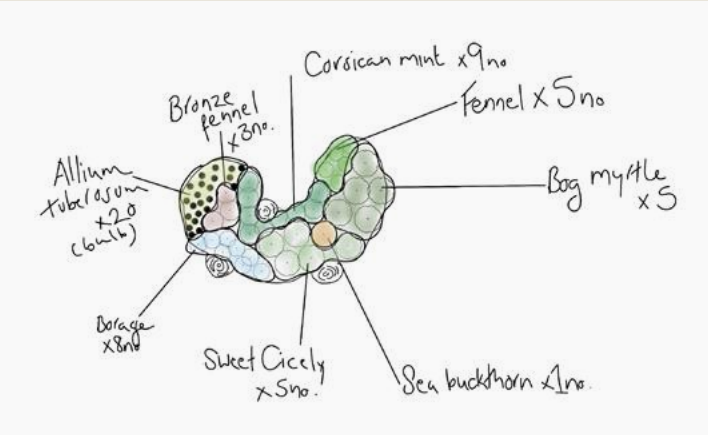
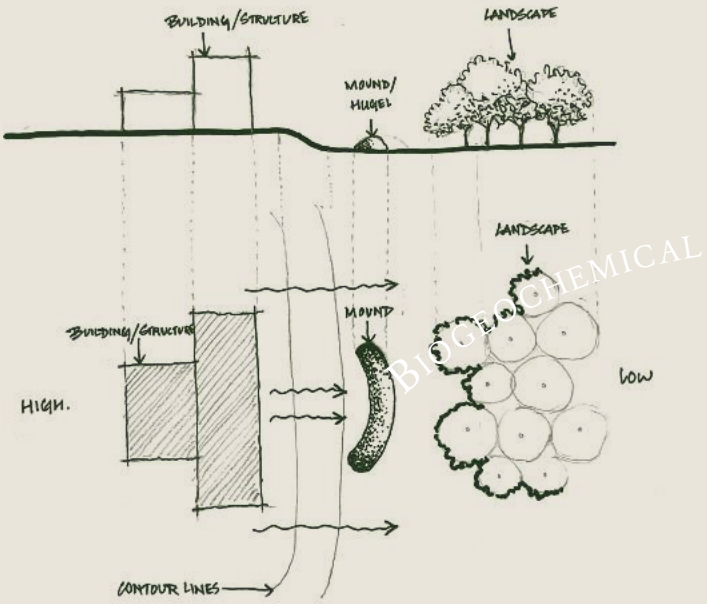
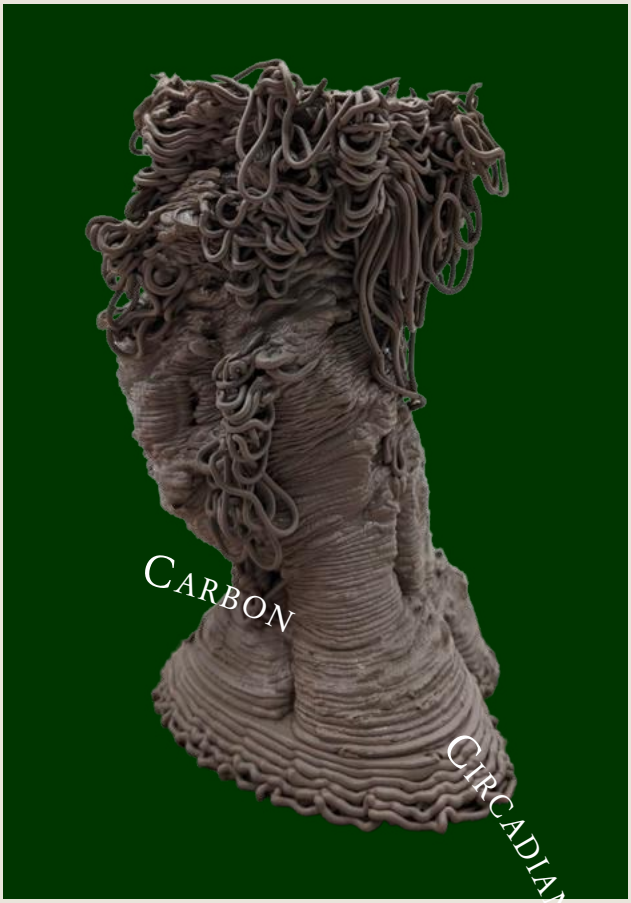






BIOGEOCHEMICAL

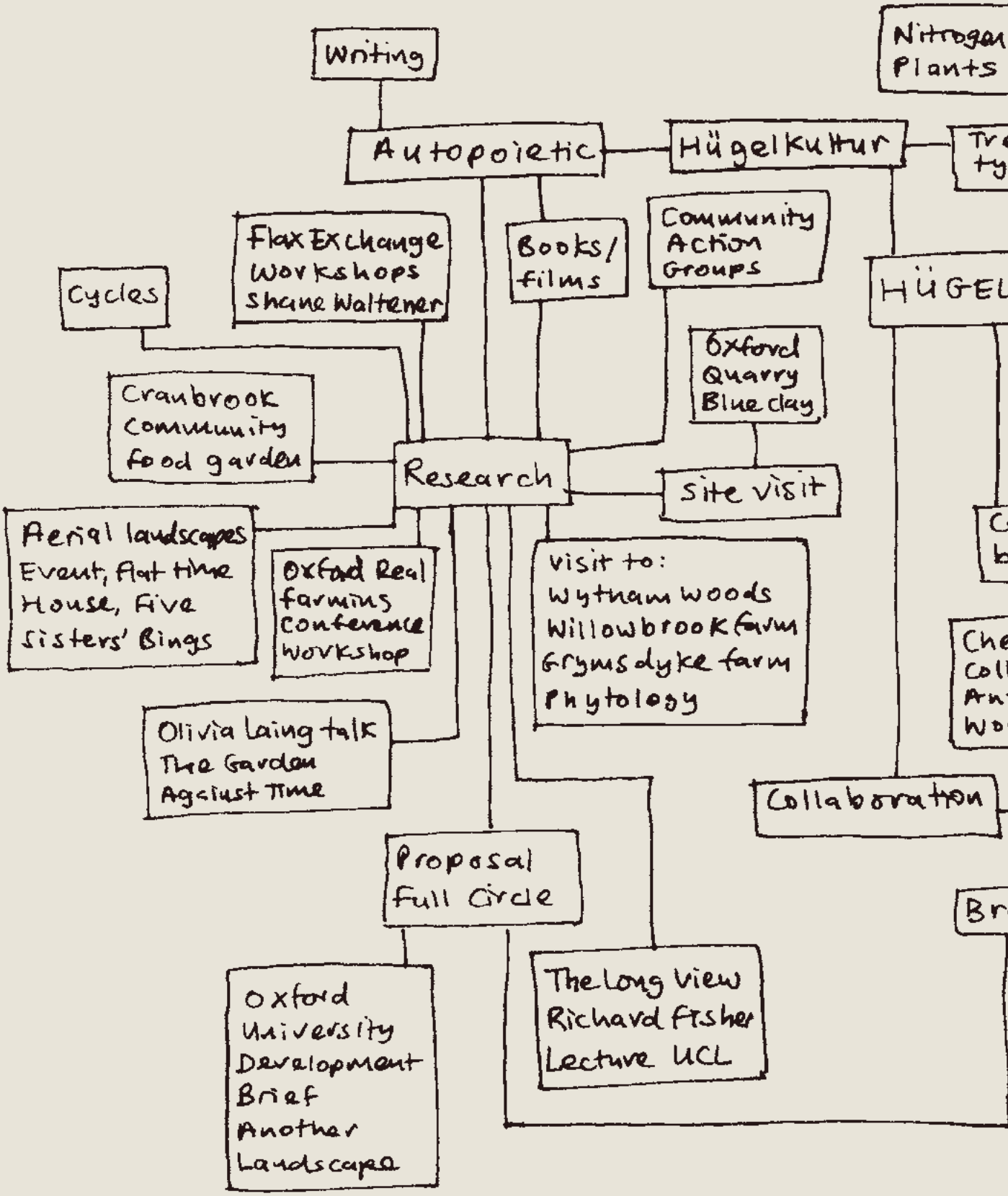
ECONOMIES

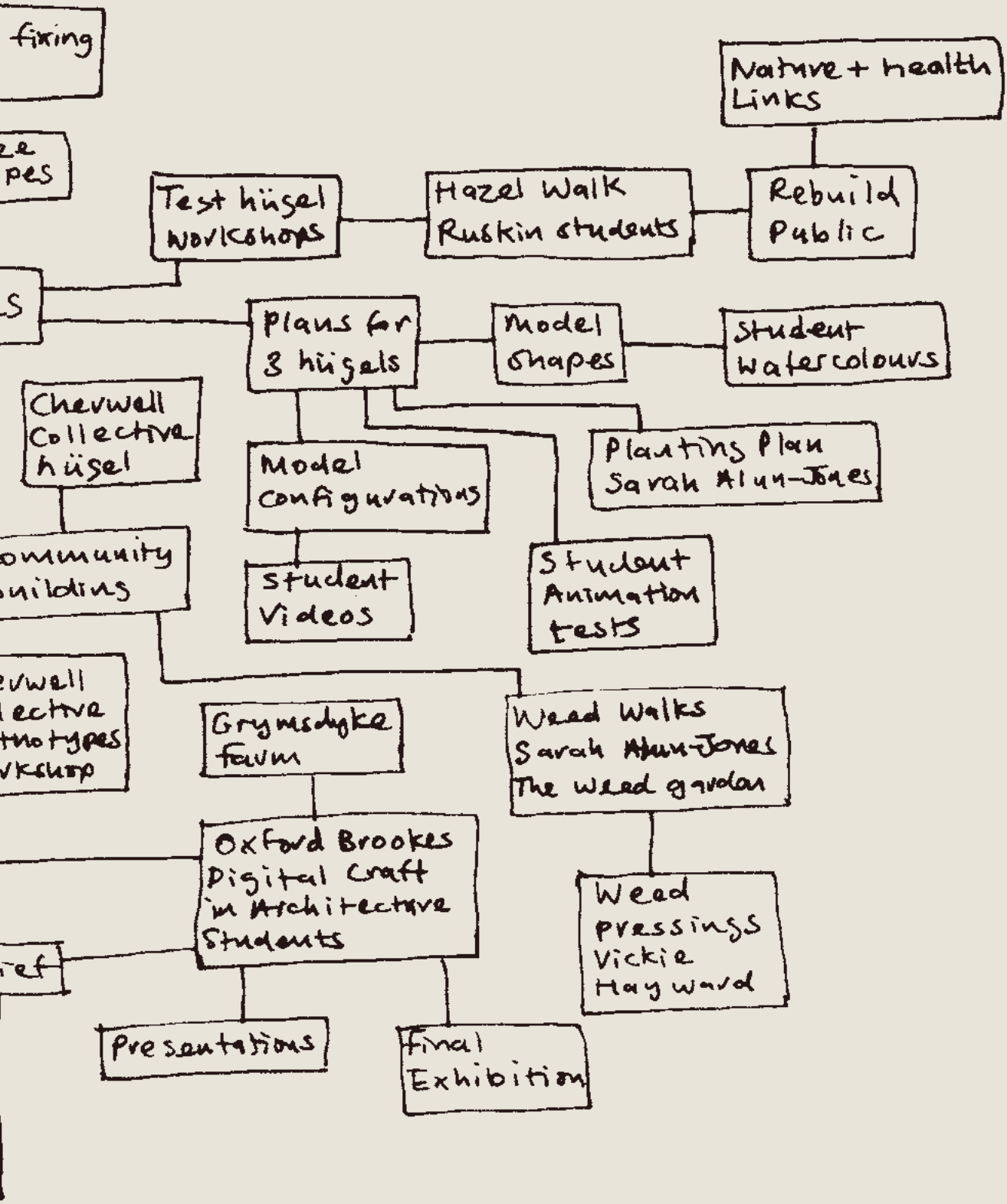
Autopoietic The Hügel Story

Part One: Growing an Idea

Jaimini Patel

The site, currently a wheat monoculture, near Rowel Brook, Autumn 2023


Writing
Nitrogen
Plants
Autopoietic
Hügelkultur
Tr
ty
Flax Exchange
Workshops
Shane Waltener
Books/
films
Community
Action
Groups
Cycles
HÜGEL
Oxford
Quarry
Blue clay
Cranbrook
Community
food garden
Research
site visit
Aerial landscapes
Event, flat time
House, Five
Sisters' Rings
Oxfad Real
farming
Conference
Workshop
visit to:
Wytham woods
Willowbrook farm
Grymsdyke farm
Phytology
Olivia Laing talk
The Garden
Against Time
Collaboration
Proposal
Full Circle
Br
Oxford
University
Development
Brief
Another
Landscape
The Long View
Richard Fisher
Lecture UCL


firing
Nature + health Links
Test hüsel workshops
Hazel Walk Ruskin students
Rebuild Public
Plans for 3 hügels
Model shapes
Student watercolours
Chevwell Collective hüsel
Model configurations
Planting Plan Sarah Alun-Jones
Student Videos
Student Animation tests
Grymsdyke farm
Weed Walks Sarah Alun-Jones The weed garden
Oxford Brookes Digital Craft in Architecture Students
Weed pressings Vickie Hayward
Presentations
Final Exhibition

BEGBROKE INNOVATION DISTRICT PUBLIC ART PROGRAMME

Another Landscape is an interdisciplinary programme that celebrates and facilitates collaboration, knowledge exchange, research and scientific endeavour. This materials-led programme includes opportunities for artistic practitioners to collaborate with researchers, with a focus on plant cultivation, regenerative materials, and material sciences.

Artistic practitioners are invited to explore ideas that draw connections between people and place through a series of site-specific land-based works. *Another Landscape* is curated by Company, Place for Oxford University Development.

Jaimini Patel is the first artist in residence in this programme. Collated here is documentation of Patel's initial research, explorations of the site and development of ideas through which *Autopoietic* emerged. It is also an invitation for future collaboration.

