Gorillas, beer bottles, Lego and a museum guide that makes stuff up.

**Pete Bennett**

**www.peteinfo.com**

background

tangible / play :

#1 gorilla game lab

#2 interactive beer bottles

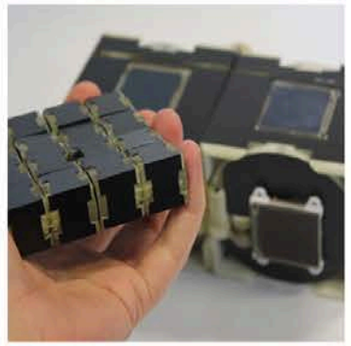
ambiguity:

#3 instructiblocks

#4 post-truth guide

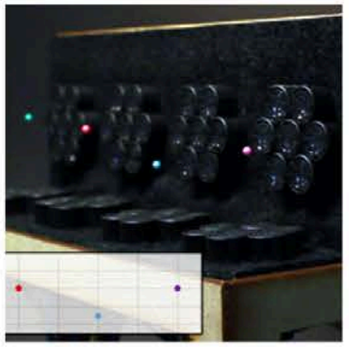
2017

CrITIcaL
2016



Cubimorph
2016

EMPress
2016



Floating charts
2016

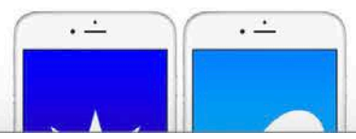
Free Form Displays
2016

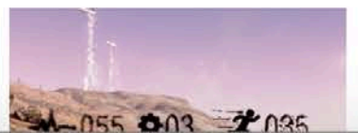
GauntLev
2016

Pet Sounds
2016

Physi

PhysiCAD
2016





**Bristol Interaction Group** - www.biglab.co.uk
University of Bristol, Computer Science Department

background

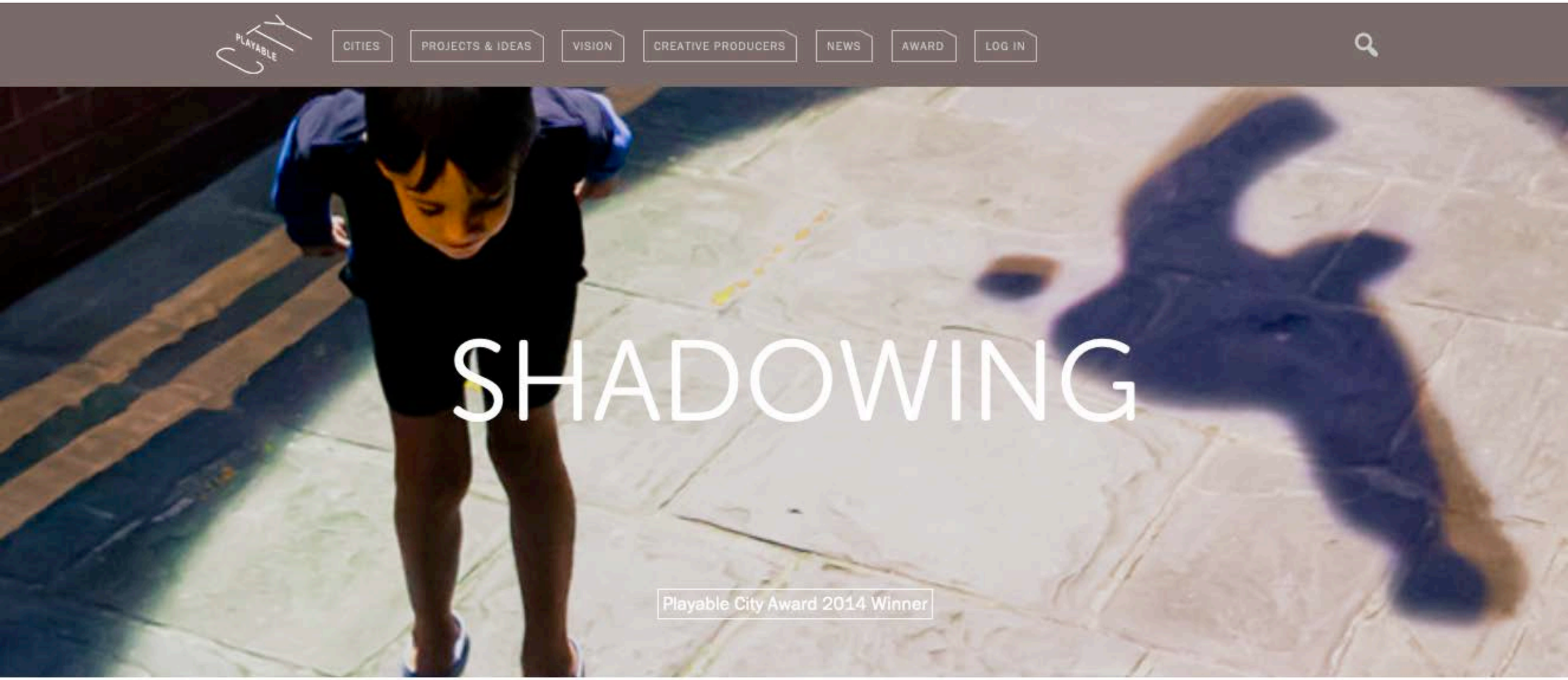
GauntLev: A Wearable for Manipulating Levitated Objects

background

SensaBubble: A Chrono-Sensory Mid-Air Display of Sight and Smell

background

Pervasive
Media Studio




SHADOWING GIVES MEMORY TO CITY LIGHTS, ENABLING THEM TO RECORD AND PLAY BACK THE SHADOWS OF THOSE WHO PASSED UNDERNEATH

**Pervasive Media Studio** - www.watershed.co.uk/studio

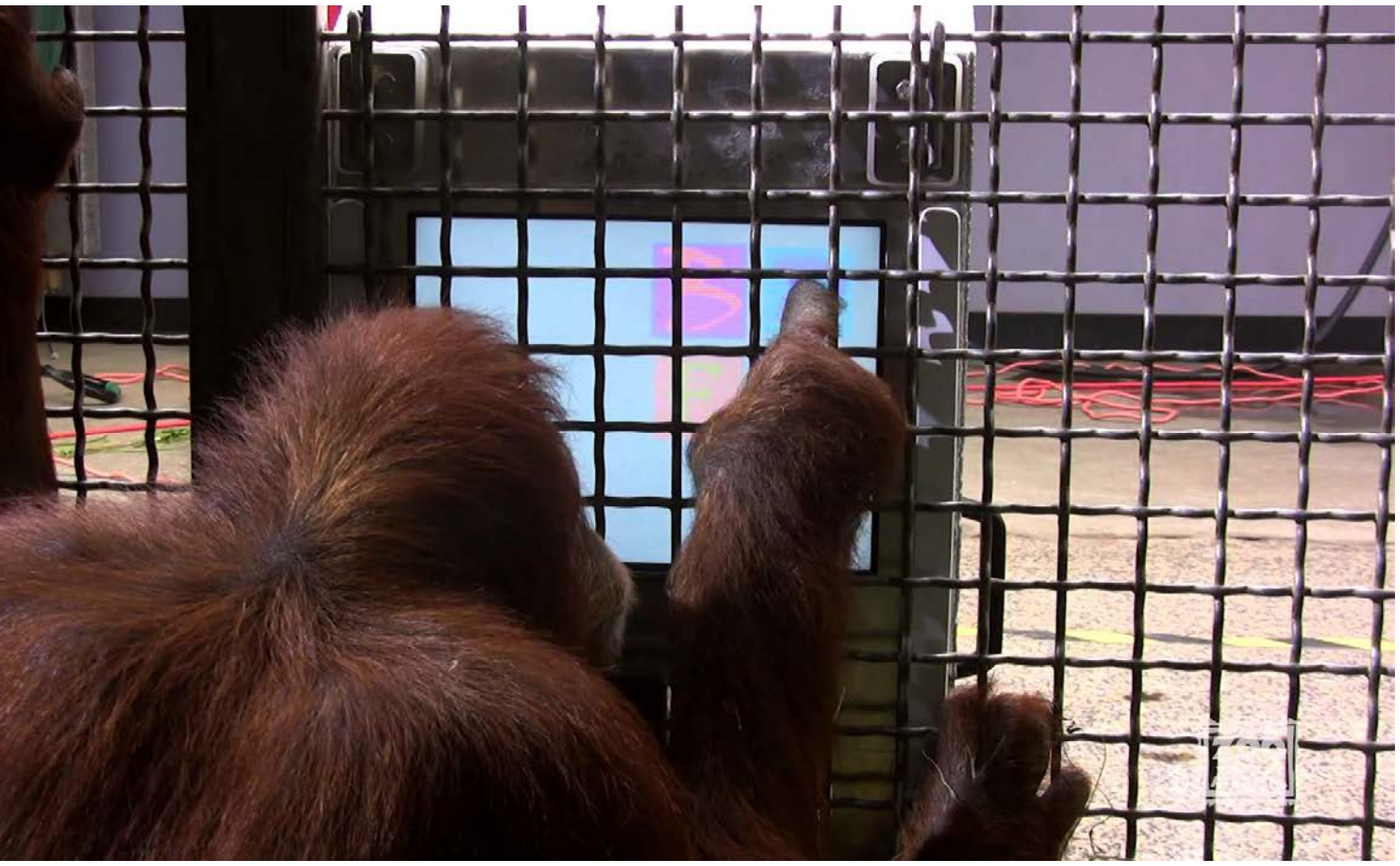
background

#1

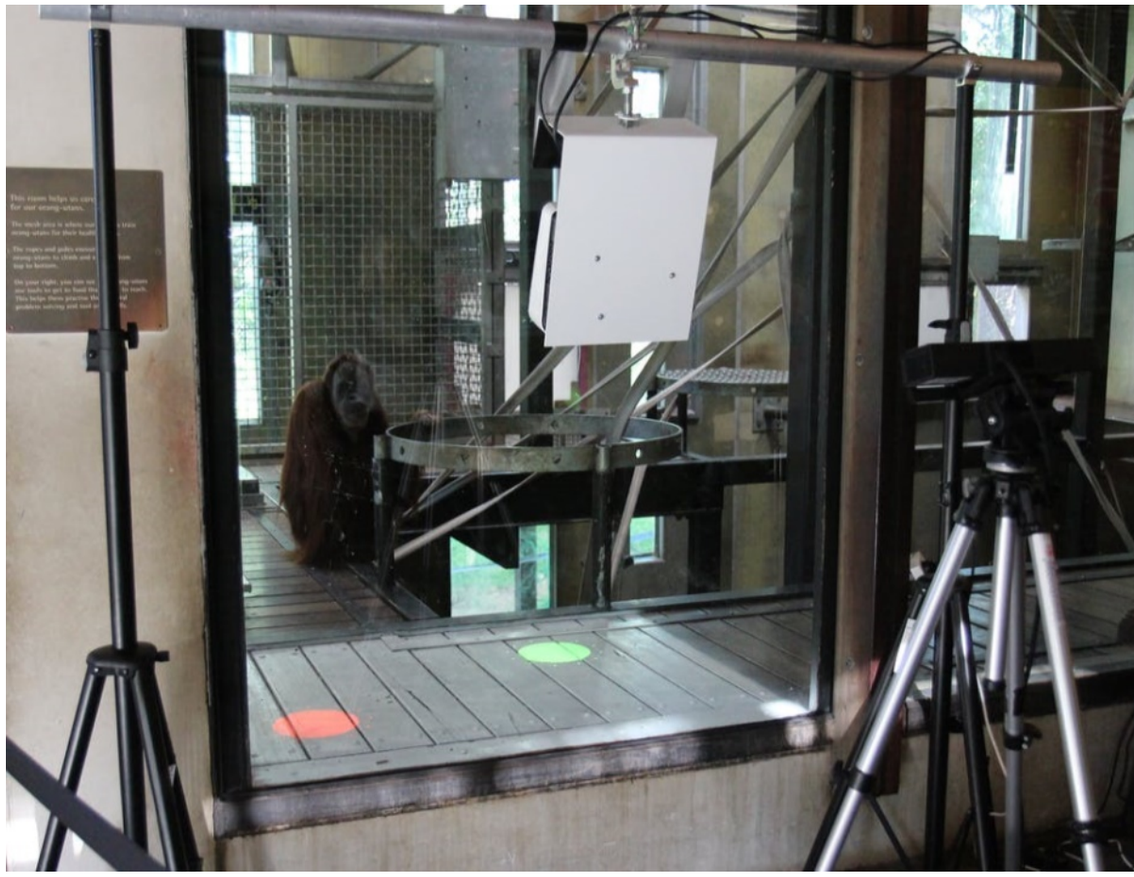
# gorilla game lab

… how can you design games for gorillas?

