



Grimeoire

An Unexpected Material Engagement project

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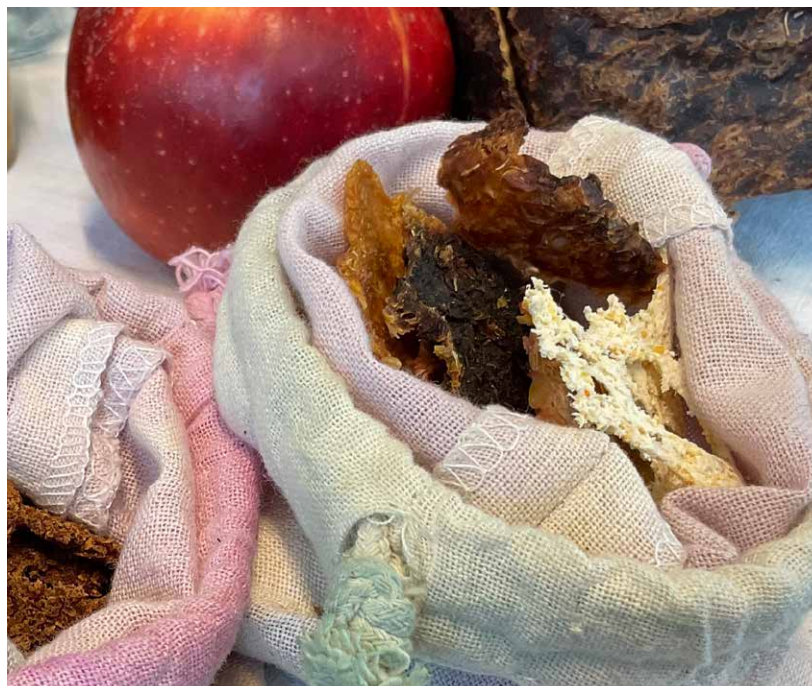
Palen D'Costa

Dylan van Oosterhout

Grimeoire is a transformative care product for more than human care strongly based in materiality.

Grimeoire as a project started of with the desire to, rather than focus on direct functionality from a human centred design perspective, seek to understand the relationality of the more than just human and material agencies of the materials and systems we engage with.

This marks a deliberate shift in the way a design process is traditionally undertaken since instead of taking an isolated problem that selected materials are used to solve, as an object, we employ a design strategy in which materials through there agency [1] as subject are observed and analysed for the emergence of new relations and transformative capacity.



As such we start of with a broader set of goals going in to this project. We seek to create a care product based on material flows that are often disregarded in their subjectivity, in particular non-virgin materials and reclaimed materials. The understanding of a care product from a more than human perspective asks us to consider the elements of care not just for different situated humans but the networks that support the material subjects and humans as well [5].

We started off by mapping out present material flows in our lives off materials that we would otherwise disregard as waste products or byproducts of our everyday living. These materials from the base of the first explorations of the agency of these materials (page 3/6). We continue this exploration by transforming these materials by mechanical means to uncover the emergence of other agencies of these materials (page 7/13). Here we follow the lens of black ecology that frames the capacity of materials to act on and transform their environment when interacting with other materials as fundamentally not completely understood until observed and further analyzed [4].



Auto-Ethnography of mapping material flows of waste and care

A DAY OF INTERACTING W/ MATERIALS

BY: PALEN D'Costa



WALKED THE DOG
PICKED UP A POOIE W/ BAG
& DISPOSED IT.



MADE COFFEE AFTER
BREAKFAST.
THREW AWAY A COFFEE
PAD.
MY HOUSEHOLD
GOES THROUGH 2
PADS A DAY.



COFFEE PADS

I DISPOSE OF COFFEE PADS BECAUSE I HAVE NO FURTHER USE FOR THEM. I RECENTLY BEGAN USING PADS INSTEAD OF COFFEE GROUNDS BECAUSE OF THE EASE & CONVENIENCE IT BRINGS TO MY DAILY MORNING RITUAL OF COFFEE DRINKING. COMING STRAIGHT OUT OF THE COFFEE MACHINE, THESE PADS SEEM LIKE A RATHER STERILE MATERIAL. HAVING JUST BEEN BOILED IN CLOSE TO BOILING HOT WATER. I HAVE SEEN COFFEE DEVELOP MOLD IN COFFEE DISPOSAL CONTAINERS, AT WHICH STAGE I WOULD NO LONGER CONSIDER USING IT FOR ANYTHING BESIDES AS COMPOST. ALTHOUGH, I HAVE NEVER COMPOSTED BEFORE.

BANANA PEELS

I HAVE NEVER MADE USE OF BANANA PEELS. I HAVE COME ACROSS SNACK RECIPES WHICH USE BANANA PEELS. I WOULD ABSOLUTELY CONSIDER USING A BANANA PEEL AS A RAW INGREDIENT IMMEDIATELY AFTER PEELING. I CAN ONLY THINK OF FREEZING AS A MEANS TO PRESERVE THE PEELS FOR FUTURE USE. I WOULD NOT BE OPPOSED TO EATING SOME PREPARATION WITH BANANA PEELS, SO APPLYING A COSMETIC SUBSTANCE DERIVED FROM THEM WOULD BE NO PROBLEM. I AM UNDER THE IMPRESSION THAT THE INSIDE LINING OF THE PEEL IS LESS RESILIENT THAN THE OUTSIDE, SO I WOULD SCRAPE IT OFF IF ANYTHING.



FRESHENED UP BY
BRUSHING MY TEETH,
WASHING MY FACE,
APPLYING DEO & FACE
CREAM.
I GO THROUGH A
LOT OF DEODORANT.



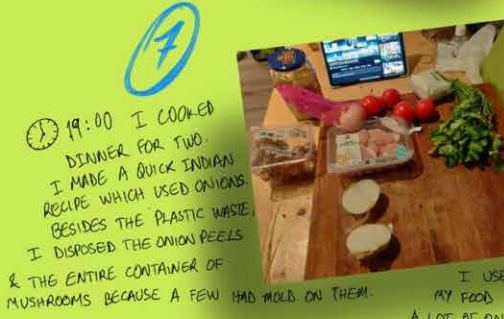
GOT TO WORK AT MY DESK W/ A GLASS
OF WATER.



MADE MYSELF A LUNCH
SMOOTHIE.
I MAKE SUCH A SMOOTHIE
3-4 TIMES A WEEK &
DISPOSE A BANANA
PEEL EVERY TIME



I TOOK A
16:30 SHOWER &
USED A SHAMPOO
& BODY WASH



19:00 I COOKED
DINNER FOR TWO.
I MADE A QUICK INDIAN
RECIPE WHICH USED ONIONS.
BESIDES THE PLASTIC WASTE
I DISPOSED THE ONION PEELS
& THE ENTIRE CONTAINER OF
MUSHROOMS BECAUSE A FEW
HAD MOLD ON THEM.



I USE A LOT OF ONIONS IN
MY FOOD IN GENERAL & DISPOSE OF
A LOT OF ONION PEELS ON A REGULAR BASIS.

Auto-Ethnography of mapping material
flows of waste and care

MUSHROOMS & ONION PEELS

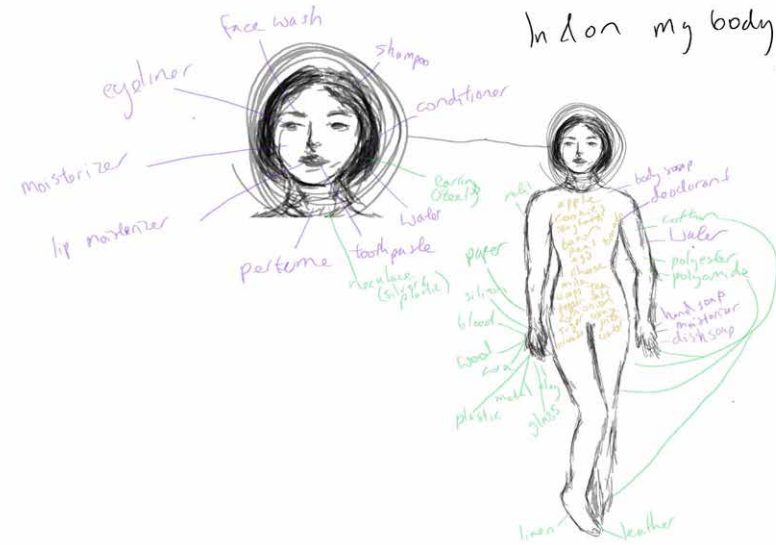
I DID NOT PHOTOGRAPH THE MUSHROOMS I THREW AWAY. IT WOULD HAVE BEEN INSIGHTFUL TO SEE HOW MUCH MOLDING PUSHED ME TO IMMEDIATELY TOSS THE LOT OF THEM IN THE BIN. I BELIEVE MY THRESHOLD OF THE DEGREE OF MOLDING BEFORE I TOSS FOODS AWAY VARIES GREATLY. AS AN EXAMPLE, JUST THE OTHER DAY, I PICKED TWO MOLDY CHILLIES OUT OF A BAG OF CHILLIES, RINSED THE REST WITH WATER AND VINEGAR, AND FROZE THEM. THE IDEA THAT MUSHROOMS ARE POROUS MAKES ME THINK THAT A LITTLE VISIBLE MOLD MEANS MORE THAT I CANT SEE IN THE BULK OF THE MUSHROOM BODIES. AS FOR THE ONION PEELS, I FIND THESE, TAKEN OF PERFECTLY RIPE ONIONS. TO BE PERFECTLY USABLE FOR SOMETHING I WOULD GLADLY INGEST OR APPLY TO MY BODY. HOWEVER, I CANNOT SAY THE SAME FOR PEELS OF ONIONS THE OUTER LAYERS OF WHICH HAVE BEGUN TO WILT OR ROT.

Zooming in into food waste, things touching my body, and the importance of biological products for that:



A day in the life of Luna:

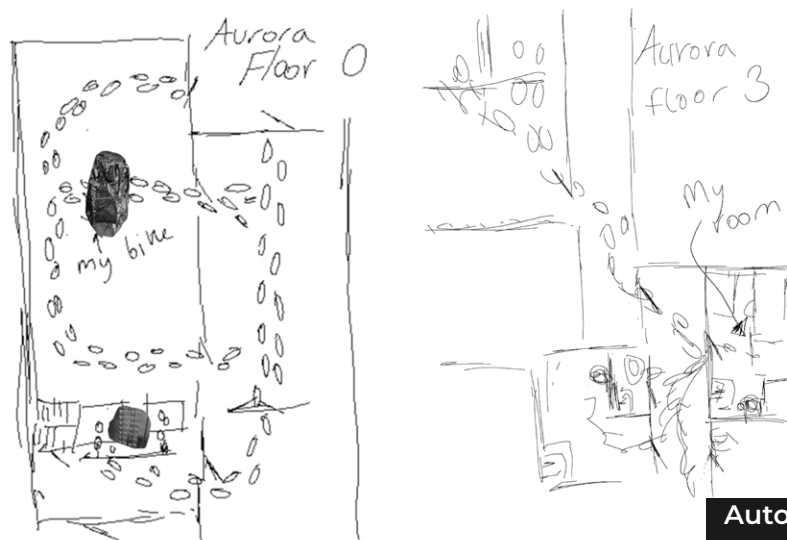
A day in the life of Luna:



In many products I use, I don't know the exact things touching my body.

