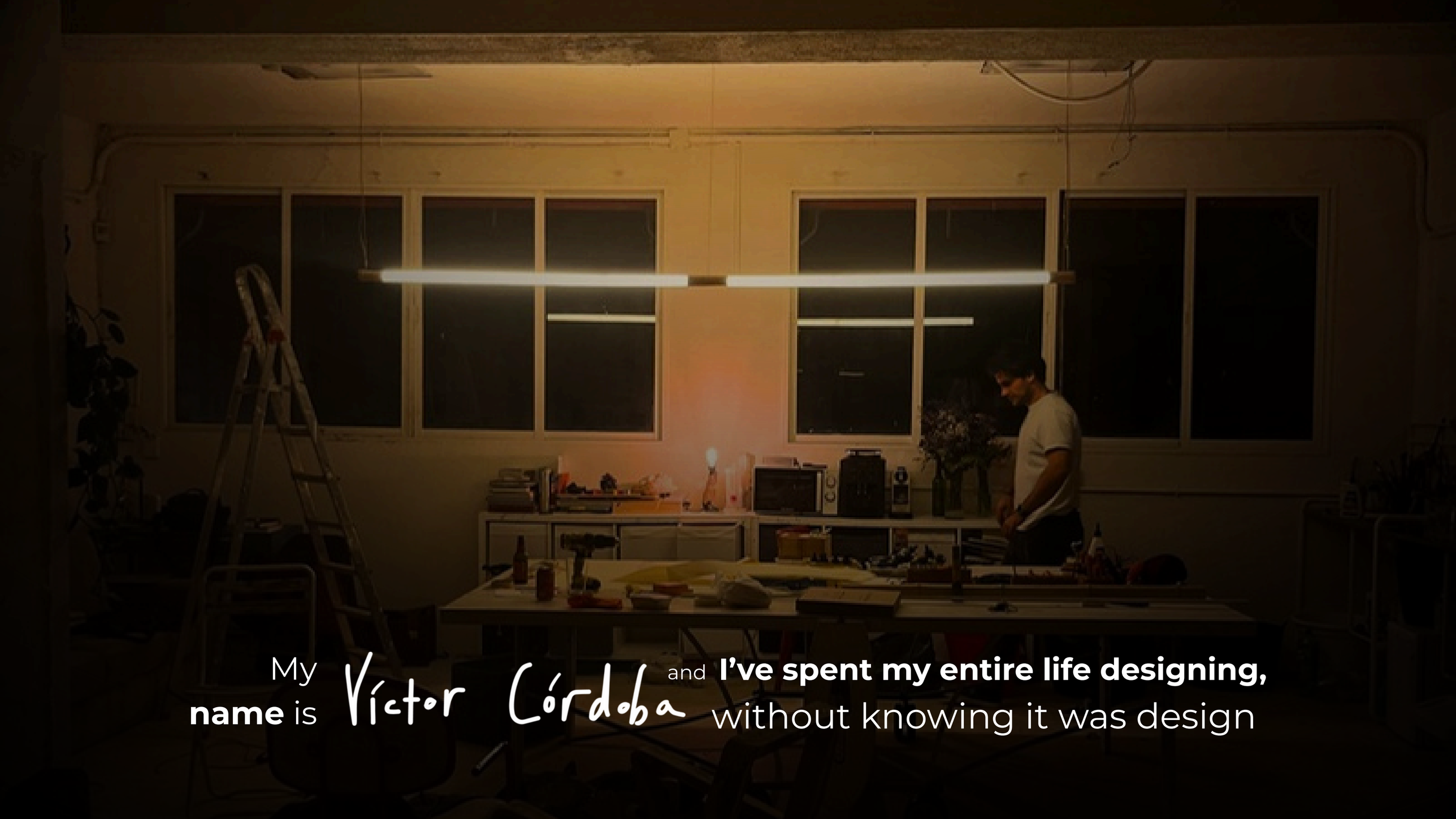
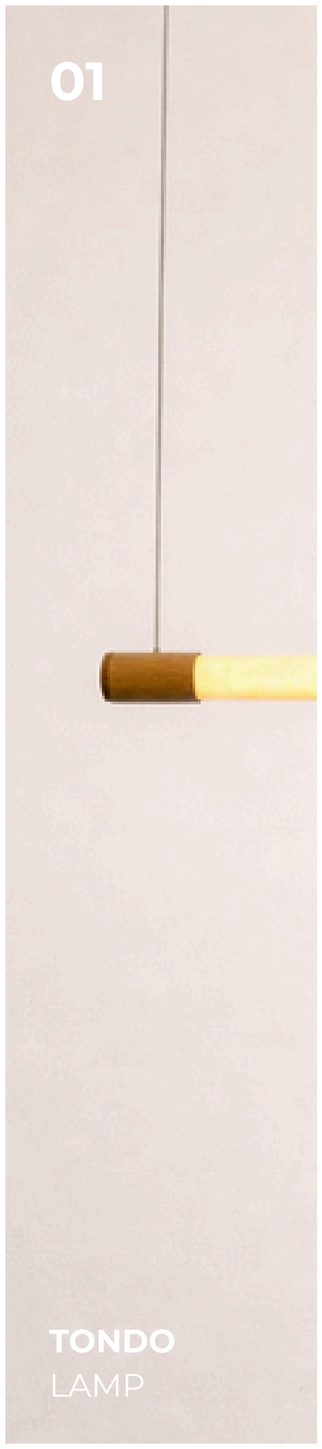


My **name** is Víctor Córdoba and **I've spent my entire life designing,** without knowing it was design

