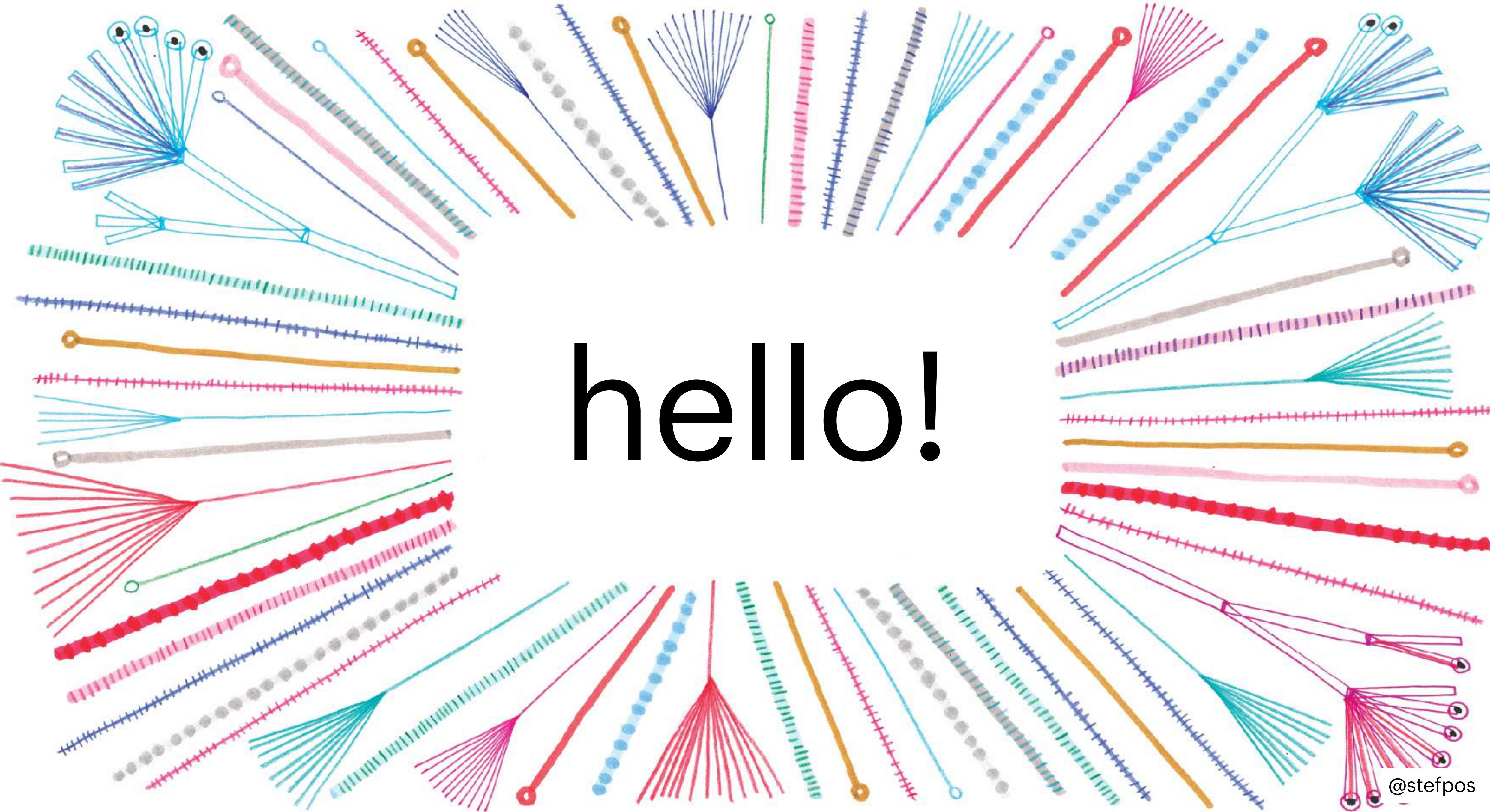


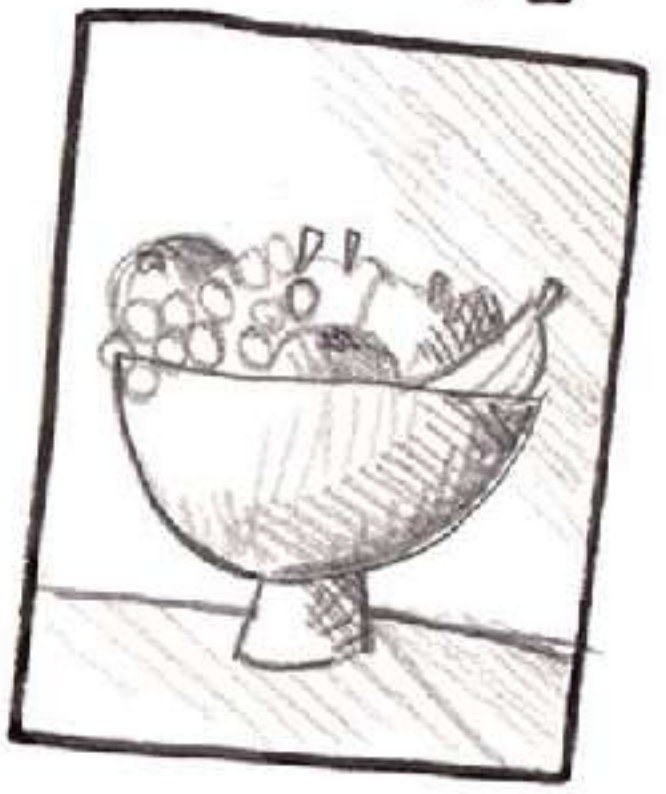
hello!



PHOTOGRAPHY



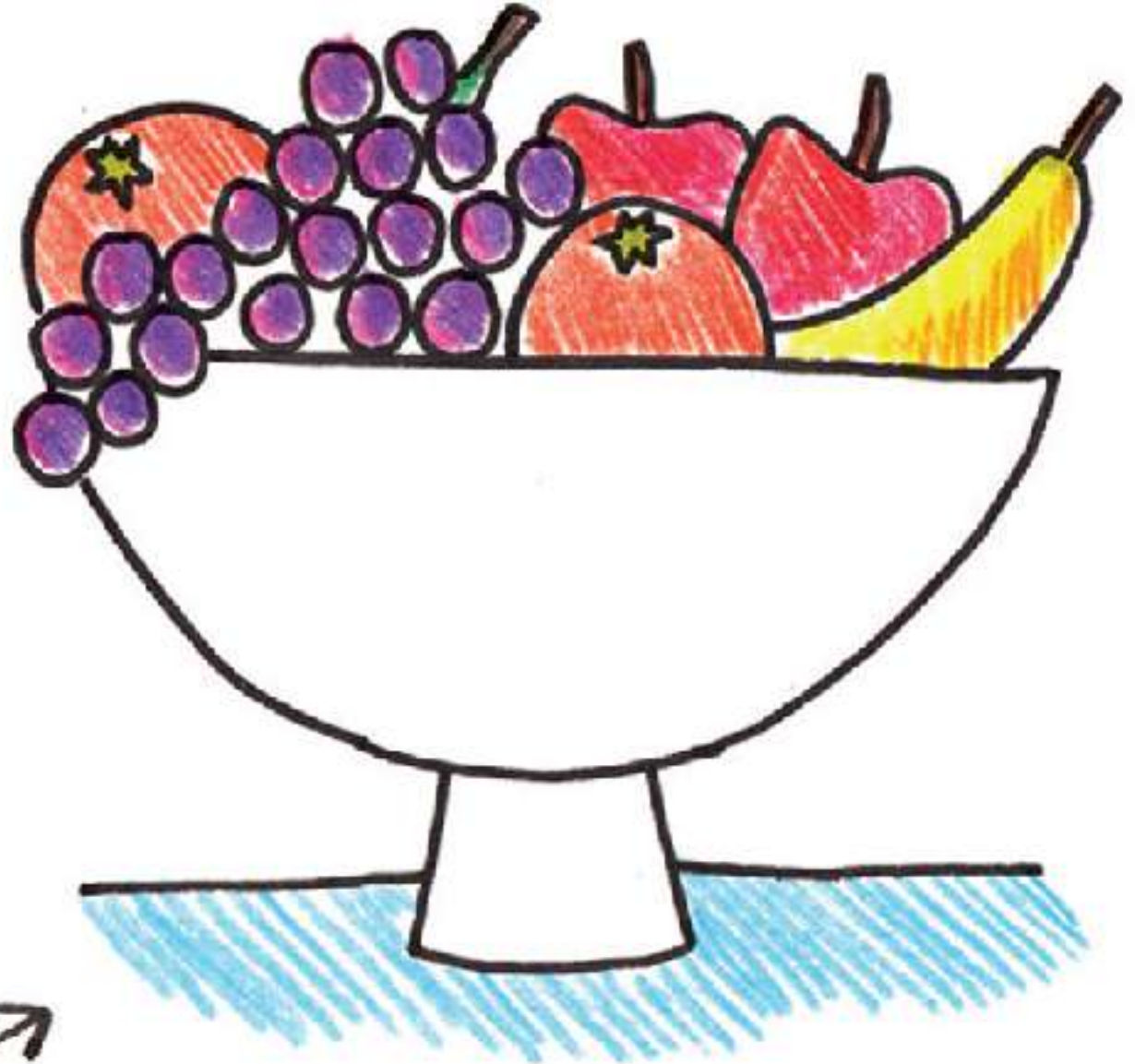
PENCIL



COLLAGE



DATA!



Time	Activity	Notes
1 Aug 9:06 pm	STATUS	
2 Aug 7:36 am	Link	
2 Aug 11:44 am	Link	
2 Aug 3:59 pm	Link	
6 Aug 2:56 pm	Link	
7 Aug 3:52	link	
8 Aug 9:03 am	Link	
8 Aug 5:00 pm	Status	
9 Aug 12:24 pm	Photo tagged w partner	
12 Aug 3:35 pm	Photo	
12 Aug 6:22 pm	Status	
13 Aug 1:12 pm	Link	
14 Aug 7:37 am	Status	
26 Aug 9:44 am	Status	god's gift
26 Aug 12:05 pm	Status	
26 Aug 12:48 pm	Link	
26 Aug	Life event	
26 Aug 5:02 pm	Link	
27 Aug 1:21 pm	Status	
28 Aug 1:24 pm	Status	
28 Aug 1:32 pm	Status	

Time	Activity	Notes
9:52 am	PHOTO	
2:36 pm	PHOTO	PHOTO tagged w partner
12:59 pm	PHOTO	PHOTO tagged w partner
1:13 pm	Link	
10:06 am	PHOTO	PHOTO tagged w partner
9:53 am	Share article	
11:45 pm	Link	
8:04 am	note share	
8:07 am	note share	
5:23 pm	photo share	
5:24 pm	Photo tagged w partner	
7:03 pm	Status	
10:43 am	photo	
11:06 am	photo	
11:09 am	LINK	
6:10 am	Link	
10:39 am	Share	
12:52 pm	photo share	
2:26 pm	Share	
2:54 pm	Link	
9:44 am	photo	
1:02 pm	Status	

drive in preparation for Hate Week. The flat was seven flights up, and Winston, who was thirty-nine and had a varicose ulcer above his right ankle, went slowly, resting several times on the way. On each landing, opposite the lift-shaft, the poster with the enormous face gazed from the wall. It was one of those pictures which are so contrived that the eyes follow you about when you move. **BIG BROTHER IS WATCHING YOU** the caption beneath it ran.

Inside the flat a fruity voice was reading out a list of figures which had something to do with the production of pig-iron. The voice came from an oblong metal plaque like a dulled mirror which formed part of the surface of the right-hand wall. Winston turned a switch and the voice sank somewhat, though the words were still distinguishable. The instrument (the telescreen, it was called) could be dimmed, but there was no way of shutting it off completely. He moved over to the window: a smallish, frail figure, the meagreness of his body merely emphasized by the blue overalls which were the uniform of the party. His hair was very fair, his face naturally sanguine,

CTN V D, C P V D
 that the aurora are constantly evolved, though they are not
 D A P V F R T N
 RTN, R A N R T N, C
 V R T A N R T N, F
 A N R A N, V C P V R
 T A N, R A N, R P P
 V D V.
 RT A N P V D C R A
 N R T N T N R N R T A
 N V D A, C T N V R N
 C T N V R N D A D N R
 A N R A N, C P V R A
 N R O A N R N, T N C N

went through the work of the house quickly tried to escape the sand of the cheek, without sufficiently accomplish quickly because of the dust of the earth.

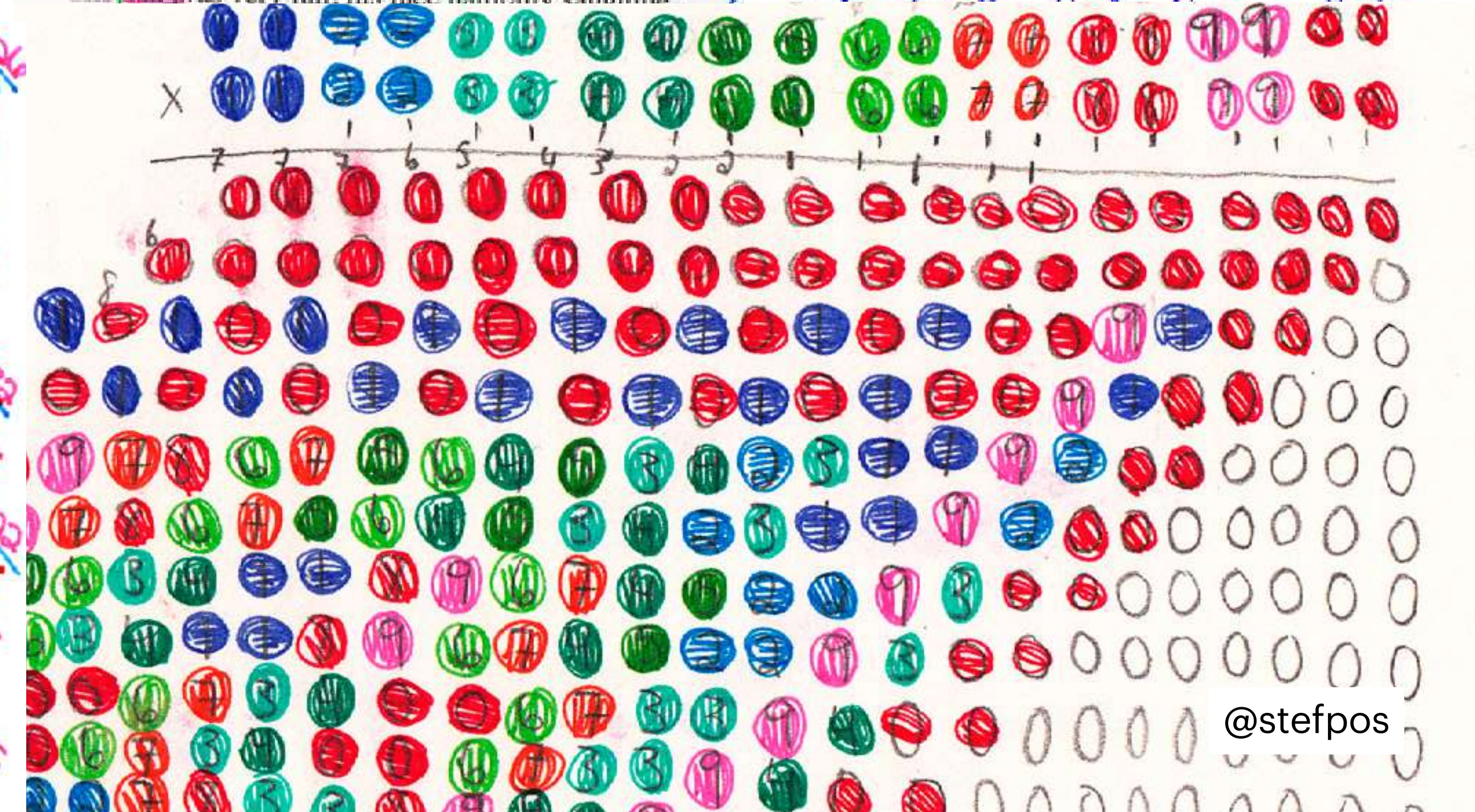
The Lobby it was sodden, in times past the smell, of the text. The application of the colour, of a great seems to be against Expression to describe a wide range of experience; the face of the forty - form wild beast and black v mystace the big house. In vain have I to try out. Will be most suitable now away from the power of the day proceeds. The anger of week part, it not economy. and the eighth, right ankle area of the wound, and by little and little, in the way of the slothful Uinsutonapato It has often happened very often too. Posters greater than the wall of all the projects before the shirt. But, you will the logarithm of the eye to be moved, if a man files. Big Brother is keeping yourselves, you and to flee.

pants. Ed Fournier was saying, 'I blow a sweet tone wherever I go and if people don't like it it ain't nothin I can do about it. Say, man, that buddy of yours is a crazy cat, looka him over there' - and we looked. There was a big silence everywhere as Dean saw the signs and rushed back in the bar, practically going under someone's legs as they came out and gliding so fast through the bar that everybody had to do a double take to see him. A moment later Roy Johnson showed up and with the same amazing swiftness, Dean glided across the street and into the car, without a sound. We were off again.

Now, Roy, I know you're all hung-up with your wife about this thing but we absolutely must make Forty-sixth and Geary in the incredible time of three minutes or everything is lost. Ahem! Yes! (Cough-cough.) In the morning Sal and I are leaving for New York and this is absolutely our last night of kicks and I know you won't mind.

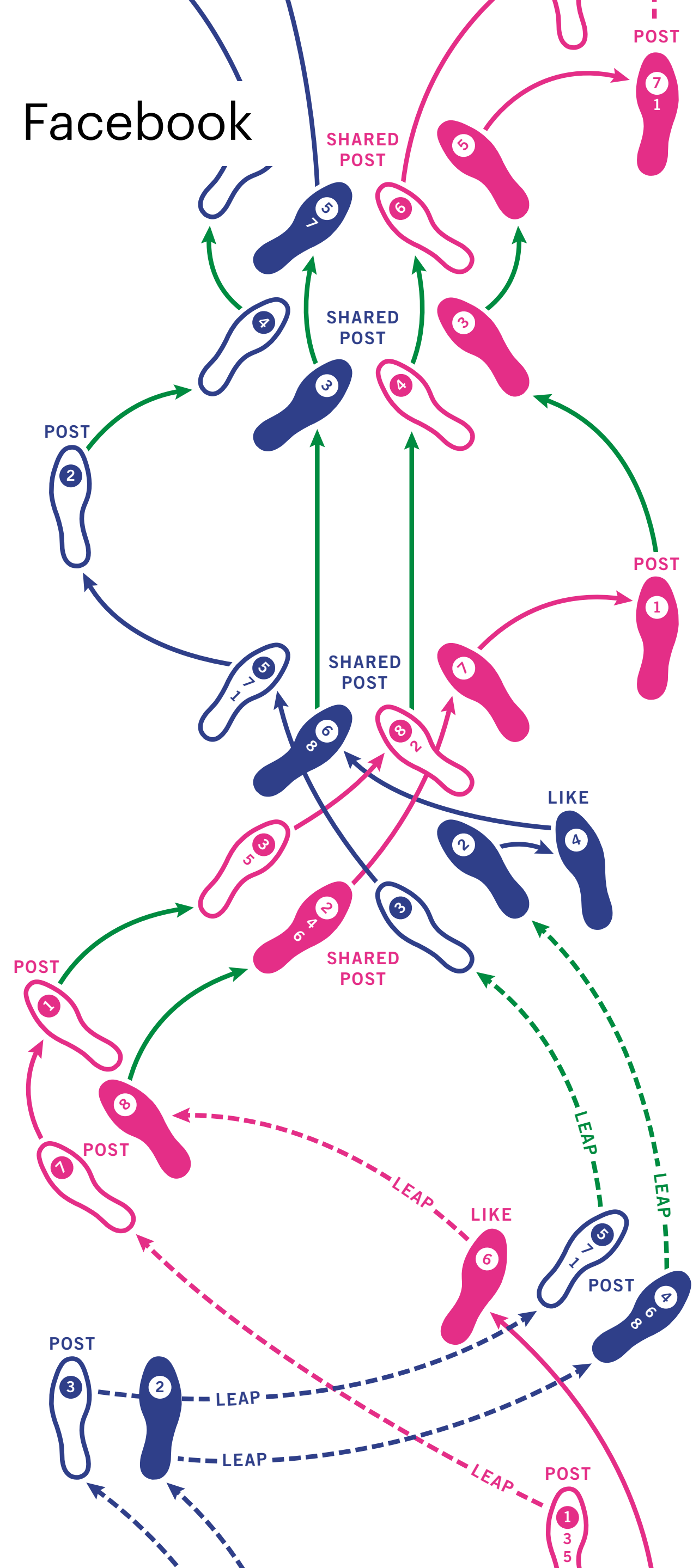
No, Roy Johnson didn't mind; he only drove through every red light he could find and hurried us along in our foolishness. At dawn he went home to bed. Dean and I had ended up with a coloured guy called Walter who ordered drinks at the bar and had them lined up and said, 'Wine-spodioid!' which was a shot of port wine, a shot of whisky, and a shot of port wine. 'Nice sweet jacker for all that bad whisky!' he yelled.

He invited us to his home for a bottle of beer. He lived in the tenements in back of Howard. His wife was asleep when we came in. The only light in the apartment was the bulb over her bed. We had to get up on a chair and unscrew the



