

A close-up photograph of a person's hands holding a small, light-colored, knitted animal toy. The person is wearing a grey hoodie and a blue shirt. The toy is made of a textured, light-colored yarn and has a small, dark, circular feature on its head. The person's left hand is holding the toy, and their right hand is visible, wearing a silver ring with a 'G' and 'Y' design. The background is a plain, light-colored surface.

Zenimals

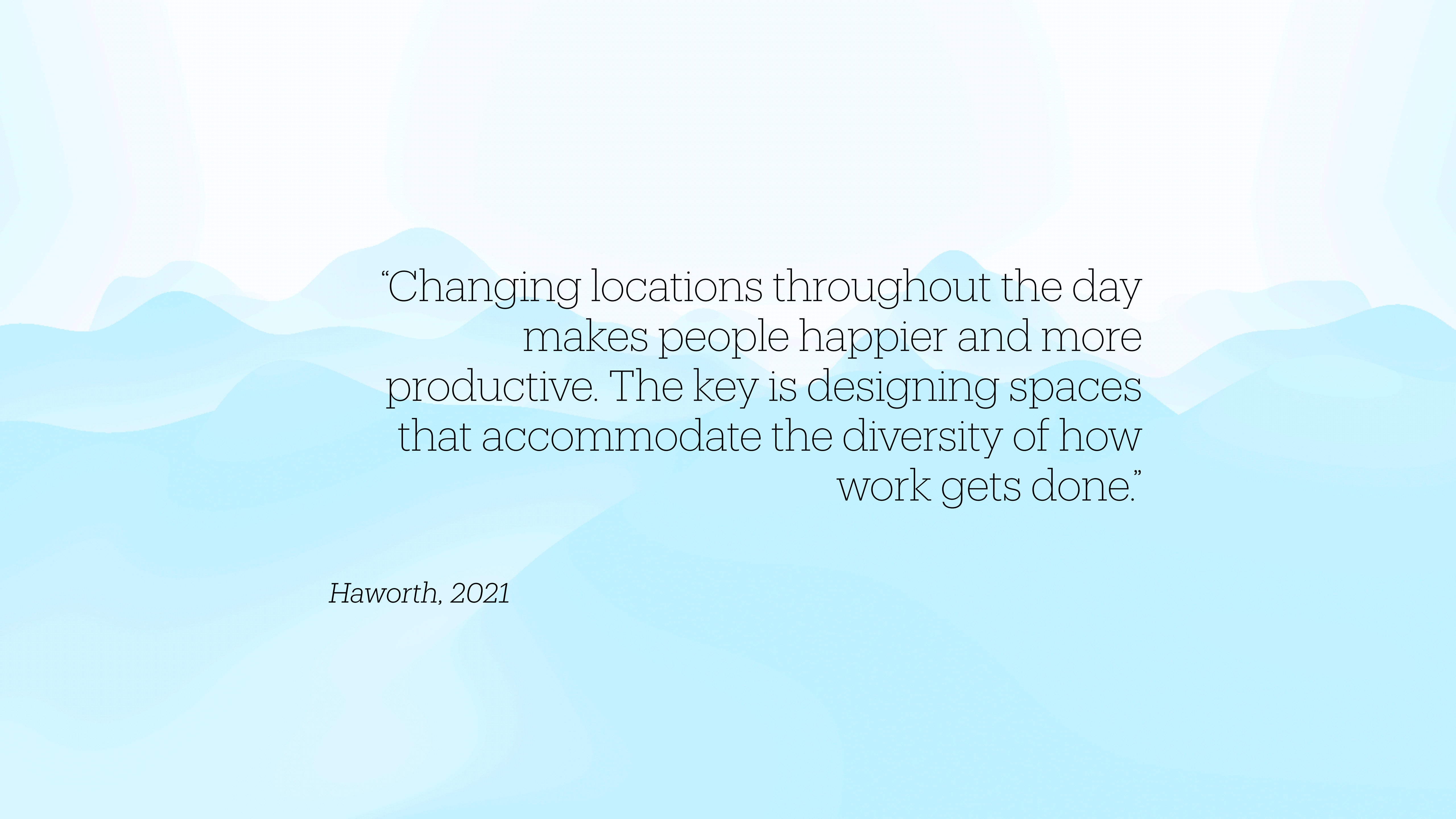
Unit 8 Element 1

Design for neurodiversity: The Haworth Project

2192 words

Marie Roy, BA PFD Year 2

Figure 1: Marie Roy (2024) Zenimals photoshoot



“Changing locations throughout the day
makes people happier and more
productive. The key is designing spaces
that accommodate the diversity of how
work gets done.”


Haworth, 2021

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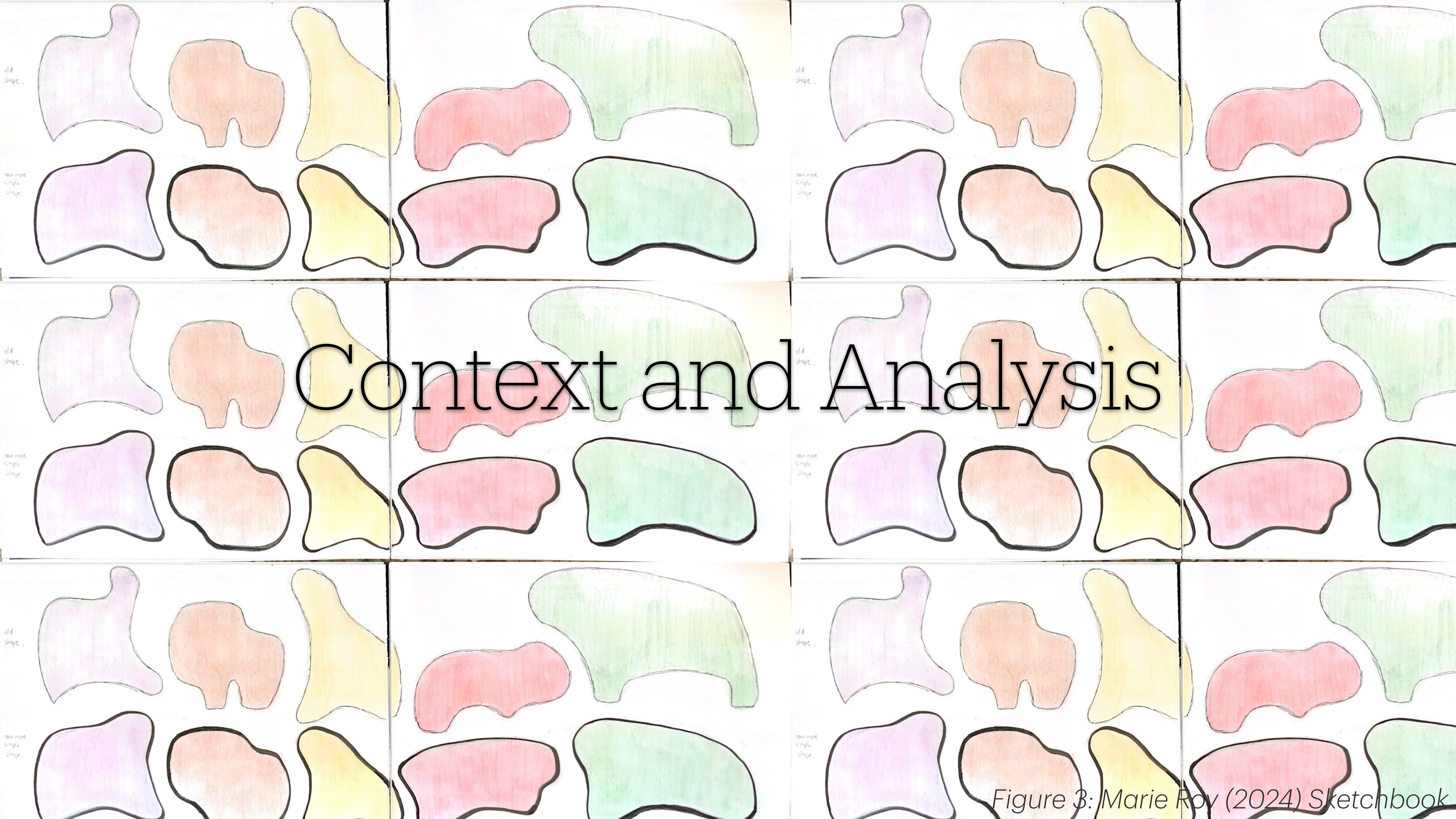
A modern office interior featuring a large, bright yellow rectangular table. Several ergonomic chairs are arranged around the table; some are blue and others are green. A wooden bench is visible in the background. The room has a clean, minimalist aesthetic with a light-colored wall and a dark floor.

Introduction

Figure 2: Marie Roy (2024) Haworth showroom visit



For this unit, we had to implement a solution in a site-specific or context-specific manner, addressing installation and work facilitation concerns at four distinct locations: Charterhouse, Fans, Stockwell, and Haworth. The completed project had to function successfully within its context, facilitating contact with users while complementing the goals of the individual client or commissioning body. In the Haworth route, we were tasked to design an inclusive add-on to Haworth's workplace furniture and accommodate the neurodivergent workforce into the office. A thorough conduct of historical, contextual, market, material and body observation research as well as prototypes and samples provided a logical continuity into the final making of the project. This essay will be a guide through the process and research conducted up to the end of the unit.



Context and Analysis

Figure 3: Marie Roy (2024) Sketchbook

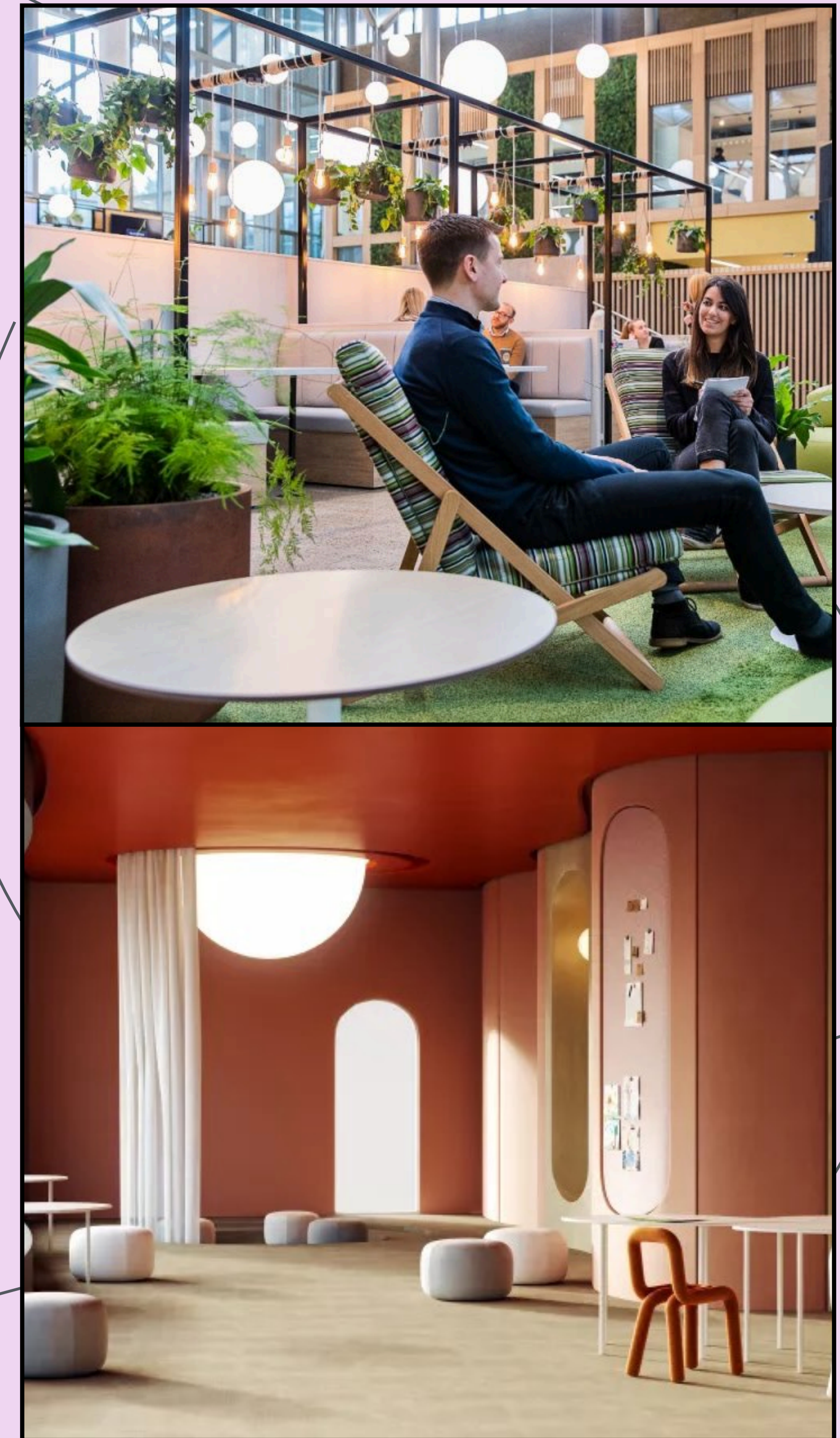
Neurodiversity

“Neurodivergent” is a nonmedical term that describes people whose brains develop or work differently. This means the person has different strengths and struggles from people considered “neurotypical”. The term “neurodivergent” came from the related term “neurodiversity.” Judy Singer, an Australian sociologist, coined the word “neurodiversity” in 1998 to recognize that everyone’s brain develops in a unique way (Cleveland Clinic, 2022). Like a person’s fingerprints, no two brains are the same. Because of that, there’s no definition of “normal” capabilities for the human brain. Some of the conditions that are most common among those who describe themselves as neurodivergent include Autism, ADHD, Down Syndrome, Dyscalculia (difficulty with math), Dysgraphia (difficulty with writing), Dyslexia (difficulty with reading), Dyspraxia (difficulty with coordination), Mental health conditions like bipolar disorder, obsessive-compulsive disorder, Social anxiety, Tourette’s, and more.

