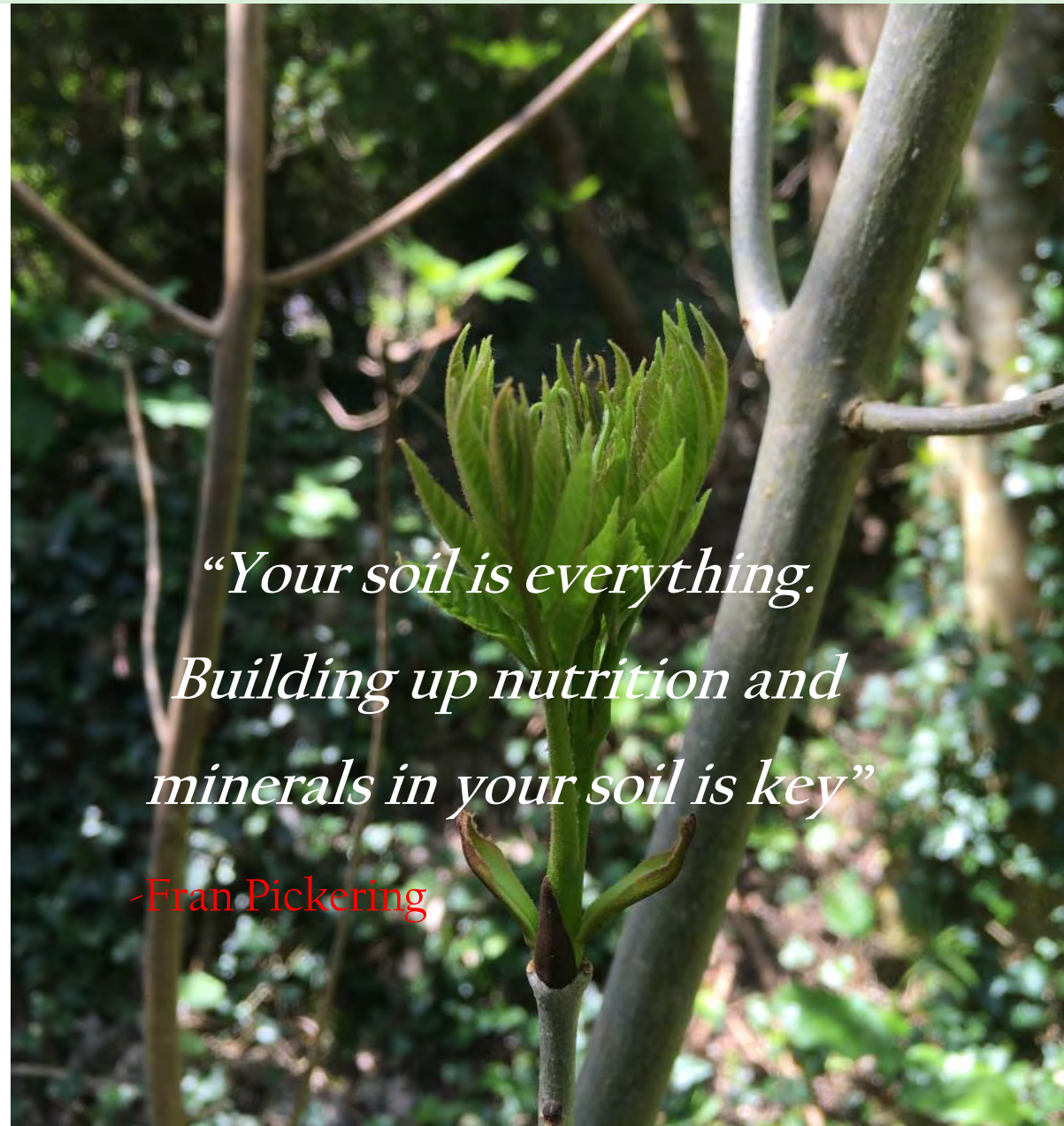
The Brighton Permaculture Trust



What is the Brighton Permaculture Trust?

The Brighton Permaculture Trust is a charity set up to protect the environment by educating people about the possibilities of greener lifestyles. They run a variety of different courses covering various aspects of sustainable development across farming and building.

Their allotment site is Based at Stanmer Organics, where they maintain a permaculture plot for education.



*“Your soil is everything.
Building up nutrition and
minerals in your soil is key”*

-Fran Pickering

***‘Inspiring, connecting, learning:
for people and planet to flourish’***





What is Permaculture?

Permaculture is a philosophy for creating sustainable ecosystems that was developed fairly recently in the 1970's. The word 'Permaculture' means permanent-culture with the aim is to create agricultural systems that mimic natural ecosystems. It values diversity and the complex dynamics within the natural world by taking a more holistic approach which aims to have as little negative impact as possible on the environment.

The Key Principles

- **Use Biological Functions:** Natural non-harmful materials.
 - **Multifunctionality:** Many uses and various supports.
 - **Diversity:** increasing diversity increases resilience.
 - **Energy Cycling:** Using energy in the least impactful way.
Reduce, Reuse, Recycle.
-

How could I use Permaculture to Approach Design?

I have realised that these ideas can be applied to all forms of design and are emerging in theories such as 'cradle-to-cradle' design systems.

Questioning the materials I am using:

- Are they sustainable?
- Can I find a biological alternative to harmful materials?
- Can I use low-impact methods of manufacturing?

For this piece, I will think about my inputs and outputs.

I can use my analytical and observational skills to deconstruct the spaces that I want to implicate my designs to make sure they are adaptive.

Exerts from Interview with Fran Pickering

From the Brighton Permaculture Trust

What do you feel are the biggest issues with the food system we have today?

“We’re living in a paradigm at the moment which is about food for profit

and food as part of a massive system earning profits. But if food is about growing food to eat, then it doesn’t have to be ever sold does it?

We are one of the most dangerous forms of activism. By not partaking in the capitalist system of consumption we are heretics to that system. You look at dig for victory in the Second World War. People grew in their gardens in order to be able to survive hunger. So, I suppose agriculture is much more about enabling people to take the burden off that whole system and possibly become less wedded to it so that they are able to make their own food.

What is your biggest challenge?

“Our biggest challenge is that we’re a small site, surrounded by monocropping culture. So, we have bees, we work very

hard to keep our bees. But they could so easily be wiped out by just going into the neighbouring fields and being pesticides.

What is a Forrest Garden System?