accessible
memorable
impactful

Facebook

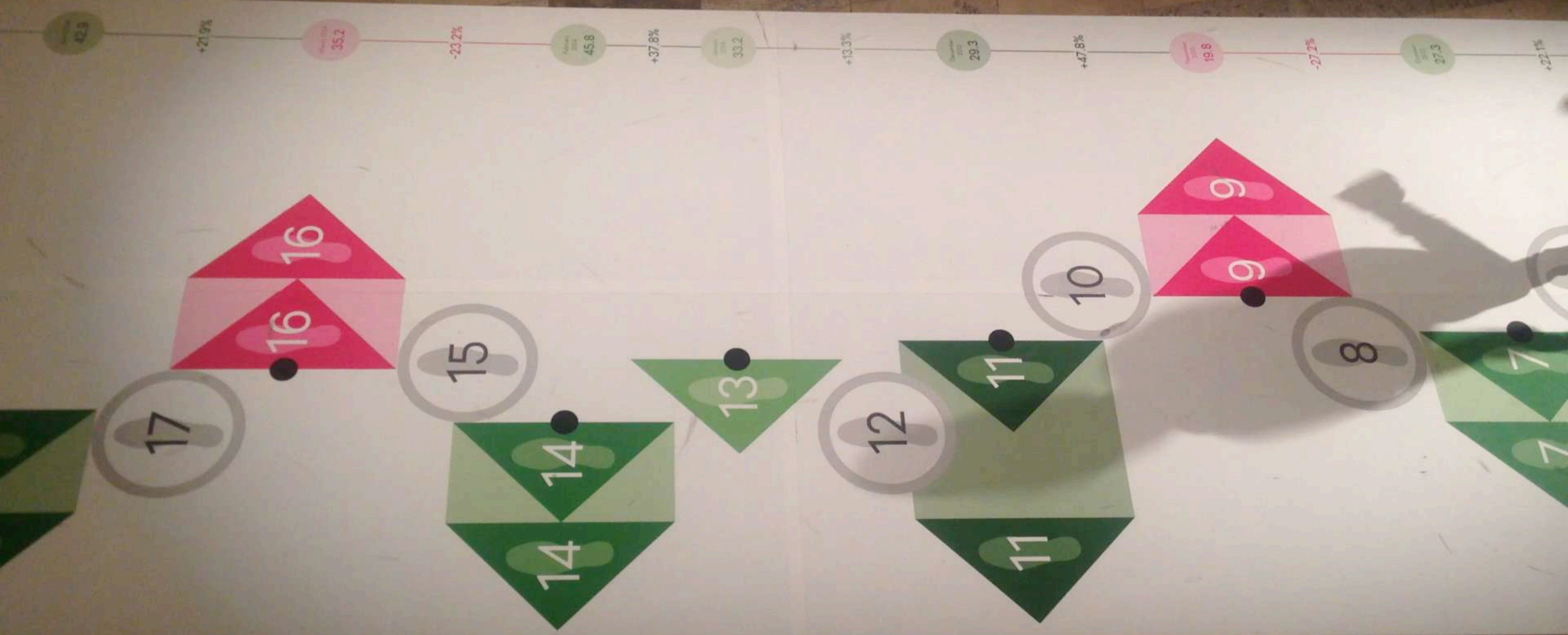


@stefpos

Open Data Playground Southbank Centre



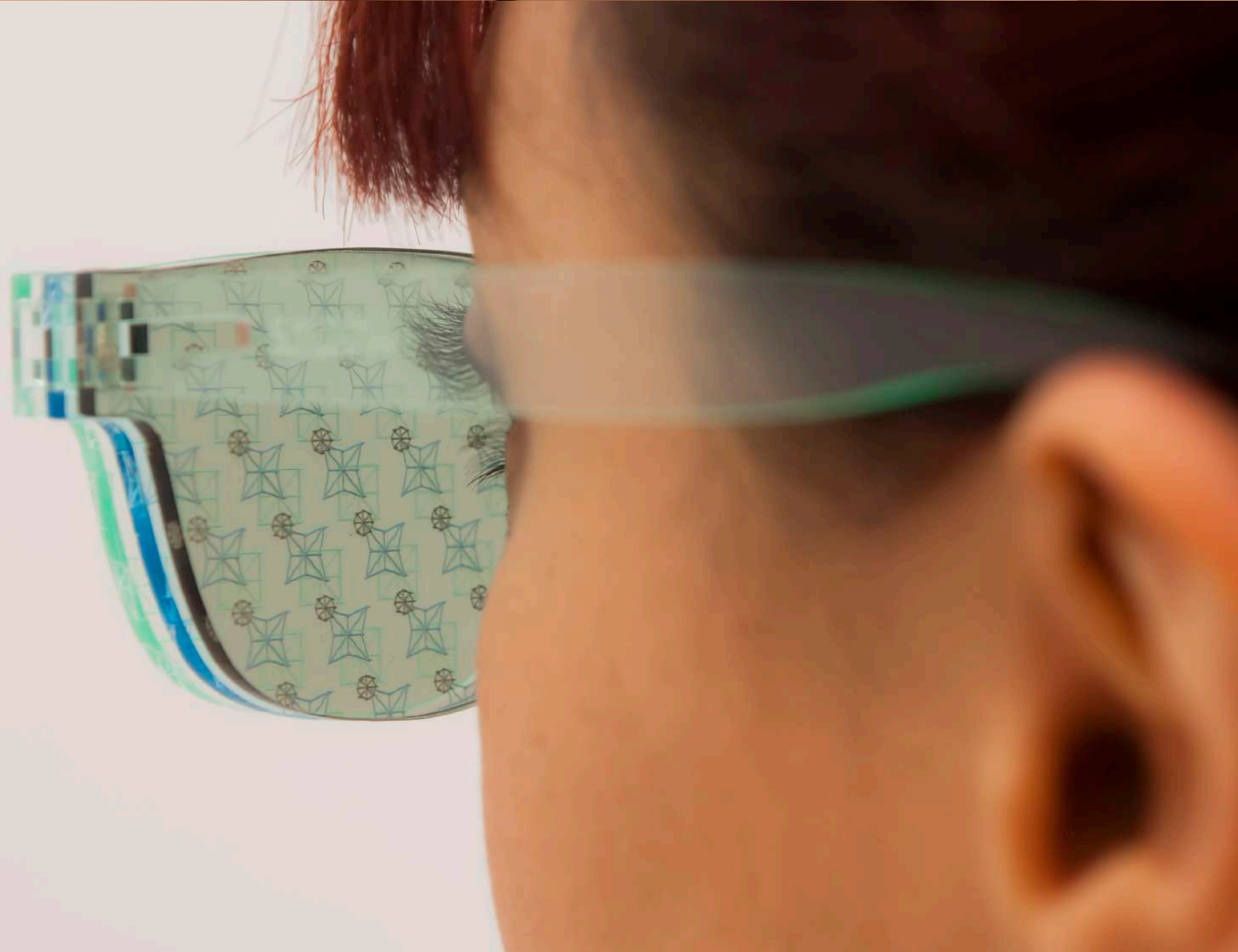
Open Data Playground Southbank Centre



Air Transformed

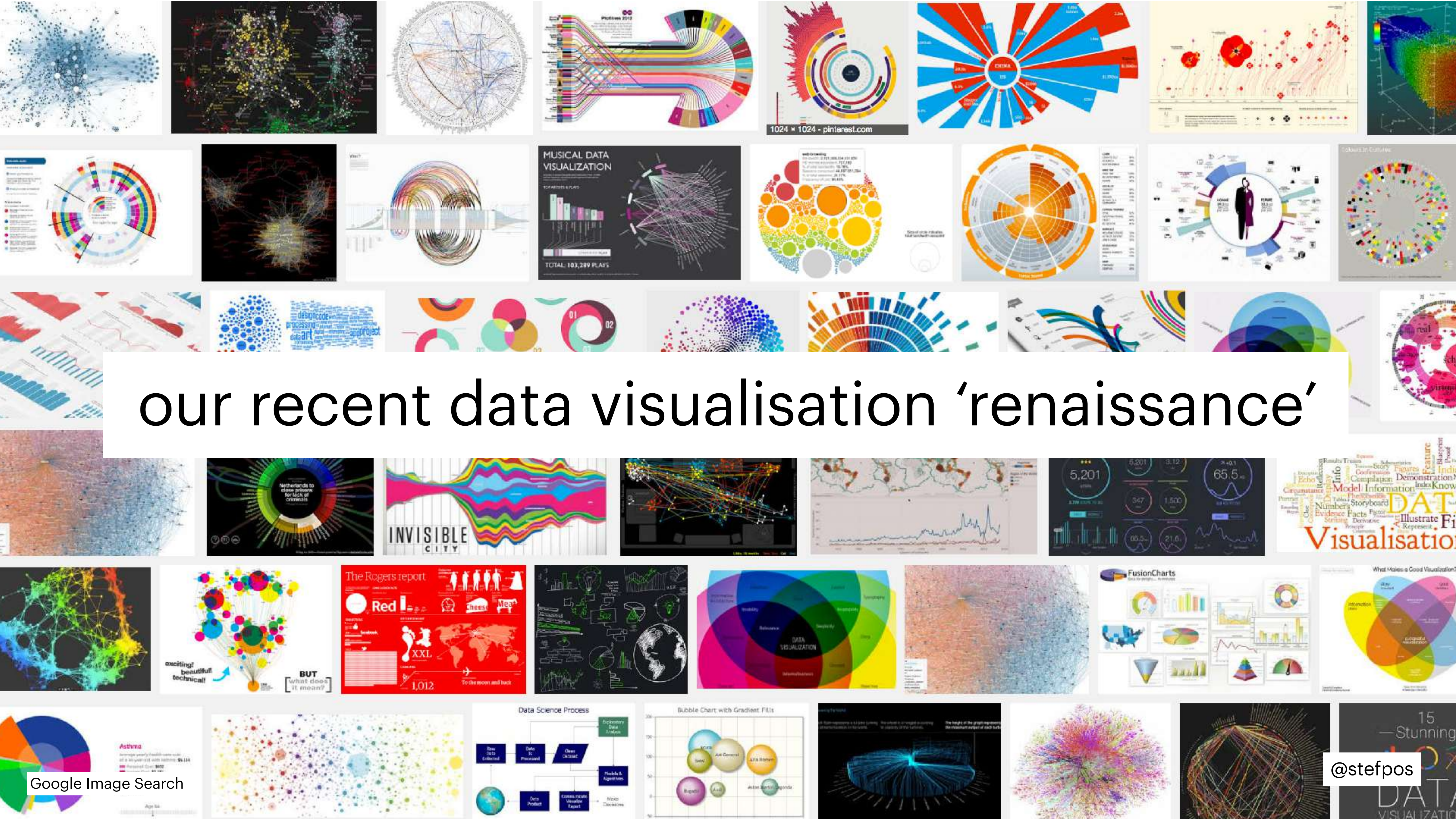


Air Transformed



@stefpos

What does it mean to
be 'post-infographic'?



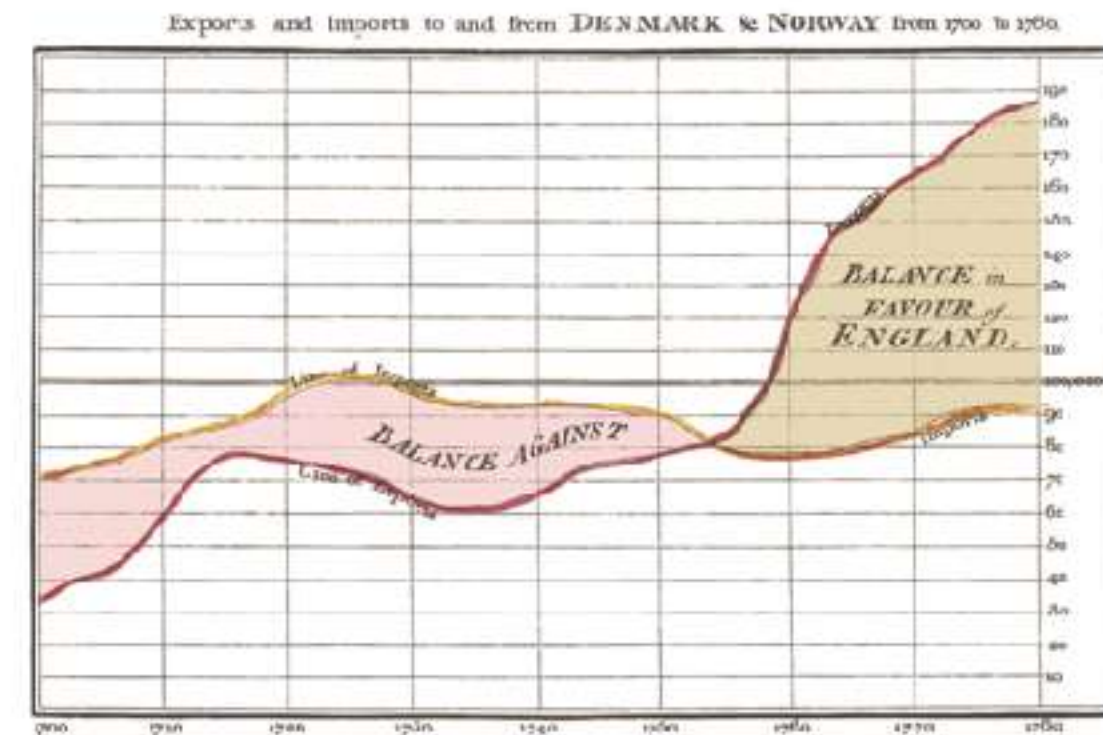
our recent data visualisation 'renaissance'

Google Image Search

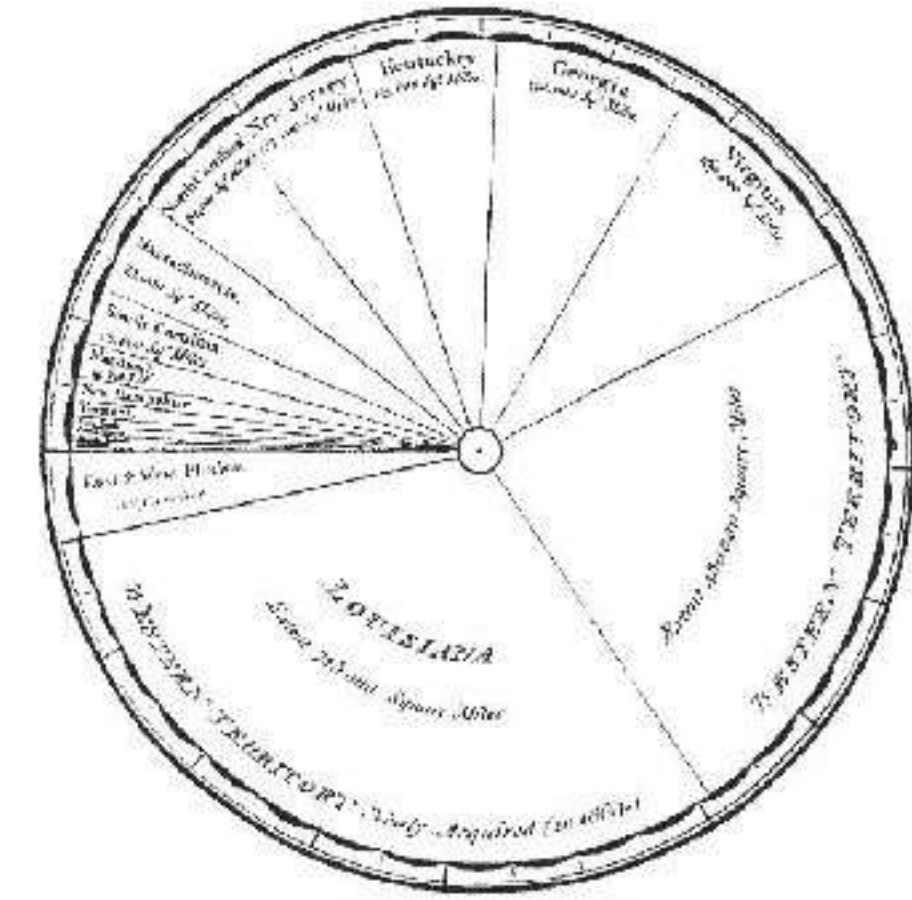
@stefpos

(renaissance because

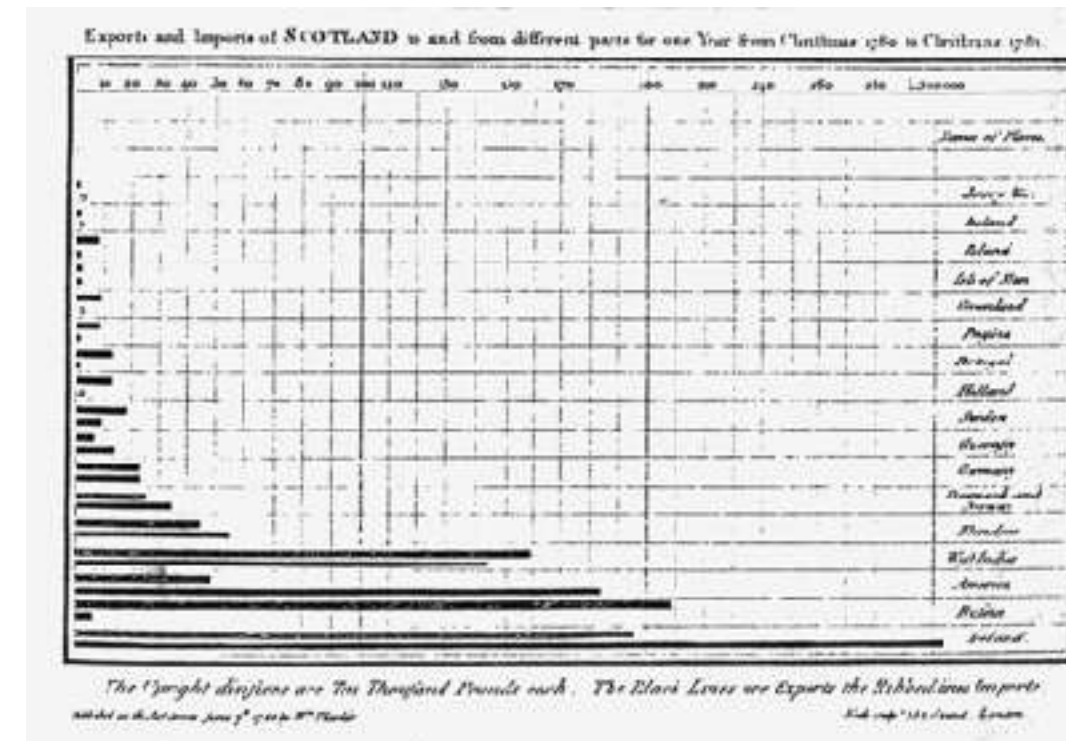
this:



this:



and this:



William Playfair

data → infographic

data → infographic
personal documentation
souvenir or memory
subject of artwork
aesthetic influence
experience
conversation starter
etc.

Data as the souvenir
of an experience

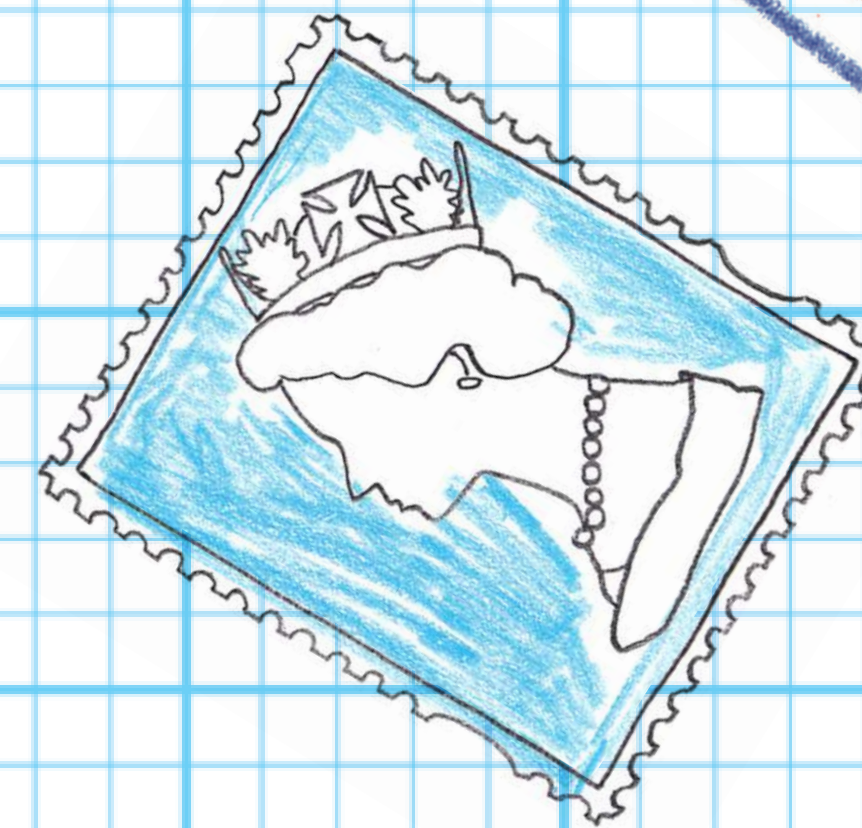
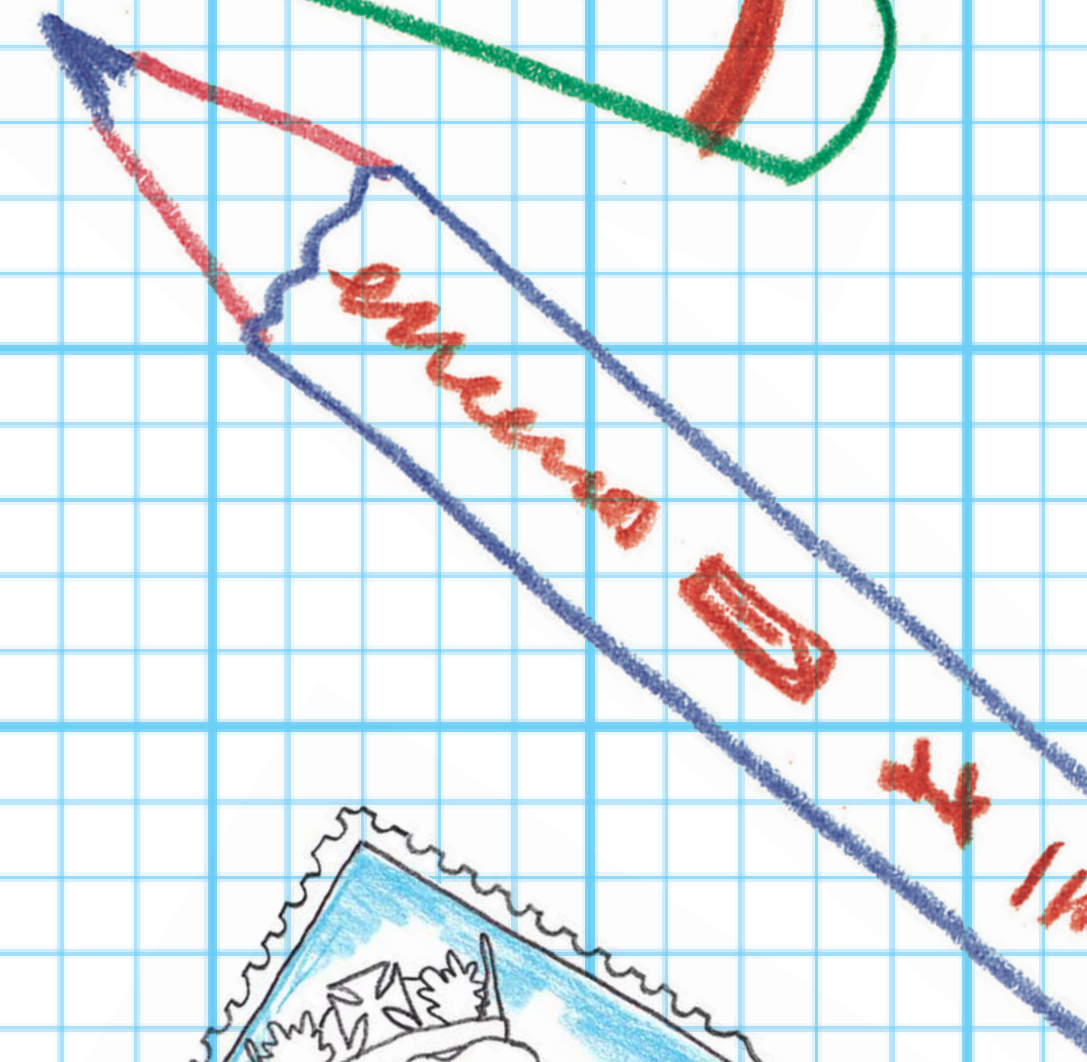
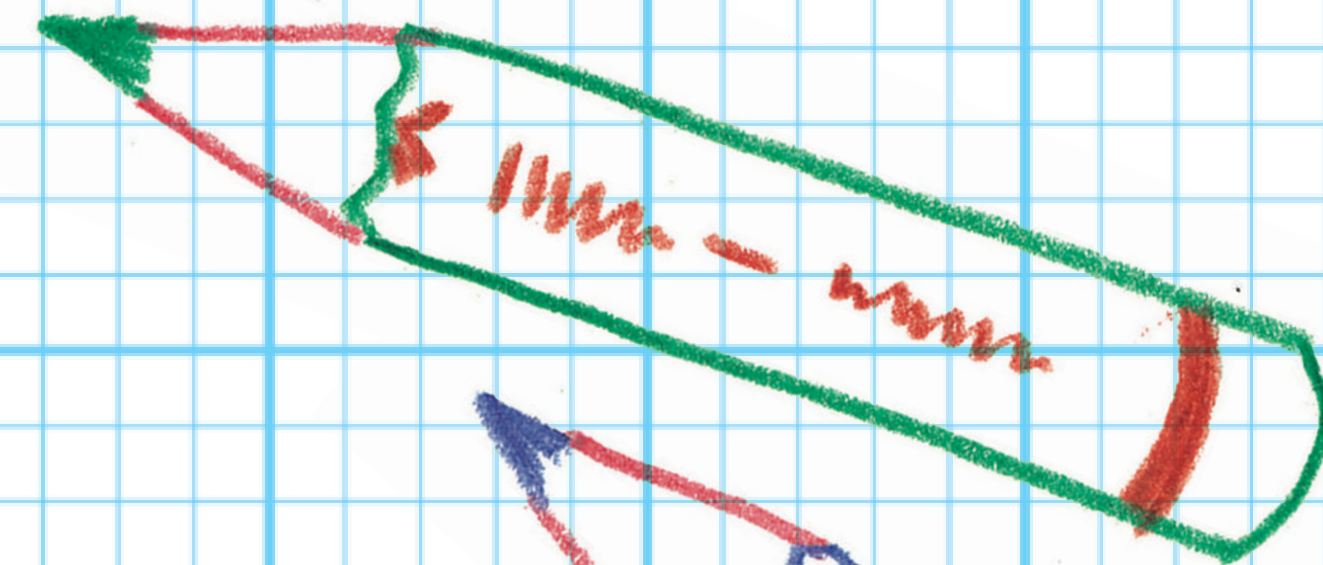
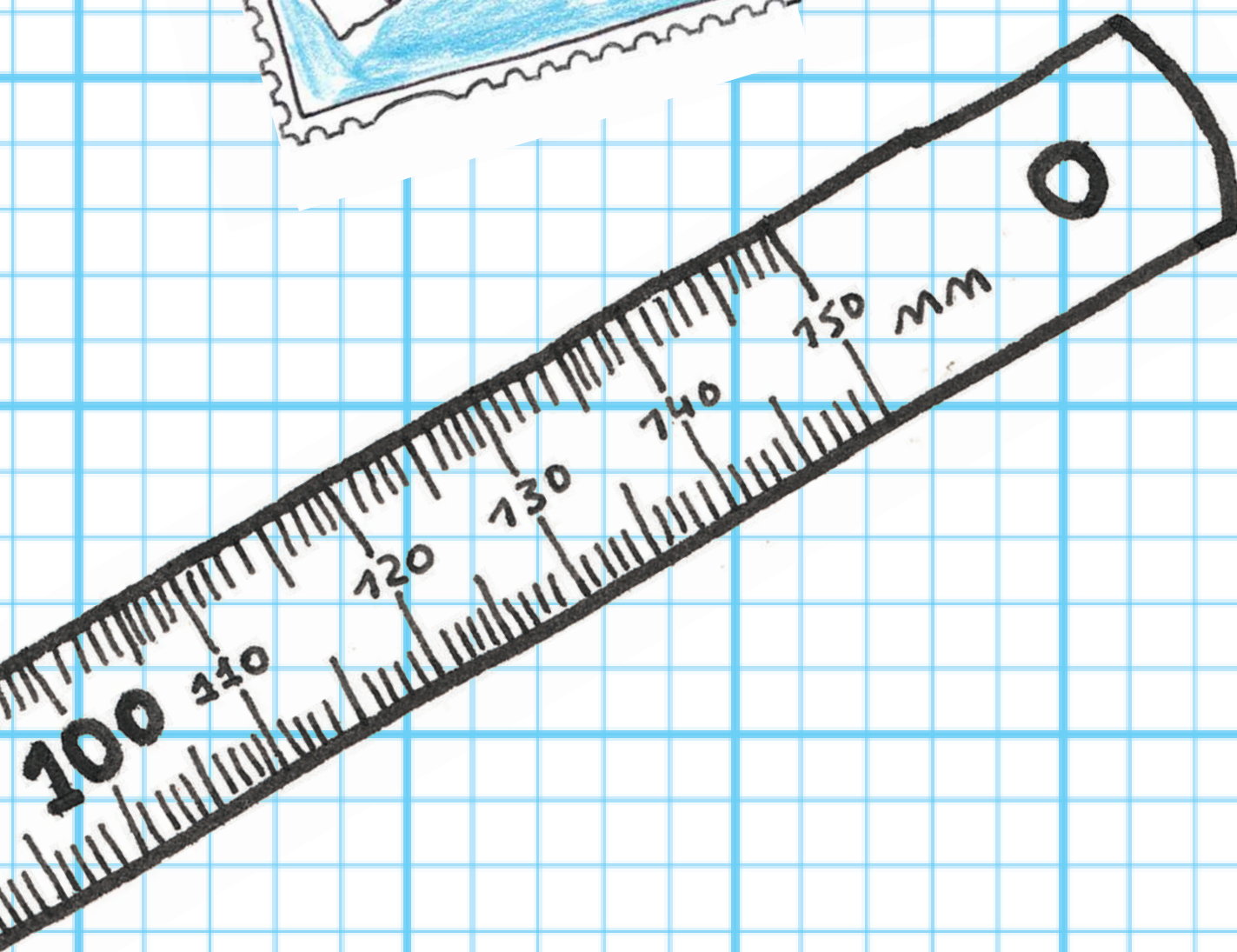
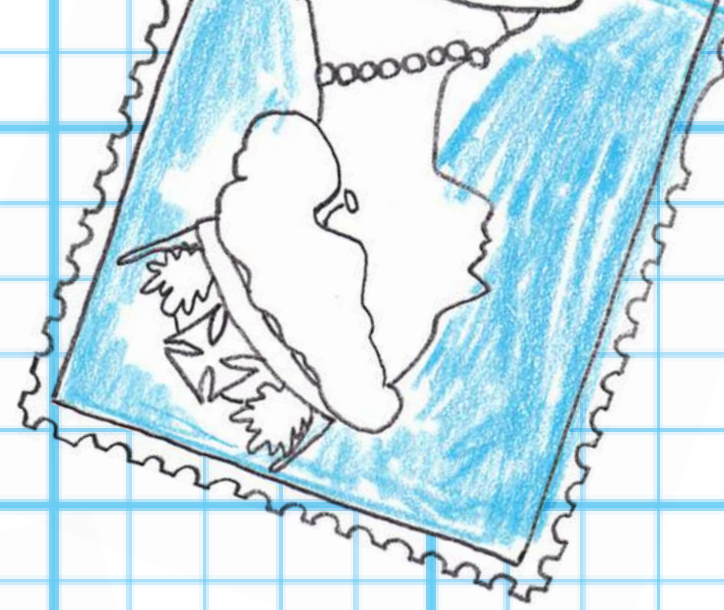
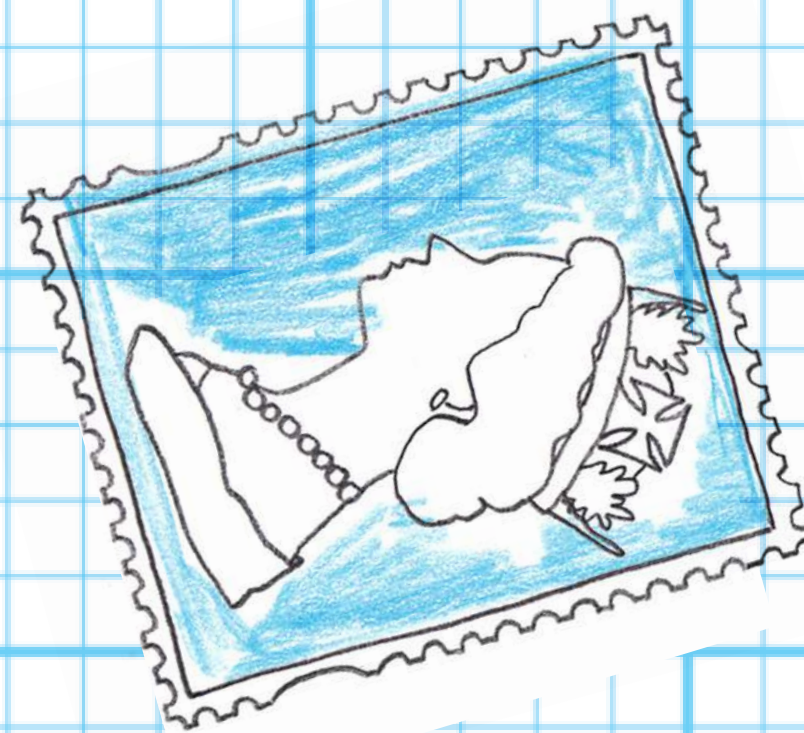