# gorilla game lab



Atlanta Zoo

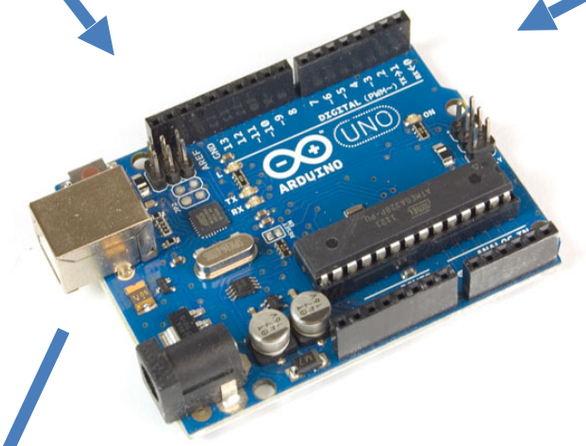


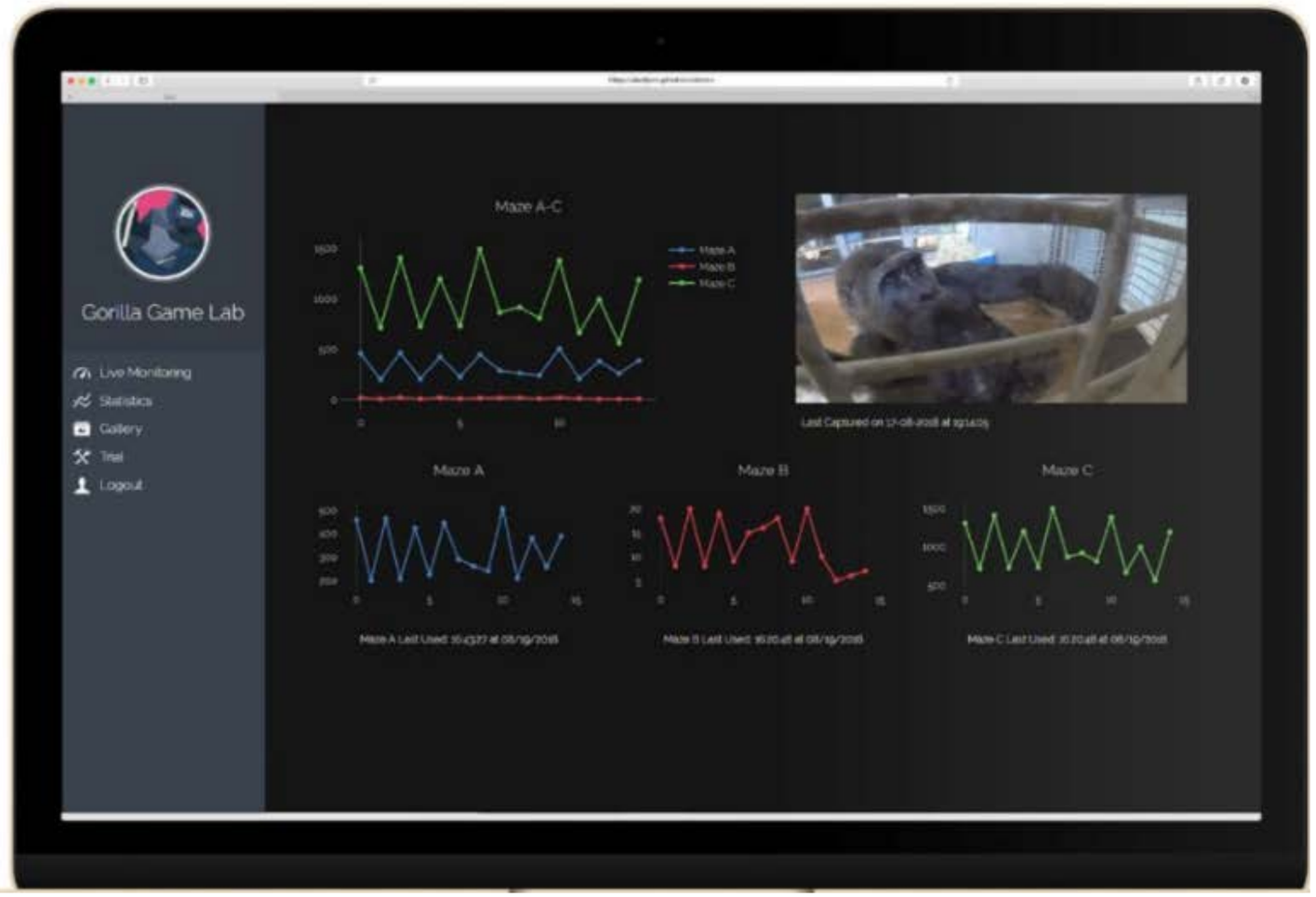
Melbourne Zoo

# gorilla game lab

# gorilla game lab

# gorilla game lab






# IoT data gathering

# gorilla game lab

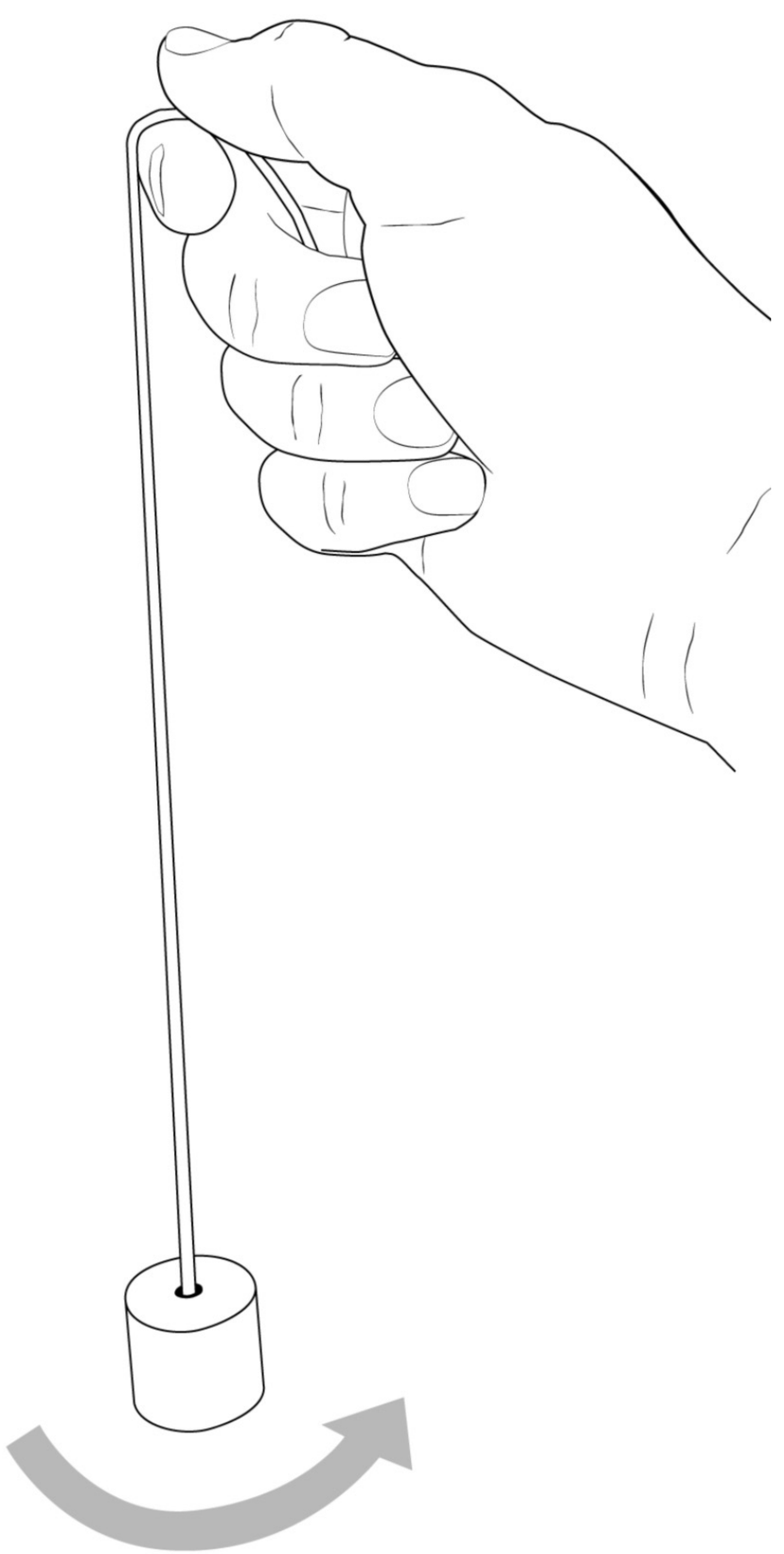
# gorilla game lab

#2

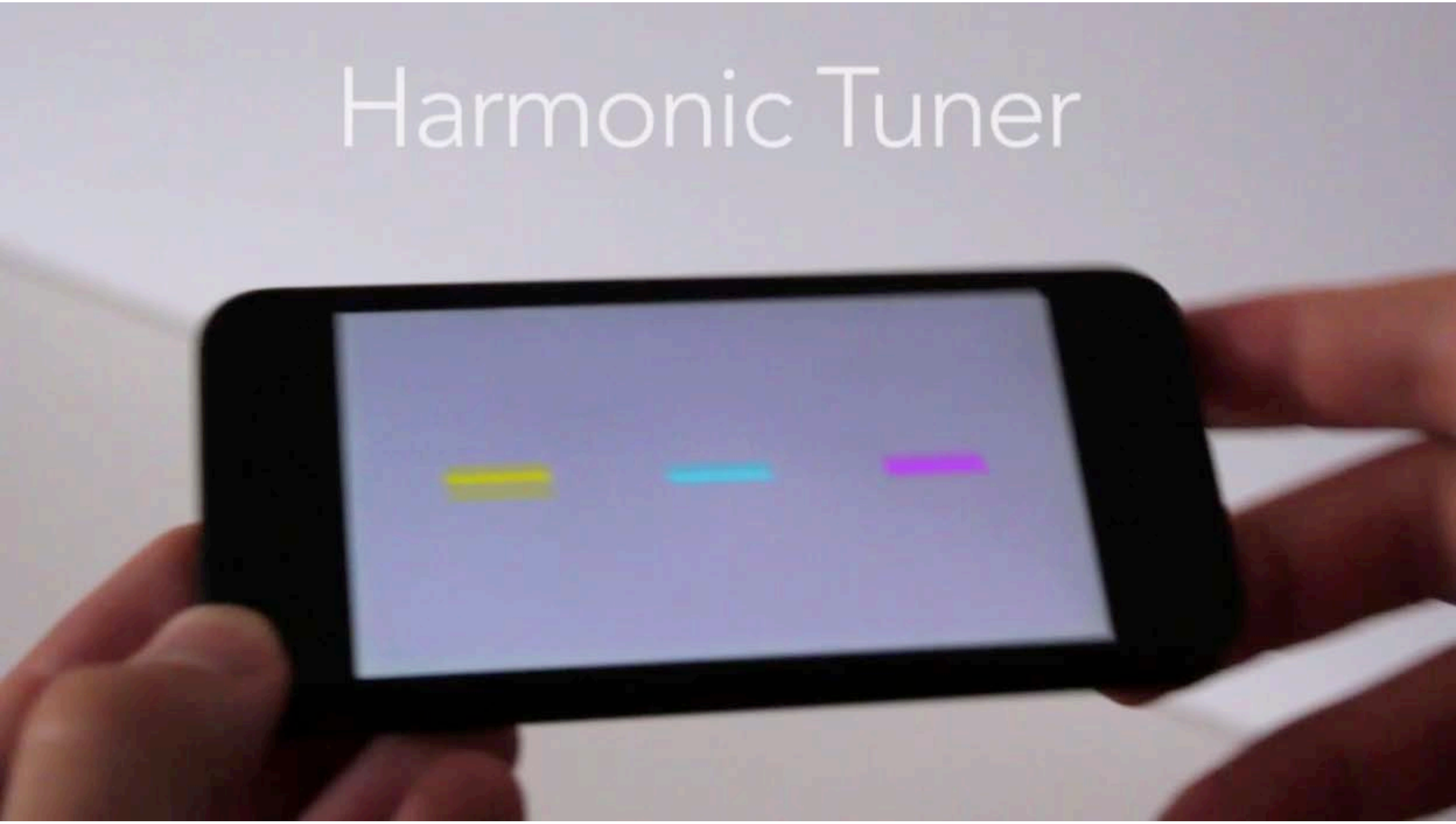
# toot and play

… how did exploring resonance lead to interactive beer bottles?

Stuart Nolan…
technology for magic
+ ideomotor response



toot and play




toot and play

# resogami with Coco Sato

# Audible Resonant Interaction

toot and play

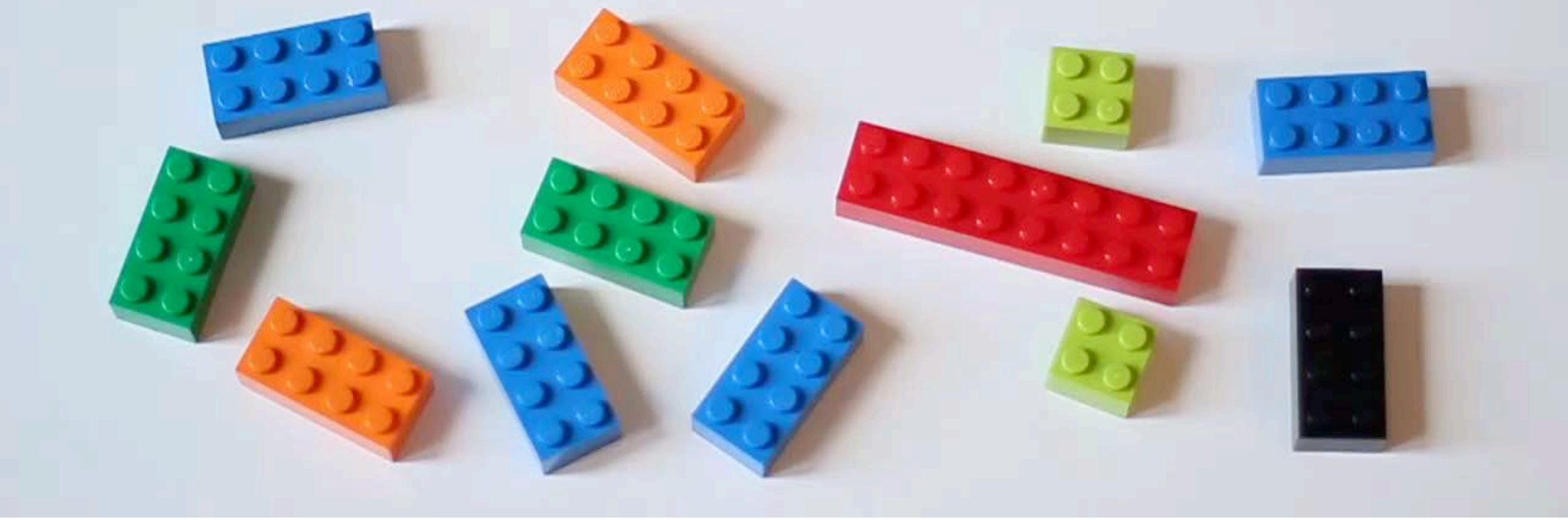
tootman
interactive
ginger beer
hydrotoot
PROTEIN SHAKE
Brigstow
Institute and
Interactive
Playable Bottles
toot & play
shipwrecked

#3

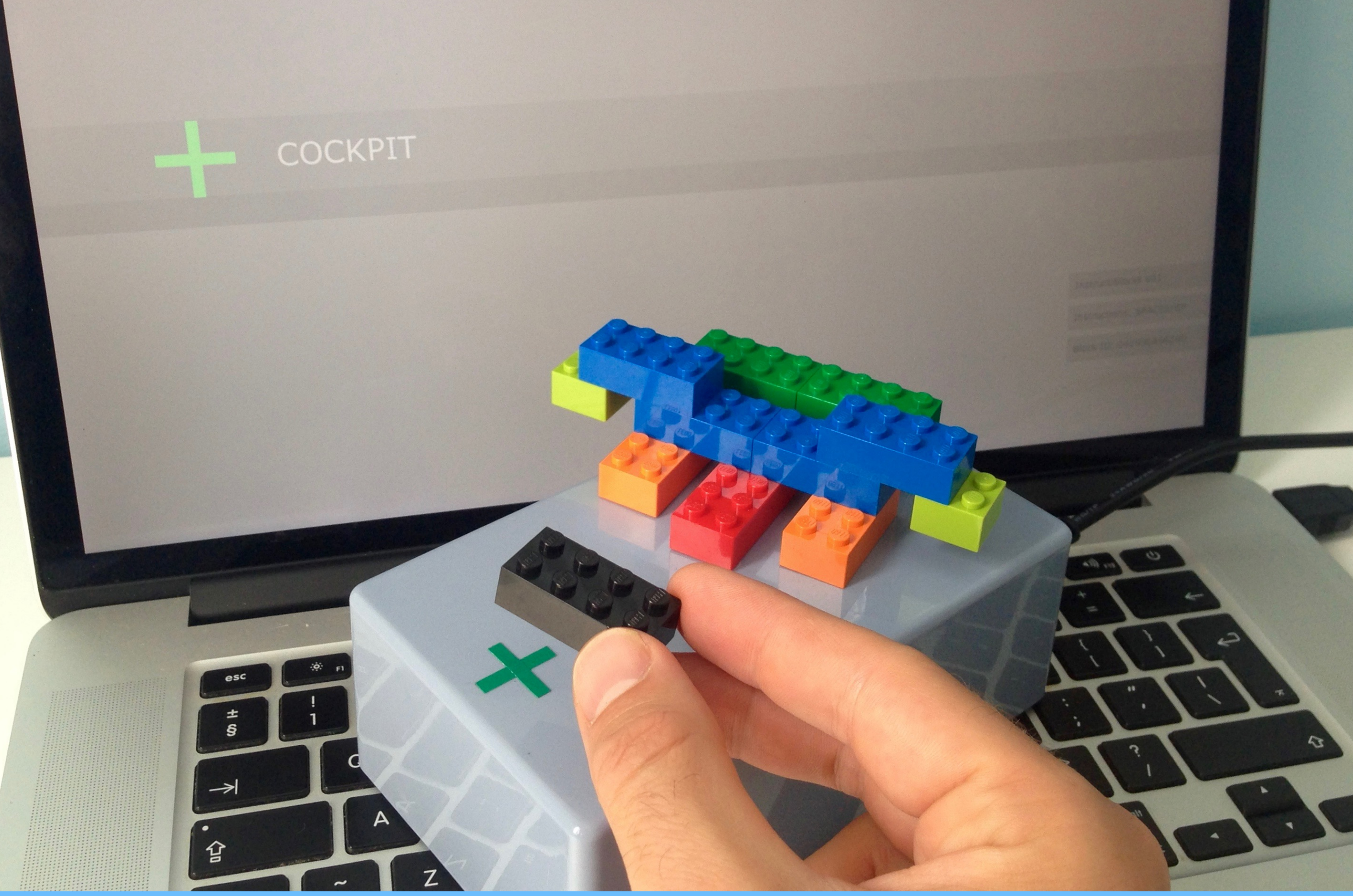
# instructiblocks

… can ambiguity lead to creativity?

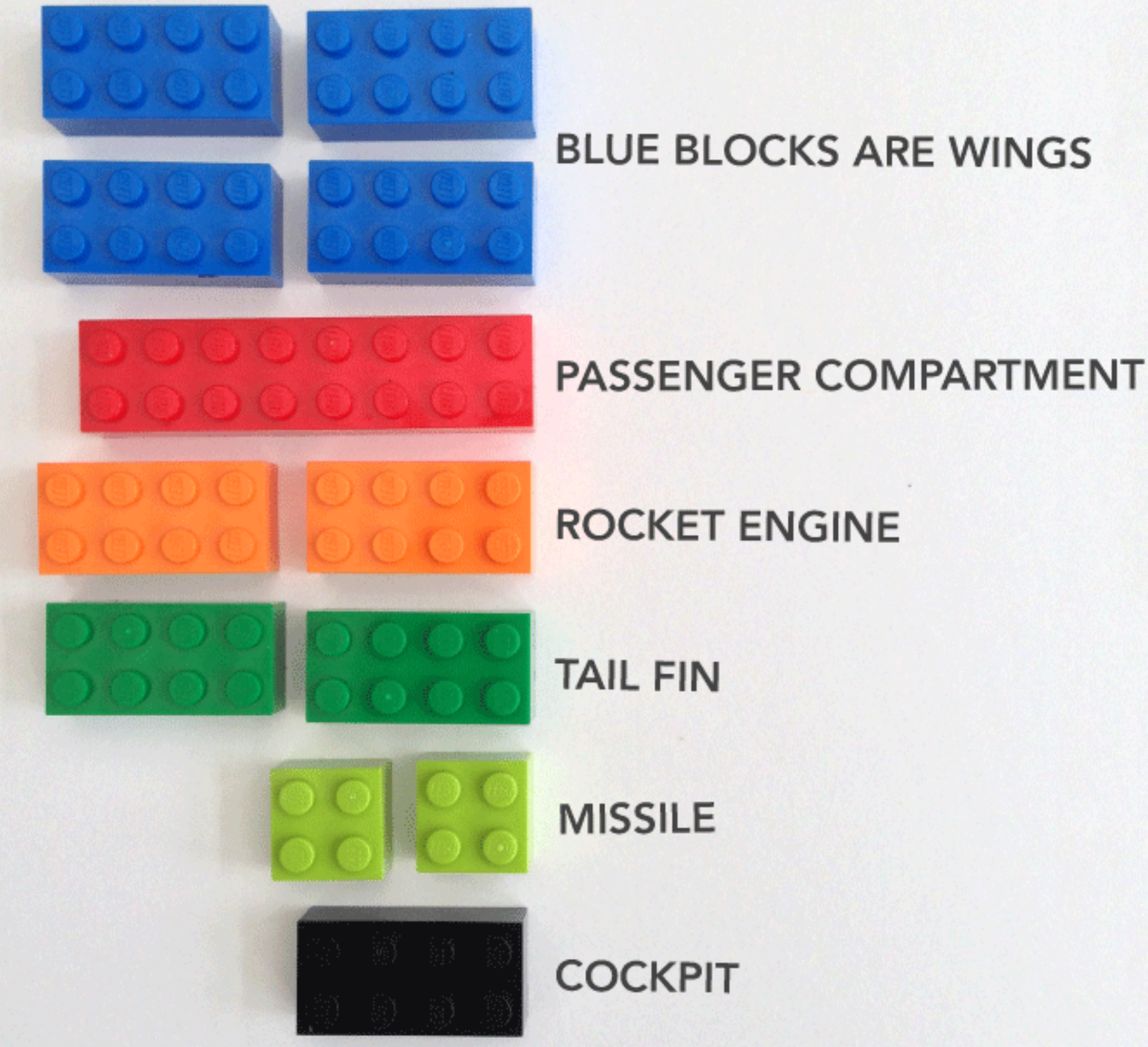
# InstructiBlocks:
## ambiguity in physical digital models



