

A photograph of a grand, ornate library interior, likely the Vatican Museums. The room features high ceilings with intricate frescoes, multiple levels of balconies with ornate railings, and walls covered in floor-to-ceiling bookshelves filled with books. The architecture is highly detailed and Baroque in style.

The Future is Baroque

Enweirdening the Aesthetics of the “Future”

Kate Compton

@galaxykate





Kate Compton 🚂 **XOXO** @GalaxyKate · Sep 5



What should I do for my XOXO talk? (note: I'll be wearing Pastel-Magic Generative Robes)

Tracery (ie, lots o' bots), intro to Generative Art (my GDC talk but more art) or a Weird Futurist talk about how generative art will change what the future looks like (no beige spaceships!)

11% Tracery (+ Chancery)

23% Intro to Generativity

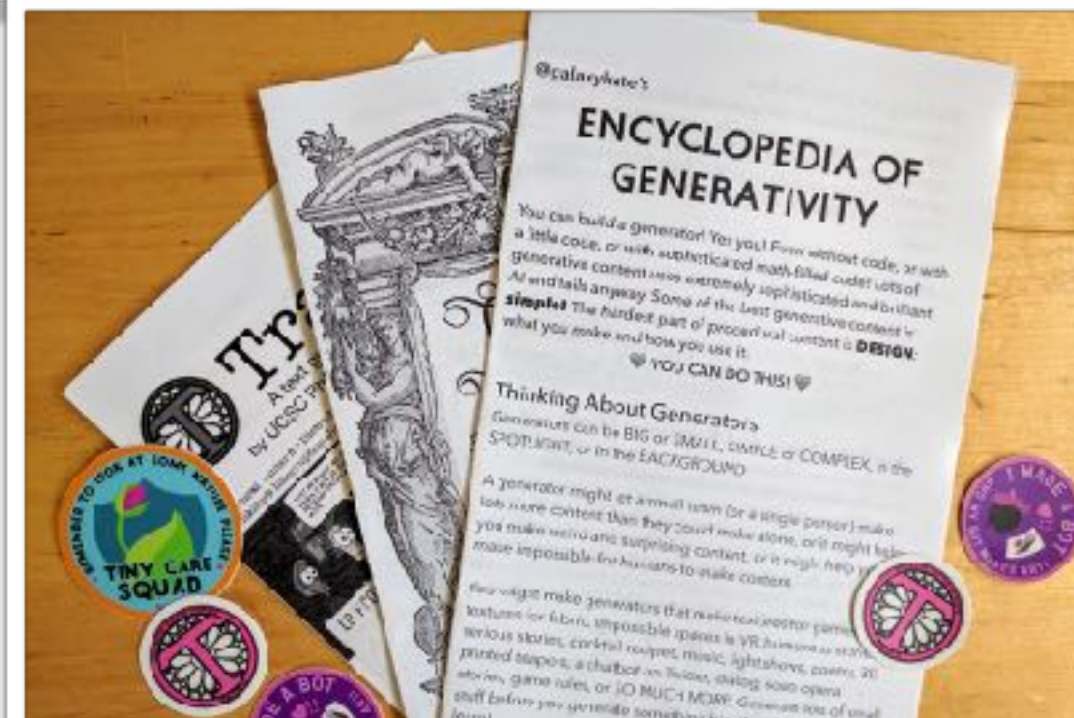
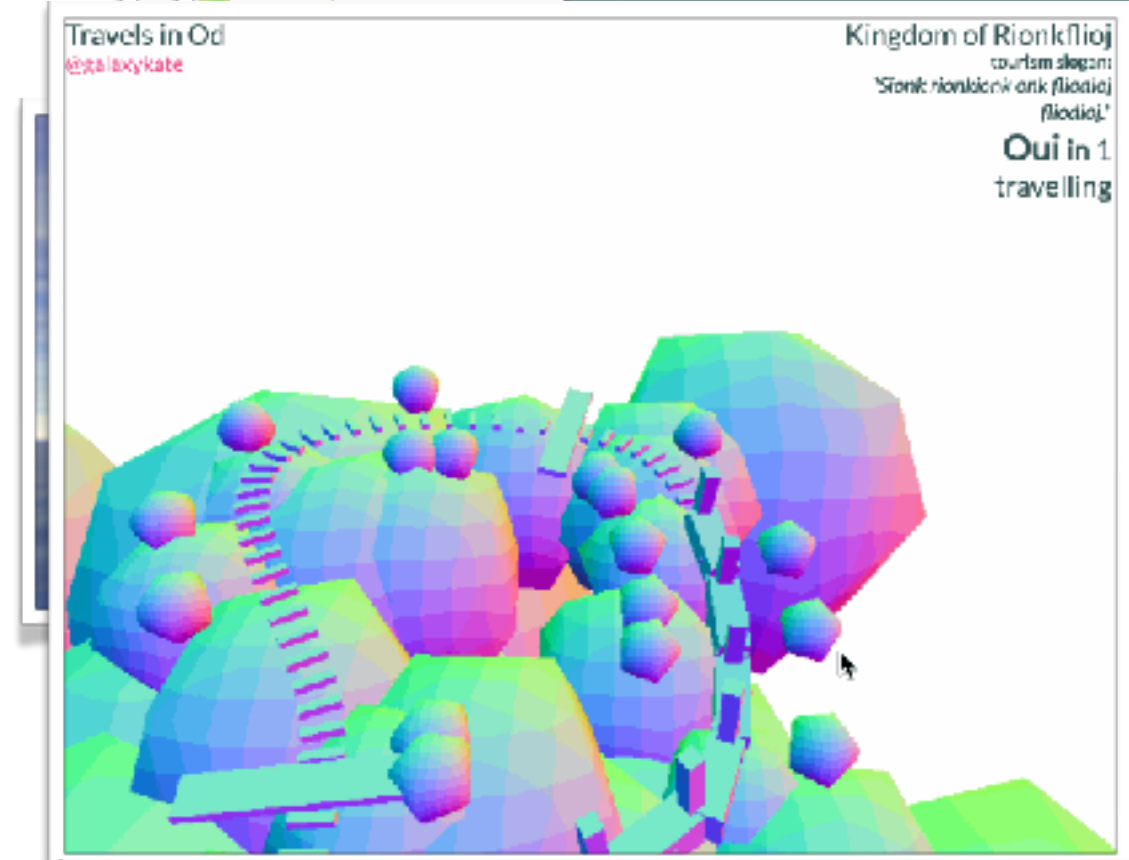
66% Weird Futurist Aesthetics

110 votes • Final results

about me

Kate Compton
@galaxykate, galaxykate.com

- @ UC Santa Cruz, Expressive Intelligence Studio: AI for human expression
- Made Tracery, a language for generative text. Used for CheapBotsDoneQuick, hosting 11000+ active bots (unless they've been banned since I wrote these slides)
- I make generative artbots, games, art tools and more (I made the planets on Spore)
- I write about and teach others how to make generative things (ask me for zines)
- I like opulent, over-the-top, femme, florid expressions of cutting-edge AI
- I want AI made by poets and philosophers and weirdos and historians and kids and painters and activists and experimenters and hippies and





What does the future look like?



"Yes, the planet got destroyed. But for a beautiful moment in time we created a lot of value for shareholders."

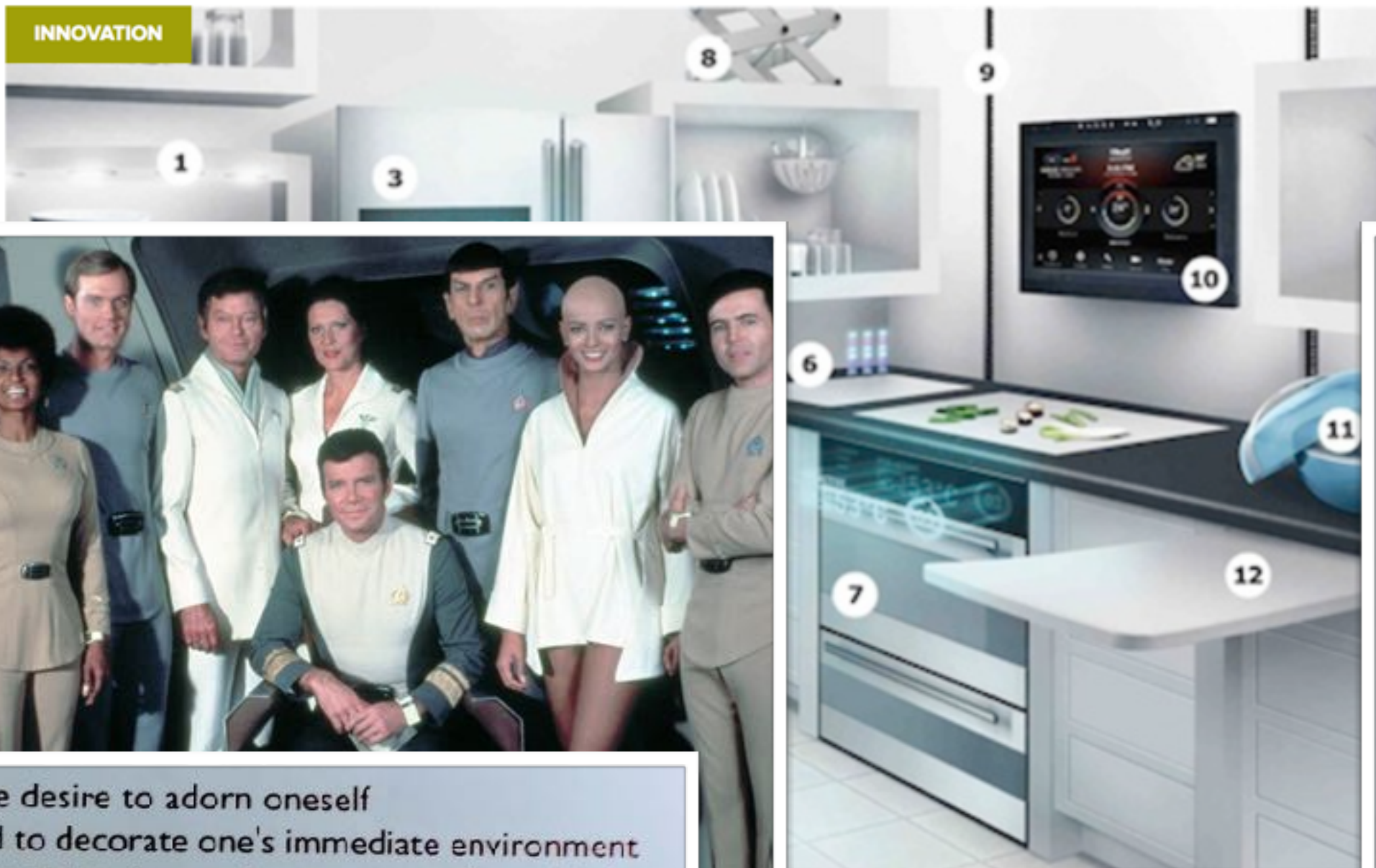


What does the future look like?



What does the future look like?

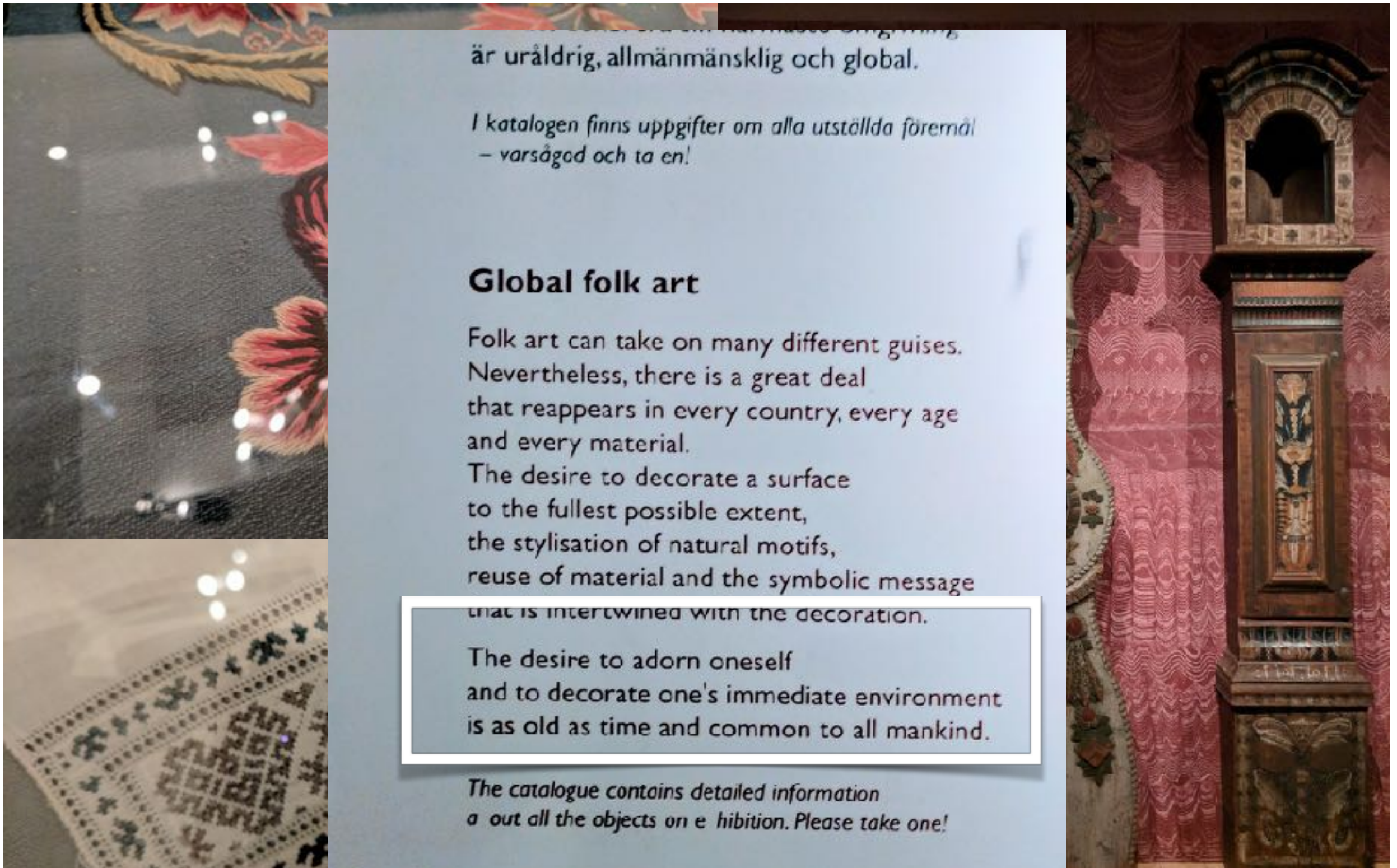
IKEA Designs the Ultra-Efficient Kitchen of the Future



The desire to adorn oneself and to decorate one's immediate environment is as old as time and common to all mankind.