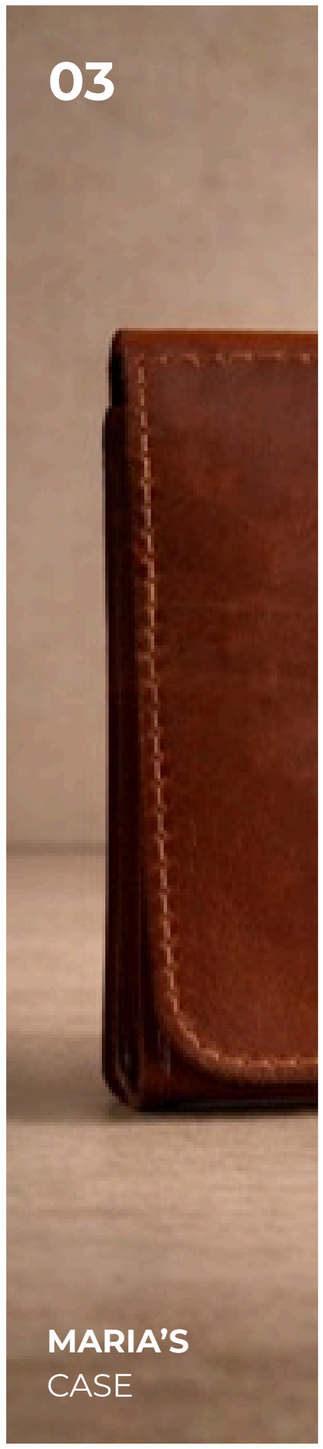


01

TONDO
LAMP

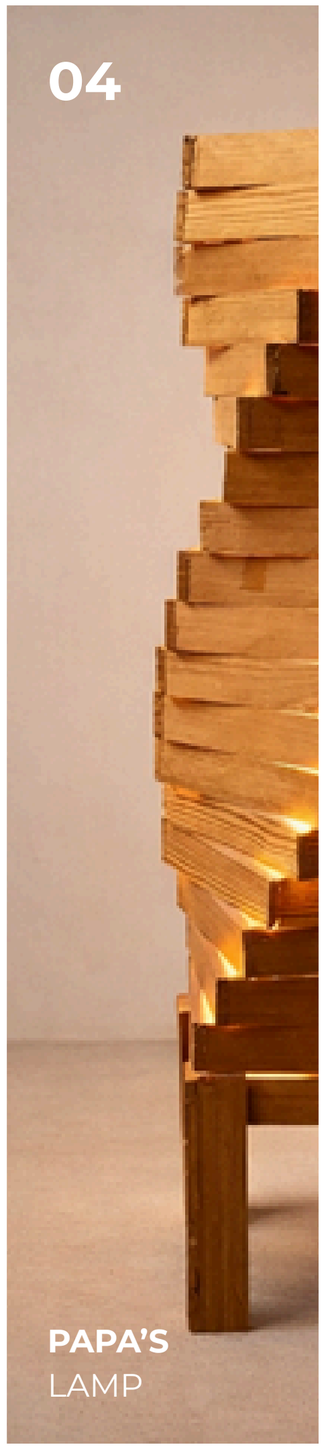
02

JOSEPH'S
CRADLE



03

MARIA'S
CASE

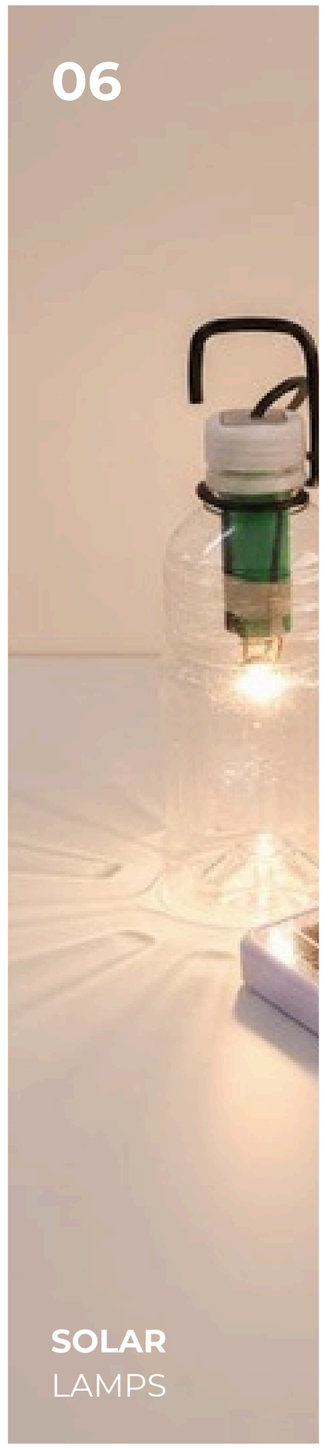


04

PAPA'S
LAMP

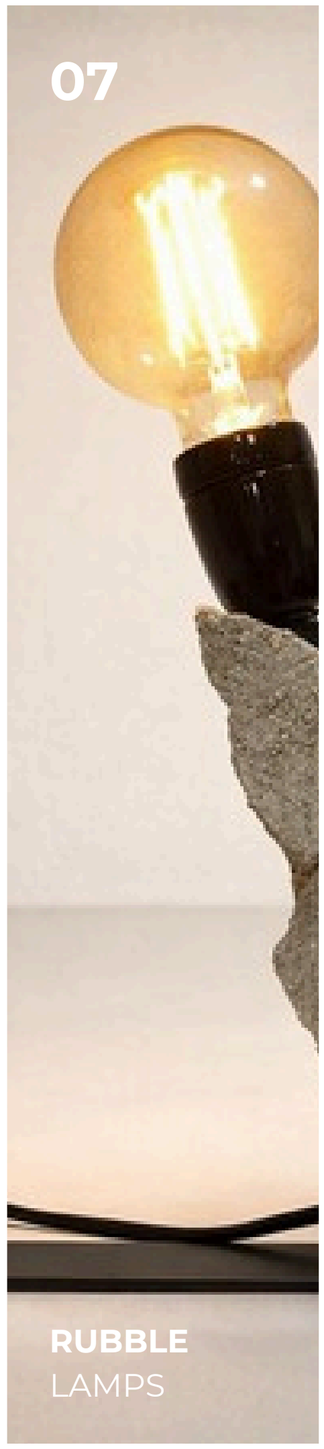
05

MATERIAL
CORONAVIRUS



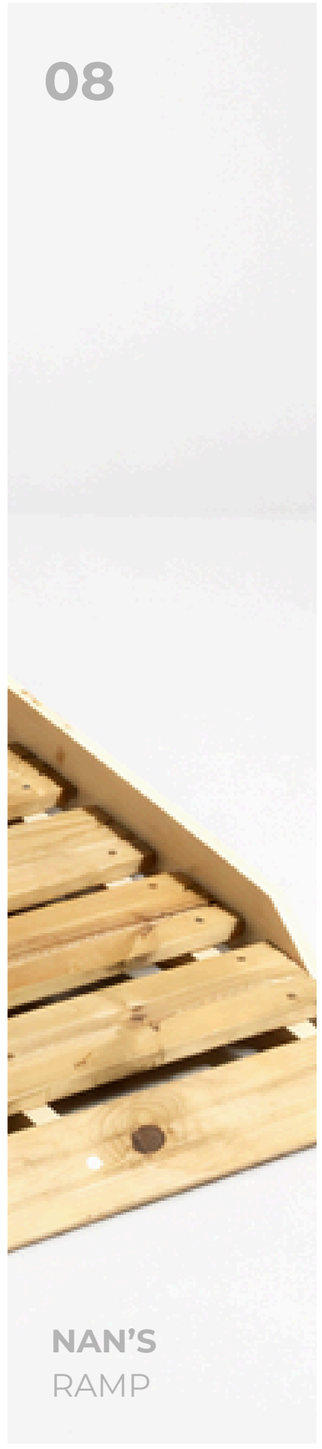
06

SOLAR
LAMPS



07

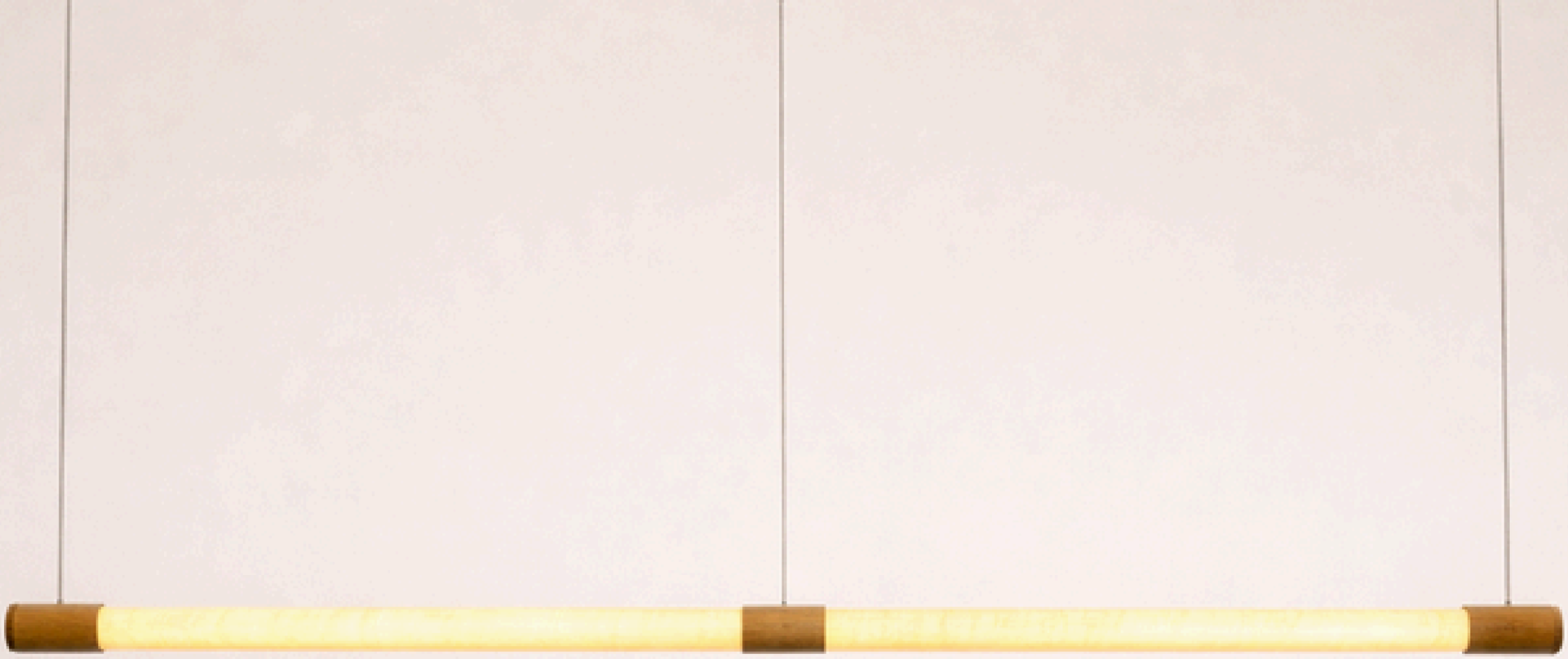
RUBBLE
LAMPS



08

NAN'S
RAMP

2025



TONDO LAMP

BAMBOO

PAPER

Tondo Lamp
3-meter ceiling lamp made of bamboo and paper for the art studio of a friend.

Its name comes from Tondo, the most densely populated neighbourhood in Manila, **where bamboo is used for everything, including boat and houses flotation** thanks to its natural watertight compartments.

