

fragments studio

a material lab for buttons

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 RÉGION DE BRUXELLES-CAPITALE
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Het Gewest en Europa investeren in uw toekomst!

 FABRICADEMY
textile and technology academy

green
fabric

simply trying to reflect the power
of the imaginary – that which,
inspired by reality, seizes the
spotlight and breaks free from
the familiar.

summary

Introduction

1-Design

- a. Inspiration - moodboards and prototypes
- b. Molding

2-Crafting

a. Reviewing recipes

- Vegetal
- Mineral
- Animal
- Food waste

b. Process

- Cooking
- Finishings
- Testing water & heat

Conclusion



Introduction

past experience



RTW NATAN, SS25

developping accessories
and finishings in fashion
luxury companies

My project is centered around creating one object : buttons. Materials used are waste and biodegradable ingredients. During the Fabricademy course, I focused on testing biomaterials in the shape of a button with the same expectations as a commercial button (resistance to water and heat).

I chose buttons because I believe the stress on raw material is not distributed equally across available resources, with a predominance of dependence on plastic-based products. My approach is material driven because in the context of circular designs, I want to challenge the status quo and explore whether it is possible to rely on waste and biodegradable ingredients to create objects.

The fashion industry has made tremendous efforts regarding fabric recyclability and organic production; however, trims and accessories have largely been left out of this effort to produce better. I believe the ecosystem of upcycling brands, environmentally and socially responsible brands, as well as fabrics suppliers goes well hand in hand with biomaterial button suppliers. Such as Fragments Studio.



What

The word “Fragments” comes from the multi faceted aspect of material origins and uses. Each material holds a past, but when assembled together, their fragments of old stories start to create a new one.

It's a creative studio specialized in material research with a focus on waste streams transformation through craftsmanship.

It offers a broad range of small decorative and functional objects for clothing such as buttons.

Both bulk and custom-made orders can be placed.

It's a creative studio with a **poetic** and nostalgic approach.



1 - Design

1 - Design

a. inspiration moodboards

intriguing nature



exuberance



independent curated
magazines

broken not broken



trompe-l'oeil



textures



visible but repurposed

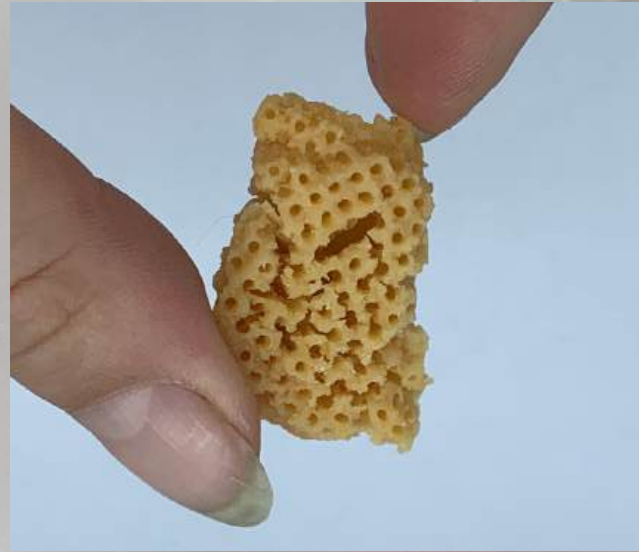


magnified imperfections in a delicate way

colors

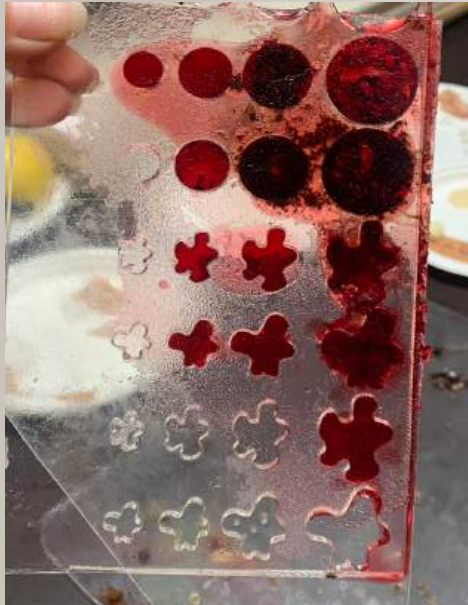


first prototypes



1 - Design

b. molding



plasticine, silicone, 3d
printer, laser cutter,
dipping iron



A collection of various craft materials is scattered on a white surface. The items include several buttons of different colors (dark brown, light tan, dark red, dark blue) and sizes. There are also beads, some dark and some light, and a red cross-shaped cookie cutter. Other items include a piece of blue fabric, a piece of yellow fabric, and a piece of clear plastic. The text "2 - Crafting" is centered in the middle of the image.