Neuro-Inclusivity in Design

To create a neuro-inclusive environment, there are some elements to consider when designing. For example, sensory-friendly elements - adding dimmable lighting, soft flooring and panels for better acoustics, sensory pods, different textures, etc. Another example is any zoning and way-finding aspects - defining zones such as meeting spots or individual desks by the use of coloured walls or carpet as clear signage. Finally, adding elements of biophilia - adding natural elements such as plants or water features, using earthy tones for walls or floors, and incorporating textures that mimic elements found in nature.

Kurtsy Groves and Oliver Marlow, authors of *Spaces for Innovation – The Design and Science of Inspiring Environments* (2016, p.69), researched how different workspaces affect creative performance and psychological behavior. They have proved that adding personal trinkets and small additions like elements of nature improved the general behavior of the workers: “The psychological impact of a personalized space in the office has been examined. People report a greater sense of psychological comfort when they feel they have control over their workspace, working in a pleasant environment. As a result of simply enriching a lean space with pictures, plants, and personal accessories, both well-being and productivity rise by 27%”.



Figures 5-6: Modulyss (2018) Creating Neuro-Inclusive Spaces

The Importance of Touch

It is known that touch and feel are extremely important in the building of a person. We learn with touch while growing up. “We bond through physical touch. Skin is the largest organ in your body and sends good and bad touch sensations to your brain. When you engage in pleasant touch, like a hug, your brain releases a hormone called oxytocin. This makes you feel good and warms up emotional and social bonds while lowering anxiety and fear.” (Benisek. A, 2023). In relation to this, weighted therapy, aka the feeling of heaviness on the body is a proven relaxing method, especially loved by neurodivergent individuals because their relation to touch is already deeper than any “neurotypical” individual due to sensory under and overload. Deep pressure therapy improves serotonin for happiness and focus and helps produce melatonin, the sleep hormone. It can be used to combat restlessness and impulsive behaviors that can make it hard to concentrate. Overall, it helps improve attention and reduce hyperactive movements due to stress and unease, and is especially helpful with those living with neurodivergence.

“Touch is the most
immediate way to interact
with our environment.”

The Power of Caresses, 2021

The Importance of Touch

To prove this point even further, the French Arte documentary (translated here) *The Power of Caresses: Touch, a Vital Contact* (2021) urges the need for physical touch in the building of a child, all the way to adult life. Babies learn by touching their surroundings for the first weeks of their lives, because they cannot see more than 30cm in front of them and they start hearing after 4 weeks. So, for their building, it is crucial that they feel the touch of their loved ones. The documentary also speaks of how Covid and social distancing changed how people interact with others, and how touch is lacking nowadays. Since physical contact makes the young child take conscience of himself, this can absolutely affect a child's growth because they are missing the chance to build themselves and their surroundings. The documentary led an experiment where they kept monkeys alone and other monkeys together in cages. The monkeys alone died after a few months, and presented signs of growth alteration, a less developed immune system, and a difficulty to memorize even the simplest things. Their brain had a volume inferior to the average. This goes without saying that touch is the most important asset of our lives.

“If touch is lacking, the organism as a whole is modified, and this goes for babies but also adults.”

The Power of Caresses, 2021

The Overall Product

In relation to this research, I have designed the Zenimals, a series of 5 modular weighted cushions in the shape of abstract animals. The aim is for the user to build a bond/connection with the cushion, just like a childhood comfort animal, a safe companion in the office. The abstract shape helps the product fit into the office landscape more, but also helps the user associate it with any animal or comforting shape they see themselves. It's a personal connection that brings them a sense of belonging, something to take care of and that makes them want to come back the next day – because neurodivergence doesn't end at the end of the workday, it doesn't switch off when the person gets home. So, looking forward to something is a great way to keep the user engaged. The series of 5 can be assembled together like a puzzle sequence. That is an additional asset that provokes a sense of satisfaction to the user, when they're tidying up at the end of the day and assembling the puzzle, it's like putting the animals back home for the night. It's a good way to wrap up the day and feel satisfied. (More on the technical research later on).



Figure 9: Marie Roy (2024) Zenimals photoshoot



and long-grain rice

Industrial grade
cotton thread

Overlock stitch
Top stitch
Running stitch

Construction and Contextual Research

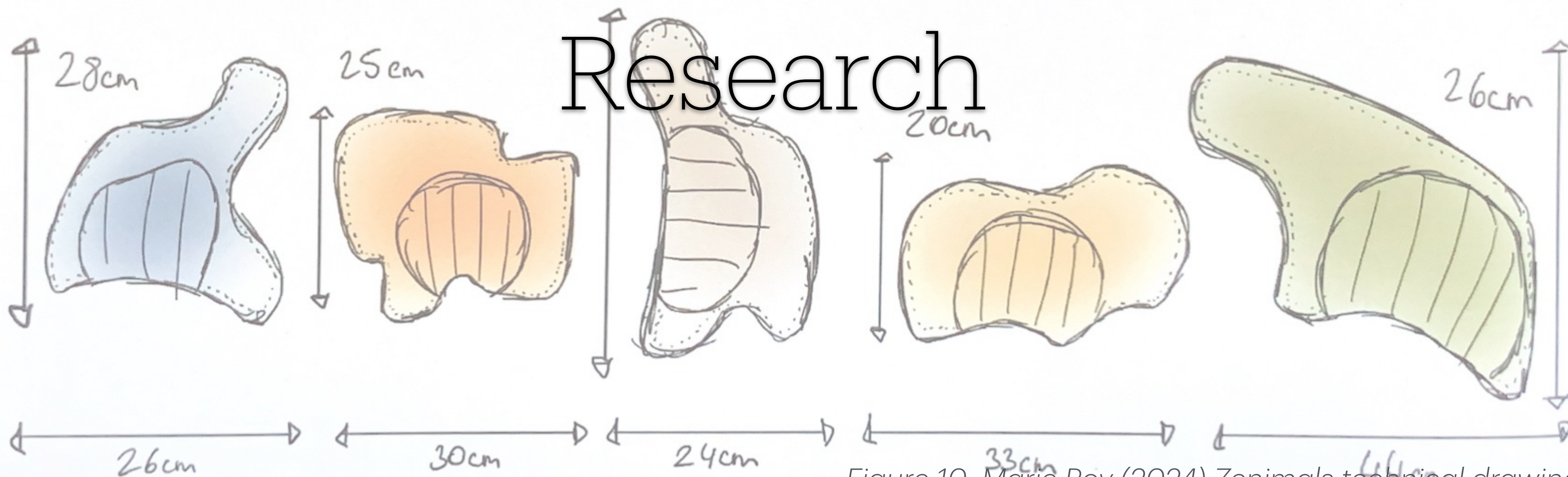



Figure 10: Marie Roy (2024) Zenimals technical drawing



Haworth: The Brand

G.W Haworth, an industrial arts teacher, launches *Modern Products*, a company selling wood items in the 1940s. In the 1970s, Dick Haworth, his son, takes over and extends the company, focusing more on office furniture. Since then, Haworth has expanded and has become a fully successful brand of office furniture. Today, the company is a globally recognized manufacturer of office furniture headquartered in Holland, Michigan, USA. In the evolving domain of modern workspaces, the company focuses on creating environments that enhance employee well-being, productivity, and collaboration. With the work of designers Patricia Urquiola, Pablo Pardo, and Giulio Cappellini, Haworth's approach emphasizes customer-centric design, incorporating advanced technologies and materials to meet the dynamic demands of today's workplaces. (Haworth, 2021)

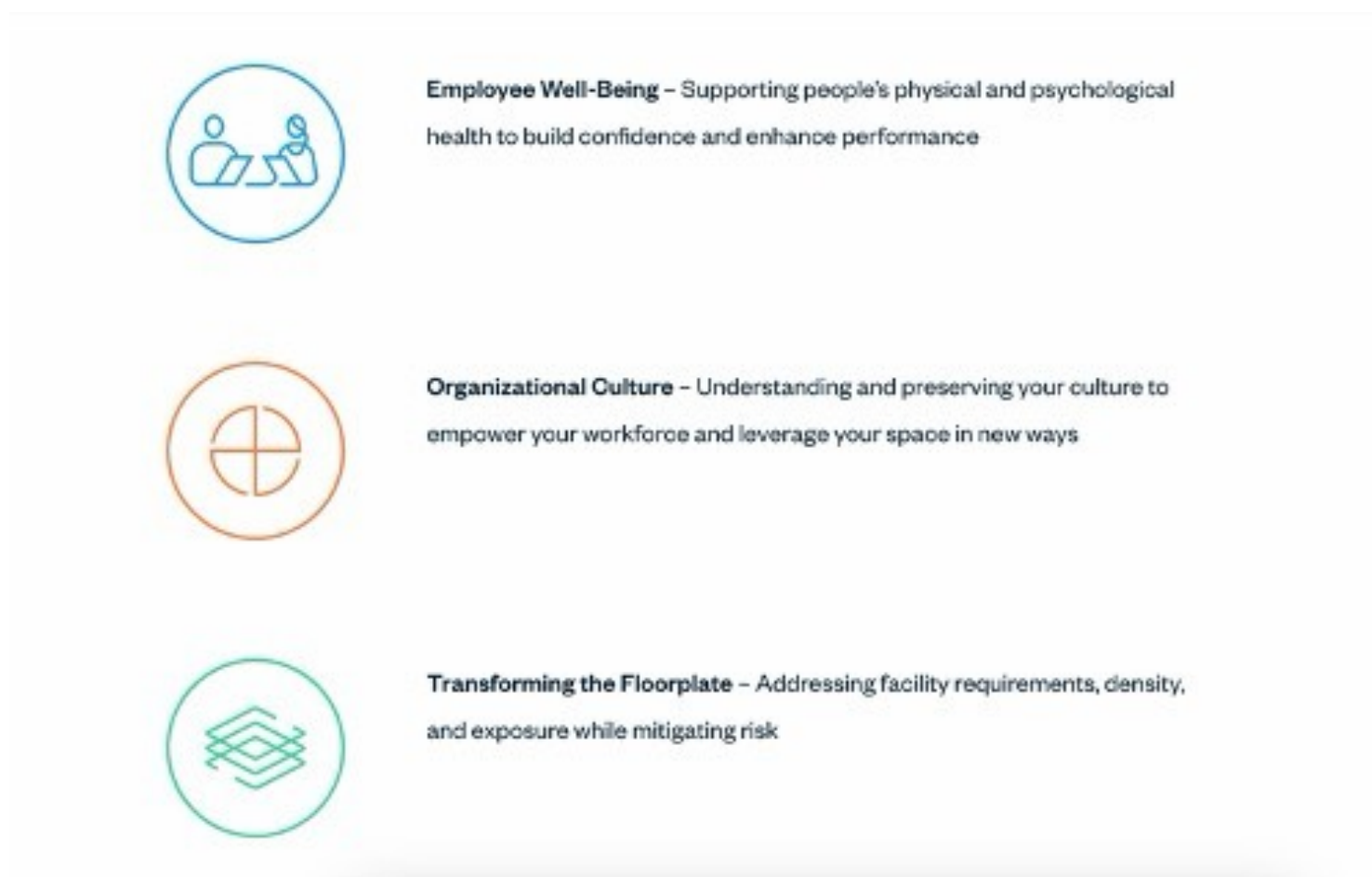


Figures 13-14: Build (2024) Designing an Inclusive office for neurodiverse employees

“Culture is as important as business strategy. It either strengthens or undermines your organization’s goals. Fostering a culture unique to your organization nurtures engagement and fuels innovation. And one of the most valuable tools to reinforce culture and drive business strategy is workplace design”.

Haworth, 2021

Figures 15-16: Haworth (2021) Organizational Culture: Competing Values Framework



Haworth's Culture = Workspace Design

The company website offers insight into their culture and beliefs. They insist on employee well-being, so that they work effectively, happily, and develop new ideas that grow revenue. The Competing Values Framework is a graph that shows the most important assets of the organization, according to Haworth: Collaborate, Create, Control, and Compete.

Contextual Research

To start my contextual research, after looking into the areas of neurodiversity, touch, weighted therapy and Haworth's identity, I looked at areas that were more about the physical shape of my product. I researched how professional brands used animal shapes in their own products, since it became a fashion trend in successful companies like *Loewe*, *Radley*, etc. They created recognisable animal shapes, but still retained some creative liberty. The *Japanese Posture Pal* (2020) was also inspiring because this one is an animal shape made specifically to be used in the office landscape.

I was struggling with finding the exact shapes for my cushions because I wanted them to be just abstract enough to not look like any specific animal, but still recognisable as a sort of animal. I found a solution by taking Enzo Mari's *Animal Jigsaw* (1957) and using his animal shapes, simply redrawing them more abstract. I redrew them over and over until I was satisfied with the shapes. This part also inspired me to add the puzzle aspect to them, so that they would fit together intricately.