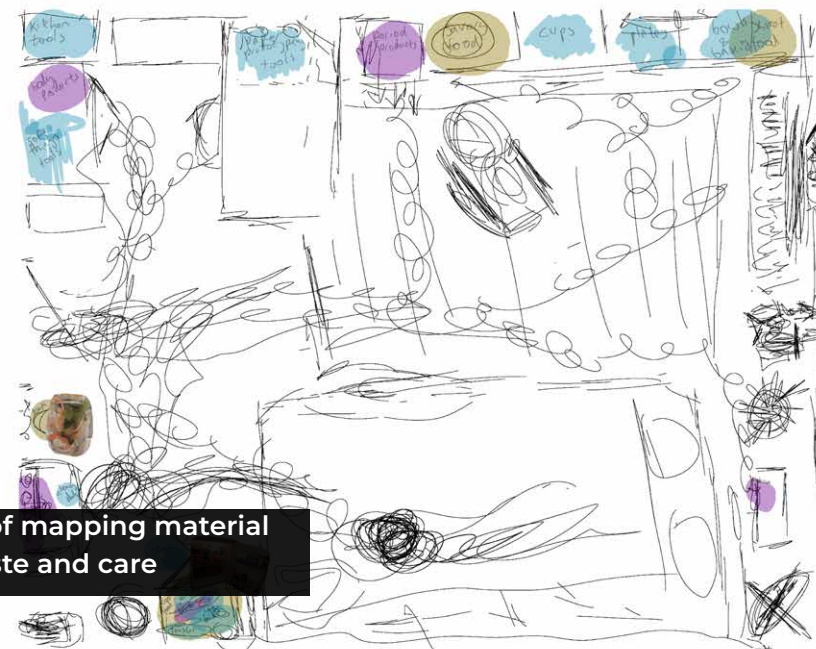
Pathways

A day in the life of Luna:



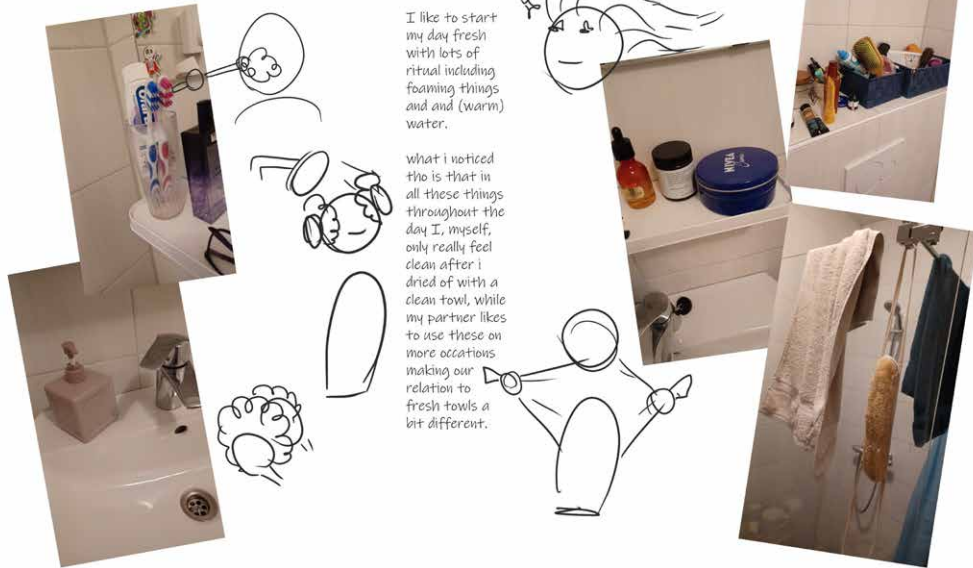
My room, my traces, my care products (purple), my food (ochre), my tools (blue)

A day in the life of Luna:



Auto-Ethnography of mapping material flows of waste and care

A day in the life, self-care, food waste and decay Ronald Tiemens

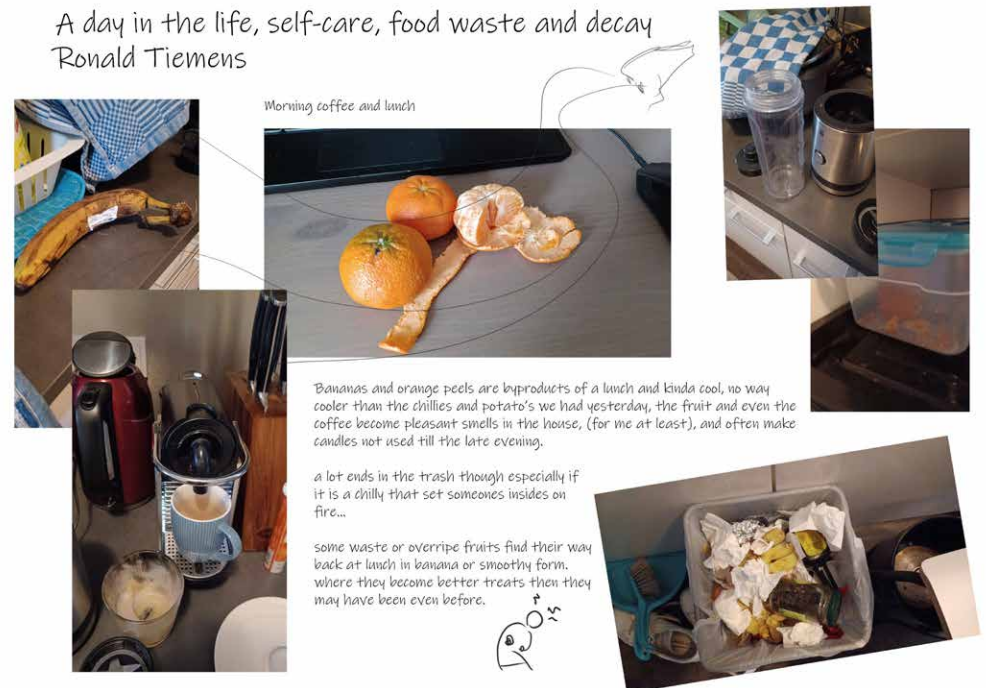


Auto-Ethnography of mapping material flows of waste and care

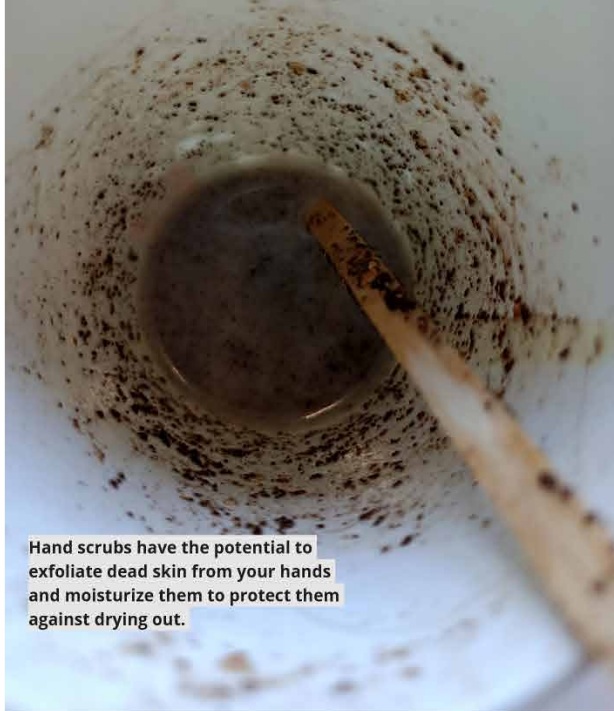
A day in the life, self-care, food waste and decay Ronald Tiemens



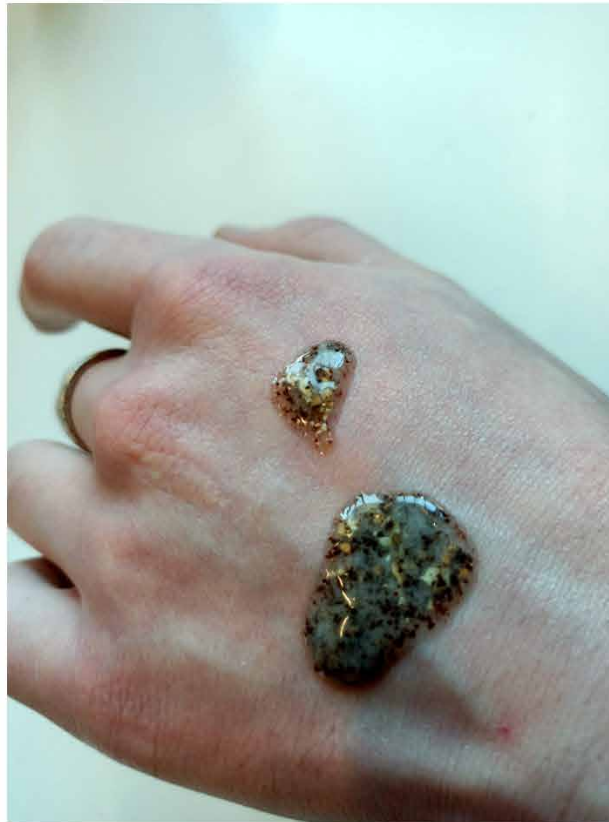
A day in the life, self-care, food waste and decay Ronald Tiemens



Mixing crushed egg shells, coffee grounds and coconut oil to create an exfoliating and moisturizing hand cream



Hand scrubs have the potential to exfoliate dead skin from your hands and moisturize them to protect them against drying out.



The fine granular eggshell powder was mixed with coffee grounds and coconut oil, and used as a body exfoliant, leaving the skin soft and moisturized.

Eggshells create an exfoliating quality that helps remove dead skin, and coconut oil helps enrich the skin to soften it

Skin exfoliant

The fine granular eggshell powder was mixed with coffee grounds and coconut oil, and used as a body exfoliant, leaving the skin soft and moisturized.

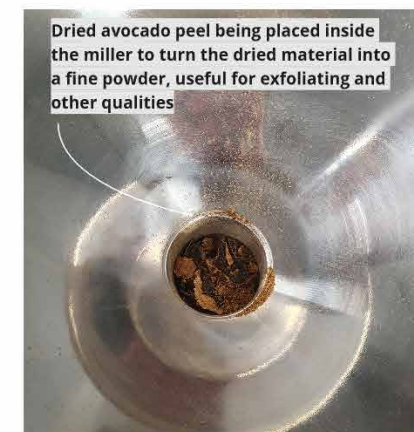
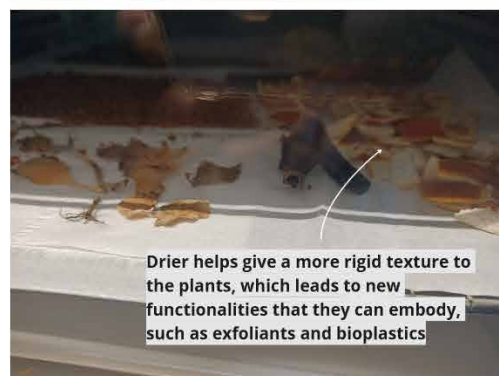
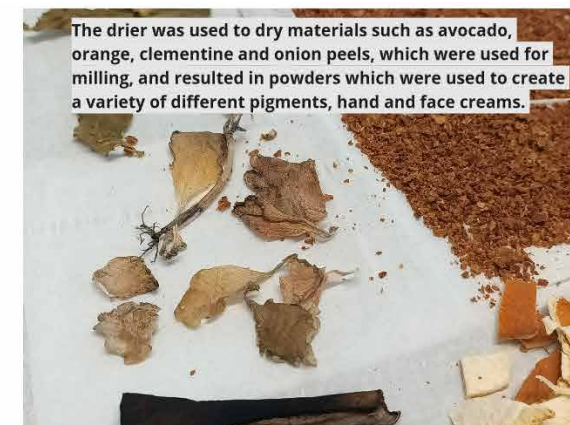


Mixing coconut oil with egg shells and coffee grounds creates a unique mixture that feels as though it can help hydrate and exfoliate your skin



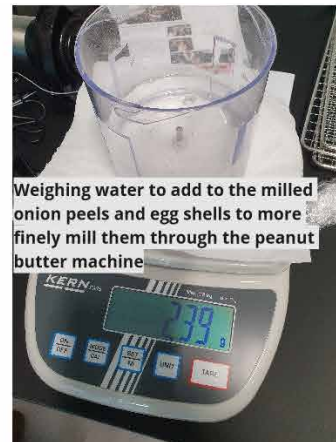
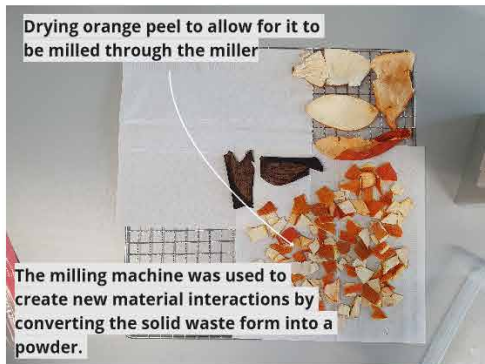
Hard texture of crushed egg shells is noticeable, and feels as though it is indeed exfoliating the skin

