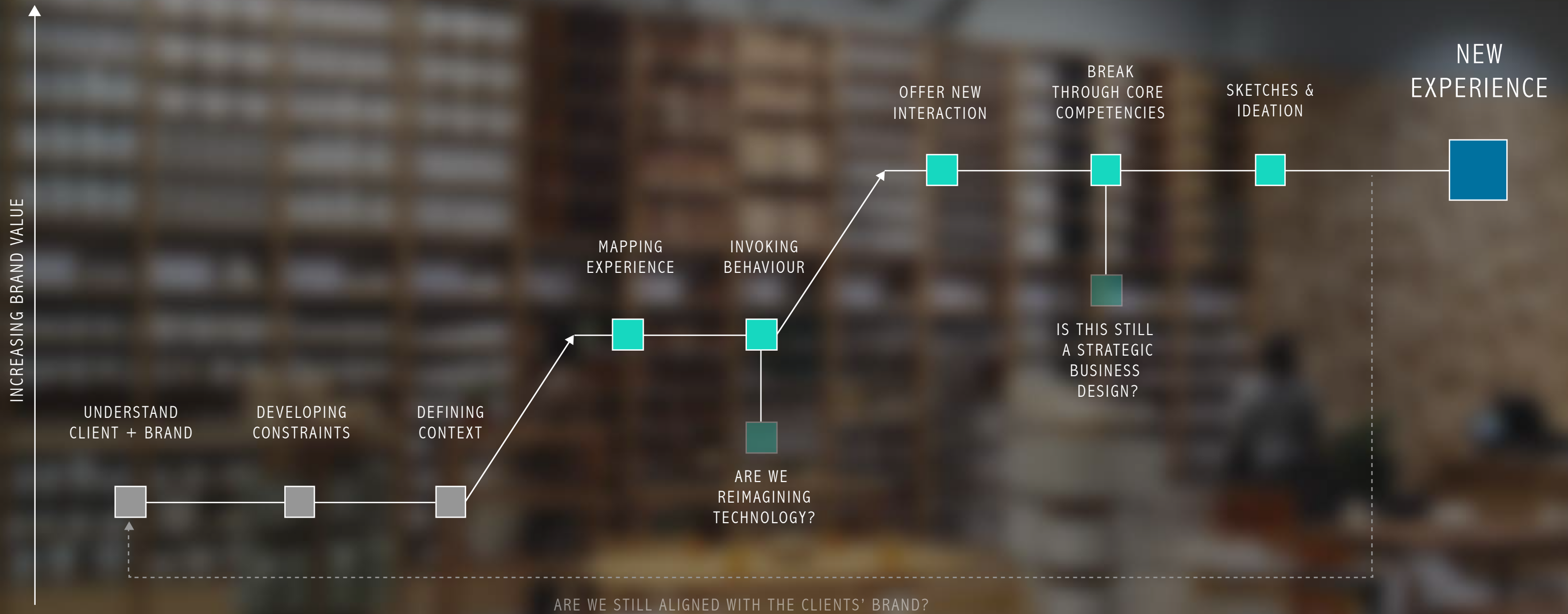


kuk / la / law / lui / leung

Flyknit ✓

MUJI

無印良品



- TRANSFORMATION ■
- INTERACTION ■
- PRESENCE ■

FRAMEWORK

our competencies and approach



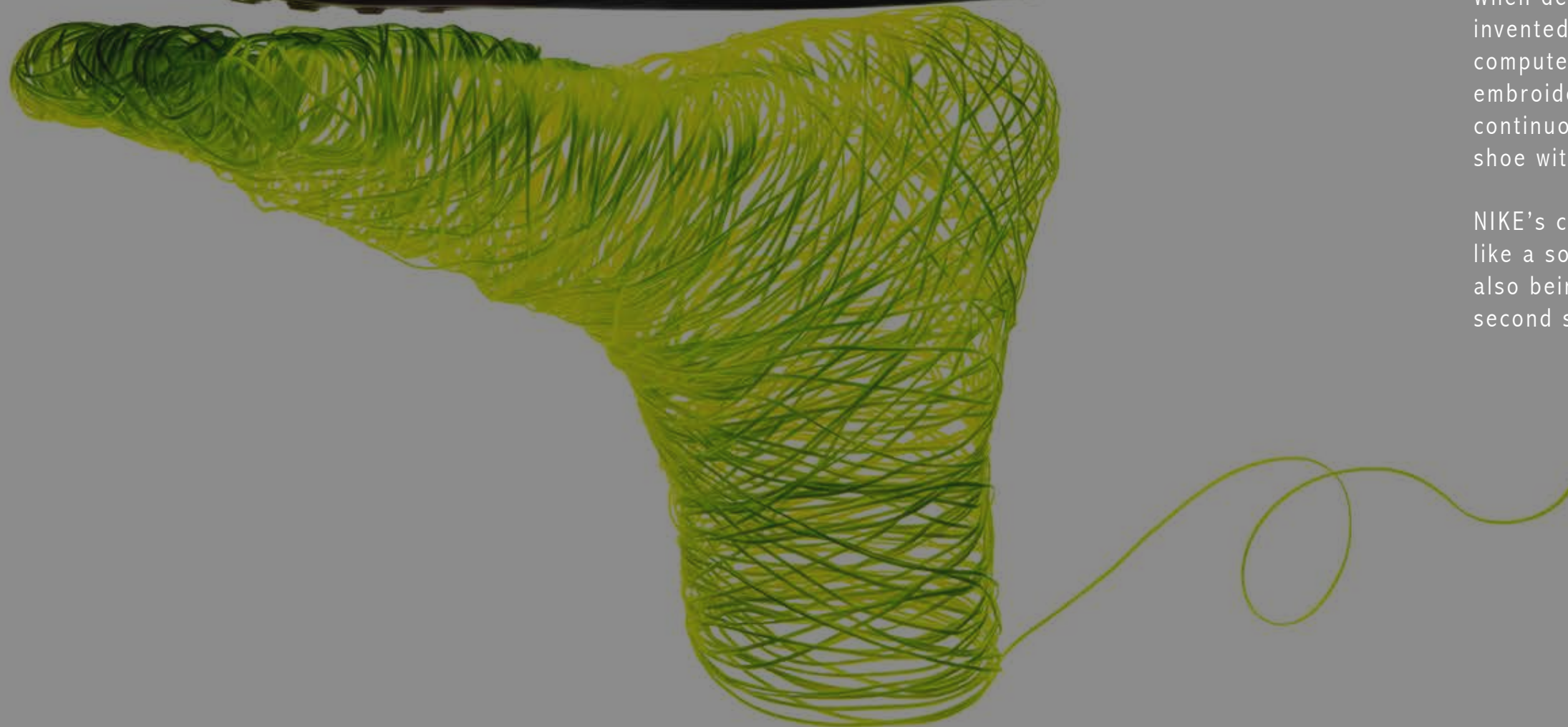


THE PROMPT

NIKE Flyknit

When developing their Flyknit technology, Nike invented a whole new manufacturing process of computerized and free-motion machine embroidery, making it possible to knit one continuous piece of yarn into the structure of a shoe with minimal waste of materials.

NIKE's cutting edge design allows Flyknit to fit like a sock to the form of each person's foot, also being so lightweight that it becomes a second skin to the foot in motion.



LIKE A CABLE BRIDGE

NIKE's inspiration

Inspired by a cable bridge and the way that the cables provide enough structure to hold up the load of the bridge, yet flexible enough to maintain balance and adapt to forces such as wind or traffic, parts of Flyknit is knitted more dense so that it provides support for the ergonomics of running, while the laces form tension points that mimicks a bridge's cables.