“We are looking at forest garden systems which, effectively runs nutrients on a low system, rather than on digging deep and bringing up fossil and carbon. You’re actually recycling at a very quick pace. The leaves fall off the trees, then unify the soil and then that tree takes that backup and then that goes into the system. Whereas what we do without linear farming or our large-scale monocropping, is digging up nutrients and minerals out of the ground. Ferrying them somewhere else and pouring them en masse onto the ground that is now depleted in order to grow something. So, there’s no life in the soil.”

How could agriculture be supported more by governments?

“We are losing allotments as we speak...


..to this idea that we need more houses. And they’re using growing land which is bonkers. I think they should definitely be encouraging more people to grow and making it more available.”

What do you think is the best way to create a more sustainable future?

“I actually think you can get further if you can imagine a better future. Human beings move forward, by imagining what they want to move into. It’s very difficult for us to do anything if we don’t actually have a vision. But a lot of the visions around at the moment a very dystopian...

“We actually have to start creating very viable, very enticing pictures of the future.”

It’s about schools as well, we do a lot of eco-clubs. The parents are quite open to it. I think in that sense children really are a key player in that transition. Definitely.



“We are one of the most dangerous forms of activism. By not partaking in the capitalist system of consumption we are heretics to that system.”

- Fran Pickering

The Brighton Permaculture Trust

Research Trip- Volunteer Allotment Day

The BPT holds ongoing volunteer days at their Permaculture plot at Stanmer Park. These days are open for anyone to join in learning various farming methods and practices throughout the year and is an incredible voluntarily run way of sharing knowledge.

Documenting the trip:

9:30am	Cycle to the site at Stanmer Park and follow instructions to find the plot.
10:00am	Other volunteers arrive and gather for a tour of the site, showing the types of plants and agriculture practices in place around the area.
11:00	Learn about propagating crops using 2 different methods. Set to work collecting cuttings from a willow tree to plant out into smaller pots.
12:00	All gather in the Polytunnel for a communal lunch feast with freshly picked lettuce. Meet the other volunteers.
1:00	Spend an hour mulching around some newly planted trees and then carry some wood logs onto the site. ‘
3:00	Finish and pack away tools.



I focused on documenting the tools and active objects that play a key role in this process to pass on skills to others.



Reflections On My Findings

The core strength of the Brighton Permaculture Trust is physically taking action through Gardening and Education. They play a role in the sustainable movement by passing on the skills and awareness needed to give people the autonomy to take some control over our food systems in a sustainable and localised way.

Collaboratively
Identifying
Key Tools.

After analysing the objects and tools used on the Allotment, I felt that none of them directly inked to the Brighton Permaculture Trust, as they are all used commonly for gardening.

I contacted Fran Pickering to discuss if there any significant tools that she thought specifically related to the organisation.

Instantly, Fran expressed the significance of their A-Frames which are used to teach with across many of their permaculture courses.

The tool closely embodies permaculture principles by enabling you to adapt to the water flow in the natural landscape by tracing out the contours in the land.





Sourcing my Materials

I focused on using Permaculture principles to source the wood for this piece. I did this by salvaging second-hand pallets from an abundant stream of waste pallets found around Brighton.

This was to create a minimum impact on the environment by using recycled, second-hand materials.

Abundant Pine

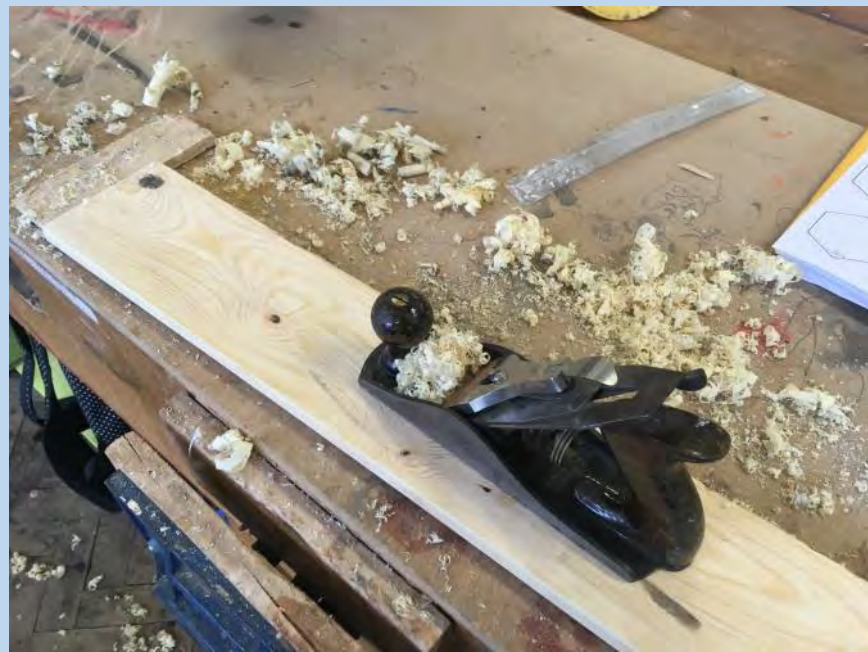
Most of this wood is cheap, low quality Pine, which fortunately is lightweight and easy to carry, making it a suitable material for this portable A-Frame.



Pulling apart pallets from scratch
requires hammers, a crowbar...

...and Lots of elbow grease.







Making Within to Permaculture Principles,

I decided to make as much of this piece as I could using hand processes and avoid machinery that used power and electricity to make this as sustainably manufactured as possible.

Above- Sandblasted and hand sanded re-claimed pine exposing the natural grain textures within. By finishing the wood to a high degree I was able to restore a level of craftsmanship and care to this damaged material.