Coconut oil and coffee grounds add significant extra oil to skin to aid in moisturizing



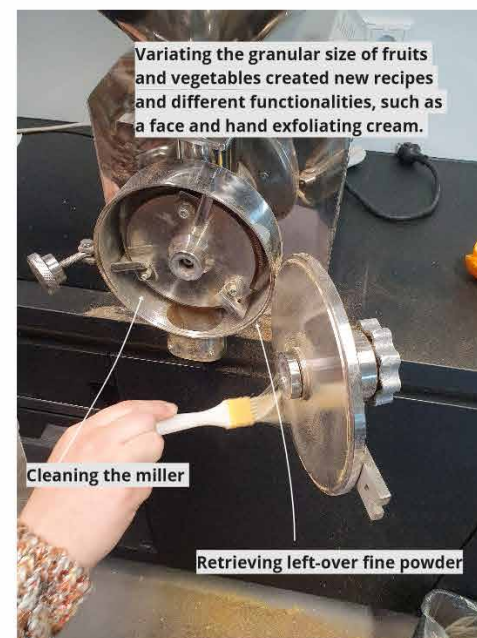
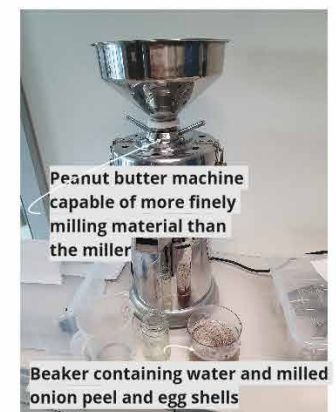
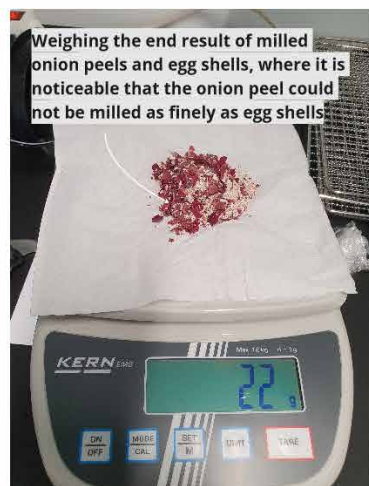
Using the drier

The drier removes moisture from materials, enhancing the rigidity of orange rinds while making avocado peels more brittle.



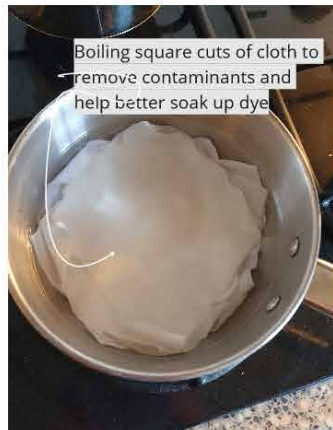
Using the milling machine

The milling machine was used to create new material interactions by converting the solid dry waste form into a powder. Varying the granular size of the powder created new recipes, such as a face and hand exfoliating cream.

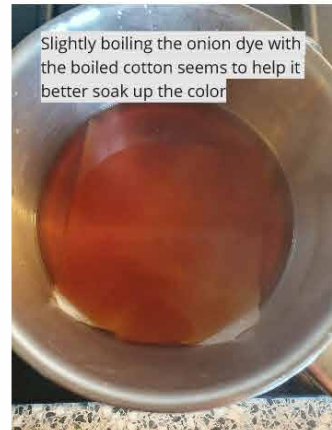




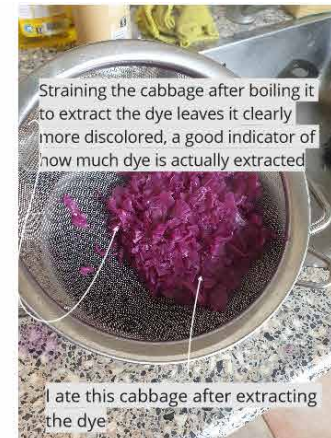
Dyeing with natural colours affords for the beautiful pigmentation trapped inside fruits and vegetables to be released and reused.



Boiling square cuts of cloth to remove contaminants and help better soak up dye



Slightly boiling the onion dye with the boiled cotton seems to help it better soak up the color

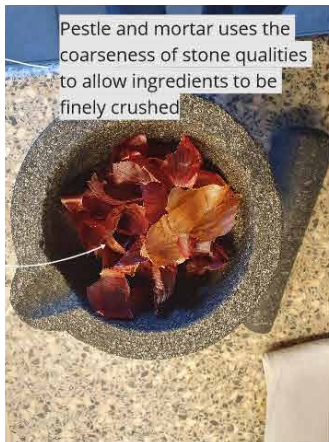


Straining the cabbage after boiling it to extract the dye leaves it clearly more discolored, a good indicator of how much dye is actually extracted

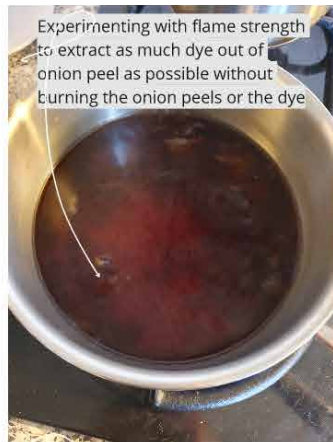
Use this cabbage after extracting the dye



Boiling the cloth with the cabbage dye and leaving it to rest seems to integrate a significant amount of color



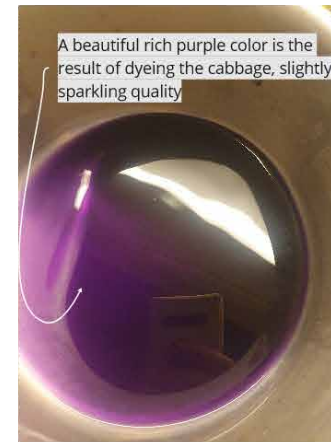
Pestle and mortar uses the coarseness of stone qualities to allow ingredients to be finely crushed



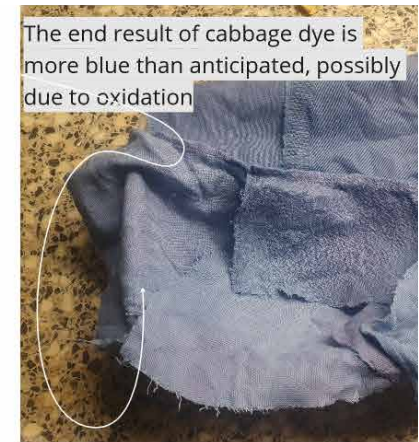
Experimenting with flame strength to extract as much dye out of onion peel as possible without turning the onion peels or the dye



The yellow color of red onion dye is surprising, and seems to have integrated very well into the cloth



A beautiful rich purple color is the result of dyeing the cabbage, slightly sparkling quality



The end result of cabbage dye is more blue than anticipated, possibly due to oxidation



Using a lid contains all qualities of the dye, stopping these from being evaporated



Mashing the red cabbage helps create a bigger surface area to allow more dye to escape the vegetable

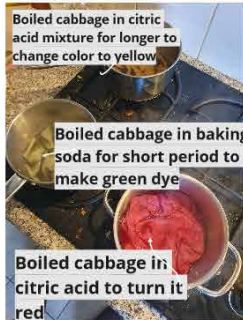


Dyeing

Dyeing with natural colours affords the beautiful pigmentation trapped inside fruits and vegetables to be released and reused. A range of colours was conceived by experimenting with the pH balance of red cabbage, developing intriguing and unique patterns.



Slicing the cabbage as small as possible to be able to extract as much dye as possible



Boiled cabbage in citric acid mixture for longer to change color to yellow

Boiled cabbage in baking soda for short period to make green dye

Boiled cabbage in citric acid to turn it red



Yellow dyed cloth didn't integrate the color well, presumably because it burned

Red dyed cloth becomes pink

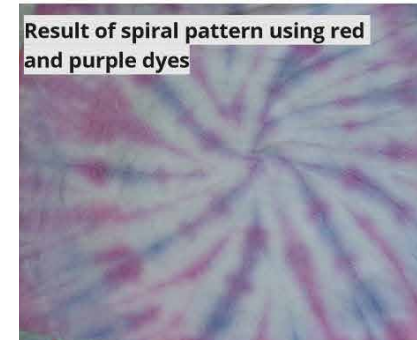
Green dyed cloth becomes light green



Experimenting with different tie dye patterns to create new and exciting color combinations and configurations



Red and purple colors seemed to take better than the green



Result of spiral pattern using red and purple dyes



One tablespoon baking soda



Beautiful red dye integrated with boiled cloth to create a pink coloration



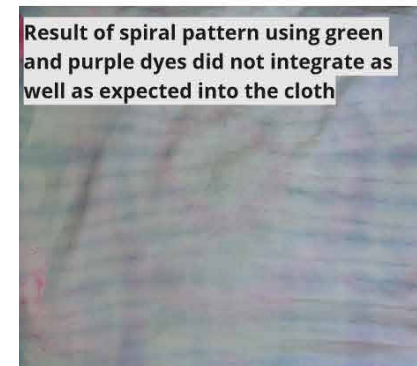
Red/Pink



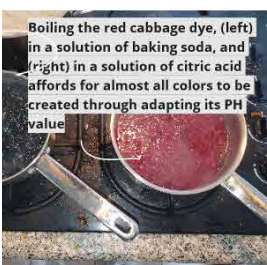
Using rubber bands secured with different tightnesses to affect color blending and white striations



Experimenting with tie dyeing complex shapes to create natural color aesthetics



Result of spiral pattern using green and purple dyes did not integrate as well as expected into the cloth



Boiling the red cabbage dye, (left) in a solution of baking soda, and (right) in a solution of citric acid affords for almost all colors to be created through adapting its PH value



Yellow dye integrated with boiled cloth to create a light yellow color



Labelling and configuring setup for tie dyeing process



Experimenting with different color palettes to create different qualities within the tie dyes



Result of crumple/natural pattern using purple and green dyes created an interesting spread of colors



Boiling cloth to allow for best dye integration



Beautiful green dye integrated with boiled cloth to create a light green color



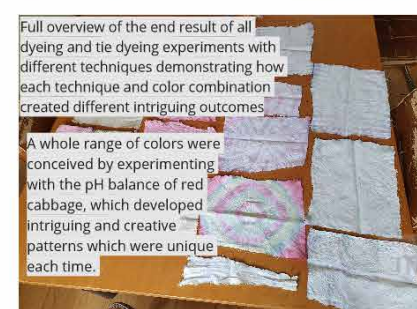
Labelling and configuring setup for tie dyeing process



Experimenting with different color palettes to create different qualities within the tie dyes

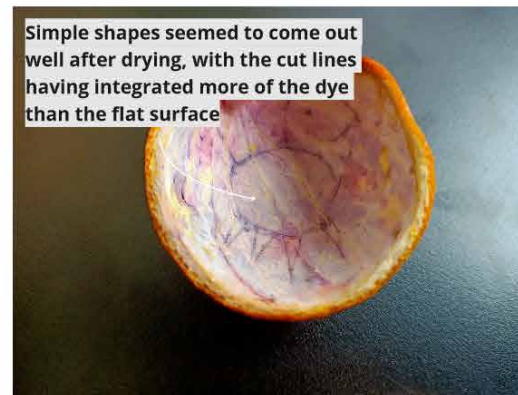
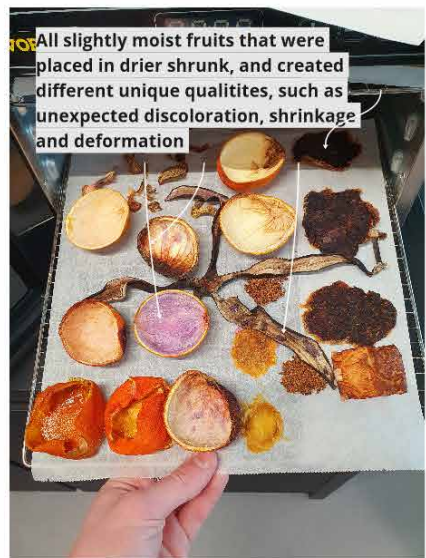
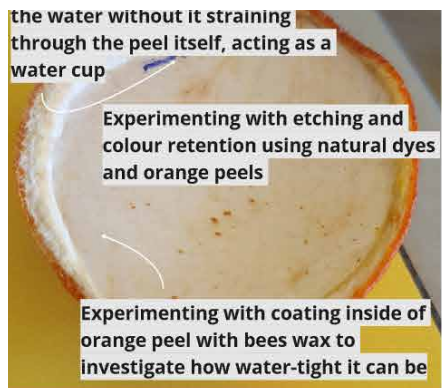