Contextual research: Animals in professional brands

Figures 18-23:
Marie Roy (2024)
Animals in
professional
brands



Loewe Elephant bag (2021)



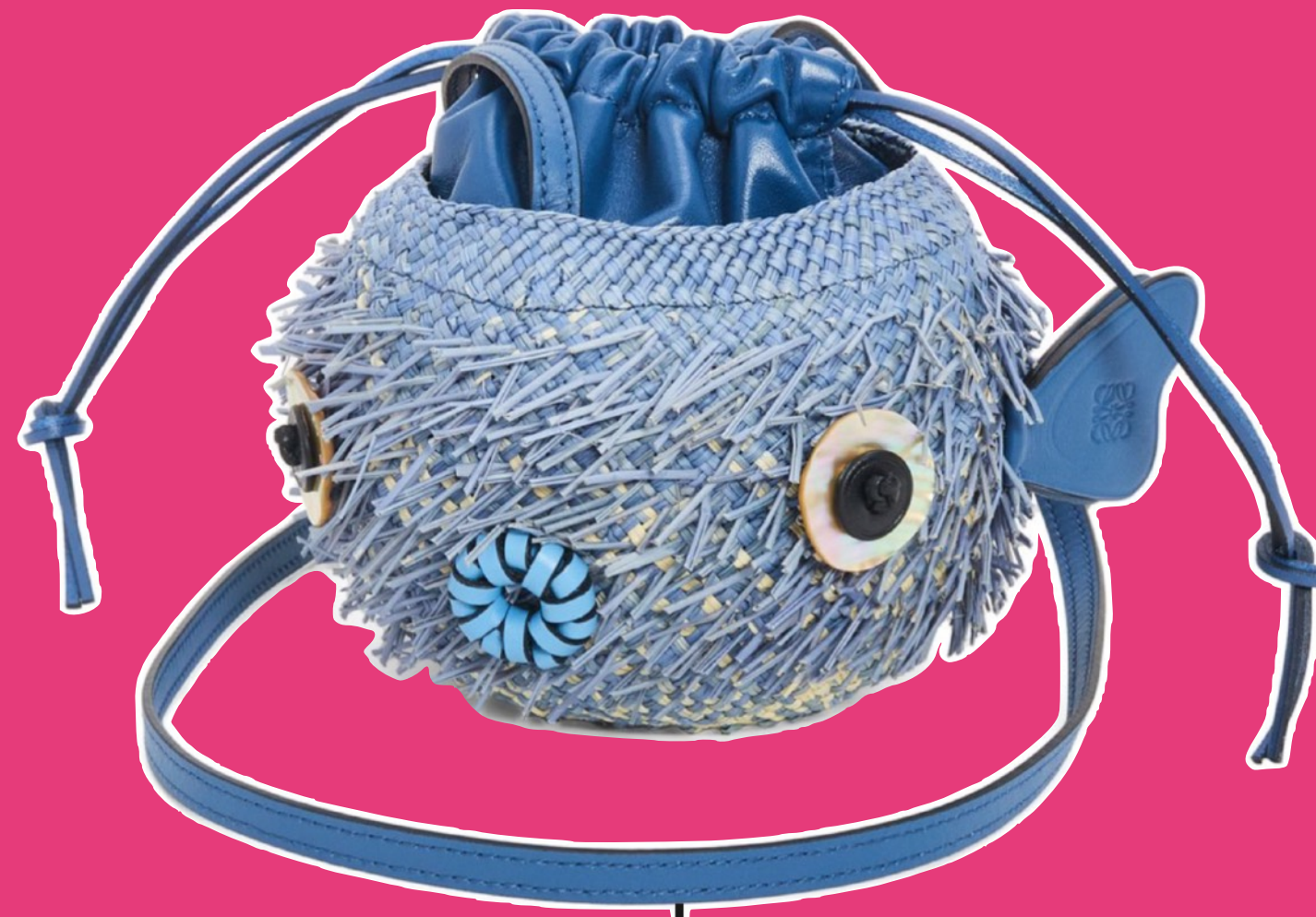
*Charles Jeffrey Loverboy
Gromlin bag (2017)*



Radley Crossbody bag (2021)



*Judith Lieber Crystal Bunny
minaudière (2009)*



Loewe Blowfish pouch (2022)



*Thome Browne leather
horse bag (2018)*

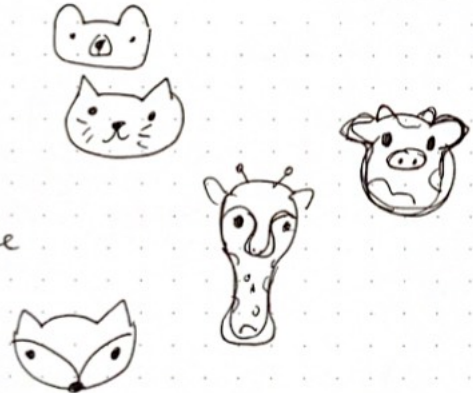
offers better comfort in chair



huggable → calms nervousness
also can use as pillow for nap time.

Animals:

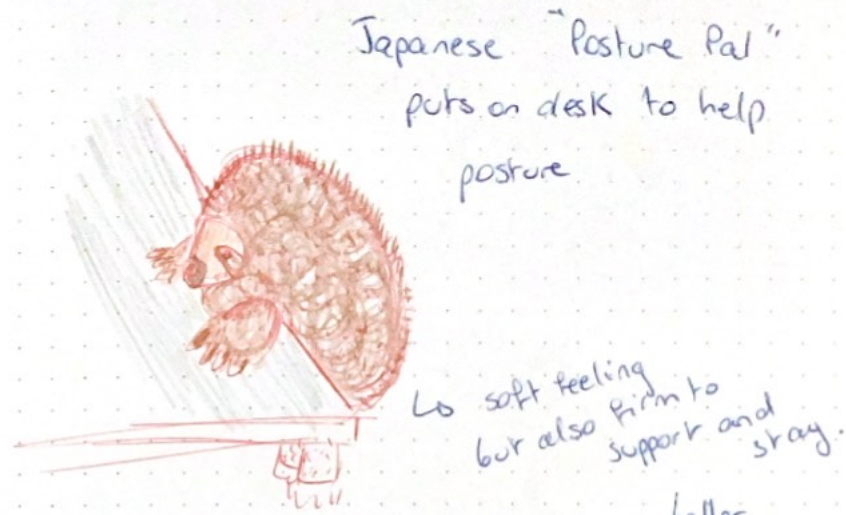
- bear
- cat
- cow
- giraffe
- fox



Japanese
posture pal

How to professionalize it?

neutral colors
Simple design
Office-themed
Each their own
Soft materials - cotton?



Japanese "Posture Pal"
puts on desk to help
posture

↳ soft feeling
but also firm to
support and stay.

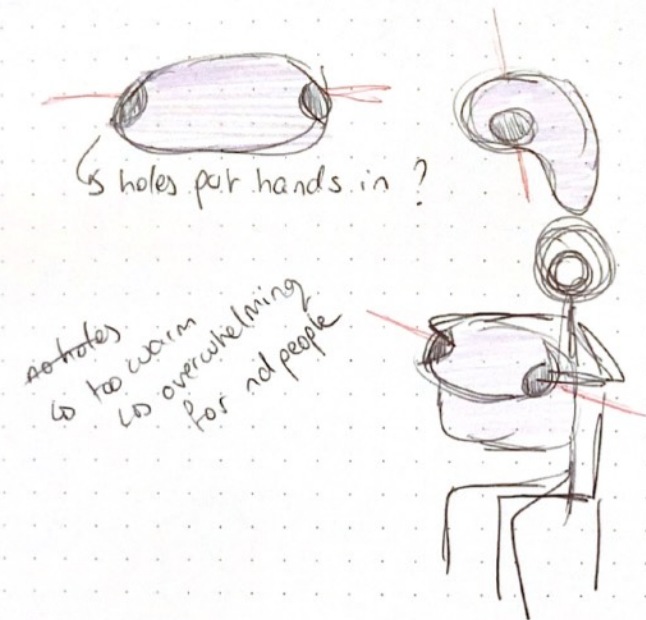


better
posture

extends
back

Modular

Movable



↳ holes for hands in?

not too
too warm
↳ overtake living
for nd people

Fill with
rice

↳ like heating
pillows

↳ need to
allow for leg
room

↳ nice



back support



front support



head support
for nap/rest



hug/squeeze for
comfort

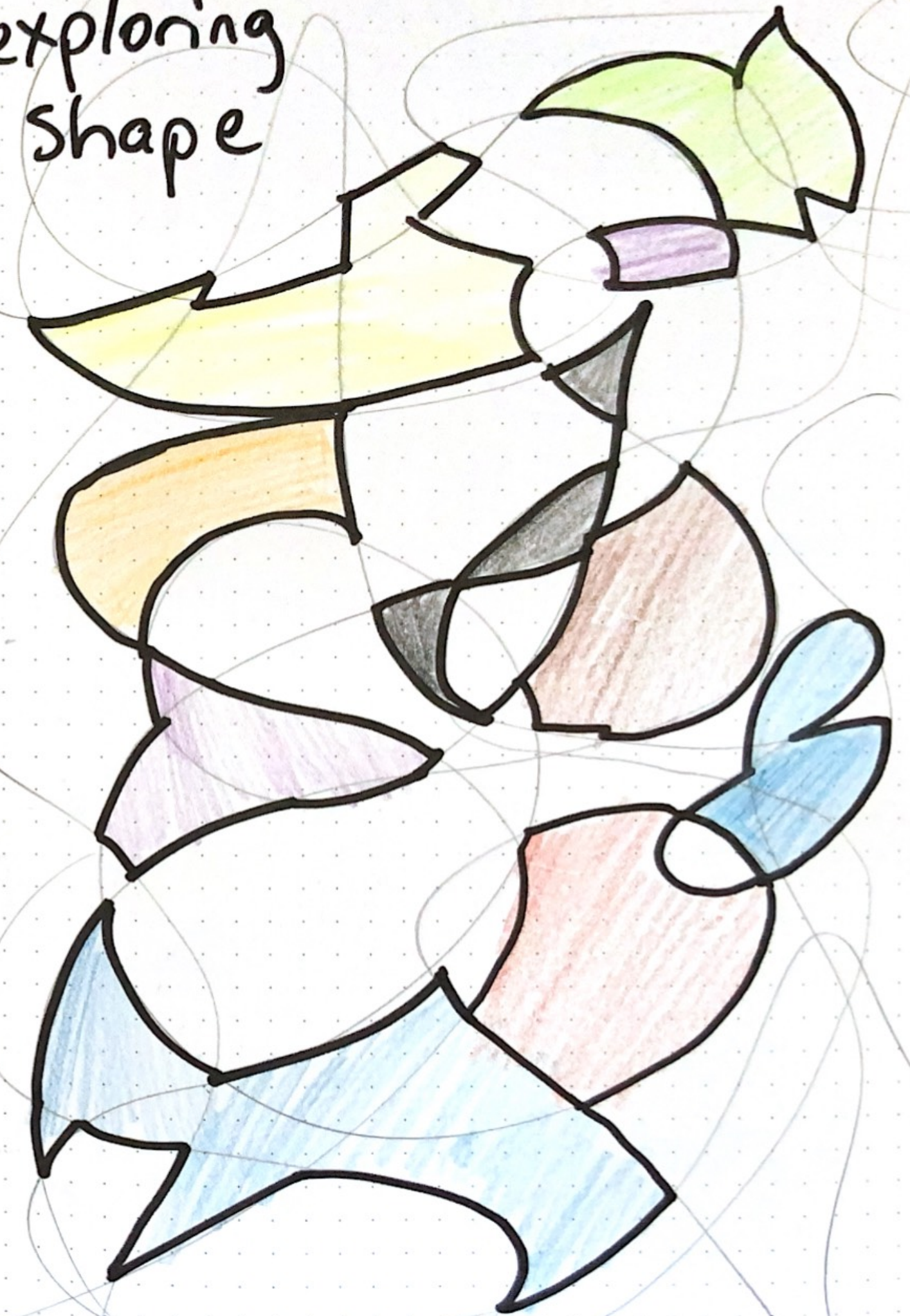
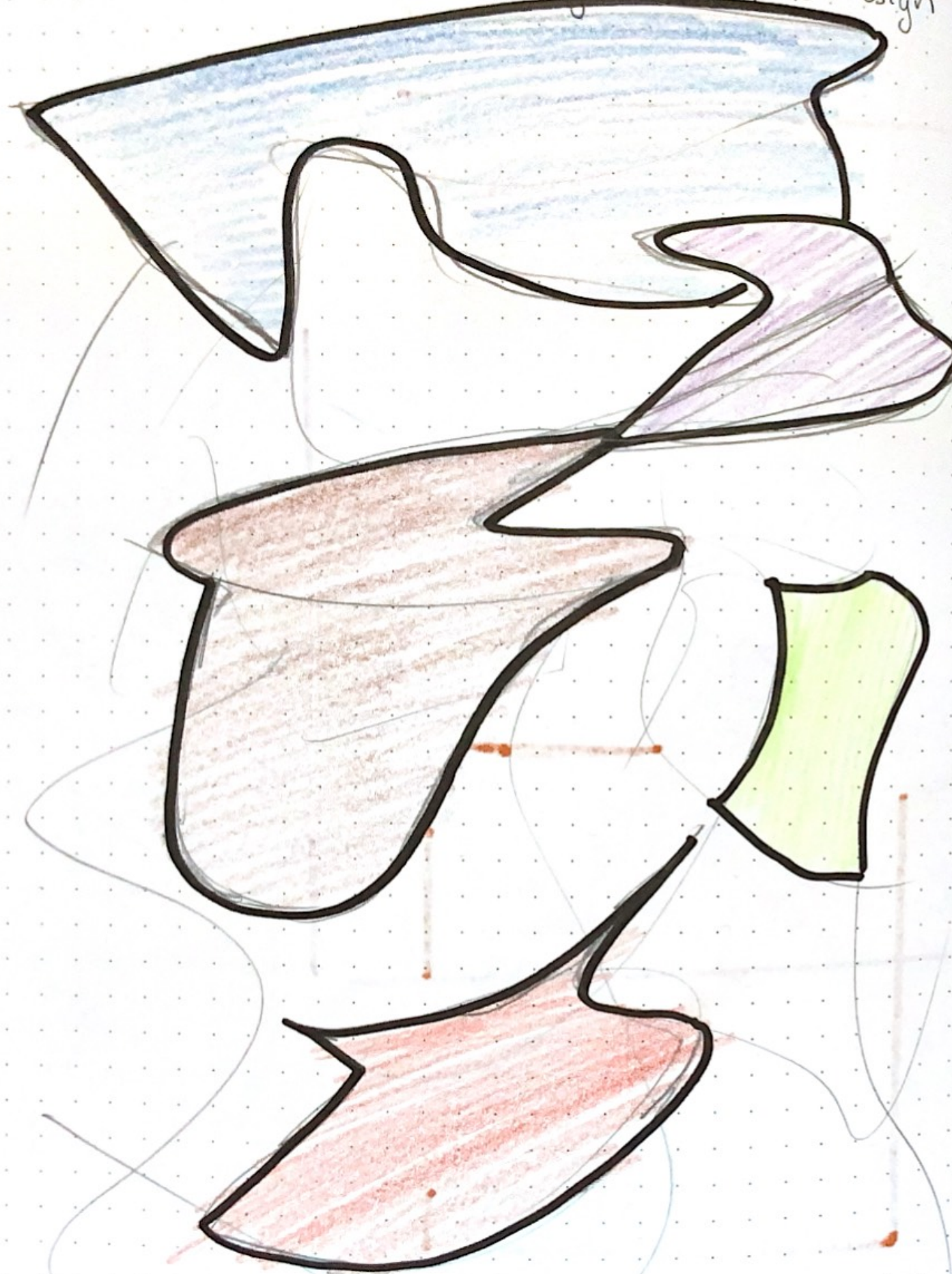