A spoil near Parkers farm, adjacent to the site. Inspiration for the hügel

Begbroke Innovation District, 5 miles Northwest of Oxford

Proposed master plan with location of the work, image courtesy of Hawkins Brown

FULL CIRCLE:
AUTOPOIETIC ENTANGLEMENT

Reciprocity Between Land and People

Self-Sustaining

Cycles

Interdisciplinary

Cathedral Thinking

Permaculture

Expanded Library

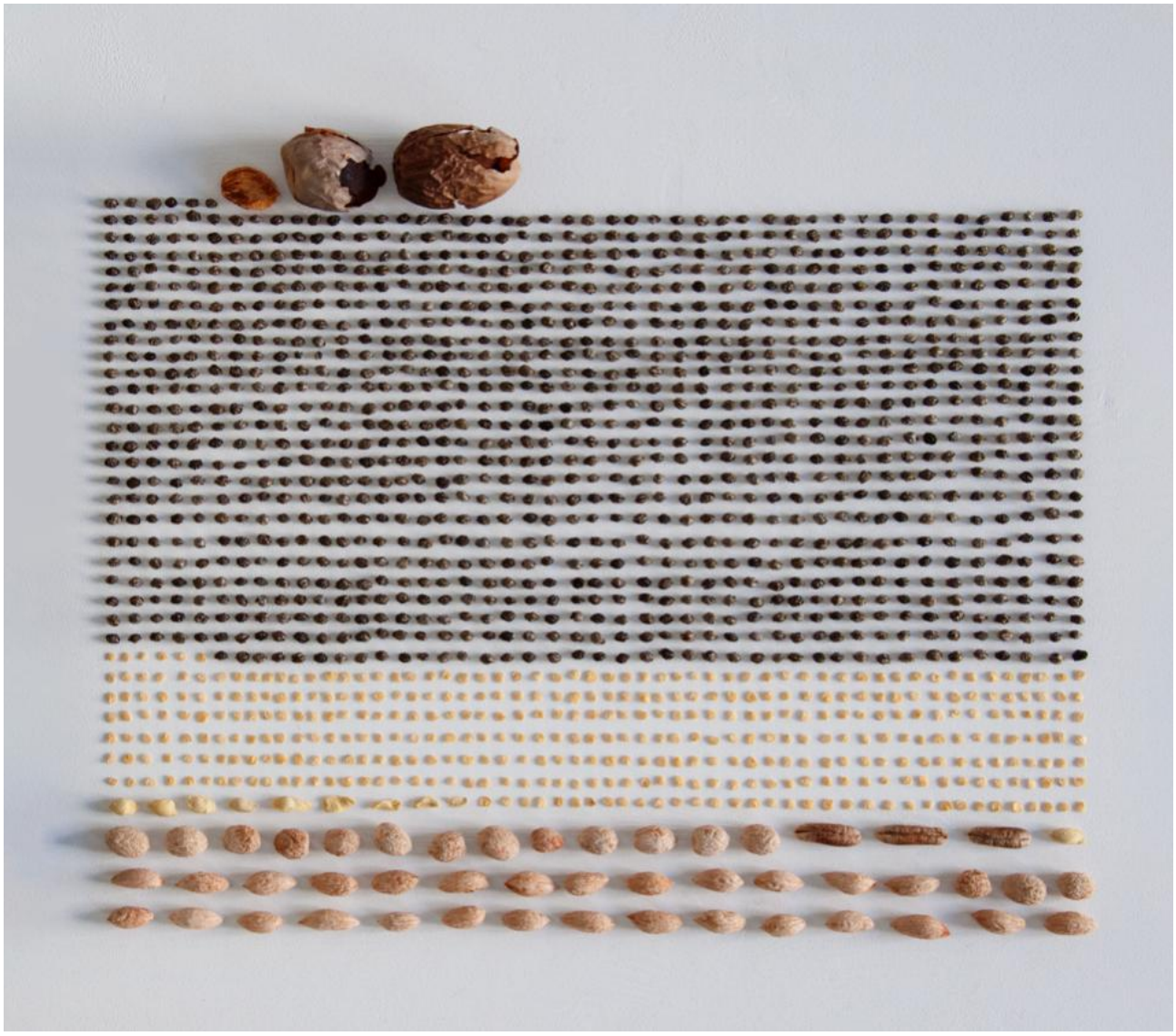
Autopoiesis

Materials from Waste/Grown/Recyclede

Collaboration/Exchange

Process

Experimental Creative Research



Culture begins with our first attempts to cultivate – the process of growing echoes the creative process in art and science. "I do a bit then nature does her bit, then I respond to that, and so it goes on, not unlike a conversation. It isn't whispers or shouts or talk of any kind, but in this to-and-fro, there is a delayed and sustained dialogue." (Stuart-Smith, 2020: 9–10) This form of tuning in through conversation with materials and each other leads somewhere not yet imagined. It is a process with its own time.

Jaimini Patel, Remainder 10/14–09/15, pips, stones and seeds from food consumed, carbon paper, biro, paper, Turin, Italy, 2015

OXFORD REAL FARMING CONFERENCE
DEEP LISTENING

Deep Listening, as developed by Pauline Oliveros, explores the difference between the involuntary nature of hearing and the conscious nature of listening. The practice includes listening to the sounds of daily life, nature, one's thoughts, imagination, and dreams. It cultivates a heightened awareness of the sonic environment, both external and internal, and promotes experimentation, improvisation, collaboration, playfulness, and other creative skills.

The workshop delivered in Christchurch Meadow, Oxford was an opportunity to meet land workers and people interested in collaboration around biomaterials, living architecture, biodiversity, and waste. The participants were diverse, and their spirit of generosity and openness was heartening for this experimental initial offering.

Christchurch meadow, Oxford, image courtesy of Jonathan Bowen

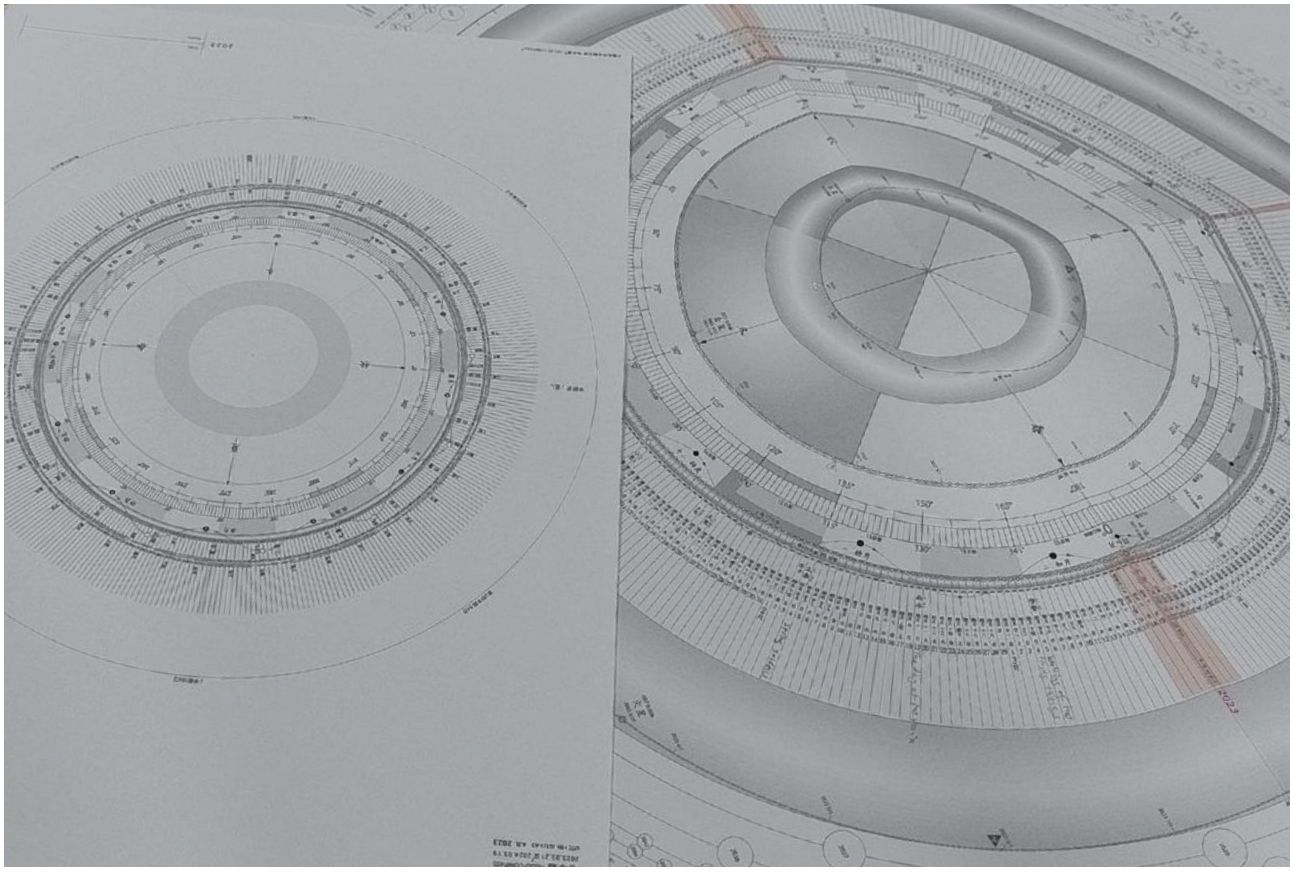
An invitation to listen to the grass, image courtesy of Pierre Pericard

One of the many tree houses in the woodland

VISIT TO WILLOWBROOK FARM

This family-run farm is remarkable in its vision and approach. Through trial and error, experimentation, hard lessons and sheer determination the family have created an environmentally sustainable farm that is so much more than that. Ali, the youngest working member, was generous in his willingness to share his already substantial knowledge and experience which included mobile chicken coops on wheels that fertilise the land. An evocative idea and image. The attitude of learning by doing and often through failure is encouraging for an artist undertaking a land-based project.

The family cob house, built from trial and error, constructed entirely of natural materials mostly drawn from the farm



In many parts of the world, there are more than four seasons. In China and Japan, there are twenty-four small seasons based on the lunisolar calendar. In addition, in Japan, there are seventy-two micro-seasons each lasting around five days. Those working outside may share a more heightened awareness of the many macro and micro cycles interacting at any given time and their significance.

Helio Compass, tracking seasonal divisions, phases of the moon, and planetary alignments


CYCLES
Carbon
Circadian
Life
Biogeochemical
Seasons
Lunar
Thermodynamic
Research
Tides
Economies
Time
Respiration
Menstrual
Water
Waves
Planetary
History
Photosynthesis
Neurofeedback
Nitrogen

Wytham Woods, biological Site of Special Scientific Interest, North-west of Oxford, Autumn 2023

KŌ *OR* MICRO-SEASONS

Snow reveals hidden barley
Celery begins to flourish
Water springs move
Pheasants start to call
Midwinter flowers bloom
Water in marshes freezes solid
Chickens start to lactate
East winds thaw the ice
Bush warblers are seen
Fish ascend the ice
Earth's veins become moist
Mist begins to rise
Plants and trees start to move
Hibernating insects open their doors
Peach trees start to smile
Caterpillars transform into butterflies
Sparrows start nesting
Cherry blossoms begin to open
Thunder first makes its voice heard
Swallows arrive
Wild geese head north
Rainbows begin to appear
Reeds begin to sprout
Frost ceases, seedlings emerge
Peonies bloom
Frogs begin to croak
Earthworms come out
Bamboo shoots sprout
Silkworms wake up and eat mulberry leaves
Safflowers flourish
Wheat ripens
Praying mantises are born
Decaying plants become fireflies
Plum fruits turn yellow
Wheat withers
Iris flowers bloom
Half-summer plants sprout
Warm wind arrives
Lotus flowers begin to bloom
Hawks start learning
Paulownia trees begin to form flowers
Earth becomes moist and sultry
Heavy rain occurs occasionally
Cool wind arrives
Cicadas sing in the cold
Dense fog rises and falls
Cotton flowers open
Heaven and earth begin to cool
Millet ripens
Grass dew turns white
Wagtails sing
Swallows depart
Thunder ceases its voice
Hibernating insects close their doors
Water begins to dry up
Wild geese arrive
Chrysanthemum flowers bloom
Crickets are at the door
First frost
Light drizzle falls occasionally
Maple leaves and ivy turn yellow
Camellia flowers begin to bloom
Ground begins to freeze
Japanese allspice blooms
Rainbow hides and cannot be seen
North wind sweeps away fallen leaves
Tachibana oranges begin to turn yellow
Earth closes and winter begins
Bears hibernate in their dens
Flocks of fish gather
Wheat sprouts
Deer shed their antlers

Begbroke Innovation District, image courtesy of Yesenia Thibault-Picazo

Grange Hill Quarry, 28 miles from the site

BLUE CLAY
FROM GRANGE HILL QUARRY

Material that cannot be grown or recycled will be from waste and where possible, sourced locally. Blue clay is a byproduct at the quarry and will be used with participants and creative practitioners.

Blue clay

OXFORD BROOKES

The MA Digital Craft in architecture is a new course at Oxford Brookes. It explores the relationship between digital fabrication methods and traditional crafting. Students were given a brief to develop a collaborative research project based on the *Full Circle* proposal.

Brief

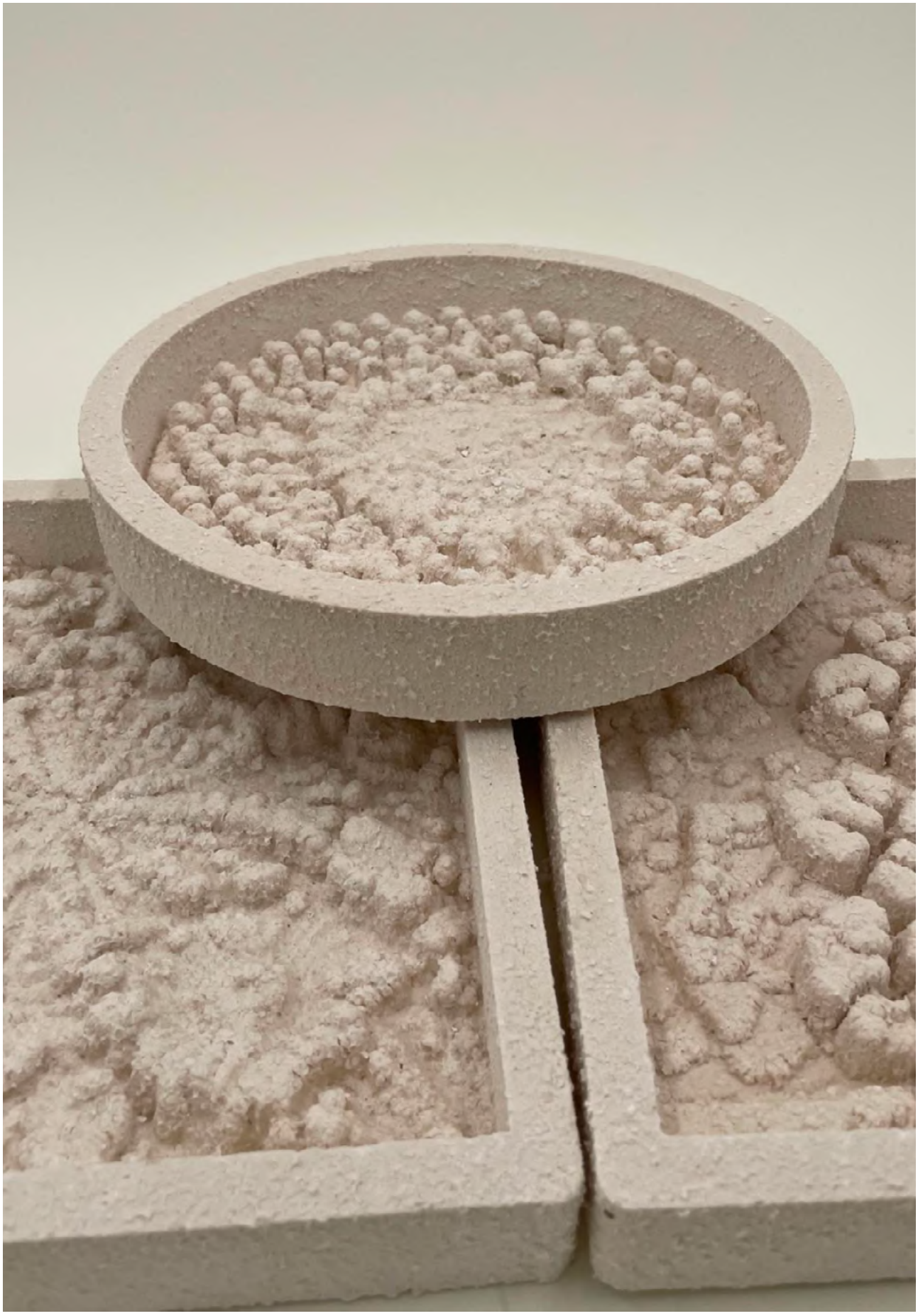
I Use a bioregional approach to map local materials and skills. Consider what the appropriate boundaries are and why. Materials can be grown, recycled, salvaged, be waste, off-cuts or biproducts. Skills might be those that have been lost or forgotten. Create prototypes.