Result of bullseye pattern using green, purple, and red dyes created a visually appealing tie dye, unexpectedly the colors bled well together creating more colors

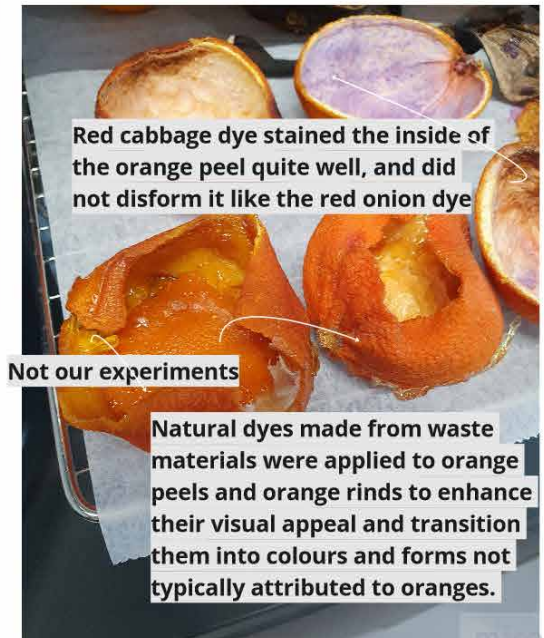


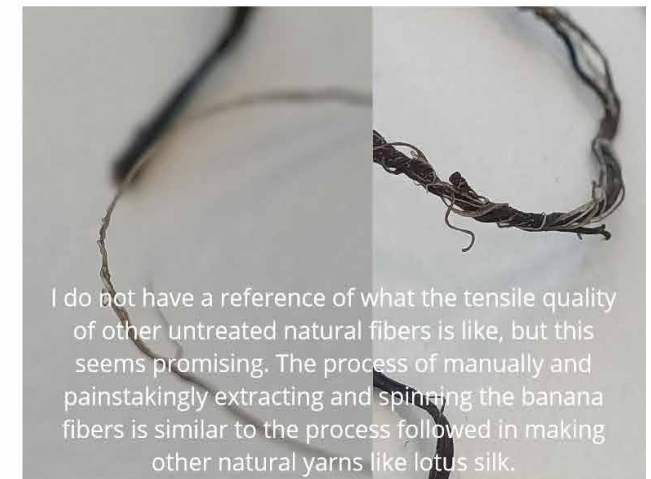
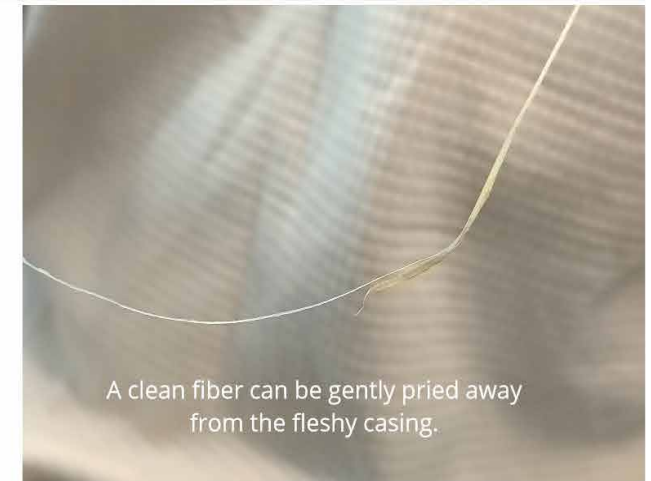
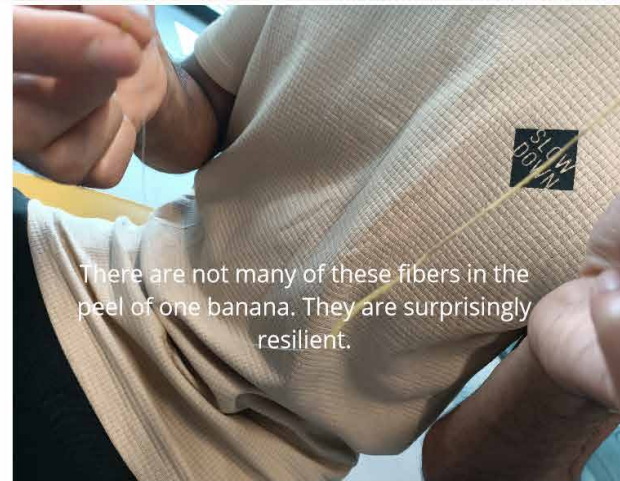
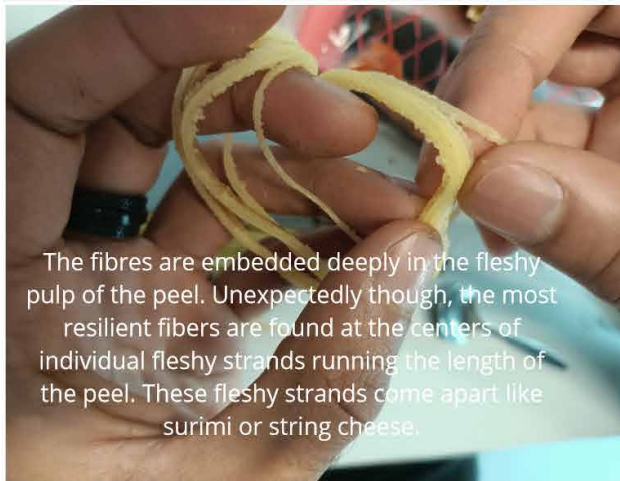
Full overview of the end result of all dyeing and tie dyeing experiments with different techniques demonstrating how each technique and color combination created different intriguing outcomes

A whole range of colors were conceived by experimenting with the pH balance of red cabbage, which developed intriguing and creative patterns which were unique each time.



Dyeing inside orange
Natural dyes made from waste materials were applied to orange peels and orange rinds to enhance their visual appeal.





Banana peel yarn

Dissecting banana peels revealed fibers which were manually spun into a yarn. The untreated yarn was brittle and did not have any qualities which were desirable in the final care product.

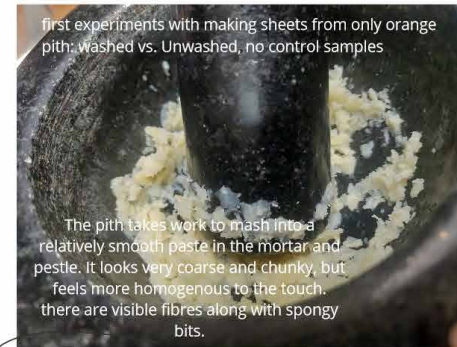
In these first preliminary engagements we observed the transformation of orange fibers into a structure that resembled the complexity and anesthetic qualities of coral skeletons (page 14/16). However, it was not just the transformation of the orange that we observed. By looking at this coral we got a first-hand experience how this material displayed beauty and showed us that it had other capacities mainly in convincing us that could take shapes and facilitate aesthetic experiences convincing us of its hidden agency. We have at this point acceptance that we did not understand the material and that it had hidden qualities and benefits that other materials could most definitely also display.

Using the lens of black ecology [4], we saw in this experience the parallels with witchcraft and the experience of magic [6]. In our cultural understanding of witchcraft, we see the inherent acceptance of hidden and mysterious qualities of the material world, nature and the world we live in. This framing convinced us that a care routine based around the performative action of witchcraft may facilitate a mindset in human agents where the agency of materials is both accepted and experienced. Through this agency and the relation that the materials have with wider networks, such as the soil from which they originate [2], a care ritual could be devised not just for the benefit of its human subjects but to material and the environmental systems that support them both. For this to work however all subjects needed to facilitate in a performative activity based around magic.



orange pit washed with dish soap

The washed orange pith still smelled fresh and "clean" on the second day after separation, while the unwashed sample smelled sour and vinegary.

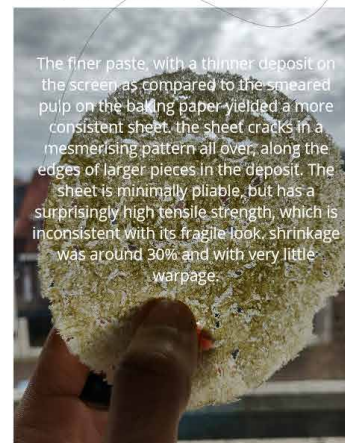


first experiments with making sheets from only orange pith: washed vs. Unwashed, no control samples

The pith takes work to mash into a relatively smooth paste in the mortar and pestle. It looks very coarse and chunky, but feels more homogenous to the touch. there are visible fibres along with spongy bits.



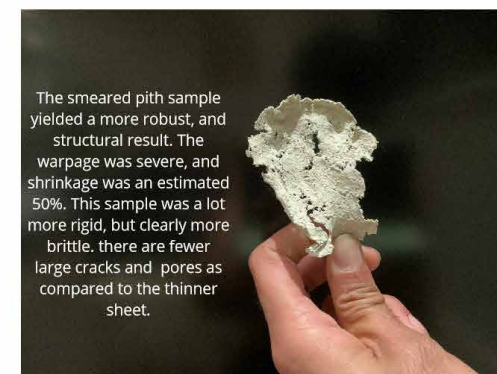
Two days of drying, placed above my CV ketel



The finer paste, with a thinner deposit on the screen as compared to the smeared pulp on the baking paper yielded a more consistent sheet. the sheet cracks in a mesmerising pattern all over, along the edges of larger pieces in the deposit. The sheet is minimally pliable, but has a surprisingly high tensile strength, which is inconsistent with its fragile look. shrinkage was around 30% and with very little warpage.



The experience of draining the water from the pulp was similar to straining orange pulp out of juice: the pulp clogging the strainer along with the surface tension of the liquid require the surface tension to be manually broken by lightly rubbing the bottom of the screen with your fingers as the liquid drains out.



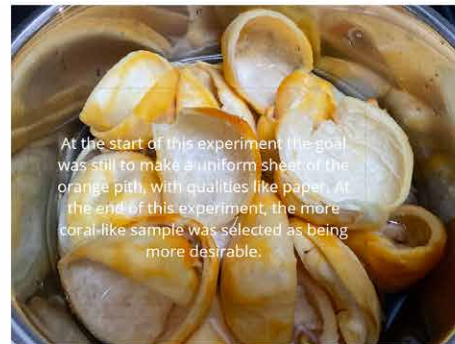
The smeared pith sample yielded a more robust, and structural result. The warpage was severe, and shrinkage was an estimated 50%. This sample was a lot more rigid, but clearly more brittle. there are fewer large cracks and pores as compared to the thinner sheet.

washed pith was diluted with water and blended with an immersion blender for 5 short pulses.



Two days of drying, placed above my CV ketel.