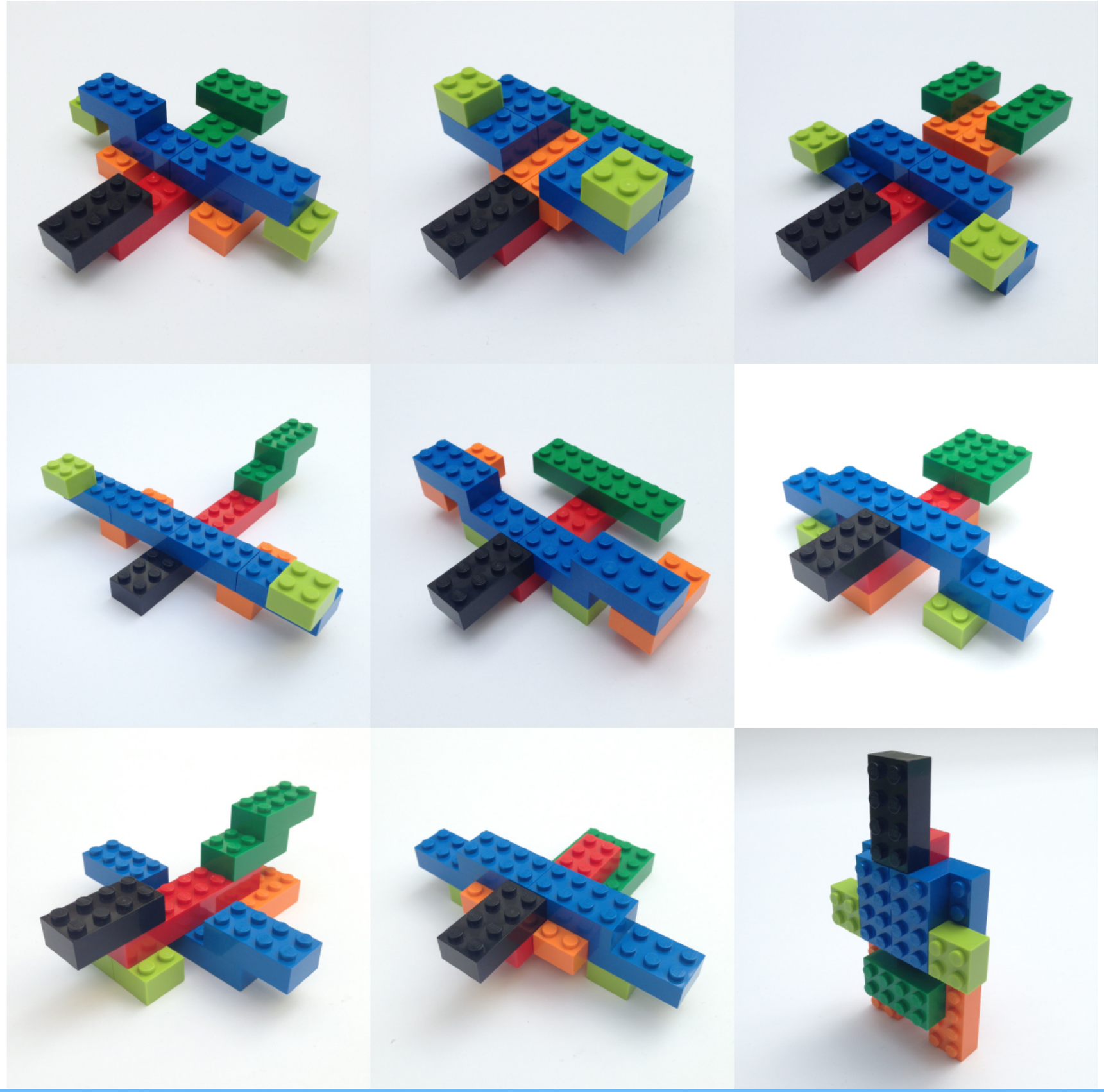
## instructiBlocks: ambiguous instructions




# instructiBlocks: ambiguous instructions




# instructiBlocks: ambiguous instructions



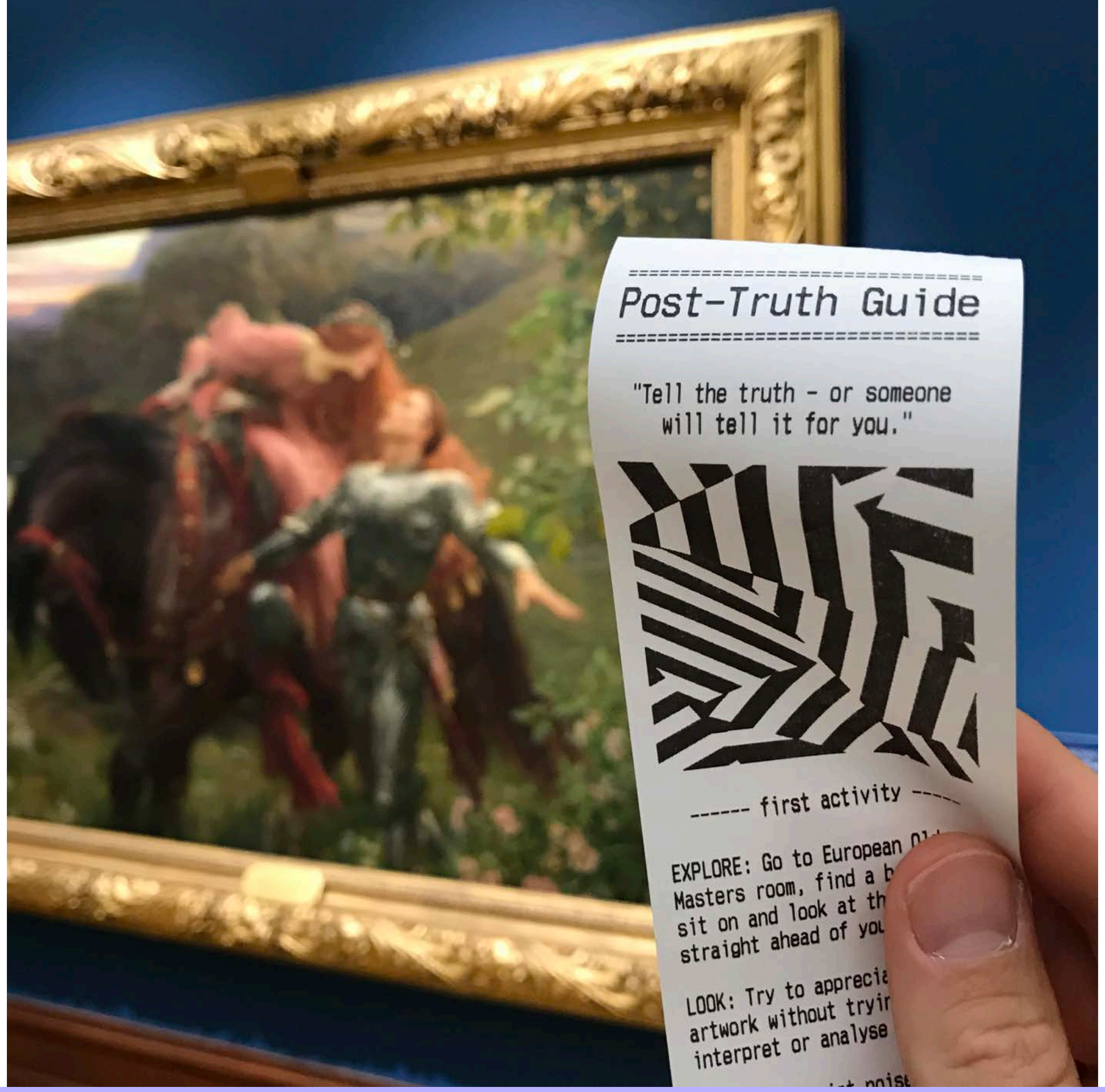
# instructiBlocks: ambiguous instructions

#4

# post-truth guide

… designing an ambiguous museum guide

# post-truth museum guide

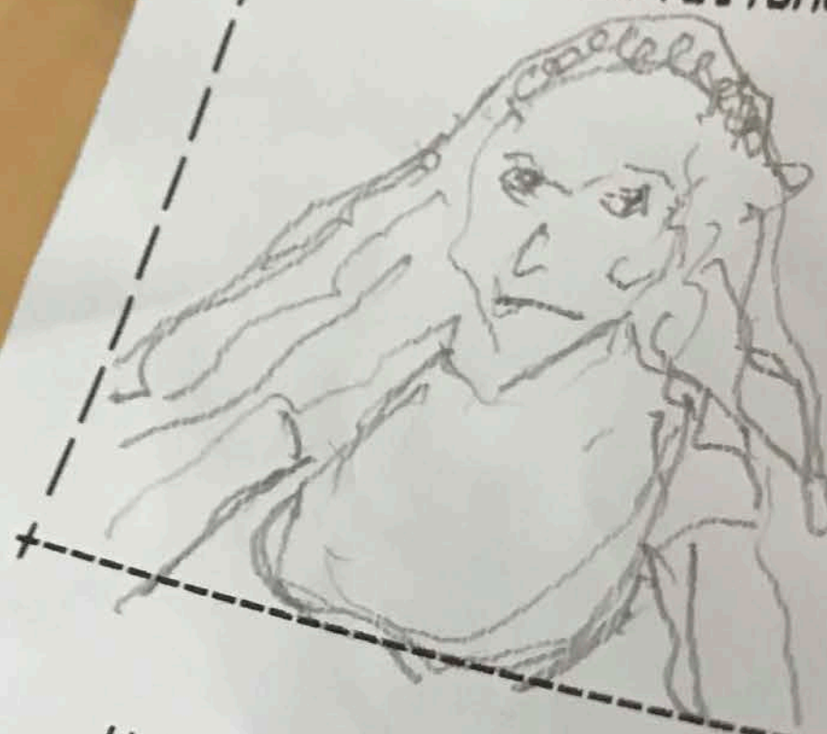



# post-truth museum guide

LOOK: Don't read the interpretation. What do you think the painting is about?

DO: Draw a small picture of the artwork in the observations box below.

observations



www.post-truth.guide
#posttruthguide

Funded by

# post-truth museum guide

# post-truth museum guide

# post-truth museum guide

background

tangible / play :

#1 gorilla game lab

#2 interactive beer bottles

ambiguity:

#3 instructiblocks

#4 post-truth guide

demo your designs!

# new brief:

# Communiqué pt2

brainstorm new ideas

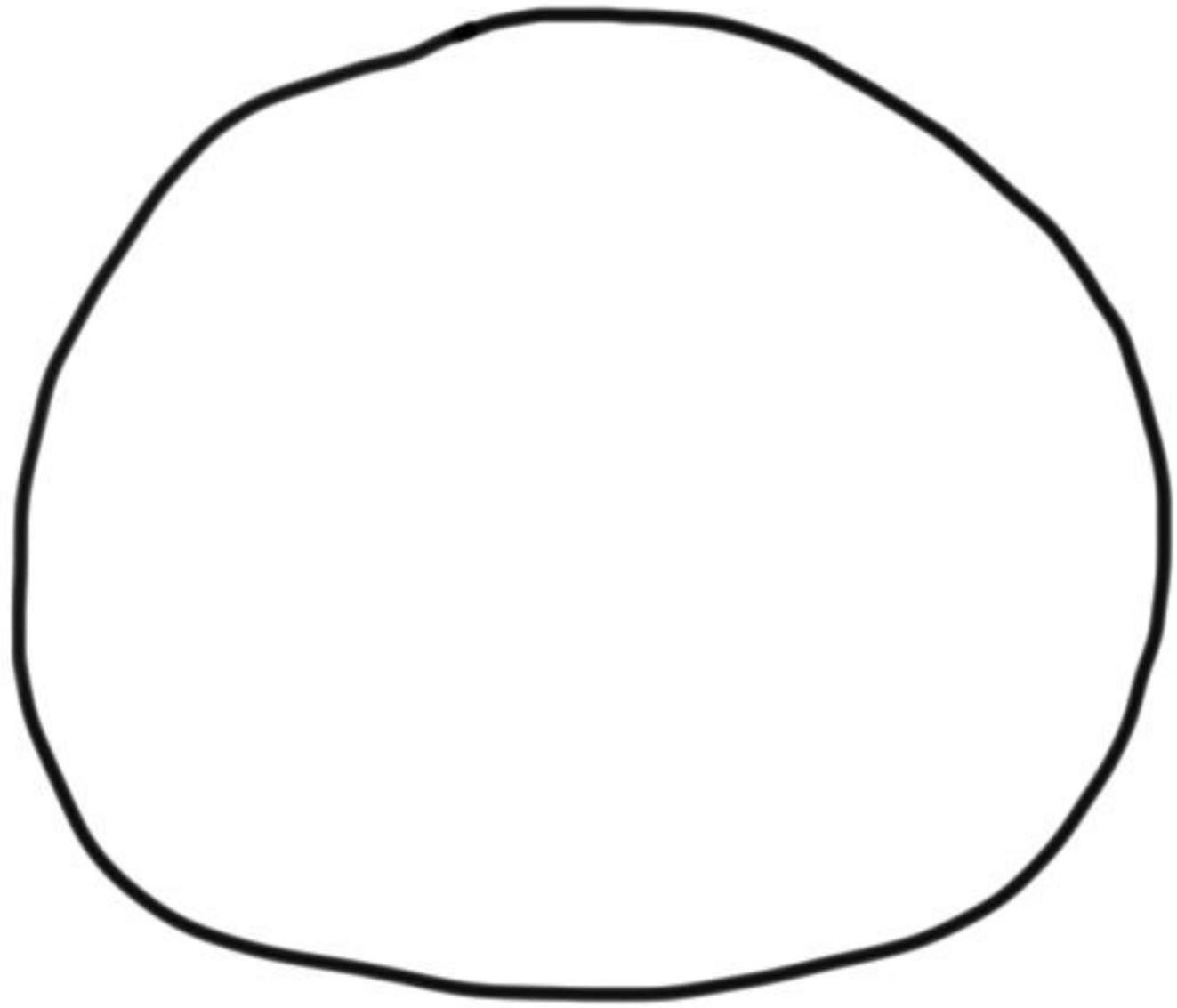
group of 4-5

## IDEO’s seven rules of brainstorming

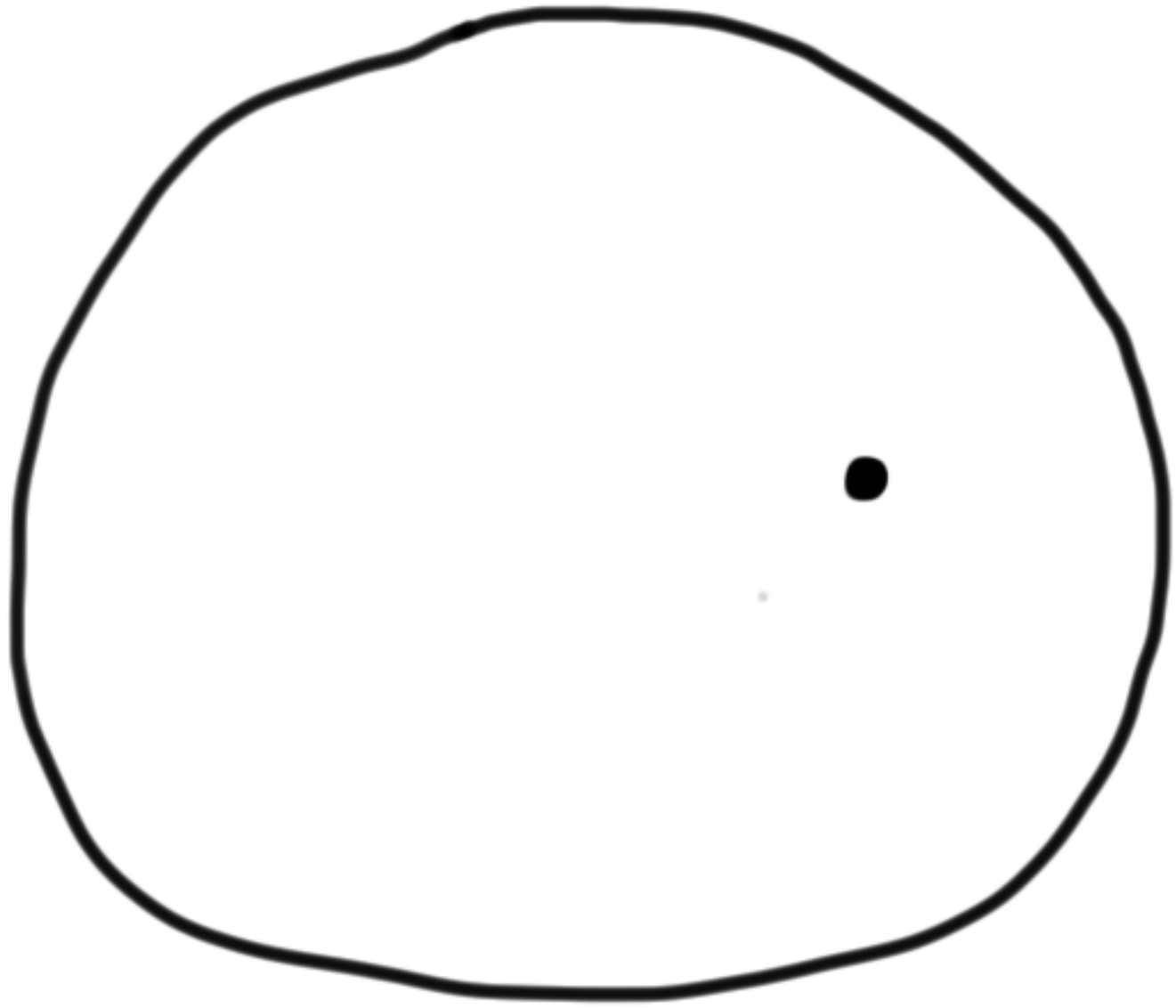
1. Defer judgement
2. Encourage wild ideas
3. Build on the ideas of others
4. Stay focused on the topic
5. One conversation at a time
6. Be visual
7. Go for quantity