What does the future look like?

Nordiska museet, Stockholm



är uråldrig, allmänmänsklig och global.

*I katalogen finns uppgifter om alla utställda föremål
– varsågod och ta en!*

Global folk art

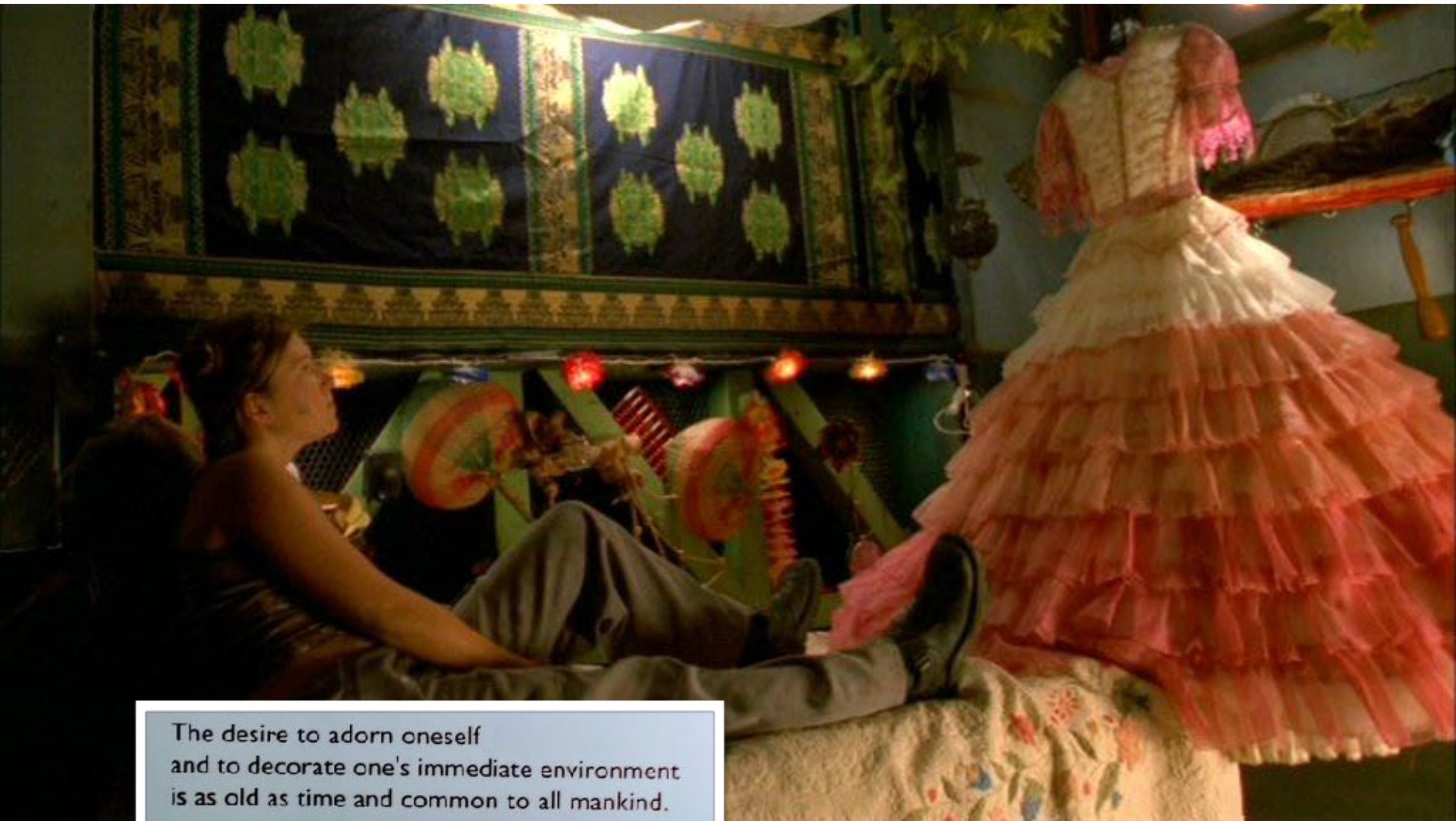
Folk art can take on many different guises. Nevertheless, there is a great deal that reappears in every country, every age and every material.

The desire to decorate a surface to the fullest possible extent, the stylisation of natural motifs, reuse of material and the symbolic message that is intertwined with the decoration.

The desire to adorn oneself and to decorate one's immediate environment is as old as time and common to all mankind.

*The catalogue contains detailed information
about all the objects on exhibition. Please take one!*

What does the future look like?



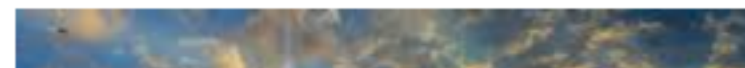
The desire to adorn oneself and to decorate one's immediate environment is as old as time and common to all mankind.

What does the future look like?





Why does the “future” look like this?



When did we decide that the future is unadorned beige?



3D Printing and the Fall of the Modernist Aesthetic



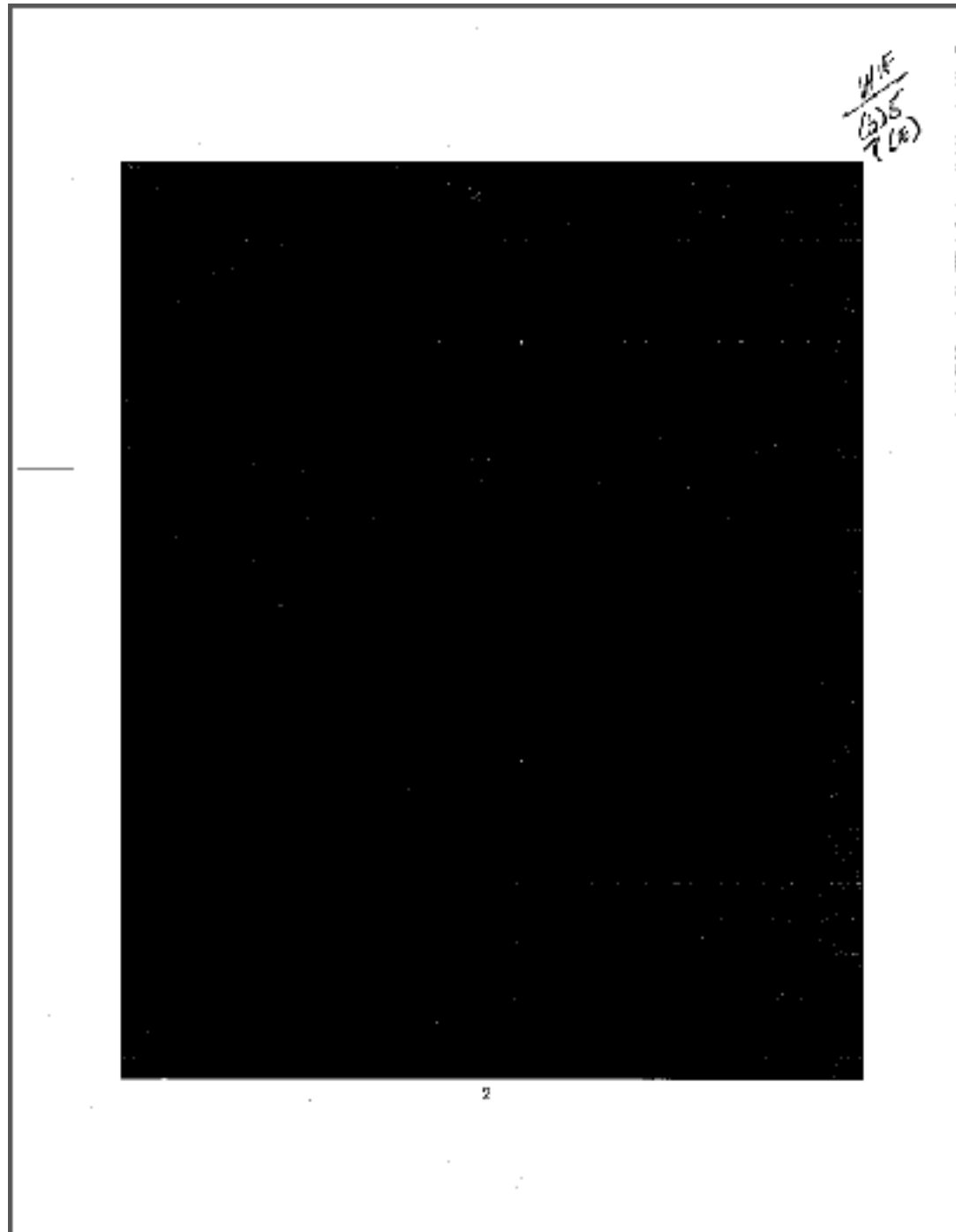
(a possibly true explanation of modern aesthetics)

a thought:

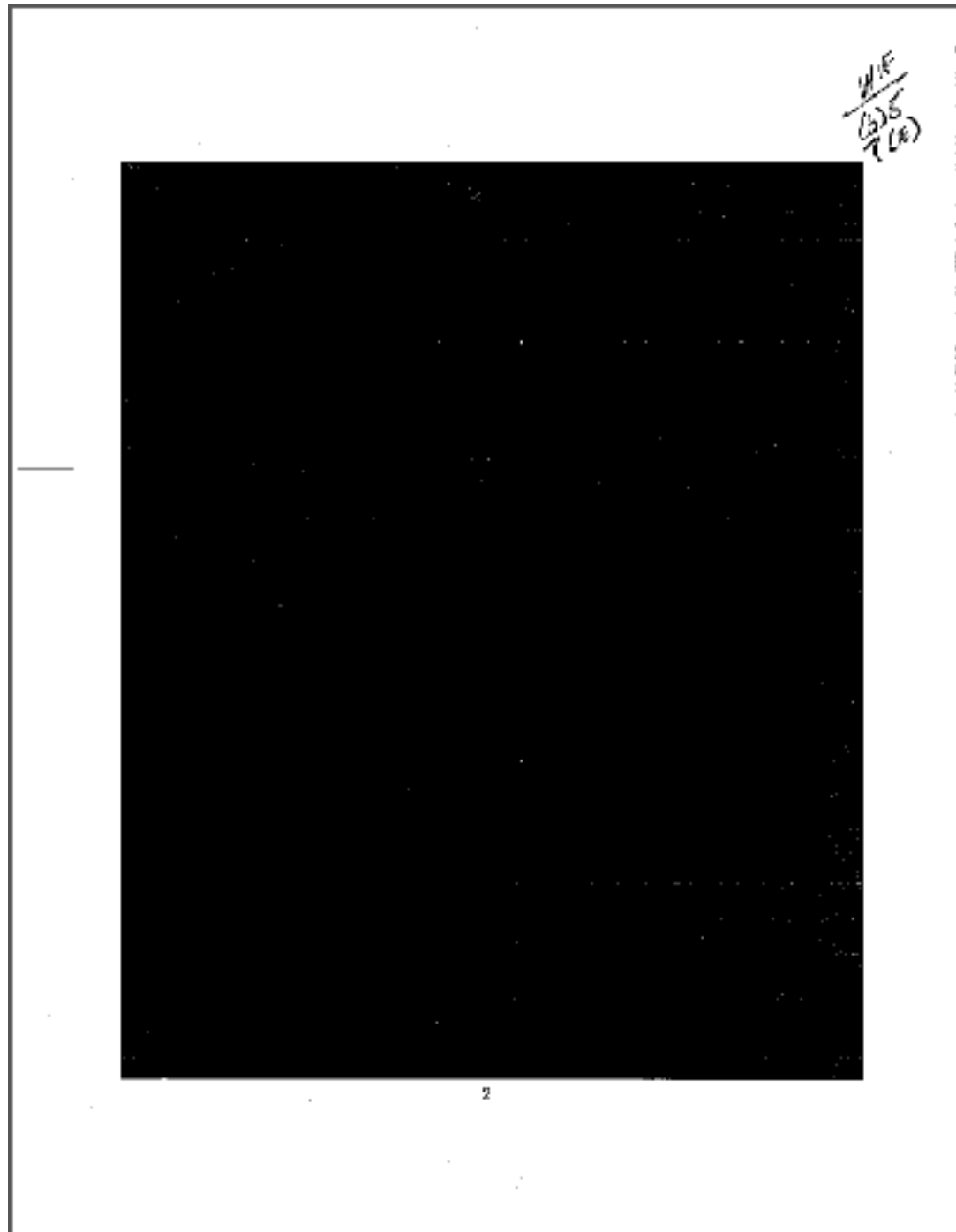
A 3D printer

is like a 2D raster printer,
where the head prints in two dimensions

Which costs more to print?



Which costs more to design?



Warning:

Architecture History

- As delivered by a non-historian
non-architect

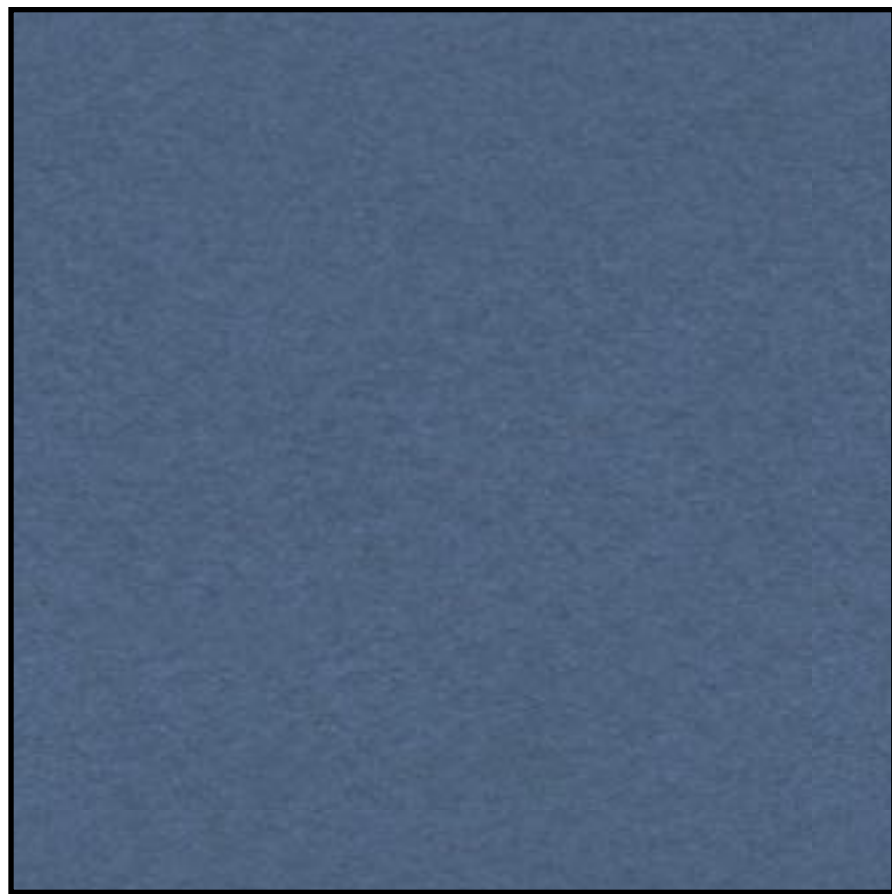




What's the price for building
this thing?