2 - Crafting

how I discovered the recipe for buttons :

vegetal

- wood
- flowers
- cellulose

mineral

- glass
- shells

animal

- milk
- wool

food waste

- coffee
- peels
- potato starch

a. Reviewing recipes

vegetal - flowers



color: dark red

color recipe: red onions + citric acid

ingredients: 50g gelatin

25ml water

10g dried flowers

description: textured, hard, see-through

vegetal - cellulose



color: grey, blue, dark red
color recipe: shredded textile

ingredients: 250 ml water
50 g gelatin
7g glycerol
1g citric acid
20g shredded cotton

description: textured, hard, opaque

vegetal - methylcellulose



color: khaki

color recipe: elder

ingredients: 100 ml coloured water

15g gelatine

2g alginate

1gr CMC

5g glycerine

description: smooth, hard, opaque

mineral - glass



color: multicolor
color recipe: collage

ingredients: 5g broken glass
1.5cm paper cutout word
1cm waste lace
10g tin
1g glass glue

description: textured, hard, see-through

animal - egg shells



color: orange

color recipe: yellow onion peel

ingredients: 100ml coloured water

3g alginate

3g glycerin

50g broken eggshell

description: textured, hard, opaque

animal - milk



color: ivory

color recipe: natural color from recipe

ingredients: 0,380L full milk

10ml vinegar

14g glycerin

15ml alcohol

description: smooth, hard, opaque

animal - wool



color: brown
color recipe: elder

ingredients: 50g gelatin
25ml coloured water
20g wool yarn

description: smooth, hard, opaque

animal - gelatin



color: orange

color recipe: yellow onions

ingredients: 250ml coloured water

100g gelatin

7g glycerin

10 g tanin

description: smooth, crumbly, opaque

food waste - coffee



color: black

color recipe: elder + iron sulfate

ingredients: 50g gelatin
25ml water
10g coffee grounds

description: textured, hard, opaque

food waste - potato starch



color: transparent
color recipe: natural color from recipe

ingredients: 20g potato starch
10 ml vinegar
5ml glycerin
100ml water

description: textured, hard, see-through

food waste - potato starch



color: transparent

color recipe: natural color from recipe

ingredients: 125gr sodium bicarbonate
62gr potato starch
88ml of water
2ml white vinegar

description: smooth, crumbly, opaque

b. Process

Tools needed :

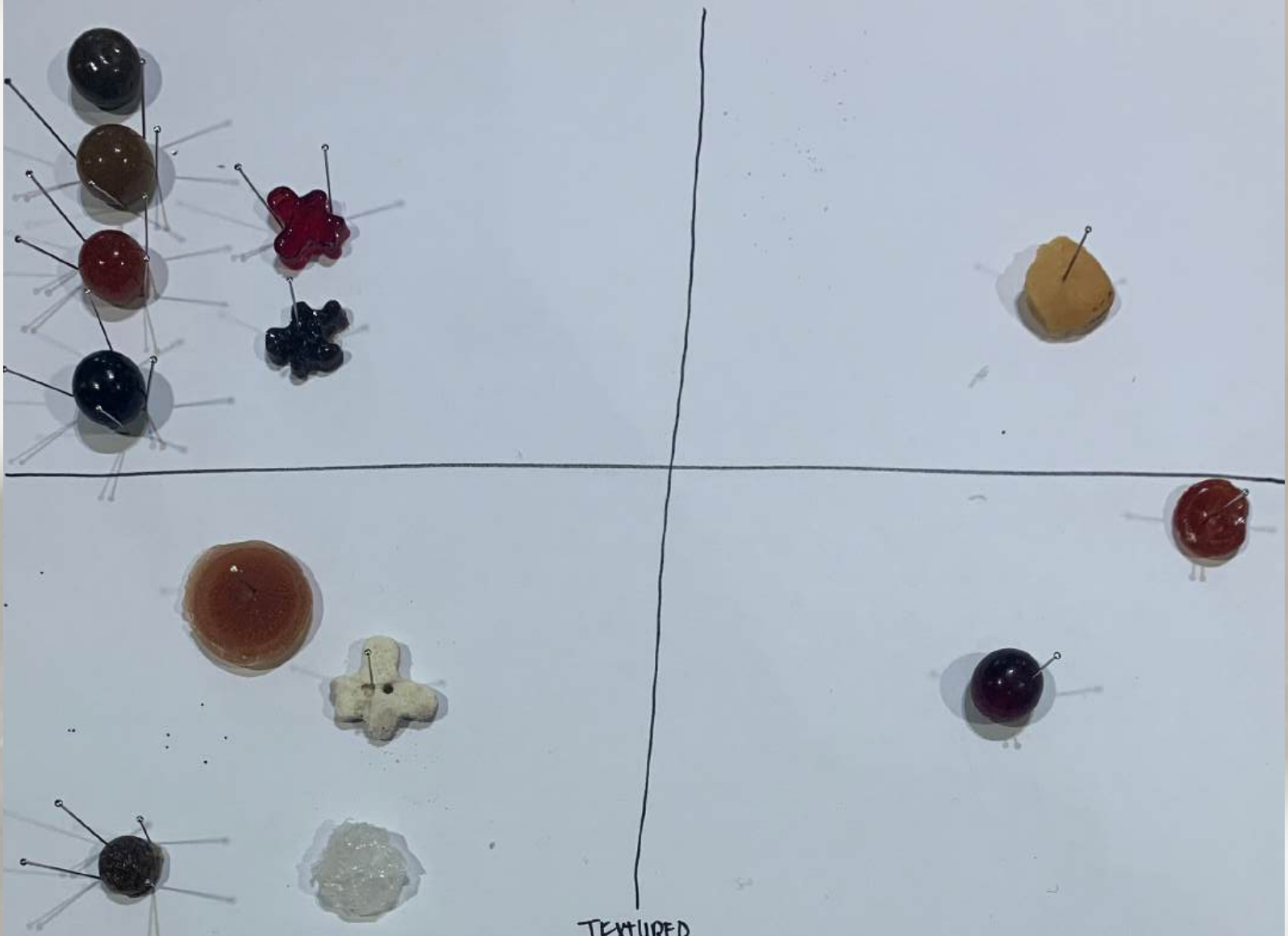
Thermometer, beaker, pan, heating plate, scale, small and medium bowls, syringe, wooden chopsticks, silicone spatula, dehydrator, ventilator