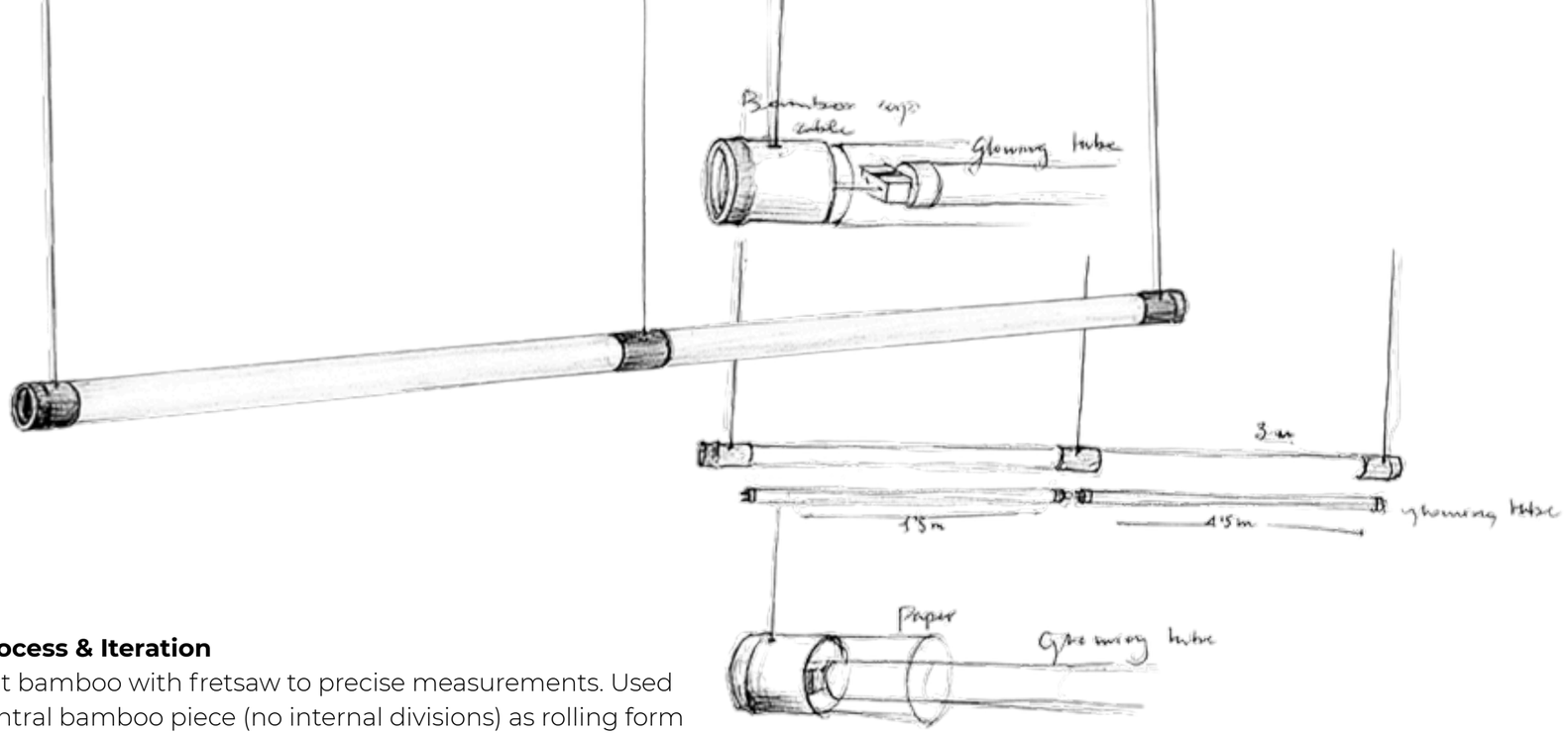
Bamboo end cap
Details

Design problem
Two ugly 1.5m halogen tubes with cheap plastic connectors. Cold light, no ambience. Needed to cover the full 3m table, create warmth, and hide industrial components elegantly.

Solution
Replaced halogens with LED strips inside translucent tubes (energy efficient, no flicker for cameras). Used bamboo's natural cylindrical shape to match LED tubes perfectly. Bamboo's internal compartments hide electrical connections (clemas, cables). Wrapped in paper for diffused warm light. Copper audio cables (visible through transparent coating) for aesthetics. Three steel cables for suspension. Switchable LED: warm/neutral/cold.

Motivation

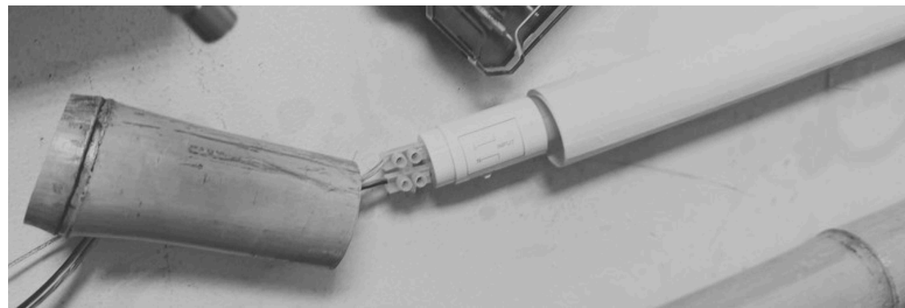
The studio had cold halogen lights that felt like a hospital. The space hosts Open Studios with gallerists and clients, but also serves as workspace. Needed warm, welcoming atmosphere while maintaining functional lighting. He proposed paper for the lamp shade, and I proposed bamboo for the end caps (in Philippines they use it for everything).



Process & Iteration
Cut bamboo with fretsaw to precise measurements. Used central bamboo piece (no internal divisions) as rolling form for paper. Side pieces (with compartments) to hide connections.

Main Challenge
Paper. We didn't master the rolling technique and it kept opening despite gluing inside and using multiple layers. Heat made it separate further. Should have pre-shaped paper with water/steam before rolling.

Learnings
Materials need preparation adapted to their nature. For example paper under tension wants to unfold. Art studios need neutral, flicker-free light for photography. Bamboo's natural compartments can solve design problems.