What's the price for building this thing?



Labor for
MATERIALS

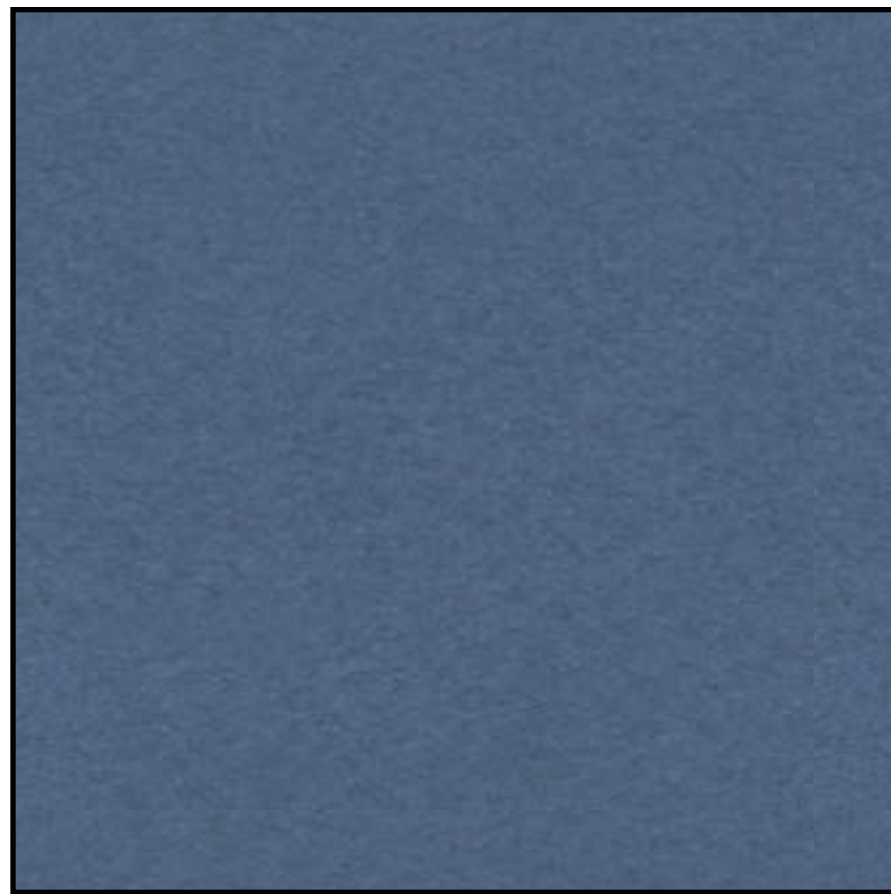


Labor for
CONSTRUCTION



Labor for
DESIGN
sculpture,
ornamentation,
decoration, etc

What's the price for building this thing?



Labor for
MATERIALS



Labor for
CONSTRUCTION

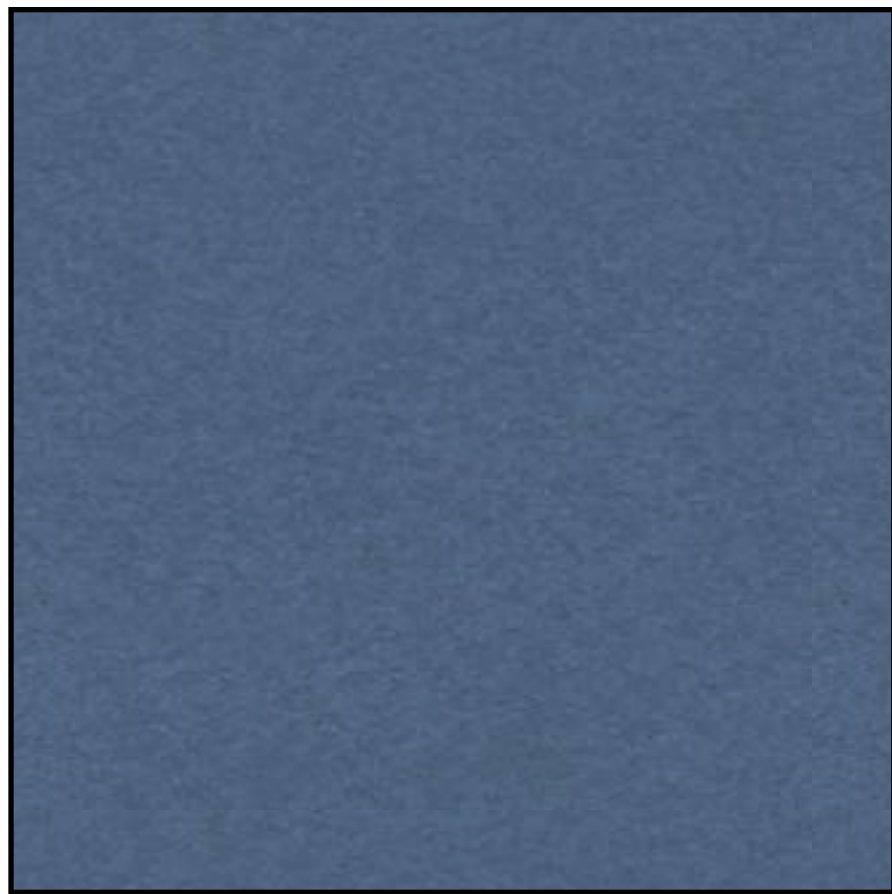


Labor for
DESIGN

“As long as we dragged the marble 1000 miles from Turkey, and we’re going to spend 100 hours carving it, we might as well make some different designs”

“We don’t have
a lot of raw
material, but
we’ve got all
the time in the
world.”





Labor for
MATERIALS



Labor for
CONSTRUCTION



Labor for
DESIGN

Concrete happens.

“Whoa, this stuff
is really cheap,
and we can make
huge quantities”



Labor for
MATERIALS



Labor for
CONSTRUCTION



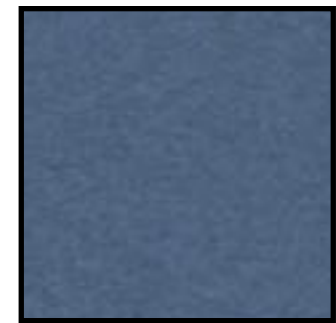
Labor for
DESIGN



Labor for
MATERIALS



Labor for
CONSTRUCTION



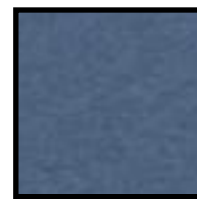
Labor for
DESIGN

Oops.

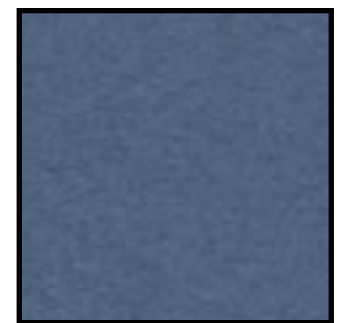
“Hey, if we use flat-sided
molds and don’t have any
unique pieces, we can build
these really easily, and no-
one has to carve anything
by hand”



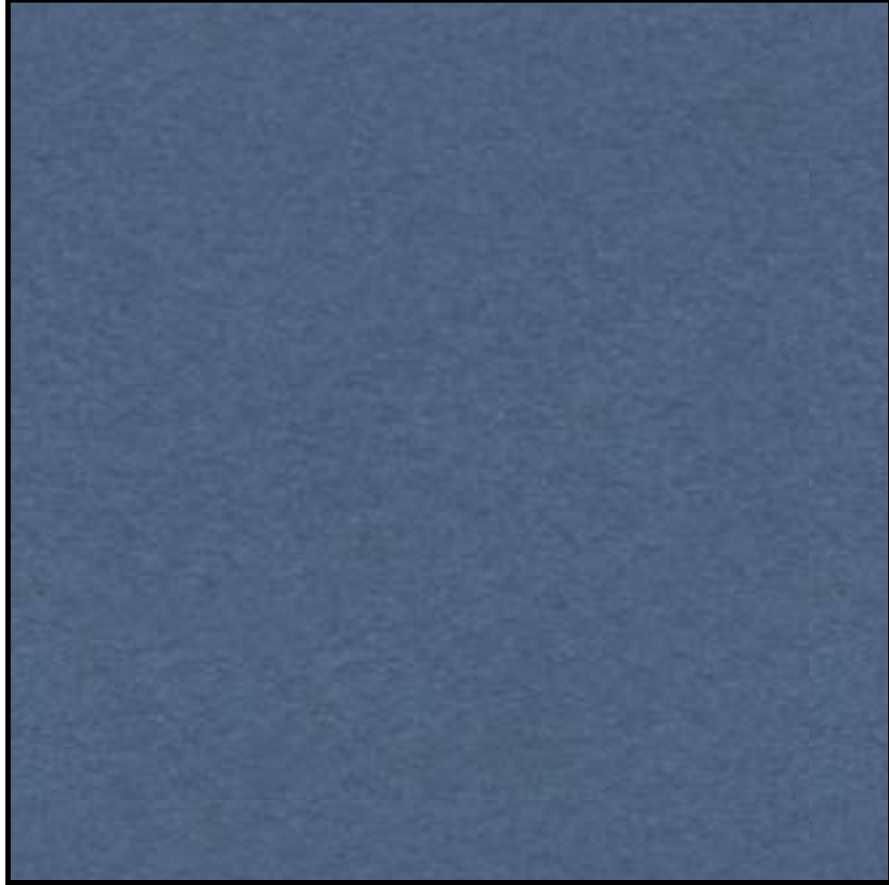
Labor for
MATERIALS



Labor for
CONSTRUCTION



Labor for
DESIGN



Labor for
MATERIALS



Labor for
CONSTRUCTION



Labor for
DESIGN

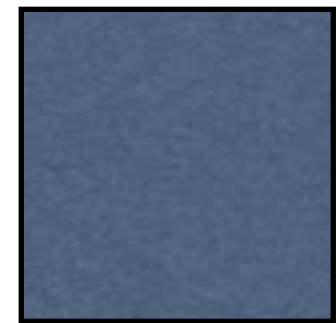
becomes....



Labor for
MATERIALS



Labor for
CONSTRUCTION



Labor for
DESIGN

“Wow! We can build a lot of
building and objects!”



Labor for
MATERIALS



Labor for
CONSTRUCTION



Labor for
DESIGN

“Wow! We can build a lot of
building and objects!”



Labor for
MATERIALS



Labor for
CONSTRUCTION



Labor for
DESIGN

“Individually designed
columns?
Who’s got the money for
that?”



Labor for
MATERIALS

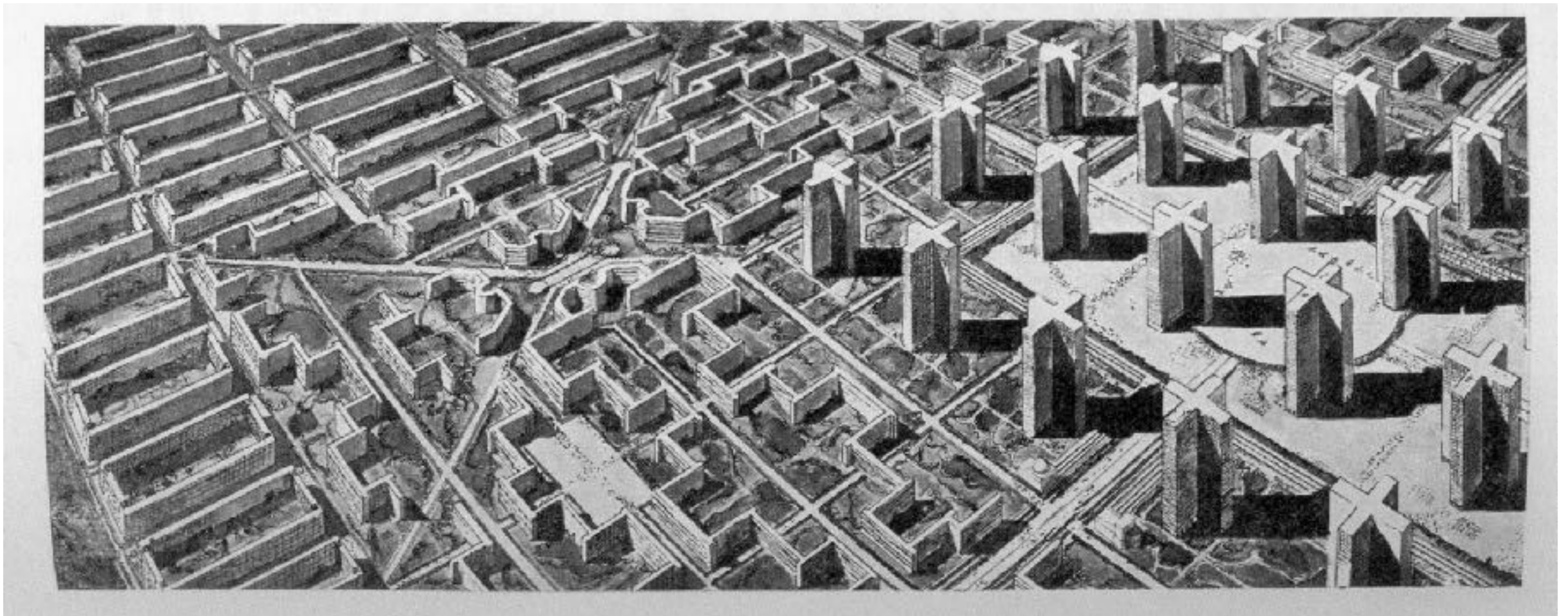


Labor for
CONSTRUCTION



Labor for
DESIGN

This starts looking really ~attractive~



Art history 101



“Modernism was essentially conceived of as a rebellion against 19th Century academic and historicist traditions and against Victorian nationalism and cultural absolutism, on the grounds that the "traditional" forms of art, architecture, literature, religious faith, social organization and daily life (in a modern industrialized world) were becoming outdated.”

(http://www.philosophybasics.com/movements_modernism.html)

**Economically optimal form of architecture
becomes dominant worldwide?**



It was probably the compelling philosophy.

So about 3D
printing...

3D printing changes the costs again

Decreases with
complexity



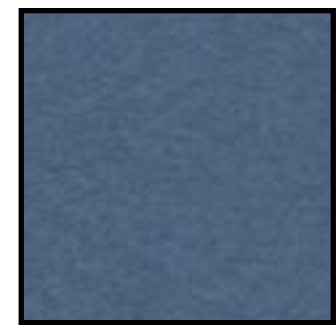
Labor for
MATERIALS

Constant with
complexity



Labor for
CONSTRUCTION

Same as always



Labor for
DESIGN

If these cost the same?