GIORGIA



Stefanie

Dear Data



www.dear-data.com

@_deardata

@stefpos

books

drinks

sounds

laughter

transportation

indecision

eavesdropping

our time alone

thank-yous

complaints

compliments

mirrors

emotions

workspaces

our past

doors

to-do lists

our cities

apologies

new things

envy

desires

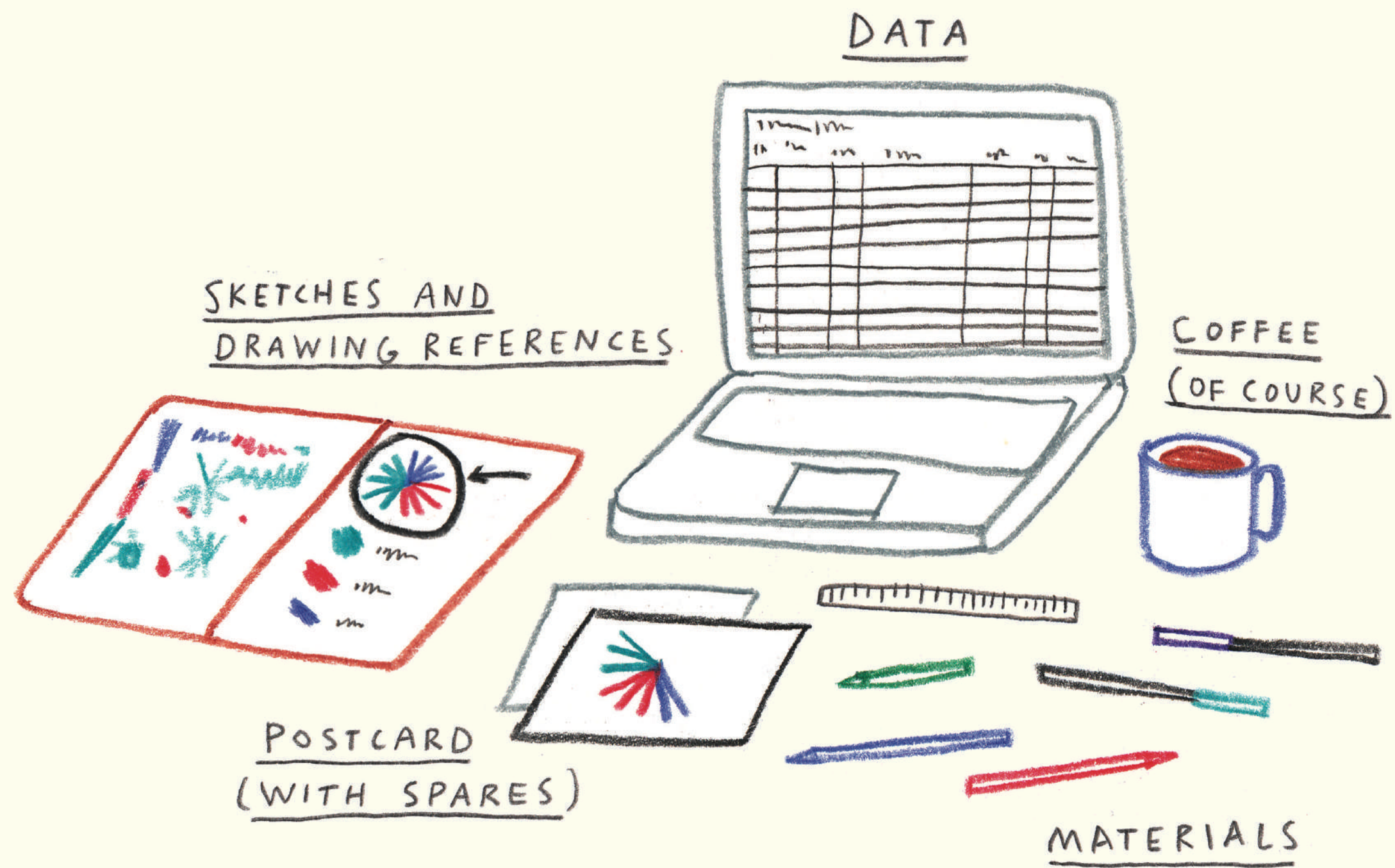
things we buy

(...)

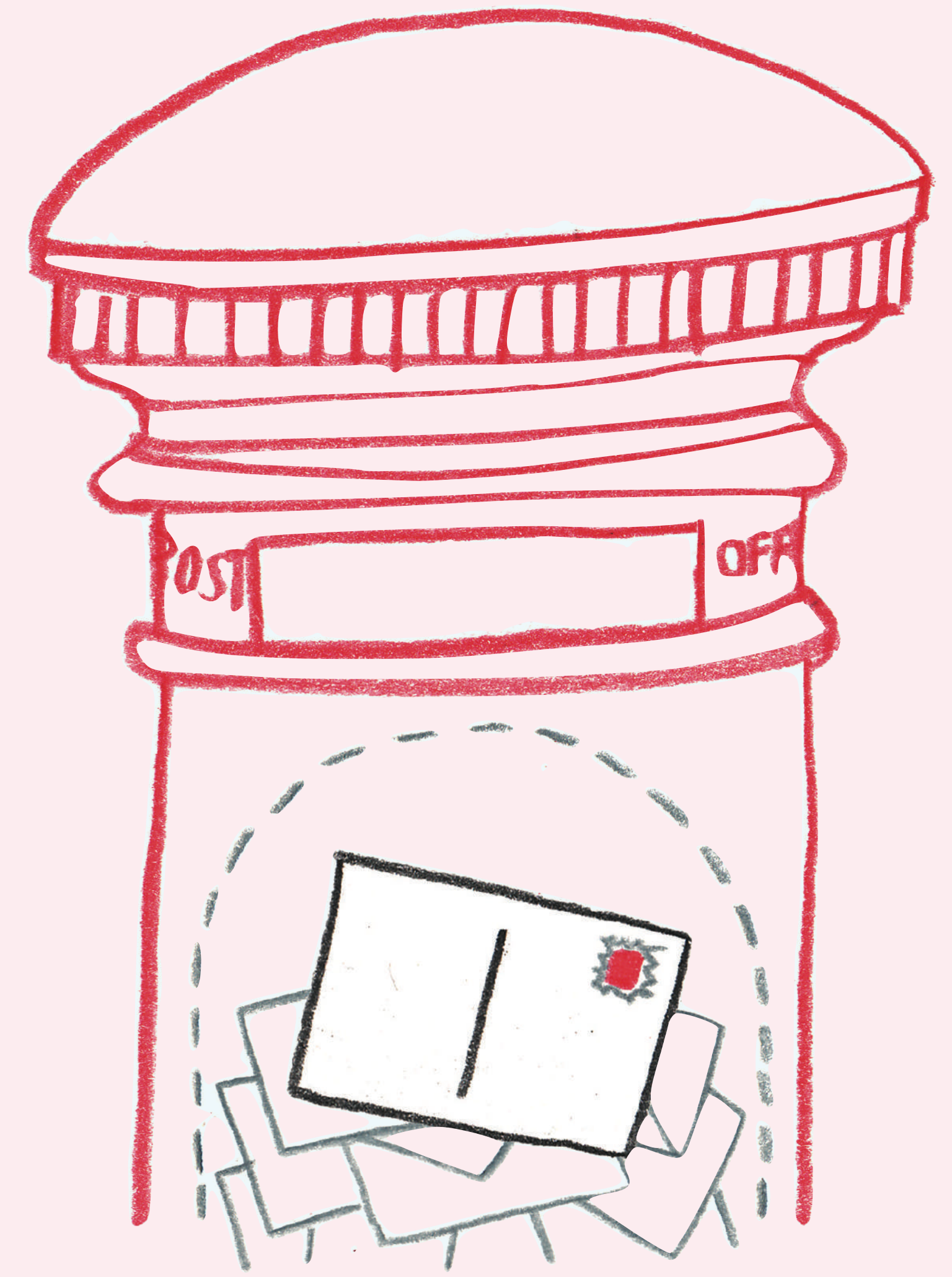
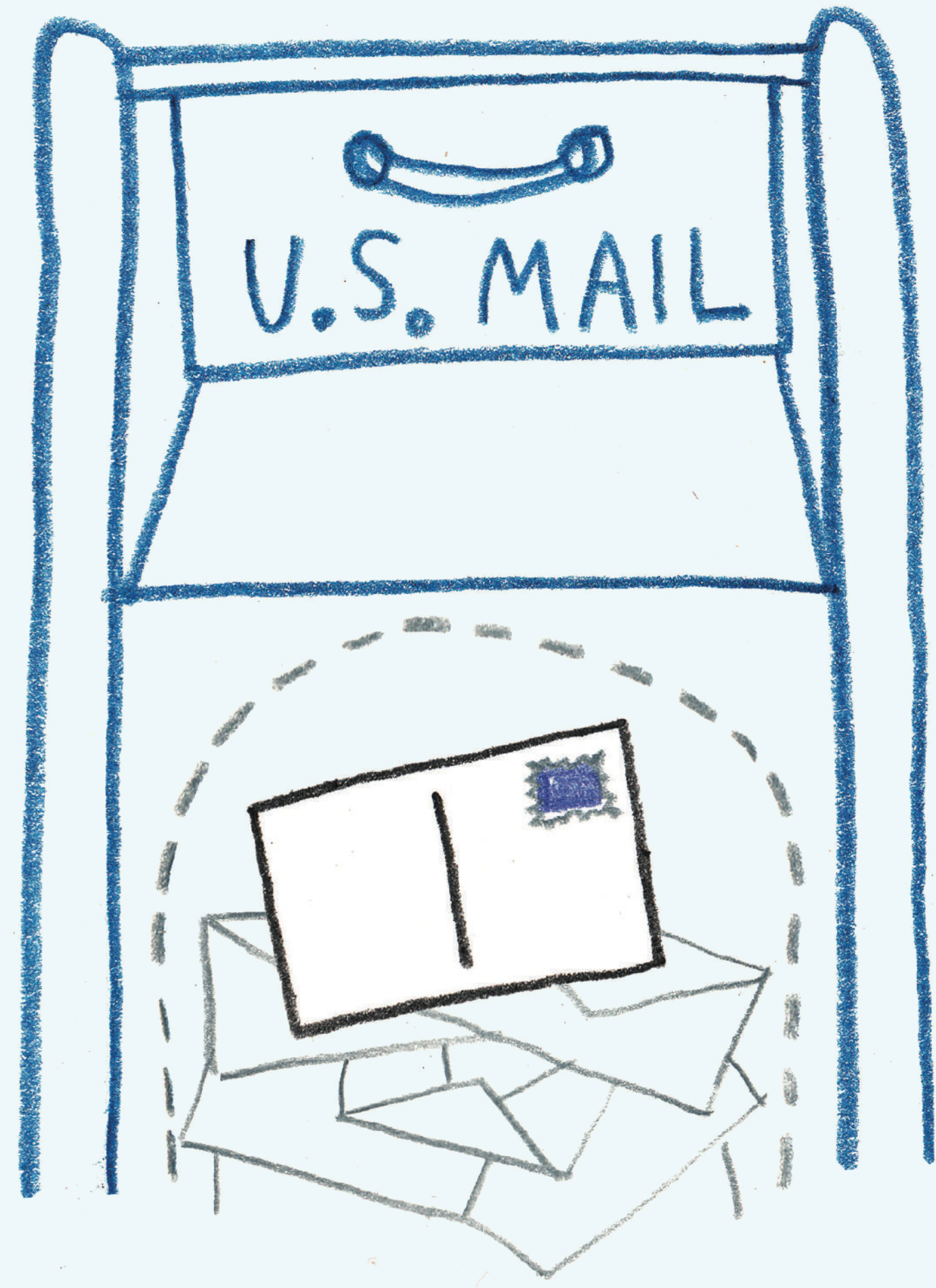
DATASET

1	2	3	4	5	6	7
.....
.....
.....
.....
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.....

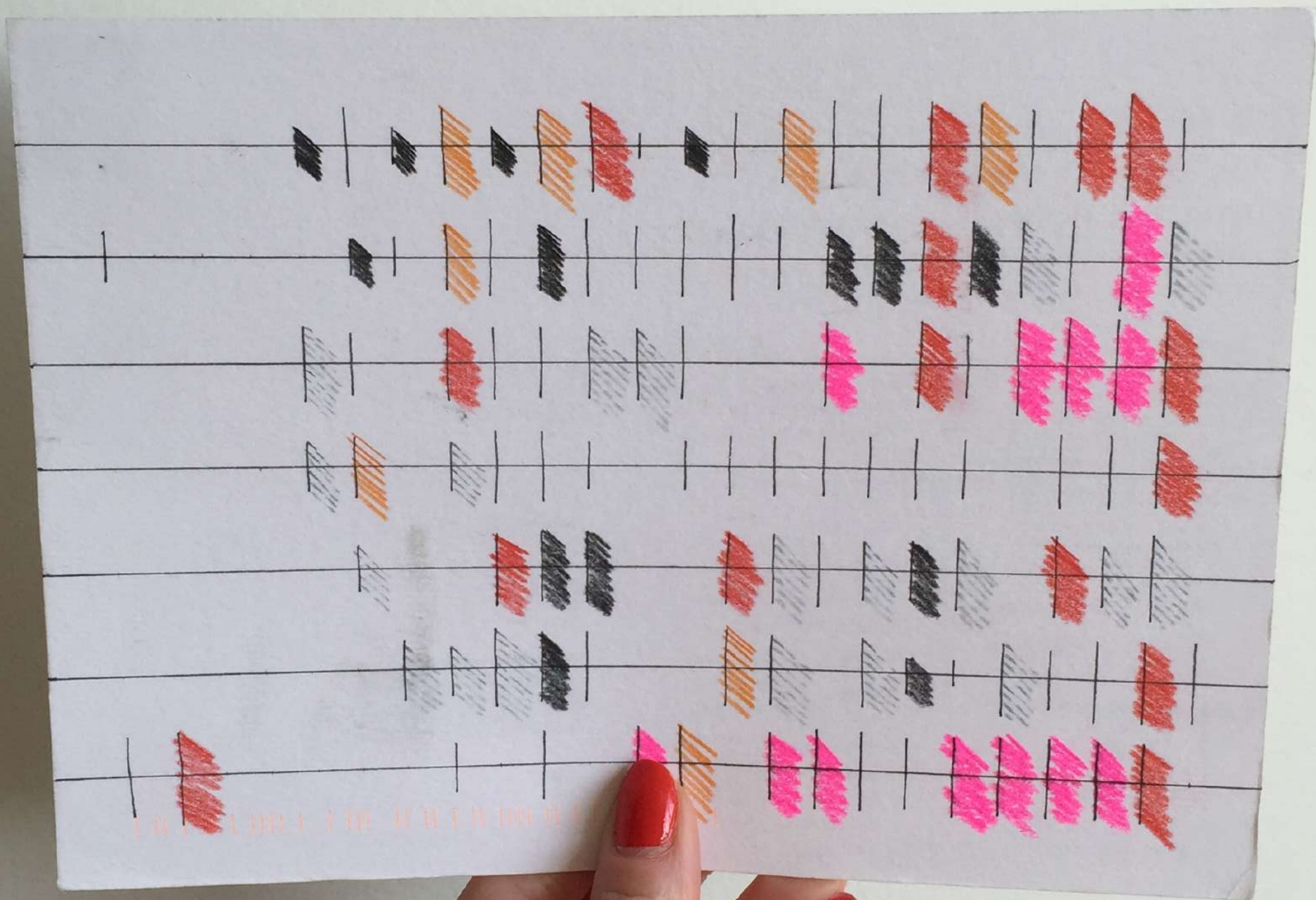
Annotations:
- Green lines through columns 1 and 2: **LEAVE THIS OUT**
- Red dashed lines connecting circled cells: **LOWEST VALUES**
- Blue dashed lines connecting circled cells: **HIGHEST VALUES**
- Red circle around row 6: **INTERESTING!**



GIORGIA Stefanie



Stefanie to GIORGIA



GIORGIA to Stefanie

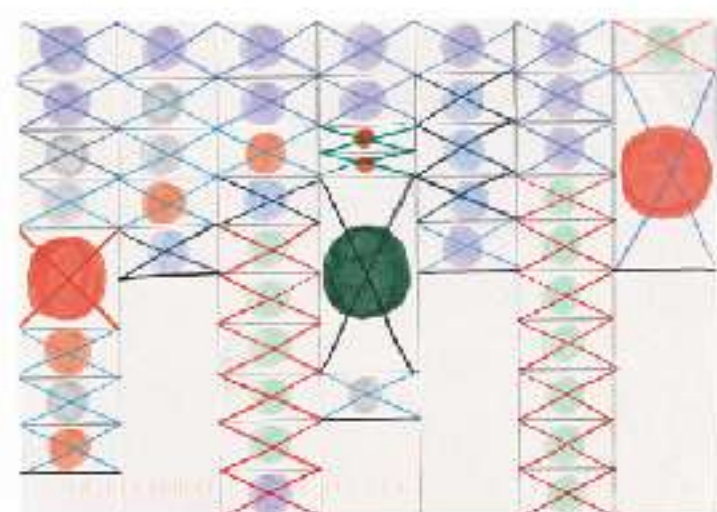
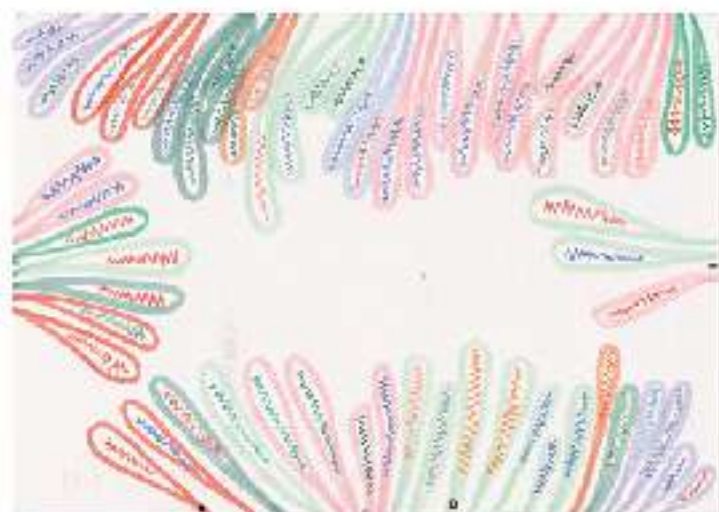
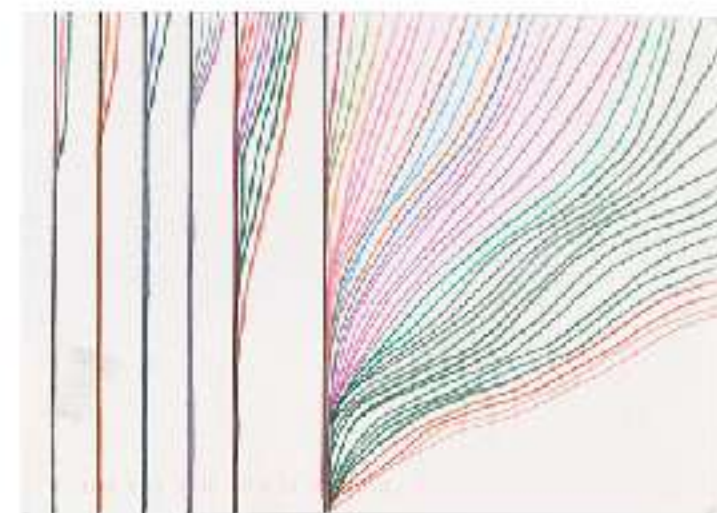
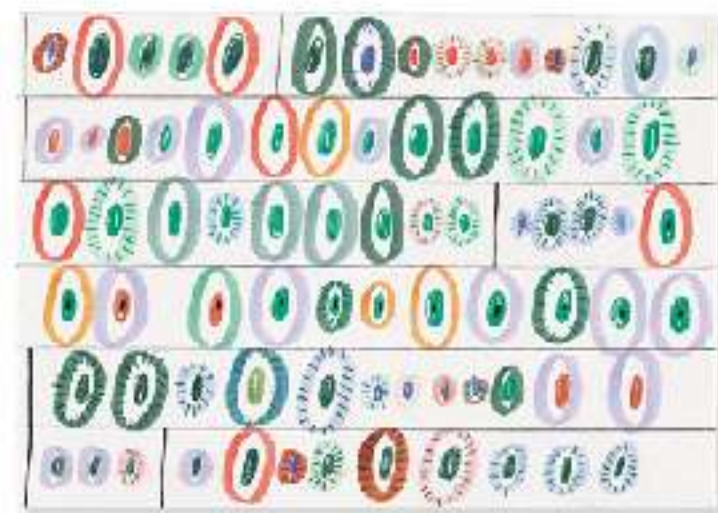
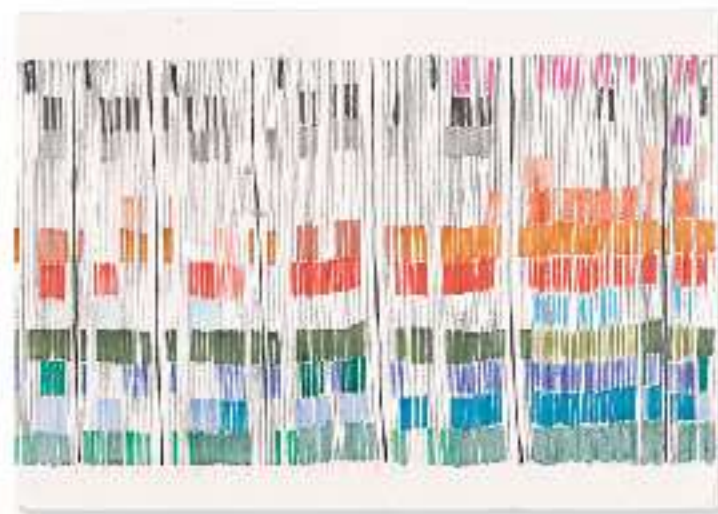
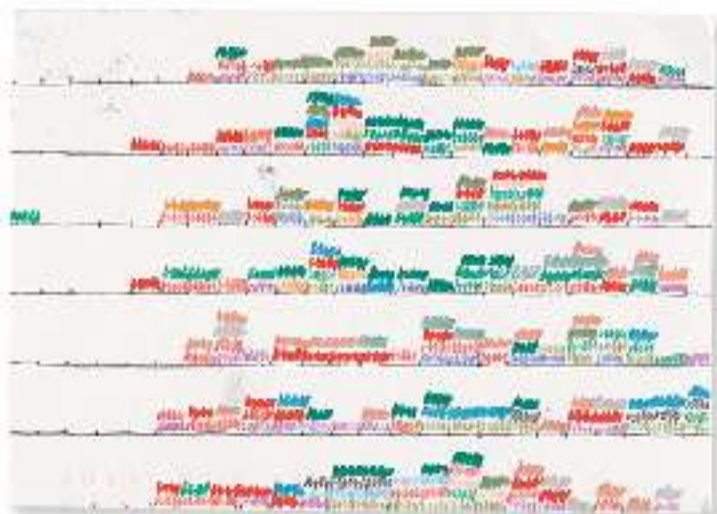
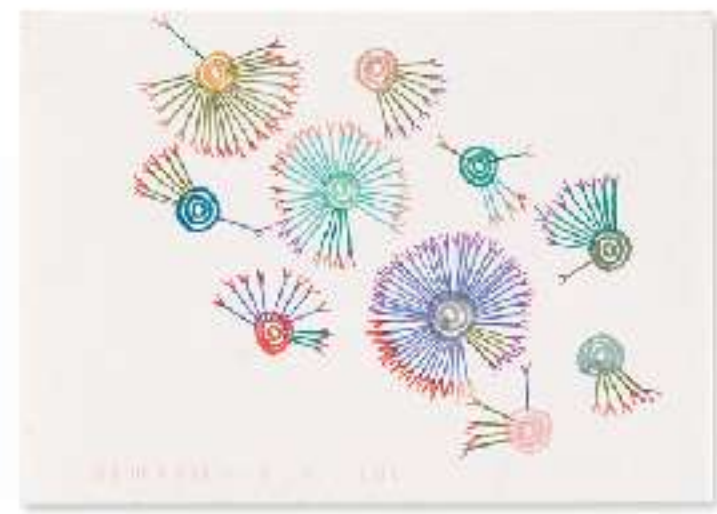
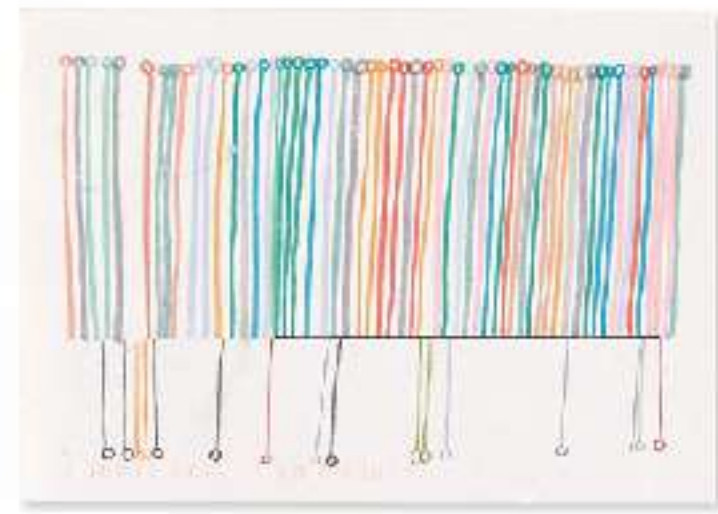
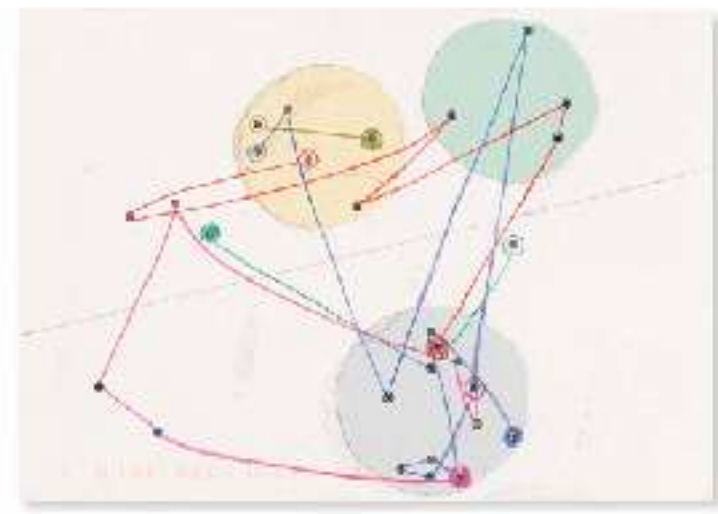
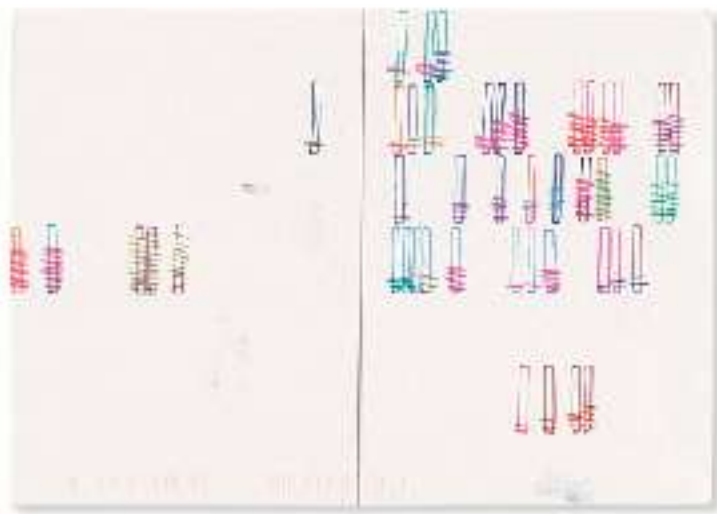
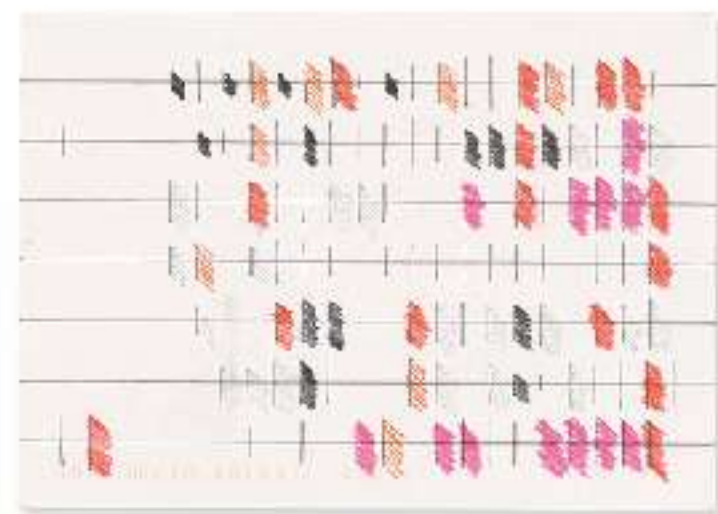
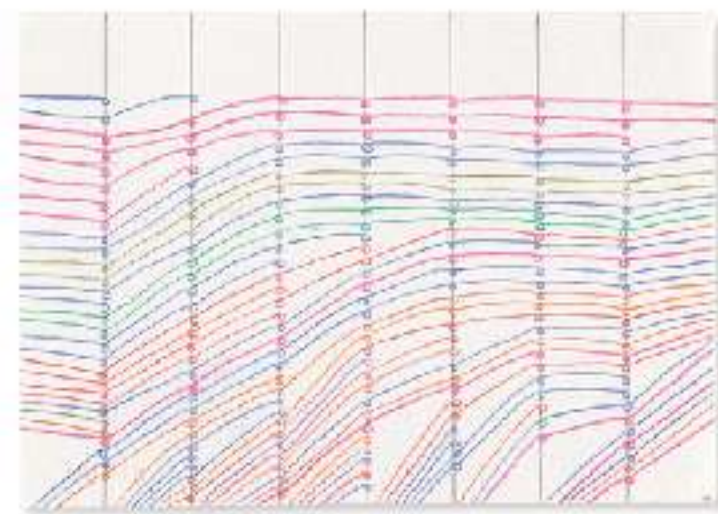
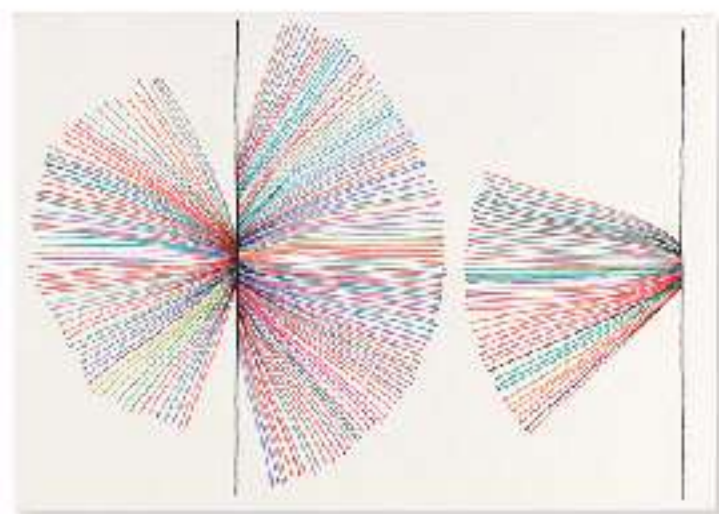
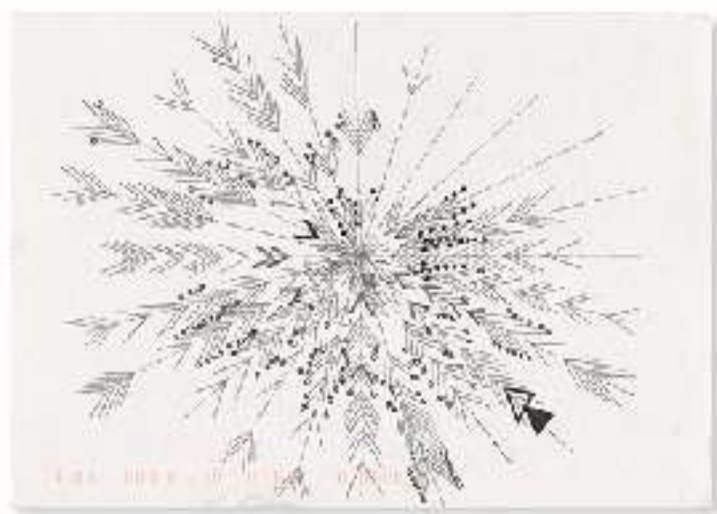