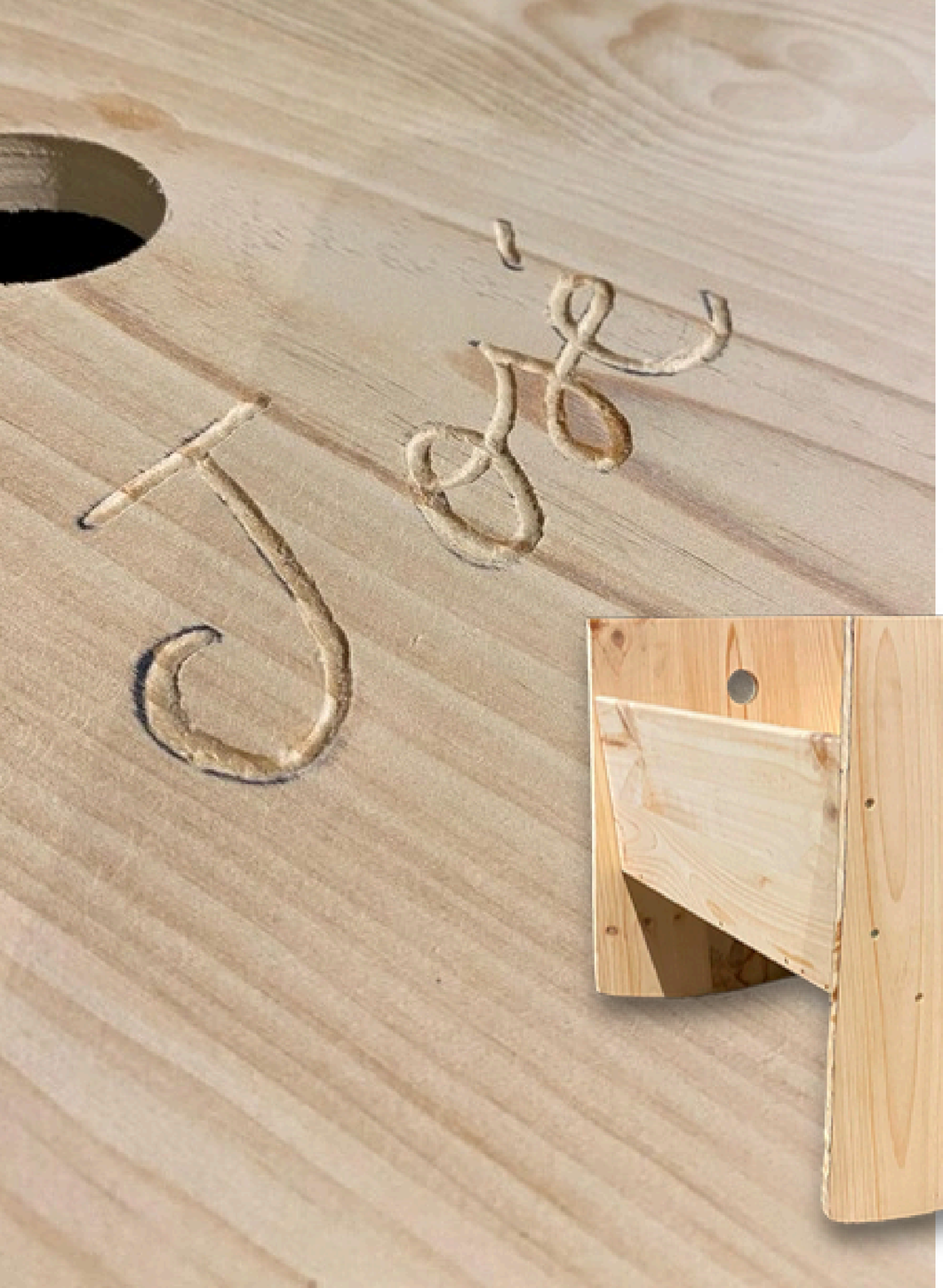
JOSEPH'S CRADLE

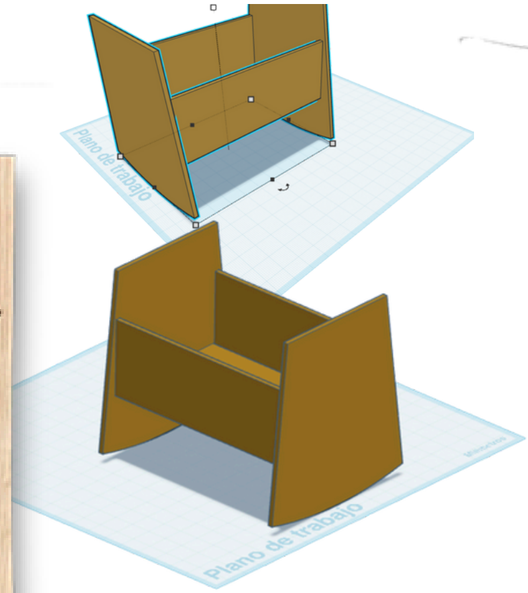
2023

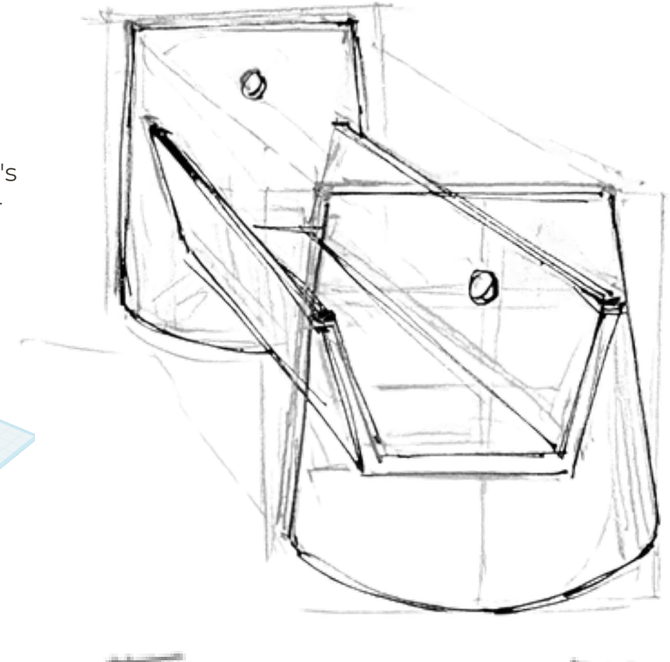
WOOD

Handcrafted wooden cradle designed for durability across generations.

Built with **solid wood and natural rocking motion**. Currently in use for 2 years, two children's names already engraved *(José, Carlos)*. Ready for future siblings and future centuries.







Motivation
Gift for my best friends' first child (I was best man at their wedding). Named José, like the biblical carpenter, so wood felt right. Philosophy: create something lasting, like our grandparents' furniture, not disposable products.

Design problem
Commercial cradles have artificial rocking (wheels without inertia). Standard Moses baskets last only 6 months. Mothers need versatile height to rock from bed, sofa, or chair.

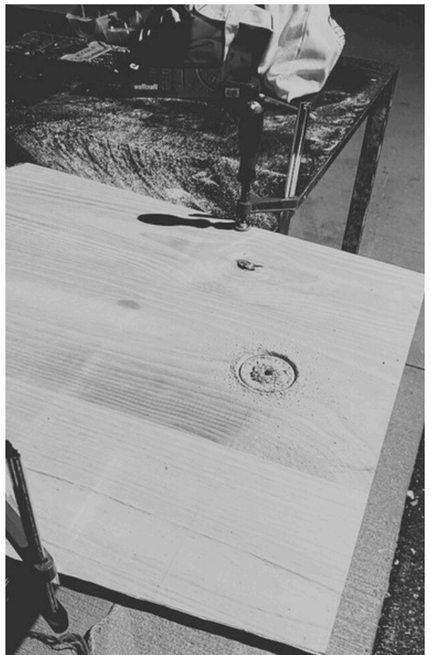
Solution
Solid wood with natural rocking inertia. Extended size for 1.5–2 years of use. Side holes for transport. Embedded Virgin Mary medal (tradition). Space to engrave each child's name.

Final Outcome

Process & Iteration
3D modeling + motion simulation for rocking behavior. Illustrator templates for real-scale testing. Curvature tests before final cuts.

Main Challenge
Irregular rocking created noise against floor.
Cause: rustic finish and irregular circular cut.
Solution: extensive sanding until smooth, consistent motion achieved.

Learnings
Curved woodworking techniques. Levelling two pieces at equal height.
User-centred approach: researched baby growth rates, interviewed mothers about ergonomic heights.
Lasur finishing for breathable, waterproof, low-maintenance durability.



2025

LEATHER

MARIA’S CASE

Maria’s Case

Leather case integrating watercolours, brushes, and sketchbook into one portable studio. L-shaped design unfolds for immediate painting anywhere. Modular: all components replaceable. Made for artist María.

Motivation
Painting outdoors with María meant carrying separate bag with watercolours, brushes, sketchbook, and everything loose. Upon opening, watercolours would fall, brushes scattered, sketchbook needed holding. Wanted one object:

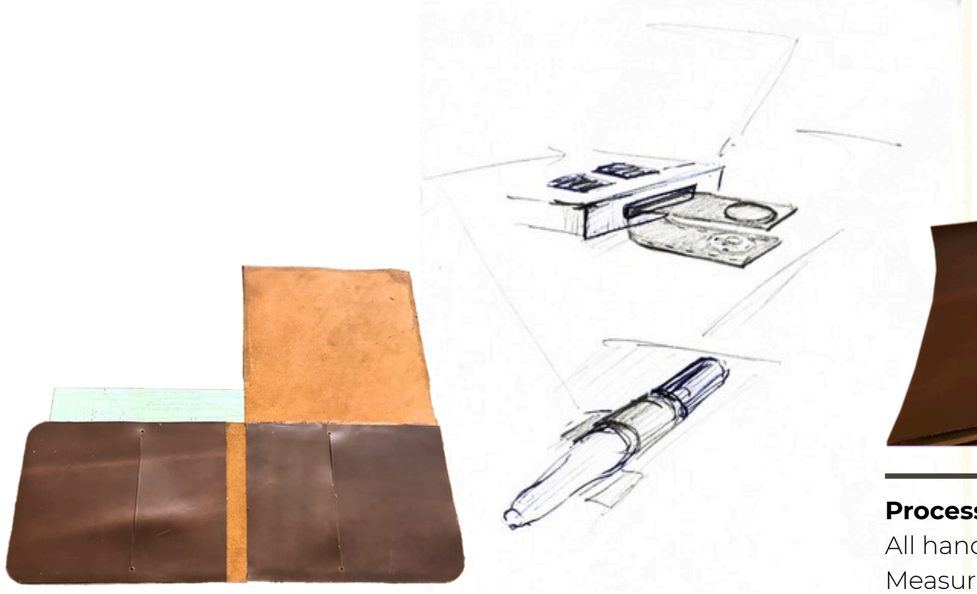
open it, paint.

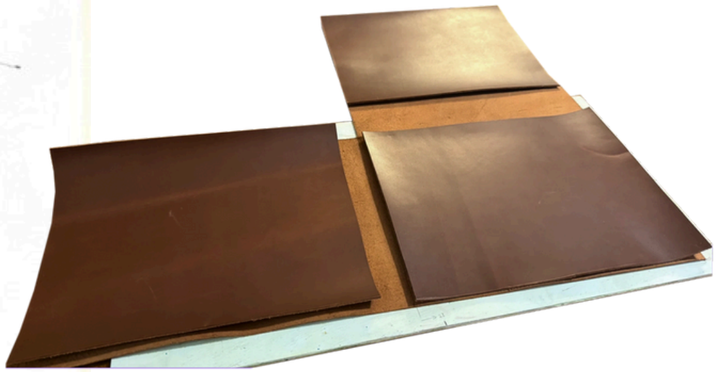
Design problem
How to integrate landscape-format sketchbook + watercolours + brushes into single foldable case? Must work on lap, in field, anywhere.

Solution
L-shaped leather case: folds from top and side, everything secured inside. Sketchbook slot-sized for standard commercial landscape formats and replaceable. Brushes with integrated water holders, removable. Watercolour palette attached with rivets, detachable. Snap buttons for closure. Modular design: leather shell lasts generations, internals swap out.