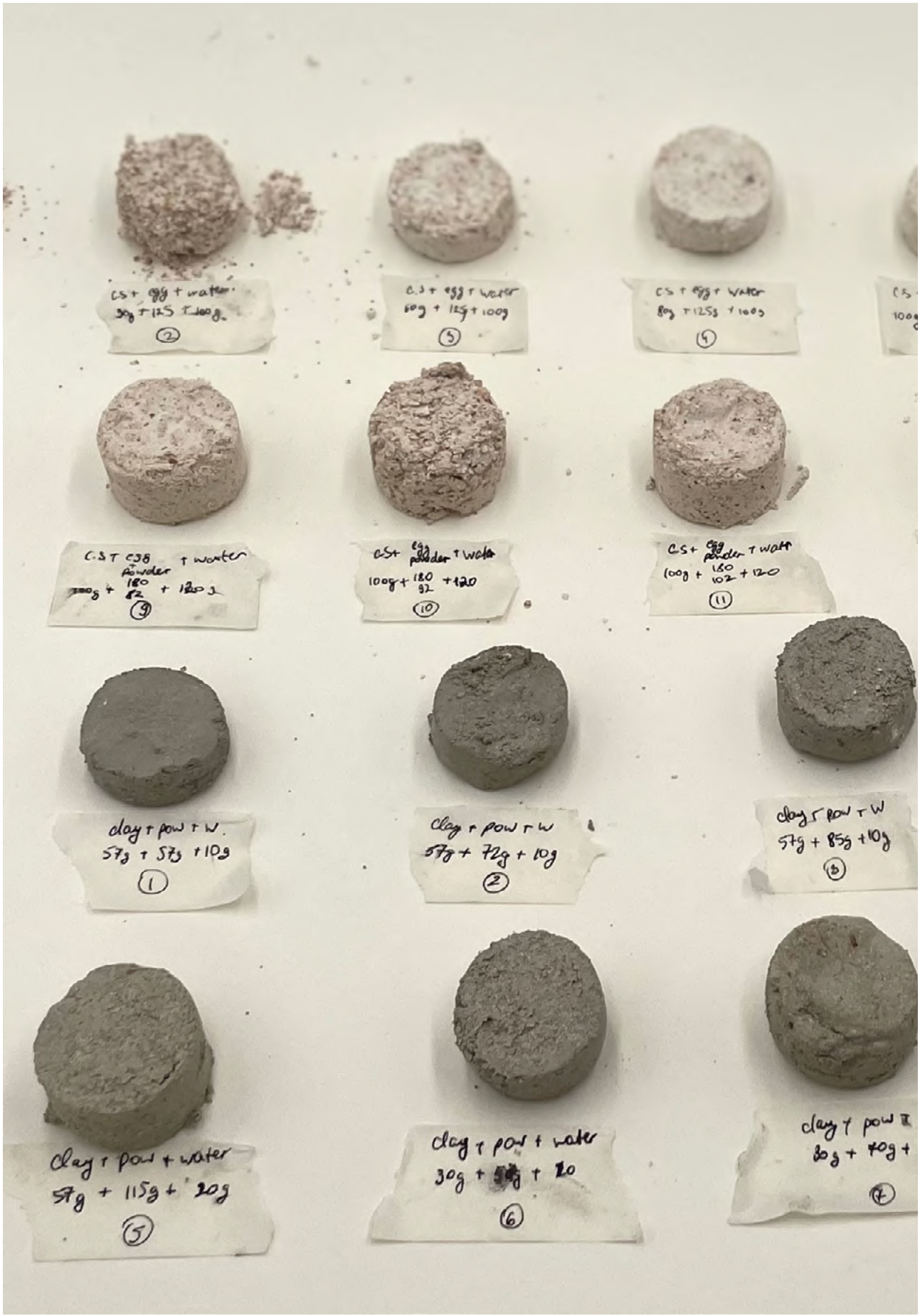
II Create an archive of this research that can be used.
What form can an archive take and how can it capture different types of knowledge and experience – research, materials, processes, workshops, stories, creative outcomes, skills, and tools.

Things to consider:
a. plants that can restore biodiversity and be used as materials
b. circular, self-sustaining economies/systems
c. bio-materials of the future as the climate changes

Students experimented with blue clay from the quarry, mixing it with ground eggshell (collected from local businesses) and firing it at different temperatures. They responded individually and as a group interpreting the brief through their various research foci. Conversations included the nature of hospitality, and future archaeology and through the process of working together, the brief evolved. It became clear as the residency progressed that the work is about growing – plants, skills, materials, knowledge, communities, and connections. The abstract ideas in the proposal began to take form.

Experiments by Nikole Rugina at Grymsdyke farm, a research facility, Princes Risborough




CS + egg + water
30g + 125 + 100g
(2)
CS + egg + water
60g + 125g + 100g
(5)
CS + egg + water
80g + 125g + 100g
(9)
CS + CSB powder + water
180 82 + 120g
(9)
CS + egg powder + water
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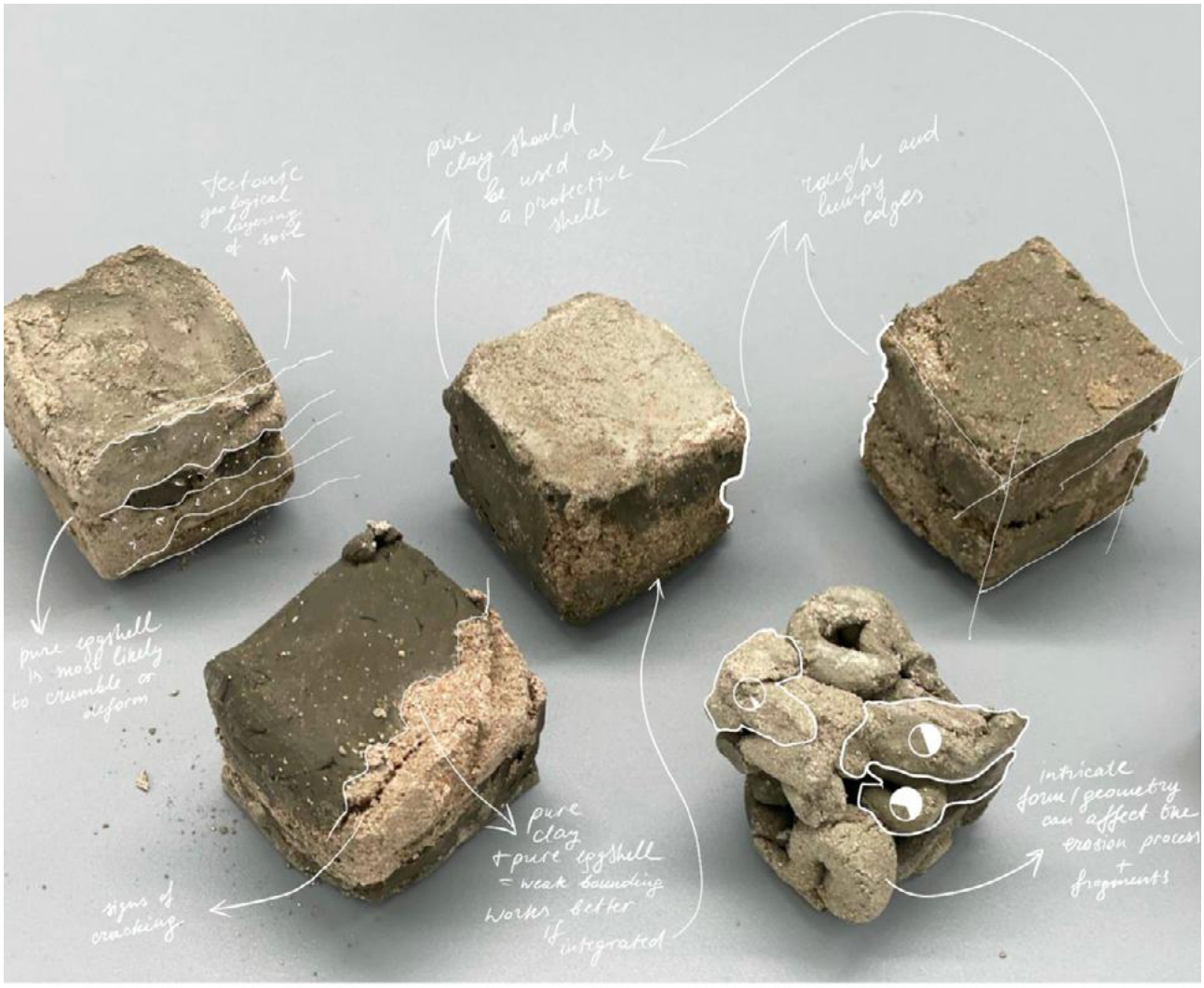

tectonic geological layering of soil
pure clay should be used as a protective shell
rough and lumpy edges
pure eggshell is most likely to crumble or deform
pure clay + pure eggshell = weak bounding works better if integrated
signs of cracking
intricate form / geometry can affect the erosion process + fragments


1


2


3


4


5


6

Click here to see the final presentation

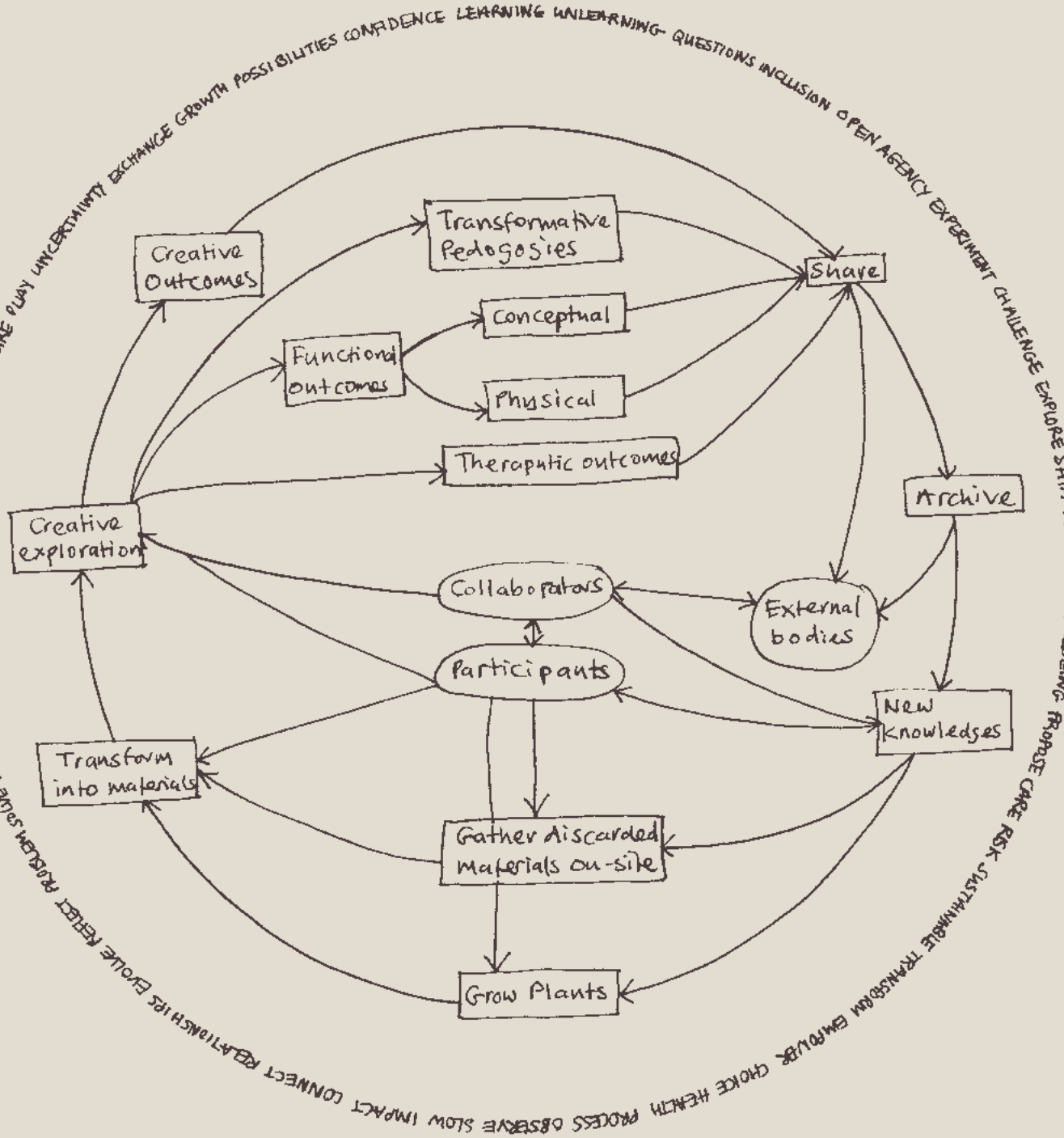
Research project final exhibition, Oxford Brookes, 2024, images courtesy of Oxford Brookes