A close-up photograph of a person's lower legs and feet. They are wearing black athletic pants and vibrant, multi-colored knit sneakers with black laces and a black swoosh logo. The person is standing on a lush green lawn. The background is a soft-focus field of green grass and yellow wildflowers, creating a bokeh effect. The overall lighting is natural and bright, suggesting an outdoor setting.

ADAPTIVE SUPPORT

Opening

From there, we got the opening of “adaptive support”, which represents the flexibility of the form that is needed in order to adapt to people and the way they use it, yet at the same time maintaining enough structure to support different affordances. The relationship between the adaptiveness and the structural support creates tension, which is a constraint that we set for our design.





“

MUJI is simplicity but a simplicity through complexity of thought and design.

- KENYA HARA ”

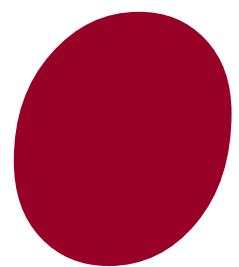


MUJI

Client

The client that we chose to design for is Muji. Muji's brand of "no brand" focuses on bringing products to its simplest form with a sense of "emptiness" so that it can speak to different people. We feel that their values resonate with our opening, as their products are "empty containers" that adapt to the different meanings people put to it, yet offers support as a product of everyday life.