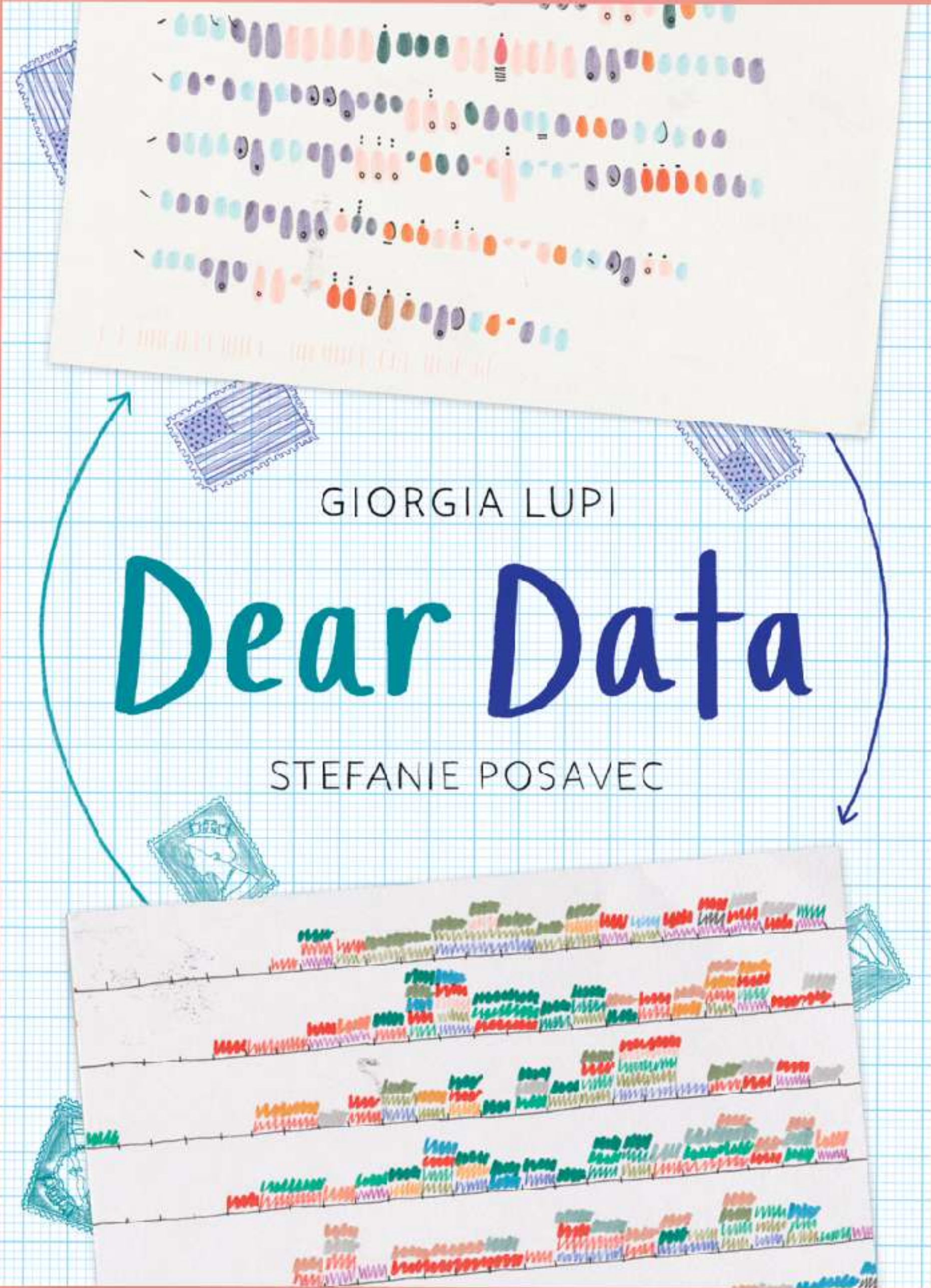
USING A MANUAL PROCESS TO:

MAKE SENSE

MAKE A CONNECTION

MAKE A MEMORY

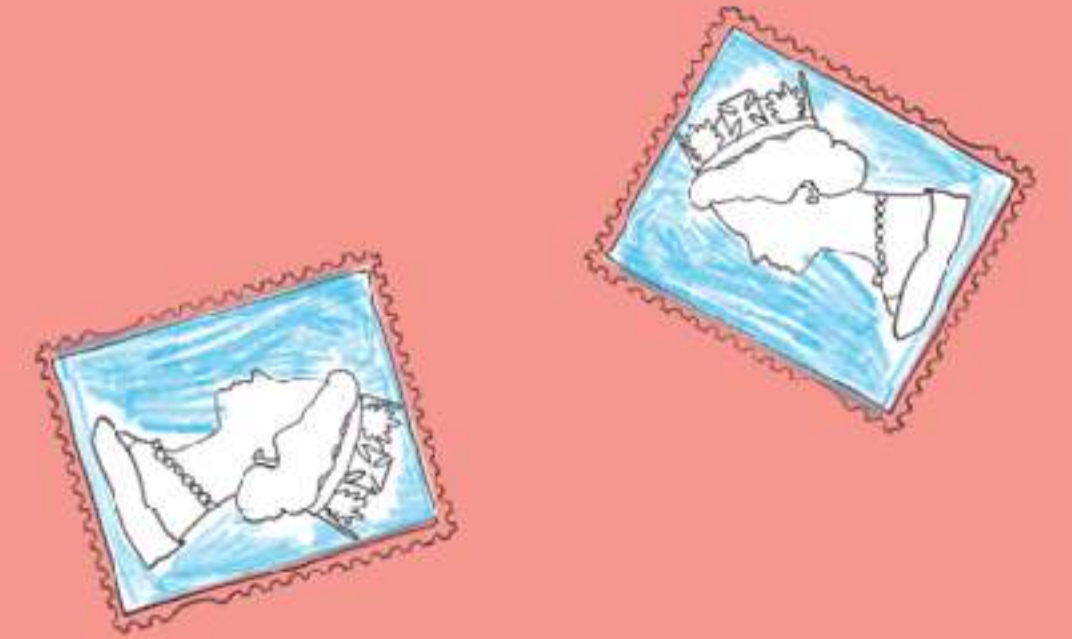




GIORGIA LUPI

Dear Data

STEFANIE POSAVEC



GIORGIA LUPI and STEFANIE POSAVEC

CONVERSATIONS

PHONE:

TO-DO-LIST

GRATITUDE

SMILES

LOVE

OBSERVE, COLLECT, DRAW!

DREAMS

DISTRACTIONS

++++

✓
✓
✓

|||| ⊕

++++

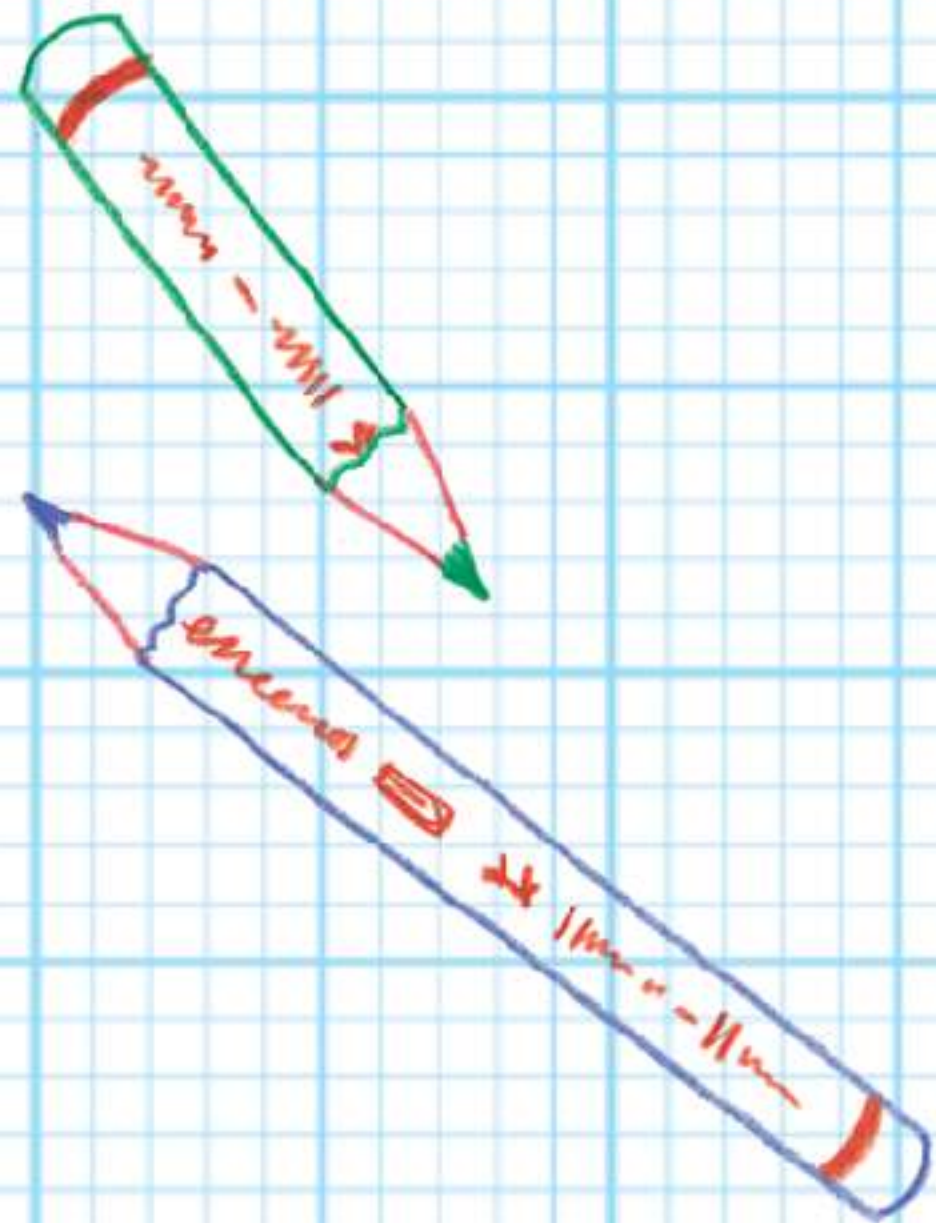
||||

1 2 3 4 5 6 7 8 9 10
|||||

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A VISUAL JOURNAL

DISCOVER THE PATTERNS IN
YOUR EVERYDAY LIFE



MoMA

[Plan your visit](#)

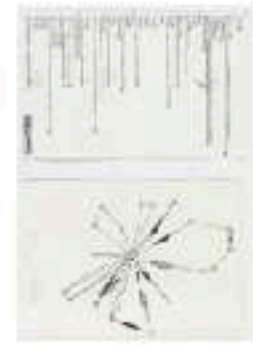
[Exhibitions and events](#)

[Art and artists](#)

[Store](#)



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 1 (Wed)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 2 (Thu)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 3 (Fri)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 4 (Sat)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 5 (Sun)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 6 (Mon)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 19 (Tue)
2015



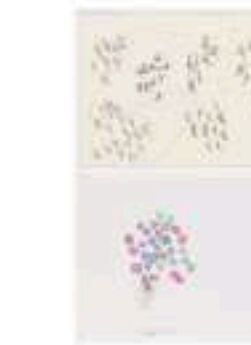
Giorgia Lupi, Stefanie Posavec
Dear Data: Week 20 (Wed)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 21 (Thu)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 22 (Fri)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 23 (Sat)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 24 (Sun)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 7 (Mon)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 8 (Tue)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 9 (Wed)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 10 (Thu)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 11 (Fri)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 12 (Sat)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 25 (Sun)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 26 (Mon)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 27 (Tue)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 28 (Wed)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 29 (Thu)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 30 (Fri)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 13 (Sat)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 14 (Sun)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 15 (Mon)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 16 (Tue)
2014



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 17 (Wed)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 18 (Thu)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 31 (Fri)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 32 (Sat)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 33 (Sun)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 34 (Mon)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 35 (Tue)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 36 (Wed)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 37 (Thu)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 38 (Fri)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 39 (Sat)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 40 (Sun)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 41 (Mon)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 42 (Tue)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 43 (Wed)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 44 (Thu)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 45 (Fri)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 46 (Sat)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 47 (Sun)
2015



Giorgia Lupi, Stefanie Posavec
Dear Data: Week 48 (Mon)
2015

@stefpos



CRITIC'S PICK

The Word at MoMA Is 'Rotation, Rotation, Rotation'

On Saturday, the museum opens with changes to 20 of its 60 permanent collection galleries. A critic's guide to the standouts on each floor.

Search Engines Here we see a range of reactions to digitalization: its embrace in the work of Seth Price, and its rejection in the enticing collages of Wangechi Mutu and the hand-decorated postcards exchanged by Giorgia Lupi and Stefanie Posavec.



Giorgia Lupi

Italian, born 1981

Stefanie Posavec

American, born 1981

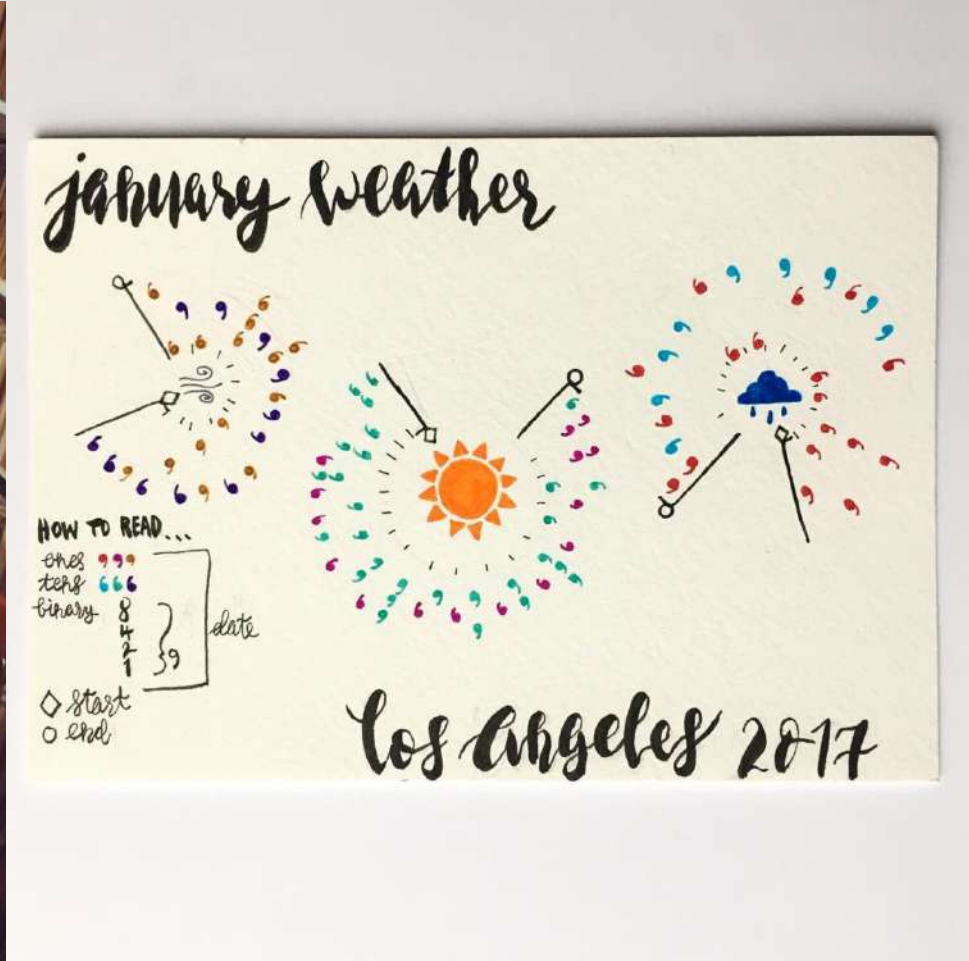
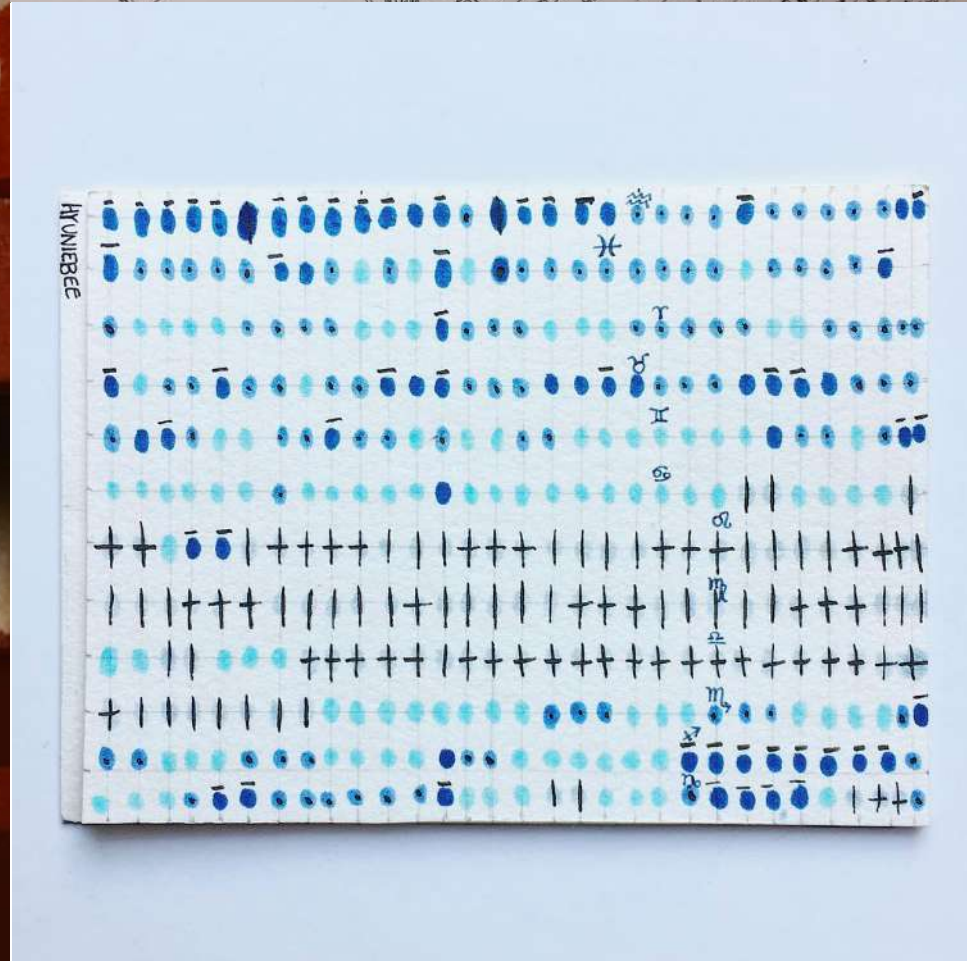
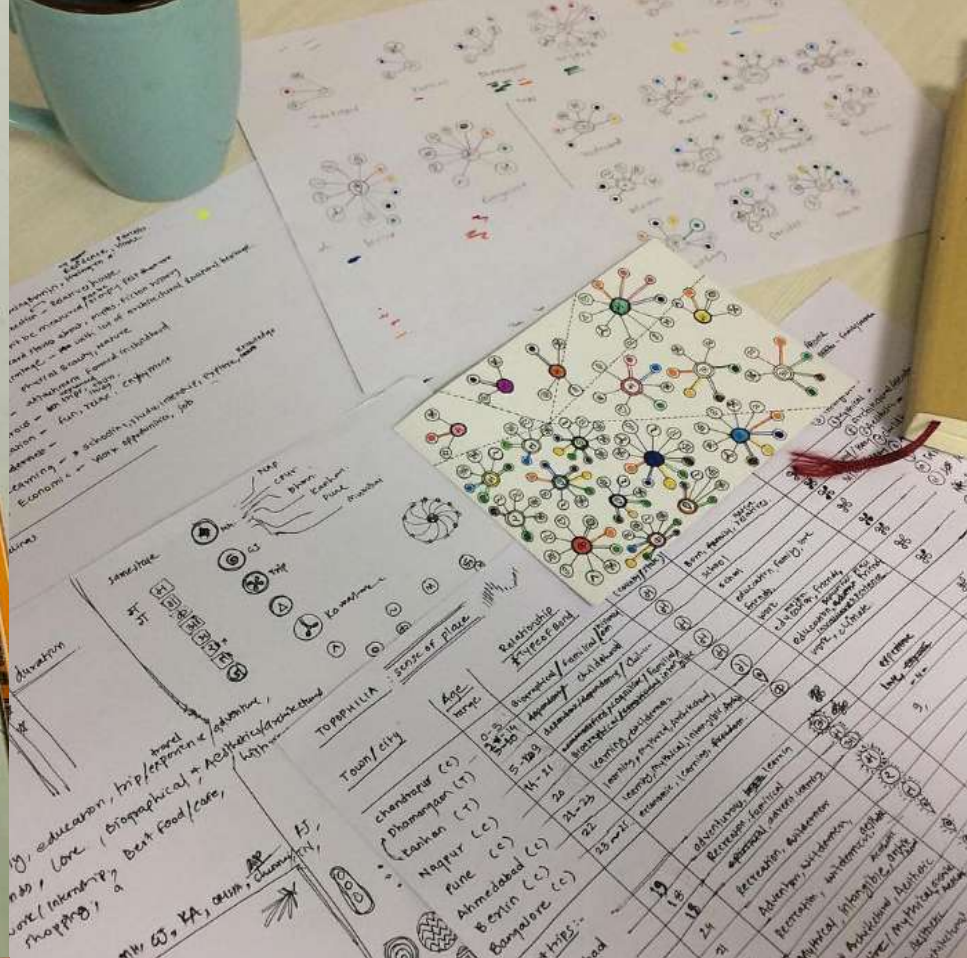
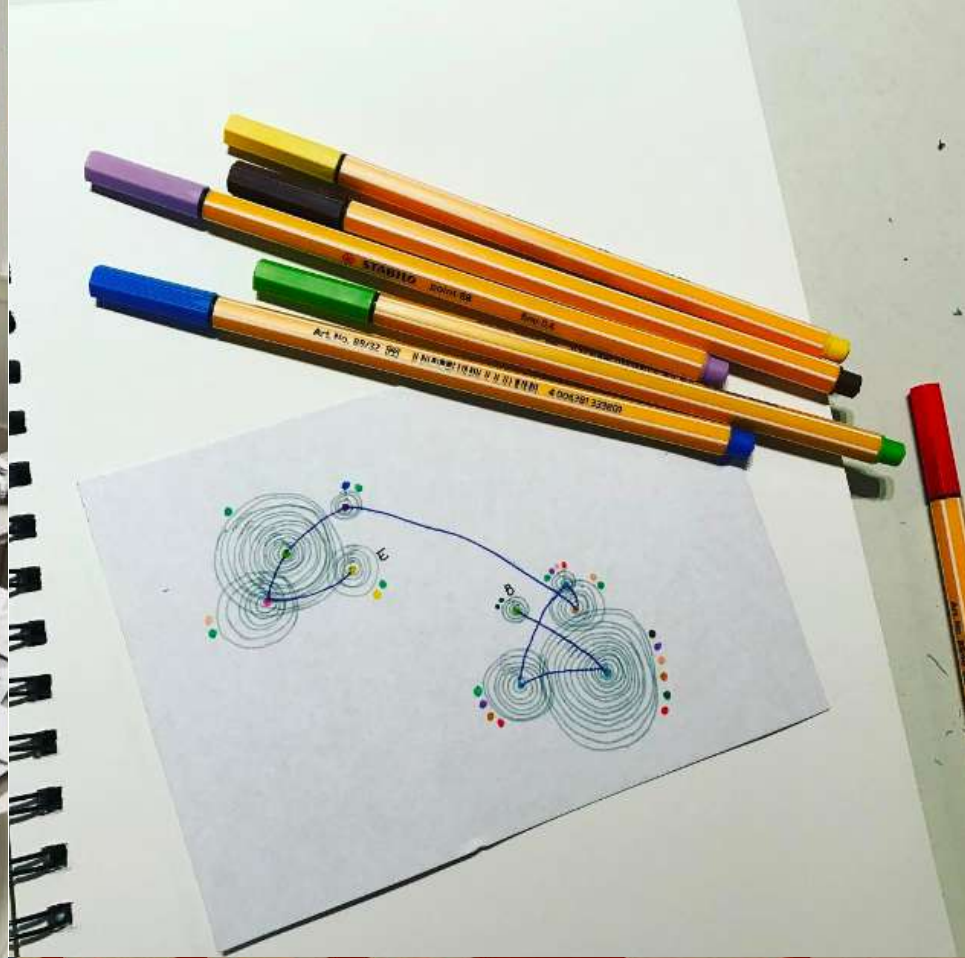
Dear Data 2014–15