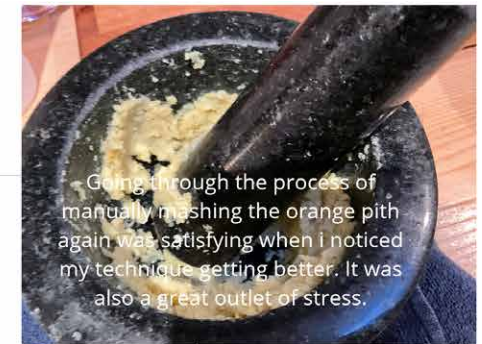
third attempt at sheet making: only orange pith, tried boiling, washing with soap, different pureeing methods, and sheet making techniques. found definite recipe to make coral sheets



At the start of this experiment the goal was still to make a uniform sheet of the orange pith, with qualities like paper. At the end of this experiment, the more coral-like sample was selected as being more desirable.



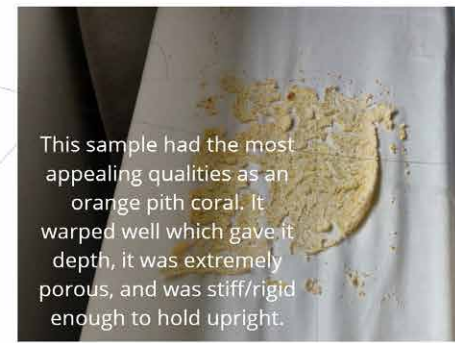
Washing the orange peels with soap feels extremely strange. It is as though any ideas about it being food/edible immediately vanish.



Going through the process of manually mashing the orange pith again was satisfying when I noticed my technique getting better. It was also a great outlet of stress.



Best sample in the middle. soap washed, raw, partial pulping in mortar and pestle, finishing in immersion blender, poured directly onto screen.



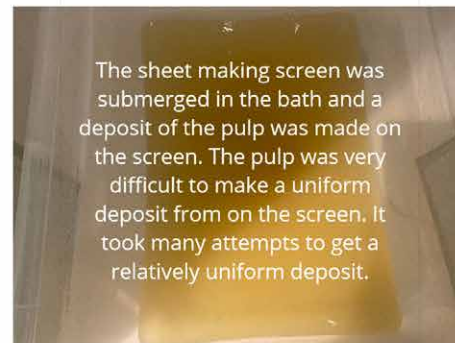
This sample had the most appealing qualities as an orange pith coral. It warped well which gave it depth, it was extremely porous, and was stiff/rigid enough to hold upright.

Orange pith coral

The orange pith coral material was a truly unexpected outcome of experimentation in forming sheets out of orange pith. Its rich visual, tactile, and functional qualities made it an interesting ingredient in an exfoliating scrub.



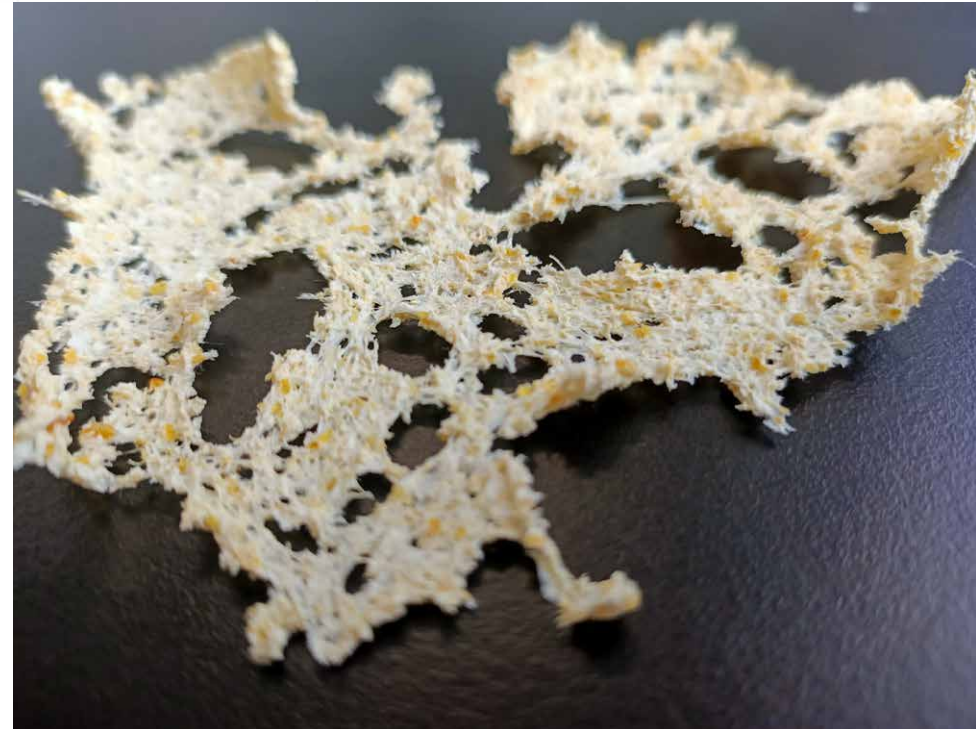
the soap washed+ boiled pith was blended with the immersion blender and poured into the bath.



The sheet making screen was submerged in the bath and a deposit of the pulp was made on the screen. The pulp was very difficult to make a uniform deposit from on the screen. It took many attempts to get a relatively uniform deposit.

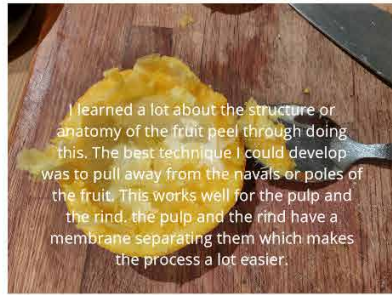


The boiled sample did not separate from the screen in one piece. Its pasty consistency allowed it to embed in the mesh screen rather than be deposited on top of it.

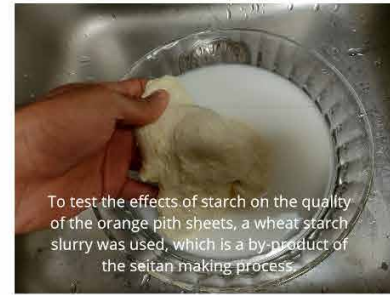




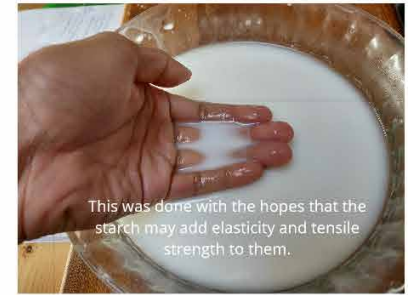
This step was all about developing better technique with separating the pulp, pith and rind. I used multiple types of tablespoons I had at home with varying rounded edges. The more square edged spoon worked better.



I learned a lot about the structure or anatomy of the fruit peel through doing this. The best technique I could develop was to pull away from the navels or poles of the fruit. This works well for the pulp and the rind, the pulp and the rind have a membrane separating them which makes the process a lot easier.



To test the effects of starch on the quality of the orange pith sheets, a wheat starch slurry was used, which is a by-product of the seitan making process.



This was done with the hopes that the starch may add elasticity and tensile strength to them.



The same process was followed as in the first experiment for a part of the pith



A larger portion of the pith was blended directly with an immersion blender.



A mixture was made with the starch slurry and the blended pith puree. This mixture was very similar in look and feel to a south indian fermented rice pancake batter



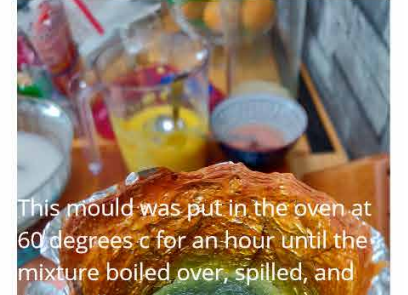
Multiple dyes were tested for small samples taken from the main mixture, and after making those samples, the concentrated beet juice was poured into the main mixture to make larger sheets with.



A portion of the blended pith puree was mixed with a small amount of starch, dye and baking powder and put into an aluminum foil mould in an attempt to make small bowls



A second mould was made with more starch slurry and baking powder, and only left to air dry.



This mould was put in the oven at 60 degrees c for an hour until the mixture boiled over, spilled, and then collapsed entirely into a dense paste in the bottom of the mould.



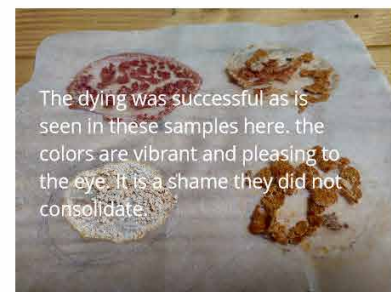
In this series of tests, none of the samples formed sheets, which was highly unexpected.



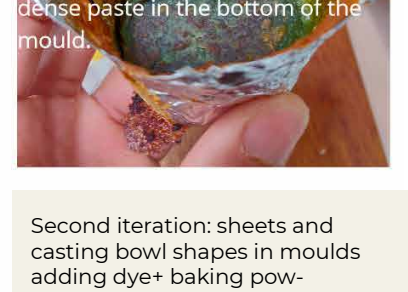
The smaller pieces which did form had very similar qualities to the smeared sample made in the first experiment.



This was the most visually captivating sample, with its close resemblance to a cracked dried lake bed in time of drought.



The dyeing was successful as is seen in these samples here. the colors are vibrant and pleasing to the eye. It is a shame they did not consolidate.



Second iteration: sheets and casting bowl shapes in moulds adding dye+ baking powder+wheat starch.

dyeing successful but all tests failed to consolidate

In our following engagements with material transformations afforded by our mapped-out material flows we looked for aesthetic qualities that support the experiences of magic and mystery. We mapped out the results of our experimentations on the basis of how provocative and innately magical they felt **(page17)**.

From this point we synthesized a place where ritual could take place from and with the material creative agents and created the grimeoire box. The grimeoire box functions with its different aesthetic qualities as a portal to the fantastical where the care ritual takes place. Other material experiments resulted in the emergence of material states that when interacted with following a recipe would create skin care products and other products related to the well-being of humans **(page18/32)**.





The sight of these ingredients together is very interesting. The stark visual patterns of the coral makes it feel very out of place with this specific combination of tools, utensils and materials surrounding it.



coral coconut scrub experiment:



The process of pulverizing the coral is bittersweet, since lots of labor went into making it, while simultaneously, its presentation in coral form at the start of this ritual makes interacting with it a very rich experience.



ABC peel scrub

The dehydrated and pulverized Avocado, Banana, and Clementine peels made for powders which were perceived as having great potency due to their scent, depth of color, and tactile feel. They were used as ingredients in exfoliating and nourishing topical care products.



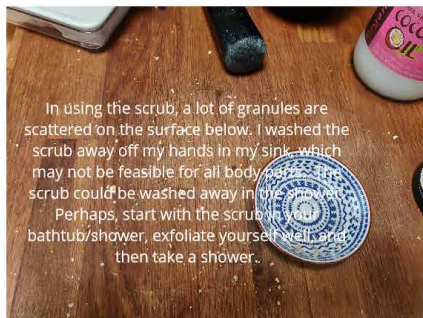
The mixture of coconut oil and crushed coral is not very visually appealing. The look of granules in a semi-solid material, without significant contrast and hue difference between the two makes for very unpleasant associations.



The feel of this material is however very pleasant. The coral does not soften in the oil very quickly. It is not known whether the coral granules soften

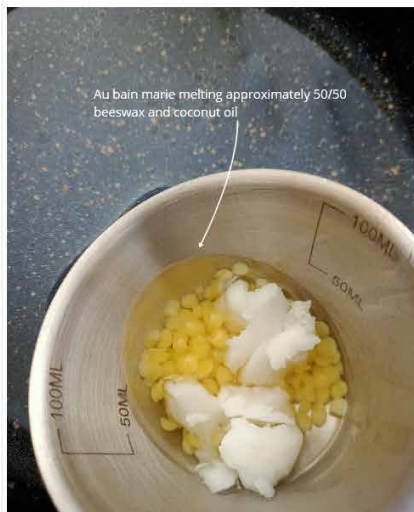
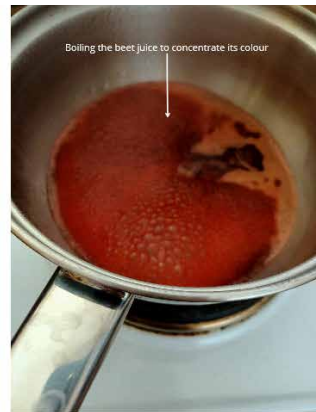


The scrub feels like it is doing just as well as any exfoliating scrub I have used before. The granules are perfectly intermediate in abrasive quality, when compared to eggshell and Avocado peel powder as exfoliants.



