

# MAKERS MANUAL #52

## Daan Veerman



# DOODLING BAUBLES



### BIO OF THE DESIGNER

Daan Veerman is a Dutch designer interested in (re)developing production techniques, turning them into crafts. Currently, he is working on a series of work called "Digital Craft" which explores the opportunities of 3D printing as a (re)developed craft. Within this series, Veerman copies archetypical mass-produced plastic items, such as crates, by using a 3D pen in a laborious process, placing crafts and industry production side by side.

### FURTHER READING

- Grammar of the Ornament, Owen Jones
- Rollable Ramblings, Koen Taselaar
- Weaving as a Metaphor, Sheila Hicks & Irma Boom

### LIST OF THINGS

#### MATERIALS

- PLA filament fit for the 3D pen (1.75 mm)

#### TOOLS

- 3D pen
- Paper tape
- Scissors
- Leftover packaging material such as empty cans and lids to use as a mould for drawing. Look for packaging featuring strange shapes and silhouettes.

### INTRODUCTION

This manual offers a playful way to make your own baubles. It invites makers to invent their own techniques to then implement this in making unique decorations by using a 3D pen, some simple tools and ordinary objects. This manual pushes the maker to really think about and look at the plastic products that are part of daily life. It is not only about making something new, but also about becoming aware of the shapes, sizes and wonderful textures of the objects that surround us everyday.

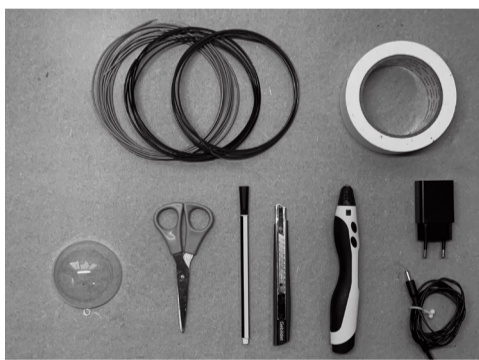
#### STEP 1

Before you start printing and doodling, it is wise to practice first. Cover a sturdy flat surface (sheet of wood, cutting mat, etc.) with paper tape and start testing.

> Practice with varying distance from the surface you're printing on and see what kind of structures this produces.

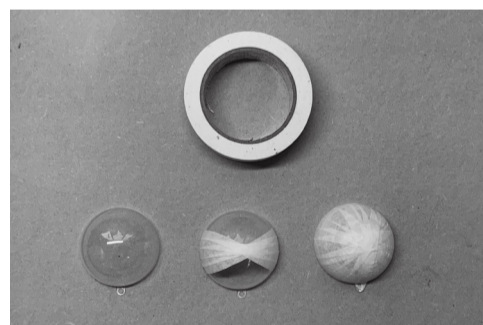
> Practice with filling or completely covering certain parts of the surface.

When you feel comfortable with using the 3D pen on flat surfaces, it's time to switch to doodling on simple shapes.

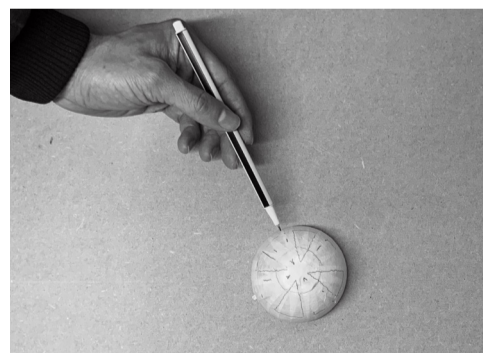


print on the moulds in such a way that the mould itself can be removed after you finished drawing.

> If you want to draw patterns on your design, you can first draw with a pencil on the paper tape covering the mould. This gives you the possibility to easily trace more difficult shapes on the mould.



3.1



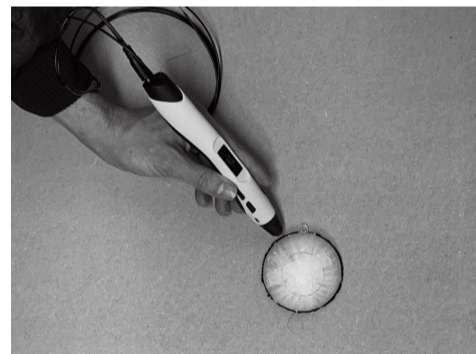
3.2

#### STEP 4

Start doodling on the mould of your choice. When you doodle really dense structures, sometimes the print can get stuck on the mould. To avoid this, make sure to regularly check if you can still remove your print from the shape. The doodled print can be taken off by wiggling it or by using a knife, scissors or your nails.

> Be careful when you use some force to separate the print from the mould.

> Make sure to remove the print from the mould completely, and then place it back on and continue doodling.



4.1



4.2



4.3

#### STEP 5

You can attach shapes by doodling lines which connect the two shapes. If you want to be precise, you can connect the shapes at a few points first and later completely connect them. When making baubles, this is the best technique. First fix the two half spheres together in 4 to 6 places by printing lines which connect the two half spheres. Then, go around the entire shape and cover the connecting parts completely.



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#### STEP 6

If you wish to construct your baubles from multiple smaller shapes, do the same as described above. Start with making the largest shape, and always make sure to check whether you can still take the mould out of the print. Other smaller shapes can be made by using smaller objects, e.g. lids or small containers. Also cover these in paper tape to make it easy to remove the print. Or, alternatively you can also doodle "freehand" on a flat sheet such as a cutting mat and connect these to the baubles.

#### STEP 7

Last but not least: once you finish the shape of your bauble, make sure to think of a hook or loop that can be used to hang the bauble. This can either be a small hole in the print, or a specific shape added to the bauble.

Enjoy decorating your home with your own creations!

Makers Manual is a collaborative project between exciting makers and STORE STORE. This is a collection of manuals encouraging people to make objects from what is around them. These manuals are both a practical guide to making for beginners and experts, and a journey into the designers' practice. You can share your creations using #makersmanual.

This project is supported by G.F. Smith.

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