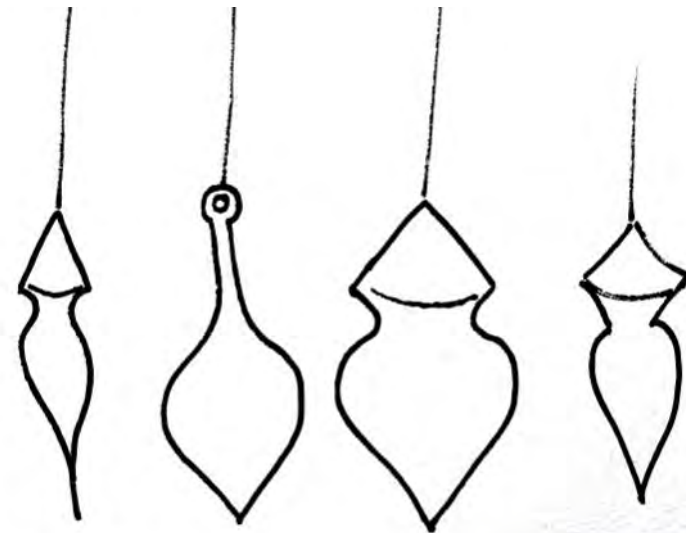


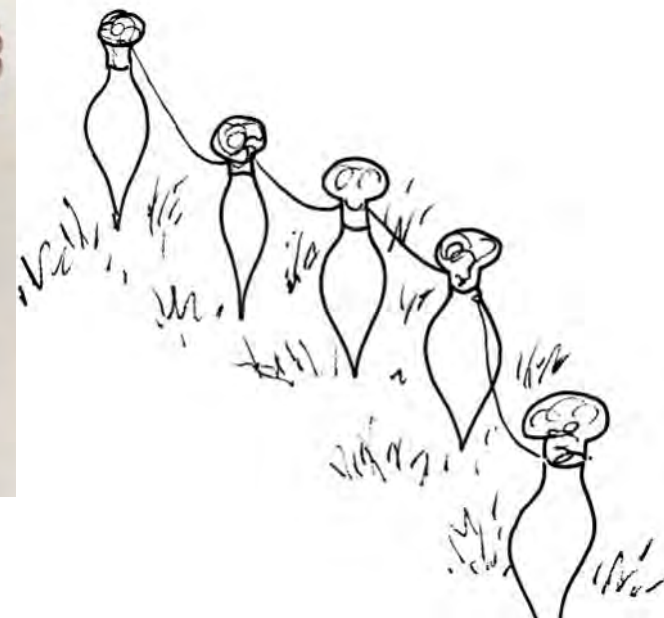
Plum Line

In order to make this object match the other pieces in the set, I selected the sections to be made from ceramics.

I chose the plum line bob. This section needs to be heavy enough to weigh down the line, so using ceramics was functionally suitable.

I turned the wood on the lathe before sandblasting.





Ground Pegs

The second part of this piece is a set of pegs to use as markers into the ground to plot where the contours lie.

I designed a piece to be tuned wood with a ceramic wood-grain stopper





Capturing the Object in Use

After the piece is finished, I have pre-discussed a plan to bring the A-Frame to an allotment day and document Fran using the object to teach the landscaping techniques to volunteers on the day.

This will be a great way to gauge people's responses to the object, and to measure its functionality.



Reflecting On The Project So Far

On reflection, I feel that this project has pushed me to explore using waste materials, which is a more sustainable approach to making. Even though it can take more time and effort to source the right wood and work it back to a good quality. It reduces our need to cut down even more trees- which is something I would like to explore further in the future.

The Brighton Permaculture Trust



The Brighthelm Centre.

The Old Tree Brewery.

The Sussex Peasant.

The Brighthelm Centre

Growing in Cities?

For this project I worked slightly differently. Rather than making an object that defines a process, I focused on making a site specific piece that could re-enforce our connection to the natural world within cities. This deals with issues of disconnection from food and agriculture from a different perspective.

The Bright Helm Centre in Brighton

The Bright Helm is a community centre in the heart of Brighton that has a garden space open to the public.

I organised a meeting with one of the Bright Helm managers who explained how the centre is used by lots of different groups. mostly with a focus around sustainability, such as the protest group 'Pesticide Free Brighton.'

How could the groups using this space be unified around their topic of sustainability? I wanted to develop a physical piece of work to increase ownership of the space and encourage collaboration.



Urban Agriculture

Green spaces like these are rapidly diminishing in cities as space is often privatised and developed. These parks provide spaces of calm and connection to the natural world within the built environment, making this an interesting site to promote.

Protecting and promoting green spaces is not just for the benefit of biodiversity and wildlife, but for the physical health and well-being of people too.

National Park City Movement

I have taken inspiration from the re-greening movement working to turn London into an official National Park. It culminates various projects that integrate agriculture into the built environment.



Map of London's Green Spaces

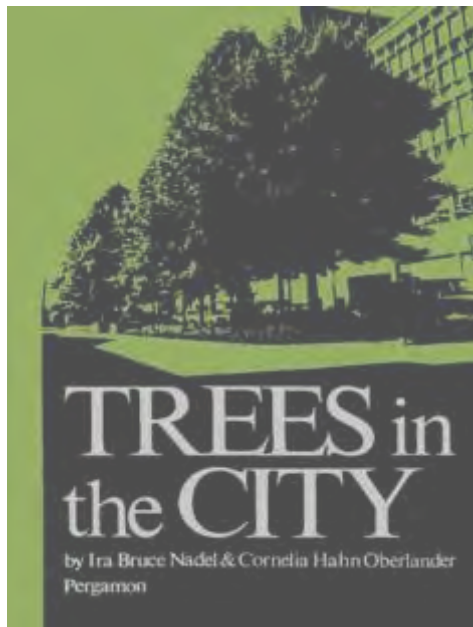
The Biophilia Hypothesis

Edward O. Wilson

Supporting Theory

The Biophilia Hypothesis suggests that humans evolved within the natural world and have an innate attraction to that which is living. Biophilic design incorporates natural materials, textures and patterns into the built environment to create spaces that positively impact our physical and psychological health.

Researching Urban Agriculture



The Importance of Trees in the City

Can you imagine living in a city with no trees?

Last year, over 10,000 trees were removed by council chainsaw crews last year alone.

A quote from the book 'Trees in the city' suggests that "they give a sense of harmony and softness to the man-made environment of concrete and steel. In our over-populated century, it is necessary to return the trees to our streets, to humanise the cityscape."





The Skip Garden,

Kings Cross, London

Another amazing project which I visited and documented is the Skip Community Garden in Kings Cross. It is a portable edible garden designed by the Bartlett school of Architecture. The whole garden is made from waste industrial materials. Skips are used as containers for growing apple orchards as well as wormeries and polytunnels.

How can we creatively utilise materials and urban spaces?

Octavia's Orchard

By JAILmake and The National Trust, Southbank, 2003

The Octavia Orchard is a project which aims to bring trees into the built environment using waste bins as portable containers. The orchard is moved around the city to different public spaces where people are encouraged to tend and pick the fruit.

<https://www.riverofflowers.org/wild-city-blog/tales-city-bee-pastures-and-urban-forests>



Inspiring
Projects
Re-Wilding
Urban
Spaces.



Analysing the Site

I used Permaculture Design methods to analyse the space and observe what already exists in the environment in order to adapt to it.

Un-Themed Observation

First, I began by carrying out an 'un-themed observation' by spending 20 minutes in silence allowing a 'childlike' approach, only using my senses to gain an emotional, incremental understanding of the space.