Six from a series of fifty-two postcard pairs
Ink, marker, pencil, colored pencil on paper

Committee on Architecture and
Design Funds, 2016

Imagine getting to know someone halfway across the world through postcards sent by snail mail—but instead of a picture and a brief message, these postcards are covered with hand-drawn symbols representing patterns from daily life. Lupi (based in New York) and Posavec (based in London) embarked on a yearlong project in which they did just this: each week, they chose a part of their life to represent in a "data drawing" to be exchanged through the mail. While information design today is typically associated with digital data, Posavec and Lupi focused on analog design to tell stories about ordinary events and small intrigues.

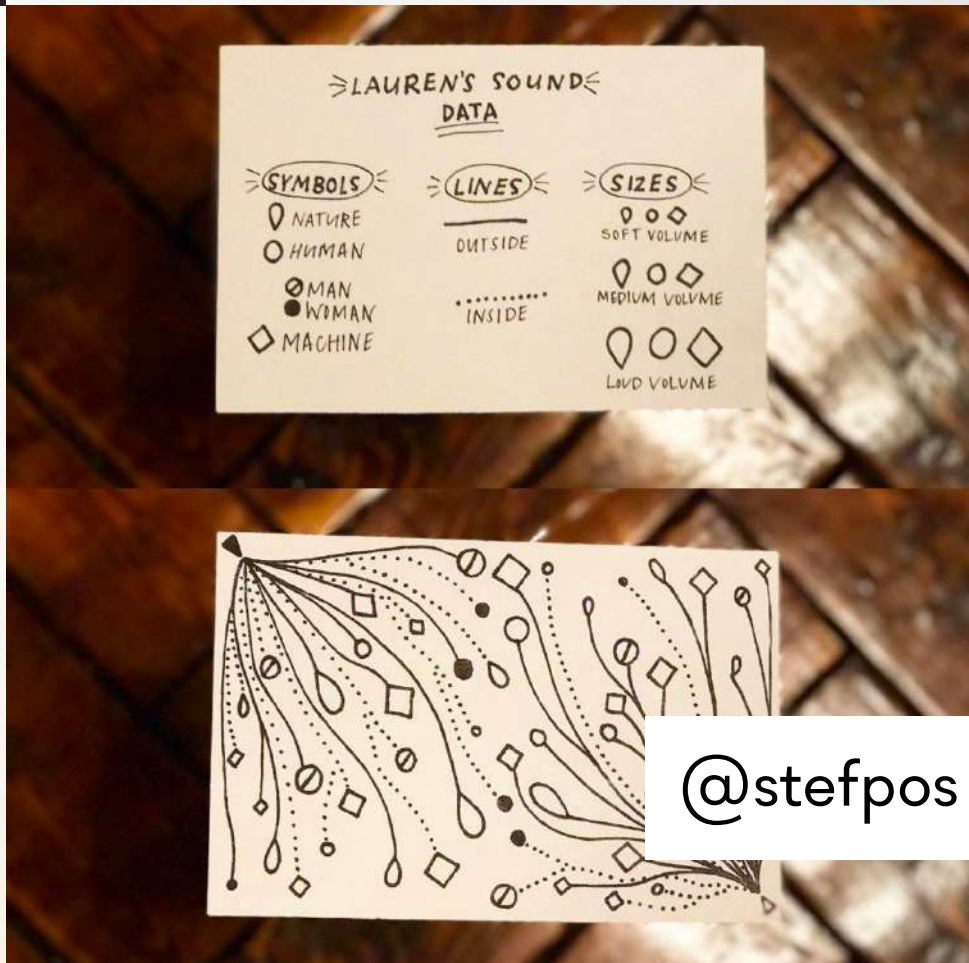
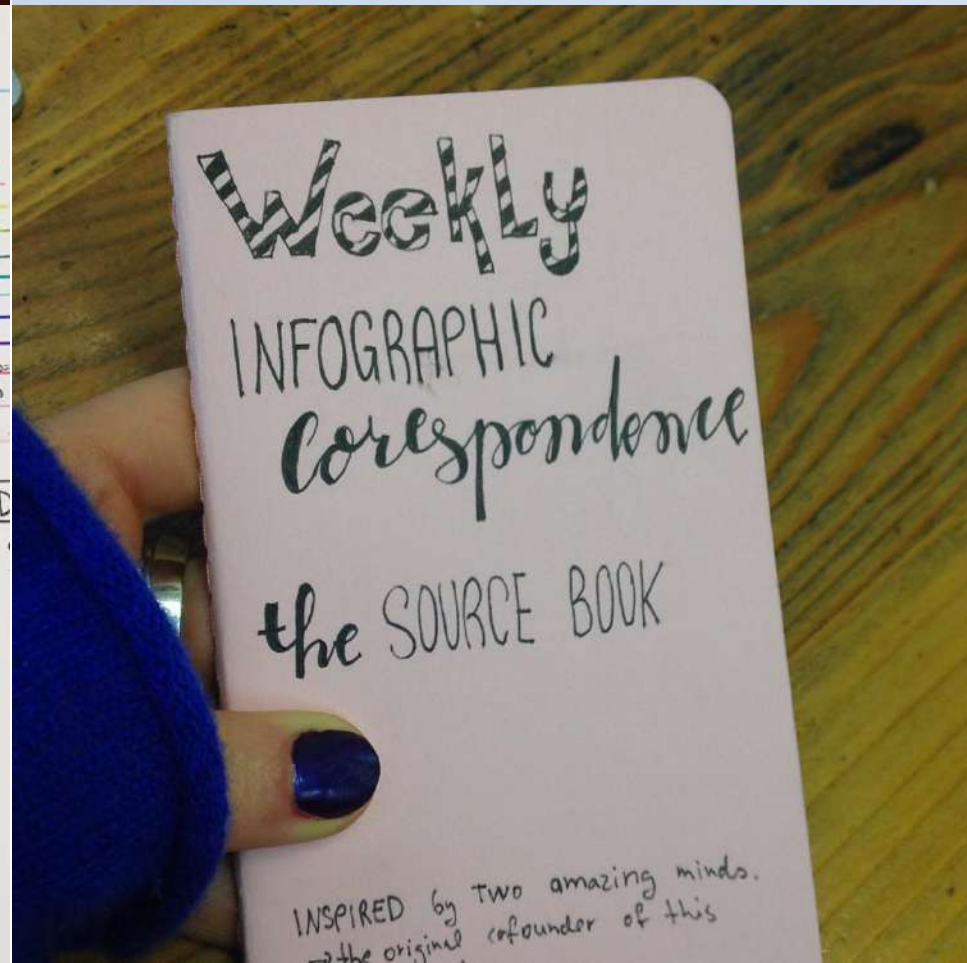
Dear Data



Dear Data PROJECT

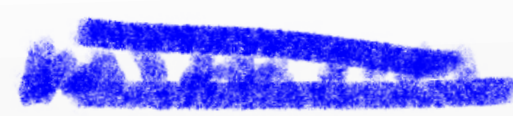
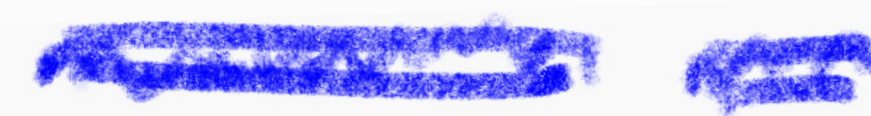
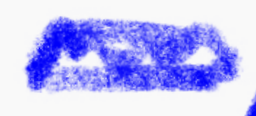
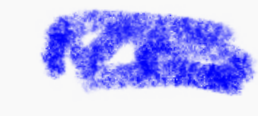
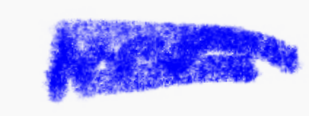
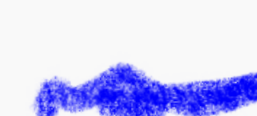
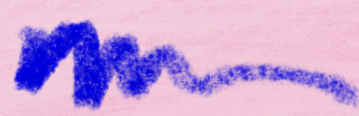

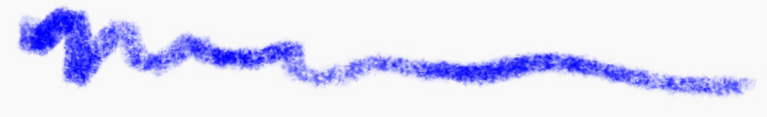
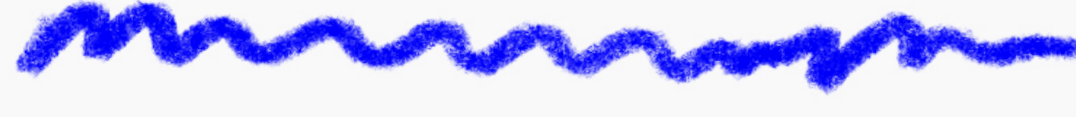
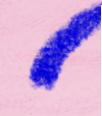

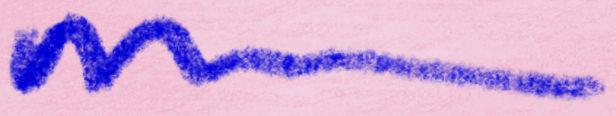

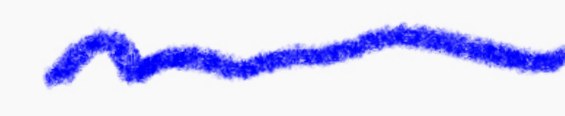
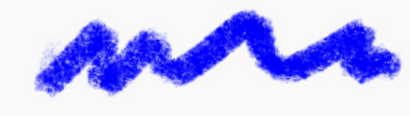
Days	Monday	Tuesday	Wednesday	Thursday	Friday	Color Code
Frankie	Basic	Hot Here	Basic	Basic	Basic	Basic
Sobhan	Basic	Basic	Rustic	Crazy	Slim	Basic
Susan	Cozy	Bland	Nice	Basic	Casual	Basic
Justin	Casual	Basic	Nice	Casual	Flowy	Basic
Victoria	Basic	Casual	Nice	Nice	Nice	Basic
Page	Basic	Basic	Nice	Mix	Nice	Basic

Weekly Average
 Frankie: Casual
 Sobhan: Basic
 Susan: Casual
 Justin: Basic
 Victoria: Nice



@stefpos

documenting life using a different form

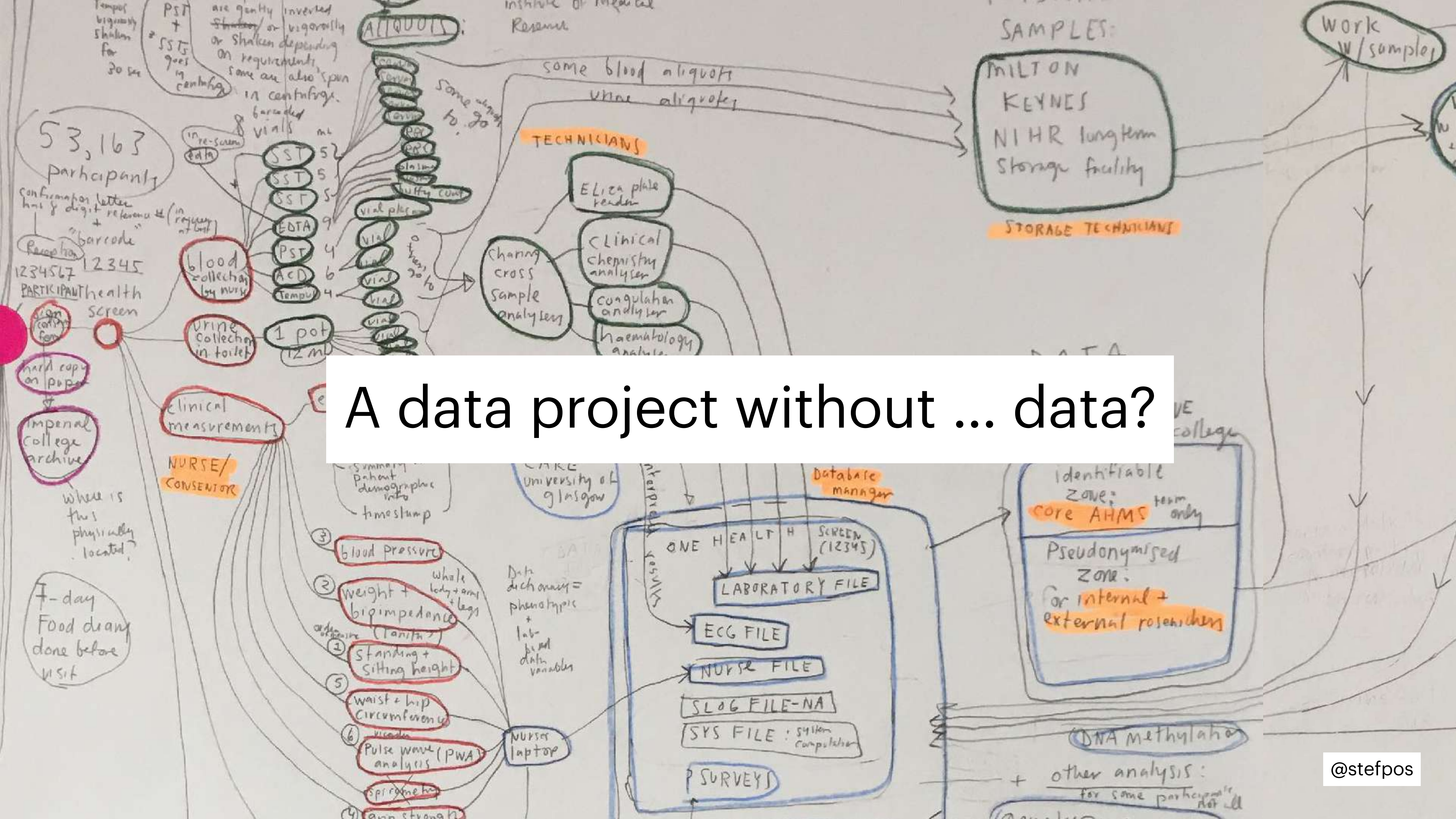
						
1			✓			
2			✓		✓	✓
3						
4						✓
5			✓		✓	
6				✓		✓

Data as something
artists respond to

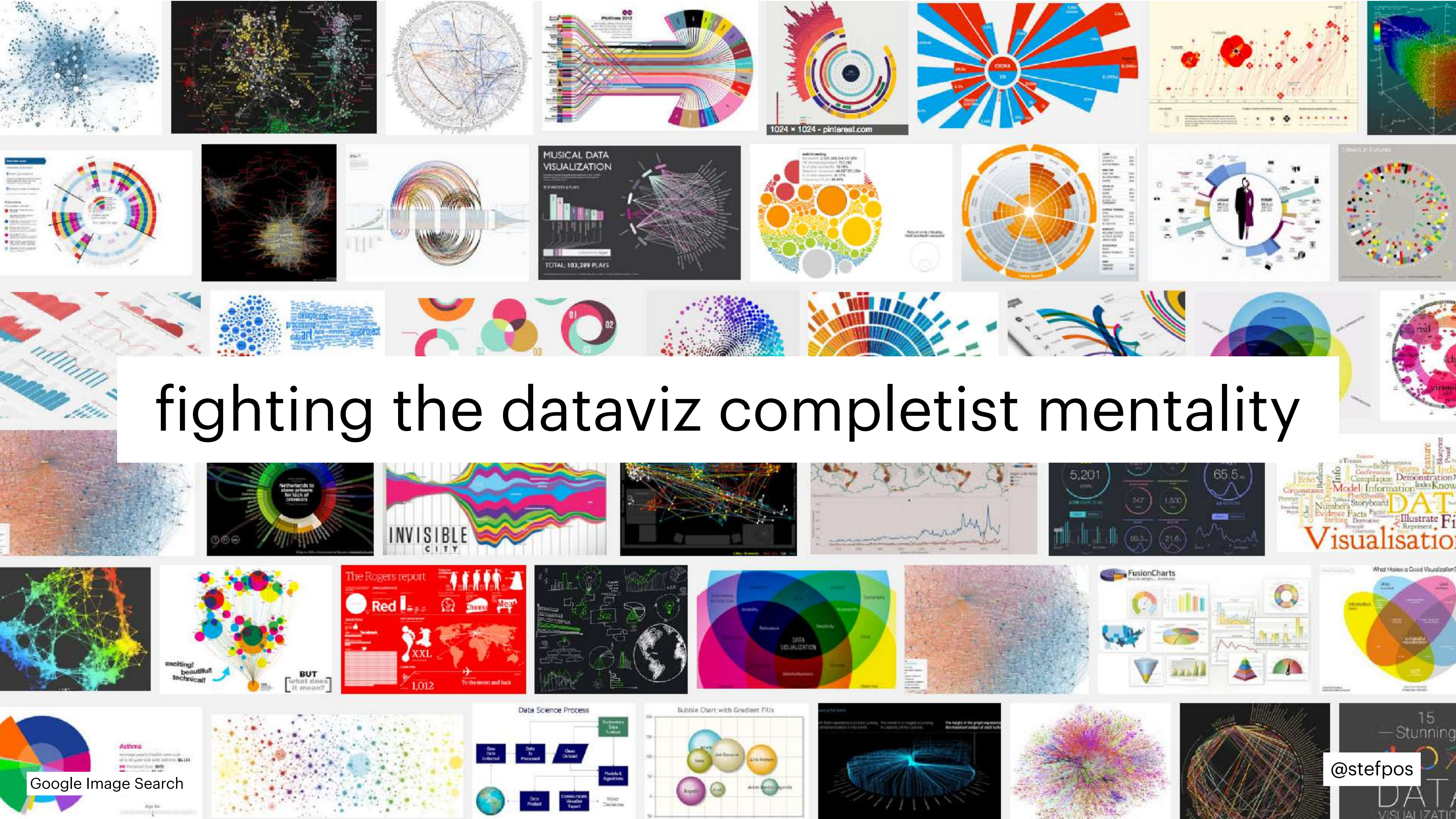


**PEOPLE
LIKE
YOU**

A biobank collects,
processes, and stores
biological samples and data
for use in medical research.



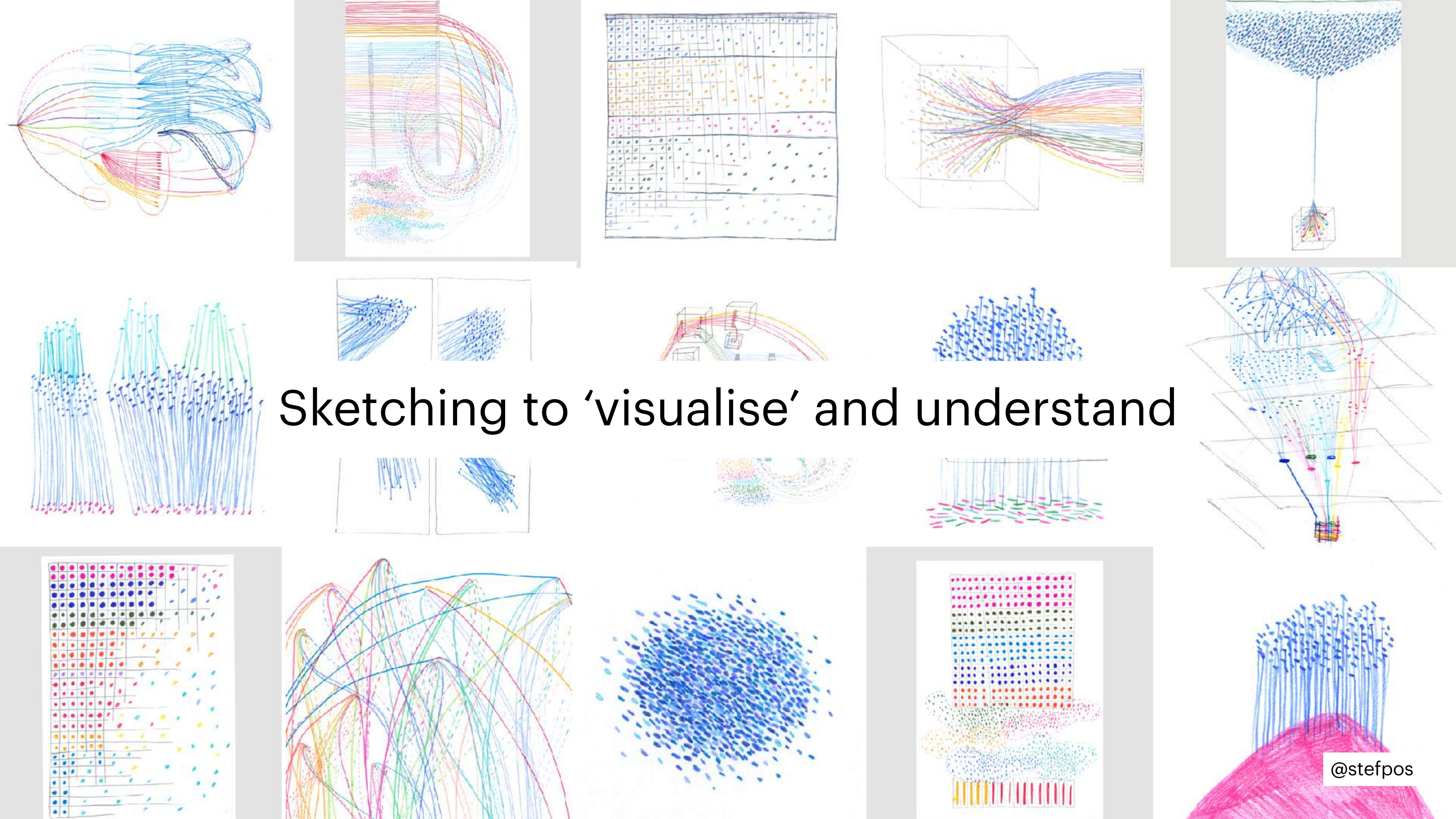
A data project without ... data?