In a world without manufacturing constraints...

"...Its only real function was to protect the floor from Gwendolyn's exercise equipment, which gleamed in the dim light scattering off the clouds from Shanghai: a step unit done up in Beaux-Arts ironmongery, a rowing machine cleverly fashioned of writhing sea serpents and hard bodied nereids, a rack of free weights supported by four callipygious caryatids -- not chunky Greeks but modern women, one of each major racial group, each tricep, gluteus, latissimus, sartorius and rectus abdominus casting its own highlight. Classical architecture indeed."

The Diamond Age





The BeauxFlex?



Don't
care

Labor for
MATERIALS

Whatever

Labor for
CONSTRUCTION





Don't
care

Labor for
MATERIALS

Whatever

Labor for
CONSTRUCTION



But we still have:

Labor for
DESIGN

(someone has to draw all those chair dragons)



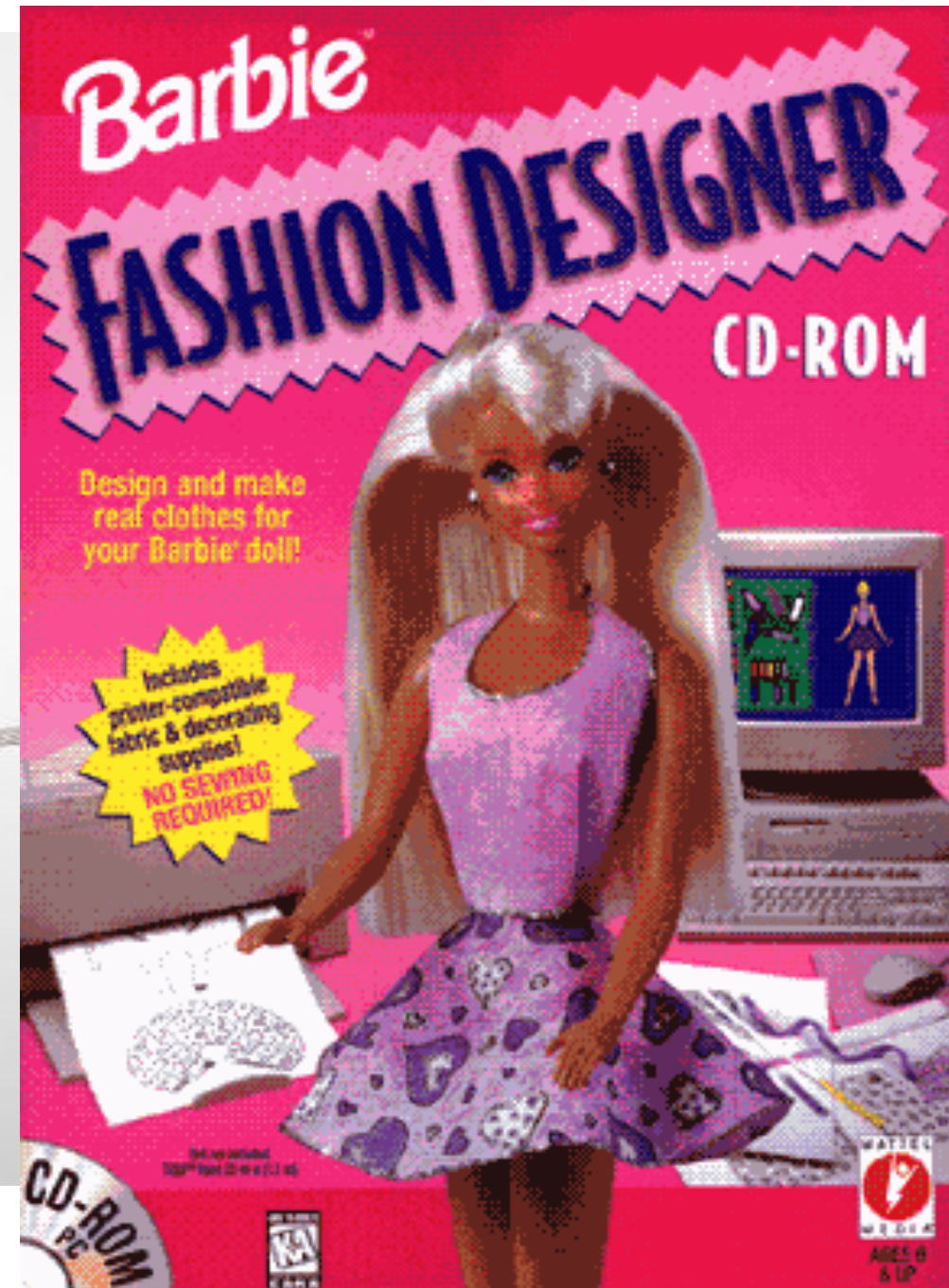
I study tools for making things
...and making things that come to life (and make things)



What does fabrication look like?



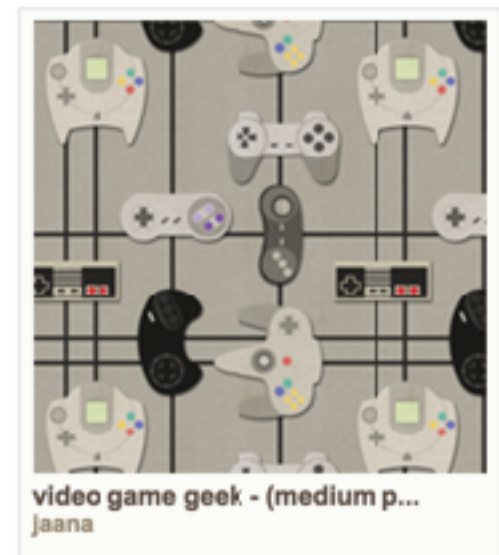
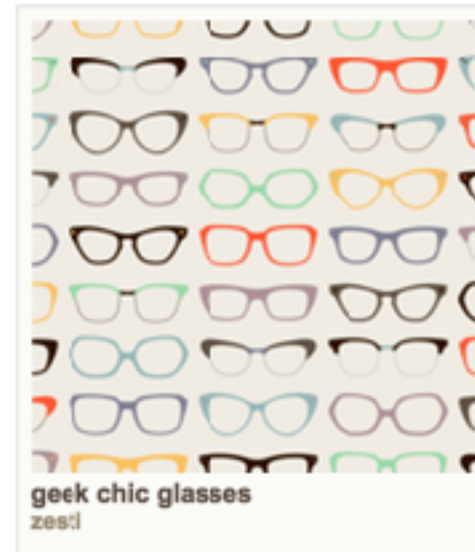
What does fabrication look like?