AUTOPOIETIC: RECIPROCITY

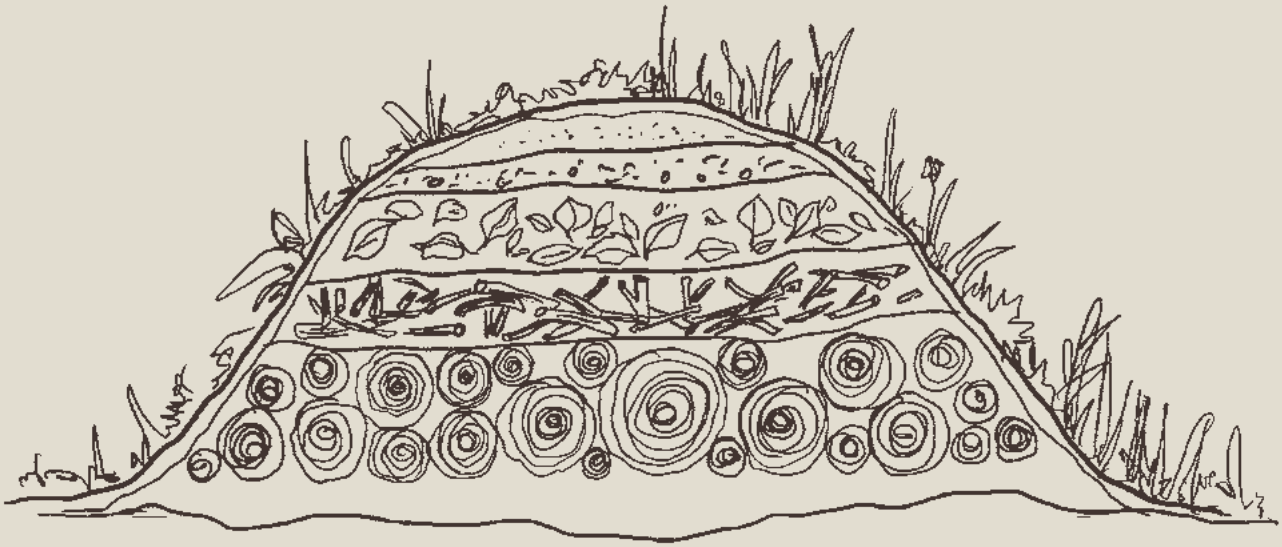
As the commons[1] worldwide become smaller and people's relationship to land becomes more tenuous, how can reciprocity between land and people and between each other be enabled? Poiesis means to make our world and to make ourselves through creativity (Caloun, 2013: 195). The biologists Maturana and Varela use the concept of Autopoiesis to distinguish living systems from non-living systems as being capable of producing and maintaining themselves by creating their own parts through a network of dynamic and ongoing interactions. Beautiful in their economy, biological systems can teach us about social systems.[2]

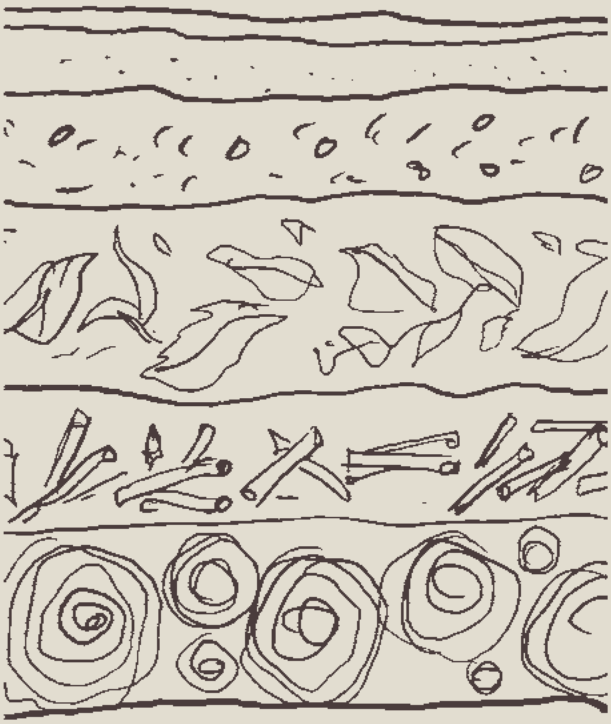
All the materials used for creative exploration and research will be grown as part of the work. A place for sensory experience, learning, and experimentation, the work will use a bioregional[3] approach to create an intricate web of connections that evolve through collective self-organisation and exchange.

The seed of an idea – a drawing created while volunteering and undertaking a horticulture course at ORGANICLEA, a food growing cooperative, Jaimini Patel, 2020.



Hügel layers, drawing Nikole Rugina, 2024





AUTOPOIETIC: HÜGELKULTUR

Many indigenous cultures saw themselves in relation to their ancestors and those yet to be born; they were careful to leave an abundance for future generations and take from nature wisely. The commons were also key to Native Americans who planted the three sisters combination of corn, beans and squash on mounds. Hügelkultur from the German: *Hügel* = mound or hill + *Kultur* = cultivation or culture, is a self-watering, self-tilling, and self-fertilizing system, an ancient no-dig growing technique used by many indigenous cultures around the world. This zero-waste method uses material that would be discarded such as logs, branches, cardboard, leaflitter and food scraps. The decomposing wood releases water and nutrients, acting as a sponge enabling flood and drought resilience.

Hügels can be self-sustaining for up to two decades. Unmaintained eventually they return to ground level or by adding waste material their lifespan is extended.

The first hügel, Hazel Walk Allotment, Kidlington

The first hügel, Hazel Walk Allotment, Kidlington

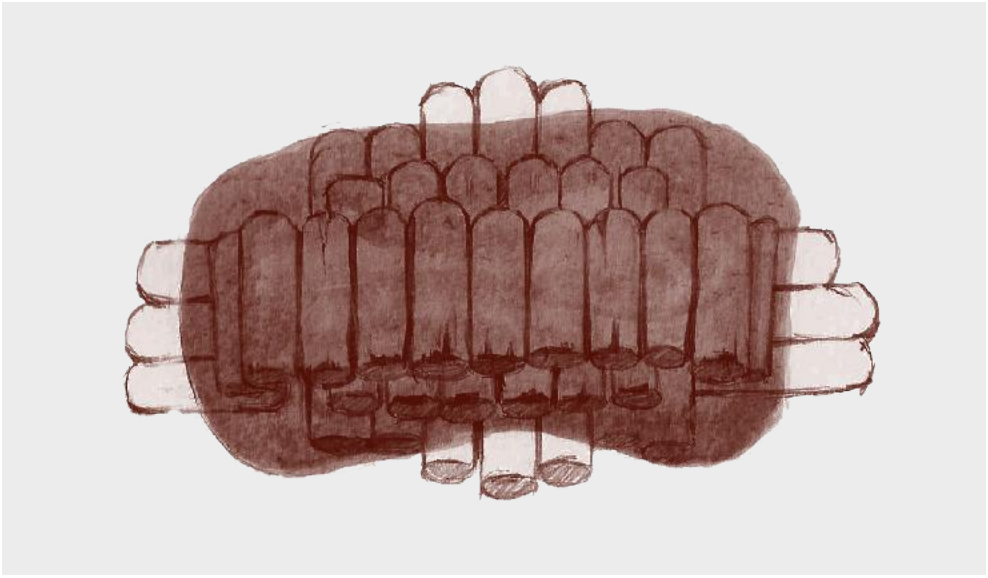
RUBBISH GARDENING WORKSHOP

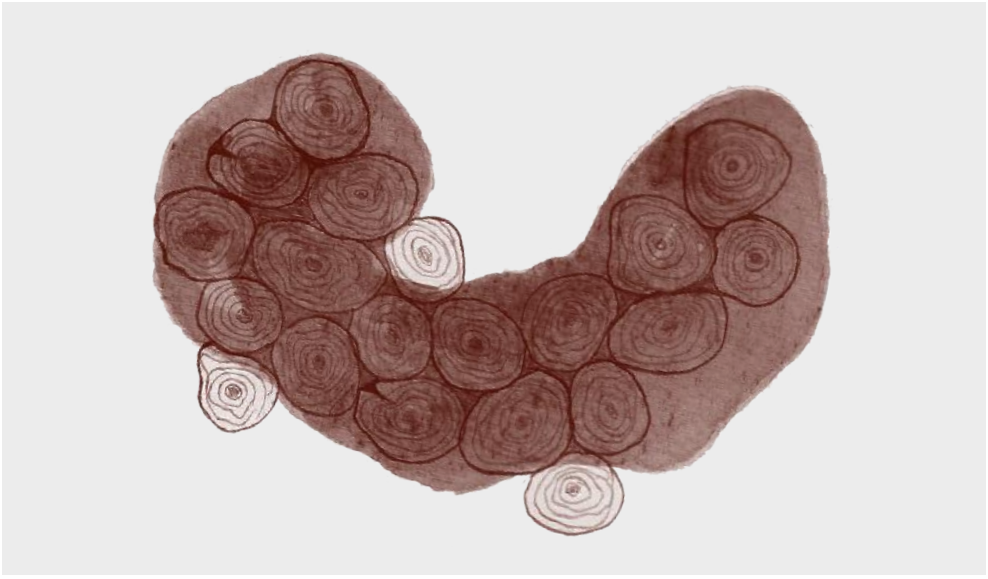
The first hügel built on Hazel Walk Allotment for the Cherwell Collective to grow plants which can be used for dyes was built with Fine Art BFA and MFA students from The Ruskin School of Art.

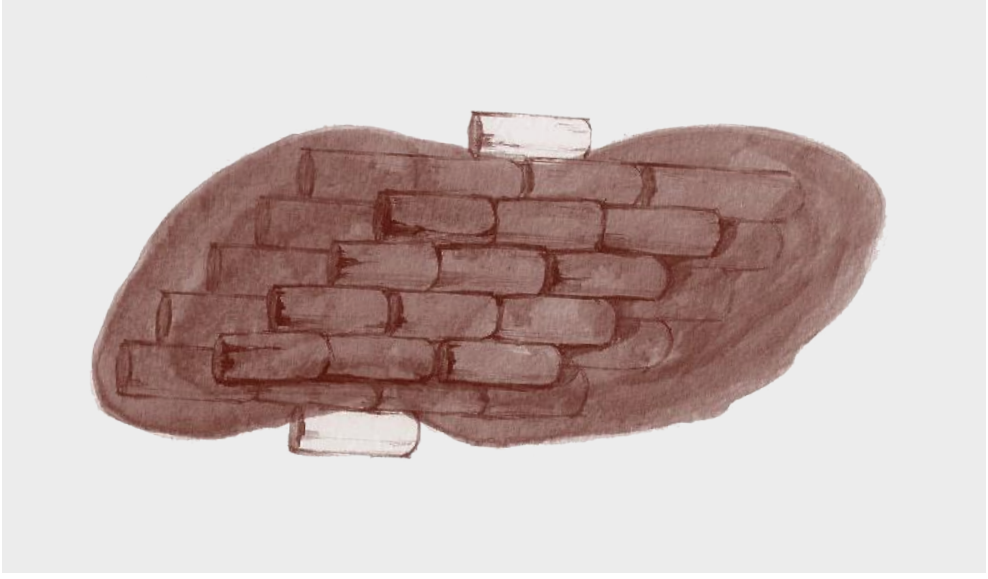
Two layers of oak were put down, then branches and garden waste from the allotment, followed by compost, topsoil and a layer of woodchip. Yarrow (Achillea millefolium), Pot marigold (Calendula officinalis), Gooseberry Hinnonmäki Röd (Ribes uva-crispa), Blackcurrant Ben Sarek (Ribes nigrum), Purpletop vervain (Verbena bonariensis), Purple Cone flower (Echinacea purpurea), Pineapple sage (Salvia elegans), Thyme (Thymus Jekka), Dyer's Chamomile (Anthemis tinctoria) and Giant Bronze Fennel (Foeniculum vulgare) were planted. The planting scheme included insect-attracting flowers, berries, herbs and plants for making dyes. Nitrogen-fixing Yarrow is useful in the first year of the hügel as the wood will draw nitrogen away from the plants as it rots before it starts to release nitrogen.

Building the hügel raised questions – how to stack the wood; what kind of shape works best; how wide and high to build; the proportion of each layer; the maturity of the plants; and how to prevent runoff?

The first hügel, Hazel Walk Allotment, Kidlington





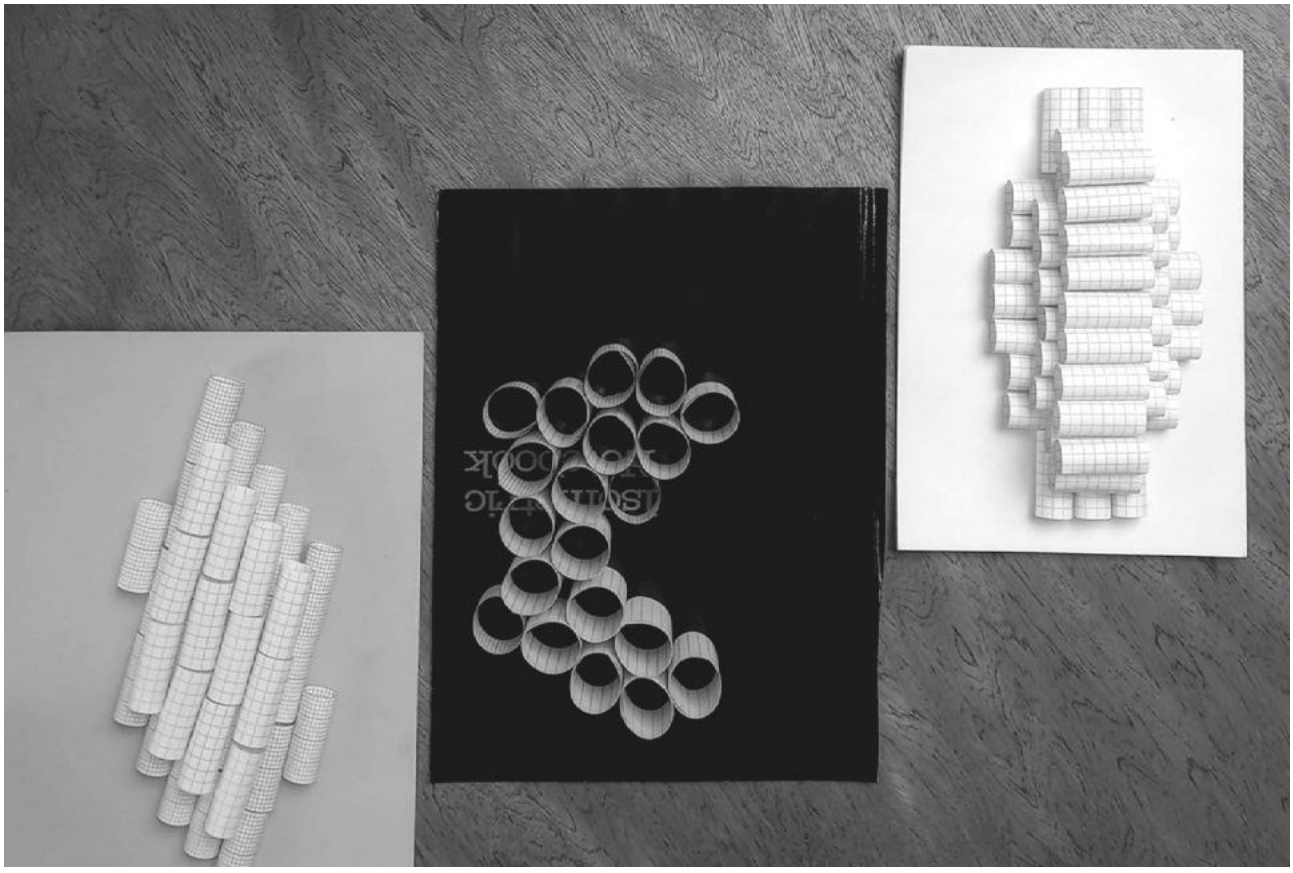


Drawings, Elena (Yutong) Zhou, 2024

HÜGEL SHAPES

The shape and size of the logs determines how they are stacked and the subsequent shape of the hügel. Experiments with models to explore the possibilities were translated into drawings by MA Narrative Environments students from Central Saint Martins.