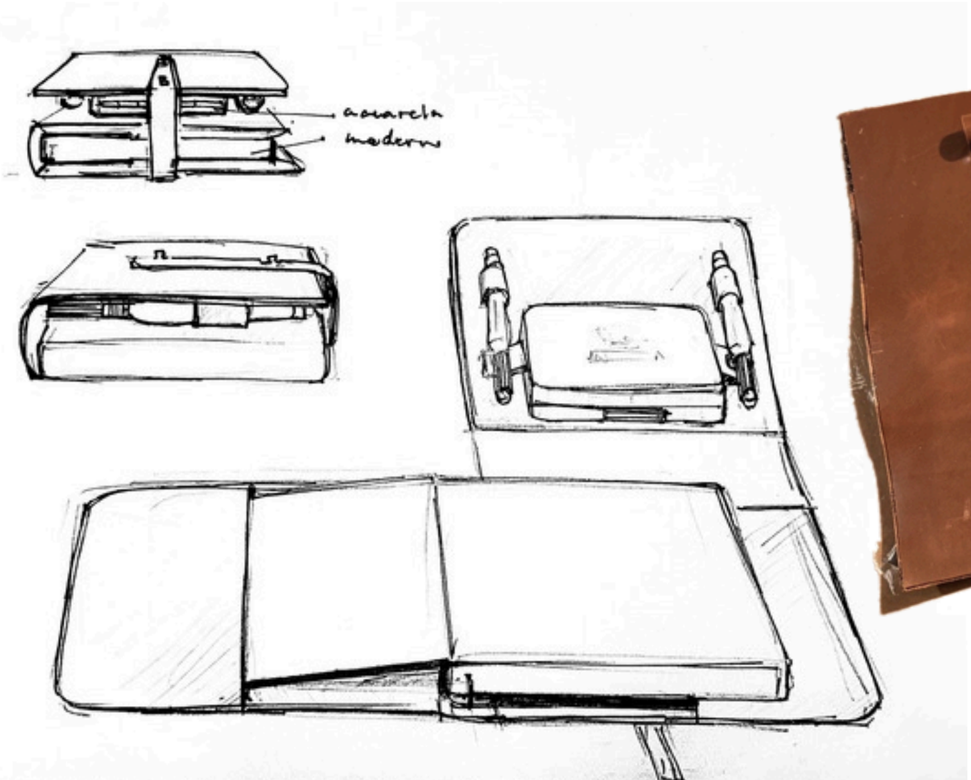
Main Challenge
Hand-stitching leather takes an enormous amount of time of hole-punching and sewing. Round cuts difficult without proper punch tools. Leather type matters: waxed leather protects but transfers grease to paper inside.

Learnings
Leather selection critical: cow leather, medium wax. Too much wax means grease on paper. Wear marks are recoverable with beeswax. Hand-stitching requires patience. Modular thinking: durable shell and replaceable internals means object that outlasts its contents.





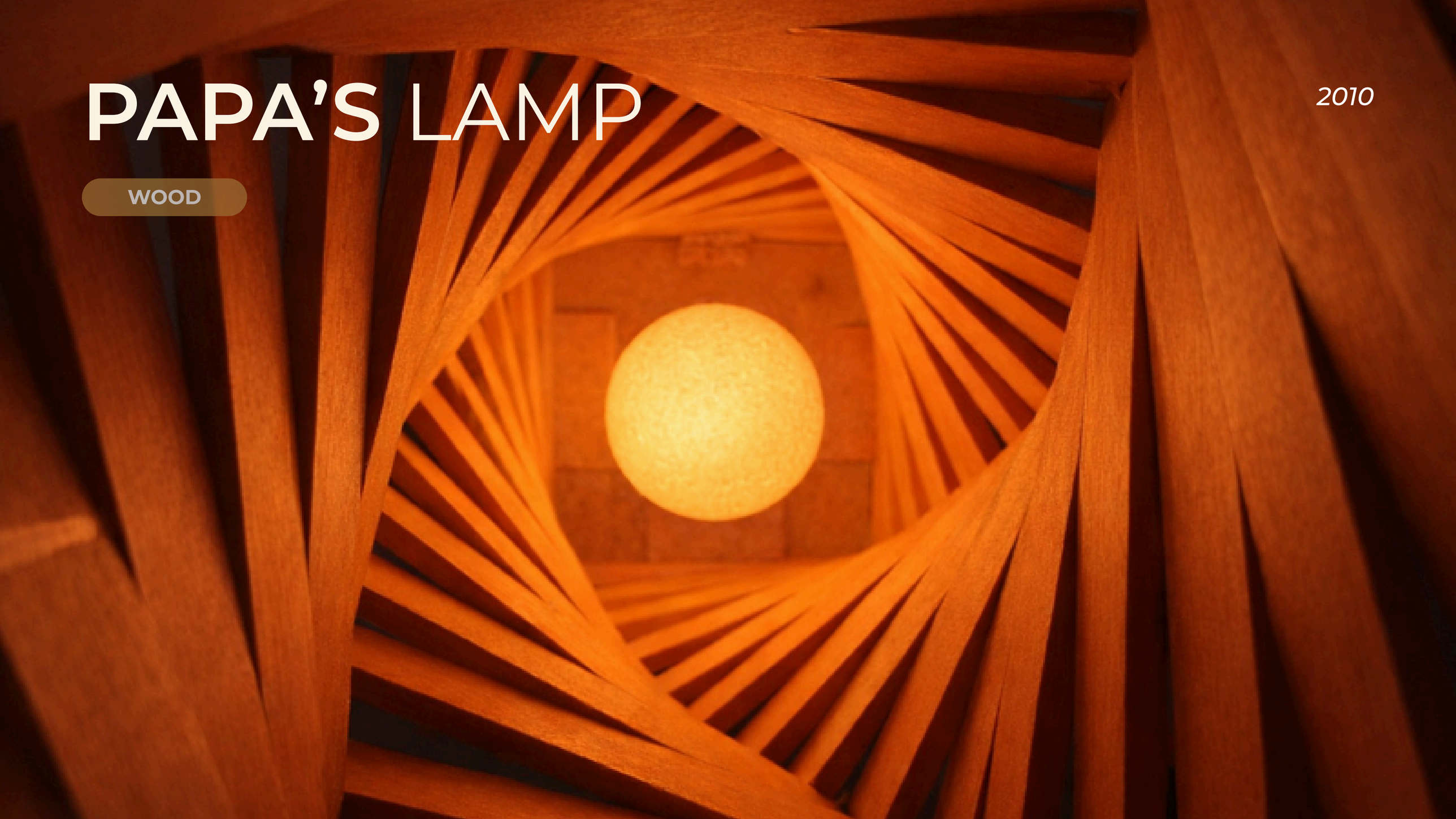
Process & Iteration
All hand-stitched leather. Brass rivets and snap closures. Measured commercial sketchbook dimensions for universal fit. Pattern designed for L-fold geometry.



PAPA’S LAMP

WOOD

2010



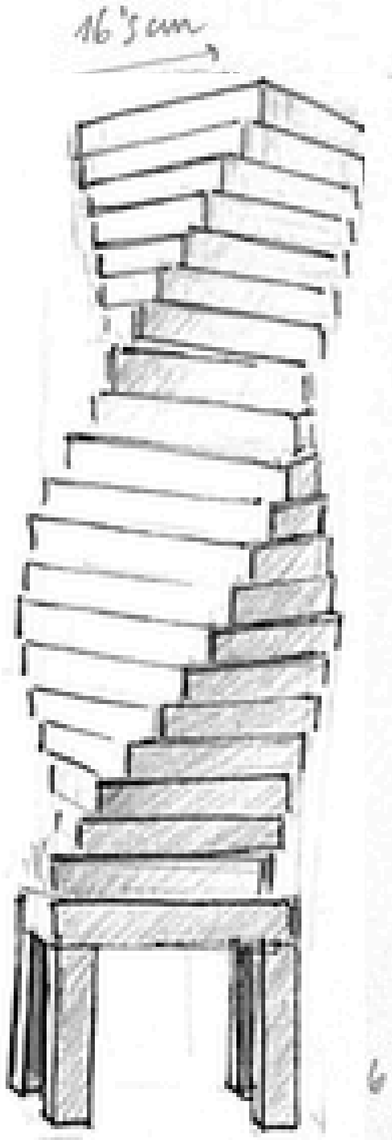
Papa’s Lamp
Wooden floor lamp made of stacked rotating squares. First woodworking project ever. Still working 16 years later.

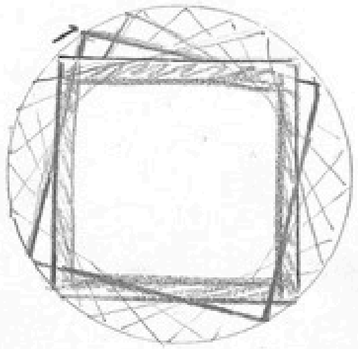
The origin of my **"designed to last" philosophy.**

Motivation
Father's Day gift. My father spent long hours at the office, so I wanted something personal so he'd think of us. A commercial lamp has no soul. What I was really giving him was my time.

Design problem
No budget, no tools, no experience. Just the desire to make something meaningful and lasting.