leg support
free sitting

Abstract shapes to fit into the office landscape.

hawerth.com → Knowledge → Inspired design

exploring
Shape



Figures 24-26: Marie Roy (2024) Sketchbook



Enzo Mari *Animal Jigsaw* (1957)



Simplified shapes + puzzle

Collaborating with Neurodivergent People

Material research and analysis

When designing for a specific group, it's always helpful to include them in the process. It's important to design for the neurodiverse with the help of the people who experience it daily. By involving them, the work taps into a knowledge that goes beyond theoretics. This ensures that the design will be truly neuro inclusive.

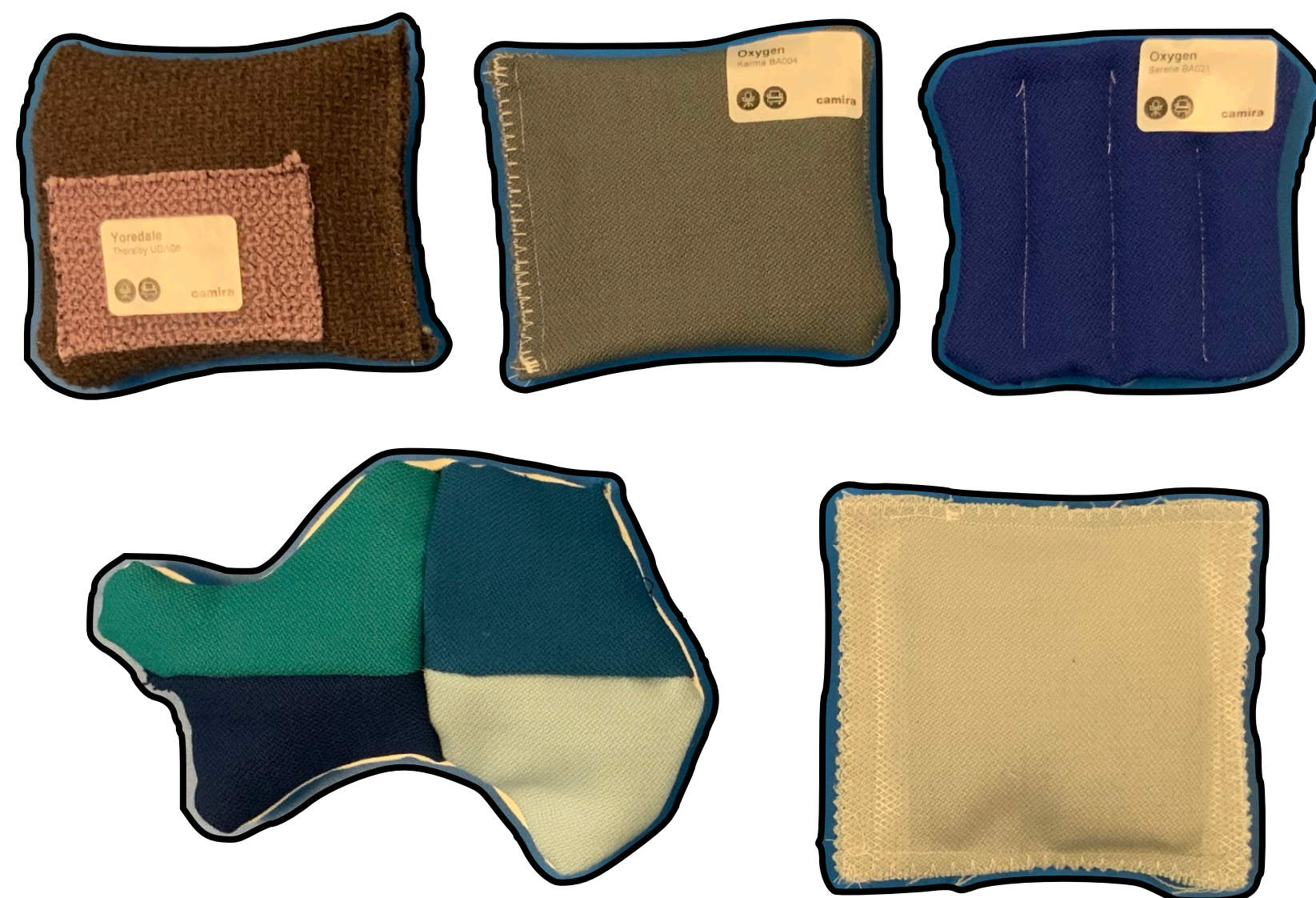
It was tricky finding the right texture combinations for the Zenimals, because it had to be soft and not overwhelming, but also quite vibrant and attractive so that it was visible, and associated with an emotion or feeling of comfort. With different fabric samples from our first visit to Camira, as well as Haworth's donated fabrics, I prepared a bunch of texture combinations and quilting samples.

We had the chance to organise a focus group, with a panel of neurodivergent individuals. I gave them all the samples and observed their body language, which is the most telling factor of someone's feelings. I observed which fabric they went for first, which is instinctively the most attractive one to them. This is how I chose the soft fabric, it was the one they were touching the most. Then, I had the textured fabric from Camira. They all agreed that by itself, the fabric is a bit overwhelming and scary because of the textured boucle. But if it is associated with a smoother fabric, then it naturally becomes much more attractive and they want to go touch it, feel both sides at once. This was how the idea of one textured and one smooth side was born.



- Panel of people with different neurodivergent paths
- Material samples exposed to them
- Body language

Material research - outside and inside



Figures 31-35: Marie Roy (2024) Fabric samples for the focus group



Secondary Research: The Conran Shop
textured pillows



Tangible texture combinations

*Figures 36-39: Marie Roy (2024) Textured cushions from
The Conran Shop*

“Yoredale” Camira - blend of wool and polyester bouclé

Figures 40-42: Marie Roy (2024) Haworth and Camira fabrics

Haworth - 100% wool linen

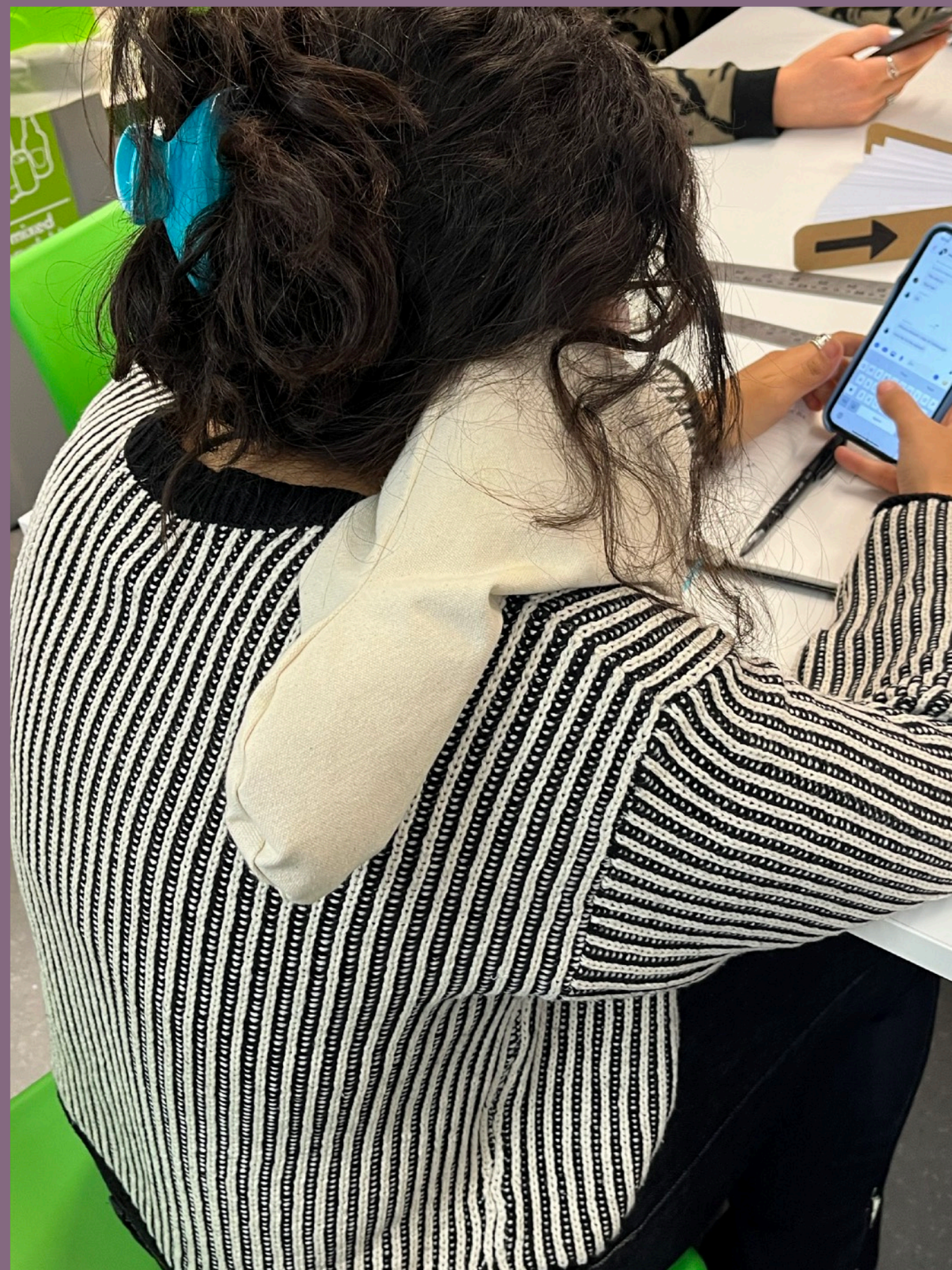


Collaborating with Neurodivergent People

After finding the right fabrics, I made real-size prototypes of the shapes out of calico and handed them to both neurotypical and neurodiverse individuals seeing how they instinctively grabbed it and interacted with it, which part of their body they put the cushion on, etc. This observation allowed me to see where to add pockets for an added exploration aspect, as well as weighted quilting on the other side of the cushion to add this grainy feel (filled with rice) they enjoyed thoroughly.

After this, came the colour combinations: once I had the two fabrics chosen, I tried all color combinations of two on a grey card background (33 Yoredale colours and 7 wool linen colours). It was a time-consuming process, but as my tutor said, “the right ones just pop out”. And they did. After a while, I settled on colors that would look good on the two sides of the same cushion, but also would be harmonious all together.