fighting the dataviz completist mentality

Google Image Search

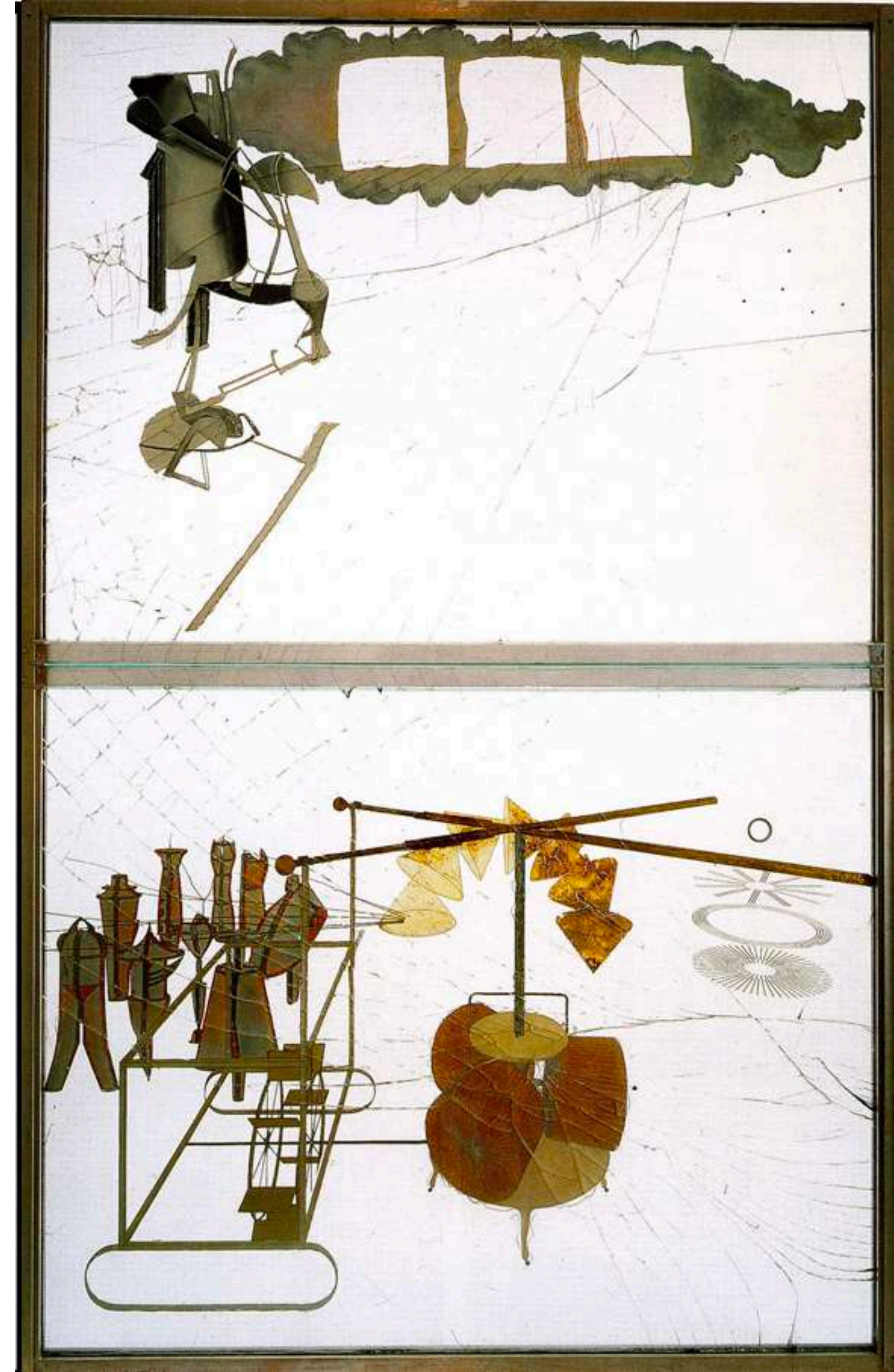
@stefpos



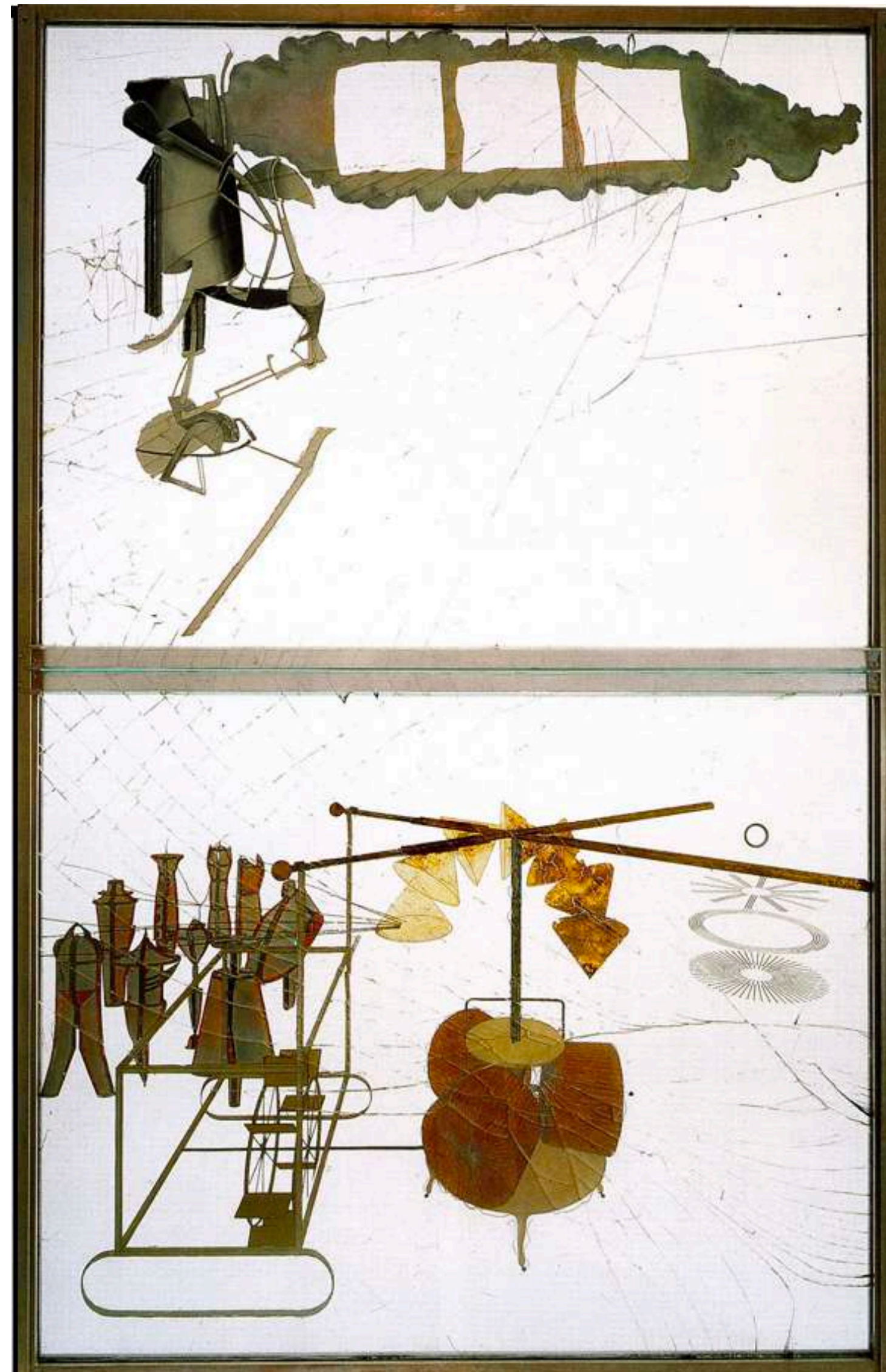
Sketching to 'visualise' and understand

Marcel Duchamp

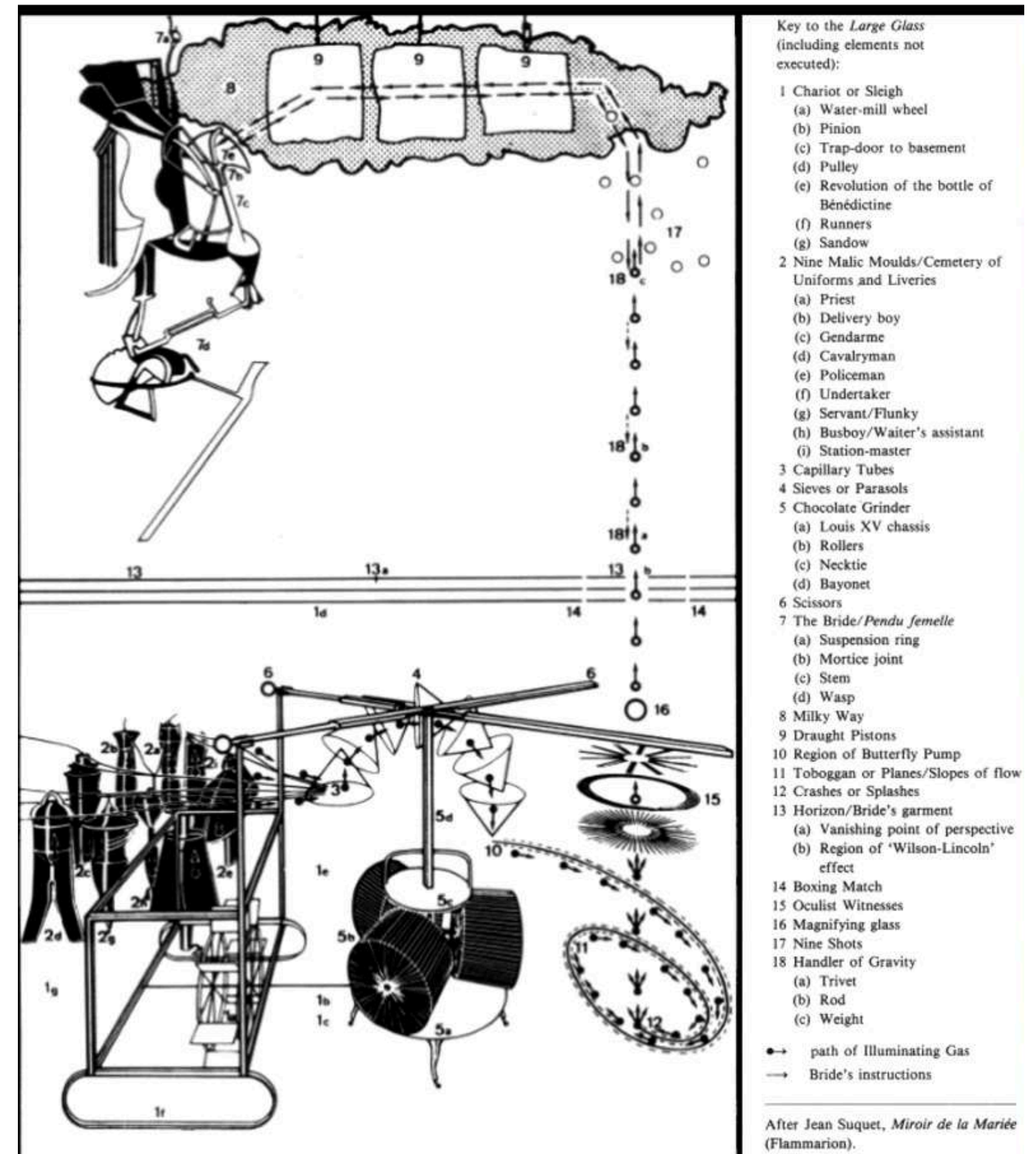
*The Bride Stripped Bare
by her Bachelors, Even
(The Large Glass)*
1915–23

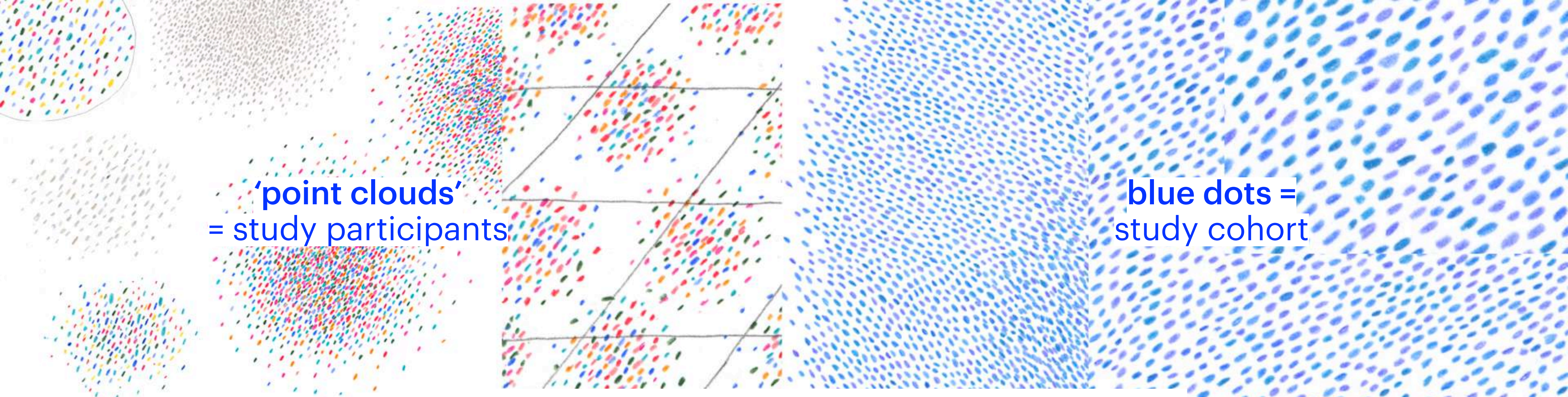


Without annotation: artwork



With annotation: diagram

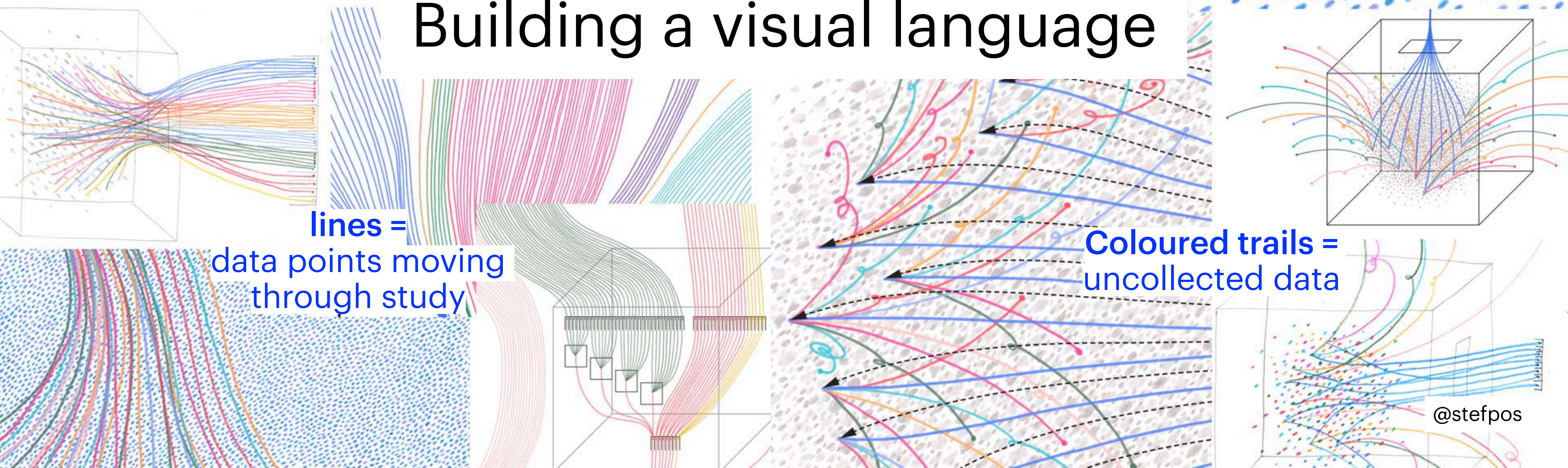




'point clouds'
= study participants

blue dots =
study cohort

Building a visual language

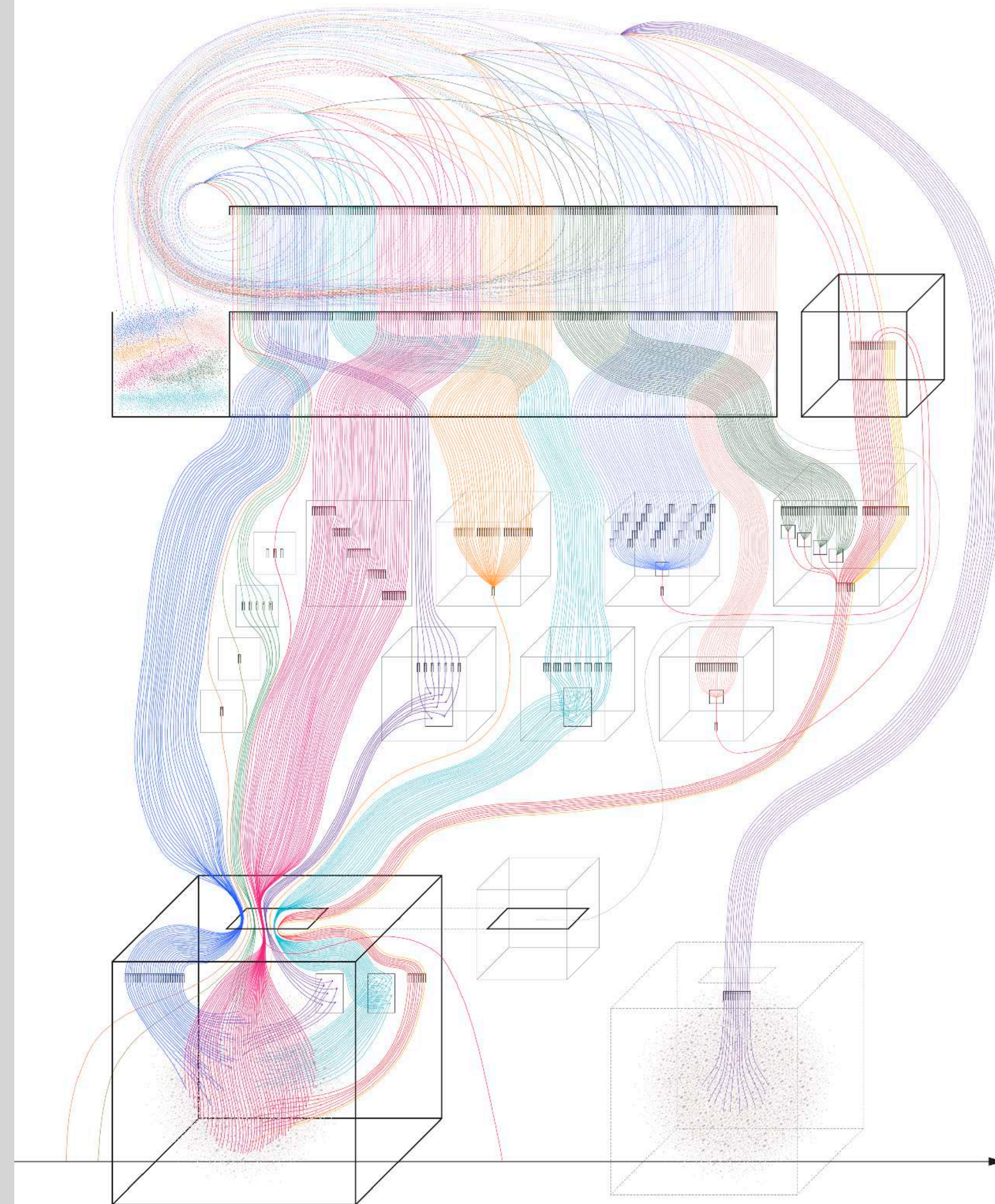


lines =
data points moving
through study

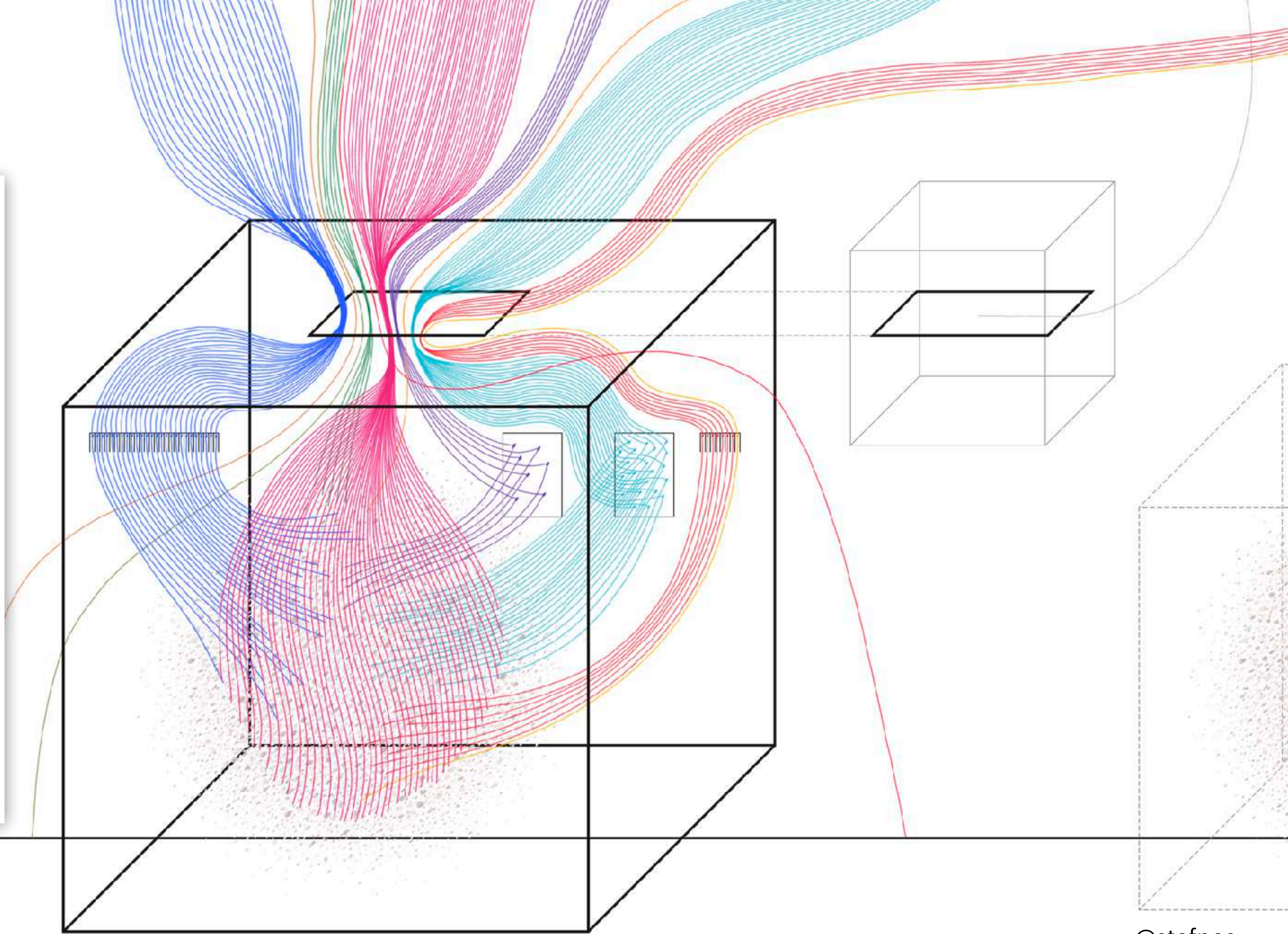
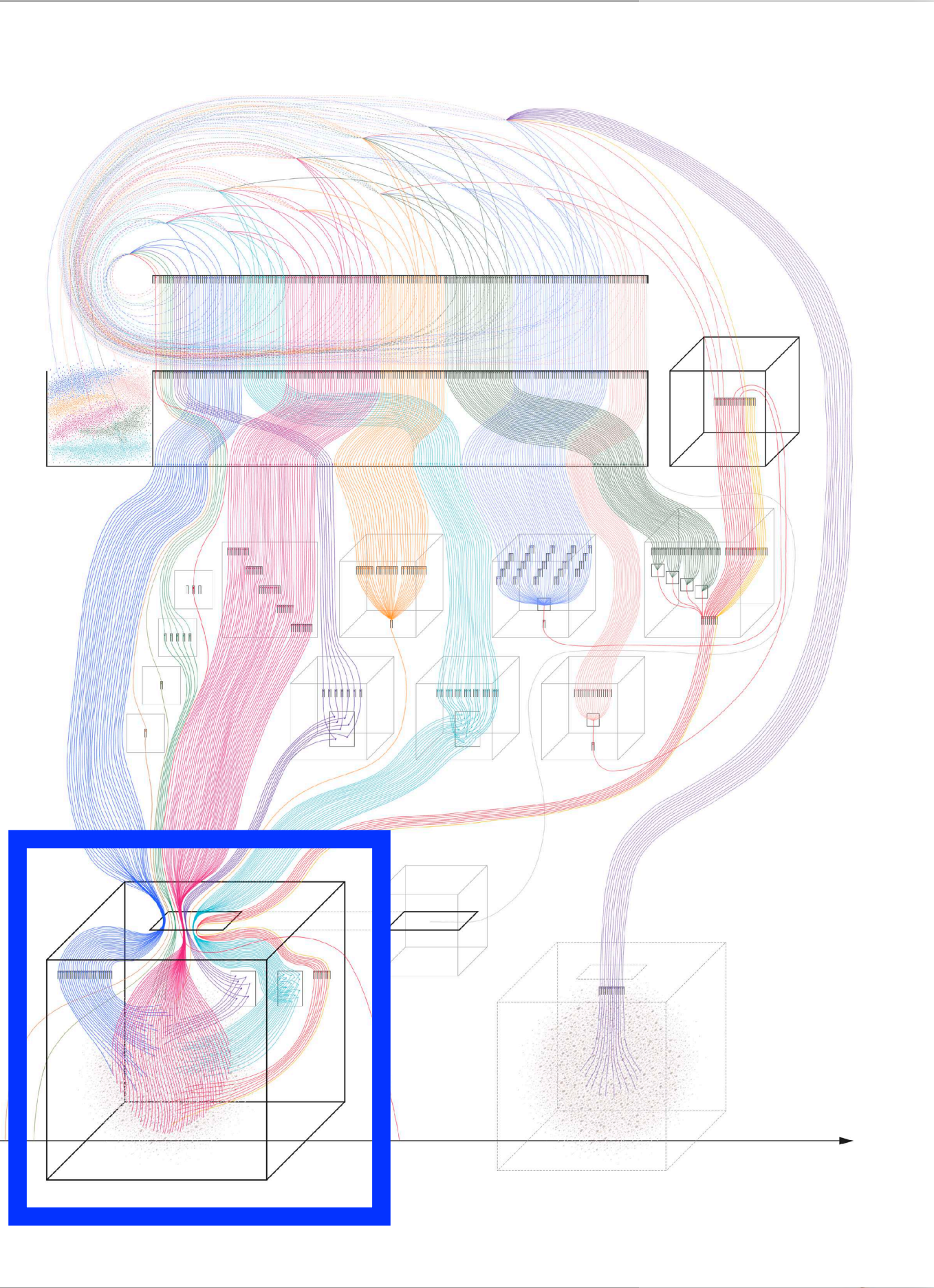
Coloured trails =
uncollected data