What could I see? What could I hear? How did I feel?

I used these instant experiential observations to consider how the atmosphere, light and sounds changed in different areas.





South – Facing walls

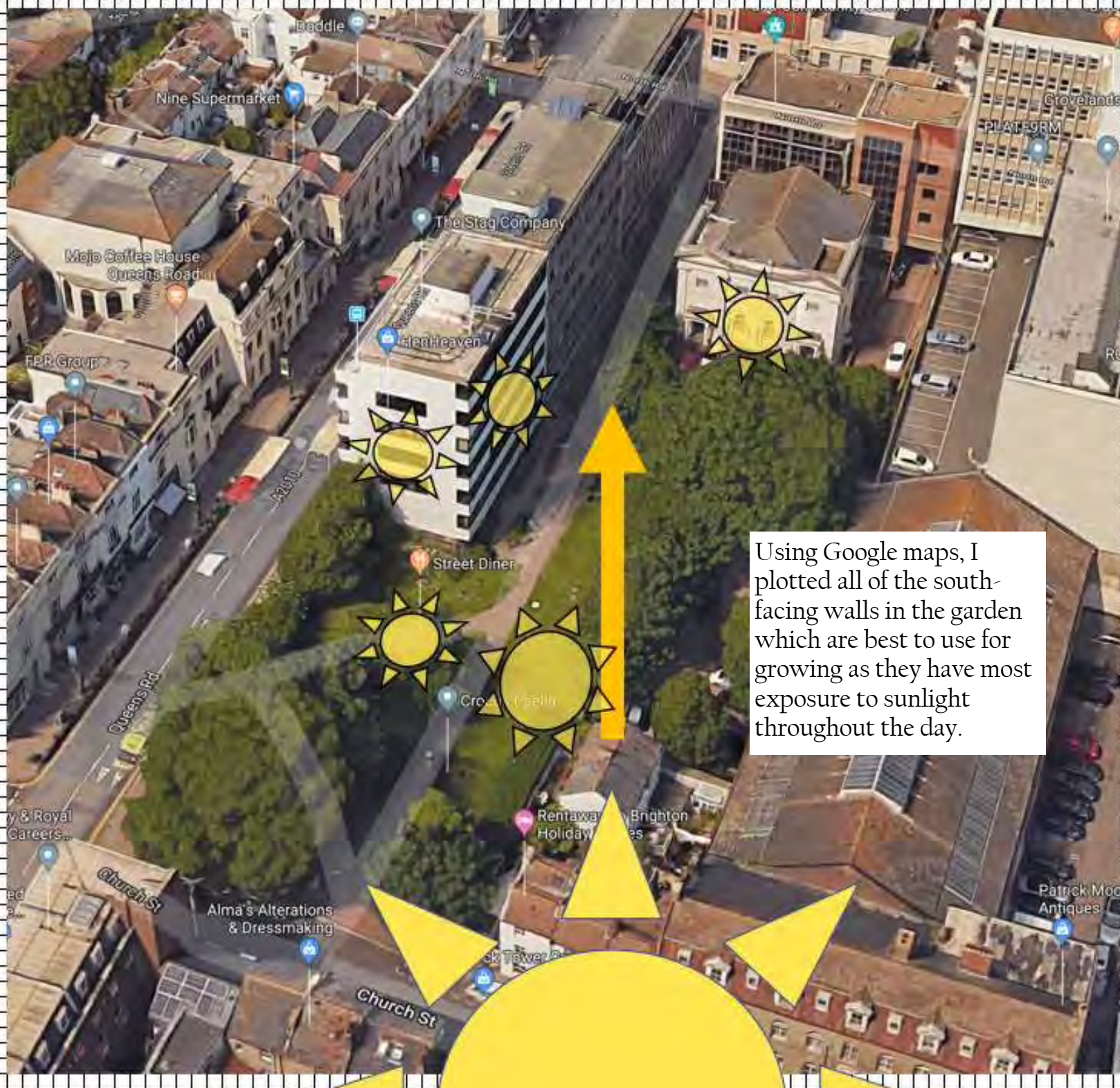
Looking for sun spots

Themed Observation

What exists already?

What is the landscape like?

I looked for places that had Soil, sunlight or water.



Using Google maps, I plotted all of the south-facing walls in the garden which are best to use for growing as they have most exposure to sunlight throughout the day.

Mapping the area

What is in the close vicinity?

- What are the social aspects? Who uses the space?
- Where are people coming from?
- What are the types of buildings around the area?
- How does this affect the garden?



Area Analysis.

BRIGHTON CENTRE

Roads above primarily Residential

Train station
central point of commuting
flowing to and from

↑ Uphill



Protection of inner city green spaces.

other green spaces in the central area.

at risk to development



The Bright Helm centre

Main Road into town/beach runs directly next to the garden
pollution/noise/cars/commuters

Roads leading down towards the lanes.
(shopping, tourists)

Downhill.

Community spaces - cafes - restaurants, shops & businesses lining the main road.

High foot-fall in this area
→ Not always local residents.



Reflecting On My Findings

From my meeting with Katie Love (Organiser) I found that although the centre is used by many different groups there is very little interaction.

Therefore, I thought about designing a piece that could encourage collaborations between various groups and reinforce their shared connection with sustainability through a collective urban agriculture project.

As the garden is passed through by many commuters each day, I couldn't construct anything on the ground that might block the pathways.

Instead, my observations of the site drew my attention to the underused wall spaces on the site.





Designing Green Spaces for Interaction and Joint Ownership.

I proposed two ideas to the organisation:

From this I began designing sculptural wall planters to make the garden feel more welcoming.

This piece focuses on finding a ways to regenerate the green urban space by giving a sense of shared community ownership to the groups who use it.

I felt that designing a project that encourages better use of the garden could also help to reinforce the centres core focus around sustainability.

Option 1- Run a workshop for the members of the space to make individual modular pieces to be placed into the site as one wall mural.

Option 2- Making the planters myself and inviting each of the groups to choose a plant of their choice to grow in each piece.

Unfortunately, the organisation felt that it would not be possible to run a collective workshop for all as people use the space at different times.