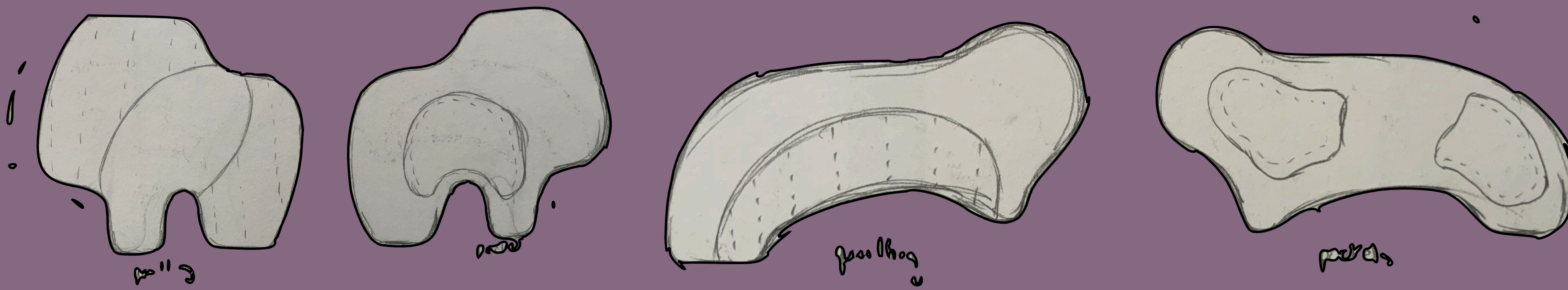
The research process was conducted on both neurotypical and neurodiverse people – meaning project involves everyone, and doesn’t pick out the neurodiverse individuals to make them feel “different”. This is following the client’s own words. By logic, it is an all-inclusive design.



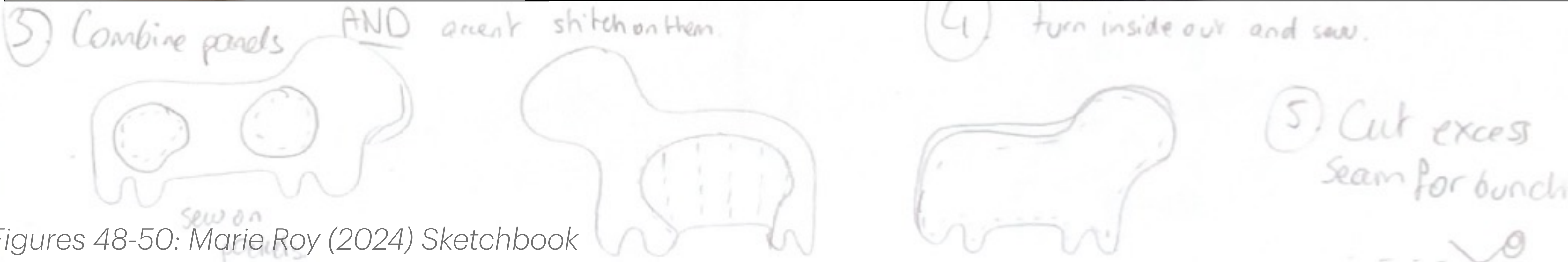
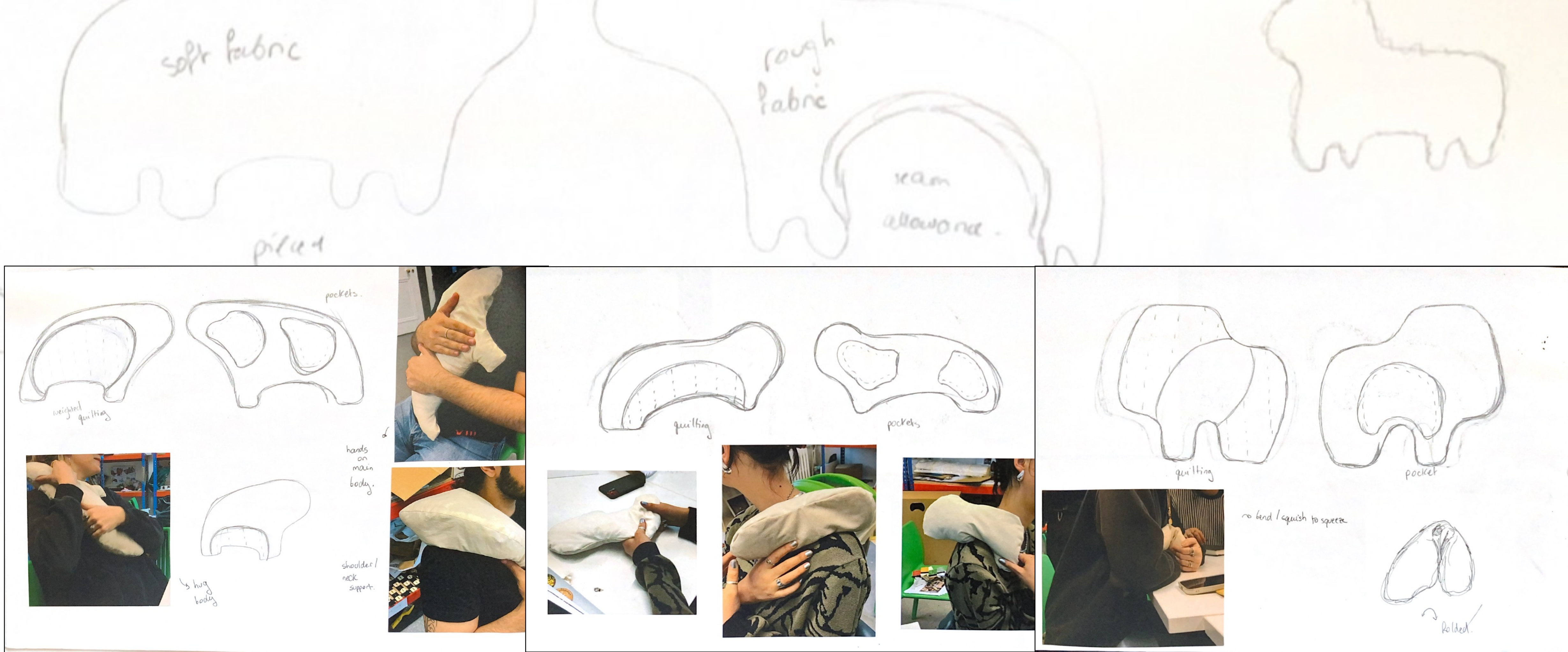
Final prototype



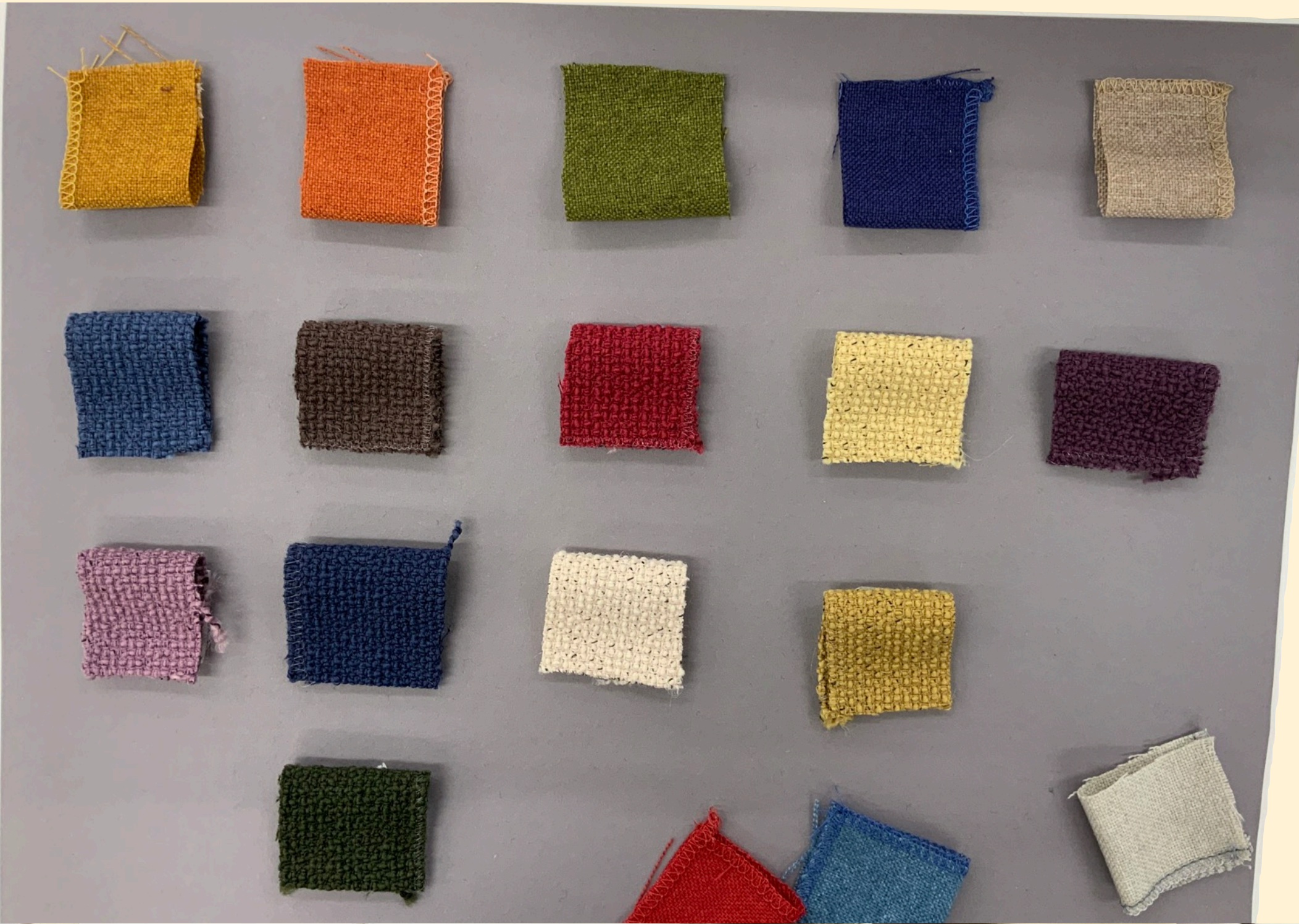
Body observation to see where to position pockets and weighted quilting



Figures 43-47: Marie Roy (2024) Body observations, sketchbook and final prototype



Figures 48-50: Marie Roy (2024) Sketchbook



Colour research



Figures 51-55: Marie Roy (2024) Colour samples and combinations

Possible colour combinations



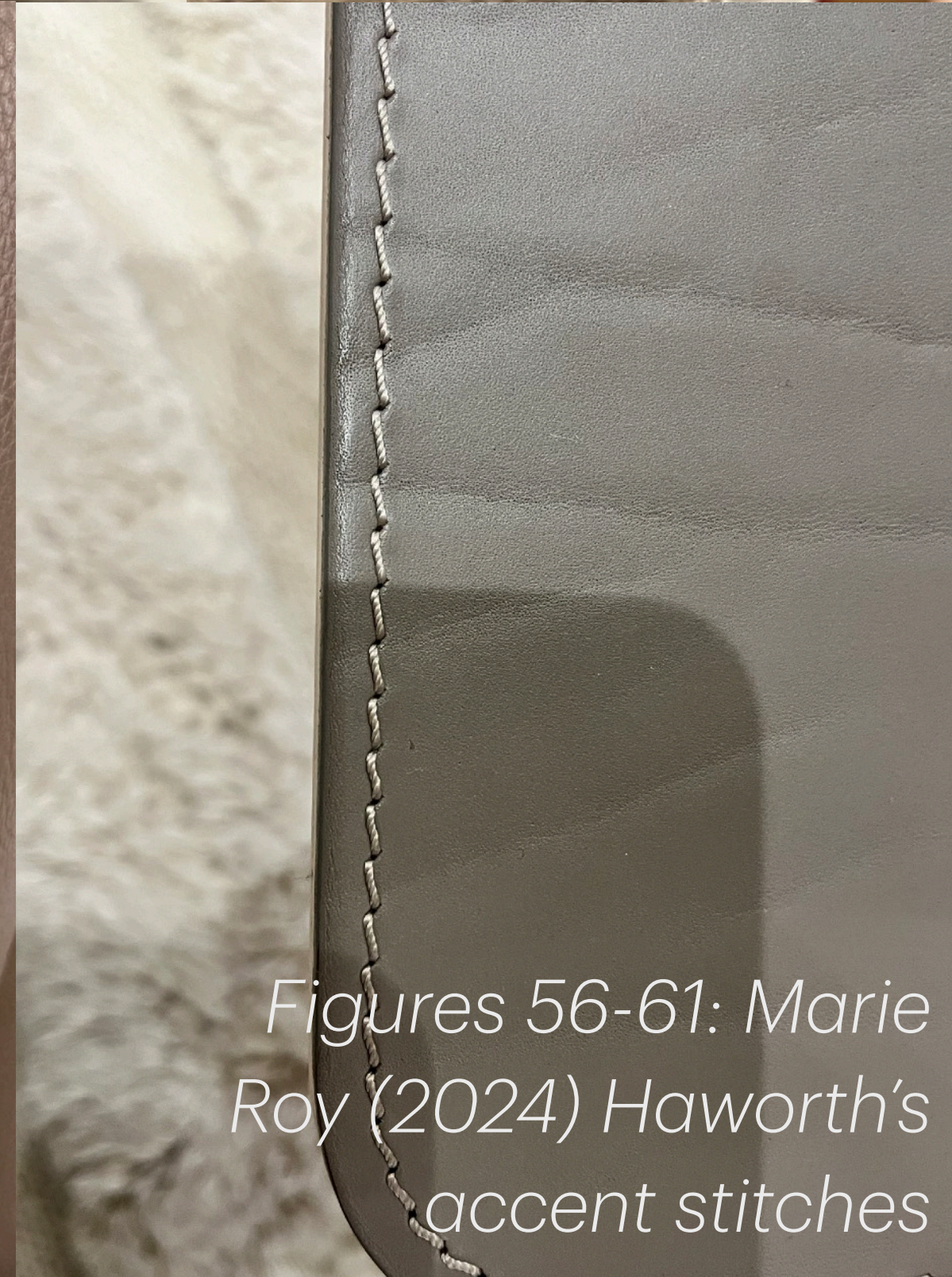
Figure 62: Marie Roy (2024)
Zenimals colour combinations