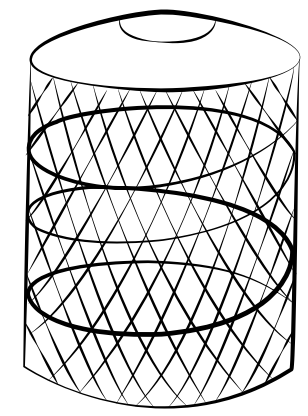




TRASH BIN

Adapting to natural movement through form

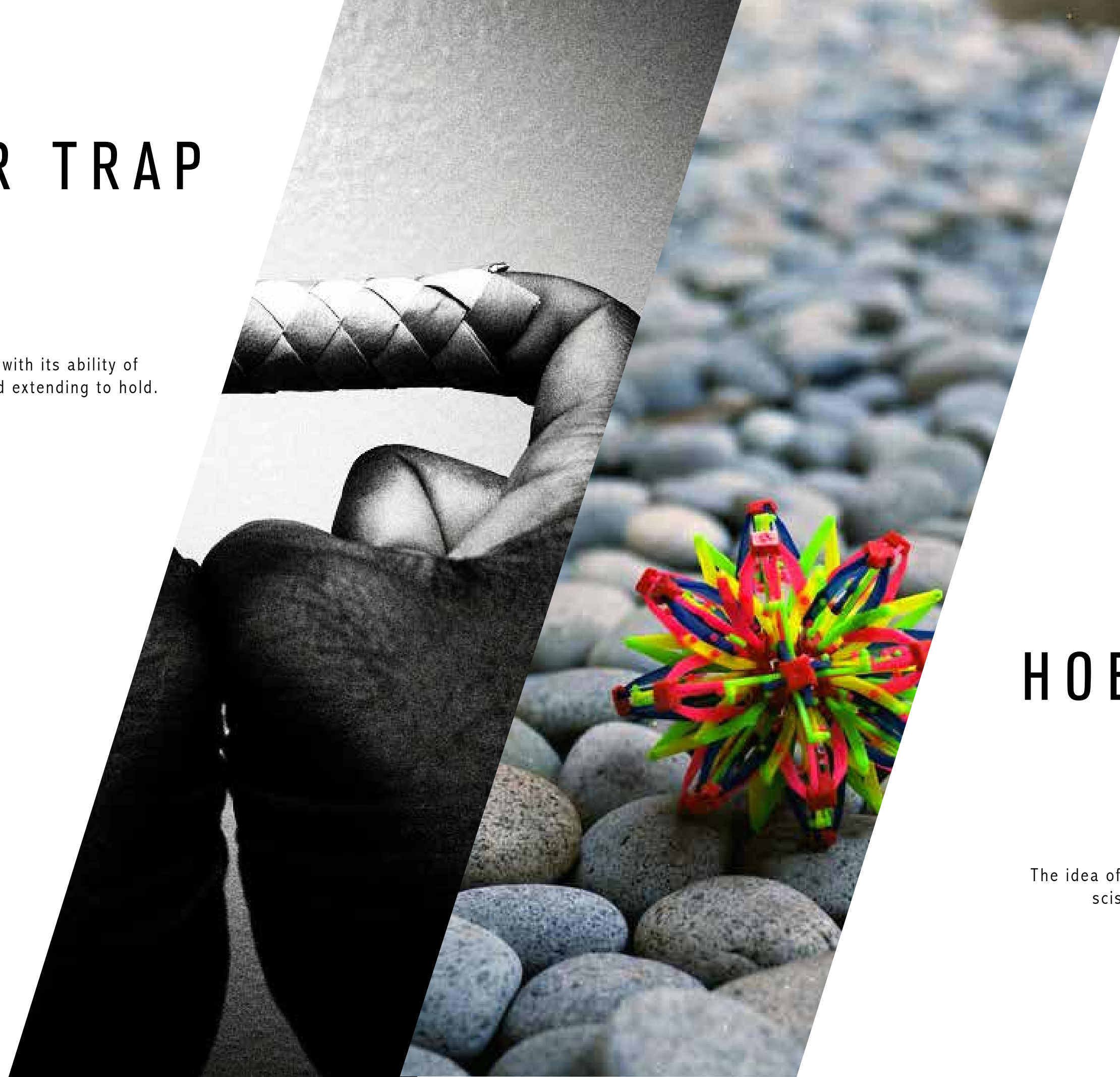
For our first provisional form of a trash bin in a public area such as a mall. Currently, Muji designs simple household products that are functional and affordable. However, we want to extend their values of everyday living, but not within the context of the household, so we saw this as an opportunity to break through one of their competencies and instead, design for the community.



FINGER TRAP TOY

Our inspiration

The simplicity of this toy, with its ability of contracting to release and extending to hold.