@stefpos

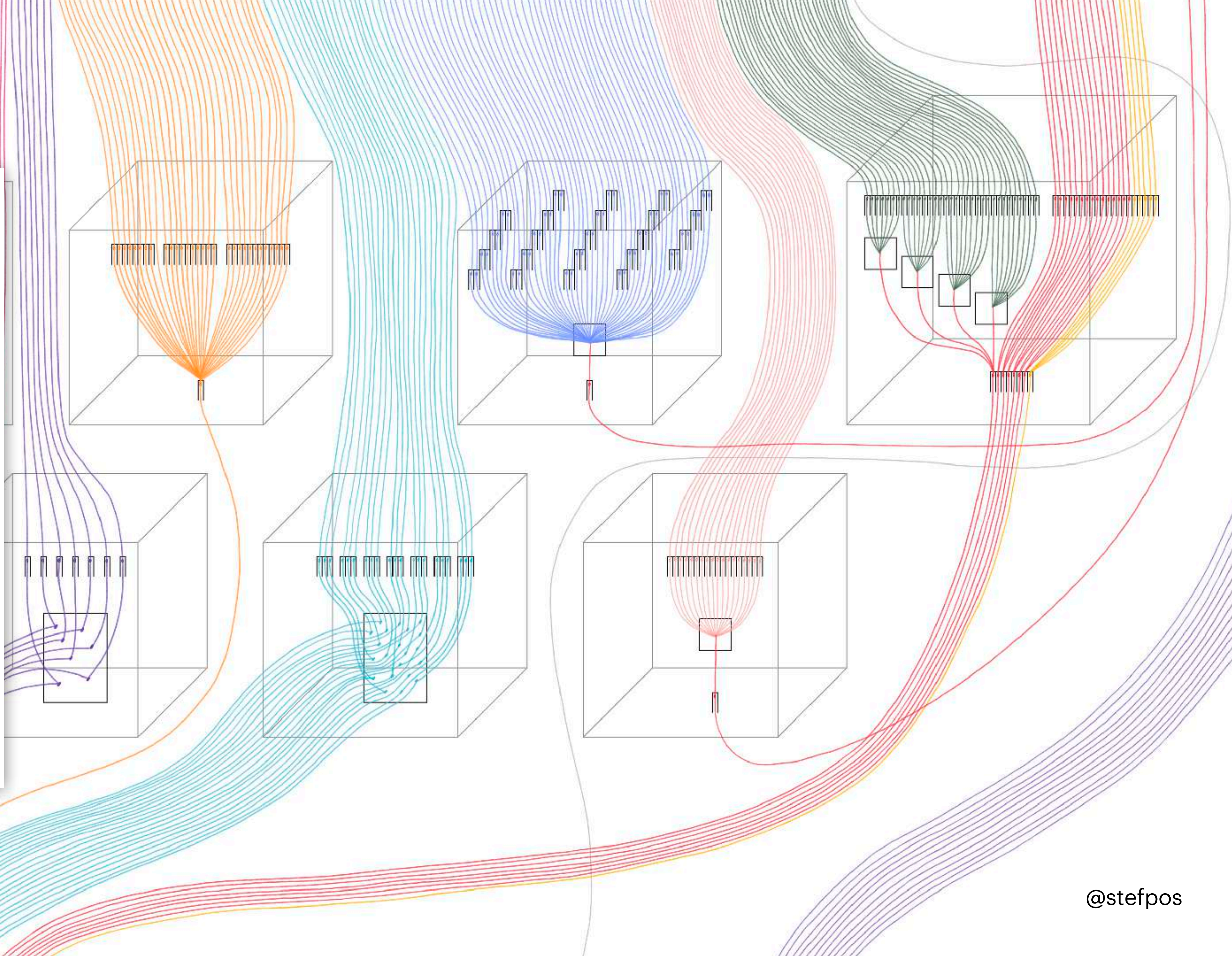
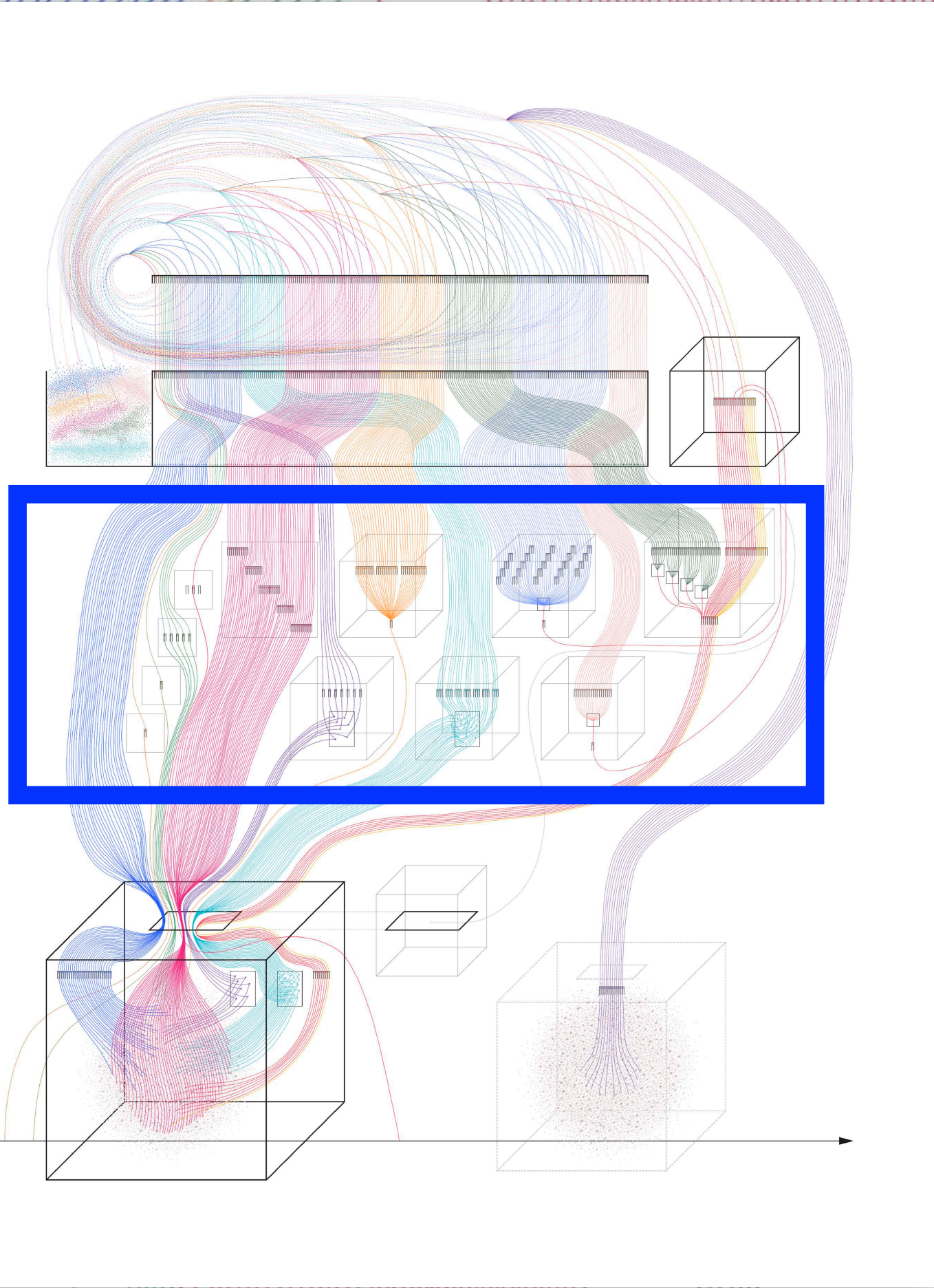
System Map



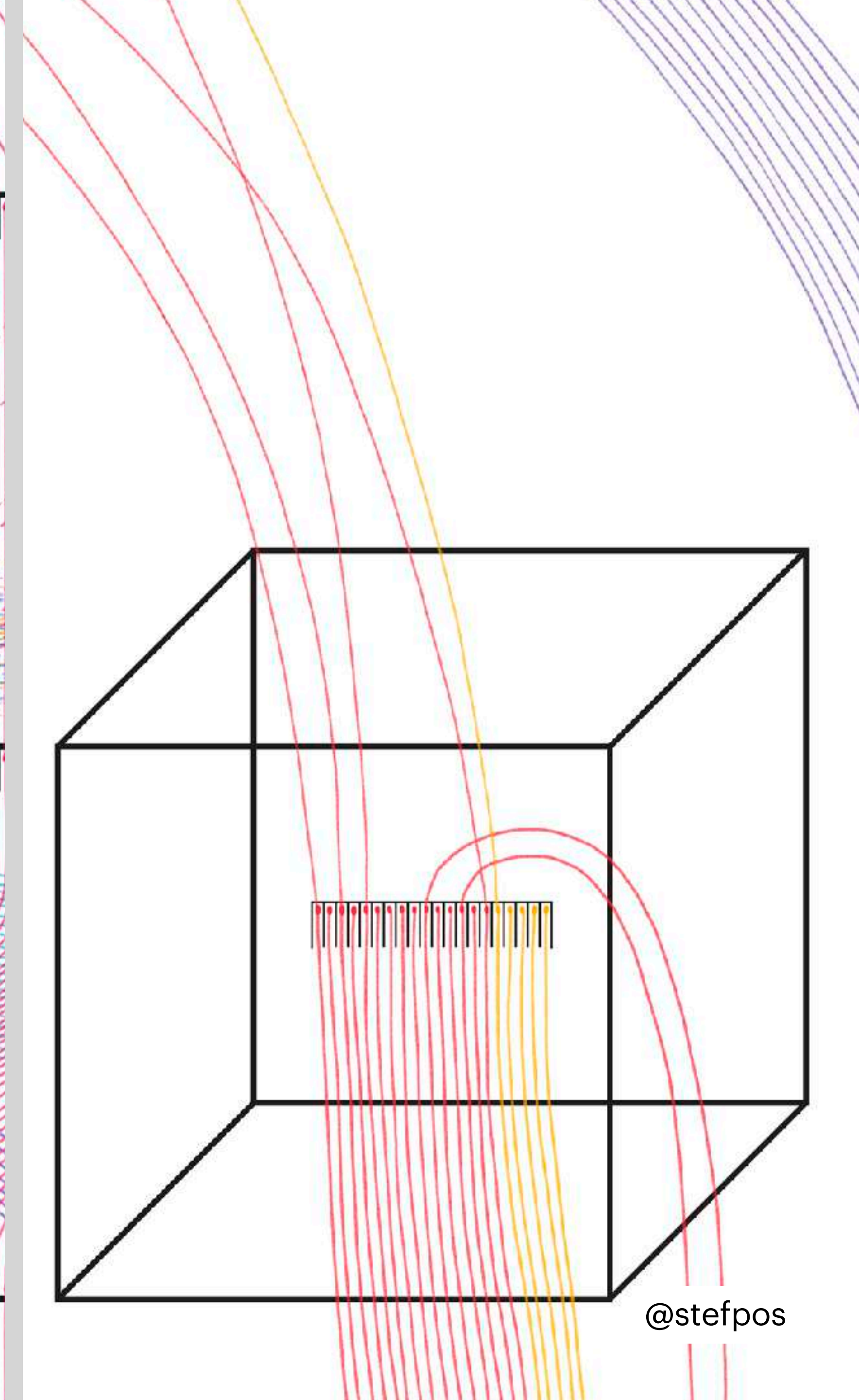
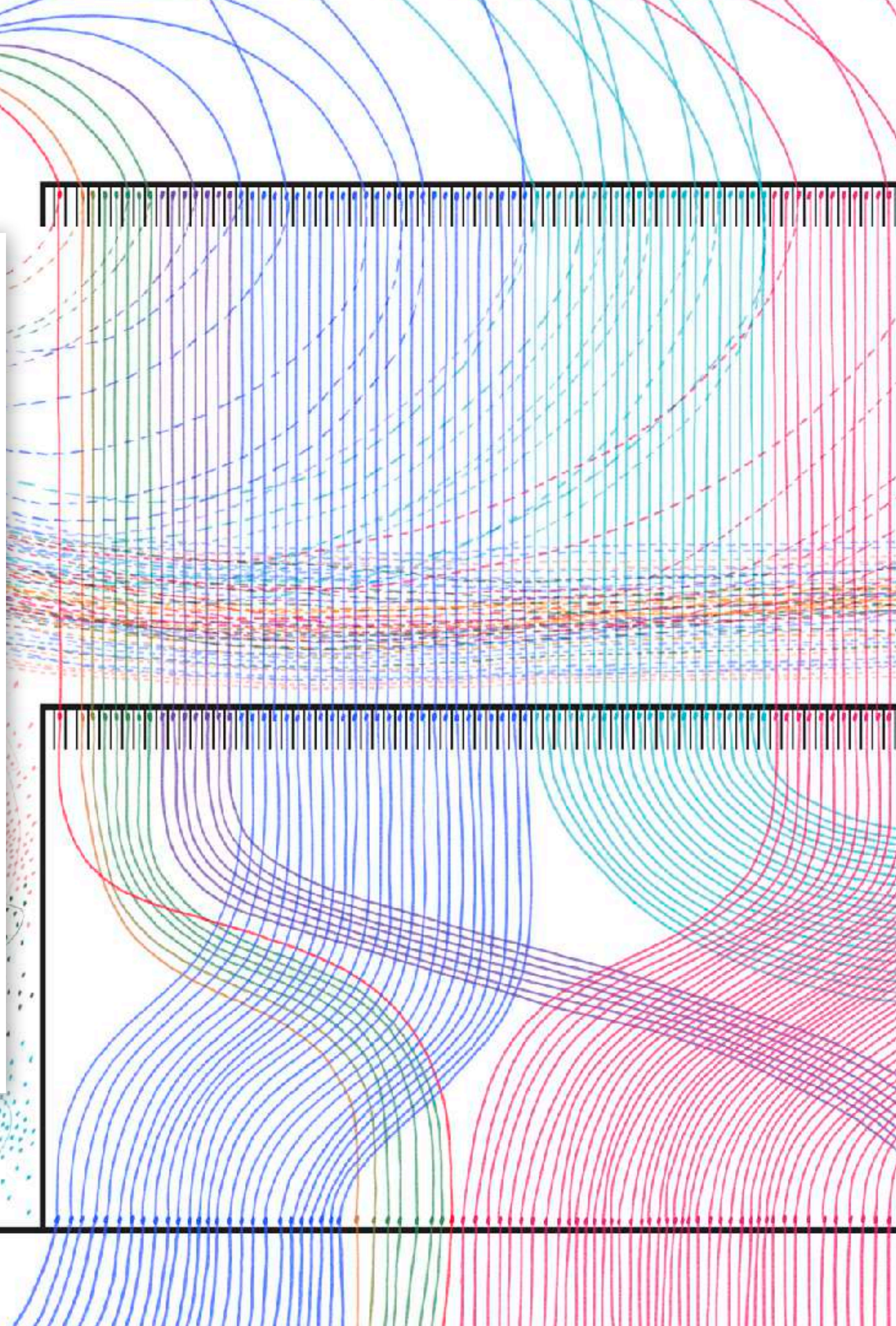
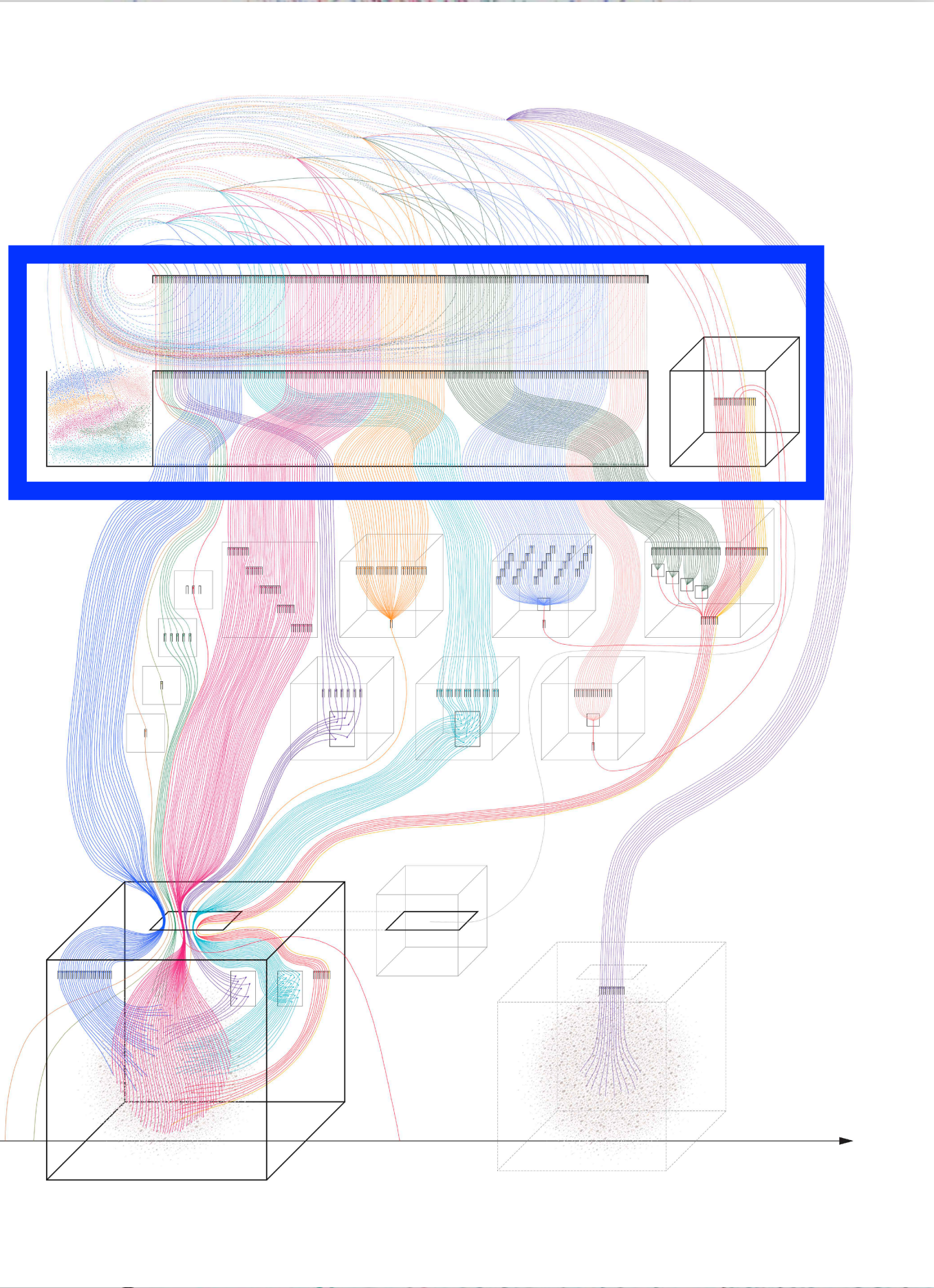
1. Acquisition



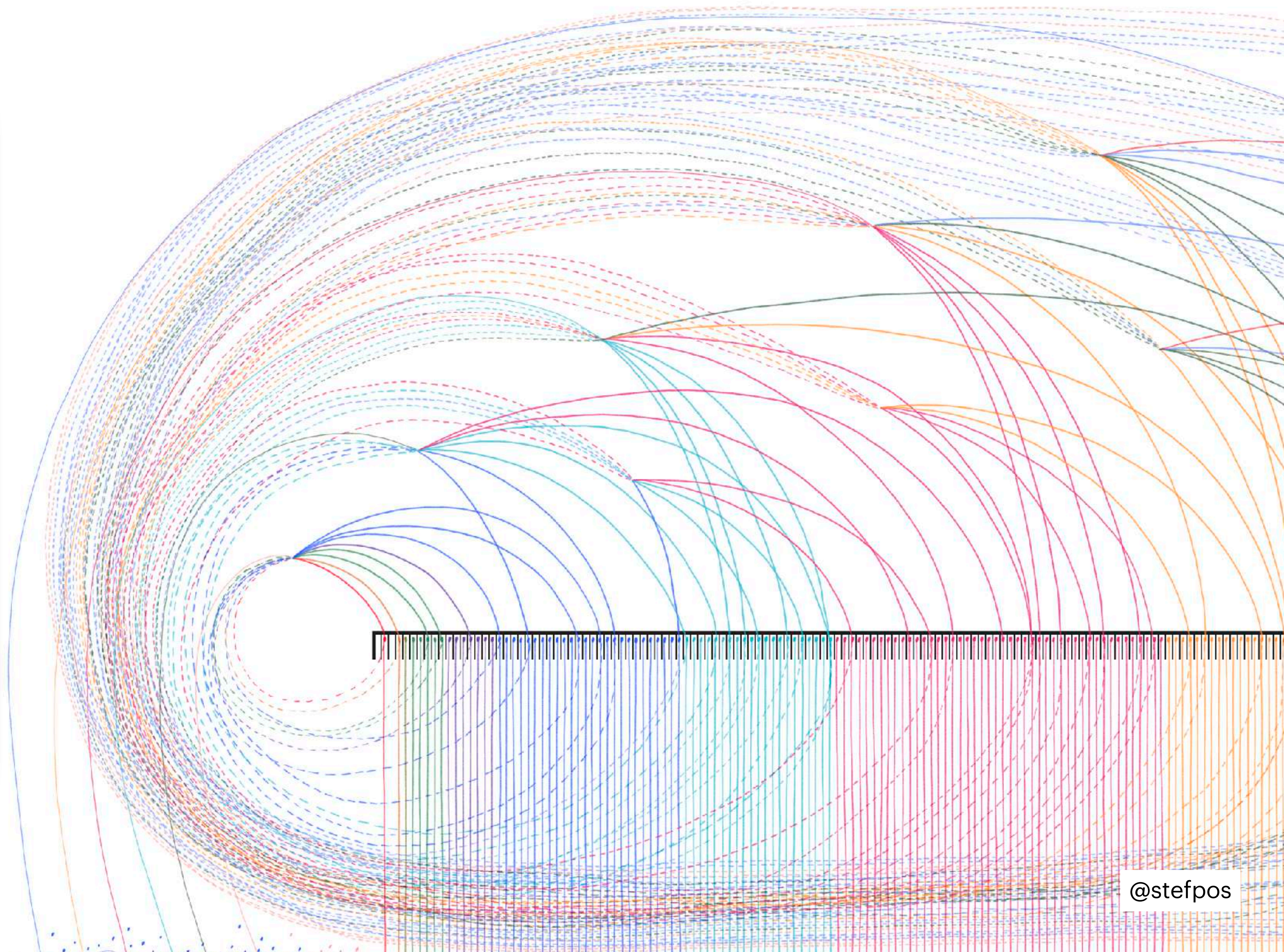
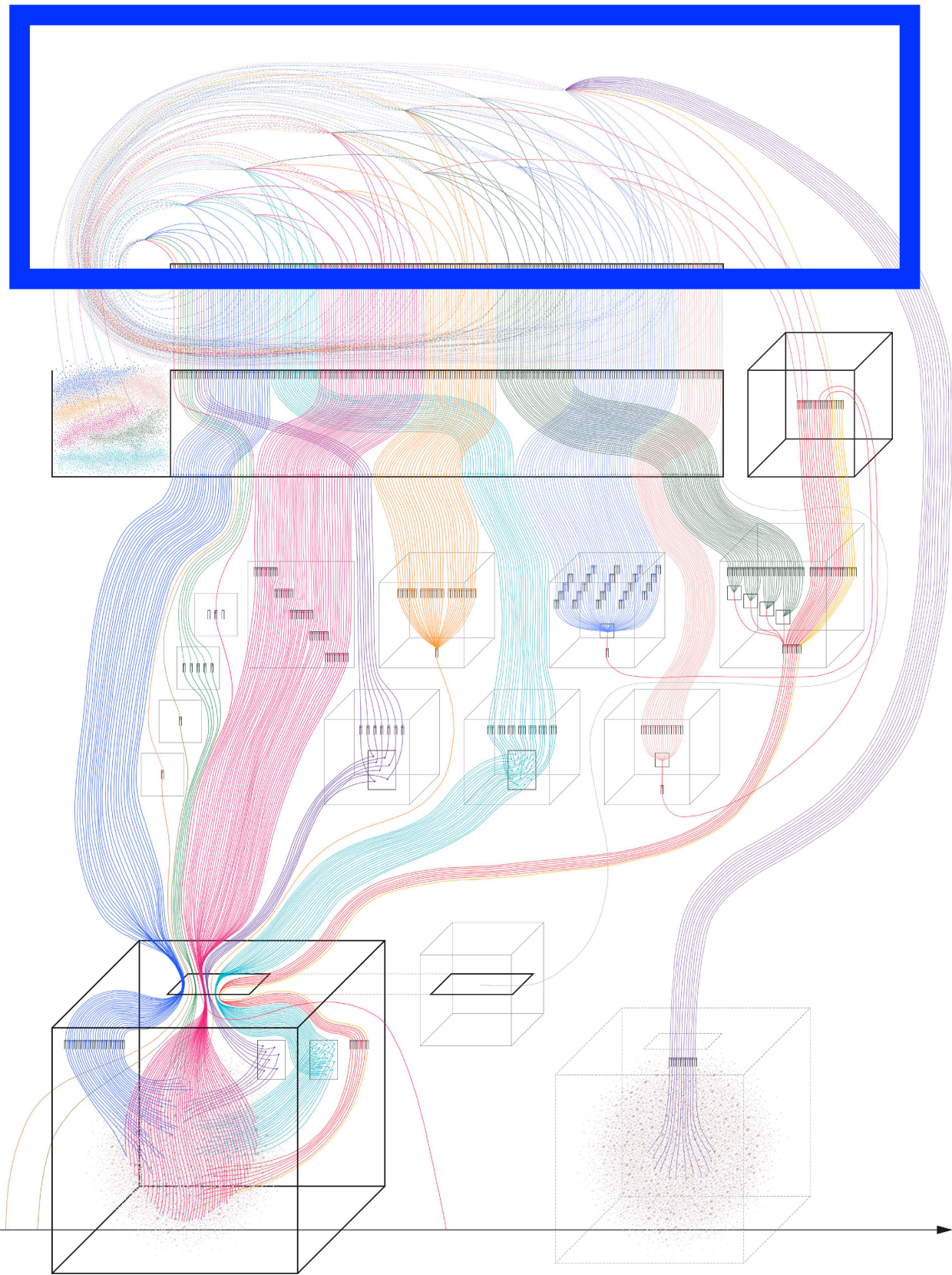
2. Processing