In using the scrub, a lot of granules are scattered on the surface below. I washed the scrub away off my hands in my sink, which may not be feasible for all body parts. The scrub could be washed away in the bathtub/shower, exfoliate yourself well, and then take a shower.





Beet lipbalm

An attempt to create lip balm from beet juice, coconut oil and beeswax, since beets have a vibrant colour and can be beneficial.

Since this experiment was not successful and used no large waste stream, we discontinued it. Nevertheless, the "creature" inspired a magical vibe.

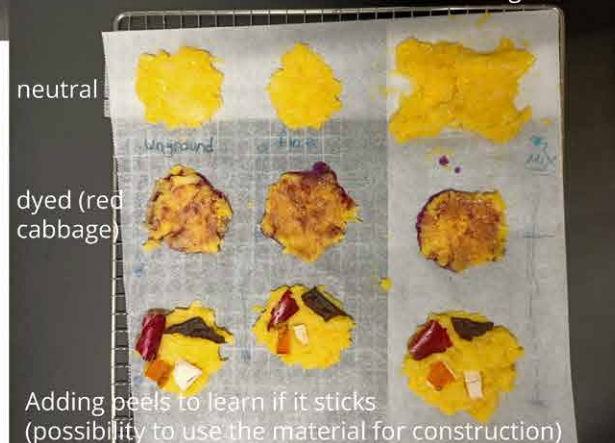
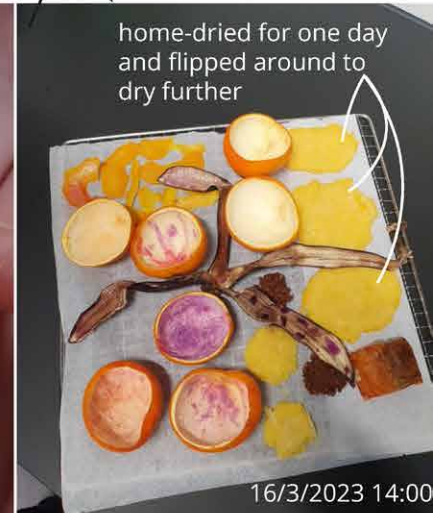




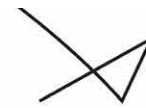
Dry different levels of fineness of orange pulp in windowsill.



Using the dryer in the lab.

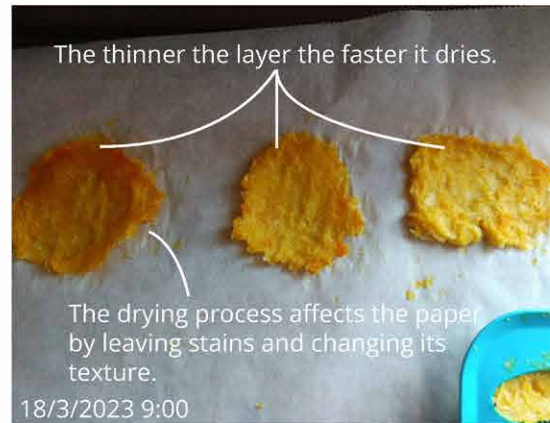


4 days later...



Orange pulp

The pulp allows for making thin skin including other materials, which are used for exfoliating or packaging. It will mould easily, which emphasizes the ecosystem and motivates recreation.





Can we save the benefits of the wet orange pulp by drying it in tablets and crushing it later and adding water?



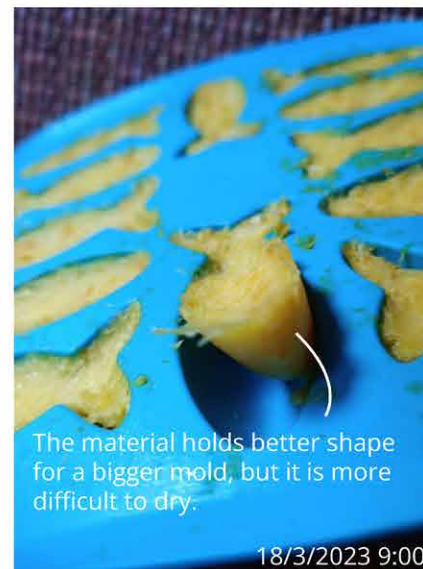
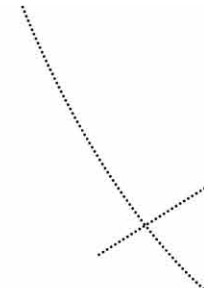
Filling up the small shape is difficult as air gets trapped.



4 days later...



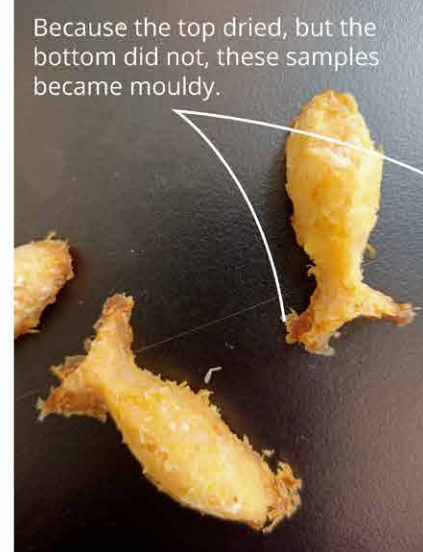
Due to shrinking the pieces don't have a very nice shape and they look rather nasty.



The material holds better shape for a bigger mold, but it is more difficult to dry.



The pulp shrinks



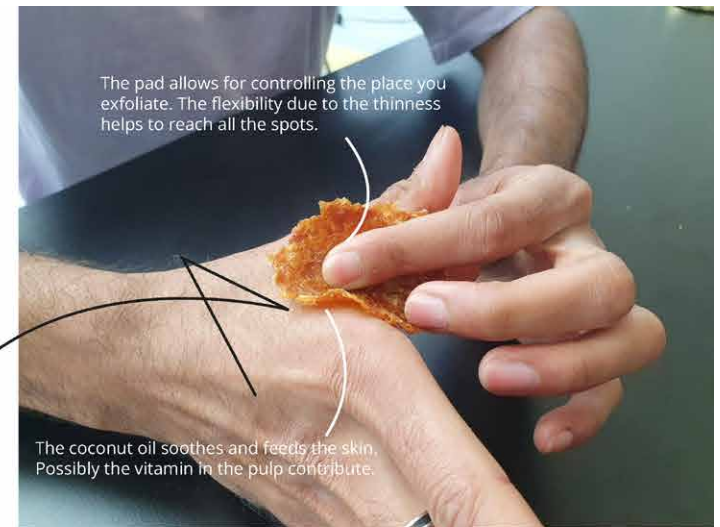
Because the top dried, but the bottom did not, these samples became mouldy.

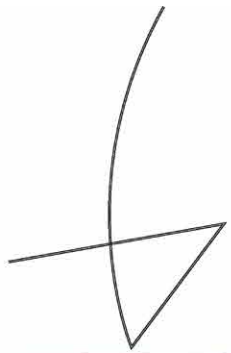




ANALYSIS

Use the skin to exfoliate skin by spreading some coconut oil over it.





Making a larger surface to use as leather-like packaging material. The desired aesthetic is that of a very old magical book.



Using the same pulp, saved in the fridge for all experiments over a timeframe of 11 days (including the drying of 5 days of the last experiment).

Blending for 1 minute to create a fine texture.



20/3/2023 19:00

The fine pulp is spread on baking paper with a rubber spatula as evenly as possible with a thickness between 1-3 mm.



21/3/2023 8:00



The first signs of evaporation show in the shrinking & showing crinkles



22/3/2023 13:00

First signs of darkening in colour. The side closer to the window darkened more.



Clearer and more crinkles, showing the progress in the drying process.

The material starts to look thinner



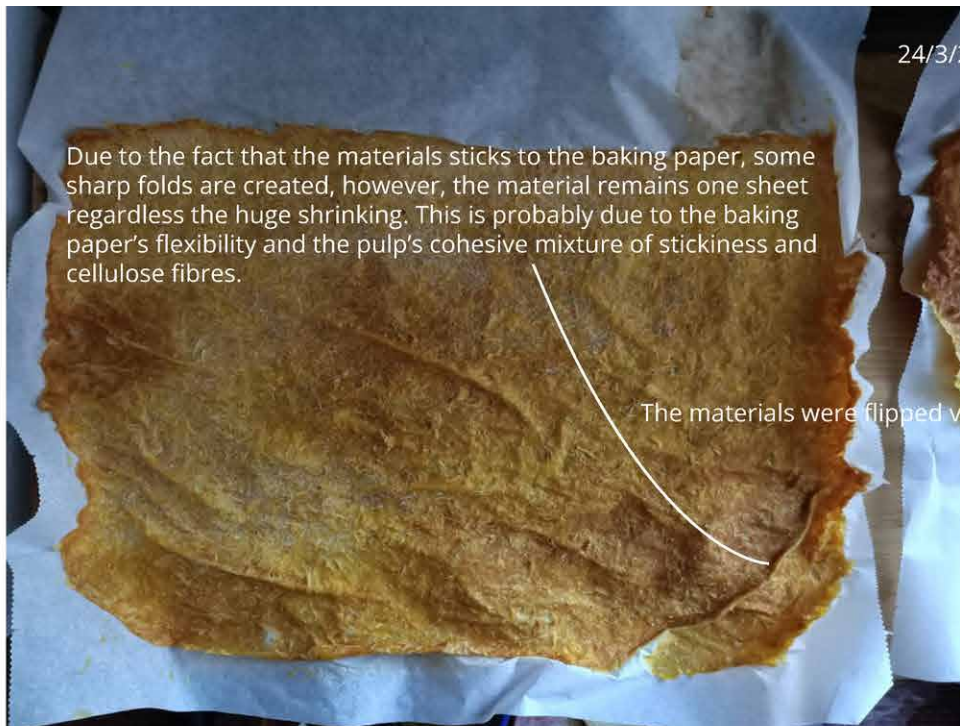
23/3/2023 10:00

The material still feels slightly moist in certain areas, which will make the sheet fall apart when trying to remove it from the paper.



Very clear crinkles, thinning and darkening.

A



24/3/2023 8:00

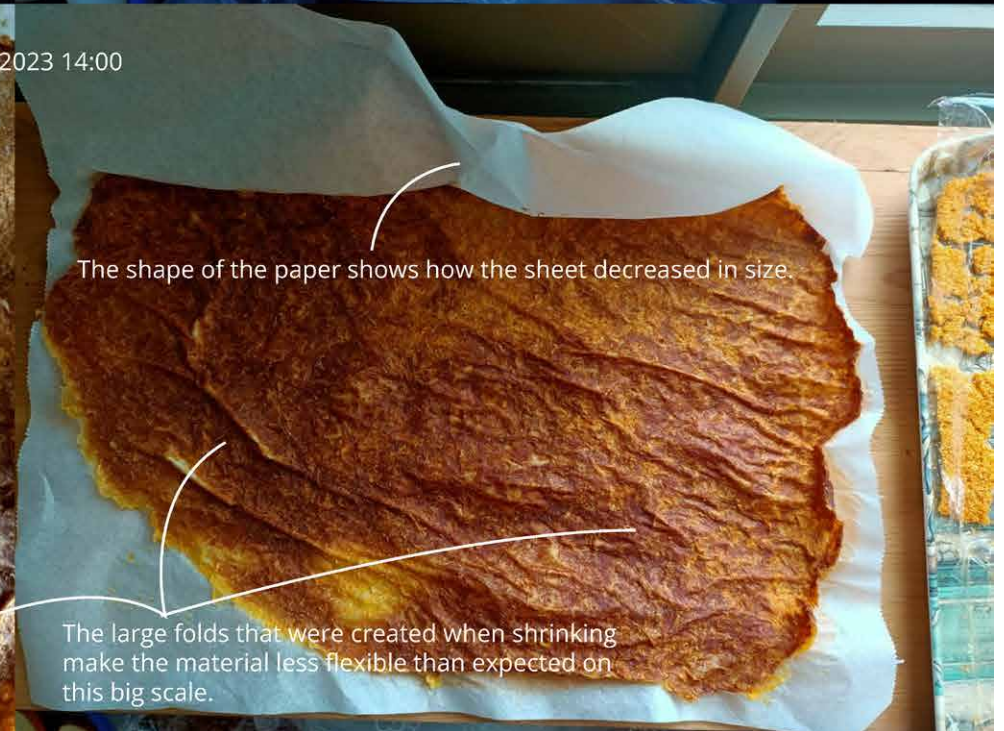
Due to the fact that the materials sticks to the baking paper, some sharp folds are created, however, the material remains one sheet regardless the huge shrinking. This is probably due to the baking paper's flexibility and the pulp's cohesive mixture of stickiness and cellulose fibres.