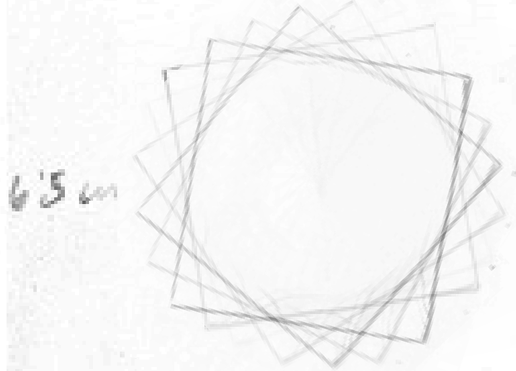
Solution
Wooden strips bought in Leroy Merlin, (B&Q store). Cut into squares, stacked with rotation offset that creates spiral form from above while letting light escape through gaps. Glued with white wood glue. Lamp base attached with plastic zip ties (didn't even cut the excess). Four wooden legs. Simple: turns on, works.



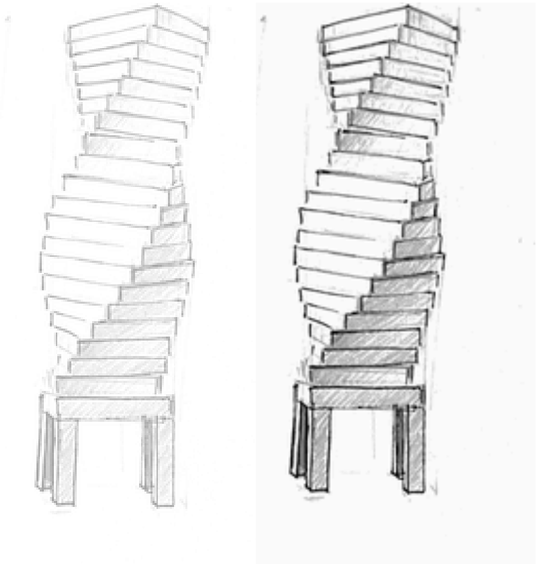


Main Challenge
Wrong tools mean poor cuts that mean more time. Looking back today, I'd do many things differently. The design isn't optimal for light output. But it was beautiful enough to last.

Deployed
16 years in my father's office. Still works. Bulb replaceable. Durable.



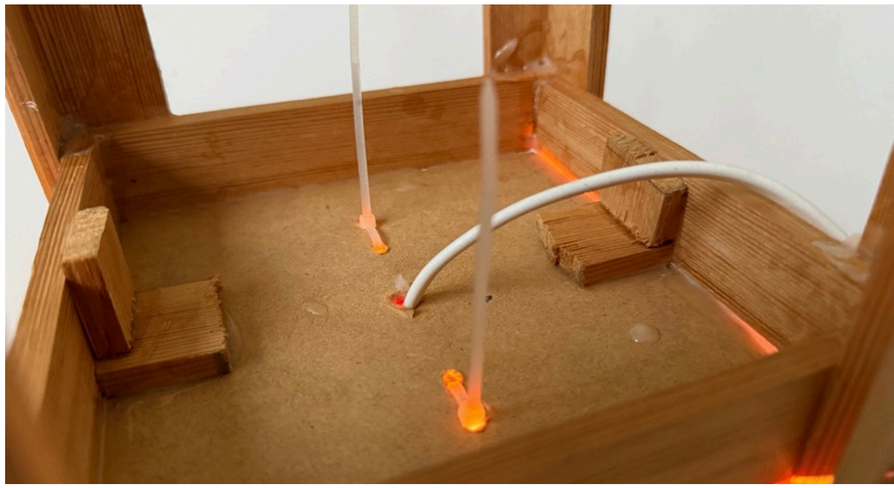
Process
Cut wood with PVC pipe saw (not even a wood saw, just what I had at home). Imprecise cuts, took a lot of time. Asked my mother for money to buy the wood. No screws, no proper tools. Pure improvisation.



Learnings

"If you have 6 hours to cut a tree, spend 4 sharpening the axe**"**

Good tools matter. But also: objects made with care and time outlast objects made for consumption. This lamp wasn't optimised, it was loved. That's why it survived.



MATERIAL CORONAVIRUS

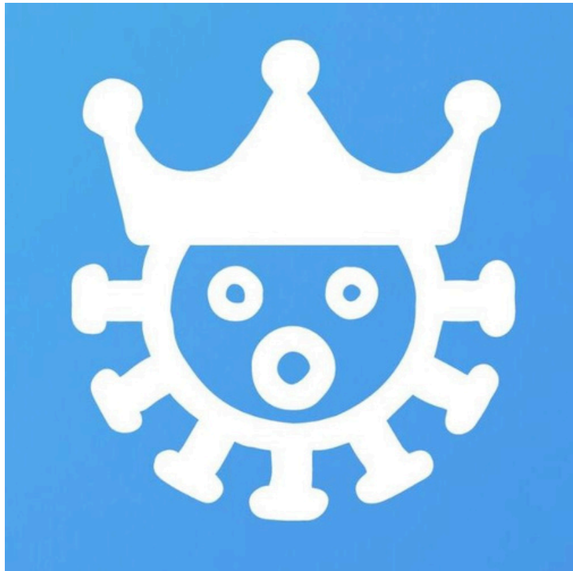
2020

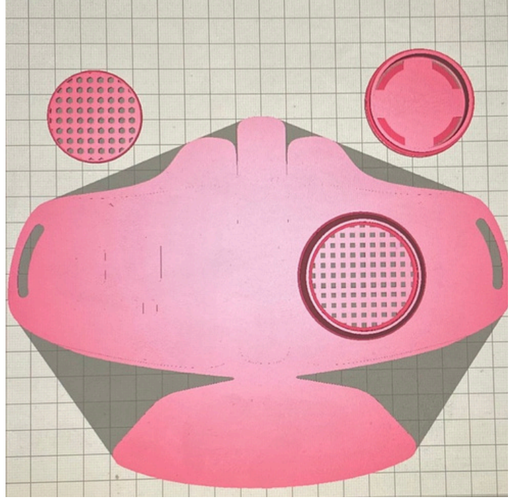
PLA | TPU

MaterialCoronavirus.com
Volunteer-driven PPE manufacturing network during COVID-19 pandemic. Products adapted for home fabrication with accessible materials: face shields, masks, glasses ear-saver clips, and respirator valves.

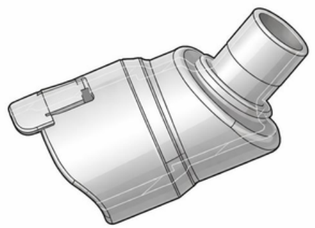
100,000 masks + 15,000 shields

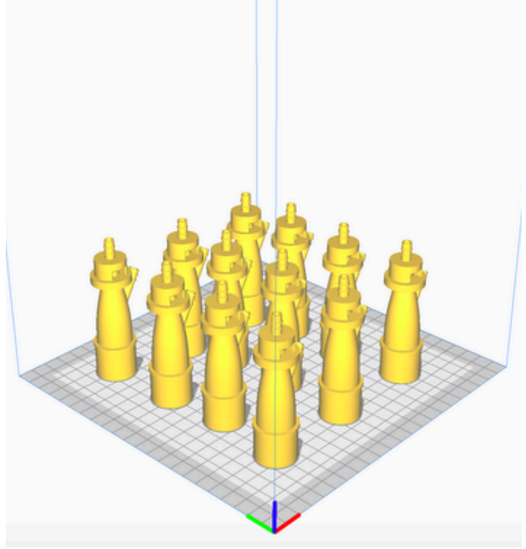
Network of 100+ 3D printers operating simultaneously.



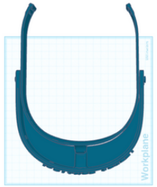


Main Challenge
Coordinating 100+ printers across the region. My 8 printers running 24/7 (five siblings doing shifts), but also managing the entire network: constant jams, old printers failing, quality control across distributed production.





Design
Development



Motivation

March 2020: flight to Philippines cancelled.

I was moving there to continue NGO solar/sanitation projects. **Four years of work paused..**

So we decided to apply same philosophy locally: identify need, design accessible solutions, coordinate people.

Design problem
Massive PPE shortage. But also, patients felt disconnected from healthcare workers hidden behind protection, no human contact.

Solution
Face shield designed for home fabrication: single 3D-printed piece, two rivets, one A4 acetate sheet. Flip-up visor. **"I'm with you", visible to patients, humanising medical care**. Respirator valves, glasses and ear-saver clips

The System
Coordinated production via WhatsApp. Sourced raw materials (partnered with Carrefour), delivered to volunteer homes, collected finished products and distributed to hospitals.

Making Process

I’m with you mask

Face Shields
Single 3D-printed piece, two rivets, A4 acetate sheet. Flip-up visor. "Estoy Contigo" (I'm with you) visible to patients. Trying to humanise care. Later scaled with industrial die-cutting after TV interview.