categorise ideas

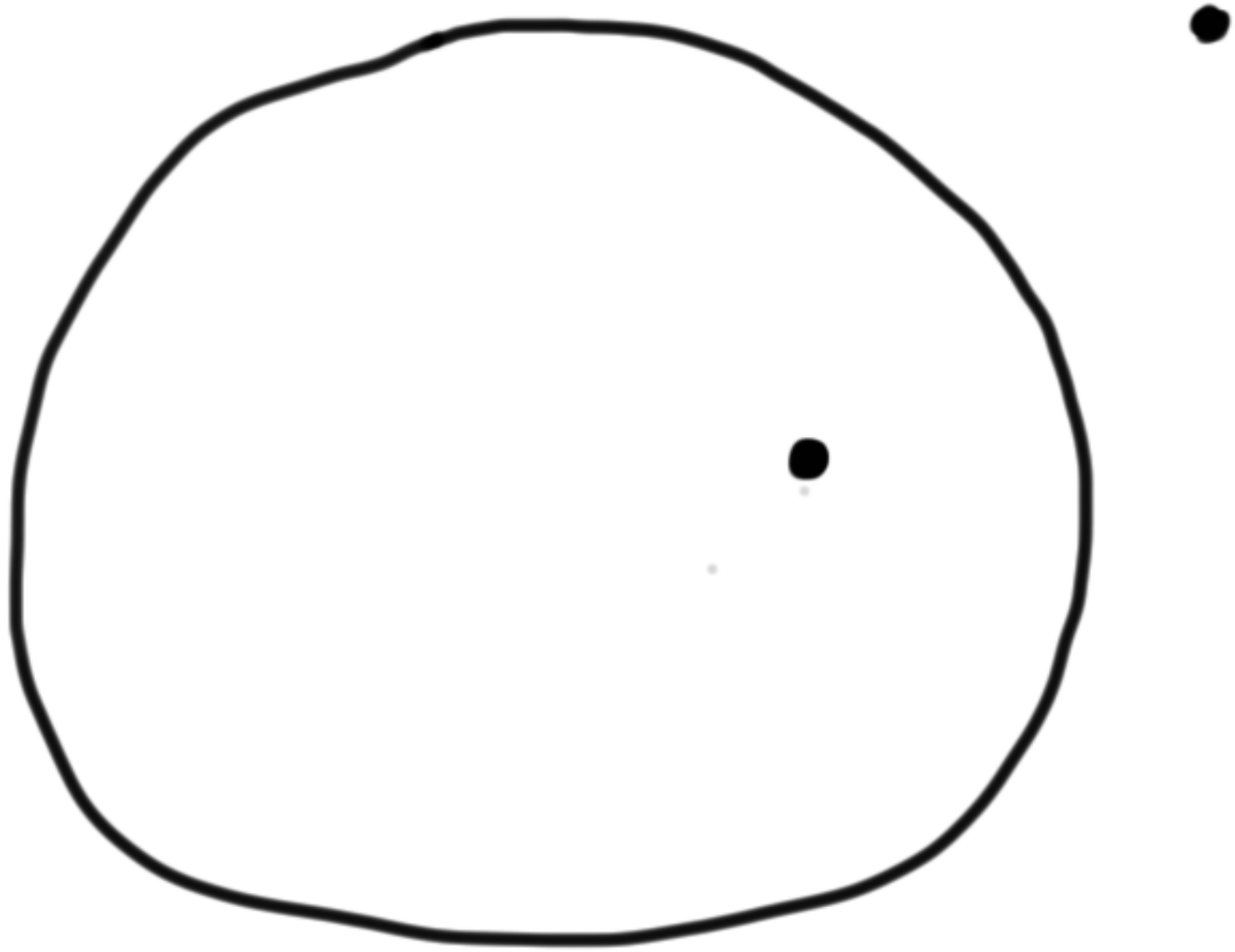
exploring design space



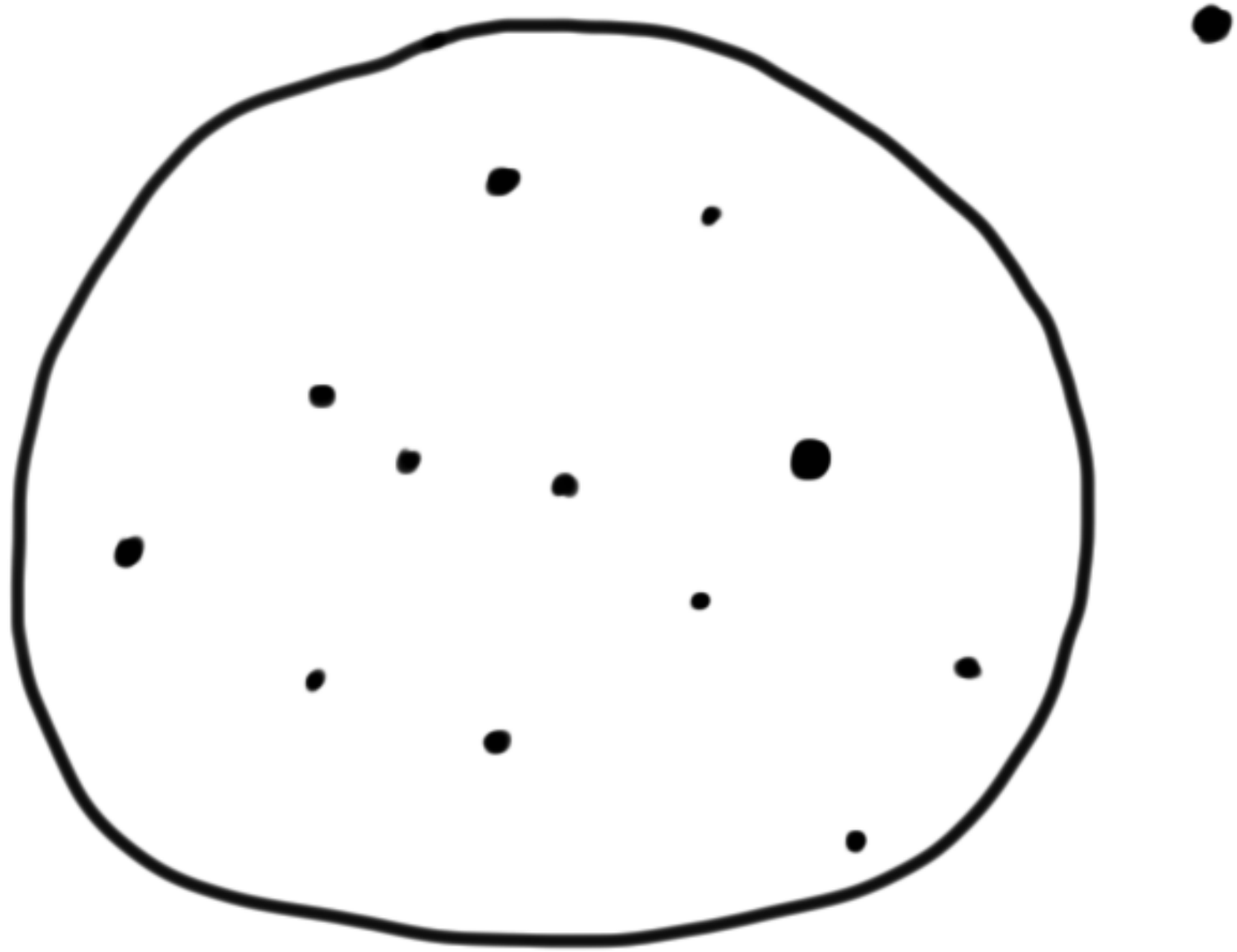
the question – “how to drink tea”