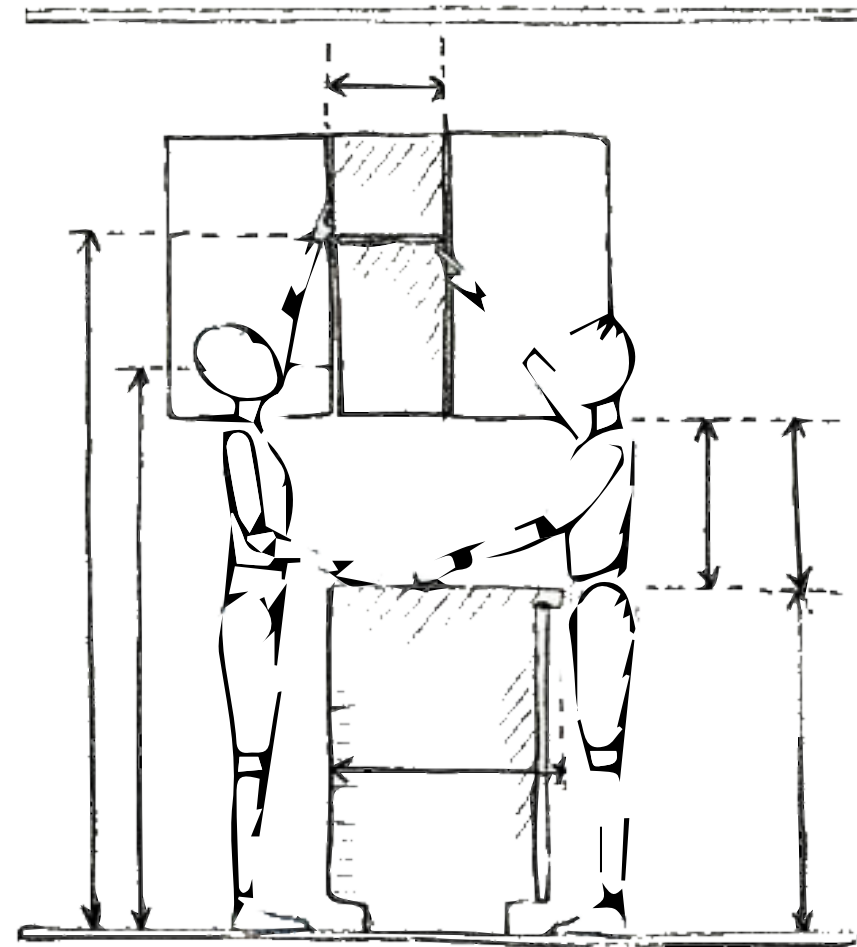
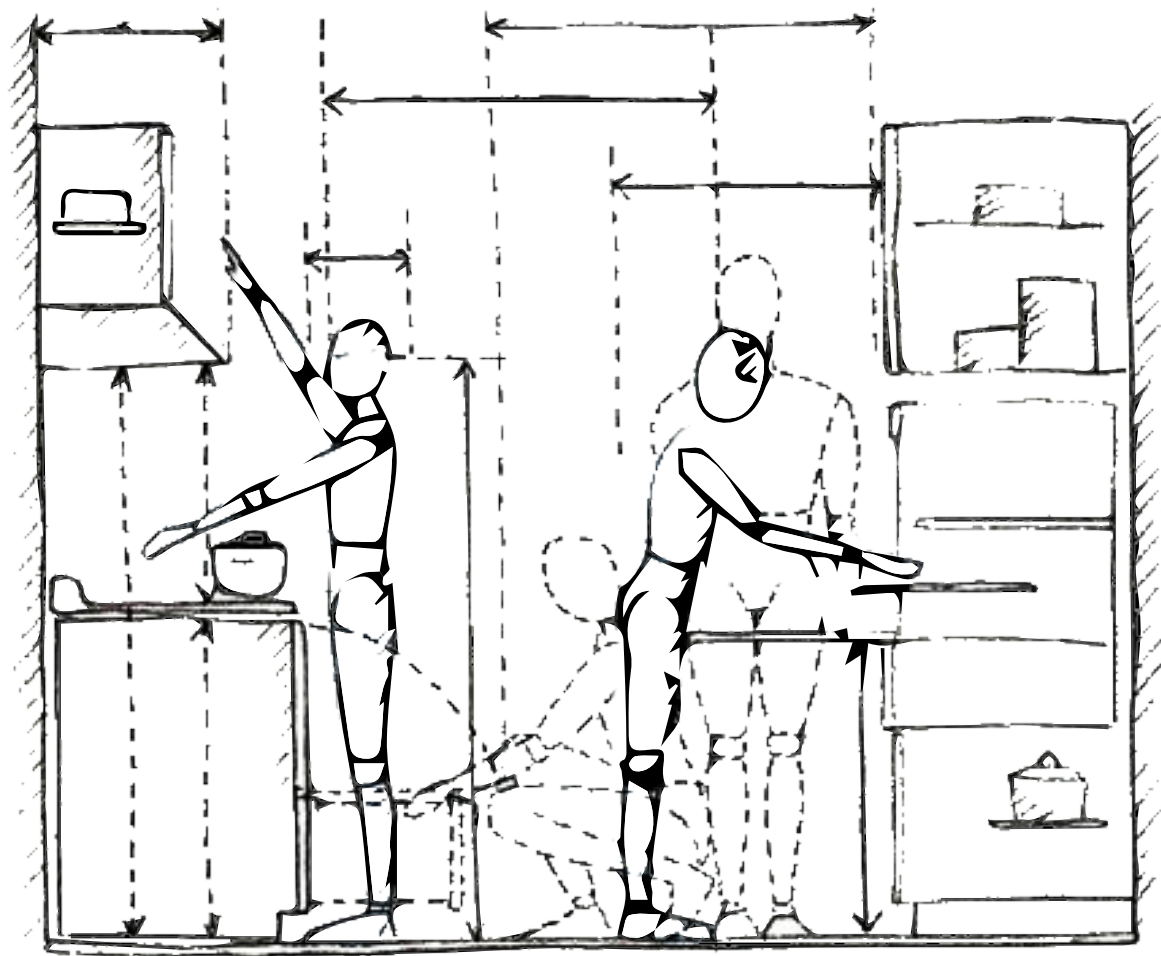


HOBBERMAN SPHERE

Our inspiration

The idea of “adaptive support” through scissor like actions of its joints.