Haworth's signature making

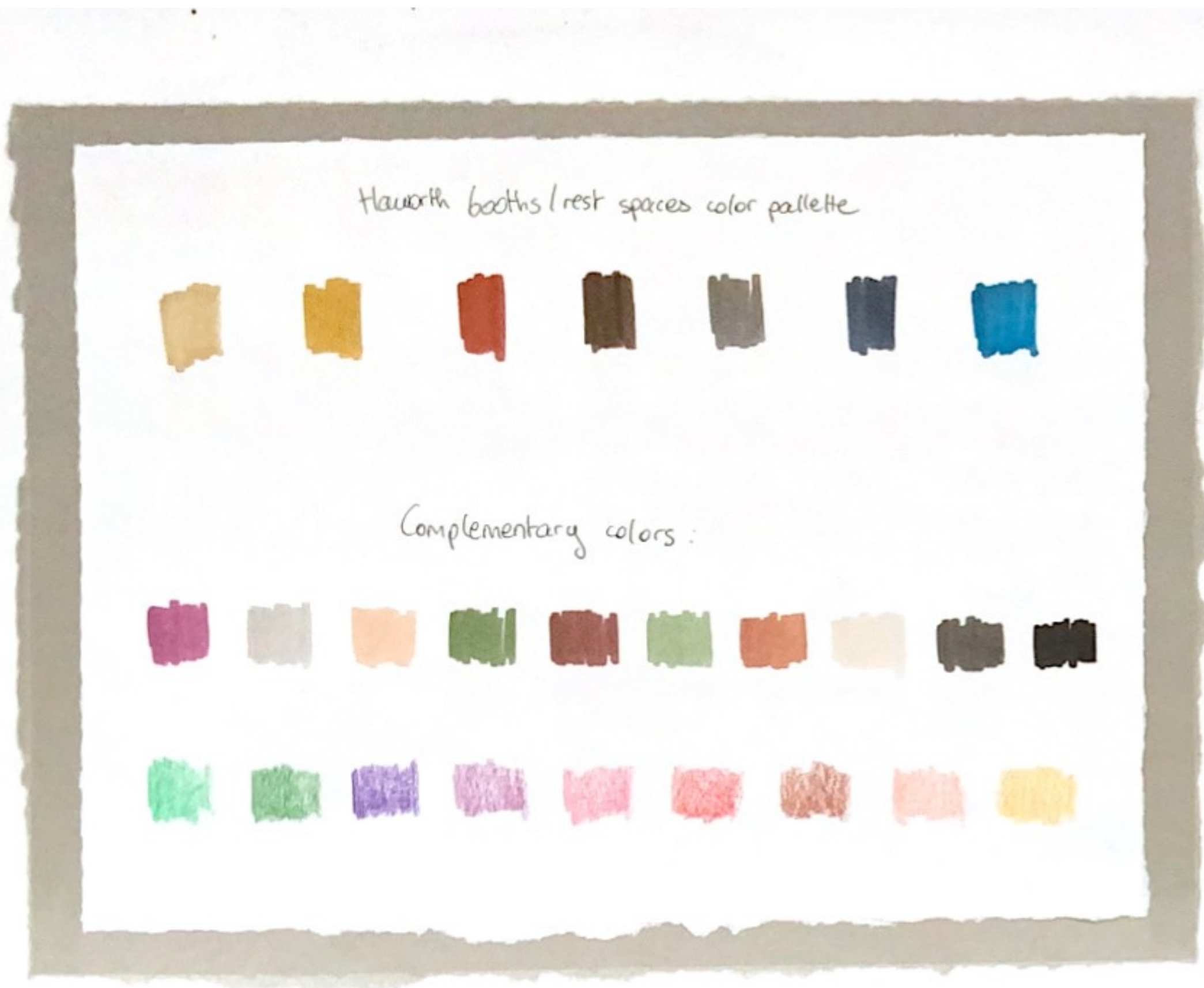
Fabrics, finishing and edges - identity of the brand



Imitating it in my product, so that it fits the identity of Haworth.



Figures 56-61: Marie Roy (2024) Haworth's accent stitches



Respecting Haworth's colour palette

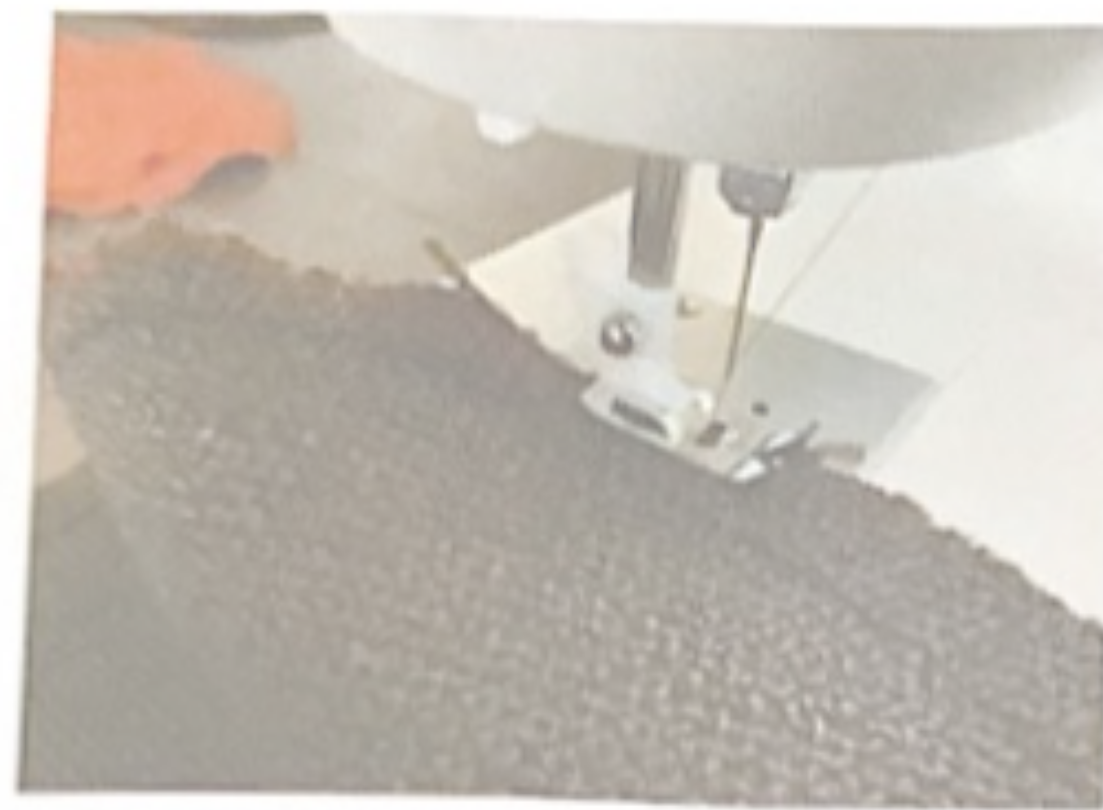
*Openest collection double booths by
Patricia Urquiola*



*Figures 64-65: Marie Roy
(2024) Zenimals photoshop
on Openest double booths*



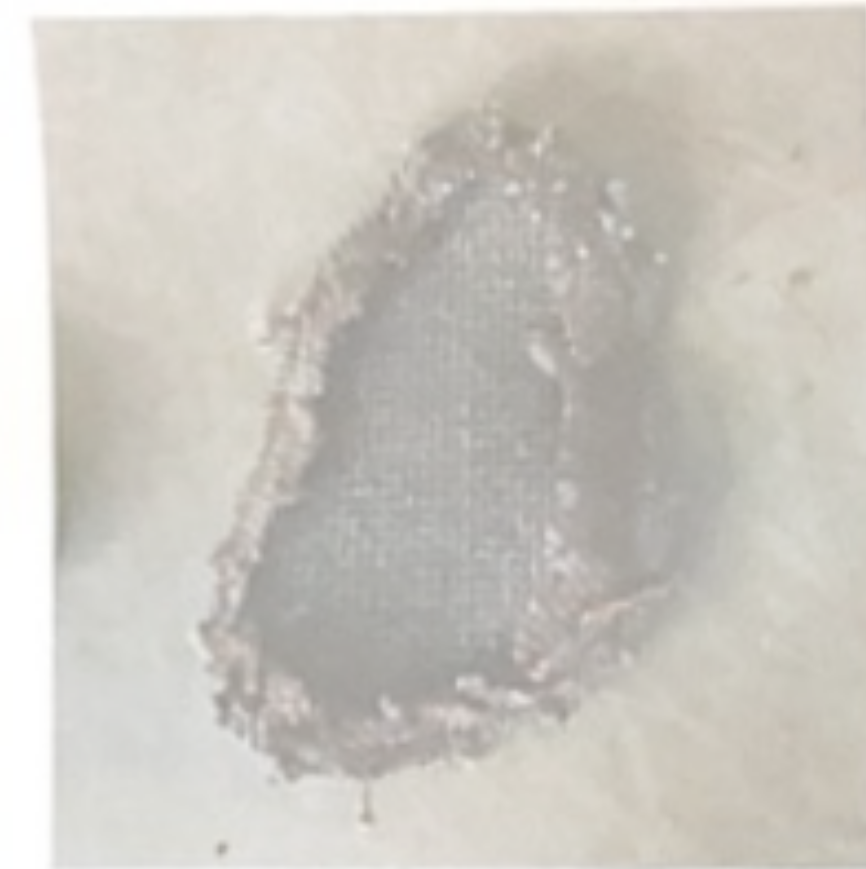
1. Cut out shapes



2. Overlock stitch
to prevent fraying



3. Prepare quilting



7. Fold hem of pockets

Conclusion

4. Fill quilting with rice



5. Stitch two pieces together



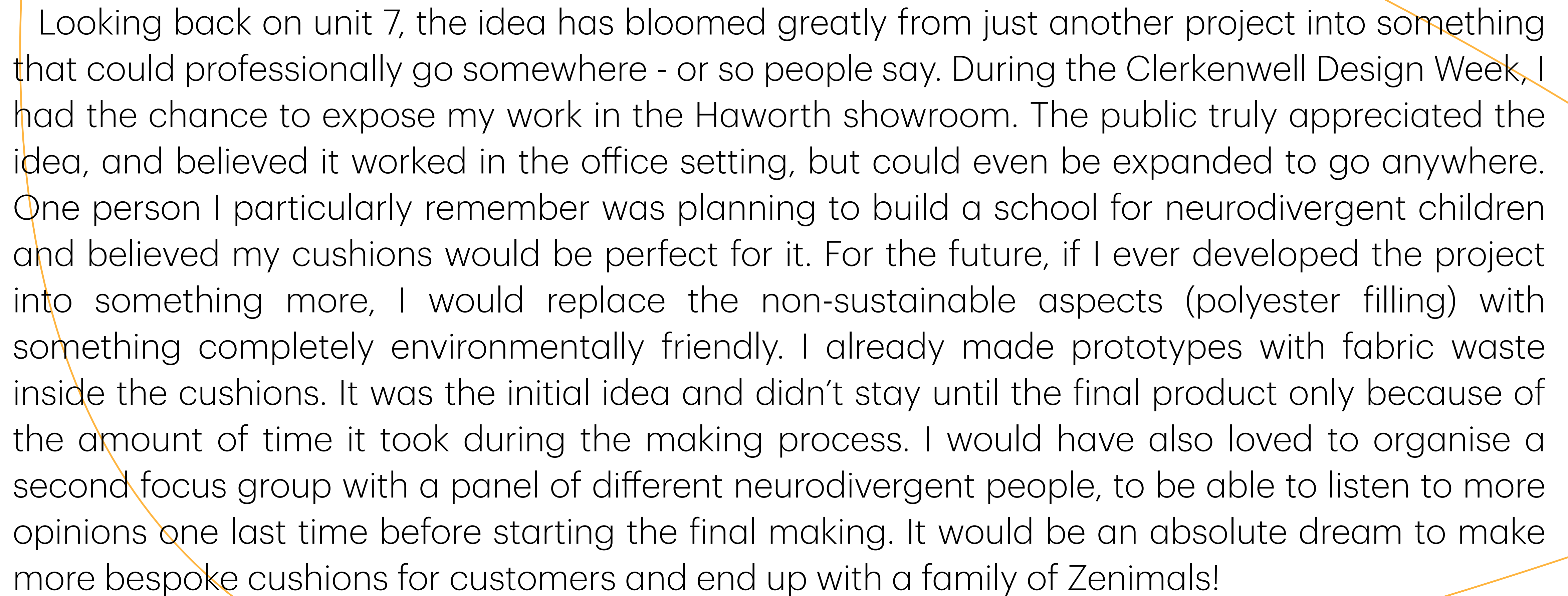
6. Make sure it's as flat as possible



10. Trim, turn inside



Figure 66: Marie Roy
(2024) Sketchbook

The background of the slide features several thin, curved orange lines that sweep across the frame, creating a modern and artistic feel.