The materials were flipped vertically to make them dry and colour a little more evenly.



25/3/2023 14:00

The material has dried enough to be separated from the baking paper



The shape of the paper shows how the sheet decreased in size.

The large folds that were created when shrinking make the material less flexible than expected on this big scale.



The orange rind dries in the windowsill

It is very bright in colour

15/3/2023 9:49

Drying orange rind granulate and extracting orange essential oil.



We later learned that it is better to first dry the rind to remove the water.

The rind smells very strongly of oranges

Grounding the rinds with a blender for 2-5 minutes.

To extract orange essential oil, we stored the ground rind in a glass jar with 70% alcohol. Shaking the mixture twice a day, for a few days.

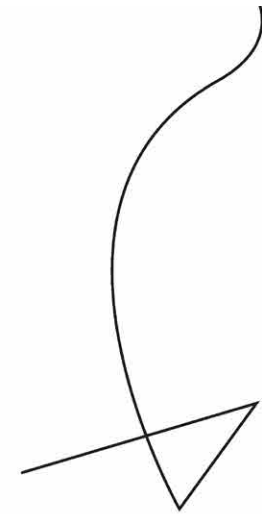
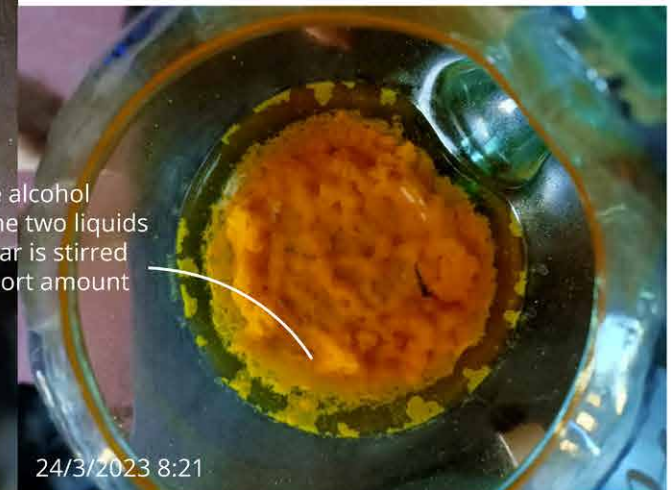


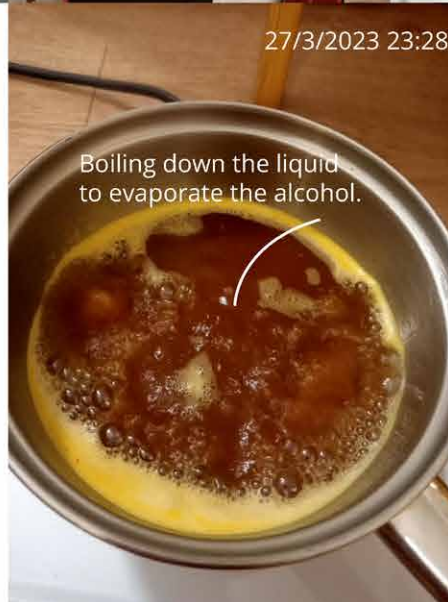
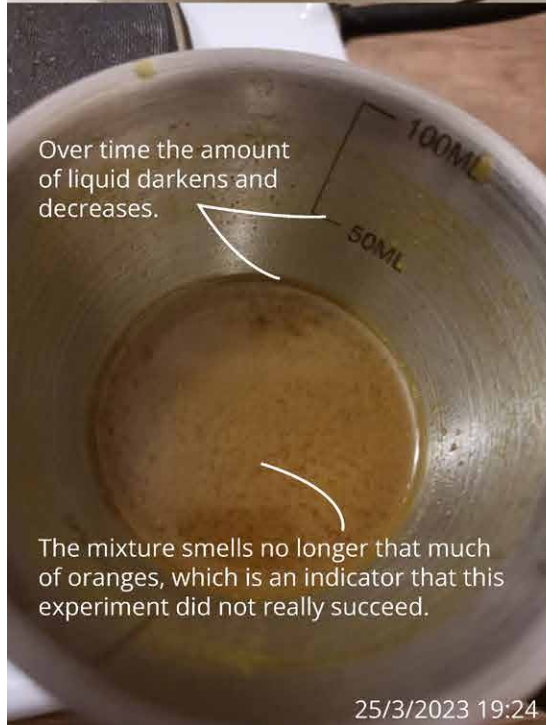
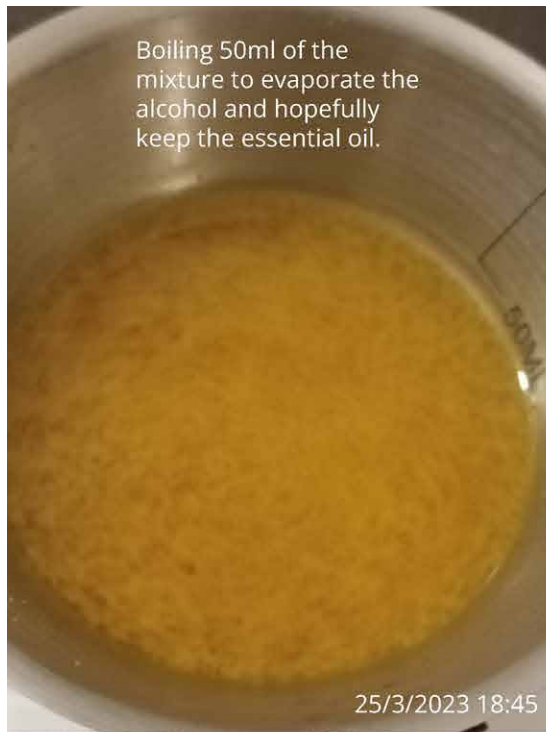
Rind

As the pulp and pith started having purpose, we looked into the rind, which had many strong properties. Its liquid even caused a rash on our hands while separating the rind from the pith.

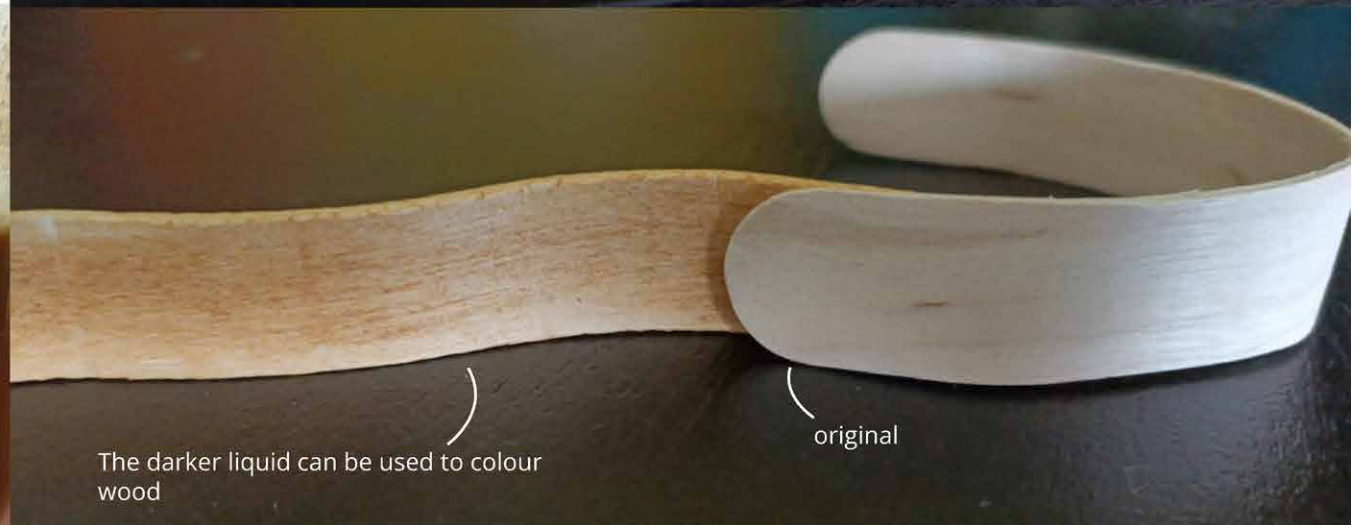
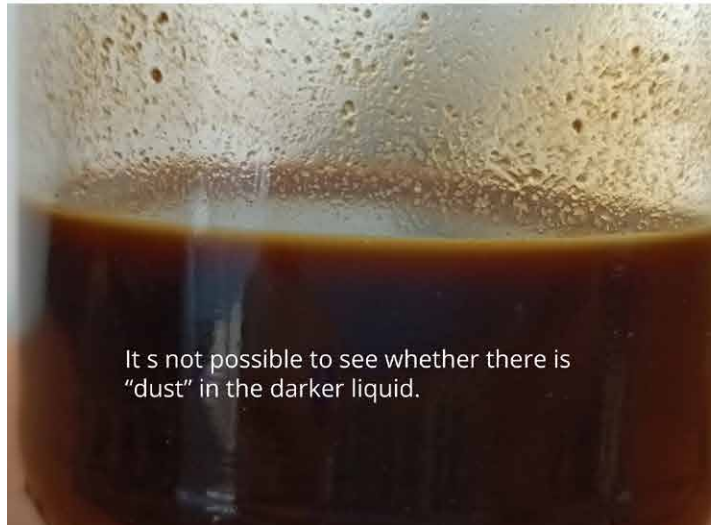
This power could be extracted as essential oil, which could be used to flavour our products. The granulate of the rind could be used in a scrub.







Results

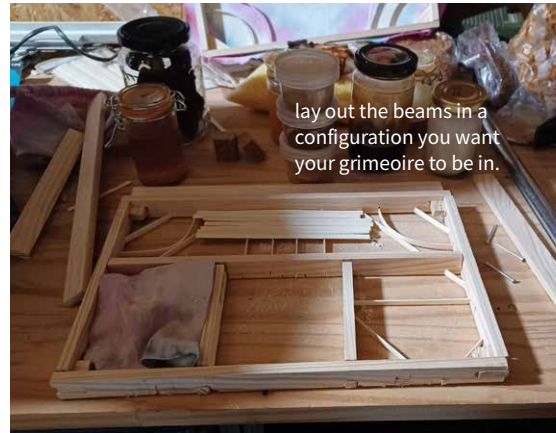


With the synthesis of the box, the ingredients and the recipes our care product is still not finished. For the creation of the experience the material agents and their supporting network in the form of soil have given labor but are still politically underrepresented in this stage of the care ritual [2]. However, by caring for these agents from the start of our design process and recognizing the relationality of the materials and soil we were careful as to not transform the capacity of these materials to be reabsorbed or introducing transformations that force different types of relations with the soil. As such grimoire was conceived with the intends to eventually decay and be easily reabsorbed into the soil. For this to happen grimoire was constructed in such a way that hard to process materials for the soil such as glue and larger pieces of metal were not needed in this construction (page 32/33).