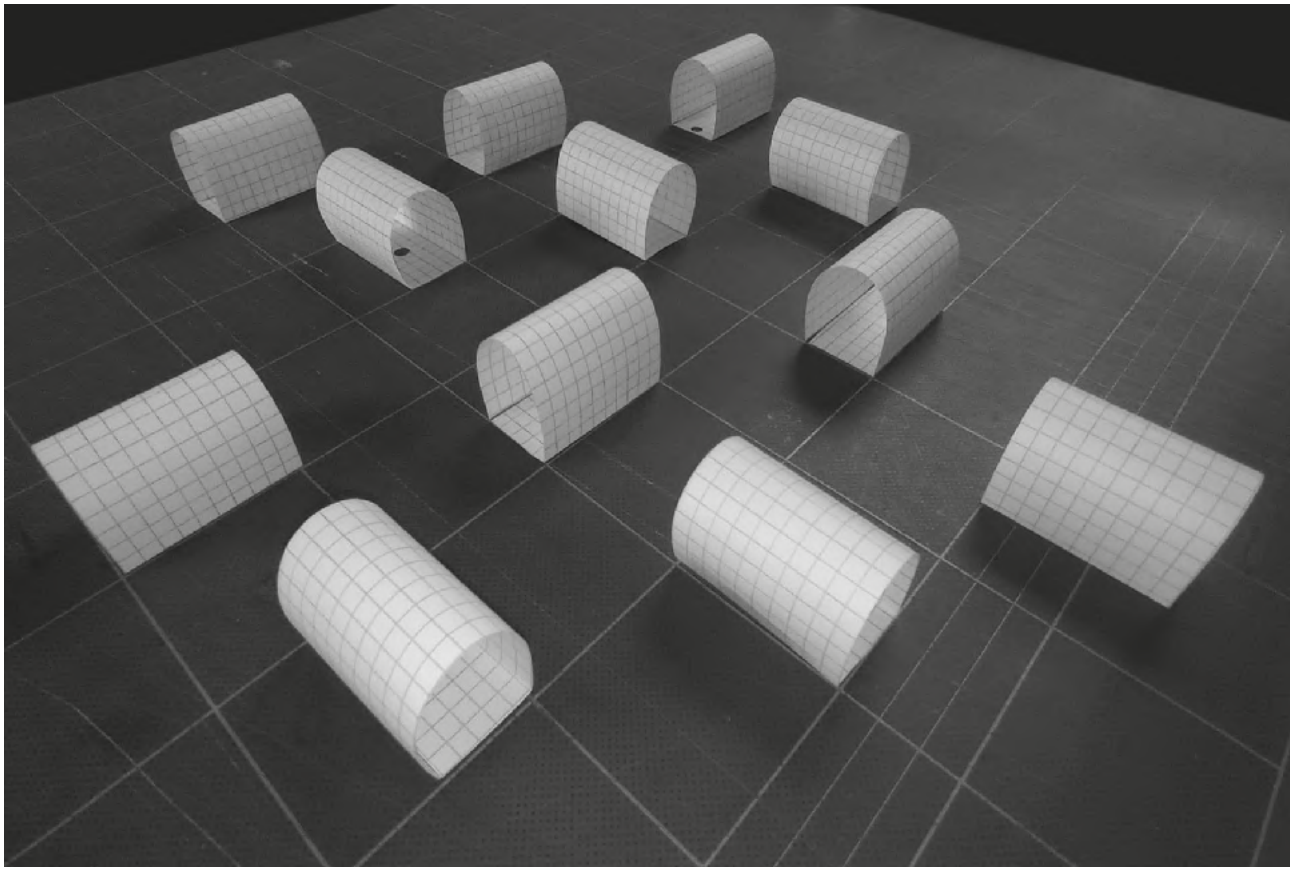
The inside of the hügel is beautiful, yet unseen. This led to thinking about how some of the wood could be left exposed as a hint to the internal structure. It could provide seating or be stood on to reach the higher parts of the hügel when gardening.



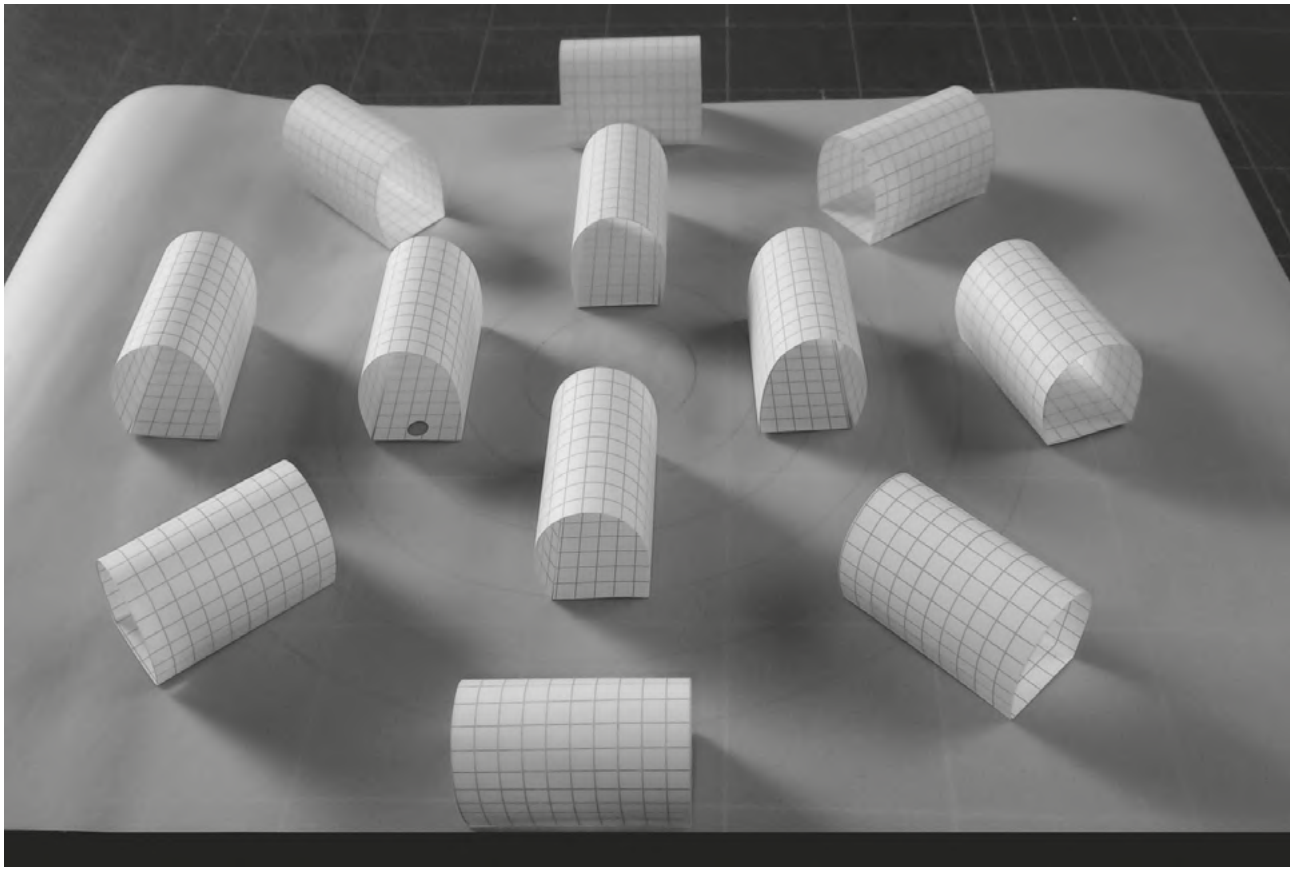
Models of stacking, Jaimini Patel

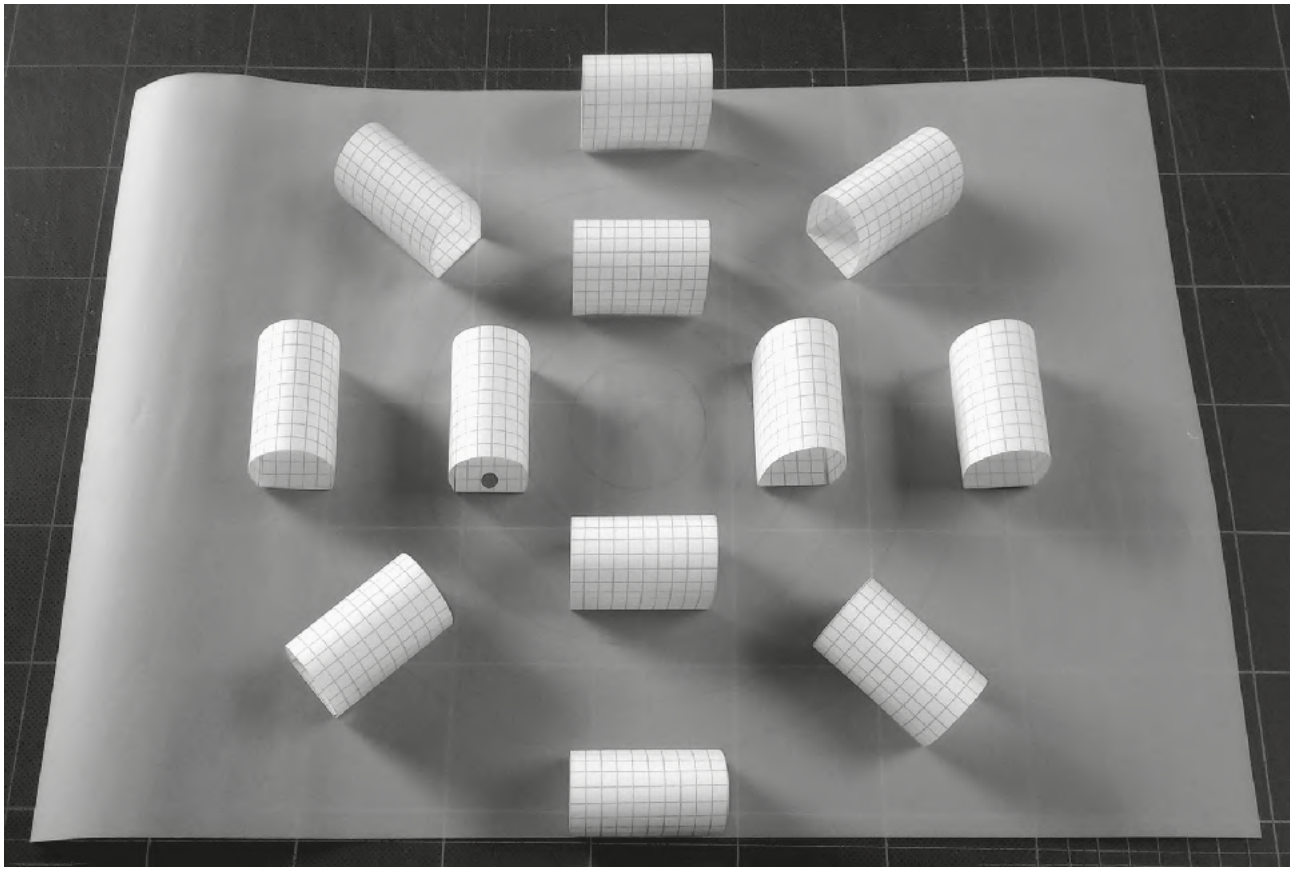
HÜGEL CONFIGURATIONS

The shape of the hügel and their arrangement within the landscape will affect how they are experienced. These models were helpful to explore the possibilities but the embodied experience of being amongst them is difficult to imagine. MA Narrative Environments students from Central Saint Martins translated the models into videos to help explore how a sense of spaciousness could be created in an immersive environment.