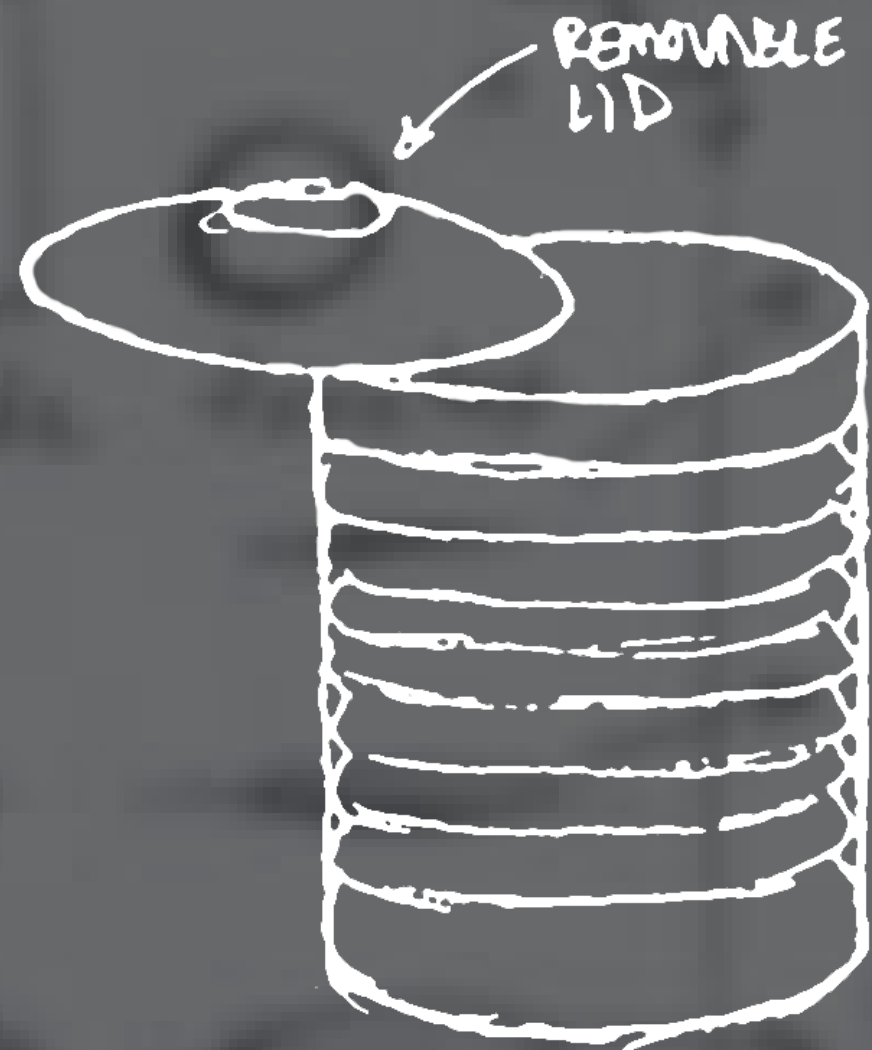




RESEARCH

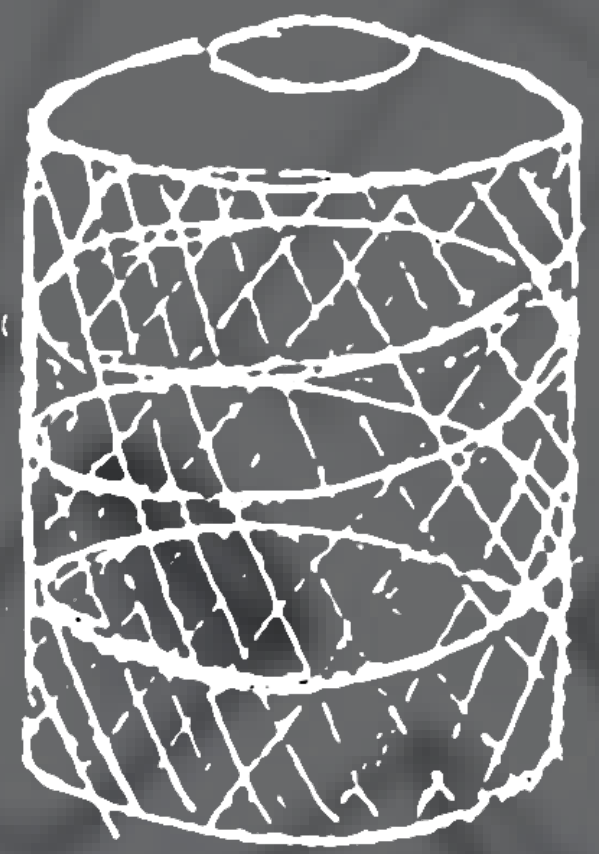
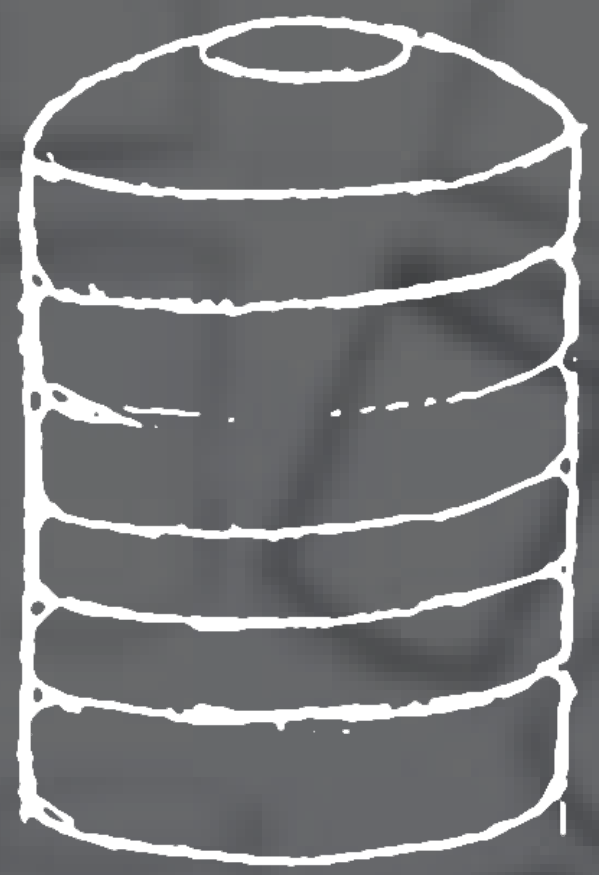
On ergonomics in lifting

For janitorial staff, there are ergonomic hazards in repetitive actions of lifting heavy garbage out of trash cans, due to exertions on muscles and joints, which can lead to injury to the muscles and tendons in the shoulder. From observation, we noticed that the interaction of lifting something heavy above the height of your waist, so that your hand bends above your elbow or your elbow lifts up so that your shoulder shrugs up is unnatural. We took this as an opportunity to invoke behaviour in a way that offers a new interaction.



REMOVABLE
LID

COLLAPSABLE
TRASH BIN



SPRAL WIRE

FORM EXPLORATION



OUR DESIGN

Why form

We redesigned this interaction with **adaptive support** in mind by having a form that oscillates from a structured expanded state to a compact state which adapts to garbage that can be lifted