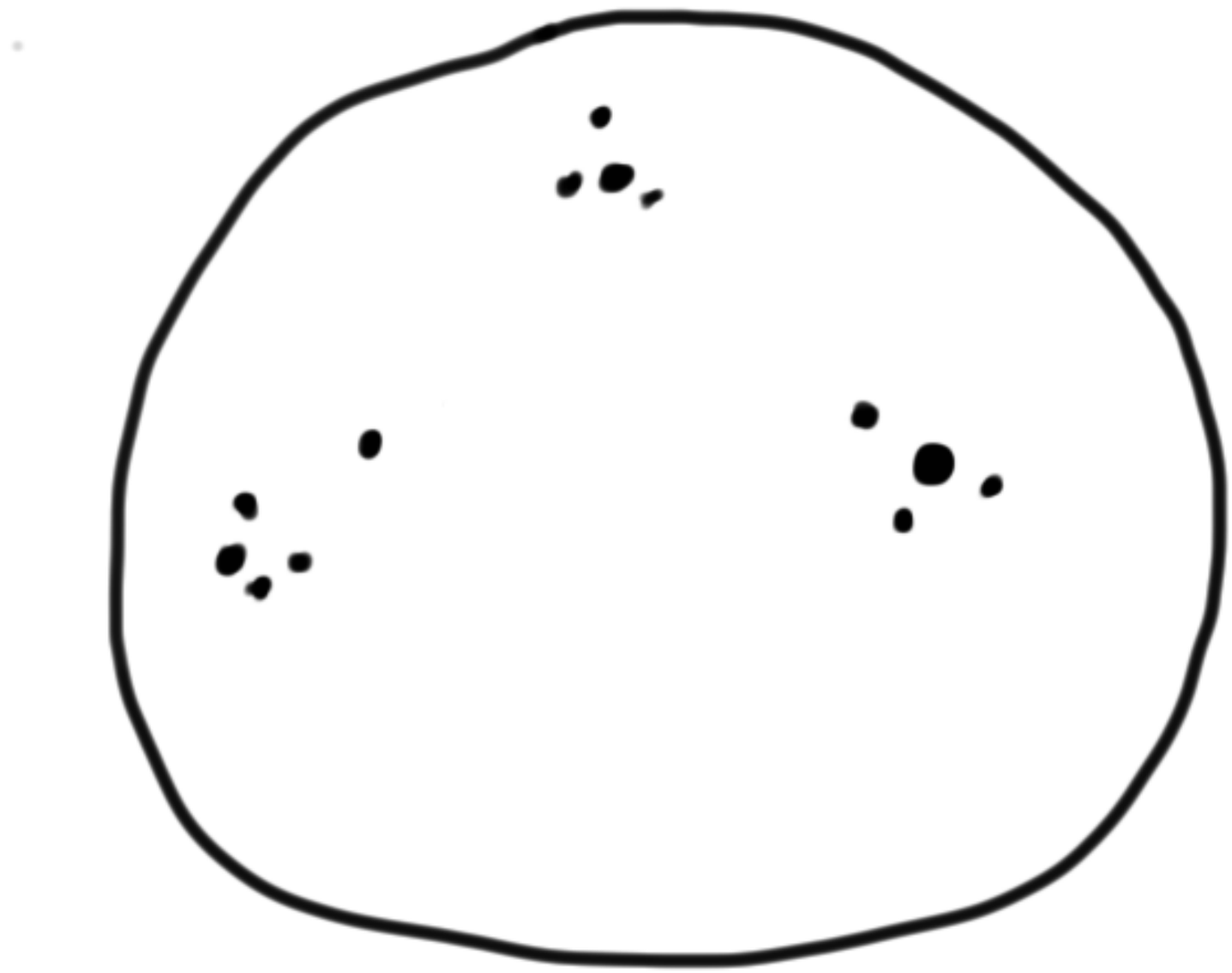
one possible answer to the question



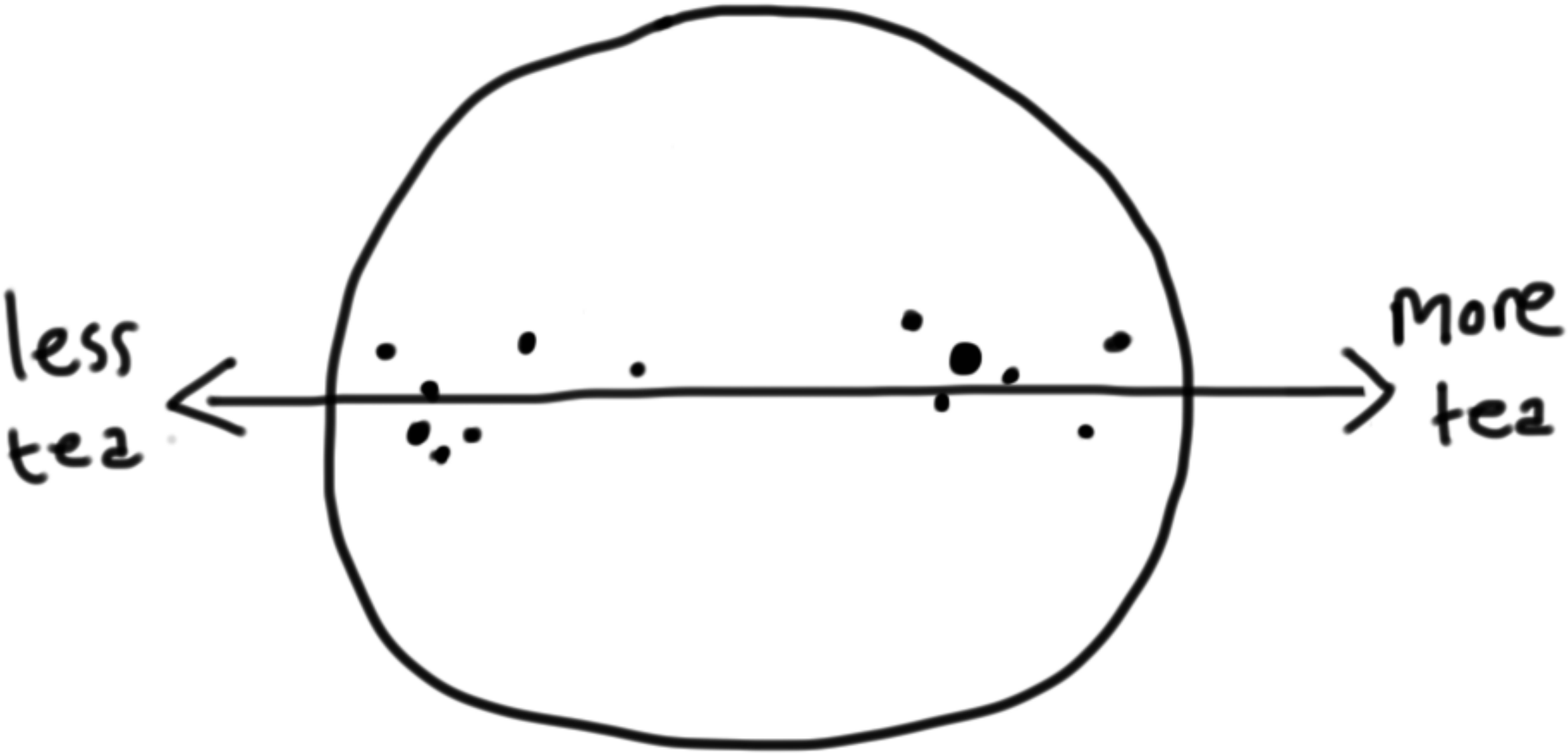
…or not an answer to the question



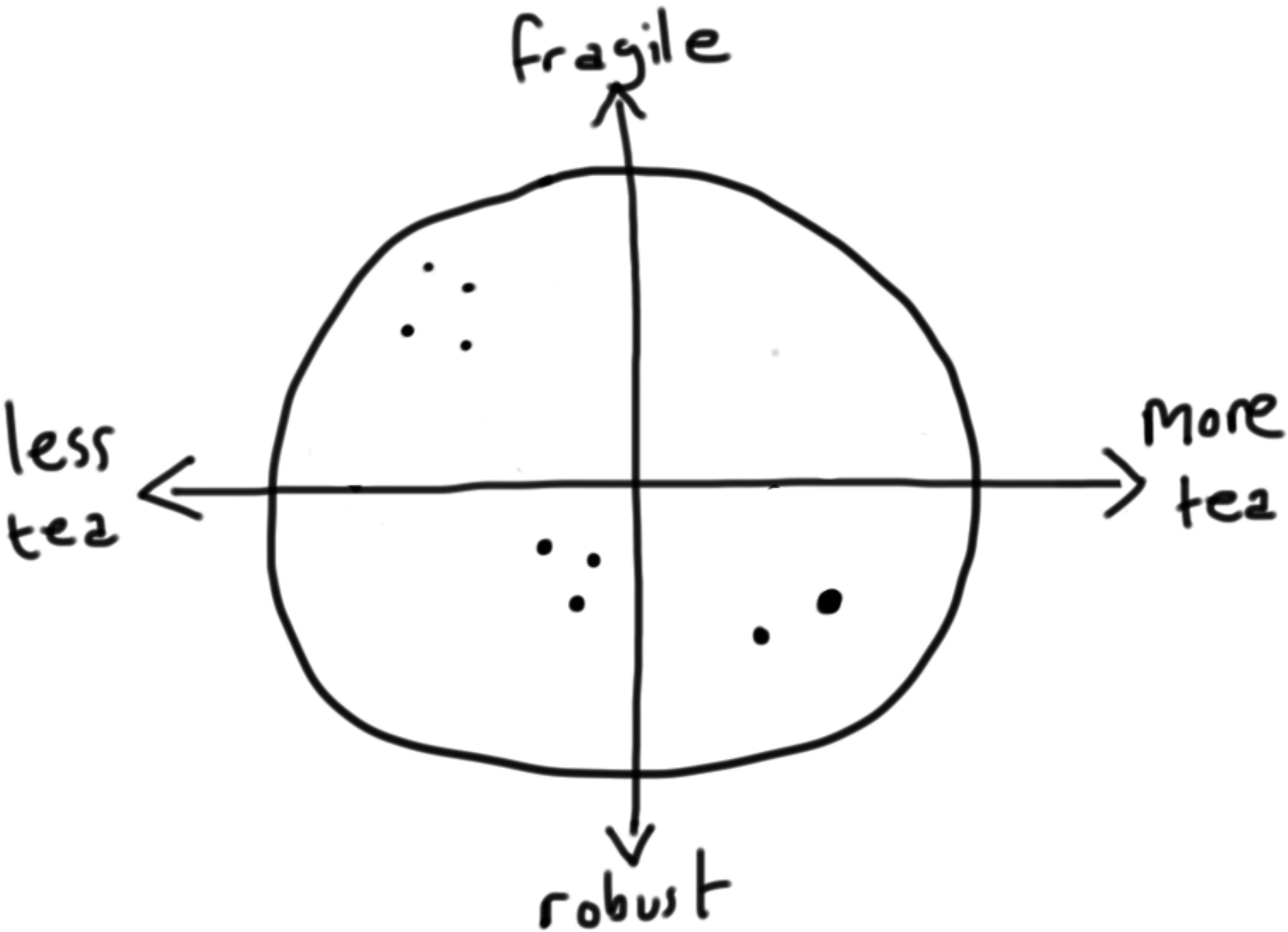
examples of ideas



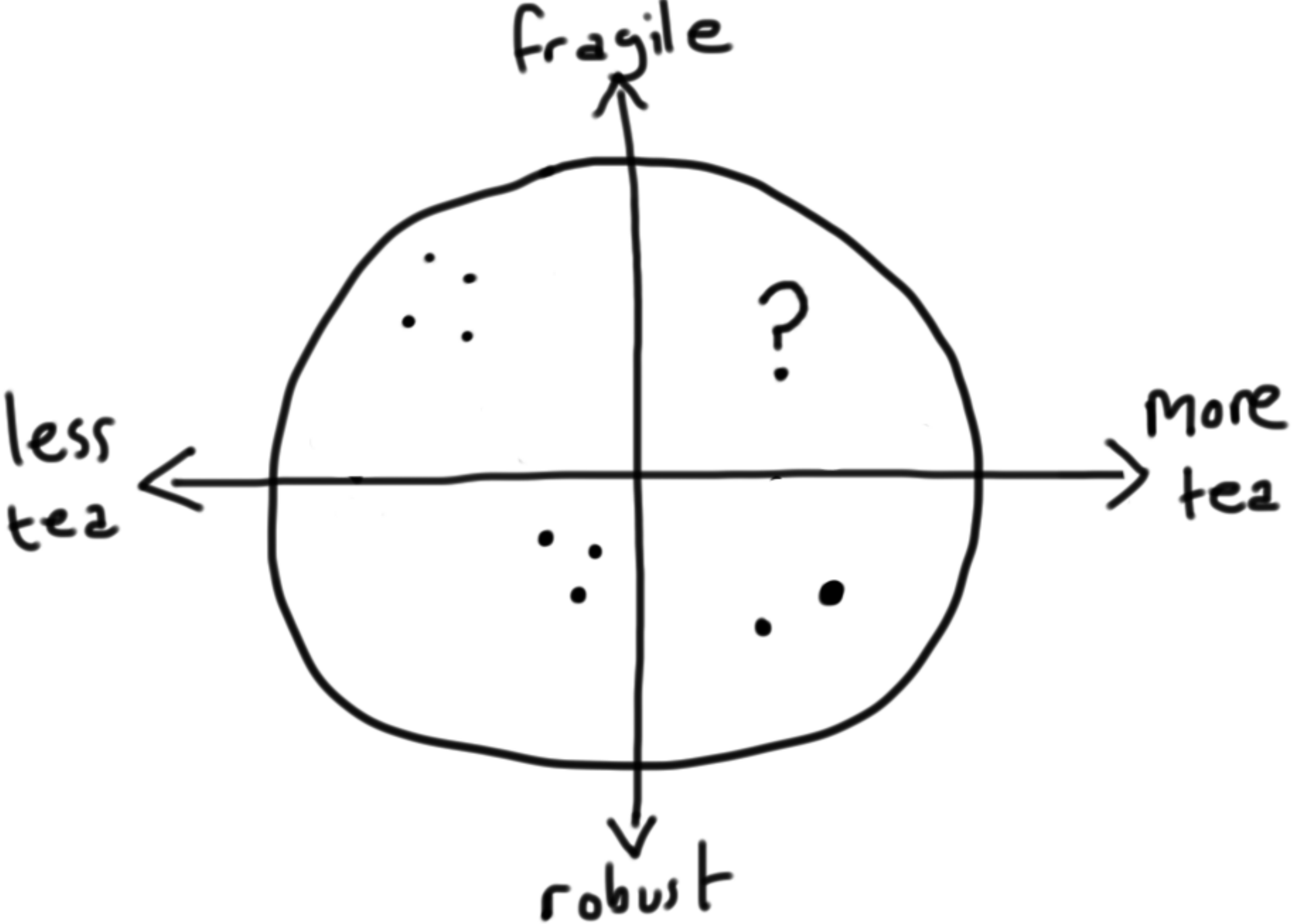
grouping similar ideas



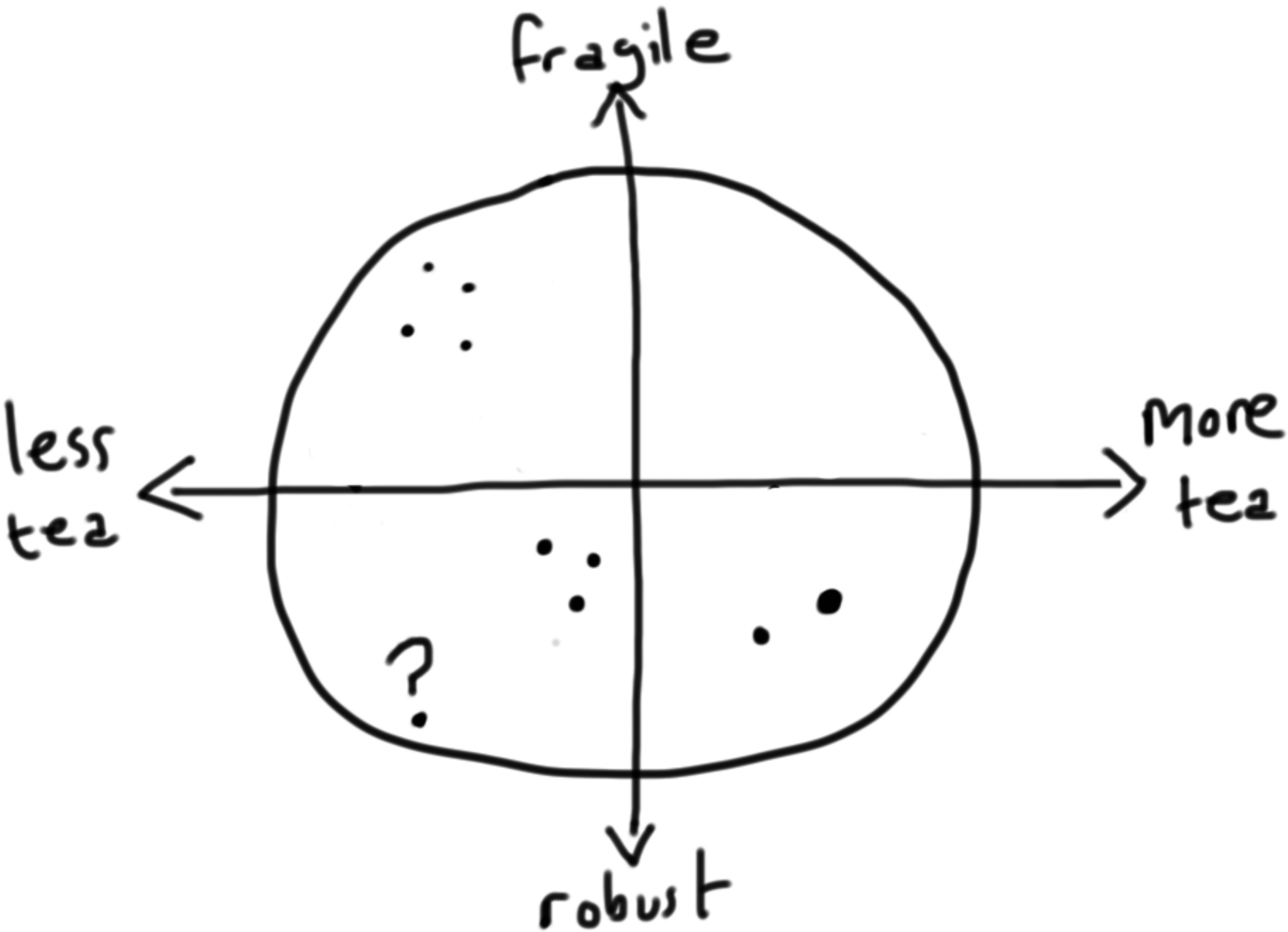

add a parameter




two parameters




spotting a blank area




spotting a more niche one

fragile ⟷ robust

less tea ⟷ more tea

playful ⟷ functional

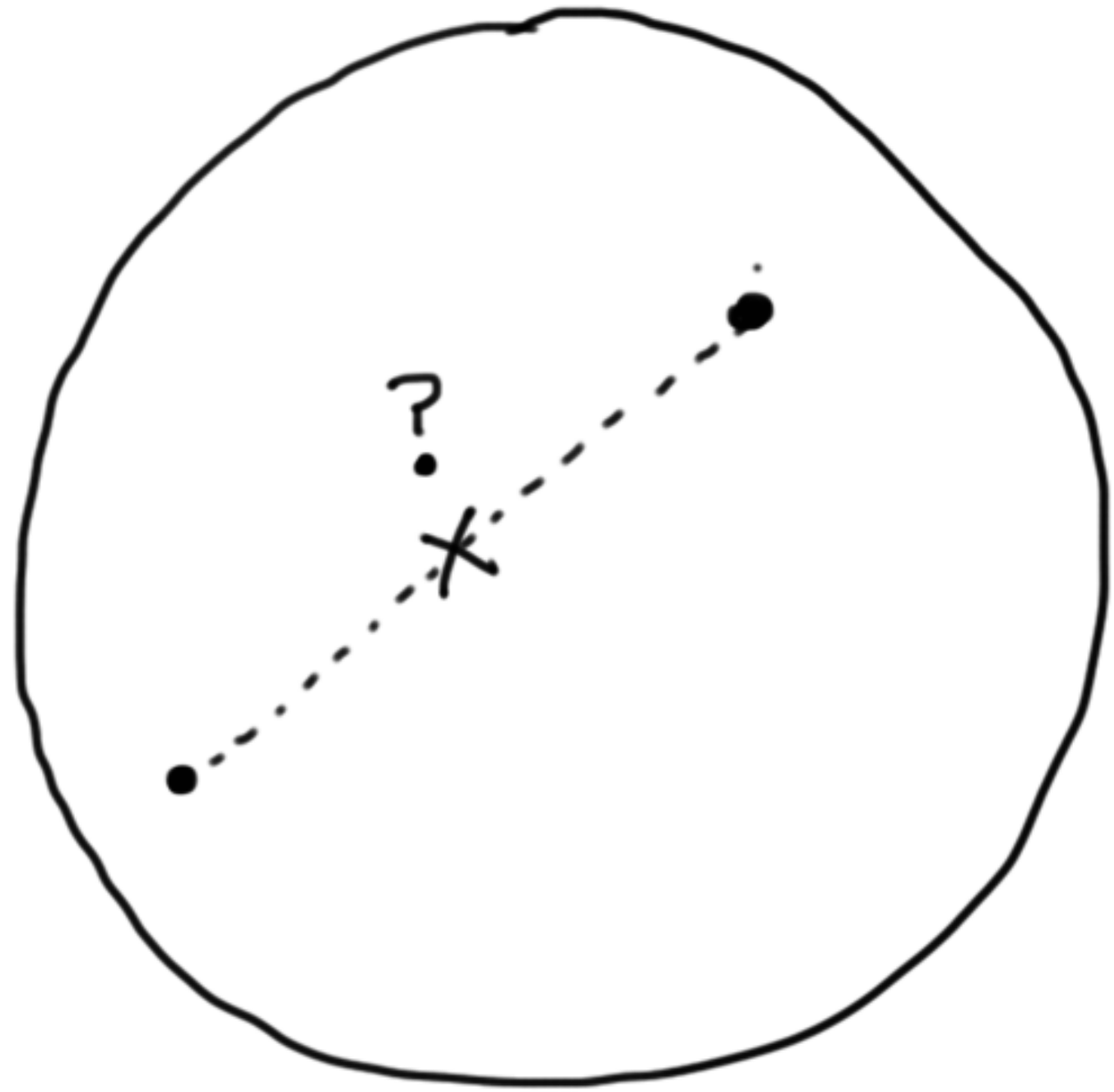
inside ⟷ outside

hot ⟷ cold

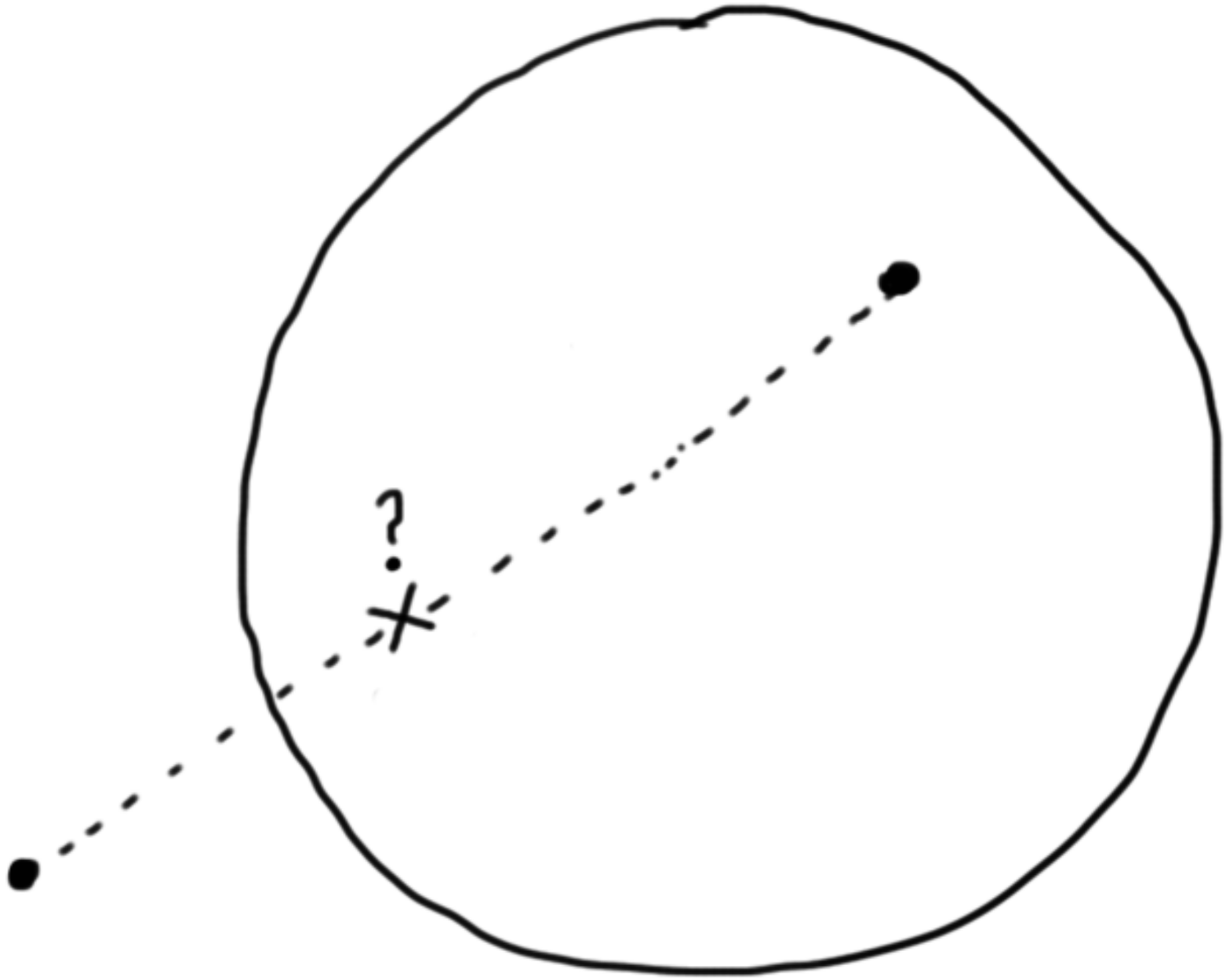
build your vocabulary

# Design Space Techniques

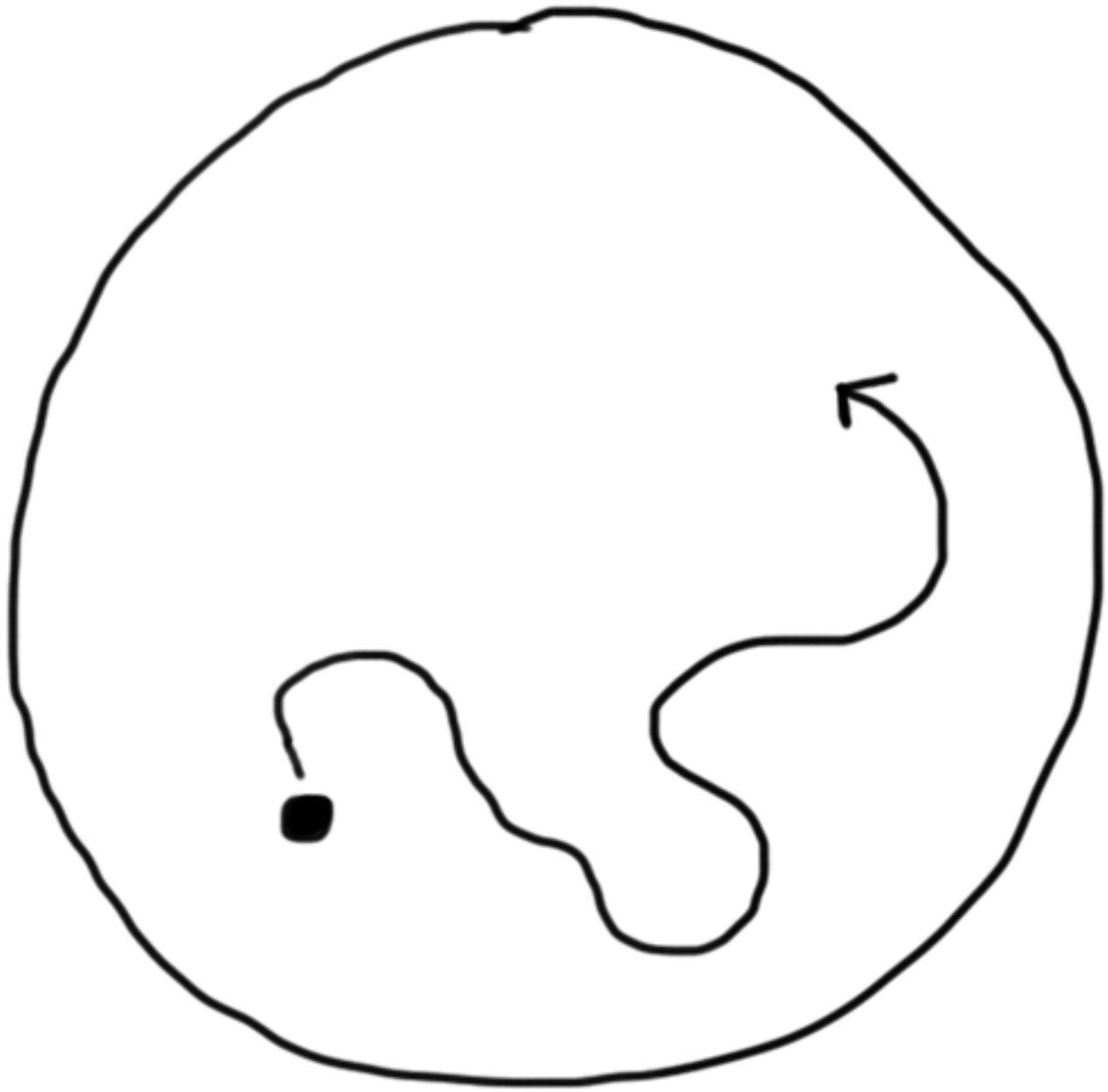
…or what to do with all this?