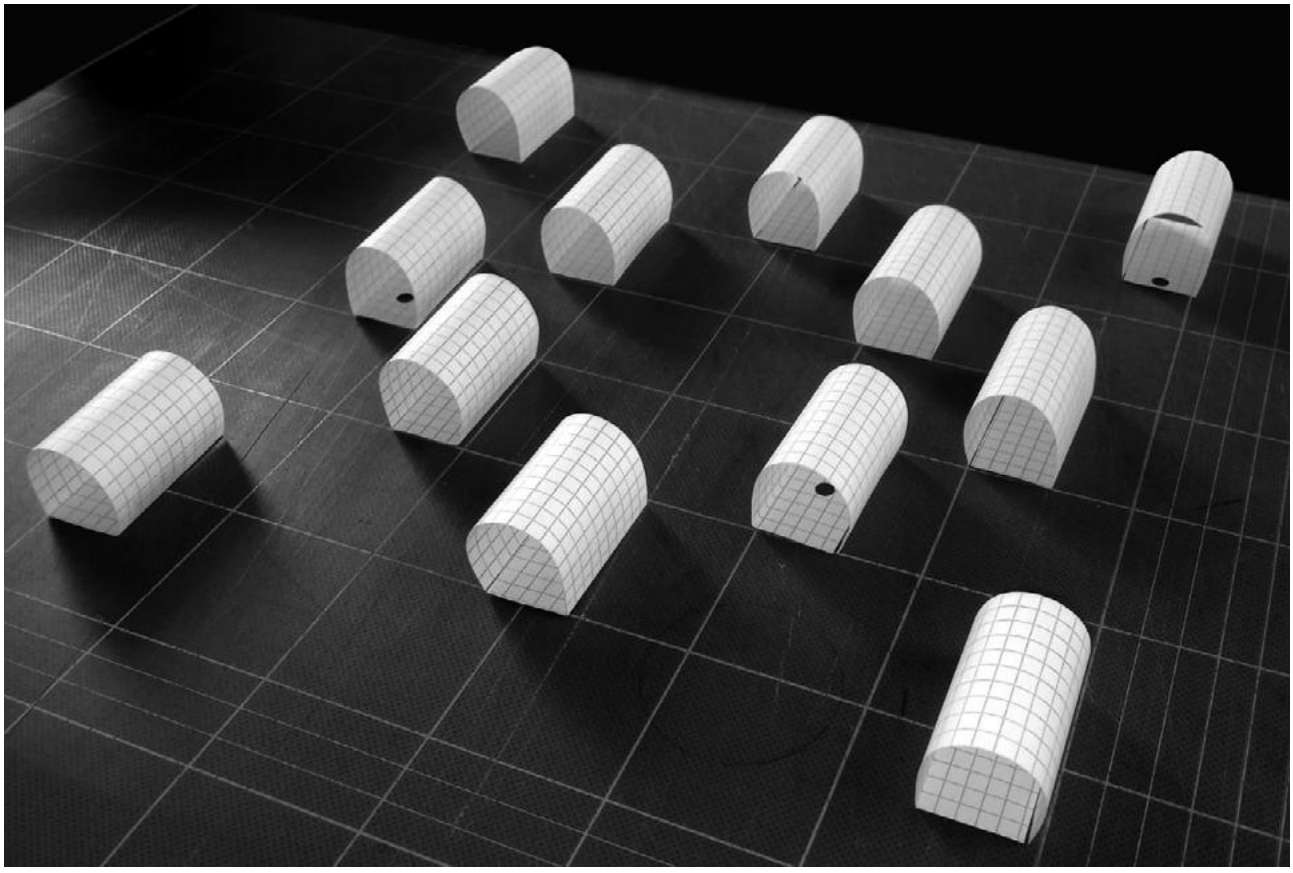


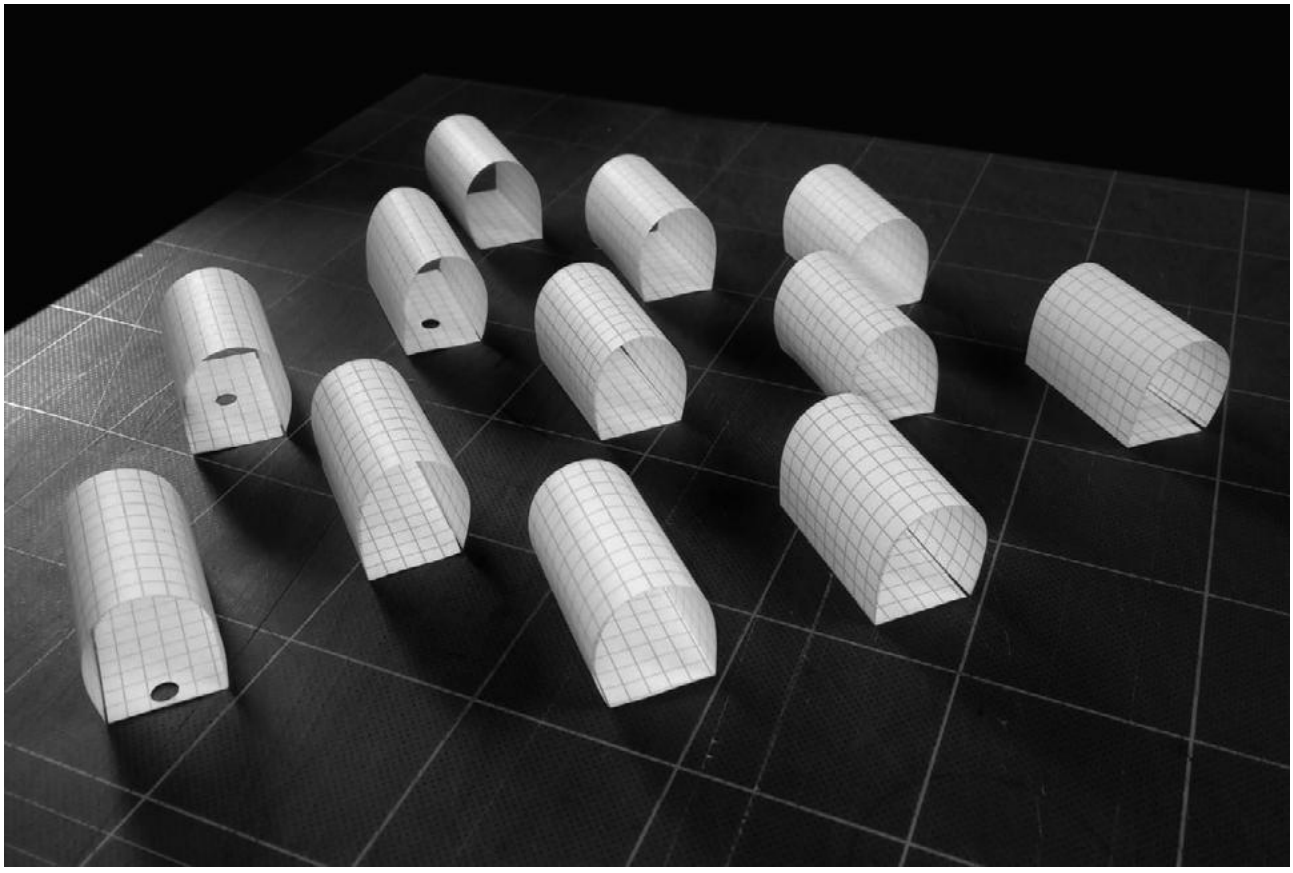
Models for hügel configurations, Jaimini Patel



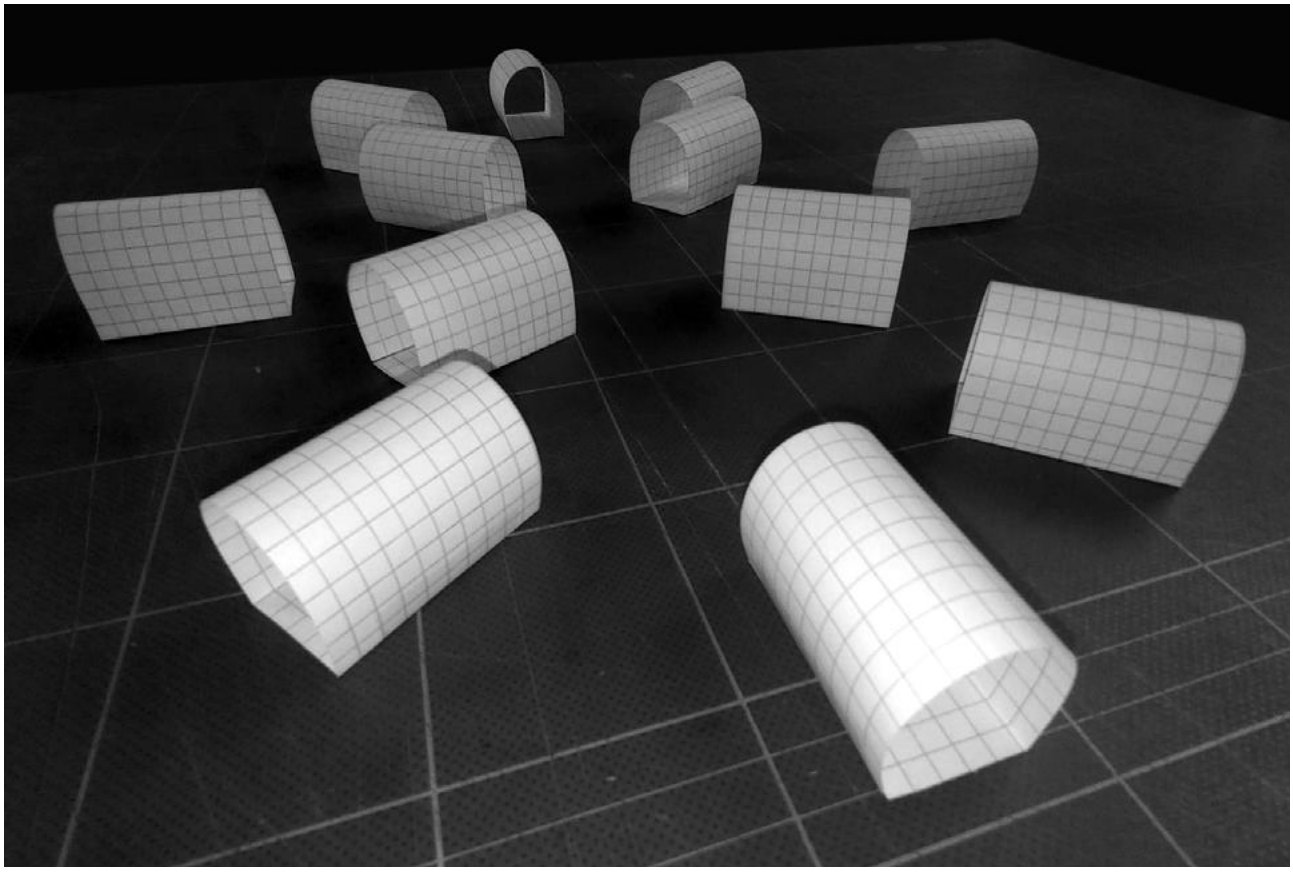


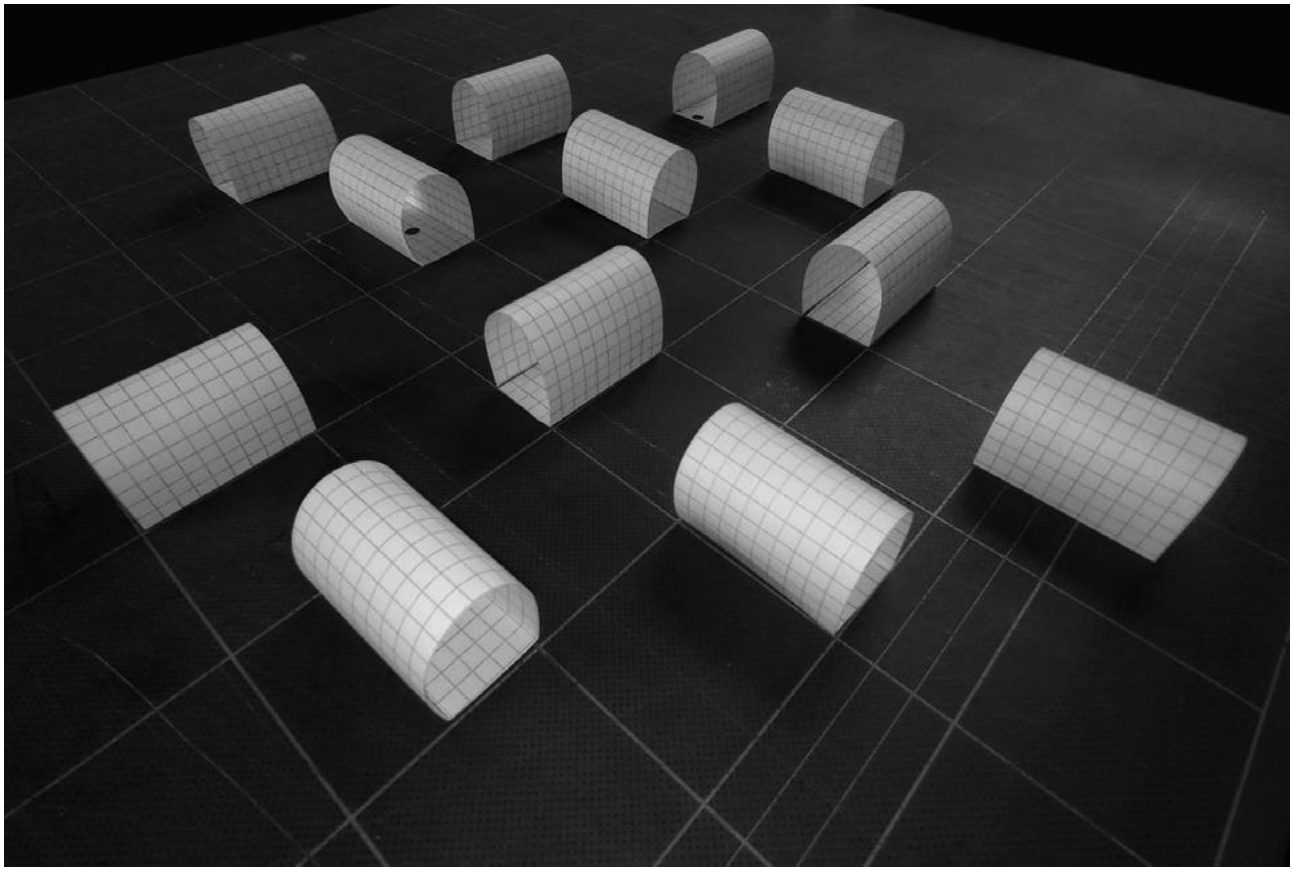
Models for hügel configurations, Jaimini Patel





Models for hügel configurations, Jaimini Patel





Models for hügel configurations, Jaimini Patel

Sasha Vinnicombe, an animation student at the University of the Creative Arts, Farnham made their initial sketch for an animation that shows the building of the hügels, the plants that would grow as the seasons changed and how people might engage with them.

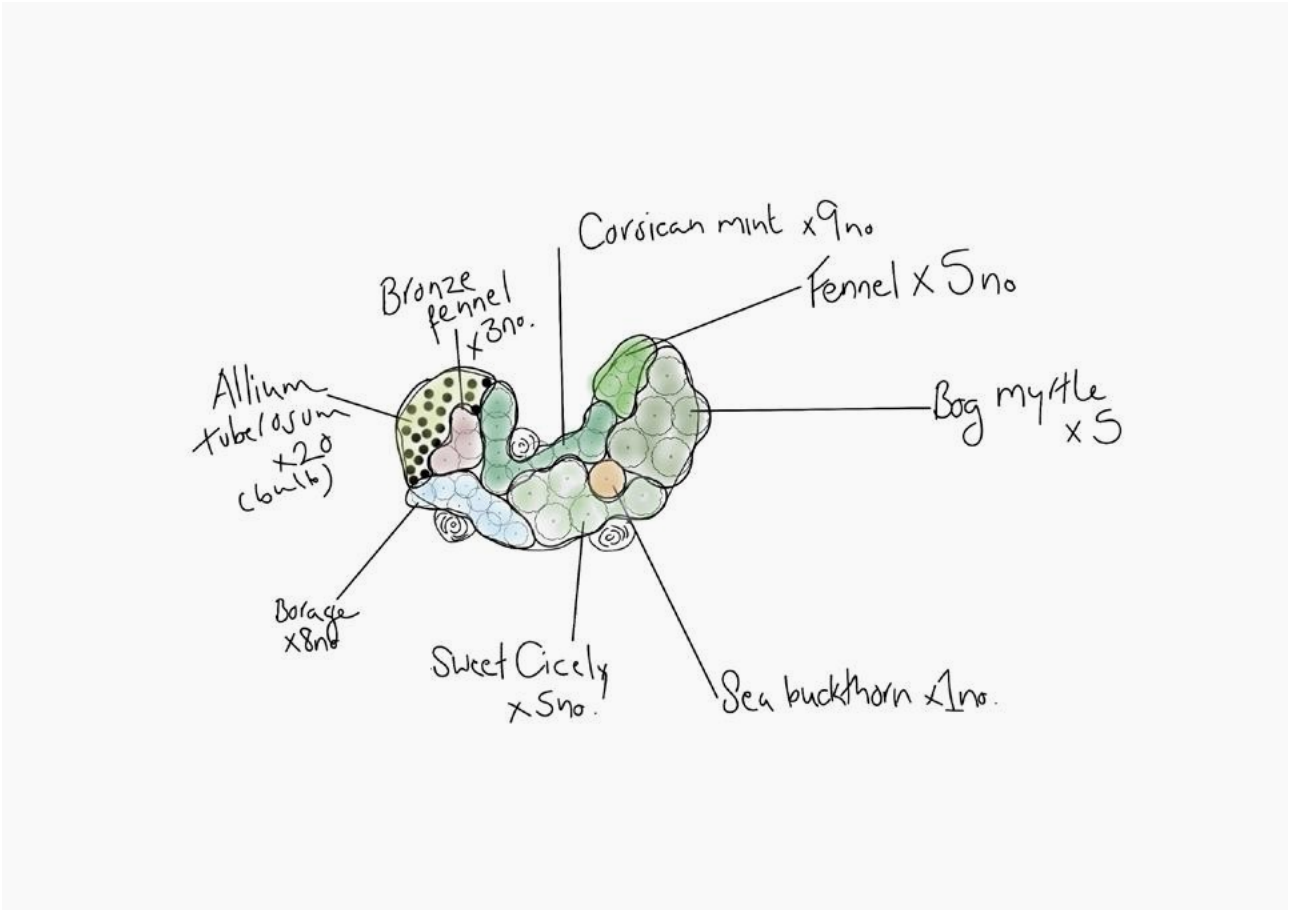
Initial storyboard ideas, Sasha Vinnicombe, 2024

THREE TEST HÜGELS
SARAH-ALUN JONES

The three hügel shapes were to have a planting theme – scent, colour and structure. The horseshoe-shaped hügel, would focus on scent to enfold a person in fragrance. The colour hügel would include plants that can be appreciated for the colour of their leaves, stems, flowers and fruit and/or be used to create dyes. The structure hügel, would use the three sisters planting technique of growing corn, beans, and squash together in a symbiotic relationship. Garden designer, Sarah-Alun Jones, made a planting plan with these drawings.