out at a lower height to minimize the load on the joints and affords the opportunity create a more natural interaction. There is mechanical tension where each metal component folds at a crossing point. We want to stress on the interaction with the object which is the motion of pushing down and pulling up, with the final point of tension being the moment that it “snaps” back into the extended form, which goes back to the structure of the support.



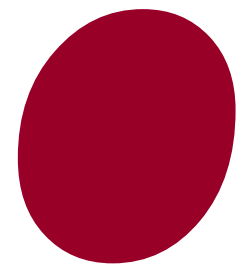


STRUCTURE

Why form

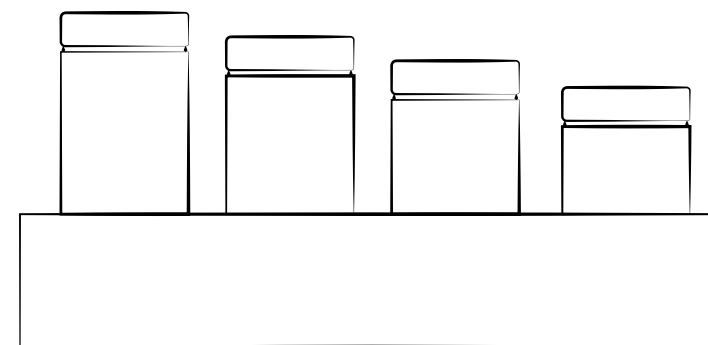
Inspired by the Hoberman Sphere and finger trap toy, our design is made from an interlocking skeleton of collapsing edges that also has the ability to form a concrete structure, which reinforces the notion of a lightweight and flexible design, just like Flyknit. Consistent with Muji's minimal yet functional design, we have also chosen to use one material—steel, to add to the efficiency of how it folds and fits together.