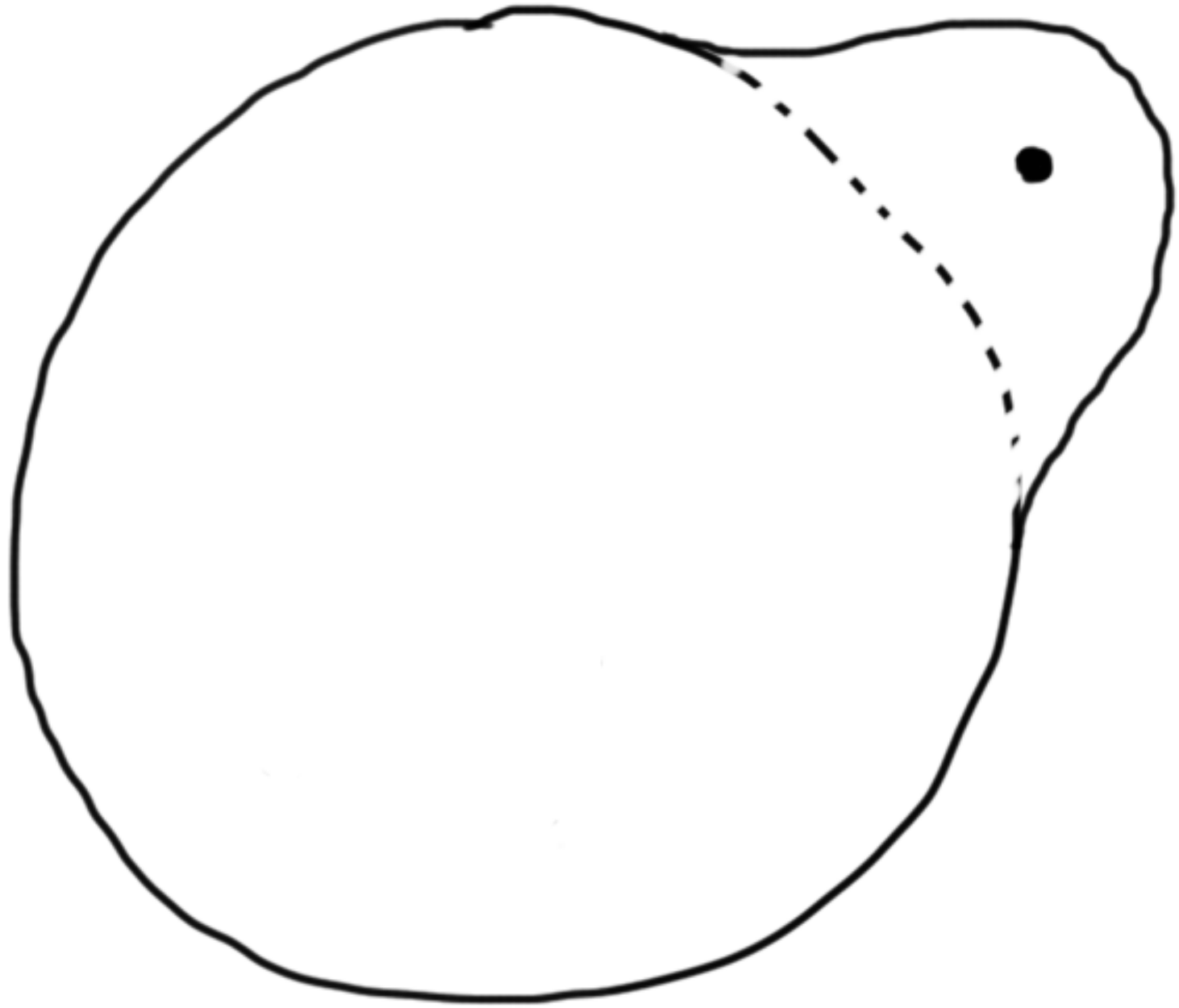

juxtaposition



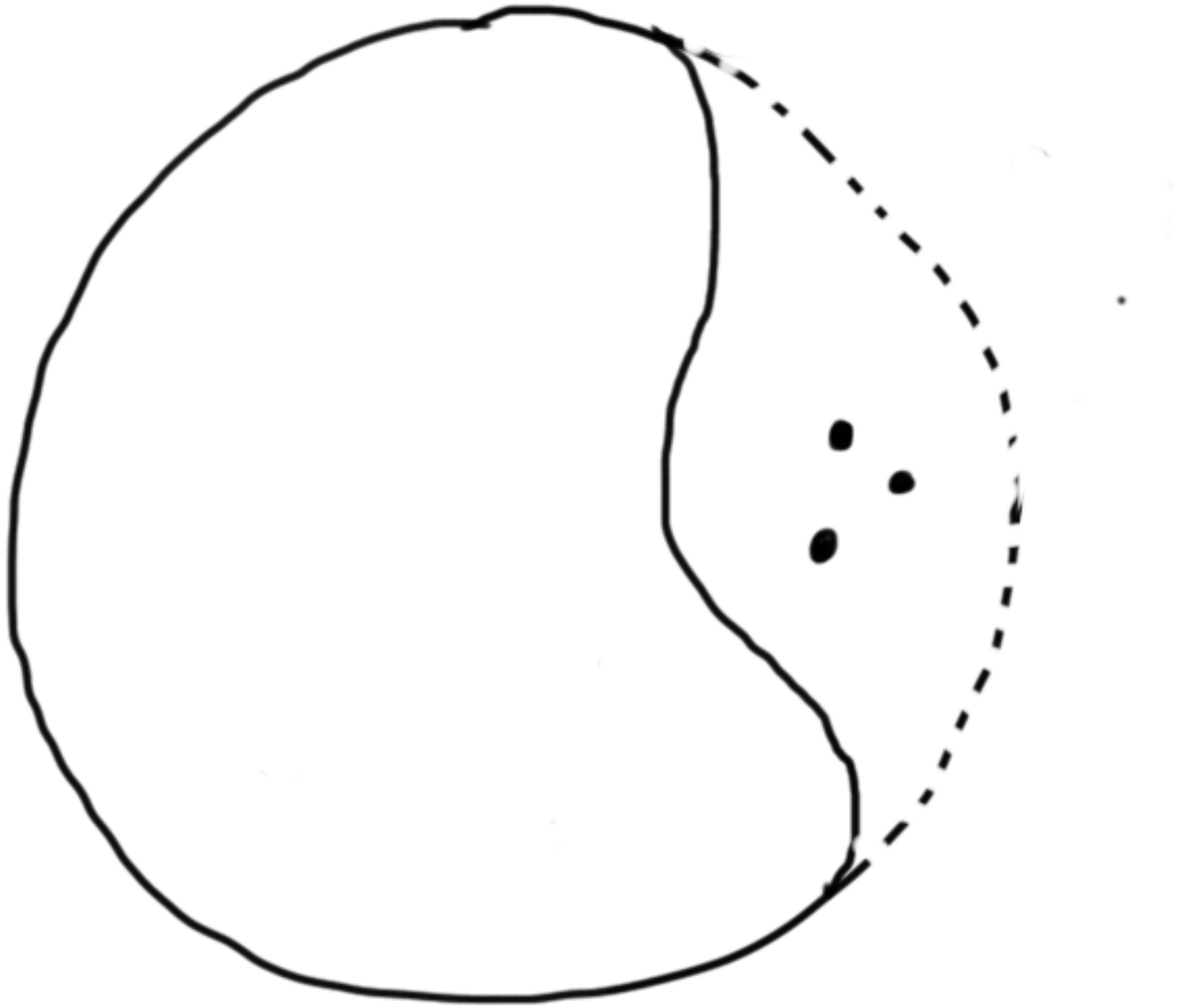

juxtaposition



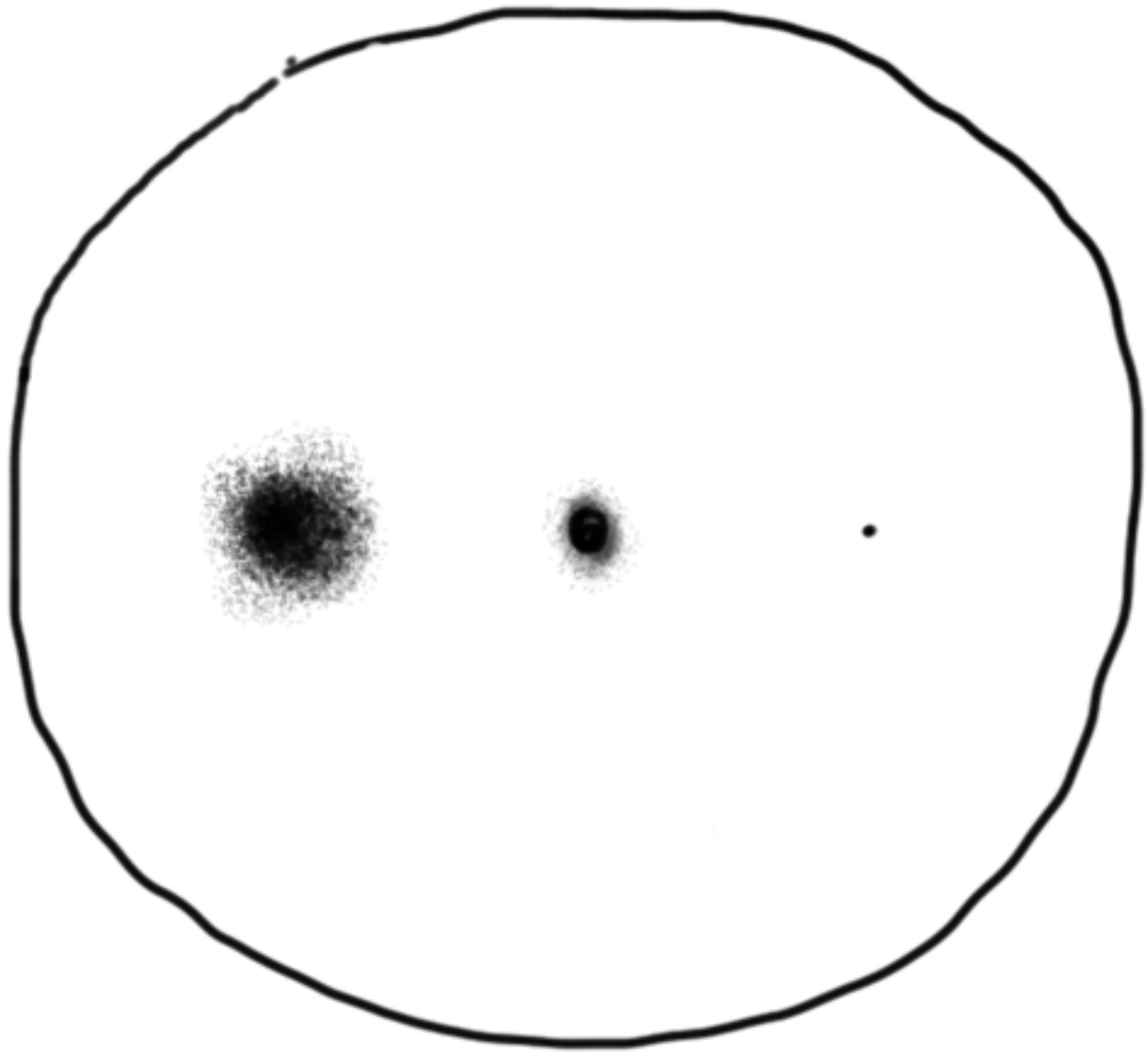
go for a walk, have a look around



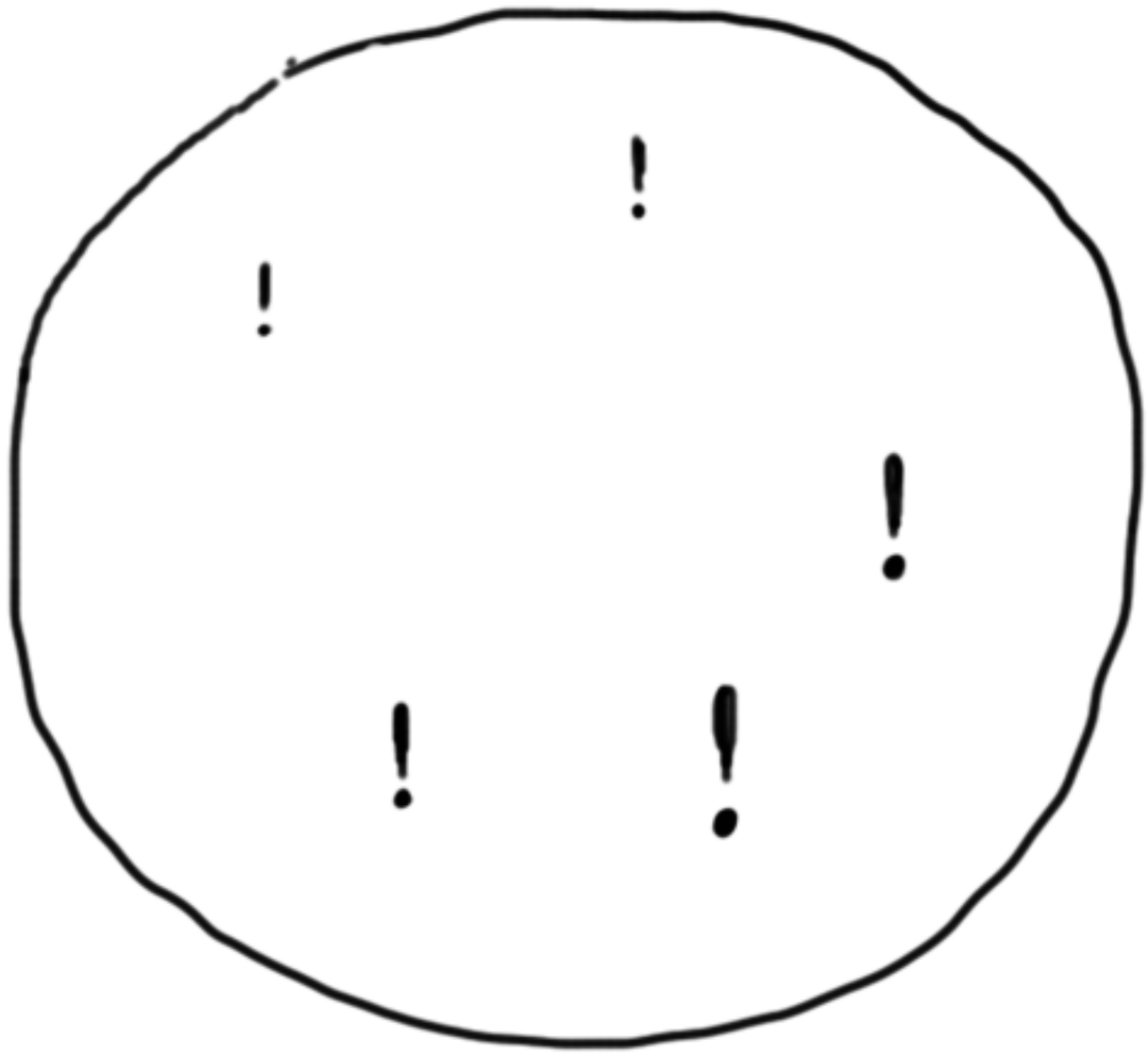
redefine (expand) original question



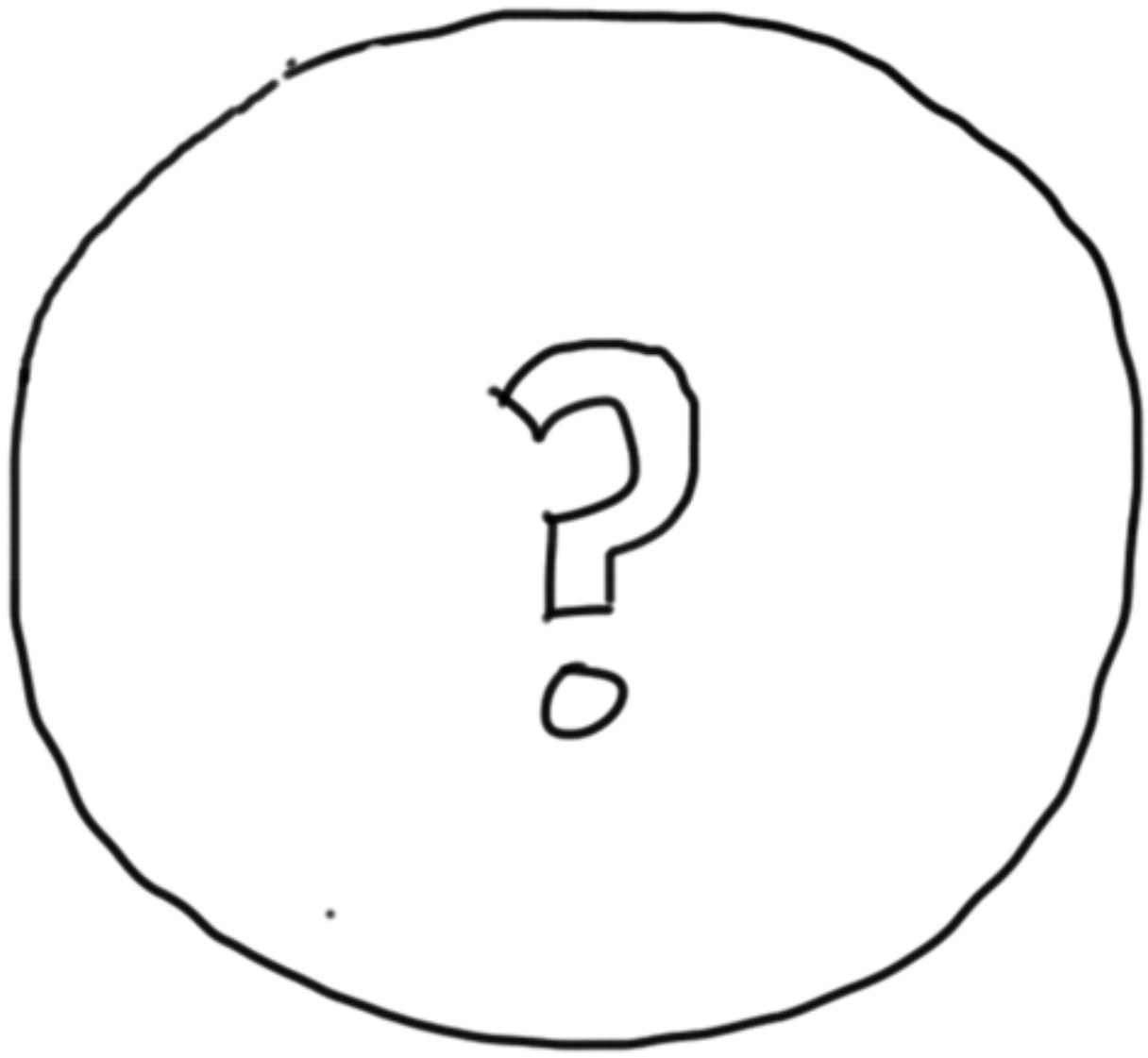
redefine (reduce) original question



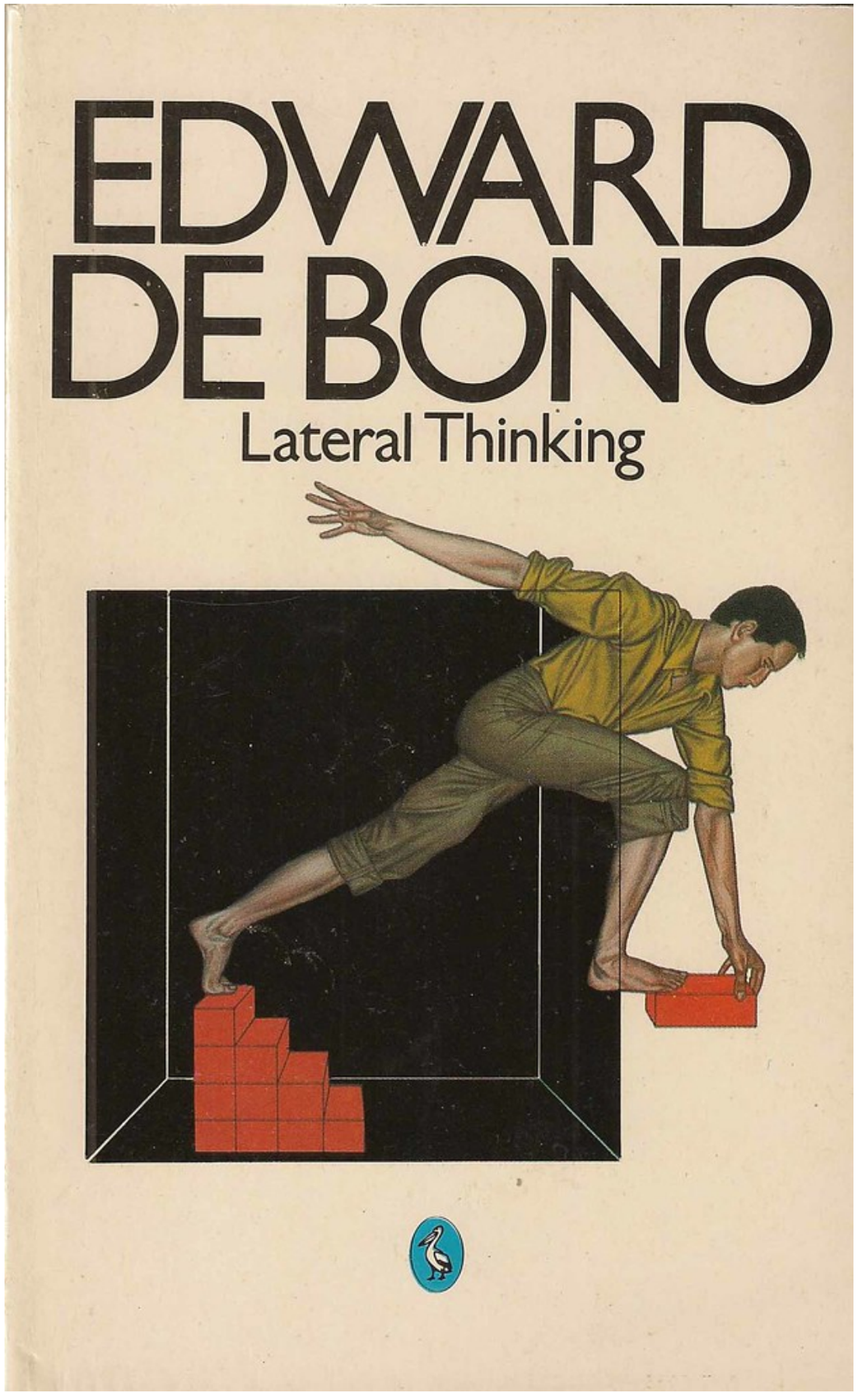
consider focus



map out terrible ideas




make up your own methods




https://en.wikipedia.org/wiki/Lateral_thinking

# Edward de Bono's Six Thinking Hats Model for Critical Thinking and Problem Solving

| | | |
|---|---|---|
| | WHITE HAT | • Objectivity<br>• Fact-finding | Wear the white hat to focus objectively on the available facts and figures. |
| | RED HAT | • Passion<br>• Intuition<br>• Emotions | Wear the red hat to look at the problem using intuition, gut reaction, and emotion. |
| | BLACK HAT | • Caution<br>• Pessimism<br>• Somberness | Wear the black hat to be vigilant and consider the negative sides of the event, issue, or problem. |
| | YELLOW HAT | • Hope<br>• Optimism | Wear the yellow hat to think positively. Consider all the benefits of the circumstances. |
| | GREEN HAT | • Creativity<br>• Inventiveness | Wear the green hat to get creative and invent new approaches. |
| | BLUE HAT | • Direction<br>• Synthesis<br>• Organization | Wear the blue hat to perform meta thinking. Scrutinize and direct discussion. Synthesize all viewpoints. |

http://www.rightattitudes.com/

Reference: Edward de Bono's *Six Thinking Hats*

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http://www.rightattitudes.com/ Reference: Edward de Bono's *Six Thinking Hats*

Initial Ideas – Blue, White, Green, Blue
Choosing between alternatives – Blue, White,(Green), Yellow, Black, Red, Blue
Identifying Solutions – Blue, White, Black, Green, Blue
Quick Feedback – Blue, Black, Green, Blue