Exploring Biophilic Designs

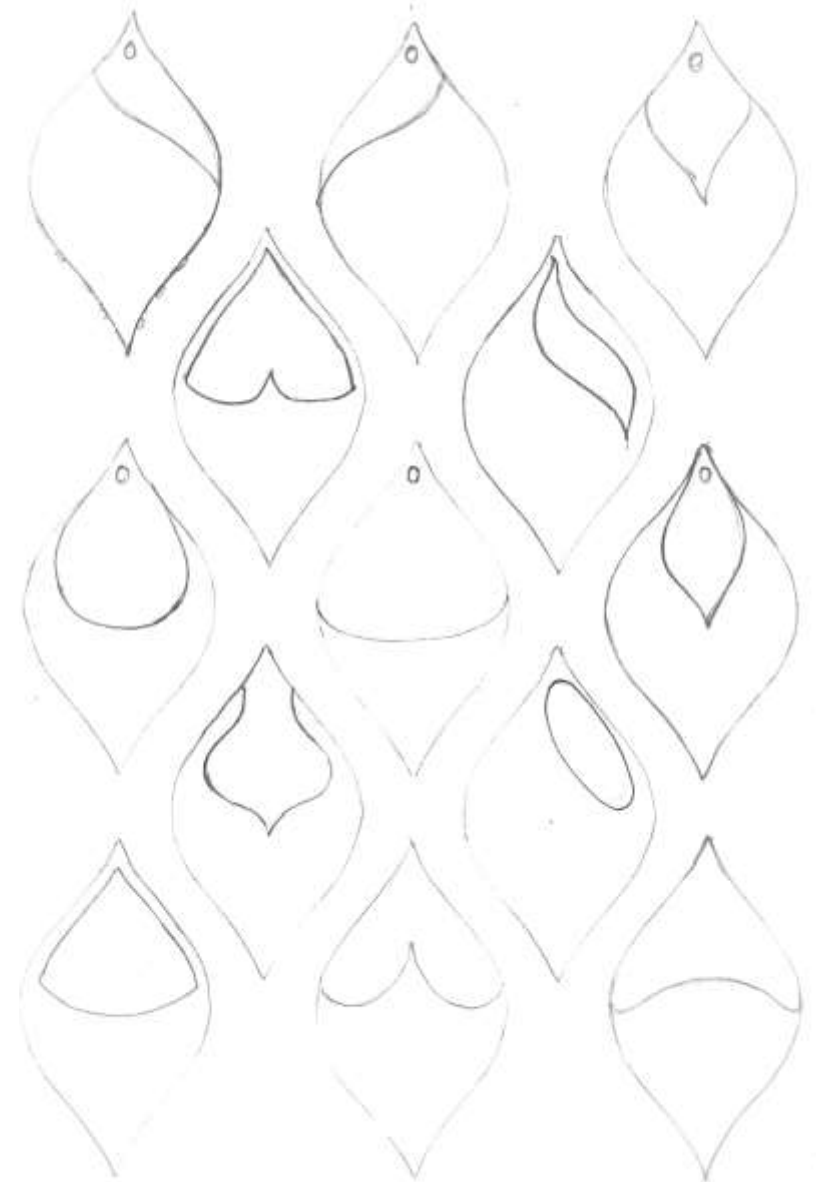
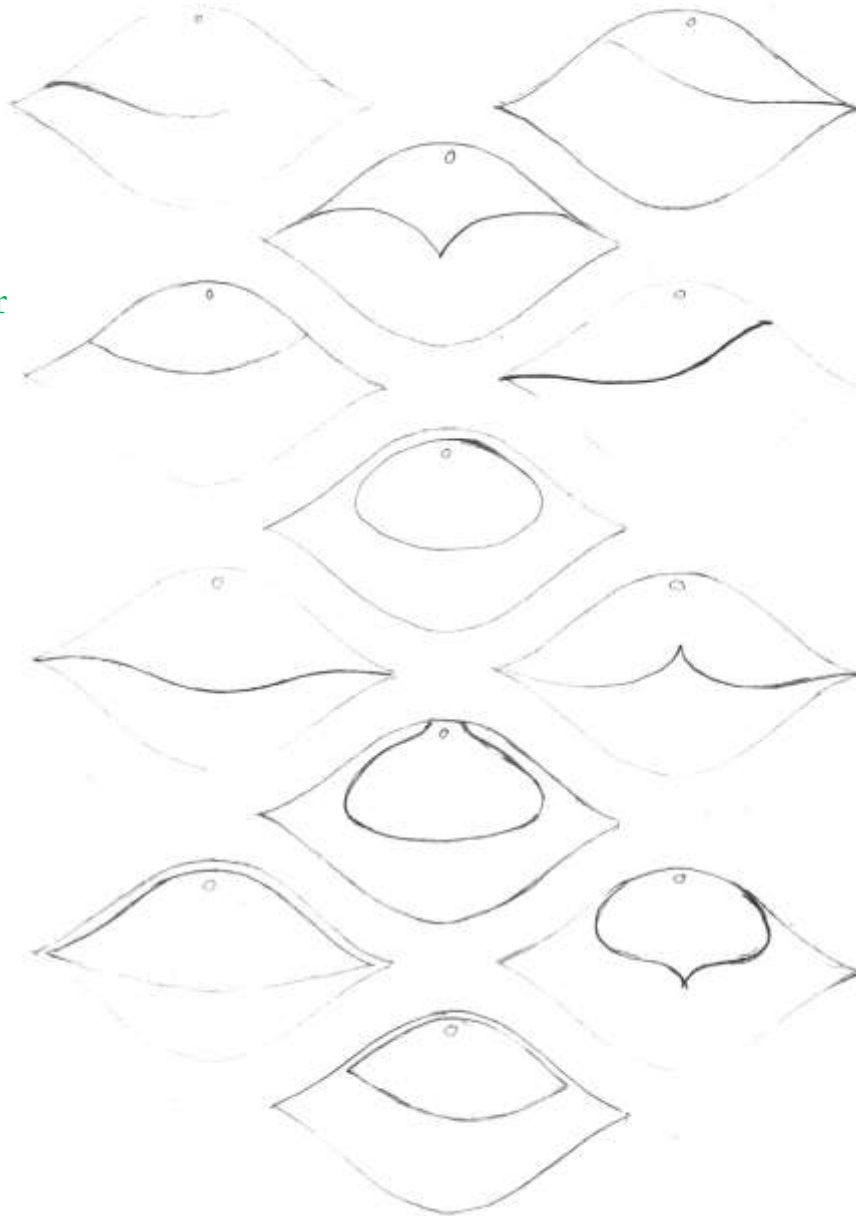
- Testing the patterns, forms and layout of the pieces

The Texture

These planters have a natural wood grain texture to link them into a set with my other pieces, and also bring natural textures into the built environment.