Looking back on unit 7, the idea has bloomed greatly from just another project into something that could professionally go somewhere - or so people say. During the Clerkenwell Design Week, I had the chance to expose my work in the Haworth showroom. The public truly appreciated the idea, and believed it worked in the office setting, but could even be expanded to go anywhere. One person I particularly remember was planning to build a school for neurodivergent children and believed my cushions would be perfect for it. For the future, if I ever developed the project into something more, I would replace the non-sustainable aspects (polyester filling) with something completely environmentally friendly. I already made prototypes with fabric waste inside the cushions. It was the initial idea and didn't stay until the final product only because of the amount of time it took during the making process. I would have also loved to organise a second focus group with a panel of different neurodivergent people, to be able to listen to more opinions one last time before starting the final making. It would be an absolute dream to make more bespoke cushions for customers and end up with a family of Zenimals!



Fabric waste as filling
in the prototypes - full
circle



Figures 67-69: Marie Roy
(2024) Fabric waste as
filling

Figures 70-73: Marie Roy (2024) Zenimals final photoshoot





Zenimals

ual: HAWORTH®

The Product

Zenimals are modular weighted cushions shaped like abstract animals, which can also fit together as a puzzle. These cushions offer comfort and grounding for neurodivergent individuals through weighted therapy, providing sensory support.

The cushions feature pockets on the first - more textured - side, for an added exploration aspect, as well as weighted quilting on the other, smoother side.

Because the office workplace can be source of a lot of unwanted stress and anxiety, Zenimals deliver a sense of security, a safe companion in your work environment.



Materials and techniques

Overlocked and top stitched Wool linen and mixed wool/polyester bouclé fabric.
Industrial-grade cotton fiber thread
Filling: 100% Hi-Loft Polyester and long-grain rice

P
O
S
t
e
r

Figures 74-75: Marie Roy (2024) Final poster and showroom display



Haworth showroom for Clerkenwell Design Week

Project Statement

Marie-Charlotte Roy

Zenimals

Zenimals are modular weighted cushions shaped like abstract animals, which can also fit together as a puzzle. These cushions offer comfort and grounding for neurodivergent individuals through weighted therapy, providing sensory support.

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Because the office workplace can be source of a lot of unwanted stress and anxiety, Zenimals deliver a sense of security, a safe companion in your work environment.

ual:

Appendix 1

Link to Visual Contextual Research Presentation

[https://artslondon-my.sharepoint.com/:b:/g/personal/m_roy0420221_arts_ac_uk/
EcCtjO2uw45KjP5E80TYhmUB84pHWy6iFeH_p0G4DJpHHw?
email=m.roy0420221@arts.ac.uk&e=Cl7JKv](https://artslondon-my.sharepoint.com/:b:/g/personal/m_roy0420221_arts_ac_uk/EcCtjO2uw45KjP5E80TYhmUB84pHWy6iFeH_p0G4DJpHHw?email=m.roy0420221@arts.ac.uk&e=Cl7JKv)

Appendix 2

Correspondances

Yoredale fabric samples

Inbox x



Marie Charlotte Roy <roymariecharlotte72@gmail.com>
to info ▼

Mon, 29 Apr, 14:38 (4 days ago) ☆ 😊 ↩ ⋮

Hi,
I'm a university student at Chelsea College of Arts, doing a project in relation to Haworth furniture. I would love to order samples from you for my project. Please may I have samples of the Yoredale fabric in all 33 colors, one of each please! Feel free to email me back about any details you need.
All the best,
Marie Roy



Camira Fabrics Mon, 29 Apr, 14:50 (4 days ago) ☆
Hi Marie, Do you require this as a card (A4 card with small, stamp size swatches on) or do you need the larger 21 x 21cm swatches? If ...



Marie Charlotte Roy <roymariecharlotte72@gmail.com>
to Camira ▼

Mon, 29 Apr, 14:55 (4 days ago) ☆ 😊 ↩ ⋮

Hi,
I would need the 21x21cm pieces please! Here is the delivery address : 4 Oakland Quay, E149EA London
I am happy to provide whatever is needed for the Area Business Manager.

Many thanks,
Marie Roy

...



www.camirafabrics.com
Camira Fabrics Ltd, The Watermill, Wheatley Park, Mirfield, West Yorkshire, WF14 8HE, UK
Accounts: +44 (0) 3330 324 568 e-mail: accounts@camirafabrics.com
Sales: +44 (0) 3330 324 565 e-mail: info@camirafabrics.com



Order Acknowledgement

Ordered by: ADAM TUTT DO NOT SEND INVOICES OUT***** INTERNAL XXX *****	Ship to: MARIE CHARLOTTE ROY 4 OAKLAND QUAY LONDON E14 9EA	Customer C05993 Order Num S639621 Date 30/04/2024 Customer Order # MARIE CHARLOTTE Carrier . Terms PAYMENT IN ADVANCE Page 2
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If you have any questions regarding this order, please contact Maia Taylor on or Email

Line	Style	Description	Colour	Colour Desc	Shipping Date	Sidemarks	Quantity	Price	Discount	Total
17	HUDA00F400	MEMOS - YOREDALE	HUDA25	LEYBURN	30/04/2024		1.00	.00	.00	.00
18	HUDA00F400	MEMOS - YOREDALE	HUDA06	THORALBY	30/04/2024		1.00	.00	.00	.00
19	HUDA00F400	MEMOS - YOREDALE	HUDA01	BUCKDEN	30/04/2024		1.00	.00	.00	.00
20	HUDA00F400	MEMOS - YOREDALE	HUDA08	GAYLE	30/04/2024		1.00	.00	.00	.00
21	HUDA00F400	MEMOS - YOREDALE	HUDA09	THORNTON	30/04/2024		1.00	.00	.00	.00
22	HUDA00F400	MEMOS - YOREDALE	HUDA17	RIBBLE	30/04/2024		1.00	.00	.00	.00
23	HUDA00F400	MEMOS - YOREDALE	HUDA32	INGLETON	30/04/2024		1.00	.00	.00	.00
24	HUDA00F400	MEMOS - YOREDALE	HUDA28	BRONTE	30/04/2024		1.00	.00	.00	.00
25	HUDA00F400	MEMOS - YOREDALE	HUDA27	GRASSINGTON	30/04/2024		1.00	.00	.00	.00
26	HUDA00F400	MEMOS - YOREDALE	HUDA23	CRACOE	30/04/2024		1.00	.00	.00	.00
27	HUDA00F400	MEMOS - YOREDALE	HUDA20	DARLEY	30/04/2024		1.00	.00	.00	.00
28	HUDA00F400	MEMOS - YOREDALE	HUDA11	FOSSDALE	30/04/2024		1.00	.00	.00	.00
29	HUDA00F400	MEMOS - YOREDALE	HUDA35	MARSDEN	30/04/2024		1.00	.00	.00	.00
30	HUDA00F400	MEMOS - YOREDALE	HUDA34	MALHAM	30/04/2024		1.00	.00	.00	.00
31	HUDA00F400	MEMOS - YOREDALE	HUDA21	DACRE	30/04/2024		1.00	.00	.00	.00
32	HUDA00F400	MEMOS - YOREDALE	HUDA22	BURNSALL	30/04/2024		1.00	.00	.00	.00

Order Comments	Bank Details HSBC 1st Floor, 33 Park Row Leeds, LS1 1LD West Yorkshire, UNITED KINGDOM	Account: 85065656 Sort Code: 40-27-15 IBAN: GB32 HBUK 4027 1585 0656 68 BIC/SWIFT: HBUKGB41056	Sales Tax % (20.00)	.00
			Order Total (GBP)	.00

This order is made in accordance with our standard terms and conditions which are available on our website.
Please note: acknowledged despatch dates are not valid and the fabric will not be reserved if your account is on credit hold. Please quote our order number.
Please note: the stated technical and environmental performance of a fabric may be affected by the post treatment applied. The technical parameters, including flammability, outlined in our internal specifications provide a guide to fabric performance and unless specified, are tested by Camira without a post treatment. We recommend that customers conduct their own testing on final finished components, including but not limited to flammability performance, in the intended format for end installation. Product guarantees for the post treatment of fabrics undertaken by Camira are guaranteed for 5 years.

VAT Reg. No. GB 877 9296 44
Registered in England No. 02215654

Mon, 29 Apr, 14:50 (4 days ago) ☆ 😊 ↩ ⋮

Camira Fabrics <Camira.Fabrics@camirafabrics.com>
to me ▼

Hi Marie,

Do you require this as a card (A4 card with small, stamp size swatches on) or do you need the larger 21 x 21cm swatches?

If you need the larger swatches then these will need to be approved by an Area Business Manager.

Please can you also provide a delivery address?

Many thanks

Maia Taylor | Samples Administrator

Meltham Mills | Meltham Mills Road | Holmfirth | West Yorkshire | HD9 4FA | United Kingdom



Ordered by: ADAM TUTT DO NOT SEND INVOICES OUT***** INTERNAL XXX *****	Ship to: MARIE CHARLOTTE ROY 4 OAKLAND QUAY LONDON E14 9EA	Customer C05993 Order Num S639621 Date 30/04/2024 Customer Order # MARIE CHARLOTTE Carrier . Terms PAYMENT IN ADVANCE Page 1
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If you have any questions regarding this order, please contact Maia Taylor on or Email

Line	Style	Description	Colour	Colour Desc	Shipping Date	Sidemarks	Quantity	Price	Discount	Total
1	HUDA00F400	MEMOS - YOREDALE	HUDA05	SIMONSTONE	30/04/2024		1.00	.00	.00	.00
2	HUDA00F400	MEMOS - YOREDALE	HUDA18	WHARFE	30/04/2024		1.00	.00	.00	.00
3	HUDA00F400	MEMOS - YOREDALE	HUDA16	NIDD	30/04/2024		1.00	.00	.00	.00
4	HUDA00F400	MEMOS - YOREDALE	HUDA30	HORTON	30/04/2024		1.00	.00	.00	.00
5	HUDA00F400	MEMOS - YOREDALE	HUDA31	ILKLEY	30/04/2024		1.00	.00	.00	.00
6	HUDA00F400	MEMOS - YOREDALE	HUDA03	ASKRIGG	30/04/2024		1.00	.00	.00	.00
7	HUDA00F400	MEMOS - YOREDALE	HUDA13	WALDEN	30/04/2024		1.00	.00	.00	.00
8	HUDA00F400	MEMOS - YOREDALE	HUDA12	WOODALE	30/04/2024		1.00	.00	.00	.00
9	HUDA00F400	MEMOS - YOREDALE	HUDA14	SEDBUSK	30/04/2024		1.00	.00	.00	.00
10	HUDA00F400	MEMOS - YOREDALE	HUDA38	SWALEDALE	30/04/2024		1.00	.00	.00	.00
11	HUDA00F400	MEMOS - YOREDALE	HUDA37	SKIPTON	30/04/2024		1.00	.00	.00	.00
12	HUDA00F400	MEMOS - YOREDALE	HUDA33	KETTLEWELL	30/04/2024		1.00	.00	.00	.00
13	HUDA00F400	MEMOS - YOREDALE	HUDA02	KIDSTONE	30/04/2024		1.00	.00	.00	.00
14	HUDA00F400	MEMOS - YOREDALE	HUDA29	GORDALE	30/04/2024		1.00	.00	.00	.00
15	HUDA00F400	MEMOS - YOREDALE	HUDA36	SETTLE	30/04/2024		1.00	.00	.00	.00
16	HUDA00F400	MEMOS - YOREDALE	HUDA04	HARDRAW	30/04/2024		1.00	.00	.00	.00

Order Comments	Bank Details HSBC 1st Floor, 33 Park Row Leeds, LS1 1LD West Yorkshire, UNITED KINGDOM	Account: 85065656 Sort Code: 40-27-15 IBAN: GB32 HBUK 4027 1585 0656 68 BIC/SWIFT: HBUKGB41056	Continues on next page
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is order is made in accordance with our standard terms and conditions which are available on our website.
Please note: acknowledged despatch dates are not valid and the fabric will not be reserved if your account is on credit hold. Please quote our order number.
Please note: the stated technical and environmental performance of a fabric may be affected by the post treatment applied. The technical parameters, including flammability, outlined in our ernal specifications provide a guide to fabric performance and unless specified, are tested by Camira without a post treatment. We recommend that customers conduct their own testing on al finished components, including but not limited to flammability performance, in the intended format for end installation. Product guarantees for the post treatment of fabrics undertaken by Camira are guaranteed for 5 years.

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Marie Charlotte Roy <roymariecharlotte72@gmail.com>

to Camira

Thu, 2 May, 15:05 (20 hours ago)



Hello,

I'm a year 2 Product and Furniture Design student at University of the Arts London Chelsea College. I am currently making a project for Haworth, and I've been working with Victor Bourdairiat that you may know (from Haworth). Ive been testing and prototyping with your fabrics until now, they are perfect for my project! I am writing you to ask a massive favour: would it be possible to acquire a 2m x 2m piece of the Yoredale fabric in 5 different colours? I would be delighted to come pick them up at Camira in Farringdon, or for them to be shipped if they come from another city. Haworth unfortunately doesn't have the right fabric for my work, but the Yoredale fabric is literally perfect. It would mean the world to me if I could acquire these large pieces of fabric from your courtesy!

I am happy to send you the details once you respond to this email.

Thank you very much for your understanding,

Marie-Charlotte Roy



Camira Fabrics

to me

Thu, 2 May, 16:04 (19 hours ago)



Hello Marie,

Thank you for contacting us.

If you could please give me your address so I can forward this on to the relevant area business manager to authorise.