The results of this final synthesis makes for products and product lifespan interaction that is quite different from what people may usually expect. Since the product is explicitly designed to decay the “user” needs to -



use a leftover piece of wood to create evenly high wooden beams.



lay out the beams in a configuration you want your grimoire to be in.



use a saw to make small cuts in the beams so used coffee stirrers can be used as pressure joints.



check the sizes of fabric you need for your specific configuration.



attach the fabric with needle and tread when possible and use staples or small nails as a last resort.



make 2 identical panels and a fitting rim and lid of similar size.



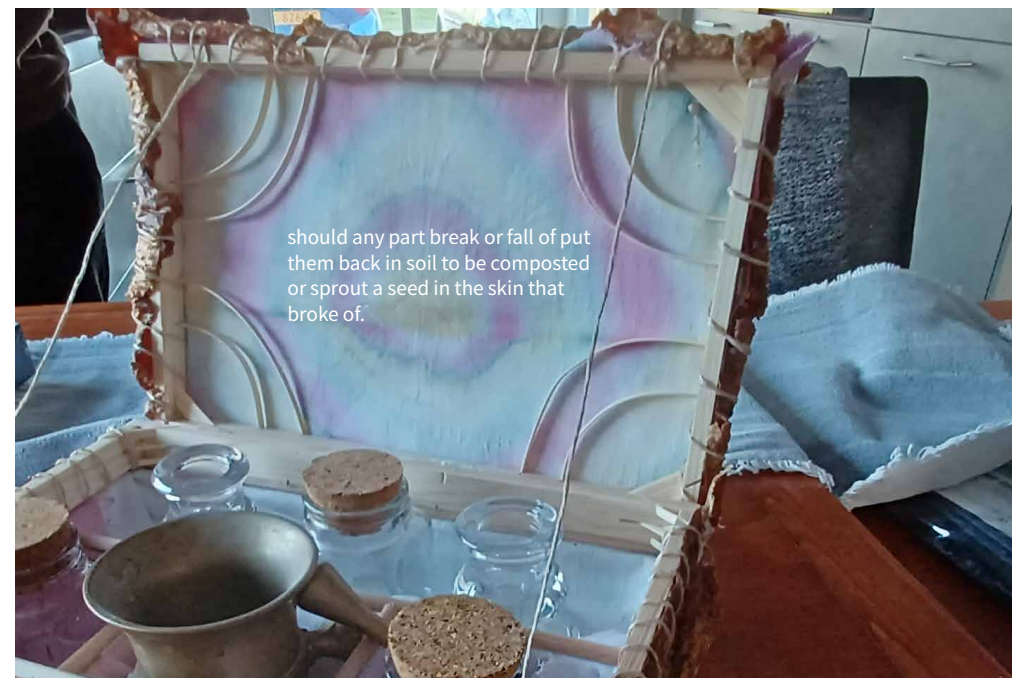
stack the botom frames together and create space between the rim and botom layer by placing extra wood to make distance and holes that we need in the next steps.



use rope or presure joints to firmly attach these layers and test if it can hold weight.

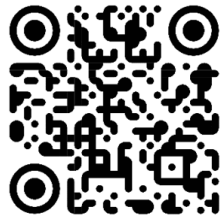


if desired place footing under grimoire made from a reclaimed material and use pressure joints where possible.

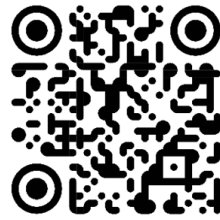


-engage in the transformation of materials to either replace or create new - iterations of the elements of the product or the product as a whole. We aid in this practice by providing recipes for the creation of all different parts of the grimoire. These recipes are presented in the same aesthetics of witchcraft and invite participation in more than just human care (page 34).

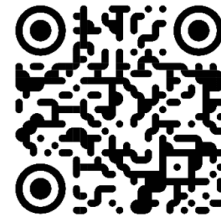
Following a feminist care ethic [5], the politically underrepresented reality of these materials and the networks that support them is transformed creating a shared empowerment [3] of all subjects involved. We go back to the lens of black ecology one last time to acknowledge the capacity of this product to display a positive feedback loop [4] since the collaborative action of the subjects involved has the capacity to create and share a multitude of instances of the product and its resulting experiences. As such grimoire has the capacity to aid and the transformation of our attitudes and understanding of the relational reality in which we and materiality operate.



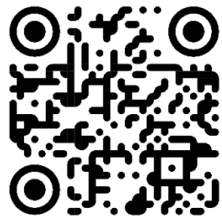
to introduction



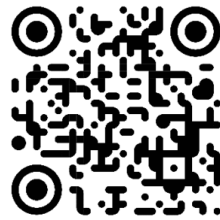
to orange pulp skin making



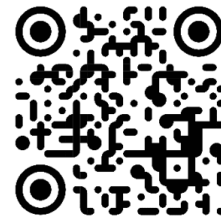
to dy(e)ing



to orange peel dissecting



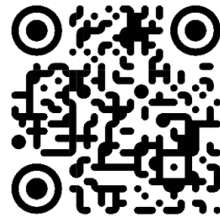
to orange pith coral making



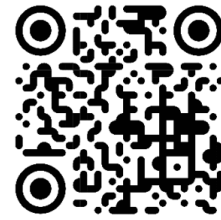
to ABC scrubbing & nourishing



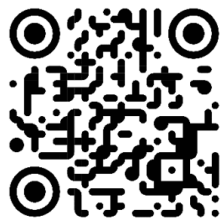
to ABC pulverizing



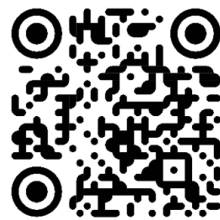
to granulate drying



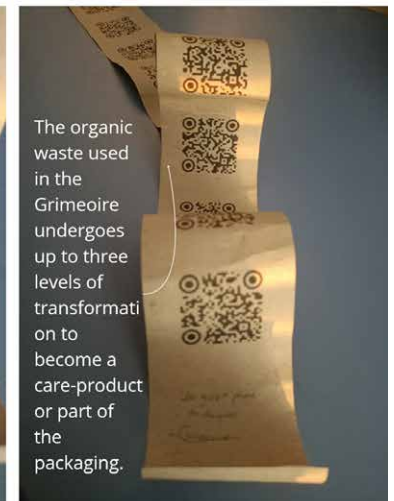
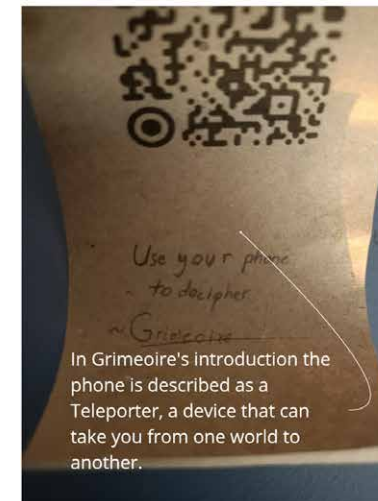
to coral scrubbing



to red cabbage & onion colour extracting



to skin exfoliating



Grimoire online environment

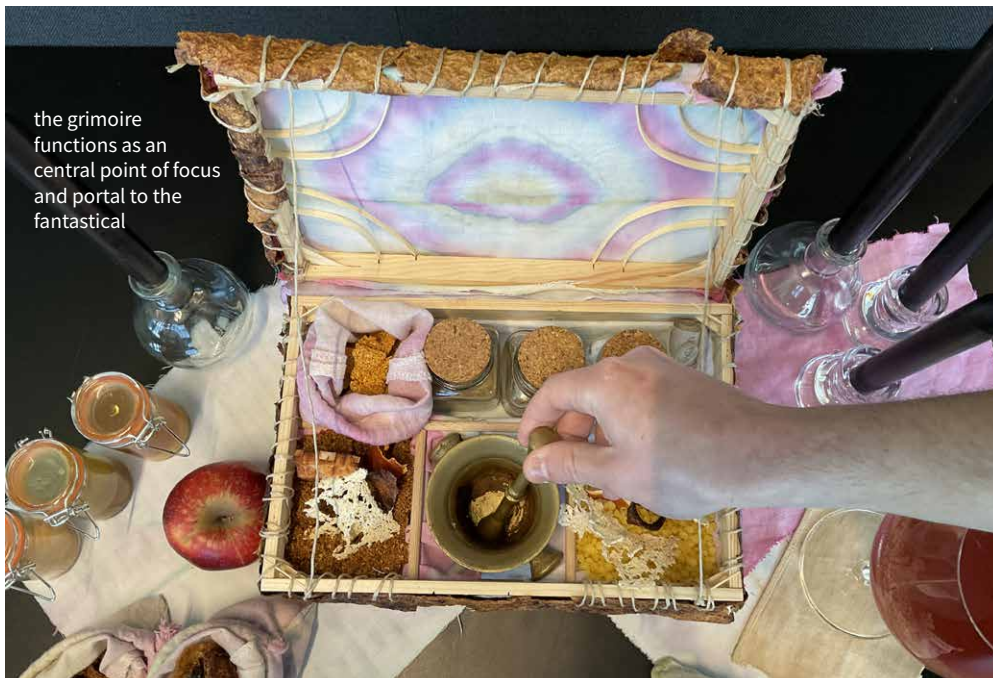
A scroll with modern runes teleports human users to an online environment explaining Grimoire's use and rituals in a magical way, using sentences like: "Observing the dye too frequently will cause it to reduce in colour." This opens the human mind to the possibility that their organic "waste" has powers. The main themes in the used magical language are: Affect what you make with your behaviour, Affect what you make with physical interactions, Beauty of nature, Do something for nature, Empower what you make, Empower you, Feelings, Keep/lose power, Macabre, Powers of ingredients, Spell/ritual. To fully understand, we recommend you teleport to the online environment: <https://grimoire.wordpress.com/>



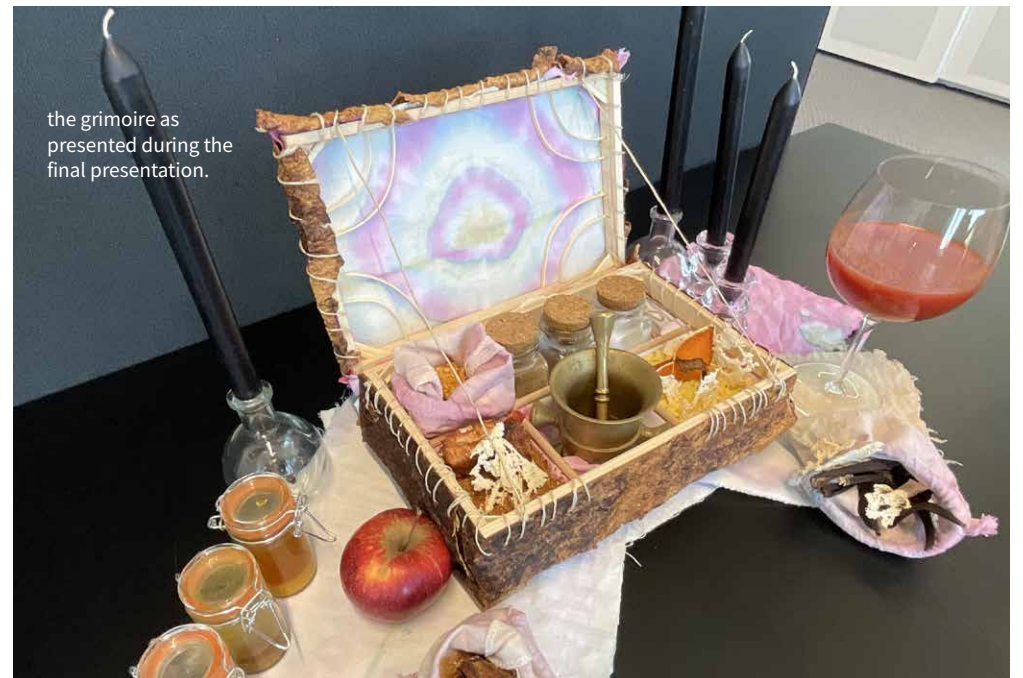
grind and powders form the basics of most recipes and are presented in containers that enhance their mystery.



preferably home sourced and made the coral and other reclaimed and transformed structures are prominently displayed



the grimoire functions as an central point of focus and portal to the fantastical



the grimoire as presented during the final presentation.

References

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