SET OF JARS

Bringing awareness to habitual nuances



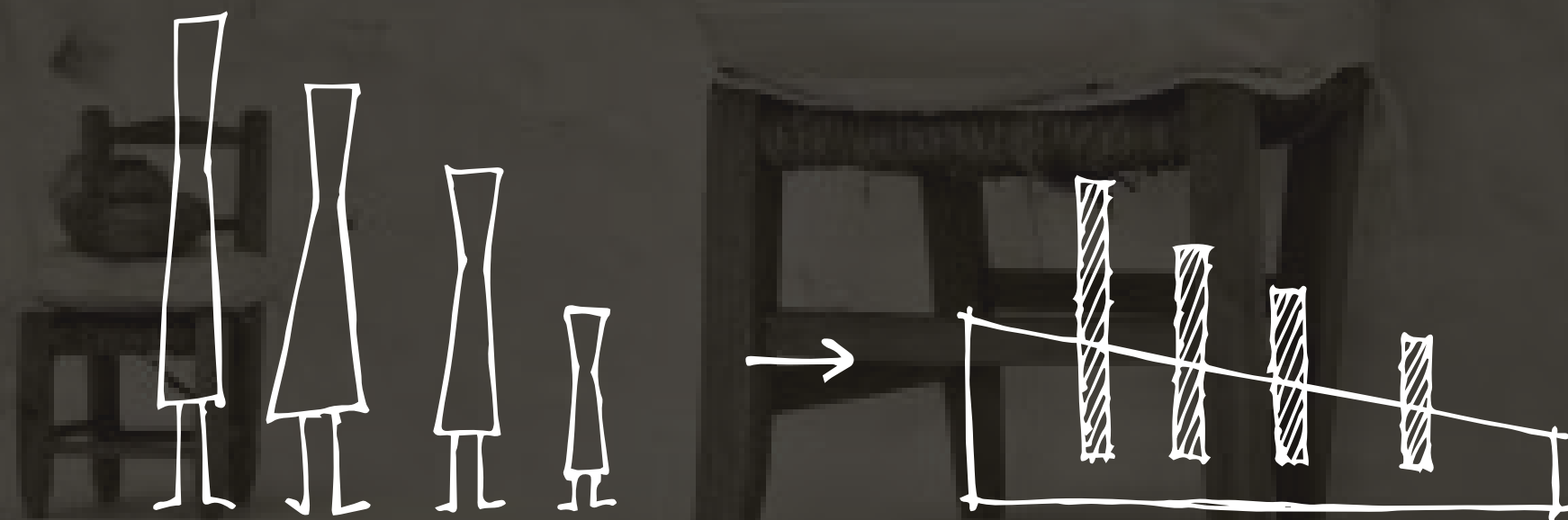
One of Muji's competencies is to design products that are predominately angled at 45 or 90 degrees. Our second provisional form is a set of jars aimed to provide a subtle avenue for people to notice their habitual nuances. To play with the idea of subtlety, we've decided to incorporate a subtle angle to our product that is neither 45 or 90 degrees, breaking one of Muji's core competencies.