Personal fabrication



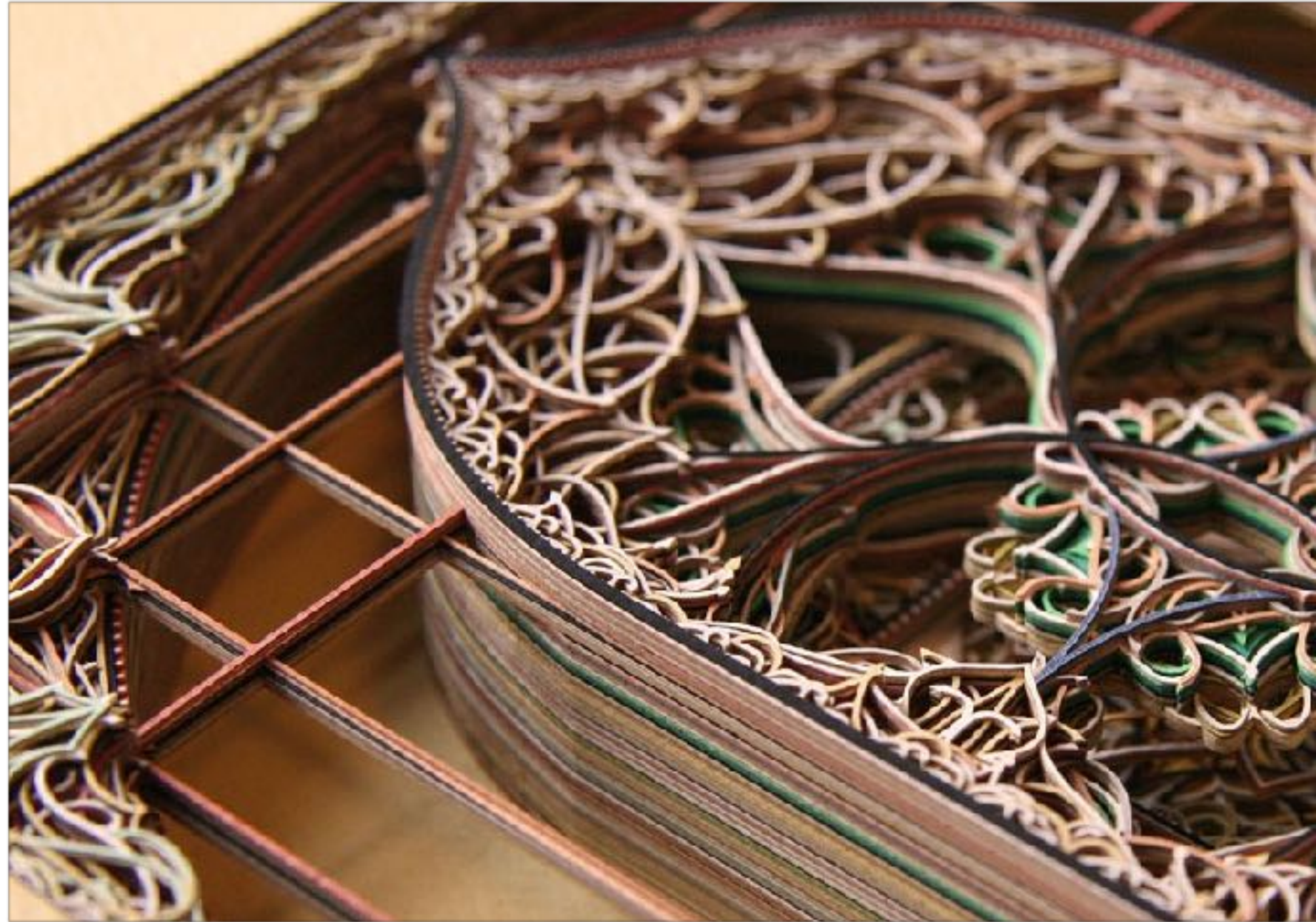
Fabric Printing *Spoonflower*



Personal fabrication



Laser Cutter
Techshop (💀)
Ponoko, Glowforge



Personal fabrication



3D Printer
Ponoko, Shapeways
Ultimaker



New aesthetics

Joshua Harker

New Balance

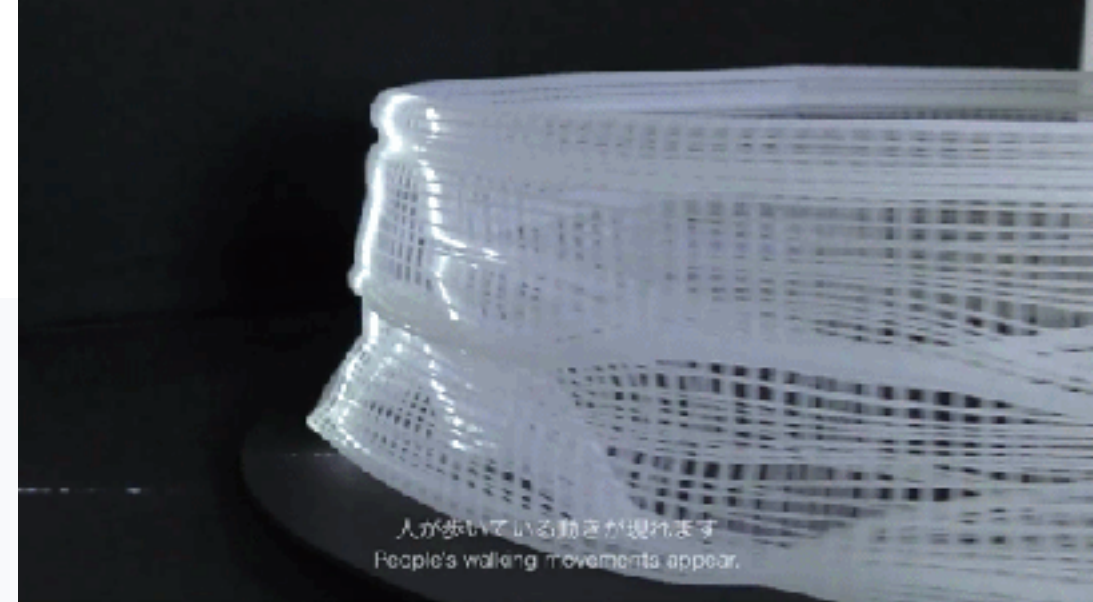


James Novak

Elvis Pompillo

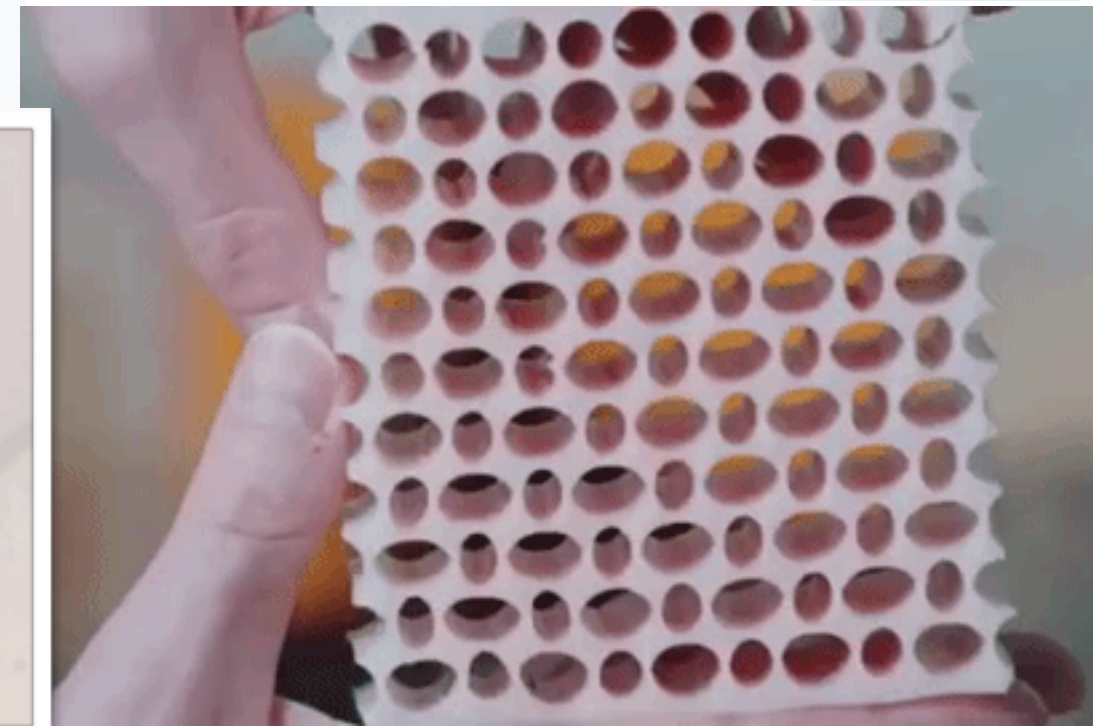


New materials and properties



toki zoetrope, Akinori Goto

Combinatorial Design of Textured Mechanical Metamaterials
van Hecke et al



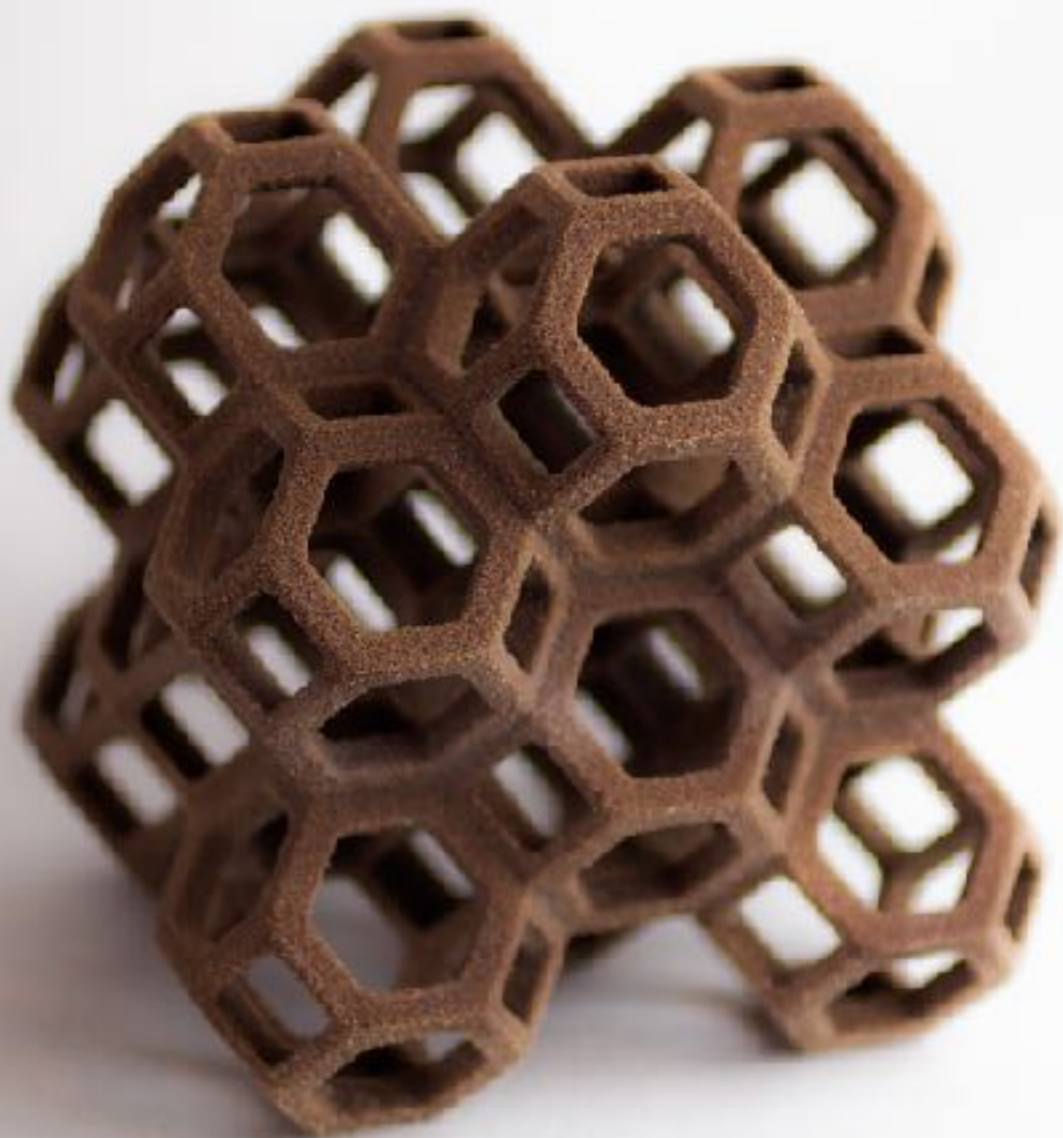
Nervous System
<https://n-e-r-v-o-u-s.com/>



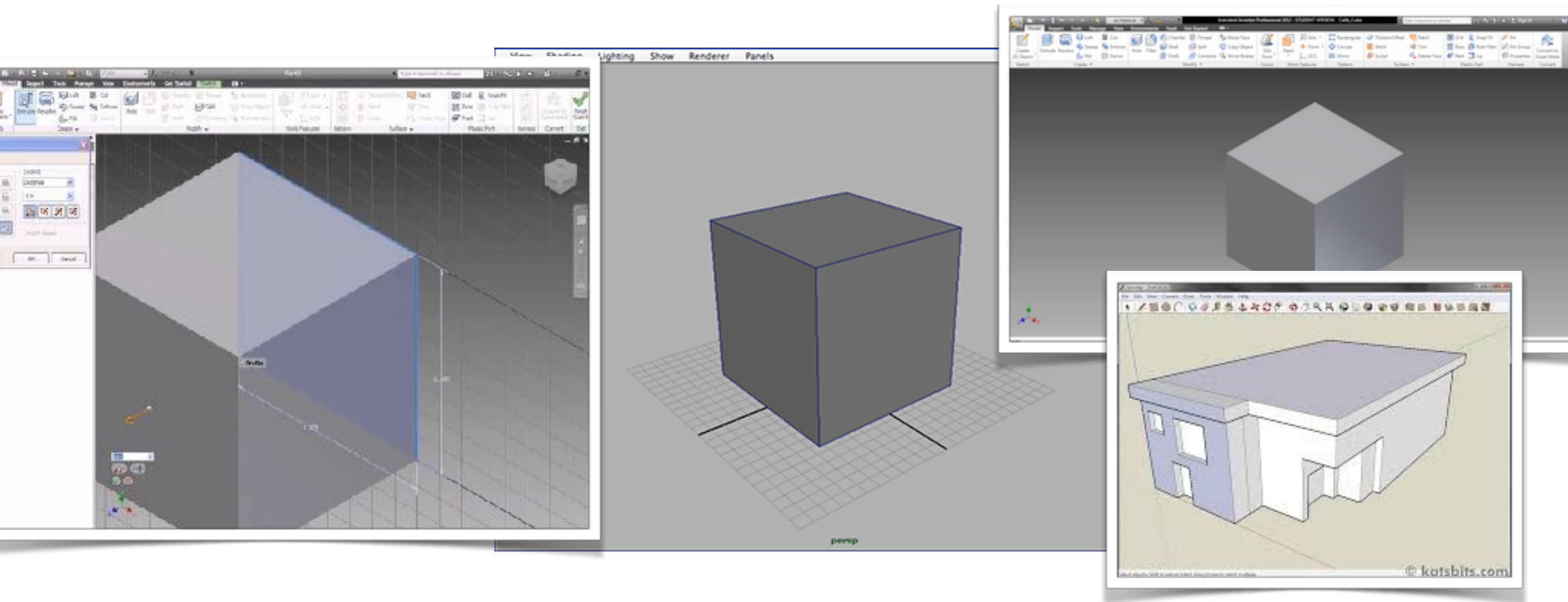
Metamaterial Mechanisms
Hasso Plattner Institute



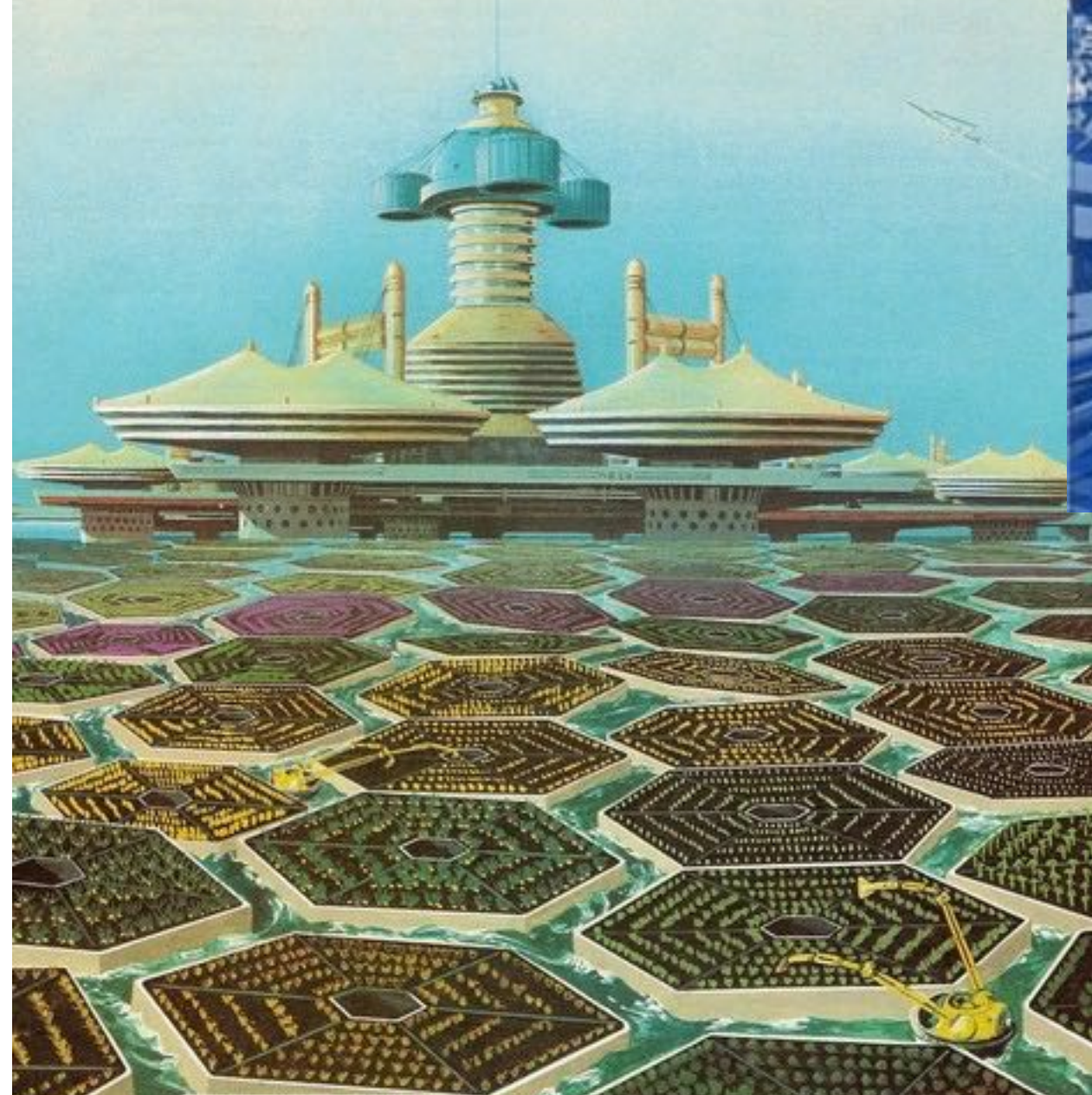
What does the future look like?