soft

Finishing:

shellac, pine resin, goldfinger, linen oil

smooth



hard

soft

TEXTURED
textured

feel

testing

dissolves

CRUMBLES

melts
wth heat



RESISTS
HEAT

resists
heat

resists water



Conclusion

SWOT analysis

Strength

Local colours

Strong storytelling

Custom order possible thanks to moulding

Main materials are local and in great amounts

Small production for niche market

Unique artisanal feel

Low energy use (air drying is often enough)

Weaknesses

Exact colours cannot be reproduced, tones may vary

Shapes may vary a little for one same product because it is not industrialized

Bubbles, foam, shrinkage are not likely controllable

Long lead times

Opportunities

Tone on tone buttons with pre-consumer waste fabrics for brands

Using a plastic varnish to make them more long-lasting, glossy and "perfect"

Threats

Color fastness

Unknown product longevity

Fast paced fashion industry cannot wait for such long development times



Appendix

reviewing literature

<p>Book</p>	<p><i>The CHEMARTS Cookbook by Aalto University</i></p>		<p>Mostly about cellulosic approach to materials</p>
<p>Report https://2d73cea0.delivery.rocketcdn.me/app/uploads/2025/04/FMM-Methodology-v4_Reissue.pdf</p>	<p>Fiber and Materials Matrix Methodology By Textile Exchange</p>		<p>Good impact analysis and Life Cycle Analysis</p>
<p>Report https://www.mckinsey.com/~media/mckinsey/industries/retail/our%20insights/state%20of%20fashion/2026/the-state-of-fashion-2026_feb.pdf?shouldIndex=false</p>	<p><i>The State of Fashion by Business of Fashion</i></p>		<p>10. Luxury Recalibrated The luxury slowdown is prompting a phase of strategic renewal. Brands are reducing their reliance on price-led growth and refocussing on creativity and craftsmanship to rebuild client trust. This recalibration calls for brands to balance the needs of distinct customer segments and integrate product, storytelling and client experience into a cohesive expression of brand</p>

 Aluminium	 Argent	 Aventurine	 Bois	 Celluloïd	 Céramique
 Corne	 Corozo	 Cuir	 Cuivre,Laiton	 Email	 Étain
 Galalithe	 Gay 1900	 Ivoire, Os	 Lithographies	 Livrée	 Métal
 Métal Doré	 Nacre Page 1 - 2	 Opaline	 Passementerie	 Plastique	 Porcelaine
 Résine	 Strass	 Tombac	 Verre	 Verre Peint	 Verre Pressé

archive

<https://boutonsweb.fr/collectionboutons/Boutweb.htm>