Strategic Planning – Blue, Yellow, Black, White, Blue, Green, Blue
Process Improvement – Blue, White, White (Other peoples views), Yellow, Black, Green, Red, Blue
Solving Problems – Blue, White, Green, Red, Yellow, Black, Green, Blue
Performance Review – Blue, Red, White, Yellow, Black, Green Red, Blue

# **Brian Eno & Peter Schmidt** - Oblique Strategies

- Use an old idea.
- State the problem in words as clearly as possible.
- Only one element of each kind.
- What would your closest friend do?
- What to increase? What to reduce?
- Are there sections? Consider transitions.
- Try faking it!
- Honour thy error as a hidden intention.
- Ask your body.
- Work at a different speed.

# **Brian Eno & Peter Schmidt** - Oblique Strategies

“These cards evolved from separate ***observations of the principles underlying what we were doing***. Sometimes they were recognised in retrospect (intellect catching up with intuition), sometimes they were identified as they were happening, sometimes they were formulated.”

# Design Thinking

Design thinking is the cognitive process from which design concepts (e.g. ideas for products) emerge. Design thinking is related to, but different from problem-solving, decision-making, creativity, sketching and prototyping.

https://en.wikipedia.org/wiki/Design_thinking

# Design Thinking

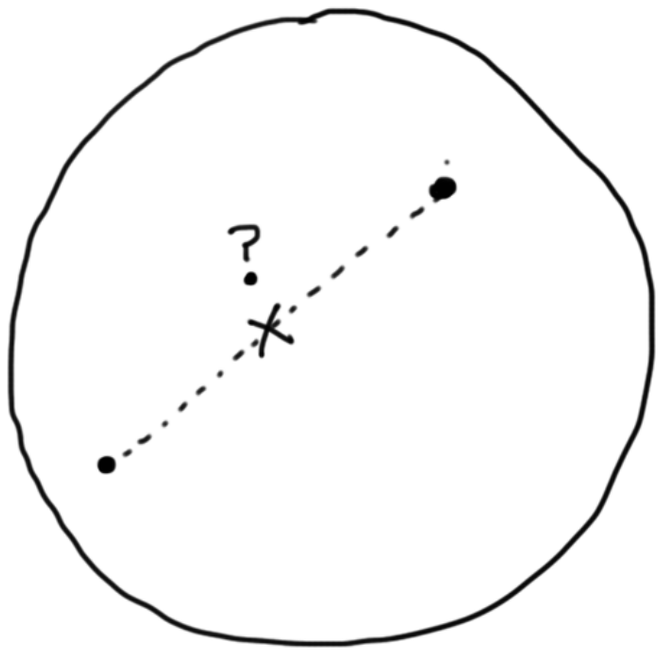
During design thinking, *the designer's attention oscillates between their understanding of a problematic context and their ideas for a solution*. New solution ideas lead to a deeper understanding of the problematic context, which in turn triggers more solution ideas.

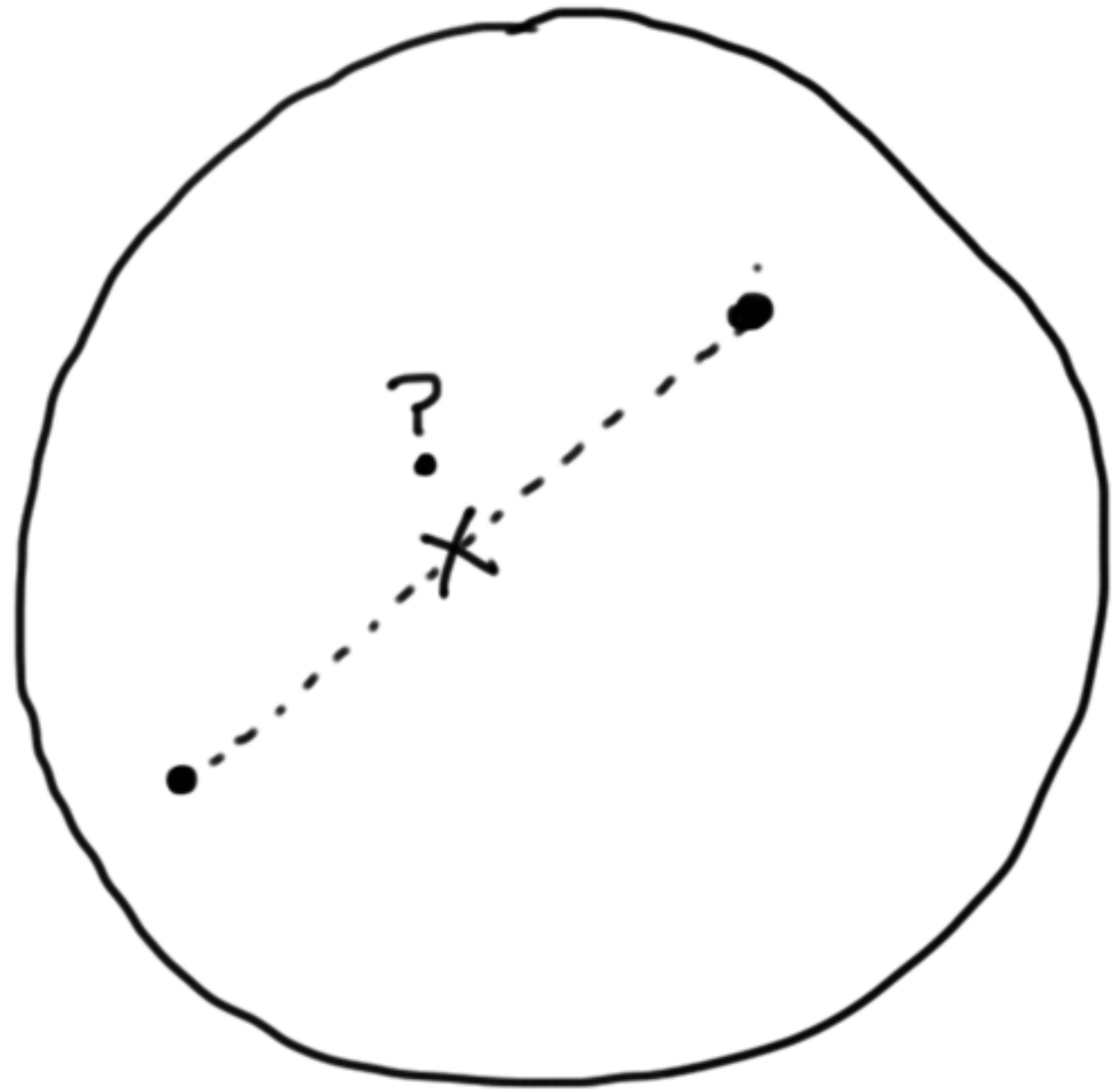
https://en.wikipedia.org/wiki/Design_thinking

# lunch

# JUXTAPOSE

## take two ideas and combine them in a new way






juxtaposition

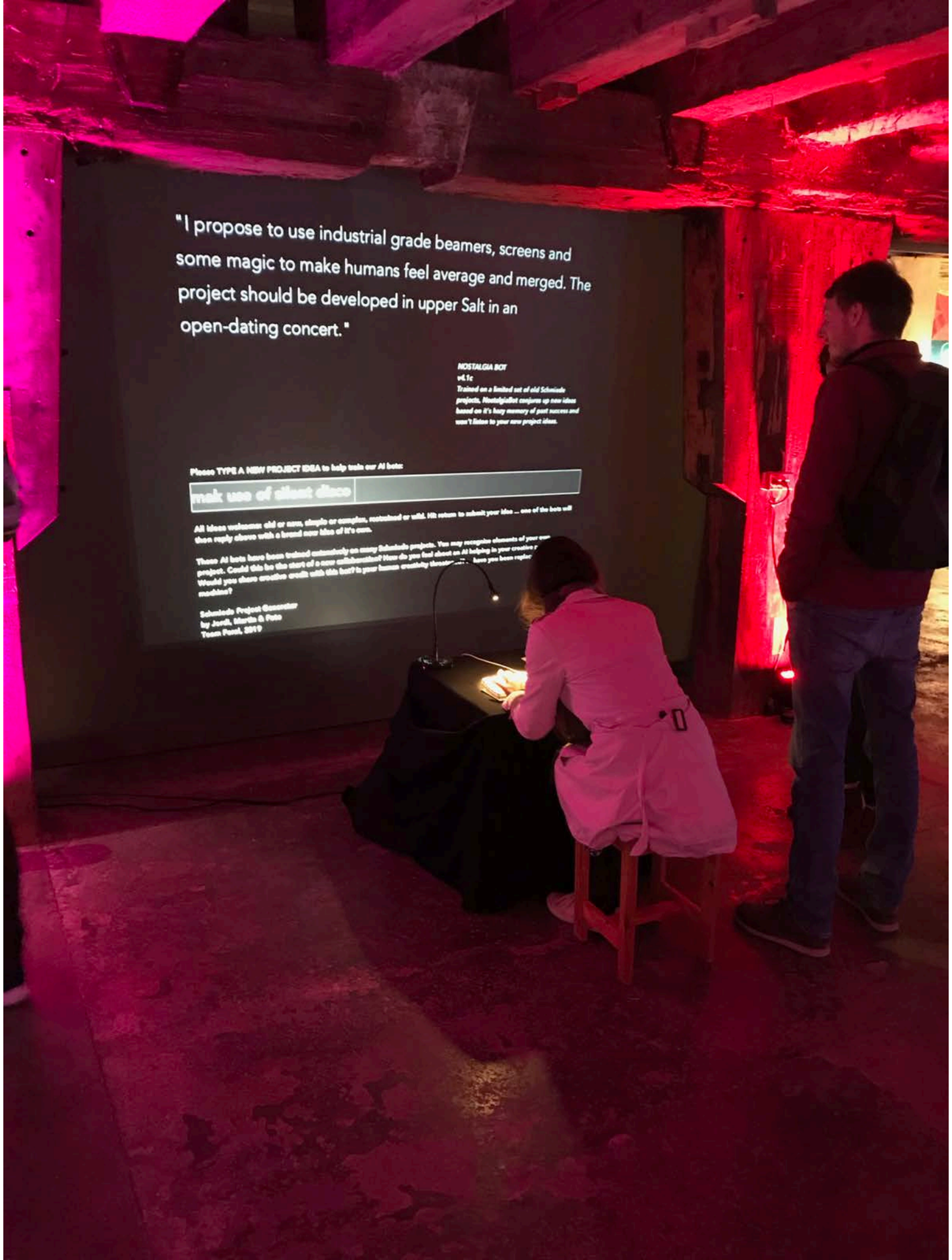
# NEW RULE

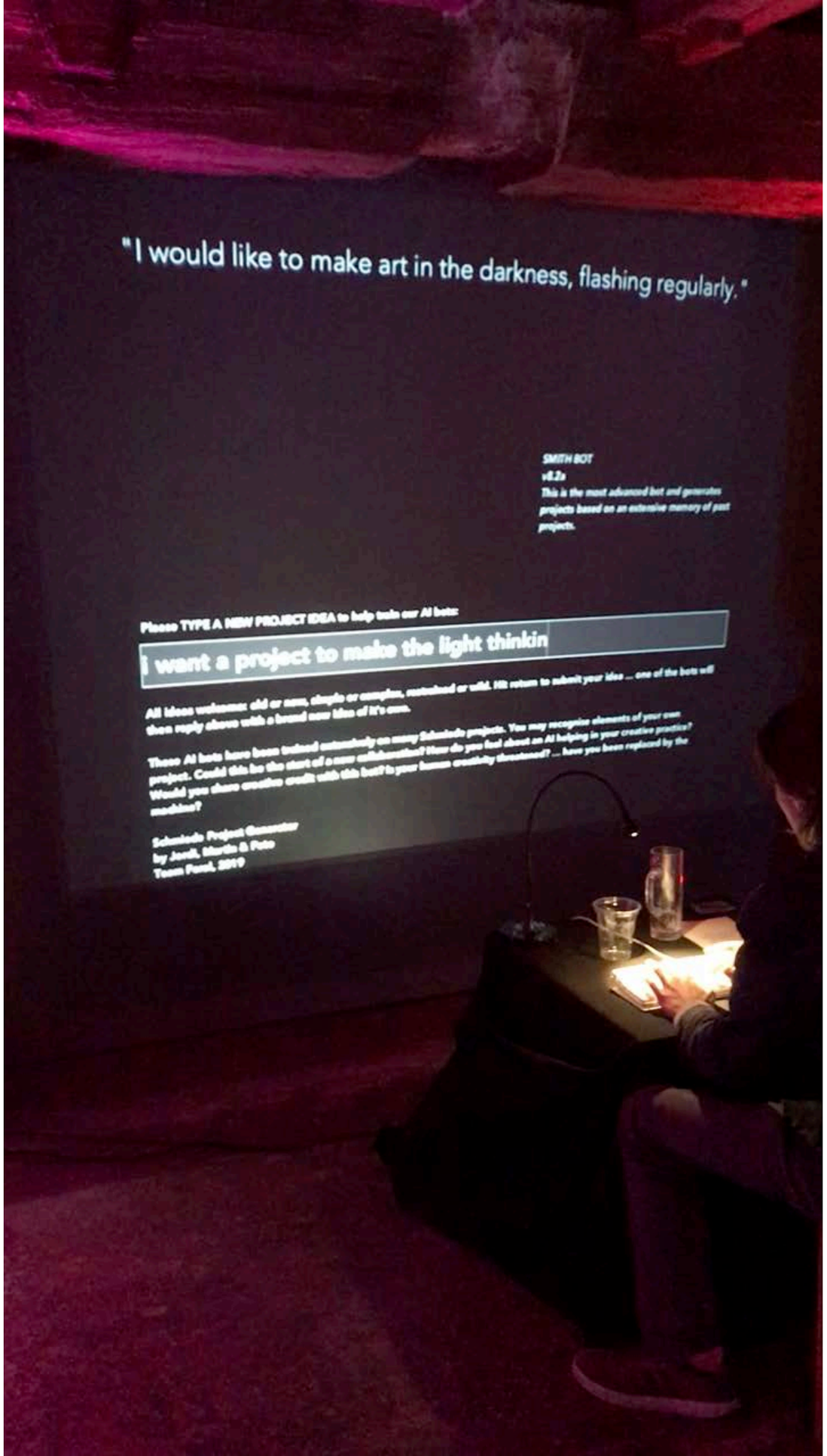
create a new design method
for another group to follow