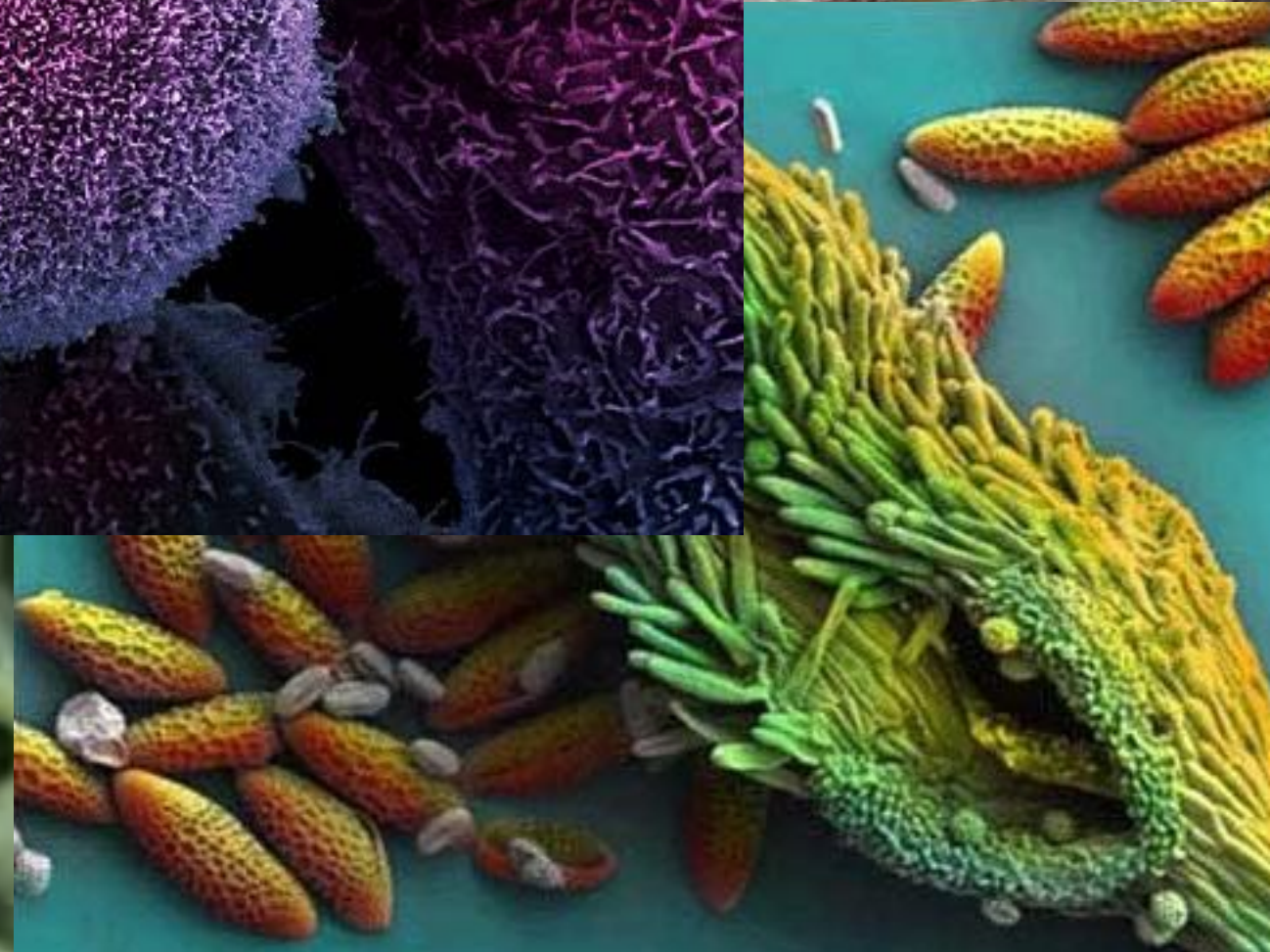
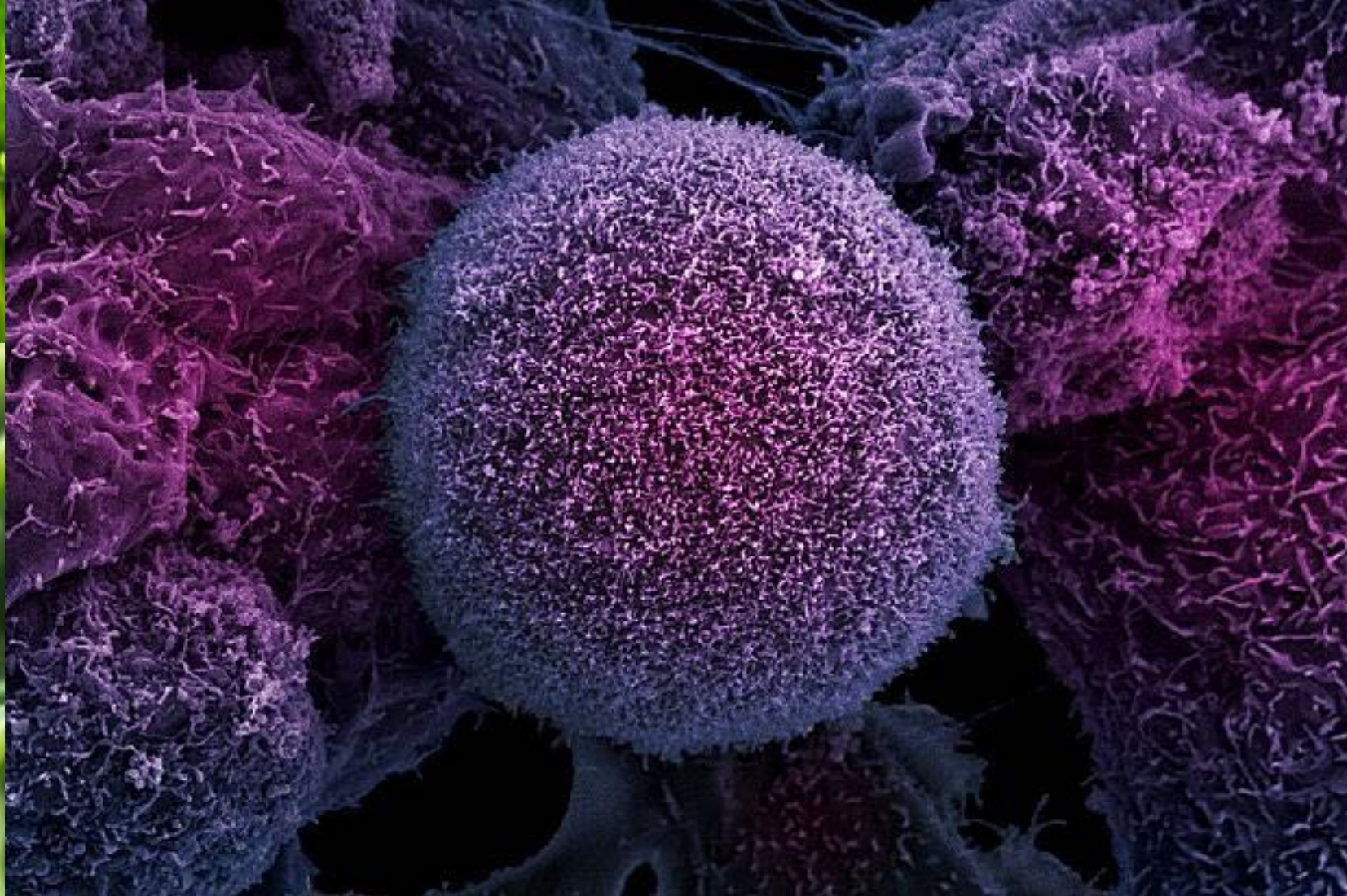
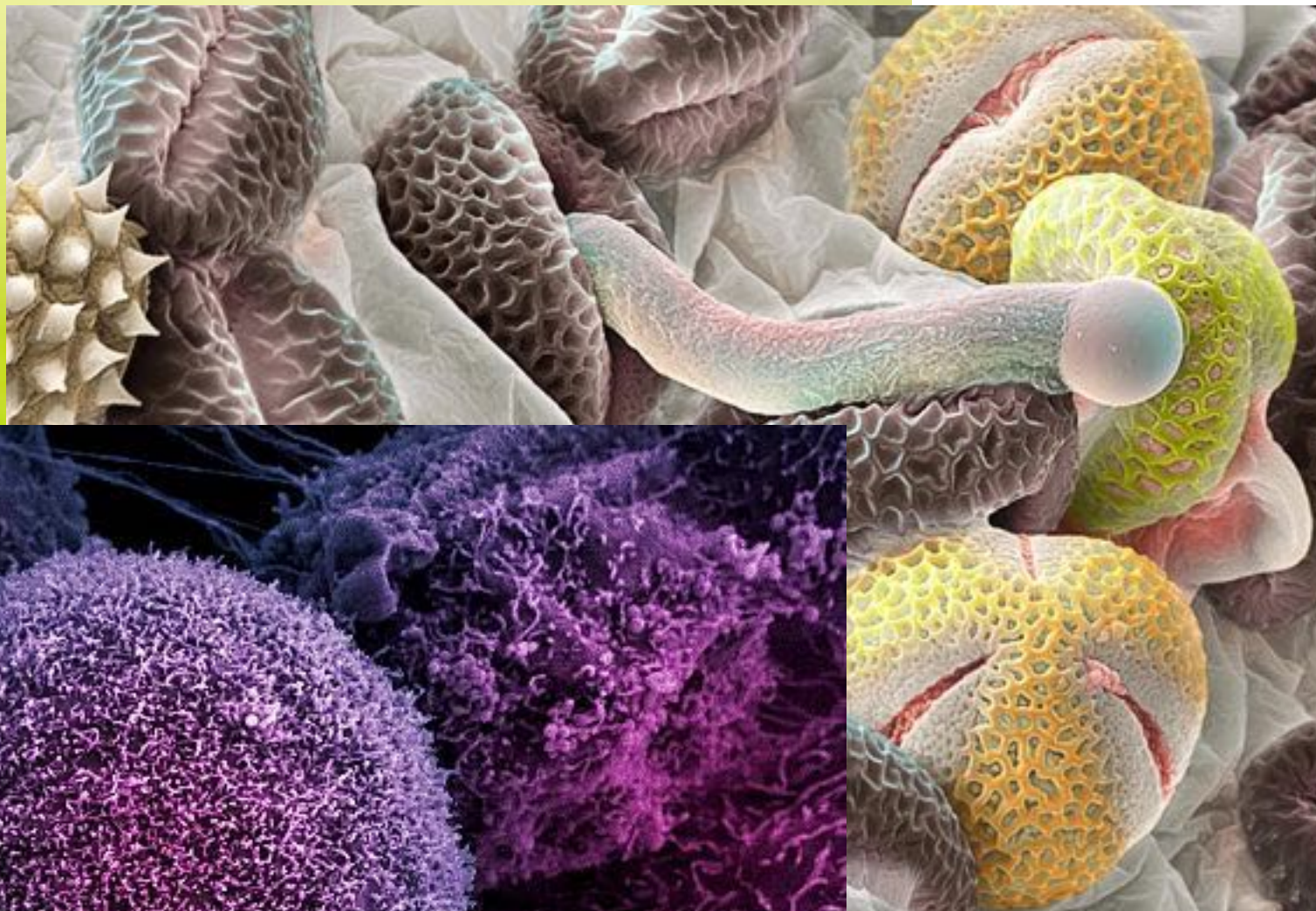


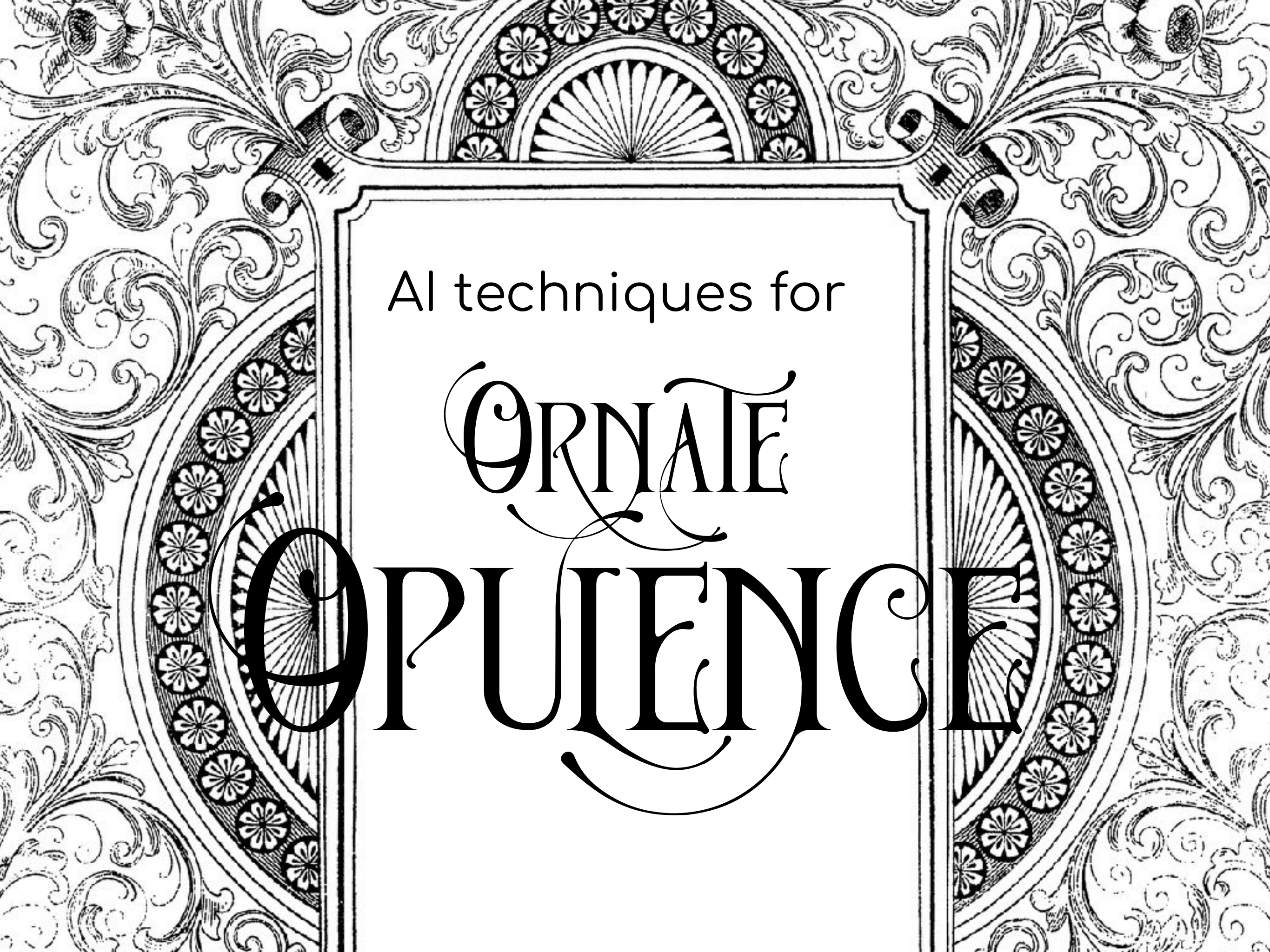
The future needs better tools



The tools we have are designed for cubes
What are the right tools for 3D Printing*?
(*and other automated manufacture strategies)







AI techniques for

ORNATE OPULENCE

tensegrity simulation



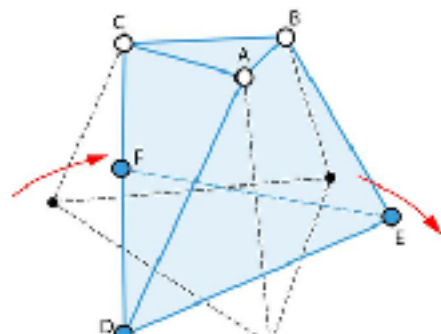
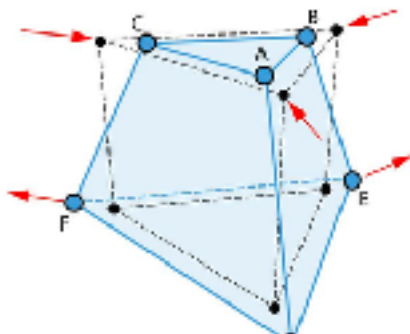
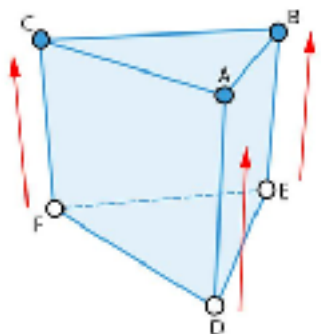
Bathsheba Grossman

Module variations

Extrude 90 - 110%

Scale 10 - 20%

Rotate 30° - 40°



surface tension
metaballs
minimum-energy surfaces

Kinematics

designed by nervous system + you

template
necklace
rings

Kinematics is a system for 4D printing that creates complex, foldable forms composed of articulated modules. Use Kinemaps to design your own flexible jewelry designs.