HÜGEL PLANTING SELECTION

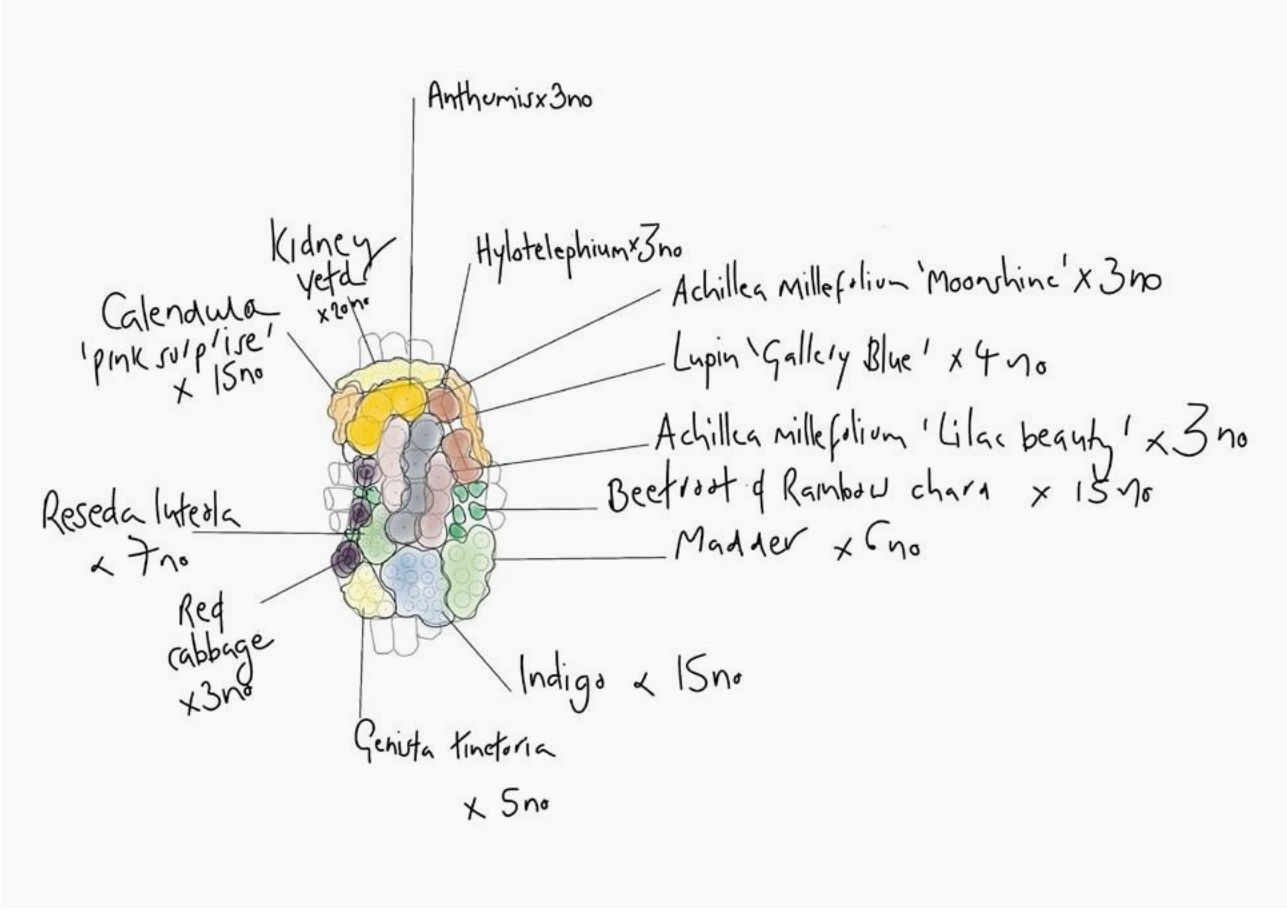
Plant List	No.	Height (mm)	Width (mm)	Pot size
Achillea Millefolium 'Moonshine'	3	600	600	2L
Achillea Millefolium ' Lilac Beauty'	3	600	600	2L
Anthemis Tinctoria 'Sauce Hollandaise'	3	900	600	2L
Brassica Oleracea Capitata (Red Cabbage)	6	600	800	plug
Beta Vulgaris (Beetroot)	15	600	300	plug
Calendula Officinalis 'Pink Surprise'	15	500	300	plug
Genista Tinctoria	5	600	500	9cm
Lupinus Polyphyllus 'Gallery Blue'	4	1500	400	3L
Persicaria Tinctoria/ Indigofera Tinctoria	15	1000	1000	plug
Reseda Luteola (Weld)	7	900	300	3cm
Rubia Tinctorum (Madder)	6	500	600	plug
Anthyllis Vulneraria (Kidney Vetch)	20	150	300	9cm pot
Hylotelephium Spectabile	3	500	500	2L
Allium Tuberosum (Three Cornered Leek)	20	300	200	bulb
Borago Officinalis (Borage)	8	500	200	plug
Foeniculum Vulgare (Sweet Fennel)	5	1000	450	2L
Foeniculum Vulgare 'Smoky' (Bronze Fennel)	3	1000	450	2L
Hippophae Rhamnoides'leikora' (Sea Buckthorn)	1	1000	400	6L pot
Mentha Requienii (Corsican Mint)	9	50	100	9cm pot
Myrica Gale (Bog Myrtle)	5	400	800	3L pot
Myrrhis Odorota (Sweet Cicely)	5	100	80	plug
Cynara Cardunculu	1	1200	400	2L



SCENT HÜGEL

Allium Tuberosum (Three-Cornered Leek)
Borago Officinalis (Borage)
Foeniculum Vulgare (Sweet Fennel)
Foeniculum Vulgare 'Smoky' (Bronze Fennel)
Hippophae Rhamnoides'leikora' (Sea Buckthorn)
Mentha Requienii (Corsican Mint)
Myrica Gale (Bog Myrtle)
Myrrhis Odorota (Sweet Cicely)

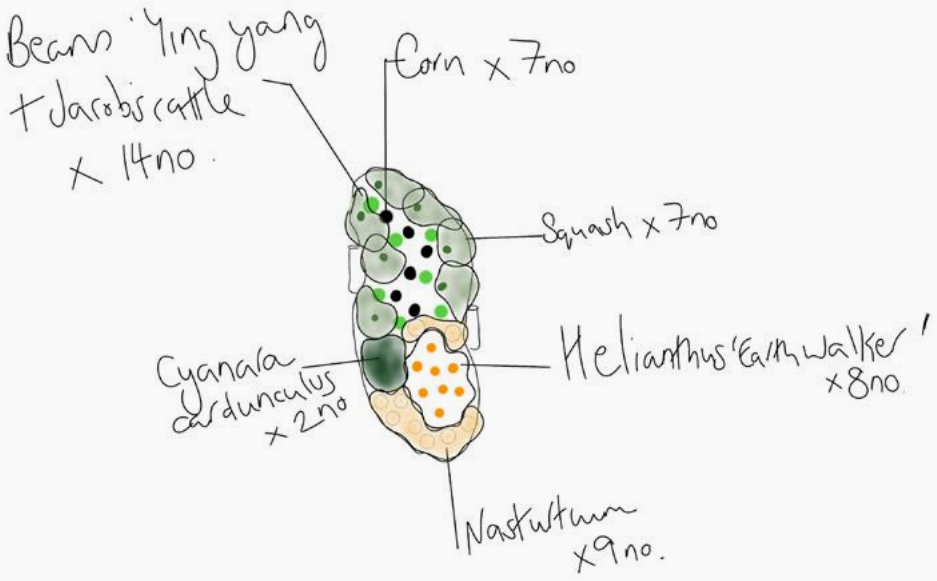
Drawings, Elena (Yutong) Zhou, 2024



COLOUR HÜGEL

Achillea Millefolium 'Moonshine'
Achillea Millefolium ' Lilac Beauty'
Anthemis Tinctoria 'Sauce Hollandaise'
Brassica Oleracea Capitata (Red Cabbage)
Beta Vulgaris (Beetroot)
Calendula Officinalis 'Pink Surprise'
Genista Tinctoria
Lupinus Polyphyllus 'Gallery Blue'
Persicaria Tinctoria/ Indigofera Tinctoria (Japanese Indigo)
Reseda Luteola (Weld)
Rubia Tinctorum (Madder)
Anthyllis Vulneraria (Kidney Vetch)
Hylotelephium Spectabile

Drawings, Elena (Yutong) Zhou, 2024



STRUCTURE HÜGEL

Cucurbita Maxima' Jumbo Pink Banana Winter Squash'
Helianthus Annuus 'Earthwalker'
Tropaeolum Majus
Phaseolus Coccineus 'Ying Yang'
Phaseolus Vulgaris ' Jacobs Cattle Gold'
Zea Hybrida - 'Glass Gem Popcorn' (Sweetcorn)
Cynara Cardunculus

Drawing Beetroot (summer), Ying Cao, 2024

Bronze head fennel (winter) Elena (Yutong) Zhou, 2024

Drawing madder (early autumn), Ying Cao, 2024

Drawing cabbage (autumn), Ying Cao, 2024

Sweet cicely winter, Ying Cao, 2024

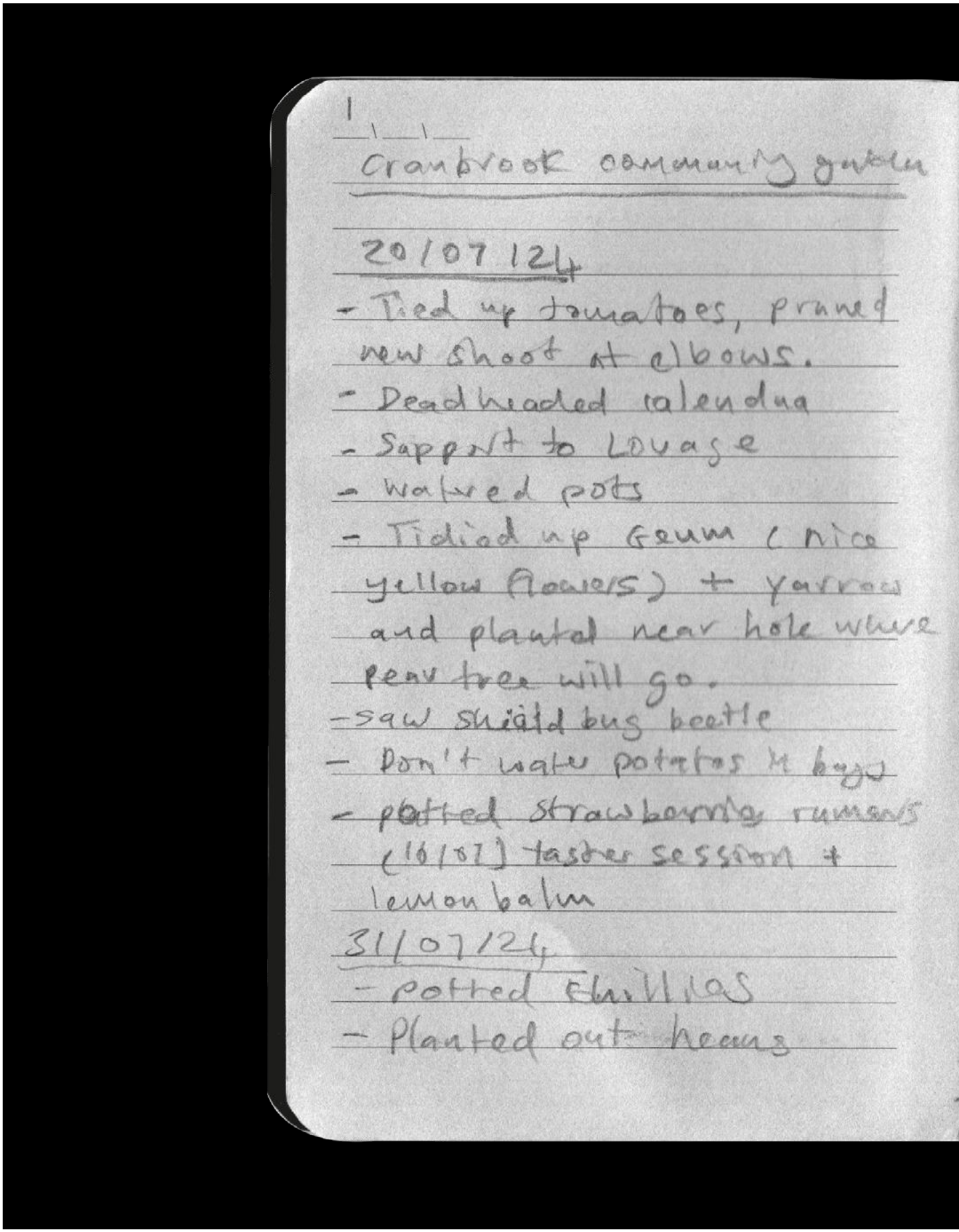
weld (summer) Ying Cao, 2024

CRANBROOK COMMUNITY FOOD GARDEN

This small haven tucked away in the iconic Cranbrook Estate is truly inspiring. So much knowledge and experience is gathered and nurtured here. Every week a new activity or project emerges, from a woodwork workshop to build a library, seed archive, to a medicinal herb garden. Each approached with creativity, ingenuity, generosity and fun. There is much to learn from such community organising. Currently, preparation is underway to build a hügel, the largest yet. It will be an opportunity to experiment and test ideas that can be observed and recorded collectively.