Respirator Valves
Disposable valves for existing ventilators that were out of stock nationwide. We fabricated and sterilised replacements. Supplied to Madrid hospitals on demand.

Learnings
People want to help and they just need tools and coordination. Designs must be extensible and scalable. Accessible materials & simple designs can create powerful volunteer networks anywhere.

Local needs require local response.

"I’m with you" was not decoration, it was essential.

Protection glasses

Final Outcome

Duke valv

Venturi valv

2017

PLASTIC

LEYTE SOLAR LAMPS

Solar Lamps for Leyte

Built with locally-sourced materials for earthquake refugees in Leyte, Philippines.

Project by Mission Cebu, NGO I founded.

Motivation

July 2017: earthquake split Leyte Island.

One side literally lifted above the other.
Homes destroyed.

Families relocated to refugee camps on basketball courts with blue UNHCR-style tents, no electricity. Adapted to the emergency.

Design problem

Refugee camps without light. Solution needed to be: buildable locally, with available materials, at very low cost, teachable to communities, replicable for future disasters (common in the Philippines geothermal zone, high seismic activity).

Solution

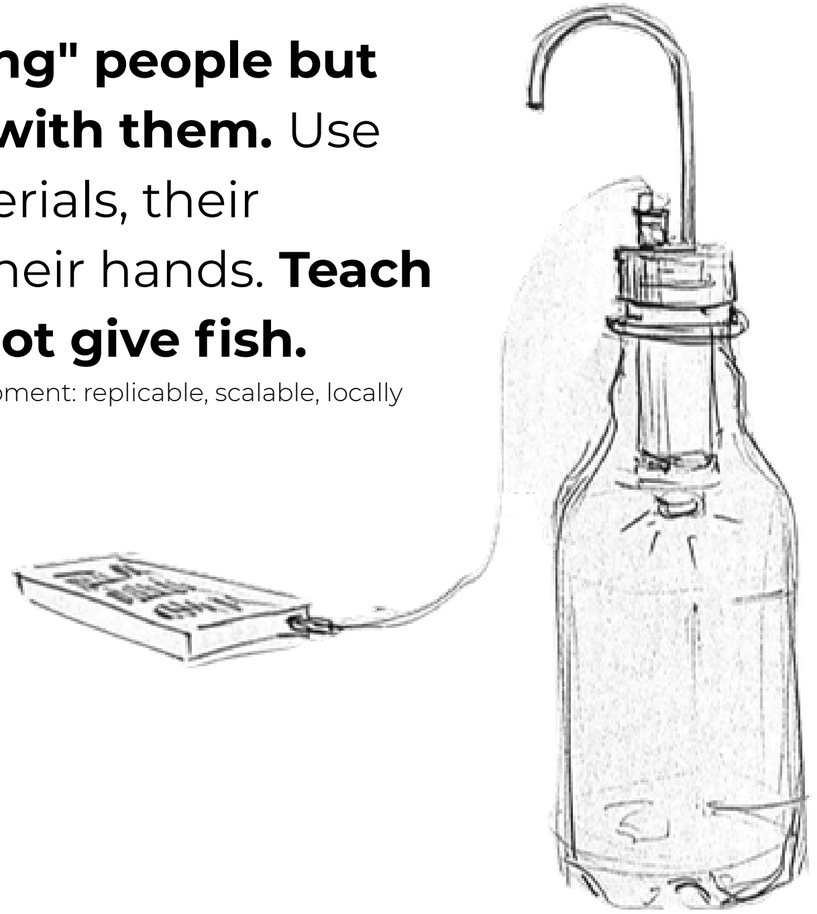
Recycled plastic bottles + small LED + rechargeable battery + mini solar panel. Sealed with silicone at bottle cap. Solar panel for charging and light detection.

Process
Partnered with Naval State University. Bought soldering equipment, silicone guns, small solar panels. Collected local plastic bottles. Taught students basic electronics and soldering.

Learnings

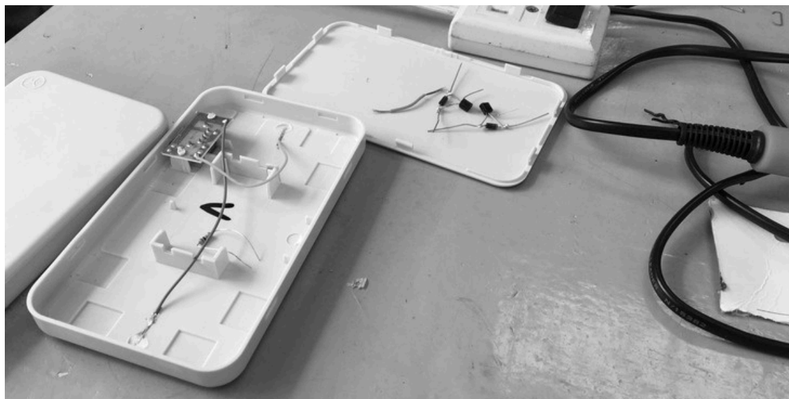
Not "saving" people but working with them. Use their materials, their context, their hands. **Teach fishing, not give fish.**

Sustainable development: replicable, scalable, locally owned.



My Role
NGO founder and president. Solar engineer. Taught soldering and basic electronics. Coordinated with local university. Managed team of young Spanish volunteers.

Scale
Multiple communities in one refugee camp. Model replicated in subsequent local workshops. This lamp design continues as a disaster response template.