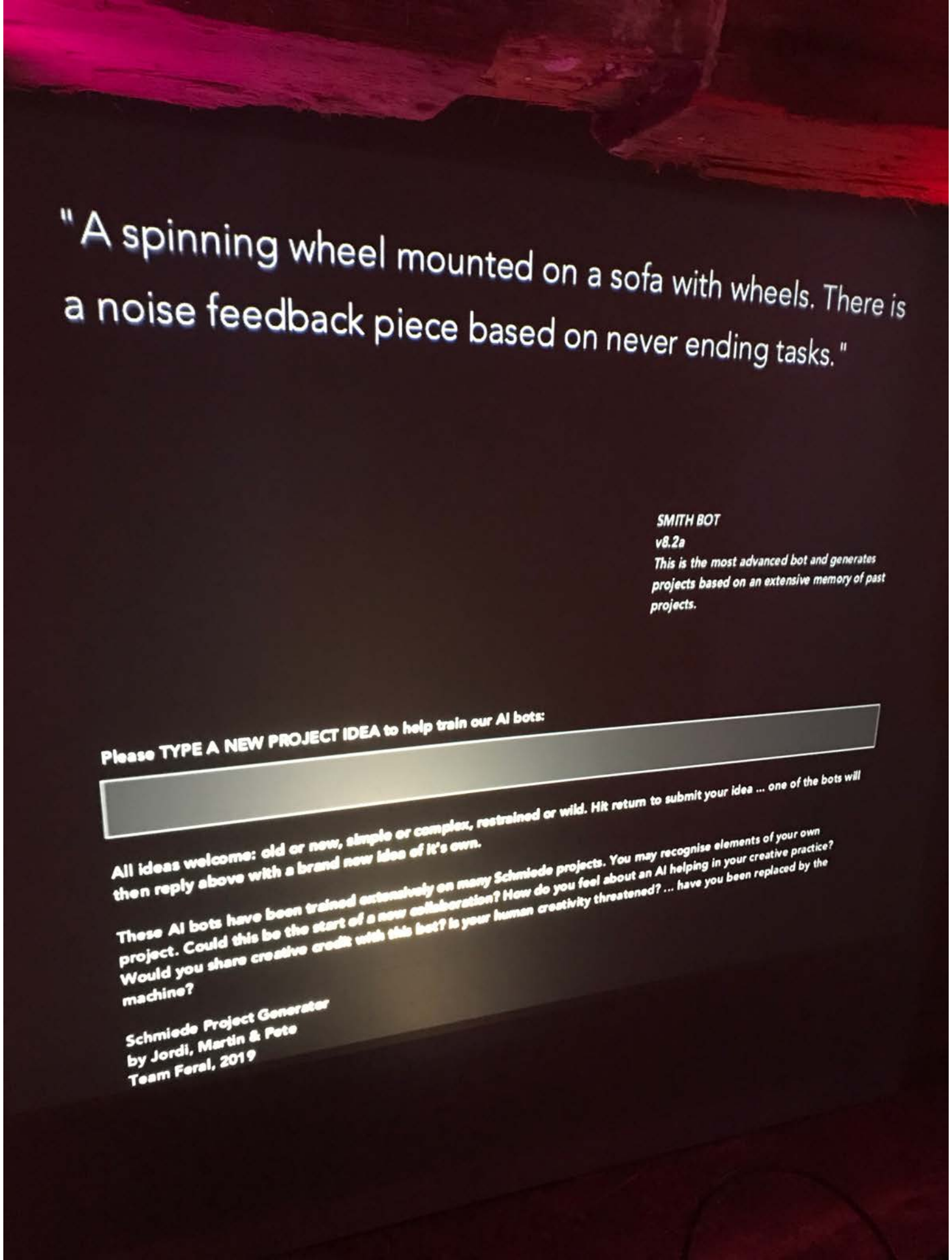
# SWAP

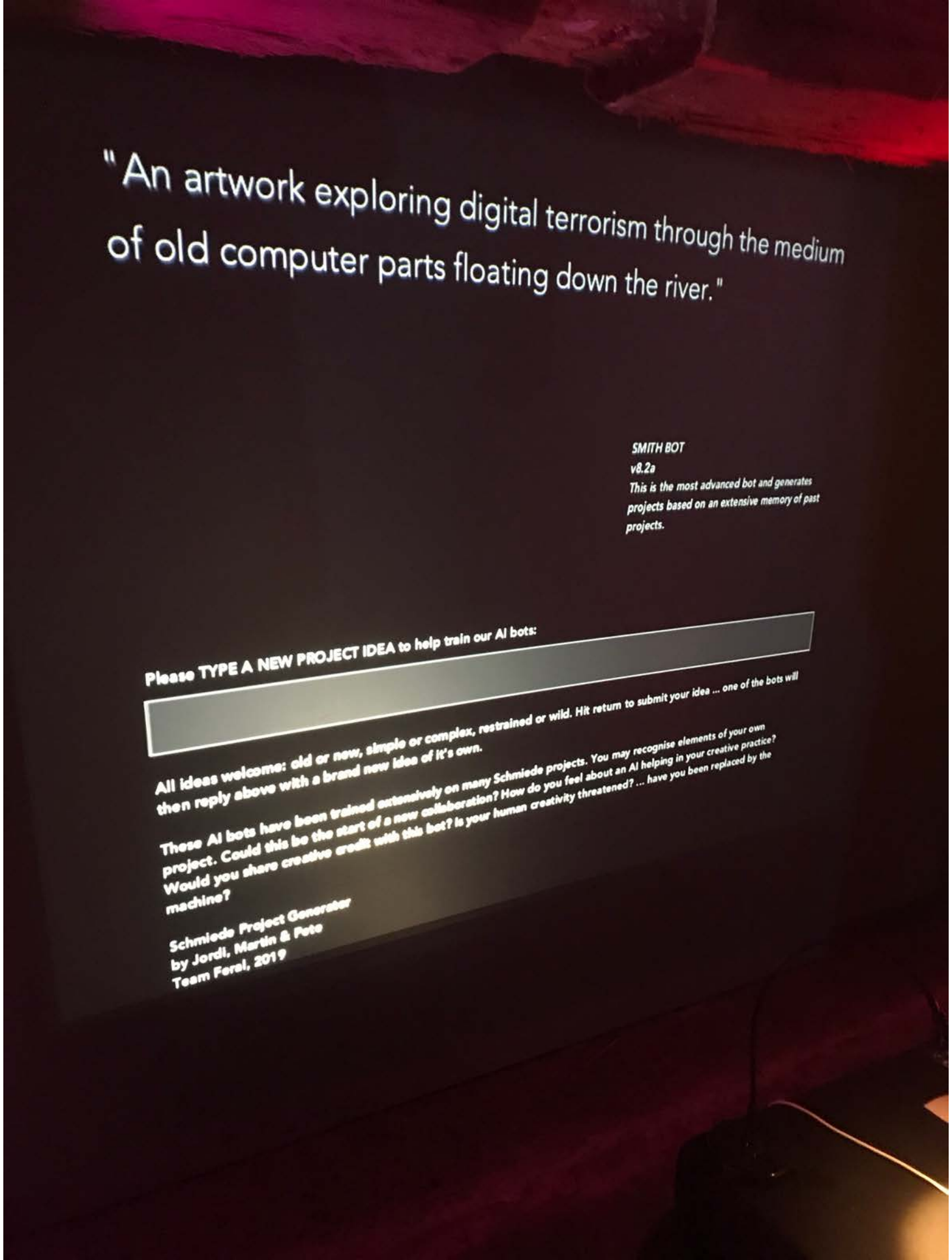
try out another group's
new design method

# auto design bot


"I propose to use industrial grade beamers, screens and some magic to make humans feel average and merged. The project should be developed in upper Salt in an open-dating concert."
NOSTALGIA BOT
v4.1c
Please TYPE A NEW PROJECT IDEA to help train our AI bots:
mak use of silent disco


"I would like to make art in the darkness, flashing regularly."
SMITH BOT
v8.2a
This is the most advanced bot and generates projects based on an extensive memory of past projects.
Please TYPE A NEW PROJECT IDEA to help train our AI bots:
i want a project to make the light thinkin
Schematic Project Generator
by Josh, Martin & Pete
Team Pond, 2019


"A spinning wheel mounted on a sofa with wheels. There is a noise feedback piece based on never ending tasks."
SMITH BOT
v8.2a
This is the most advanced bot and generates projects based on an extensive memory of past projects.
Please TYPE A NEW PROJECT IDEA to help train our AI bots:
All ideas welcome: old or new, simple or complex, restrained or wild. Hit return to submit your idea ... one of the bots will then reply above with a brand new idea of it's own.
These AI bots have been trained extensively on many Schmiede projects. You may recognise elements of your own project. Could this be the start of a new collaboration? How do you feel about an AI helping in your creative practice? Would you share creative credit with this bot? Is your human creativity threatened? ... have you been replaced by the machine?
Schmiede Project Generator
by Jordi, Martin & Pete
Team Feral, 2019


"An artwork exploring digital terrorism through the medium of old computer parts floating down the river."
SMITH BOT
v8.2a
This is the most advanced bot and generates projects based on an extensive memory of past projects.
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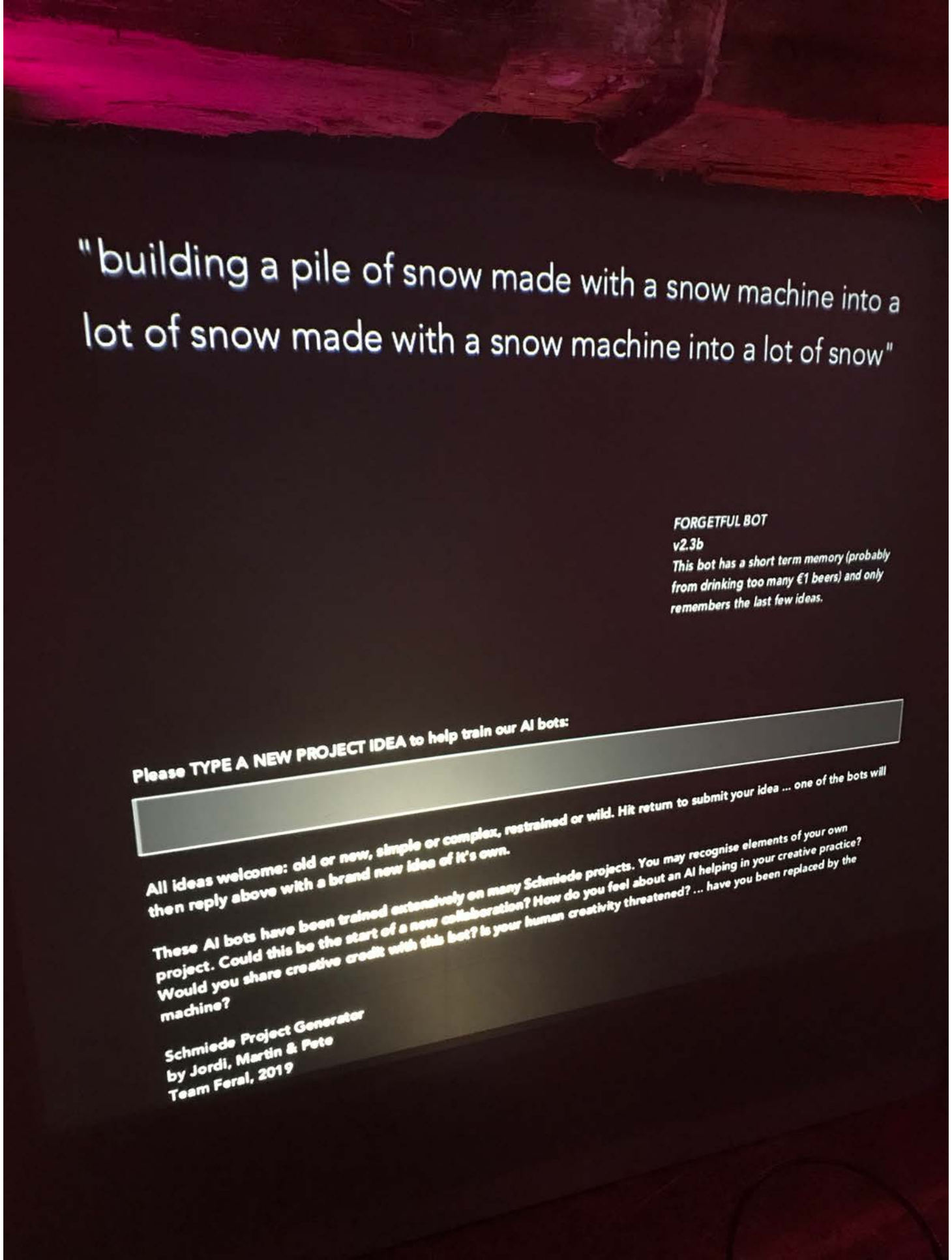
"building a pile of snow made with a snow machine into a lot of snow made with a snow machine into a lot of snow"
FORGETFUL BOT
v2.3b
This bot has a short term memory (probably from drinking too many €1 beers) and only remembers the last few ideas.
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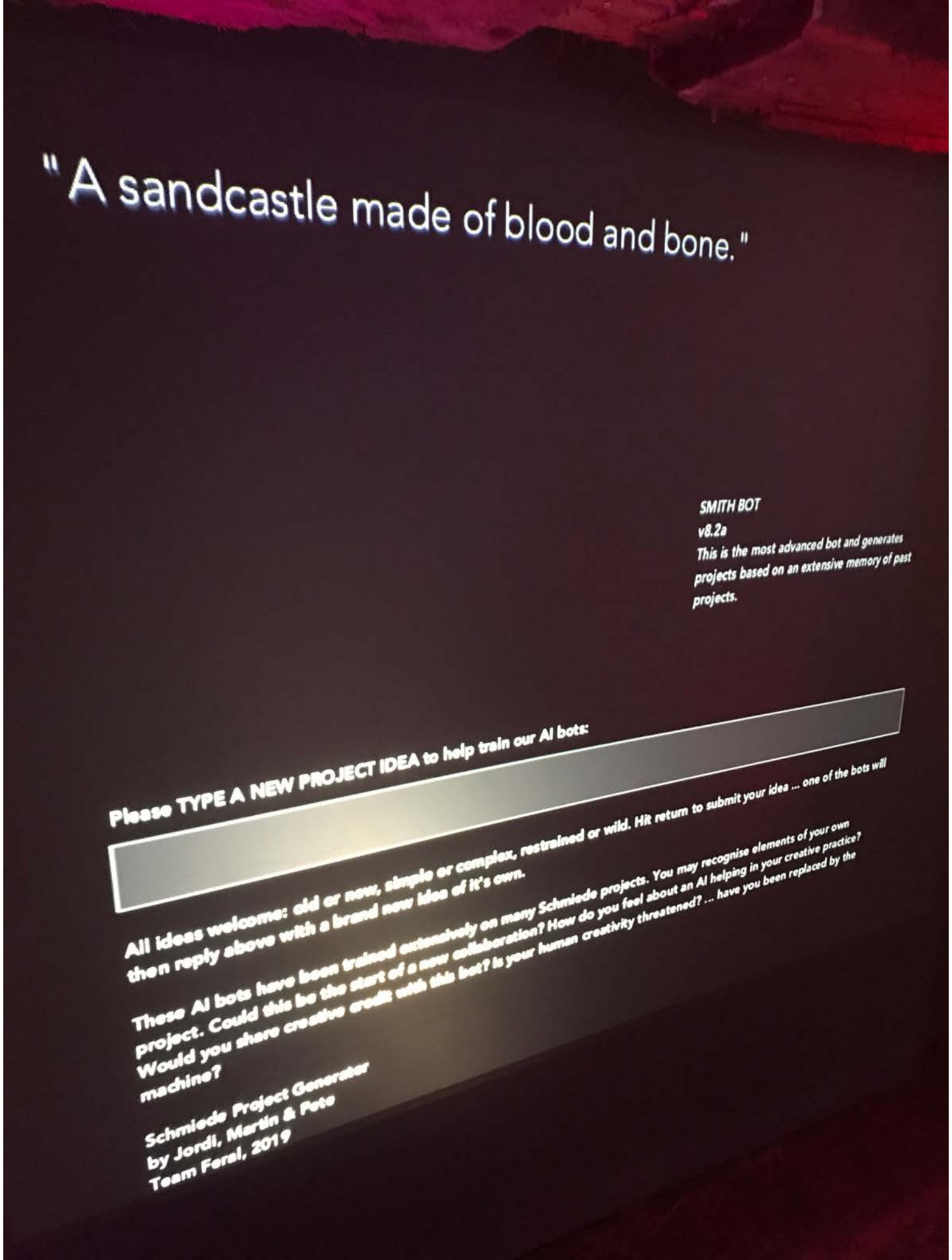
"A sandcastle made of blood and bone."
SMITH BOT
v8.2a
This is the most advanced bot and generates projects based on an extensive memory of past projects.
Please TYPE A NEW PROJECT IDEA to help train our AI bots:
All ideas welcome: old or new, simple or complex, restrained or wild. Hit return to submit your idea ... one of the bots will then reply above with a brand new idea of it's own.
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Schmiede Project Generator
by Jordi, Martin & Pete
Team Feral, 2019

"A cheese machine that makes you see things noone else does."

SMITH BOT
v8.2a
This is the most advanced bot and generates projects based on an extensive memory of past projects.

Please TYPE A NEW PROJECT IDEA to help train our AI bots:

Upper wood. Ö

All ideas welcome: old or new, simple or complex, restrained or wild. Hit return to submit your idea ... one of the bots will then reply above with a brand new idea of it's own.

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Generator

autoProject_003

autoProject_003

autoProject_003

autoProject_003

autoProject_003

autoProject_003

# An incredibly small interactive projection that helps you be creative.

autoProject_003

# A gaze tracking beer robot for design teams.

autoProject_003

# A musically inclined design toolkit located in Upper Salt.

autoProject_003

autoProject_003

# A highly complex imaginary game placed in Lower Salt.

autoProject_003

# A hiking based hybrid game for academics.

autoProject_003
A randomly generated
imaginary game
which you make yourself.

# CONTINUE

…to work on your own design. Think about how you are thinking!