Cranbrook Community Food Garden, Bethnal Green, London, images courtesy of Lizzy Mace

Cranbrook Community Food Garden, images courtesy of Lizzy Mace



1

Cranbrook community garden

20/07/24

- Tied up tomatoes, pruned new shoot at elbows.
- Deadheaded calendula
- Support to Lovage
- Watered pots
- Tidied up Geum (nice yellow flowers) + yarrow and planted near hole where pear tree will go.
- saw shield bug beetle
- Don't water potatos if bugs
- potted strawberry runners (16/07) taster session + lemon balm

31/07/24

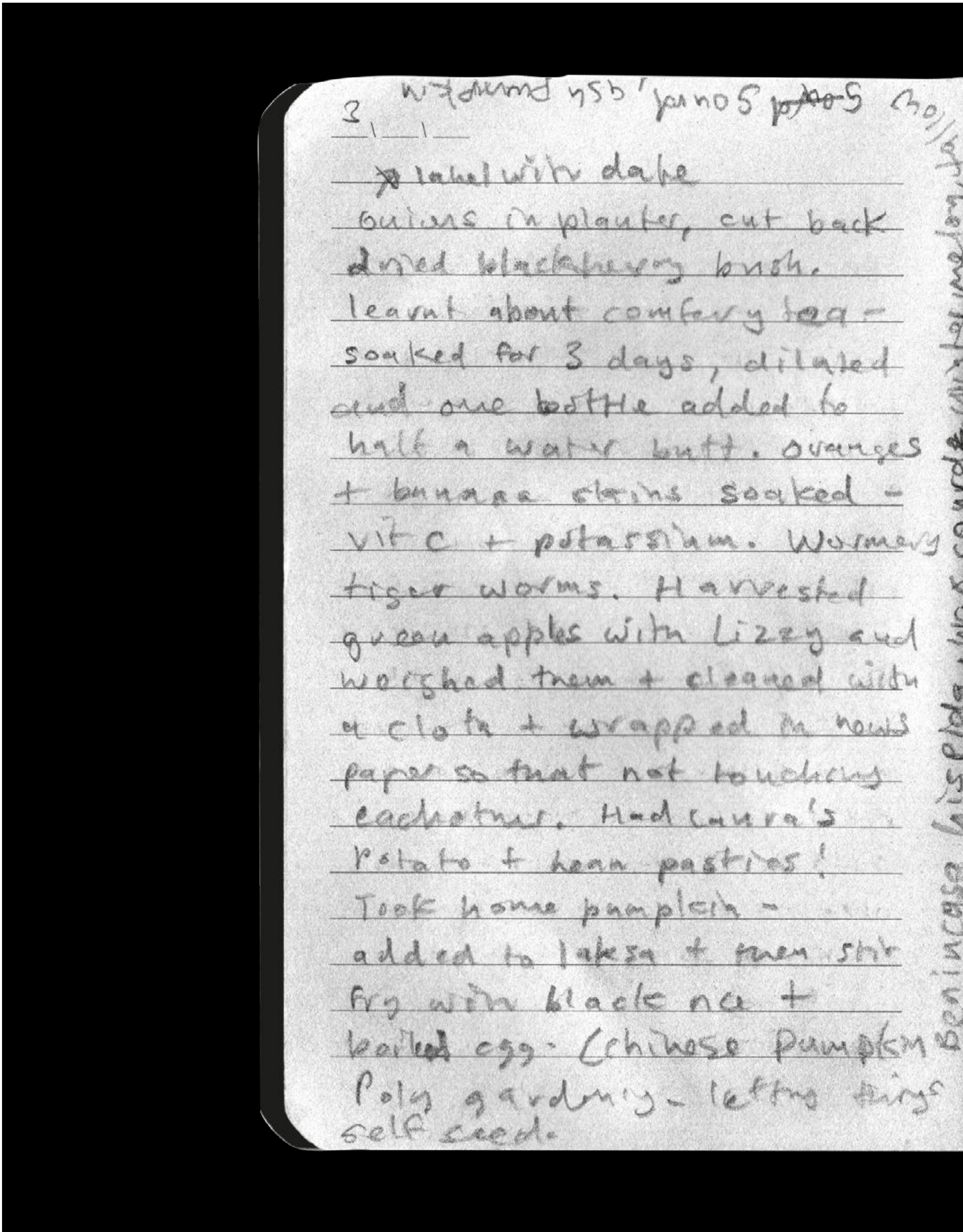
- potted Elderflowers
- Planted out herbs

2

hand span apart, can all climb up together.
- planted salvia near the marrebella plum tree, orange/yellow
- Kalamancee tree - lemon orange fruit, - cocktails, on East Asian food
- recognising early plants tiny carrot.
- grasses + mallow weeded
- mints too close together can contaminate flavours
- lovage - very strong celery flavour - add small amount instead of celery!

07/08/24

Watered plants, Sowed salad


3 [illegible] 30/1[illegible]
label with date
onions in planter, cut back
dried blackberry bush.
learnt about comfrey tea -
soaked for 3 days, diluted
and one bottle added to
half a water butt. oranges
+ banana skins soaked -
vit c + potassium. Wormery
tiger worms. Harvested
green apples with Lizzy and
washed them + cleaned with
a cloth + wrapped in news
paper so that not touching
eachother. Had Laura's
potato + bean pastries!
Took home pumpkin -
added to laksa + then stir
fry with black rice +
boiled egg. (chinese pumpkin
Poly gardening - letting things
self seed.
Benincasa hispida, wax gourd, winter melon, [illegible]

Notes from attending Cranbrook Community Food Garden, Jaimini Patel

4

14/08/24

Repaired net with Lawlor, and planted large aubergine from pot into planter. Sorted out vine leaves with Laura for dolma - soak in wine/oil to soften. Large ones without holes. Took off brown bit of fern. Salad onion seeds eaten. Planted 3 aubergines. Mended hole in net sewed a piece to it in the dark. Laura found a beautiful lace aloe for my plant collection, gave me a chilly plant and the harvest was cucamelons, [monsa melon], mexican sour gherkin.

17/08/24

Soil sifting, sift from dry leaves waste. Throw out stones

Cranbrook Community Food Garden, images courtesy of Lizzy Mace

THE FLAX EXCHANGE

The experience of being a participant in a project is incredibly valuable as an artist inviting collaboration. Artist, Shane Waltener led workshops at Poplar Union exploring homegrown and sustainable textiles practices through movement and sound. Shane's practice draws inspiration from ceramics, textiles and basketry and is rooted in ideas of ecology and reuse. The flax used in the workshop and subsequent performance was grown nearby with local people. Shane has a wonderful way of facilitating the exchange of skills, knowledge and experience. The process of doing something non-verbal together has a particular generative quality. Building relationships in this way with people and place over time is central to Autopoietic.

The Flax Exchange, Poplar Union, London

The Flax Exchange exhibition, Poplar Union, London, 2024

CHERWELL COLLECTIVE
ANTHOTYPE WORKSHOP

From Greek *Anthos* (flower) and *týpos* (imprint), an anthotype is an image created from the photosensitive material from plants. Participants were invited to participate in a workshop using kitchen waste and local weeds. Artist Kim Coleman who has been working with anthotypes co-led the workshop.

Emulsions made from cabbage, beetroot, nettle and onion skin was painted on paper on which pressed plants, seeds and paper cutouts were placed and exposed to sunlight. The images take time to appear and then in time will also disappear.

Anthotype workshop, Kidlington.

Anthotype workshop, Kidlington

Anthotype workshop, Kidlington

THE WEED GARDEN
WEED WALK

The Weed Garden, a commission for the Begbroke Innovation District, is an artwork and an inventive biodiversity initiative, celebrating the plants that many would usually regard as weeds. The garden is also in response and contrast to the history of the site, formerly home to the British Weed Research Organisation.

Its creators, architecture practice *Assemble* and garden designer Sarah Alun-Jones led a weed identification workshop. For Autopoietic, it is interesting to consider how these plants came to be on the site and which will end up being planted on the hügels. Verbena, for example, is a nitrogen fixer particularly useful in the early life of the hügel, which is why it was chosen for the Hazel Walk Allotment.

Click here to read the "Plants in the 'wrong' place"

Weed Walk, The Weed Garden, Begbroke Innovation District, image courtesy of Yesenia Thibault-Picazo

Weed Walk, The Weed Garden, Begbroke Innovation District, image courtesy of Yesenia Thibault-Picazo

Weed Walk, The Weed Garden, Begbroke Innovation District, image courtesy of Yesenia Thibault-Picazo

Weed Walk, The Weed Garden, Begbroke Innovation District, image courtesy of Yesenia Thibault-Picazo

AUTOPOIETIC: A LIBRARY

Autopoietic is a slow work. It will constitute a series of hügels built with people to create a library of plants, materials, knowledge, skills and relations. The size and shape of a hügel will be determined by the tree that it is made with, retaining a memory of it and its place of origin. Participants will establish a research focus for each hügel e.g. bees, biodiversity, climate change, dyes, colour, weaving, paper, textiles, health, medicine, tea, ritual, myth, lore, baking, brewing, fungi. People from the local community, the science park, universities, schools and local industries will be invited to build, plant and tend the hügels, which will become research tools and sites for collaborative experimentation.

Amongst the hügels will sit a metal polytunnel frame, to which creative interventions will be made using the materials grown. These will encourage plants to grow around it. In time, they will grow to cover the frame entirely. This democratic living structure, a hügelesque form, which can be inhabited, will encourage placemaking providing a space for formal and informal gathering. At the heart of the work is how we create and share knowledge and experience through the act of making and taking care of something together. Autopoietic is a provocation to set an alternative in motion – a place to test wild ideas, learn from failure, disagree, and reimagine. It is an experiment in collective self-organisation, an invitation, an evolving expanded archive.

Salad Burnett, Field Marigold, Mallow, Common Poppy

Red Clover, Lobelia, Pineapple Weed, Field Sacbious Blue

Spotted Medick, Fat Hen, Spotted Hawksbit, Feverfew

Yarrow, Wild Geranium, Shepherd Purse

AUTOPOIETIC:
CATHEDRAL THINKING

The concept of Cathedral thinking is rooted in mediaeval times when architects, stonemasons and artisans laid plans and began construction without knowing what the building they were contributing to would become or live to witness its completion. Despite there being an initial vision, it is likely that such "building projects evolved more organically and haphazardly than their final appearance might suggest" (Fisher, 2023: 22). Thinking about even longer timespans, in Japan the Ise Grand Shrine, a Shinto Temple is rebuilt every twenty years with the transfer of craft from one generation to the next. It has been rebuilt sixty-six times since the seventh century with subtle variations appearing over time. Autopoietic actively invites adaption and revision by the people who tend to the hügels. Whether they are maintained or rebuilt every twenty years, it is not so much their physical manifestation but the exchange of knowledge and the community practices they maintain that constitutes the work.

Hazel Walk Allotment hügel, image courtesy of Yesenia Thibault-Picazo

FOOTNOTES

1 Defining Commons. The existence of 'gated' and commodity-producing commons demonstrates that there are many forms of commons and challenges us to see what aspects of communing activities identify them as other from the state and market and the principle of a social organization alternative to capitalism. To this end, keeping in mind Massimo De Angelis's recommendation against setting up 'models' of commons, we propose some criterial drawn from discussions with comrades and practices we have encountered in our political work:
i) To contribute to the long-term construction of new modes of production, commons should be autonomous spaces and should aim to overcome the divisions existing among us and build the skills necessary for self-government. Today we see only fragments of the new society potentially in the making, in the same way as we can spot fragments of capitalism in urban centres like Florence in late medieval Europe, for example, where broad concentrations of workers already existed in the textile industry by the mid-fourteenth century.
ii) Commons are defined by the existence of a shared property, in the form of a shared natural or social wealth – lands, waters, forests, systems of knowledge, capacities for care – to be used by all commoners, without any distinction, but which are not for sale. Equal access to the necessary means of (re)production must be the foundation of life in the commons. This is important because the existence of hierarchical relations makes commons vulnerable to enclosures.
iii) Commons are not things but social relations. This is the reason why some (eg., Peter Linebaugh) prefer to speak of 'commoning,' a term that underscores not the material wealth shared but the sharing itself and the solidarity bonds produced in the process. Commoning is a practice that appears inefficient to capitalist eyes. It is the willingness to spend much time in the work of cooperation, discussing, negotiating, and learning to deal with conflicts and disagreement. Yet only in this way can a community in which people understand their essential interdependence be built.
iv) Commons function on the basis of established regulations, stipulating how the common wealth is to be used and cared for, that is, what the commoners' entitlements and obligations should be.
v) Commons require a community, the principle being "no community, no commons." This is why we cannot speak of a 'global commons,' a concept that presumes the existence of a global collectivity…The 'global commons' designation is a fraudulent manoeuvre that must be rejected. The same applies to the United Nations' designation of selected cities and geographical areas as 'heritage of humanity,' which required municipalities and government to adopt 'protection' and valorisation measures that benefit the tourist industry, while diverting resources away from more works that would improve the conditions of local populations.
vi) Commons are constituted on the basis of social cooperation, relations of reciprocity, and responsibility for the reproduction of the shared wealth, natural or produced. Respect for other people and openness to heterogeneous experiences provided the rules of cooperation are observed distinguishes them from gated communities that can be committed to racist, exclusionary practices, while fostering solidarity among the members.
vii) Commons are shaped by collective decision-making, through assemblies and other forms of direct democracy. Grassroots power, power from the ground up, power derived from tested abilities, and continual rotation of leadership and authority through different subjects, depending on the tasks to be performed, is the source of decision-making. This distinguishes commons from communism, which consigned power to the state. Commoning is reclaiming power of making basic decisions about our lives and doing so collectively….
viii) Commons are a perspective fostering a common interest in every aspect of life and political work and are therefore committed to refusing labor hierarchies and inequalities in every struggle and prioritizing the development of a truly collective subject.
xi) All these characteristics differentiate the common from public, which is owned, managed, controlled, and regulated by and for the state, constituting a particular type of private domain. This is not to say that we shouldn't fight to ensure that the public is not privatized. As an intermediate terrain it is in our interest that commercial interests do not engulf the public, but we should not lose sight of the distinction. We cannot abandon the state, since it is the site of the accumulation of the wealth produced by our past and present labor. Similarly, most of us still depend on capital for our survival, as most of us do not have land or other means of subsistence. But we should work to ensure that we go beyond state and capital" (Federici, 2019: 93–96).

2 Maturana and Varela are cautious about applying the term Autopoiesis to other fields. Niklas Luhmann, nevertheless, applies it to social systems, and it has been applied to other disciplines. There has been criticism and varying interpretations of the term. I pick it up as an artist loosely. I'm interested in how "Living systems…are organized in such a way that their processes produce the very components which are necessary for the continuance of these processes" (Mingers, 1989: 162). In this work I invite the circular organisation of processes which through certain conditions and relations can maintain an autonomous entity. Beth Dempster proposes the term 'sympoiesis' for self-organising systems, which unlike Autopoiesis do not have self-defined boundaries, are not self-produced but collectively produced and are not organisationally closed but organisationally ajar. (Demster, 2000: 1).

3 "*Living-in-place* means following the necessities and pleasures of life as they are uniquely presented by a particular site, and evolving ways to ensure long-term occupancy of that site. A society which practices living-in-place keeps a balance with its region of support through links between human lives, other living things, and the processes of the planet — seasons, weather, water cycles — as revealed by the place itself. It is the opposite of a society which *makes a living* through short-term destructive exploitation of land and life. Living-in-place as an age-old way of existence, disrupted in some parts of the world a few millennia ago by the rise of exploitative civilization, and more generally during the past two centuries by the spread of industrial civilization. It is not, however, to be thought of as antagonistic to civilisation, in the more human sense of that word, but may be the only way in which a truly civilized existence can be maintained" (Berg and Dasmann, 1977: 399).

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Autopoietic
The Hügel Story

Part One: Growing an Idea

By Jaimini Patel

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