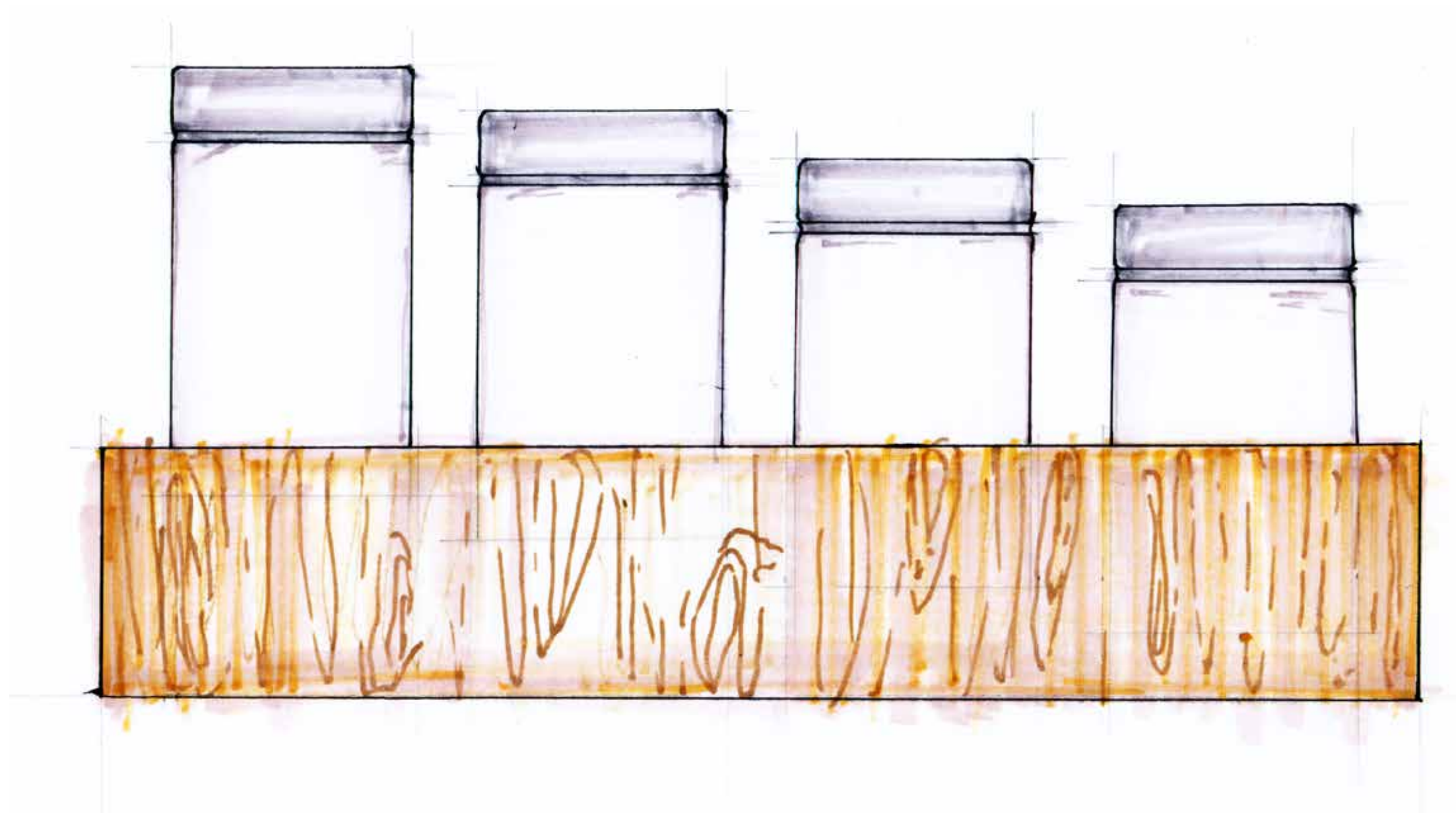


UNSpoken DESIGNATION

Our Inspiration

The process we used here is the journey map, where we first identified the context (household), and as a team, we brainstormed about the familial interactions people have at home and we thought of the story of goldilocks. Traditionally, many homes have the idea of the “power seat” where the authoritative figure of the household suggests certain cues and habitual nuances that everyone else follows, such as how each family member would sit in the same spots at the dining table. The sense of “unspoken designation” that exists within households and the hierarchy of the chairs from goldilocks is what inspired our form.





SUBTLETY

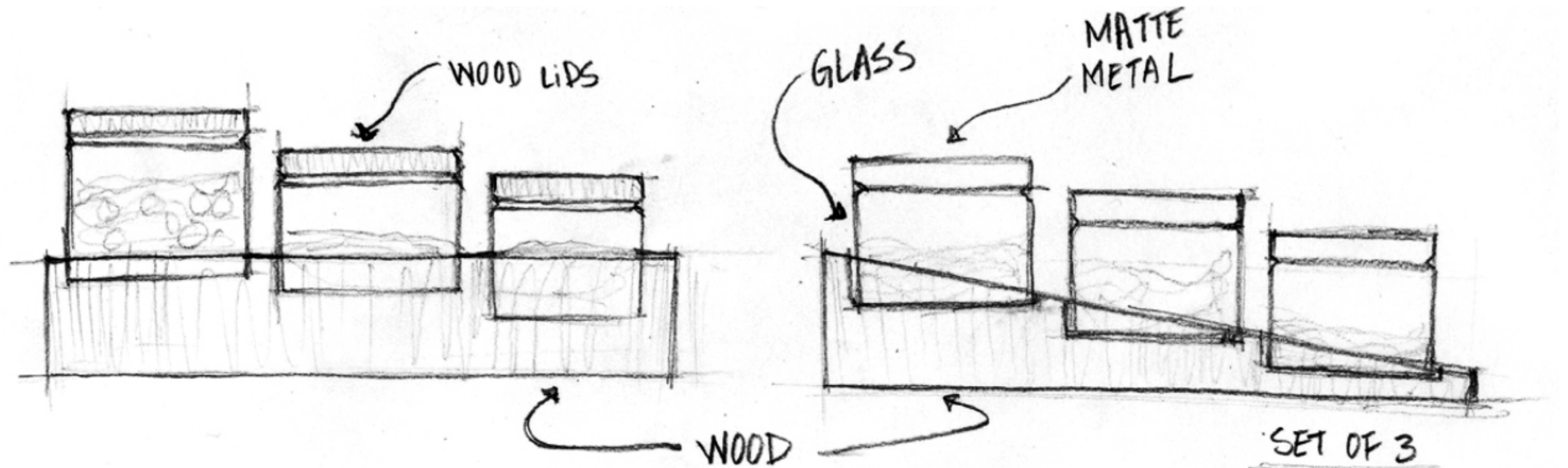
Adaptive support and tension



FORM EXPLORATION

Tension and hierarchy

After exploring with various forms, we went with the design where the jars lined up to a slope because this created an interesting, yet subtle visual tension. This sense of visual adaptation also implies that the most revealed jar is also the one that gets used most, therefore creating a hierarchy in the pattern of how much an individual uses the contents of each jar. This pattern can easily be altered by rearranging the uniform jars because it's not fixed in place and therefore offers the opportunity of adaptation.



MATERIALS

Thinking like Muji