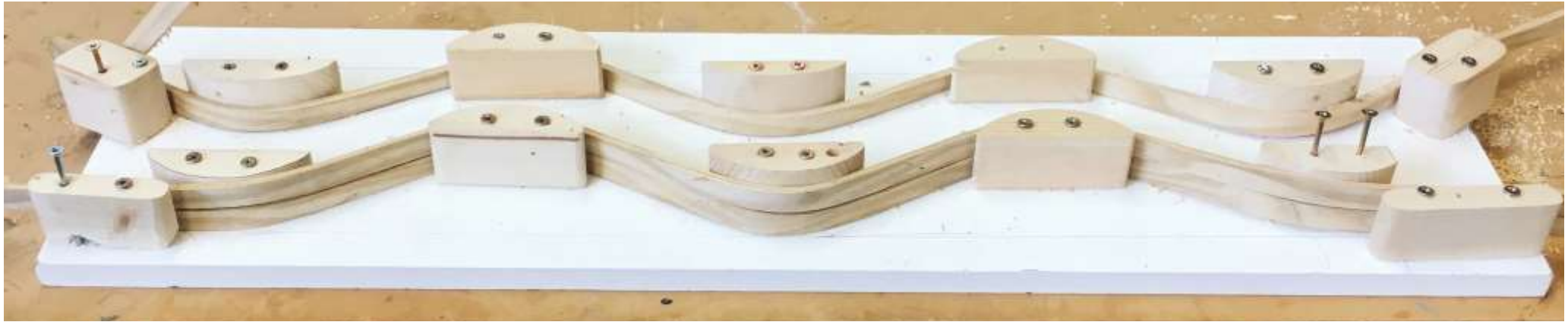
The Form

The Modular curved shapes are inspired by seed pods, and aim to bring fluidity and organic forms into the concrete, angular landscape





Designing a Modular System– Steam Bending Structures and Planters.



Steam Bending

I began by physically exploring steam bending to design a way to structurally join the planters together within a modular system.

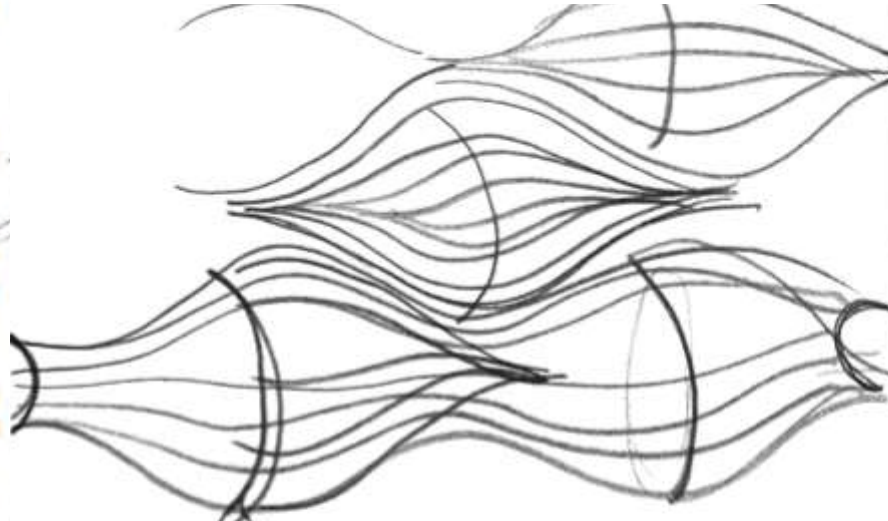
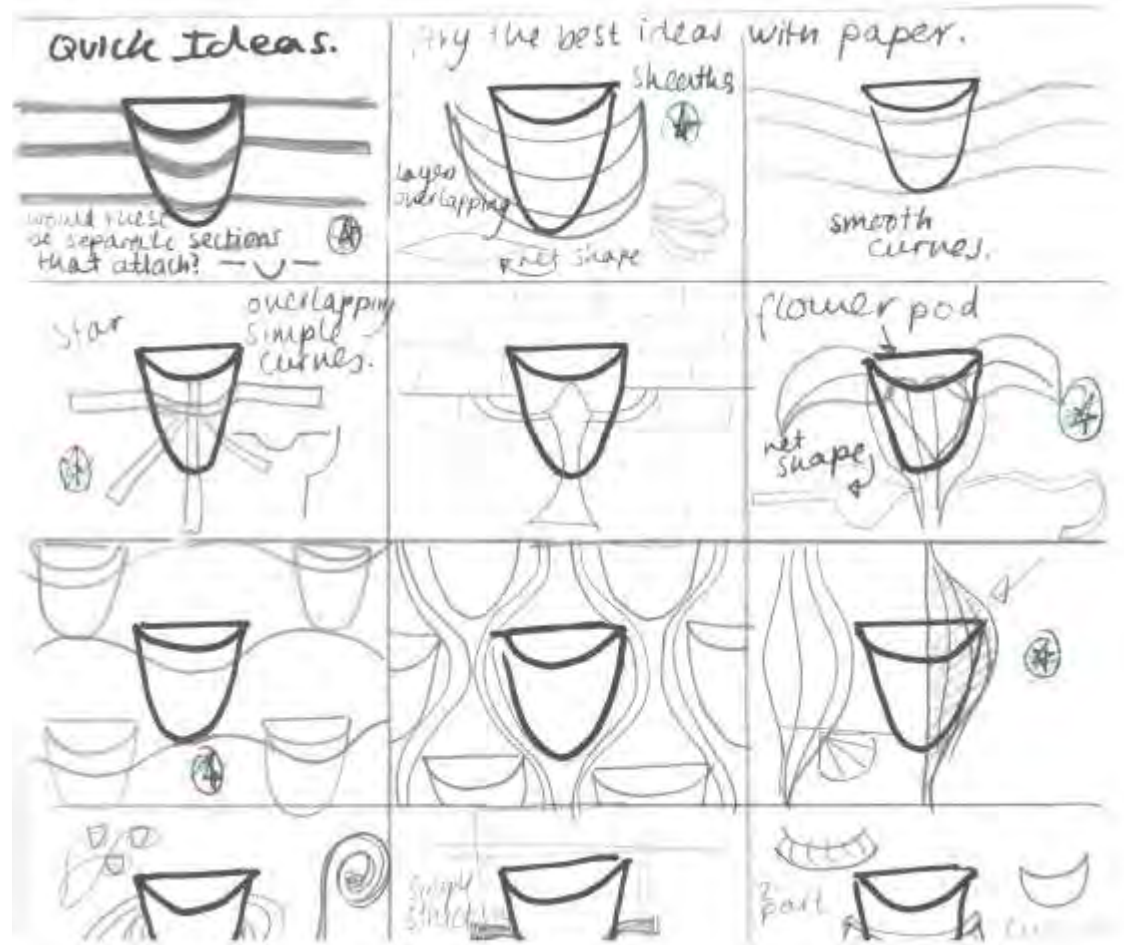
This could be a non-permanent way to fix the pods together without permanently cementing them onto the wall.