Tweet 0
Like 0



SELECT A STYLE

DENSITY TOOLS

SIZE edit

COLOR

PRICE

BUY

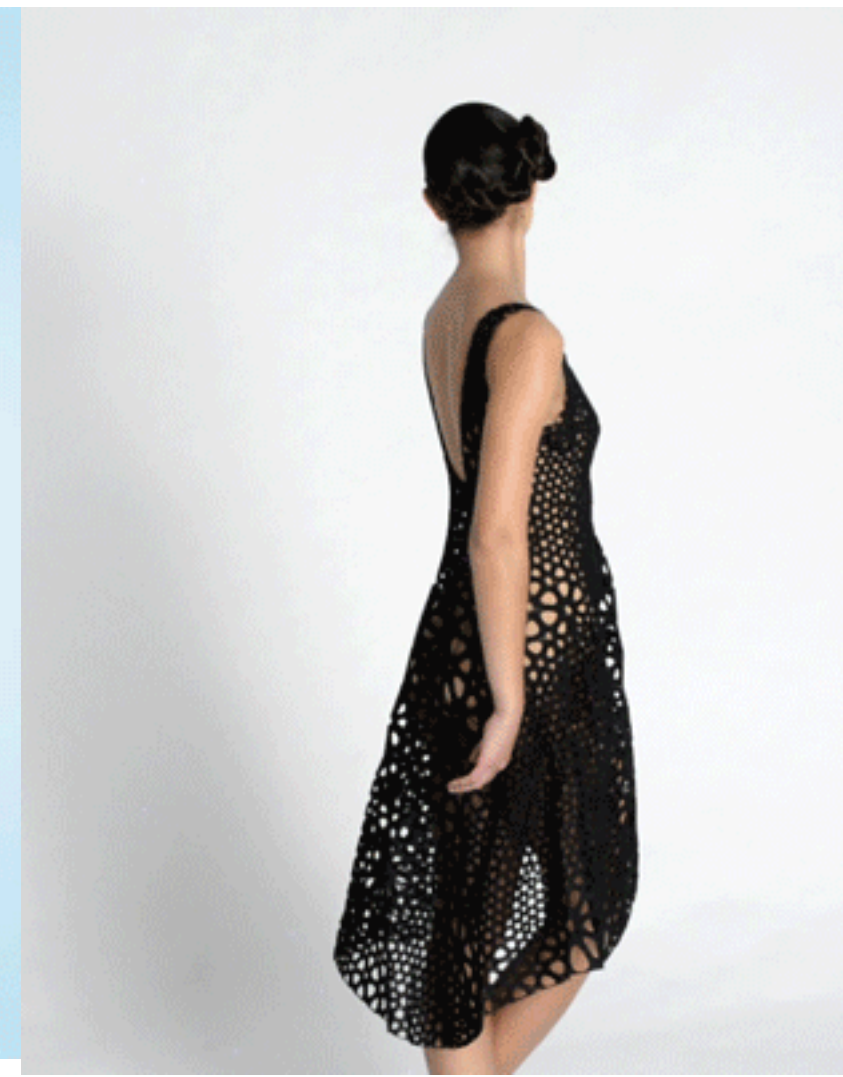
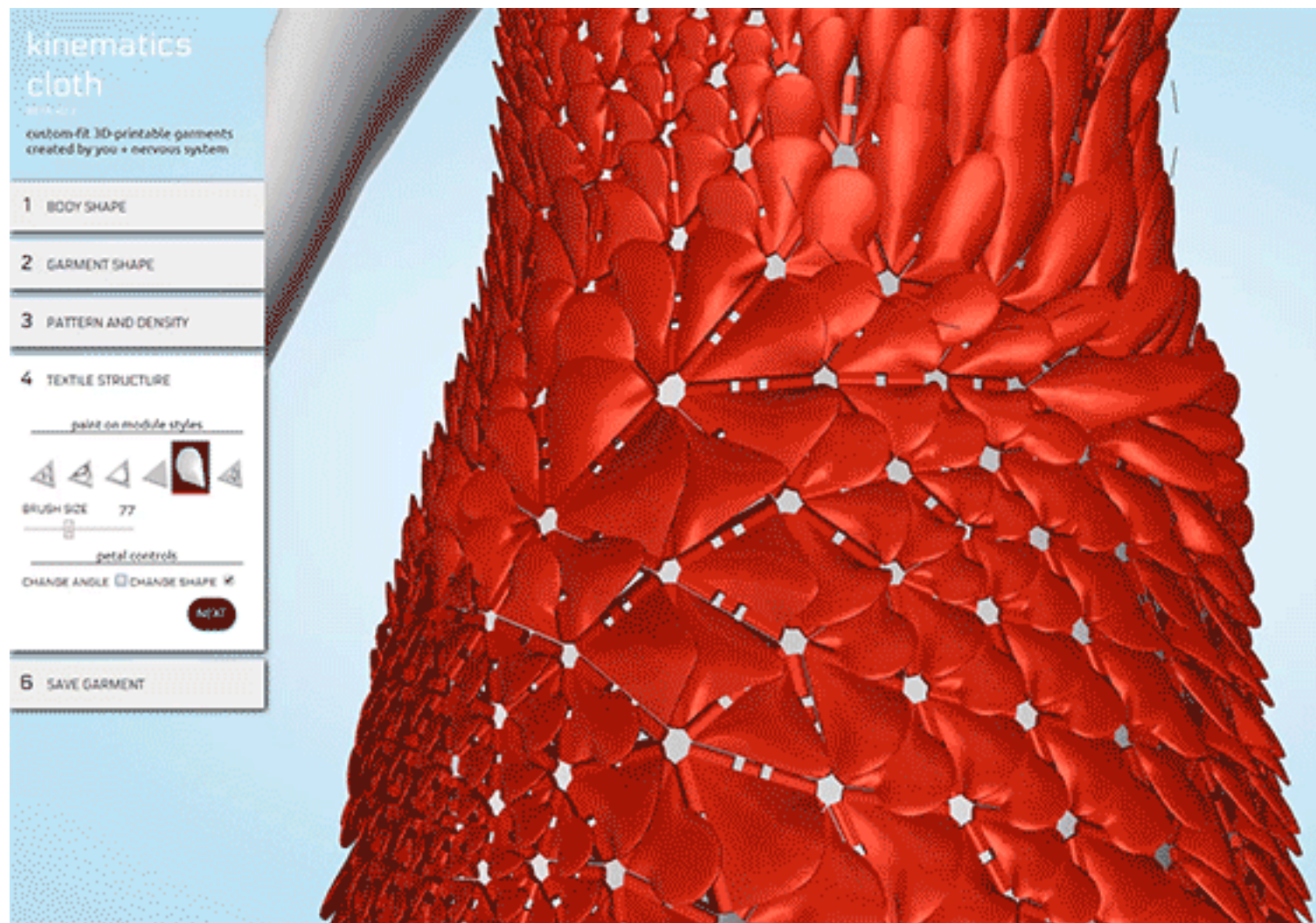
SAVE

kinematics

Nervous System

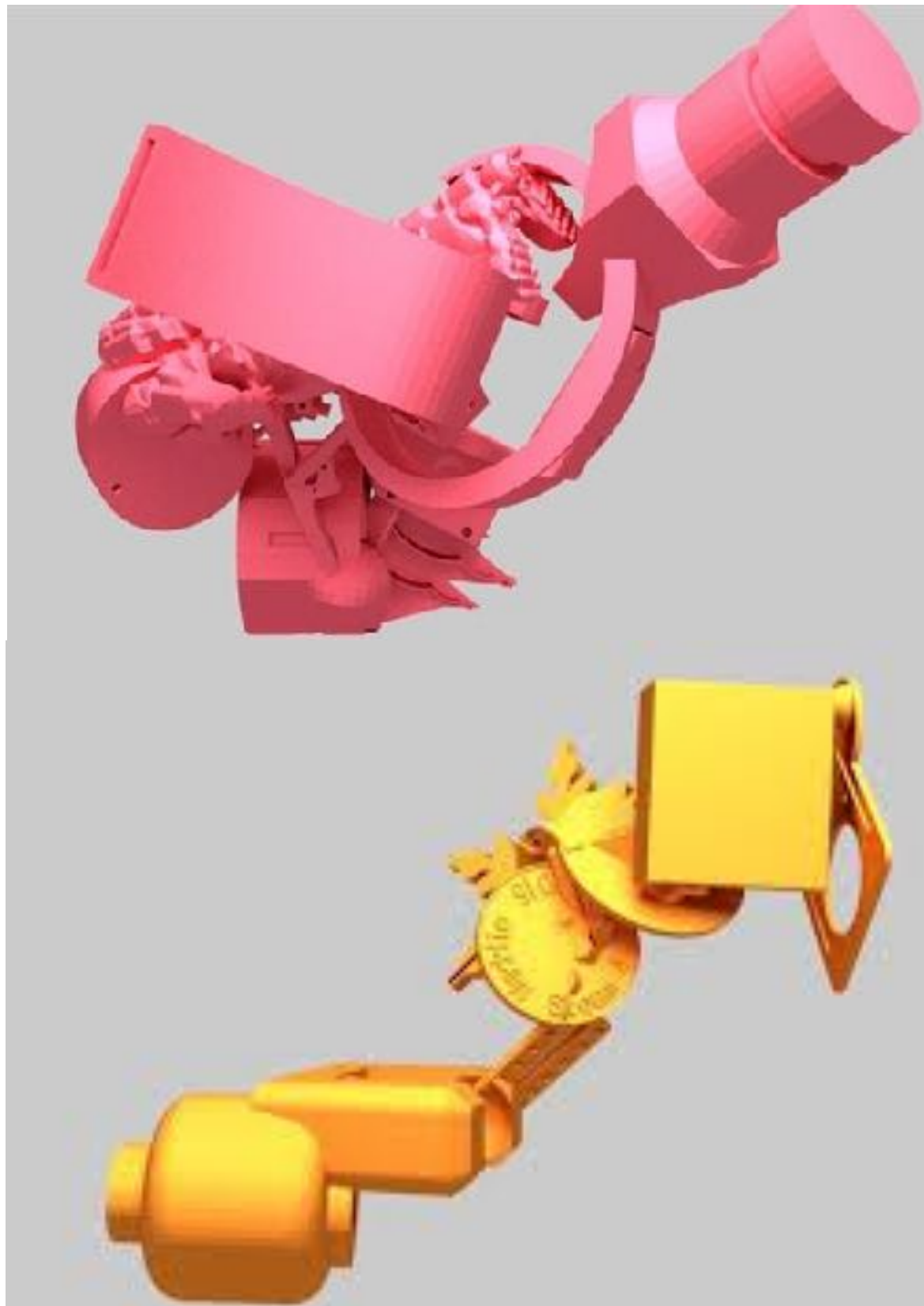
<https://n-e-r-v-o-u-s.com/>

Point-based, parametric,
Voronoi/Delaunay diagrams



Grammars

(things made of things, recursively)



Grammars (things made of things, recursively)

Josh Moore @Prebuiltlothar · Sep 16
Replying to @DUNSONnDRAGGAN
New game
1 1 1 1

DUNSONs & DRAGGANs @DUNSONnDRAGGAN · Sep 16
>NEW GAME
Warehouse of the Textiles
You are a level 1 CEO. You have 3HP. You are in the car park.
1 1 1 1

Josh Moore @Prebuiltlothar · Sep 16
Go south
1 1 1 1

DUNSONs & DRAGGANs @DUNSONnDRAGGAN · Sep 16
>GO SOUTH.
You are in the Bedroom department.
There is a FARLIG here. It is attempting to eat a frying pan.
2 1 1 1

Josh Moore @Prebuiltlothar · Sep 16
Inventory
1 1 1 1

DUNSONs & DRAGGANs @DUNSONnDRAGGAN · Sep 16
>INVENTORY
You are carrying:
beech helm
an unassembled KULLAR
an unassembled HÄRÖ
1 1 1 1