Kind regards,

Emily Drake | Customer Service Advisor

+44 (0) 333 0324572

The Watermill | Wheatley Park | Mirfield | West Yorkshire | WF14 8HE | United Kingdom



Marie Charlotte Roy

Thu, 2 May, 16:06 (5 days ago)



Hello!Here is my university address, please deliver here!16 John Islip St, London SW1P 4JU Thanks so much,Marie Roy



Marie Charlotte Roy <roymariecharlotte72@gmail.com>

Thu, 2 May, 16:55 (5 days ago)



to Camira

Hi again,
Just so there is no confusion, it would be lovely to have these 5 colours in the Yoredale fabric, each 2 meters x 2 meters:
Simonstone;
Thorlby;
Swaledale;
Sedbusk;
And Gordale.

Delivery to: 16 John Islip street, London SW1P 4JU
Thank you ever so much for your understanding and have a great rest of your day,
Marie Roy

...



Camira Fabrics

Fri, 3 May, 13:00 (4 days ago)



Hello Marie, Thank you for the below. I have spoken with Adam who is responsible for your postcode area. Can you confirm which Yore...



Marie Charlotte Roy

Fri, 3 May, 13:03 (4 days ago)



Dear Emily,I would be delighted to! Here are the 5 Yoredale colors I would need: Thank you very much and have a great afternoon,Mar...



Marie Charlotte Roy <roymariecharlotte72@gmail.com>

to Camira

Thu, 2 May, 16:06 (19 hours ago)



Hello!

Here is my university address, please deliver here!

16 John Islip St, London SW1P 4JU

Thanks so much,

Marie Roy

...



Camira Fabrics - Customer Services

to me

Tue, 30 Apr, 10:30 (3 days ago)



Dear ADAM TUTT

Thankyou for placing your order with Camira Fabrics.
Please find attached your latest order acknowledgement.
This Order (S639621) was raised on 30/04/2024 and relates to your order MARIE CHARLOTTE. Please contact us if you require further information.

Regards

Customer Services Department - Camira Fabrics



www.camirafabrics.com

Camira Fabrics Ltd, The Watermill, Wheatley Park, Mirfield, West Yorkshire, WF14 8HE, UK
Accounts: +44 (0) 3330 324 568 e-mail: accounts@camirafabrics.com
Sales: +44 (0) 3330 324 568 email: info@camirafabrics.com



Order Acknowledgement

Customer	C05993
Order Num	1226186
Date	07/05/2024
Customer Order #	MARIE ROY
Carrier	.
Terms	PAYMENT IN ADVANCE
Page	1

If you have any questions regarding this order, please contact Emily Drake on (0)333 032 4591or Email emily.drake@camirafabrics.com

Line	Style	Description	Colour	Colour Desc	Shipping Date	Sidemarks	Quantity	Price	Discount	Total
1	HUDAO0F400	YOREDALE	HUDA05	SIMONSTONE	07/05/2024		2.00	.00	.00	.00
2	HUDAO0F400	YOREDALE	HUDA06	THORALBY	07/05/2024		2.00	.00	.00	.00
3	HUDAO0F400	YOREDALE	HUDA38	SWALEDALE	07/05/2024		2.00	.00	.00	.00
4	HUDAO0F400	YOREDALE	HUDA14	SEDBUSK	07/05/2024		2.00	.00	.00	.00
5	HUDAO0F400	YOREDALE	HUDA29	GORDALE	07/05/2024		2.00	.00	.00	.00

Order Comments

	Bank Details HSBC 1st Floor, 33 Park Row Leeds, LS1 1LD West Yorkshire. UNITED KINGDOM	Account: 85065666. Sort Code: 40-27-15 IBAN: GB32 HBUK 4027 1585 0656 66. BIC/SWIFT: HBUKGB4105B.
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Sales Tax % (20.00)	.00
Order Total (GBP)	.00

This order is made in accordance with our standard terms and conditions which are available on our website.
Please note: acknowledged despatch dates are not valid and the fabric will not be reserved if your account is on credit hold. Please quote our order number.
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VAT Reg. No. GB 877 9296 44
Registered in England No. 02215654

MR

You

To Stefano Santilli

10 Apr

...

😊

Hello Stefano ,

Thank you for taking care of this. I have sent an email to every student in the Haworth group to know if [1pm on Friday](#) works for everyone, and if there's no answers by [tomorrow afternoon](#), that will be the time for those who want to go!

All the best,

Marie

Sent from [Outlook for iOS](#)

...

📁

Inbox

SS

Stefano Santilli

To You

10 Apr

...

😊

Well done Marie!

MR

You

To Fabiane Lee-Perrella

25 Apr

...

😊

Dear Fabi,

I hope you are doing well! I am writing to you because you asked earlier today to give you a list of students using textiles in Haworth :

Marie Roy

Alicia Hackett

Xinqin Xu

Meichen Zhou

Shuli Yu

Wenxi Ding

Alina Li

Urvi Agarwal

Punpun Phophientong

Sining Li

Qingyi Cen

Sent from [Outlook for iOS](#)

Figures 76-90:
Marie Roy (2024)
Correspondences

MR

You

To Alicia Hackett, Alina Li, Isabel Ogunjuyigbe, Meichen Zhou, Punpun Phophientong, Qingyi Cen, Shulin Yu, Sining Li, +4

10 Apr

...

👍 3

😊

Hello everyone!

So this is an email to decide when would be best to go to Camira [this Friday](#) following Stefano's email. I propose [1pm](#) at Camira, is everyone okay with that? I need to let stefano know [before tomorrow evening](#) so if there's no answers I'll just tell him [1pm](#) and the people who want to show up. So please let me know!!

Marie x

Sent from [Outlook for iOS](#)

📁

Inbox

AH

Alicia Hackett

To You

10 Apr

...

😊

Sounds good to me

Sent from [Outlook for iOS](#)

MR

You

To Unit 8 Haworth Group 23/24

26 Apr

...

👍 1

😊

Hi all,

Fabi and Victor were very kind to let us take some large pieces of fabric from Haworth on Monday. We need 4-5 people including me to come to Haworth [at 11 on Monday morning](#) and pick them up, and bring them to Fabi's office in uni.

Please let me know quickly who would like to come!

Thanks,

Marie Roy

Sent from [Outlook for iOS](#)

📁

Archive

MZ

Meichen Zhou

To Unit 8 Haworth Group 23/24 and You

26 Apr

...

👍 1

😊

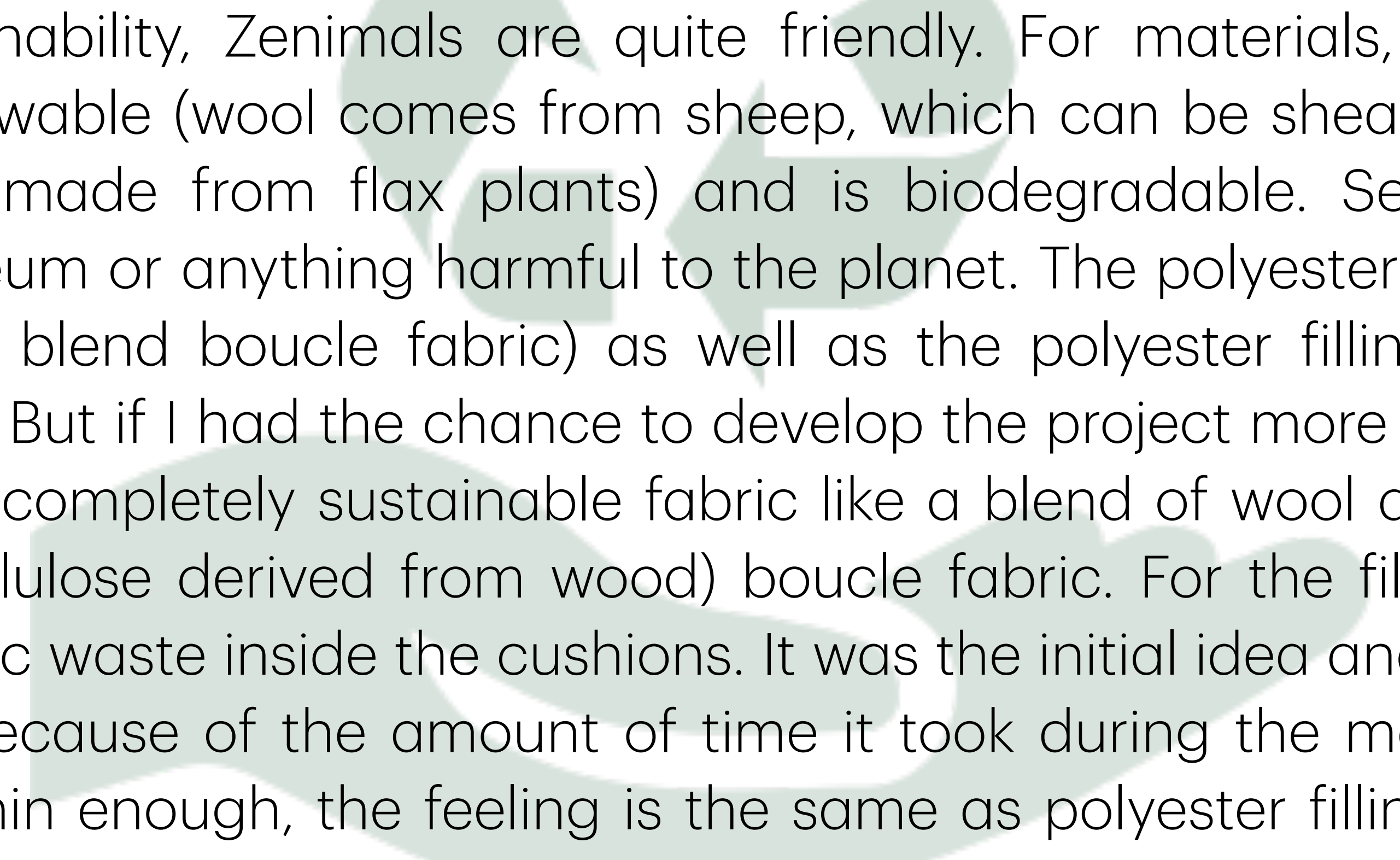
Hi Marie, thank you for your email. I can come!

Meichen

发送自 [Outlook for iOS](#)

Appendix 3

Sustainability Audit



In terms of sustainability, Zenimals are quite friendly. For materials, wool linen is 100% sustainable: it's renewable (wool comes from sheep, which can be sheared annually without harm, and linen is made from flax plants) and is biodegradable. Sewing machines use electricity, no petroleum or anything harmful to the planet. The polyester in the second fabric (wool and polyester blend boucle fabric) as well as the polyester filling are the only non-sustainable aspects. But if I had the chance to develop the project more in the future, I would make sure to find a completely sustainable fabric like a blend of wool and cotton, or lyocell (composed from cellulose derived from wood) boucle fabric. For the filling, I already made prototypes with fabric waste inside the cushions. It was the initial idea and didn't stay until the final product only because of the amount of time it took during the making process. If the fabric is shredded thin enough, the feeling is the same as polyester filling. Then the product would be completely sustainable, and waste-free. It would be a full-circle recyclable Zenimal.

Appendix 4

Costing Price

Materials	Price	Total
Fabrics	£85 (price per Yoredale meter) : 2 (only used 50cm) = £42.5. Wool linen = 0£ (donated) 42.5 x 5 (5 colors) = £212.5	£212.5
Sewing machine cost	£300 2 cushions per week = 60 cushions in 30 weeks = 180 cushions in 3 years (expectancy of sewing machine) = £1.60	£1.60
Labor	3h per cushion = 15h total 15 x 8.9 (minimum wage London) = £133.5	£133.5
Unit cost	212.5+1.60+133.5 =£ 347.6 <u>347.6</u> : 5 = £69.52 net price	£69.52 net price for 1 cushion £347.6 net price for 5 cushions
Profit	20% profit of 69.52 (69.52 x 20) : 100 = £13.904 69.52 + 13.904 = £83.424 = ~ £83.	FINAL PRICE: £83 for 1 cushion £415 for full set of 5.

Figure 92: Marie
Roy (2024) Costing
price table

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Bibliography

Cleveland Clinic (February 2022) *Neurodivergent: What it is, Symptoms & Types*.

Available at: <https://my.clevelandclinic.org/health/symptoms/23154-neurodivergent>

(Accessed: 27 May 2024)

Groves, K. and Marlow, O. (2016) *Spaces for innovation – The Design and Science of Inspiring Environments*. Amsterdam: Frame Publishers.

Benisek, A. (September 2023) *Touch Starvation: What to Know*.

Available at: <https://www.webmd.com/balance/touch-starvation>

(Accessed: 28 May 2024)

Autism Research Institute (2023) *Temple Grandin: Inside ASD*

Available at: <https://autism.org/temple-grandin-inside-asd/>

(Accessed : 26 May 2024)

Le Pouvoir des Caresses : le Toucher, un Contact Vital (2021) Arte Television, 13 December, 15 :00.

Available at : <https://www.dailymotion.com/video/x7zn07t>

(Accessed : 25 May 2024)

Haworth (2021) *Exploring the Creative Mind*

Available at : <https://www.haworth.com/eu/en/knowledge/trends/creative-mind.html>

(Accessed : 27 May 2024)

Haworth (2021) *Heritage and Innovation*

Available at: <https://www.haworth.com/eu/en/company/history.html>

(Accessed: 29 May 2024)

Sonny Angel Store (2020) *Japanese Posture Pal*

Available at: https://www.sonnyangelstore.com/en/products/posturepal_funbarus

(Accessed: 29 May 2024)

Mari, E. (1957) *Animal Jigsaw*

Available at: <https://www.danesemilano.com/en/productDetails?idProduct=60>

(Accessed: 29 May 2024)

Thank you for reading!