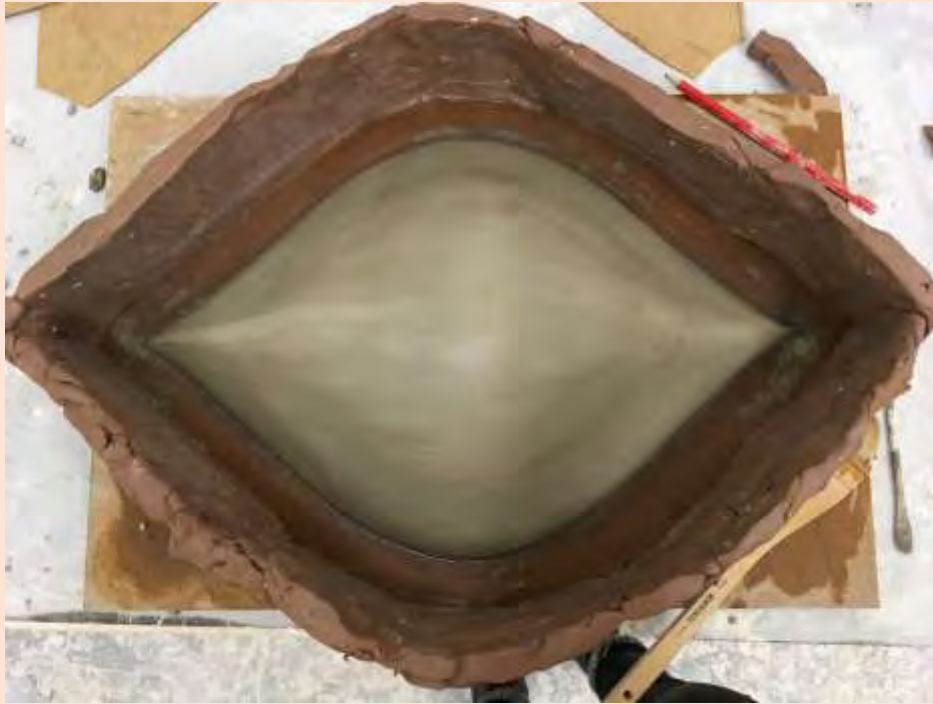
However, for an outdoor public space, the parts would have to be very strong, thick and sturdy to withstand weather, wear and interactions with people.

This could be developed later for an indoor version of the design. However, I made the decision that this was too complex for outdoor use, which needed to be permanently and securely fixed into the walls.



Drawings and Designs





Process Testing

I explored possibilities for different ways of building the planters through creating hump and sprig moulds to construct a patchwork of press moulded textures. This could allow people to personalise their planters within a workshop setting.

However, I found that these textures look more like curved patterns than real wood grain.

Workshop Proposal:

Option 1: The idea involved giving each group a chance to make a planter, which would then be installed together into a modular wall mural.

Strengths of this Idea:

The groups will have a shared experience, getting to partake in the making process will make them more invested in the final wall piece.



Limitations of this Idea:

The pieces could be made badly or incorrectly.

The non-permanence and flexibility of the groups coming in and out on a constant basis would make it difficult to gather people together.

Therefore, my planning, costing and proposal for a community workshop can be reserved for more fitting site.

Instead, I continued developing designs for a piece made by me to give to different groups to plant and care for.



Sourcing the Wood from Sussex

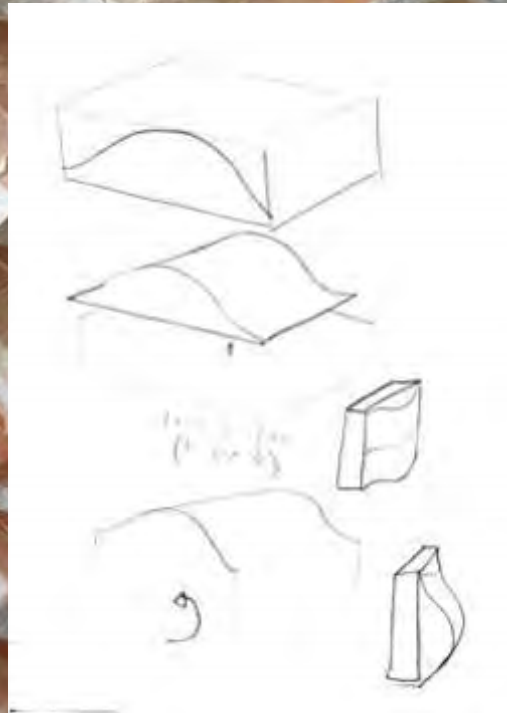
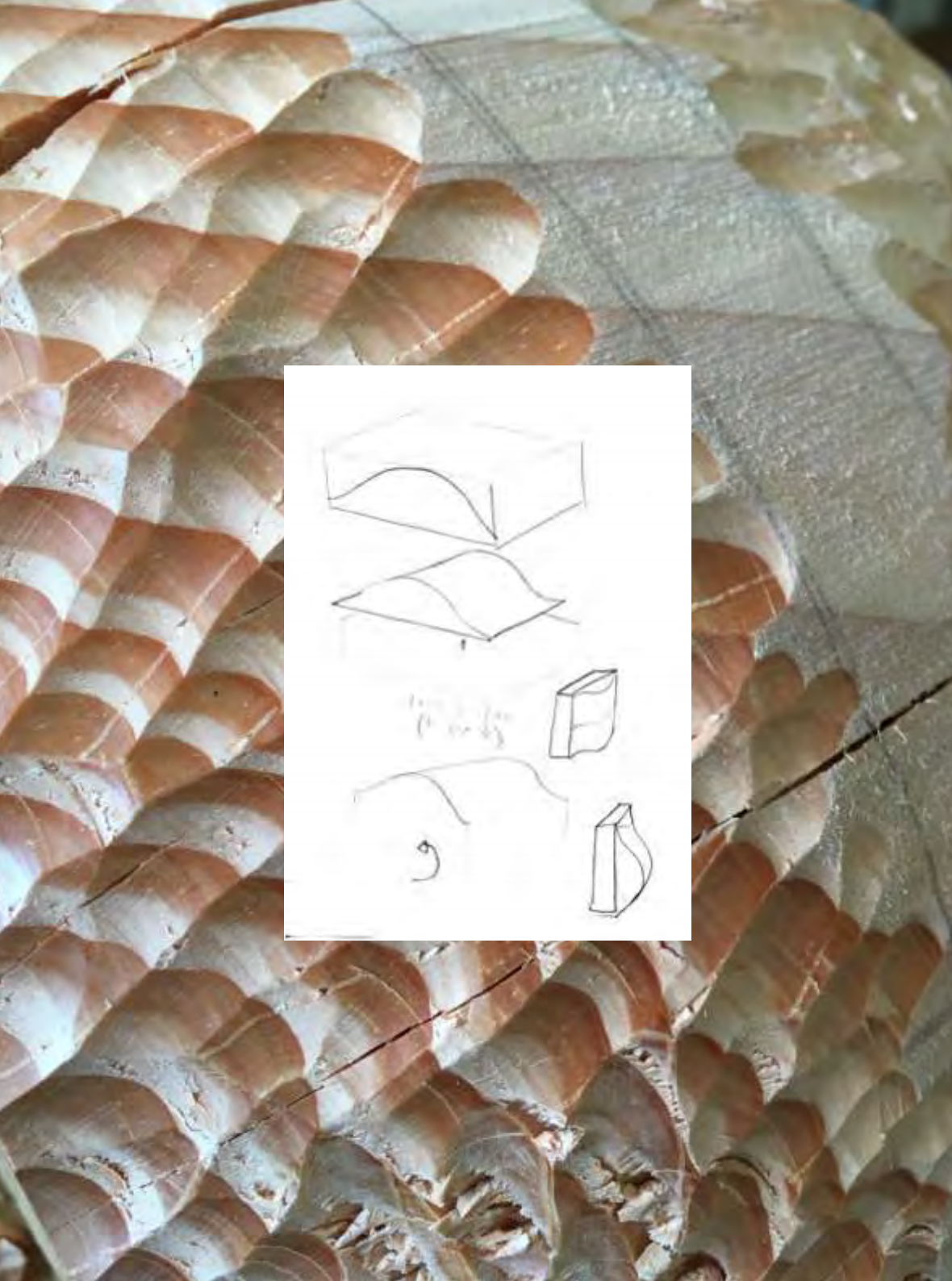
I had to source wood blocks large enough to carve the master from one piece.