Josh Moore @Prebuiltlothar · Sep 16
Attack FARLIG
1 1 1 1

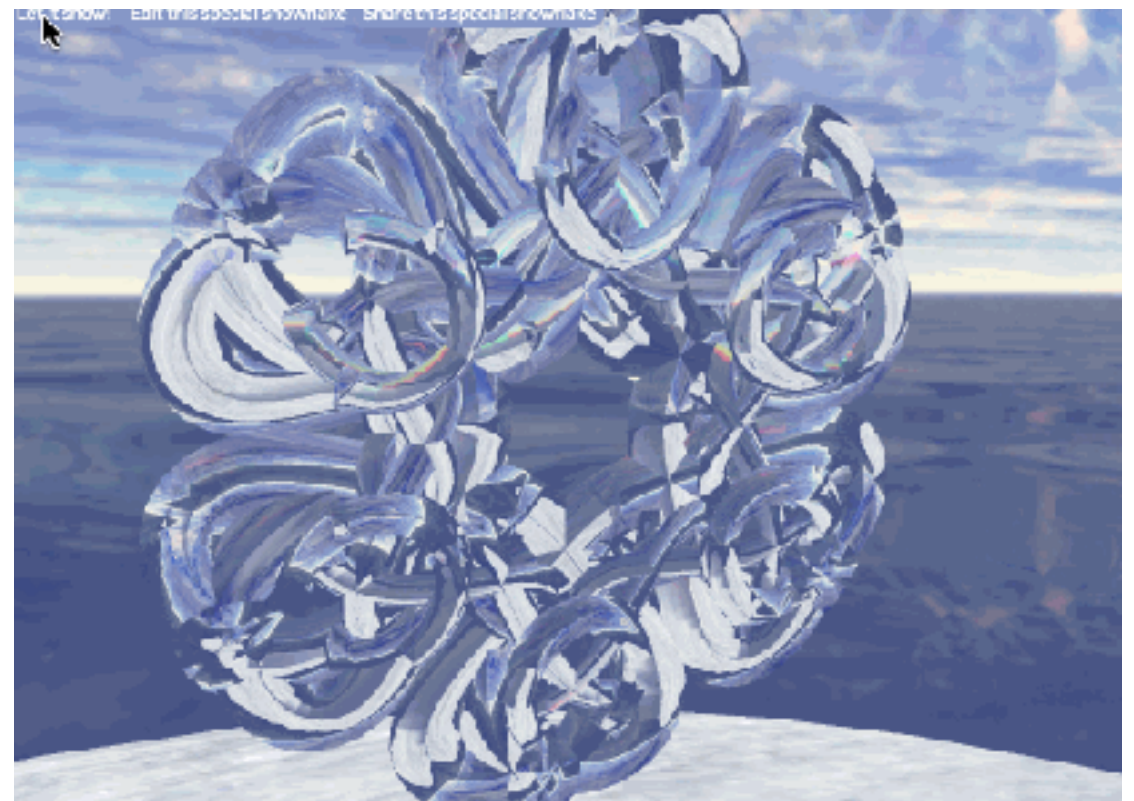
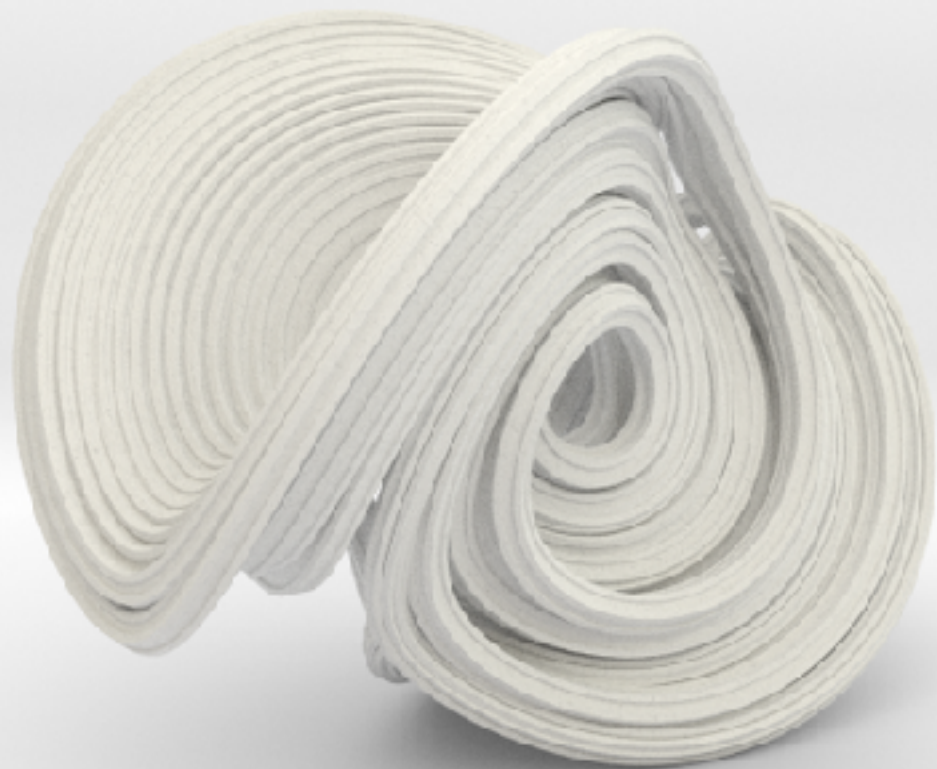
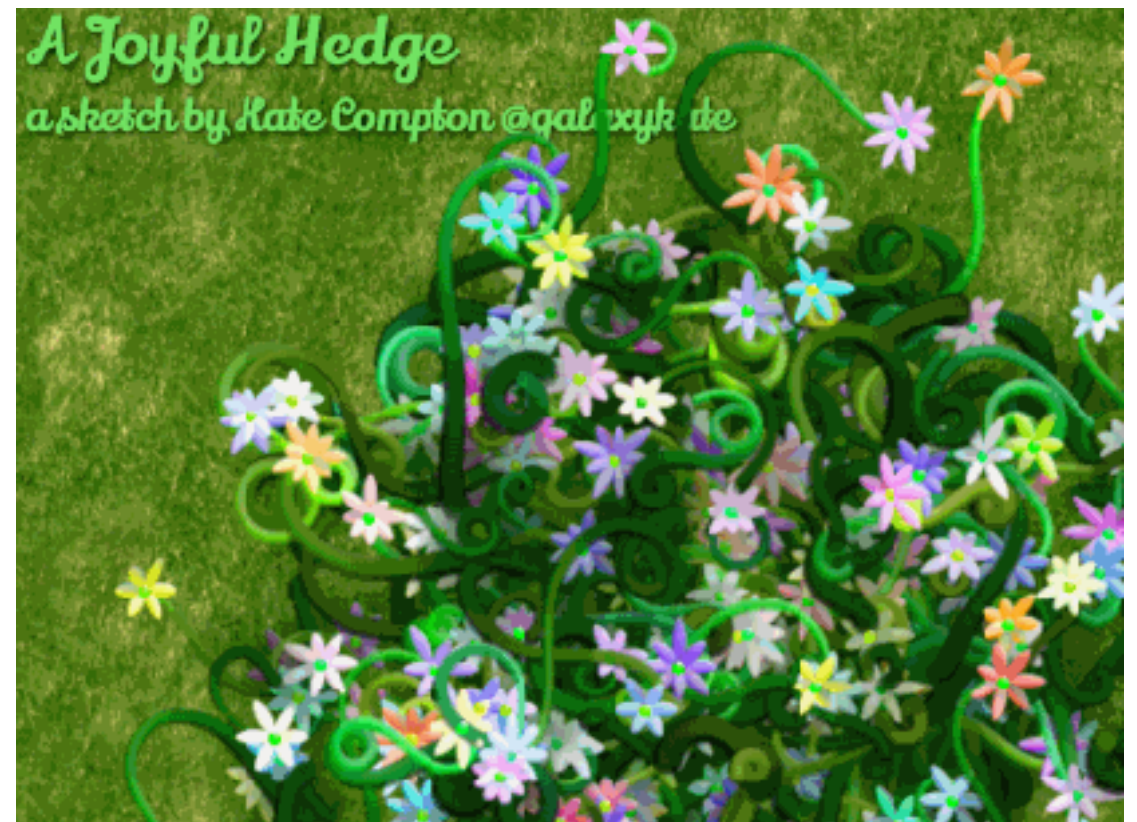
DUNSONs & DRAGGANs @DUNSONnDRAGGAN · Sep 16
>ATTACK
The creature dodges and you miss! It retaliates and veneer damage. Phew!
1 1 1 1



tracery.io

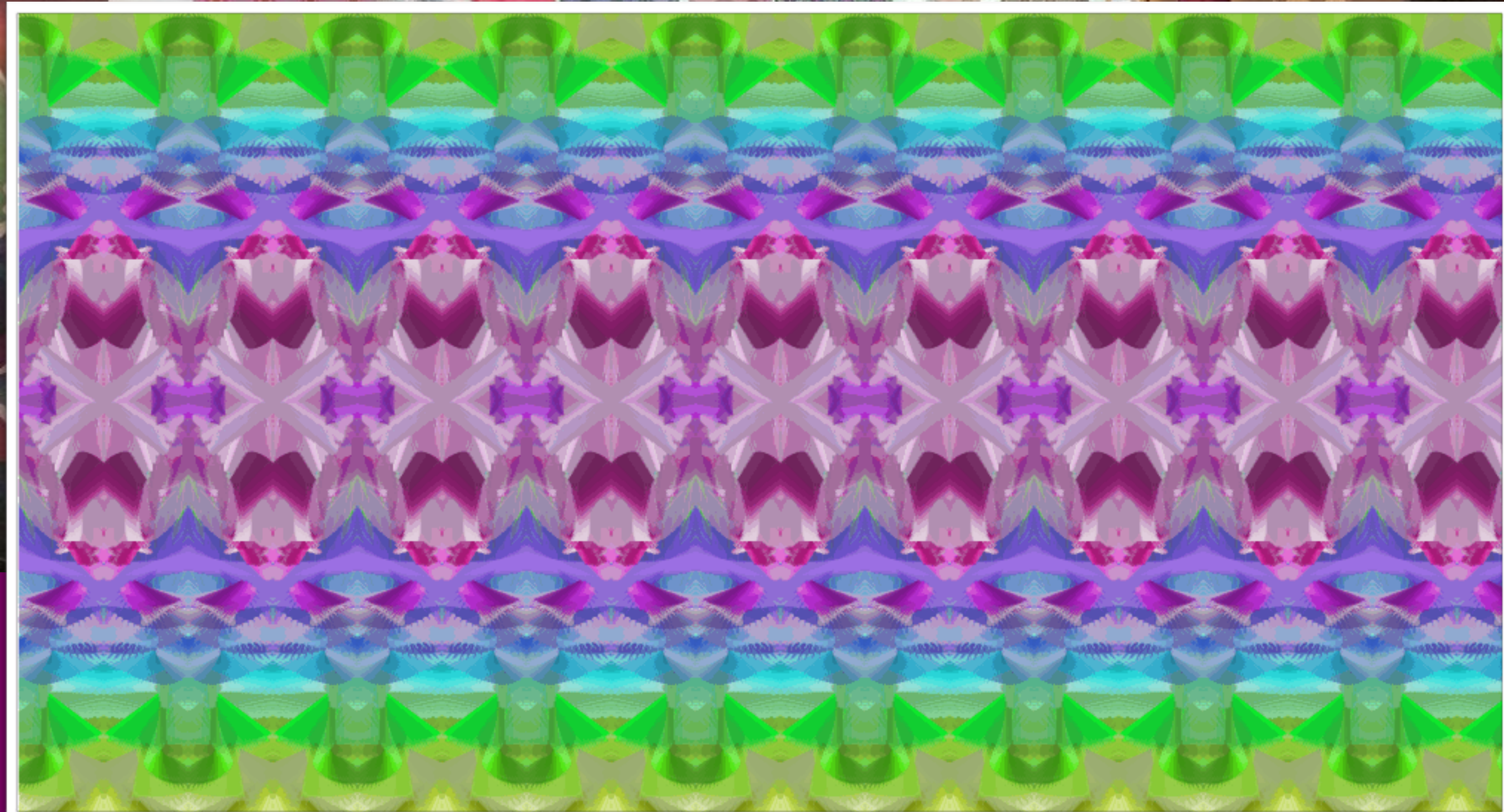


Particles



Strange attractors

Solidly Mathematical
By [taylorgibson](#) on Shapeways

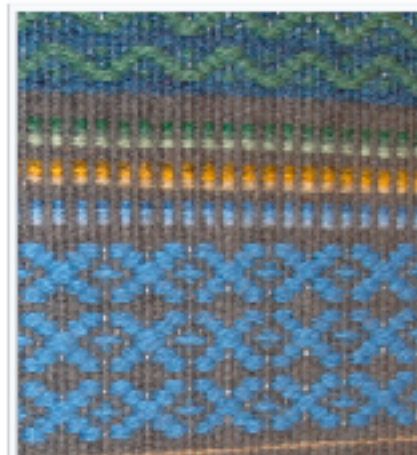




Rosengång [redigera | redigera wikitext]

Rosengång är en **kyperteknik** inom allmogevävnad som används i **mattor** och **bordsdukar** samt **ranor/vepor**. Rosengång kan antingen vävas **liksidigt** med **mönster och löst liggande trådar** på **båda sidor** ("lös rosengång"), eller **oliksidigt**, med **tydligt mönstrad och ripsartad rätsida** och **löst liggande trådar** på **baksidan** ("**bunden rosengång**" eller "gubbaväv"). Vanligast är att väva den i en **vävstol** med **tre** eller (oftare) **fyra solvskaff** och **sex trampor** (fyra **trampor** till **mönster** och två till **tuskaff**). Även om många olika färger används bildas varje rand av endast två sorters garn. Rosengång förekommer över hela Sverige och är den teknik inom allmogevävnad som har minst **ortsprägel**. Vanligast är **yllegarn** på **linnevarp**, men även **bomullsgarn** förekommer, till **exempel** i **förklädesväv**.^[1]

Hampkrus är samma slags rosengång, men fick sin **benämning** av att **hampa** användes som **mönsterinslag**.

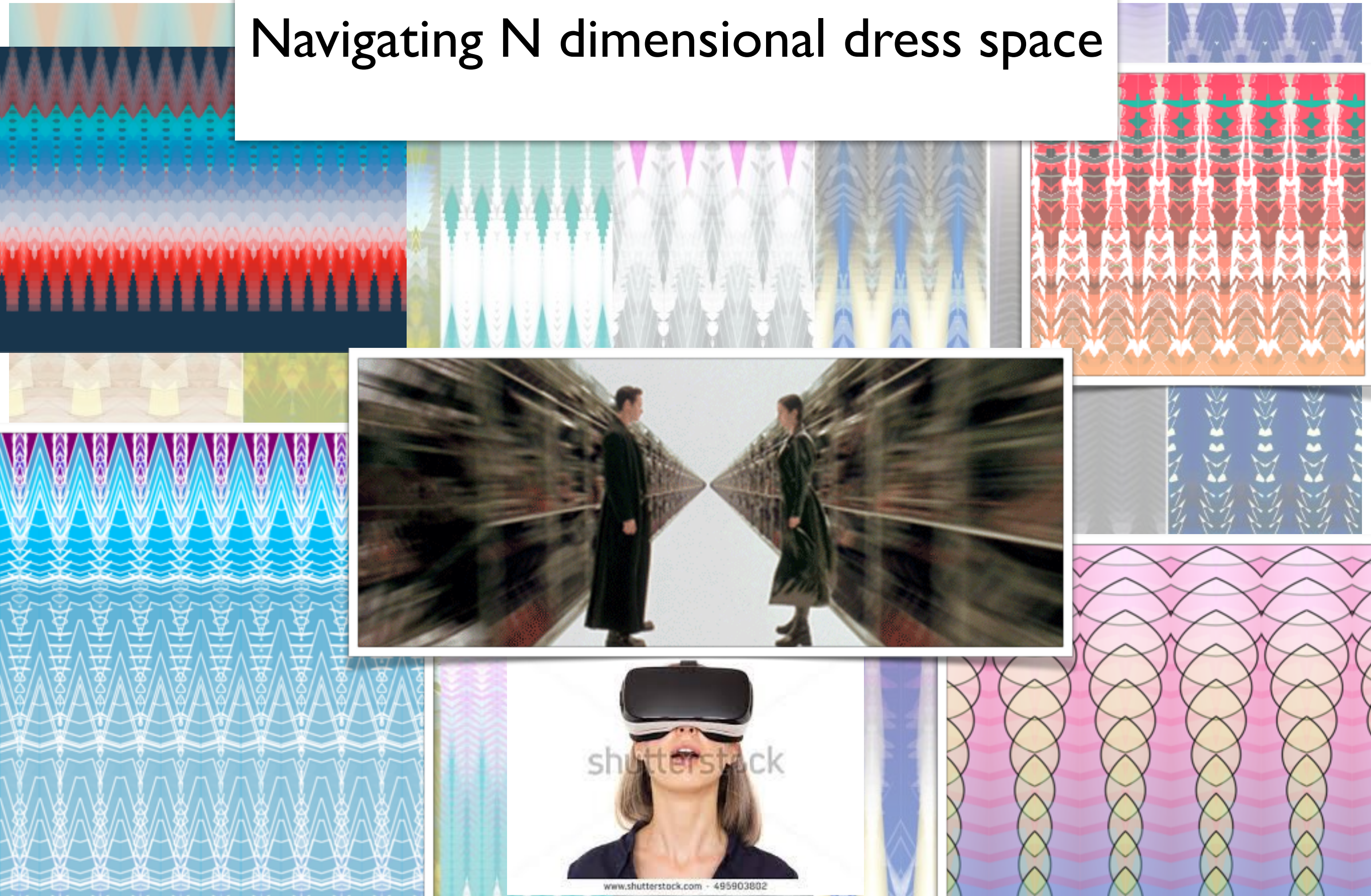


What does the future look like?



Goals:

Navigating N dimensional dress space



What does the future look like?



resources

Glitch
Scratch

heckin' yeah, you can do this! yes, you, the poets. talk to me if you're scared, but we really need poets in AI

Tracery + CheapBotsDone Quick

tracery.io

tracery.io/chancery (soon!)

cheapbotsdonequick.com

cheapbotstootsweet.com/ (Mastodon!)

ContextFreeArt

www.contextfreeart.org/

Processing

(in JS and Java flavors)

Coding Train (videos)

Nature of Code (books)

Grasshopper+Rhino

Fabrication

Thingiverse

Shapeways

Ponoko

Spoonflower

PrintAllOverMe, Society6

“Why Love Generative Art?”

Explorable Explanations

My stuff, resources, projects, advice, etc
@galaxykate, galaxykate.com