Final
Outcome

2024

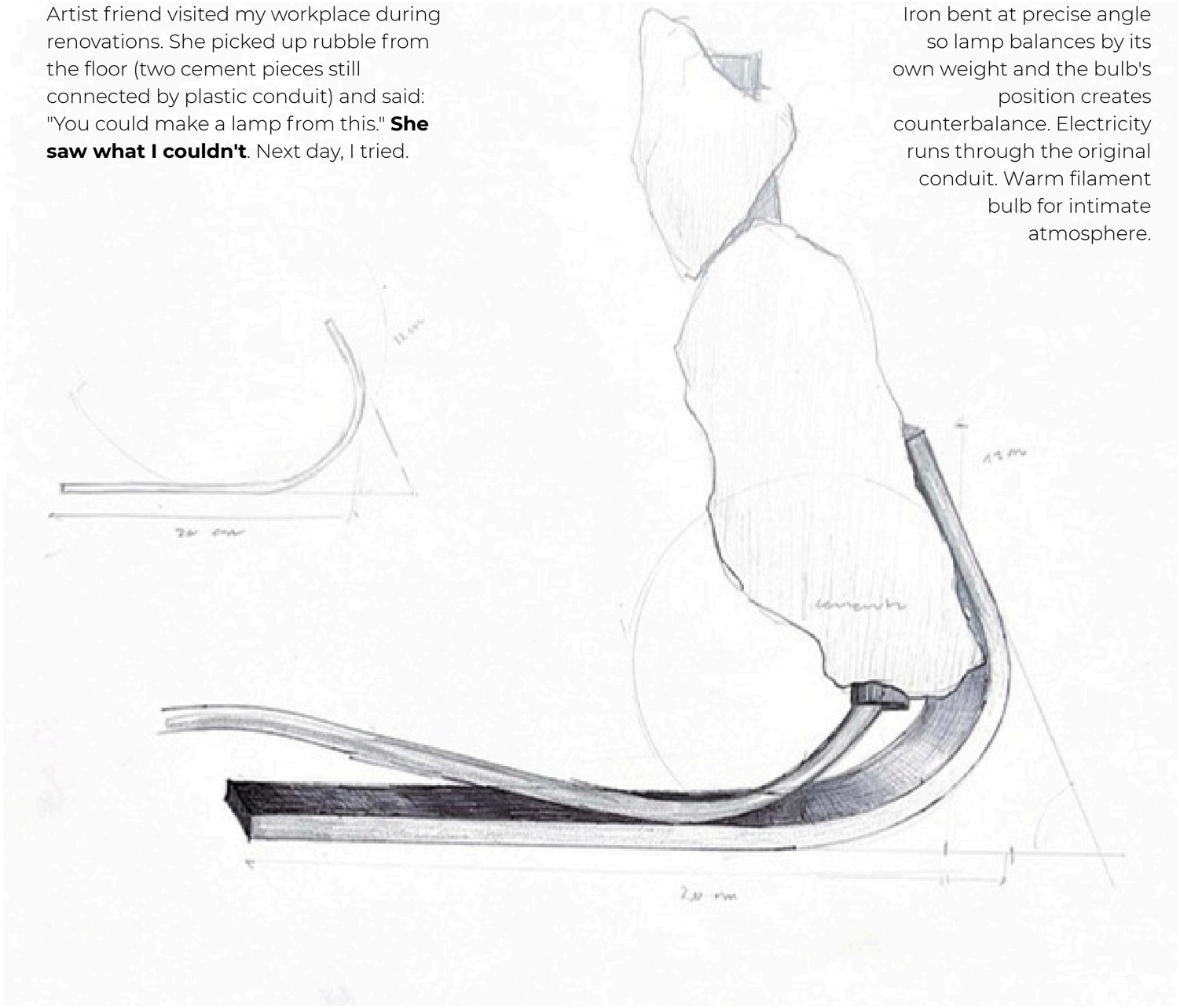
IRON

CEMENT

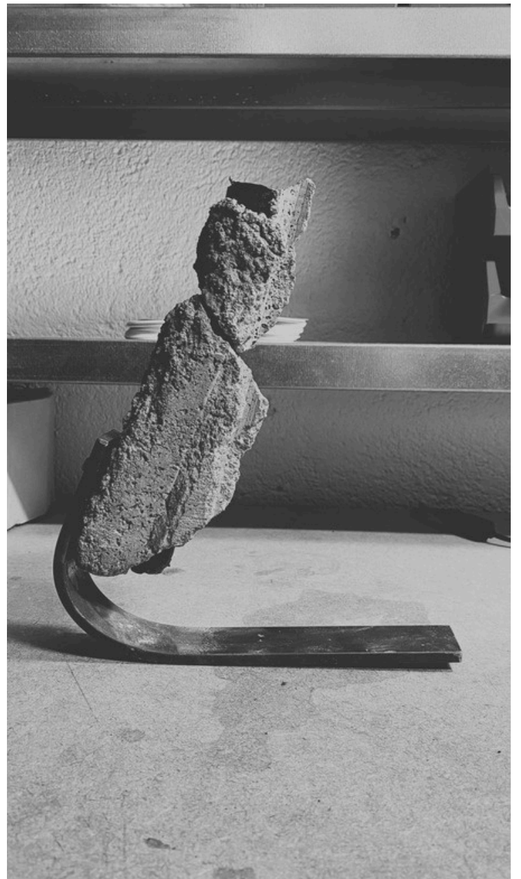
RUBBLE LAMP

Motivation
Artist friend visited my workplace during renovations. She picked up rubble from the floor (two cement pieces still connected by plastic conduit) and said: "You could make a lamp from this." **She saw what I couldn't**. Next day, I tried.

Solution
Iron bent at precise angle so lamp balances by its own weight and the bulb's position creates counterbalance. Electricity runs through the original conduit. Warm filament bulb for intimate atmosphere.



Making
Process



Process
First time working with iron or cement. Bent iron flat bar into curve using floor-mounted press because no proper workshop. Drilled cement, inserted anchors, bolted to iron.

Rubble Lamp
Desk lamp made from construction debris: two cement chunks connected by corrugated electrical conduit, mounted on hand-bent iron. A philosophical object about finding beauty in what others discard.

“The stone the builders rejected has become the cornerstone.”

— Psalm 118:22

Learnings
Materials don't need to be purchased. **Beauty exists in what others discard**, you just need eyes to see it. This lamp is a reminder that even **from waste, light can emerge**. Applies to materials. Applies to people.

NAN'S RAMP

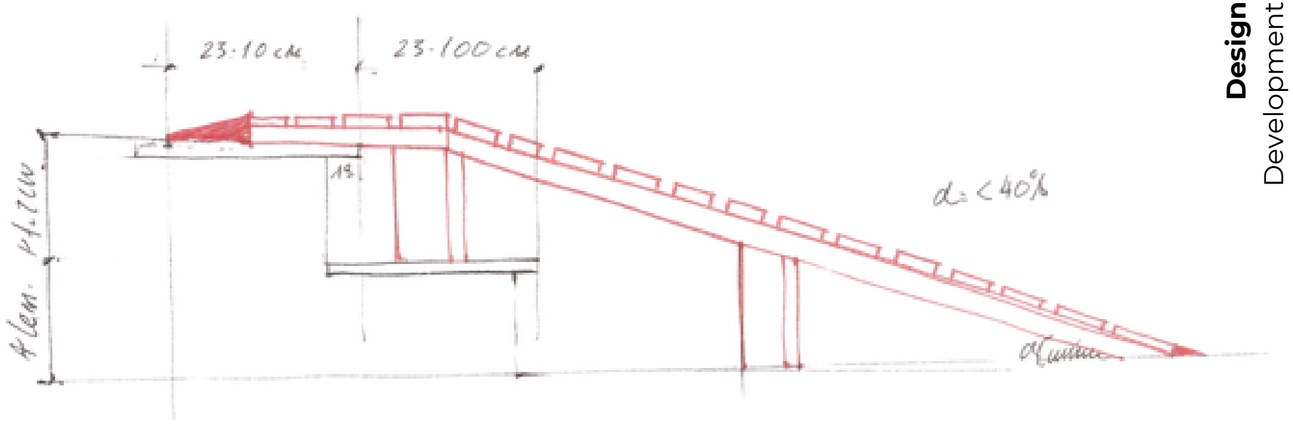
2017

WOOD

Nan’s ramp
Portable wooden ramp for wheelchair access. Built in one afternoon to allow my grandmother to stay at my family's home during her hip recovery.

"Yaya"

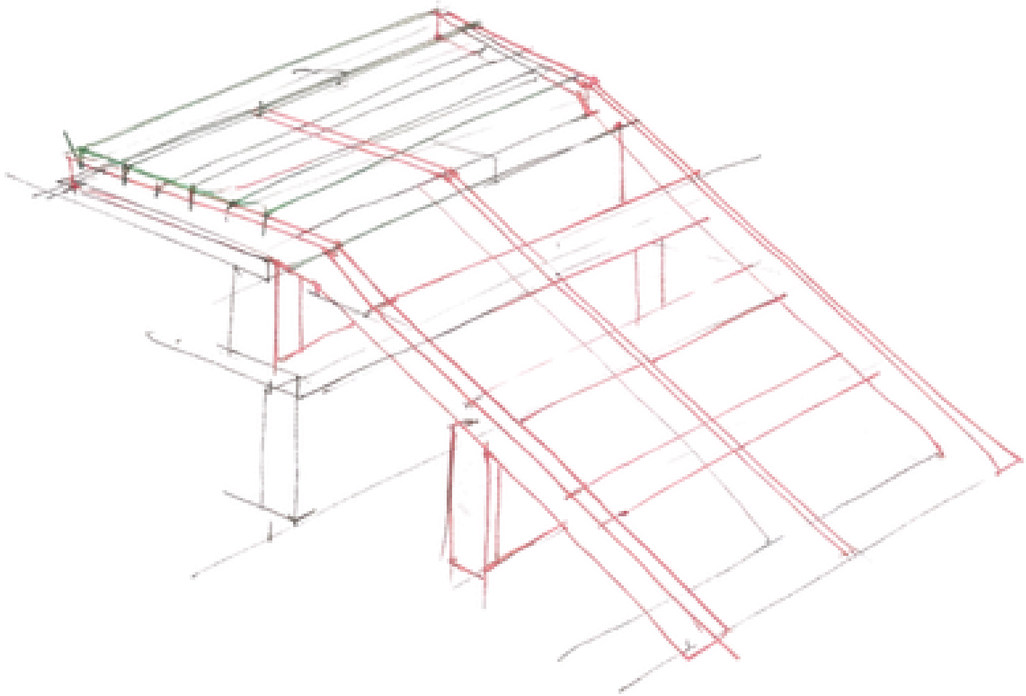
(grandmother in affectionate northern Spanish)
engraved on the wood.



Learnings

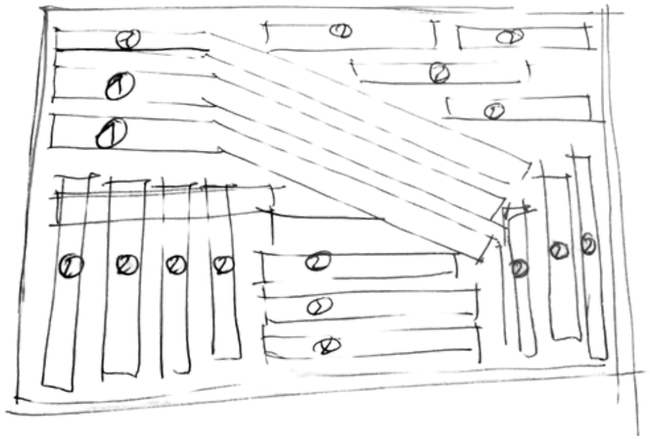
User-centred design in its purest form: observe the real problem, understand constraints (street space, single ramp, weight).

Testing reveals what drawings miss. The edge stops and support legs came from watching real use.



Design problem
Needed a ramp that works on two separate stair sections, is light enough for my mother to move alone between sections (can't have two ramps because first stairs open directly to the street), adapts to different heights, and is safe for wheelchair use.

Solution
Wooden ramp with slatted surface (grooves for grip, gaps for lightness). Two-part design: main incline + small descent section to adapt to both stair heights. Flexible enough to conform to stairs, supported by the steps themselves.



Making Process

Iteration
First version had no side barriers and the wheelchair could slip off edges. Added wooden edge stops on both sides. Also too flexible under weight. Added small support legs underneath.

Víctor Córdoba