Therefore I had search further afield to a timber yard nearby in Petworth to find pieces of wood big enough,

I managed to source a large block of air seasoned Douglas Fir which had been felled from the local rural landscape.

This felt very important to be able to bring an aspect of the local landscape into the city scape.





Carving the Forms by Hand

I used traditional processes and tools; chisels, hammers, metal files and sandpaper to carve out the curved shapes. This process allowed me to adjust the forms as I went along as I could visualise the piece as I worked. The difficulty was keeping the two pieces of wood symmetrical and matching in form.





The Mould Making Process:

Due to the many detailed surface textures of the grain, it posed a complicated task of mould making with numerous undercuts. This process involved problem solving to create a 4 to 6-part mould for each piece.



How to slip cast this?

Because this piece is so big and heavy. I won't be able to turn the slip cast & over by hand. I will need to make a contraption for rolling it?

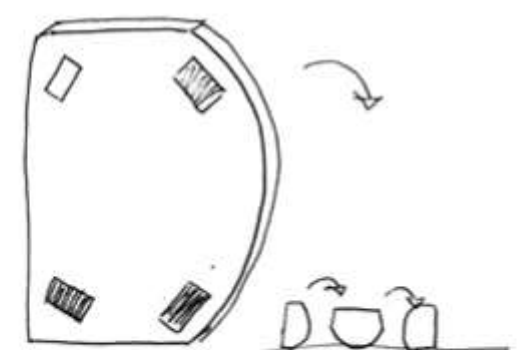
Put boards across either side to trap the plaster in facing upright
- Do the same when turned over?

Roll version 2 over a gap between two tables so that there is space to empty the slip out underneath afterward.



Or, build a box to support it in then lift + turn.
x (I think this will be too heavy)

Attach 3 sections together to hold it in + cut a hole to leave the last part supported



Flat edges will help support it upright as it rolls from side to side.

In order to manage the sheer weight and mass of clay being poured into this mould, I designed a jig to enable me to make pouring more controlled.





Perfecting the Making Process Through Trial and Error

Even at this stage of making, it took around 7 failed attempts to work out the specific details of my timings, pouring angles, drying times, fettling techniques etc..

Before I was happy with the result.



Vacuum suctioned walls as the slip was poured out.







Glazing

I planned to glaze these pieces with a mixture of glaze colours to give tonal and textual variation across the set.

However, early tests had weak colours and enormous cracks from uneven expansion in the kiln.

I refined my process to glaze more evenly.



Moving Forward

Once glazed and finished, these pieces will be arranged, mounted and planted in a set of 6 to show the possibilities of this modular design. I hope to photoshop them into the space and then invite the organisation to come and discuss the possibilities of these planter being used in their garden in the future. It would be interesting to see if communal planting is feasible or too ambitious.

Reflecting on this Project

Technically, this was by far the most challenging piece to make both from wood, plaster and ceramics. By working on such a large scale it pushed the complexities of making to a while new level. More volume meant more weight and pressure on the seams. I found this incredibly challenging, as many stages needed a second pair of hands.

Although it was gruelling and difficult, I learned such an enormous amount about the entire process of mould making and casting that I can take forward to improve my abilities for future projects.

One main drawback of this process is the large amount of slip which gets removed from each piece. In the future I would like to develop a method of reclaiming slip to minimise my material waste.



My Overall Project Reflections:

I feel that throughout this project I have learned a huge amount about how to research and collaborate with a group.

Understanding an organisation beyond what you can find out online takes time. The best way to really interrogate what is happening on the inside is to speak to people, get involved, and ask questions.

Overall, it is hard to tell what the impact of these objects will be on the people who see them. However, I hope that this project will help to encourage and promote these small acts of sustainable activism. And spark more conversations between different groups of people working across Brighton.

Technical Reflections

My increased understanding of these ceramic processes will enable me to make many more varied pieces in the future and continue to build and share this body of work.

With more time, I would like to explore making my ceramics more sustainable:

- By exploring further the possibility of using wooden moulds rather than plaster moulds.
- And by sourcing local ingredients for clay and glazes to make my pieces entirely reflect the local engagement of my work.