3. Storage

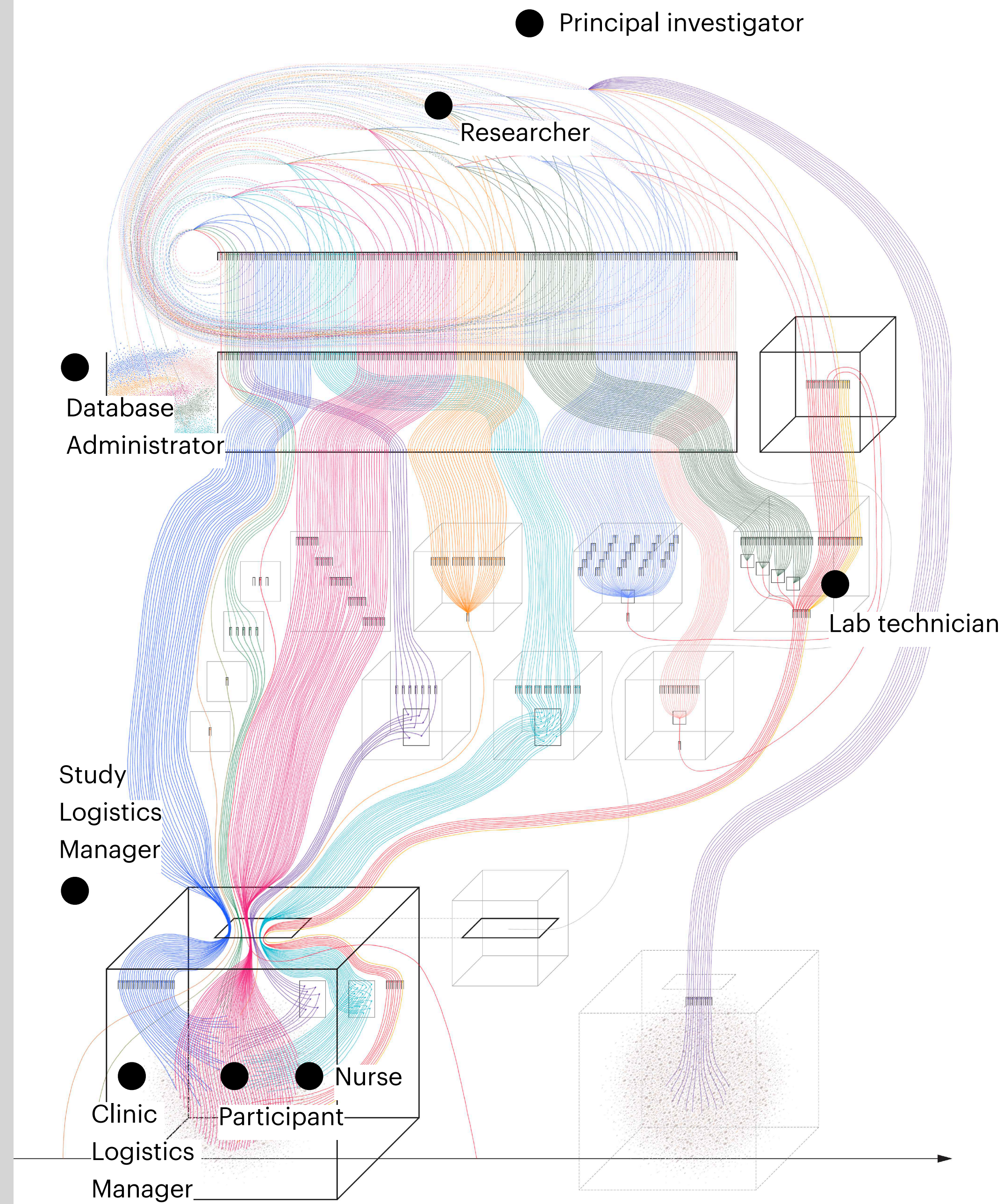


4. Analysis

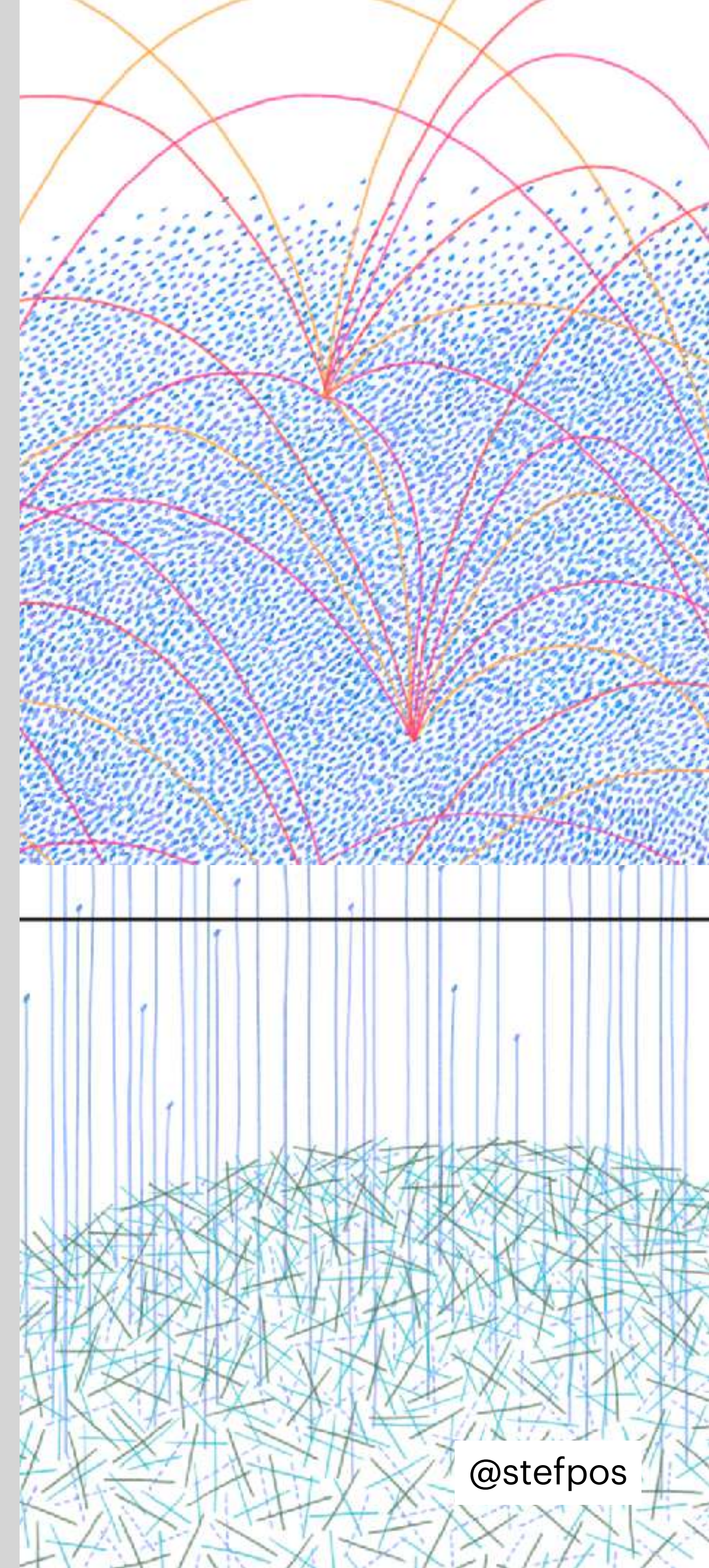
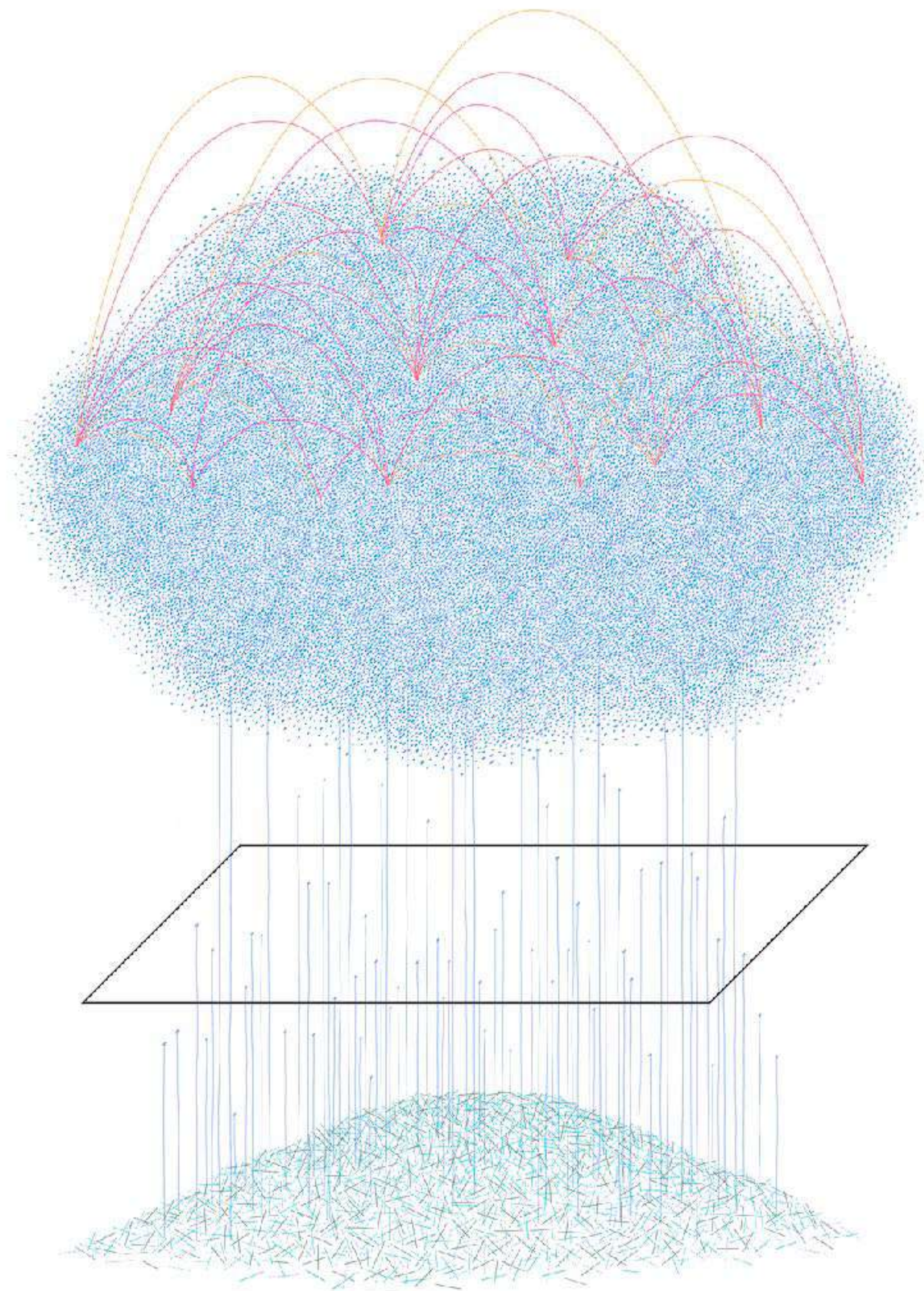


@stefpos

Location of study stakeholders within the system

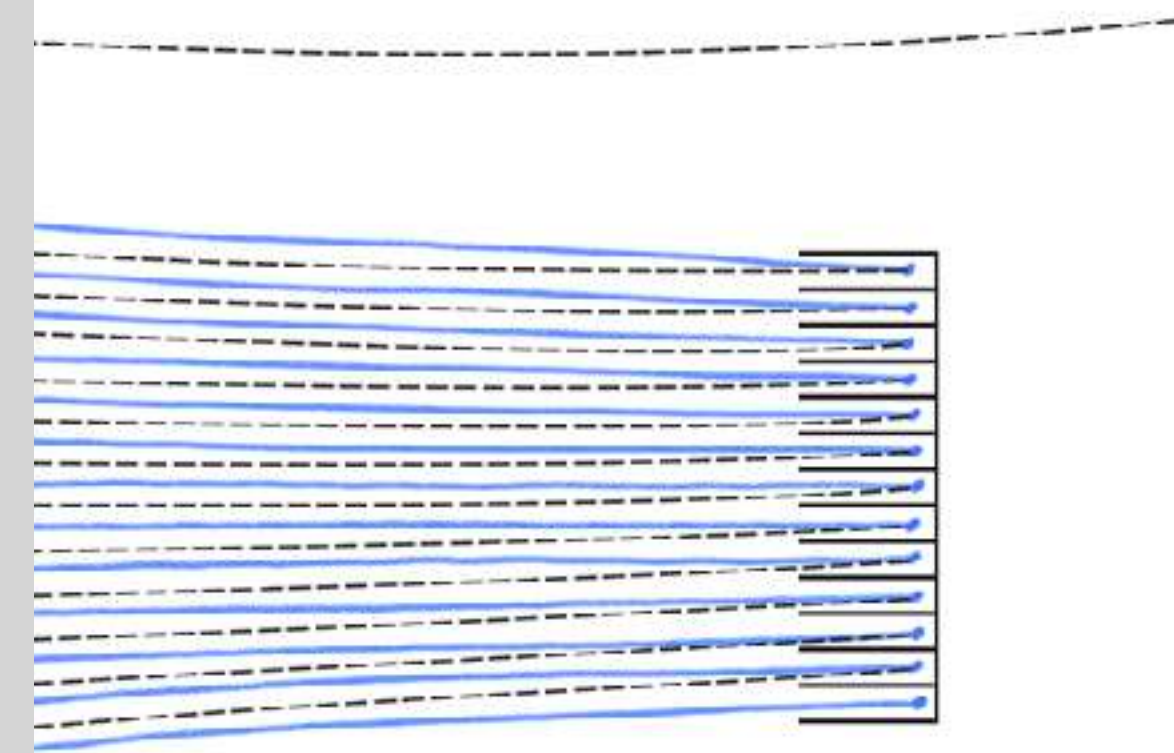
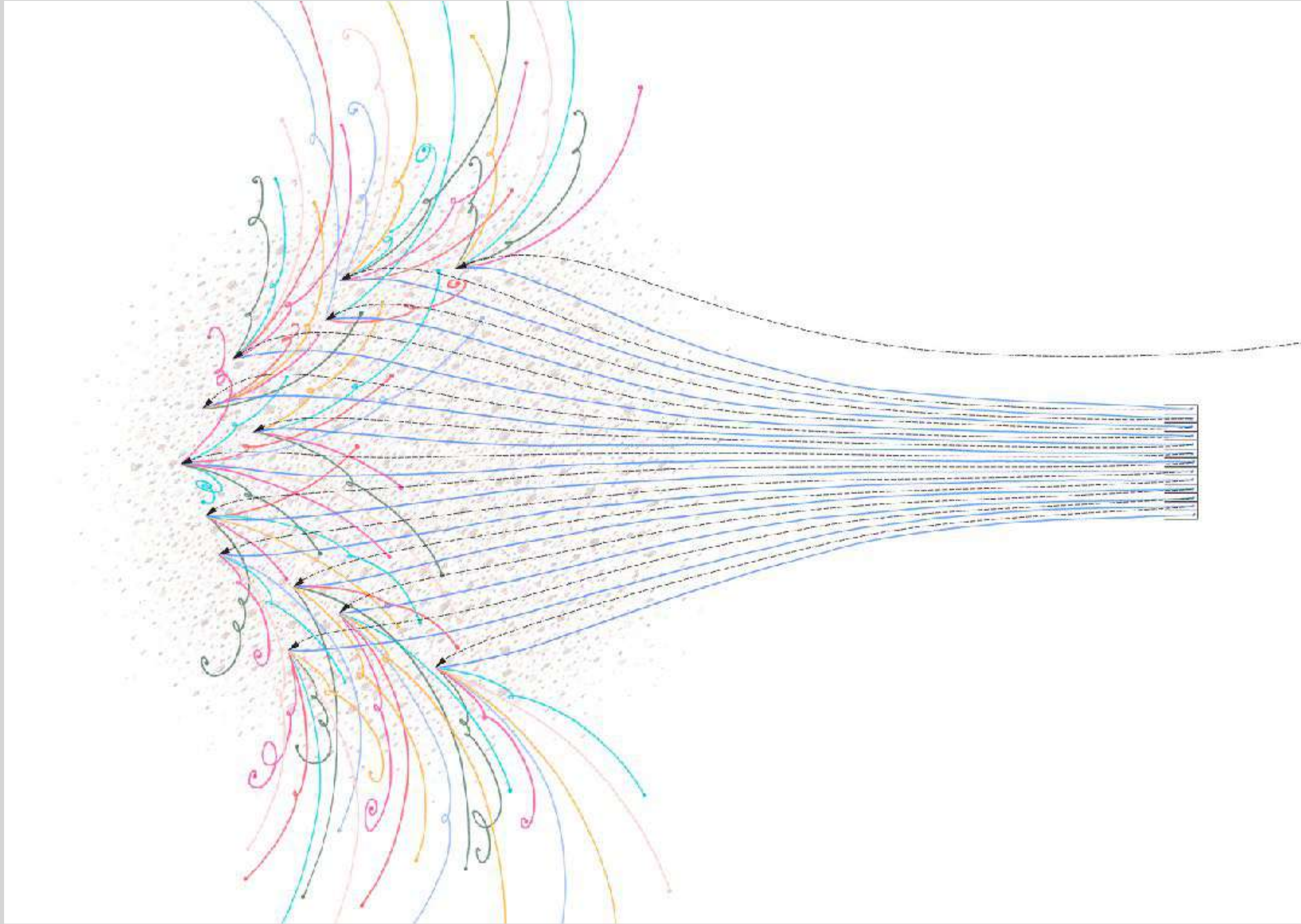


Principal
investigator



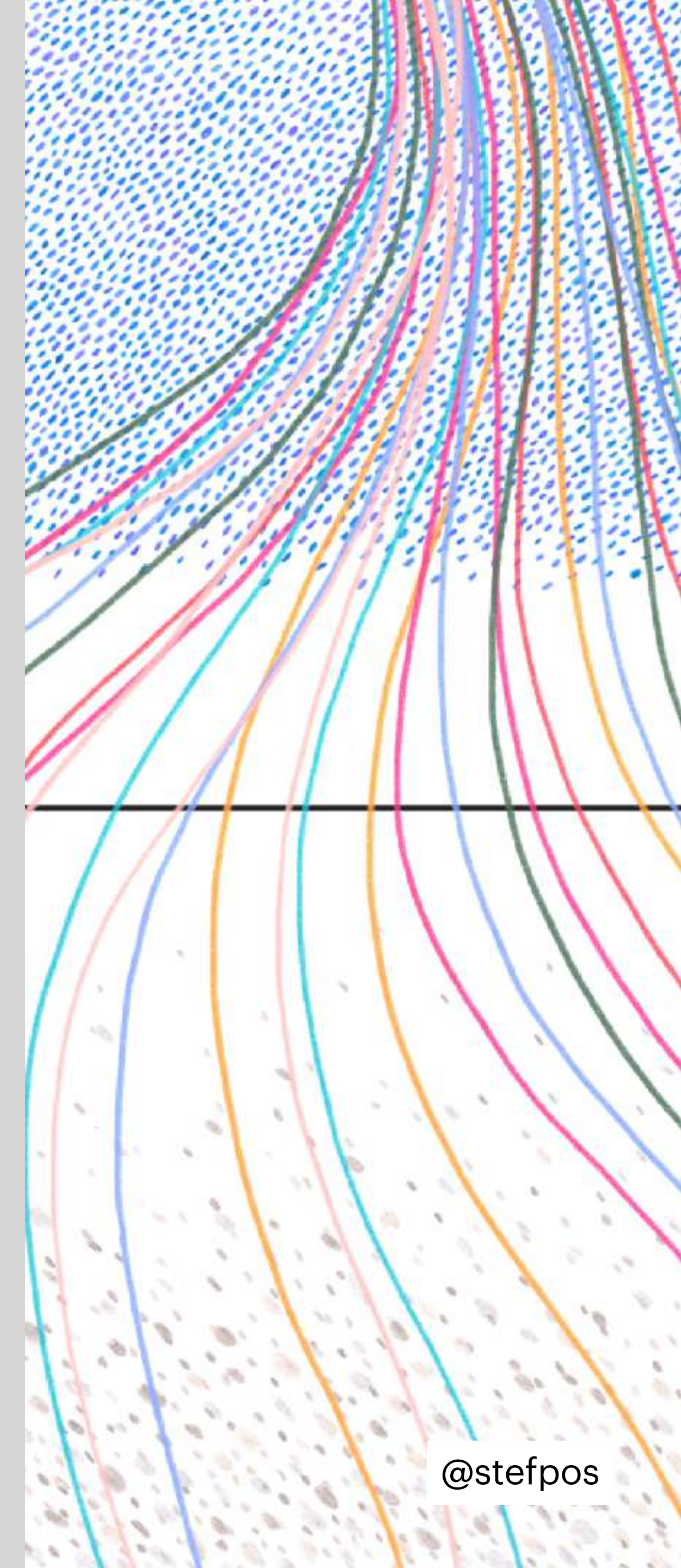
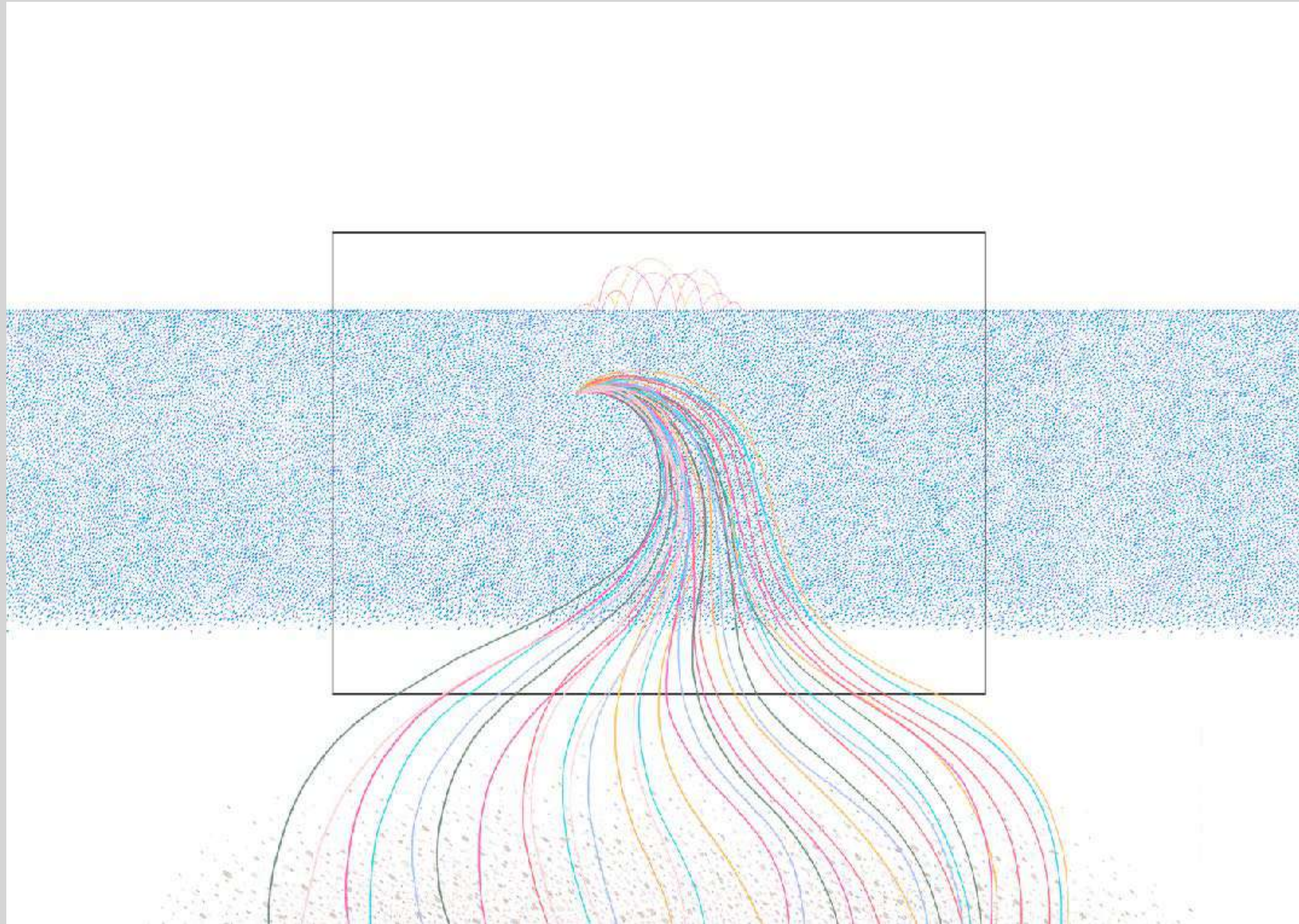
@stefpos

Nurse

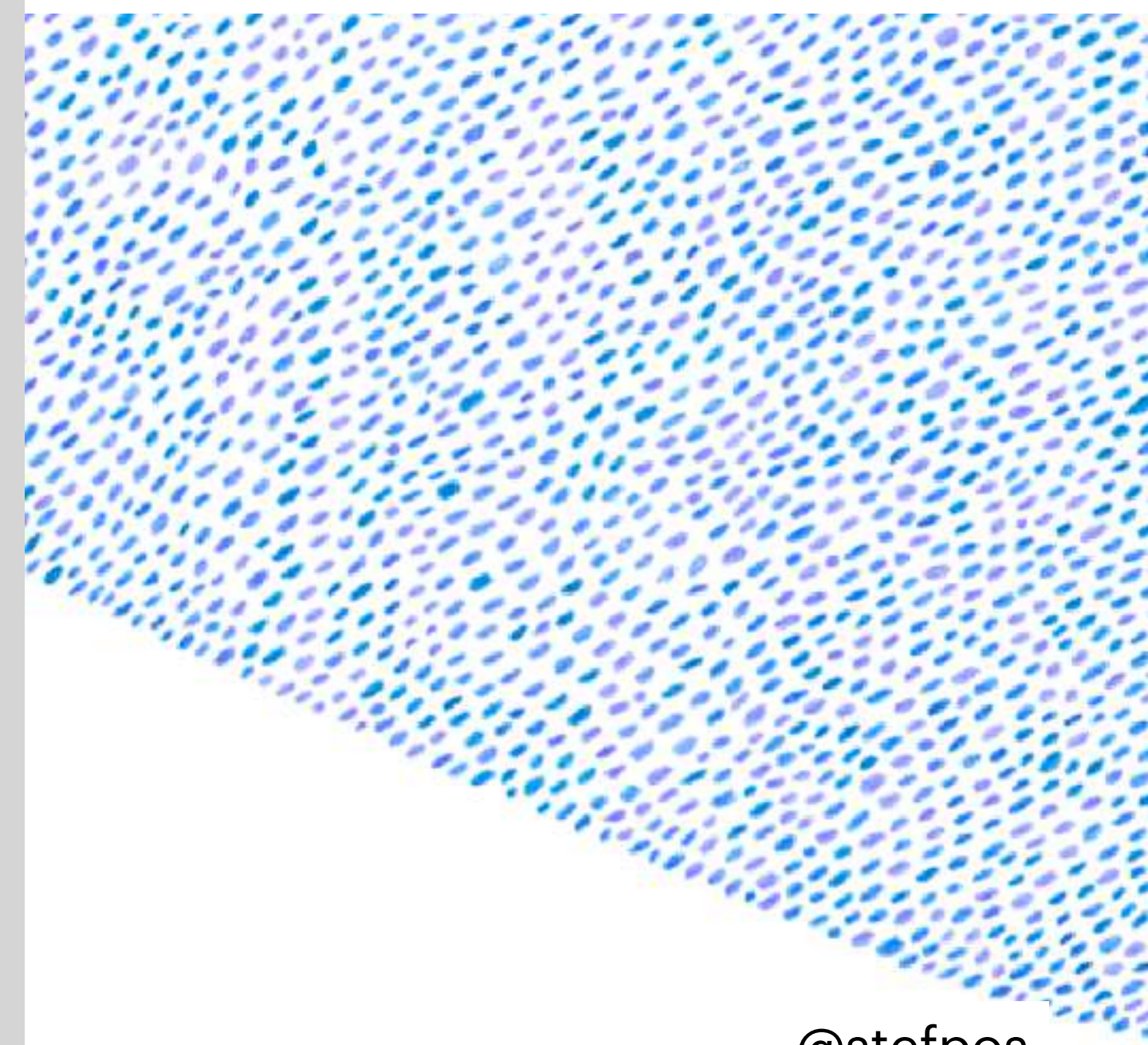
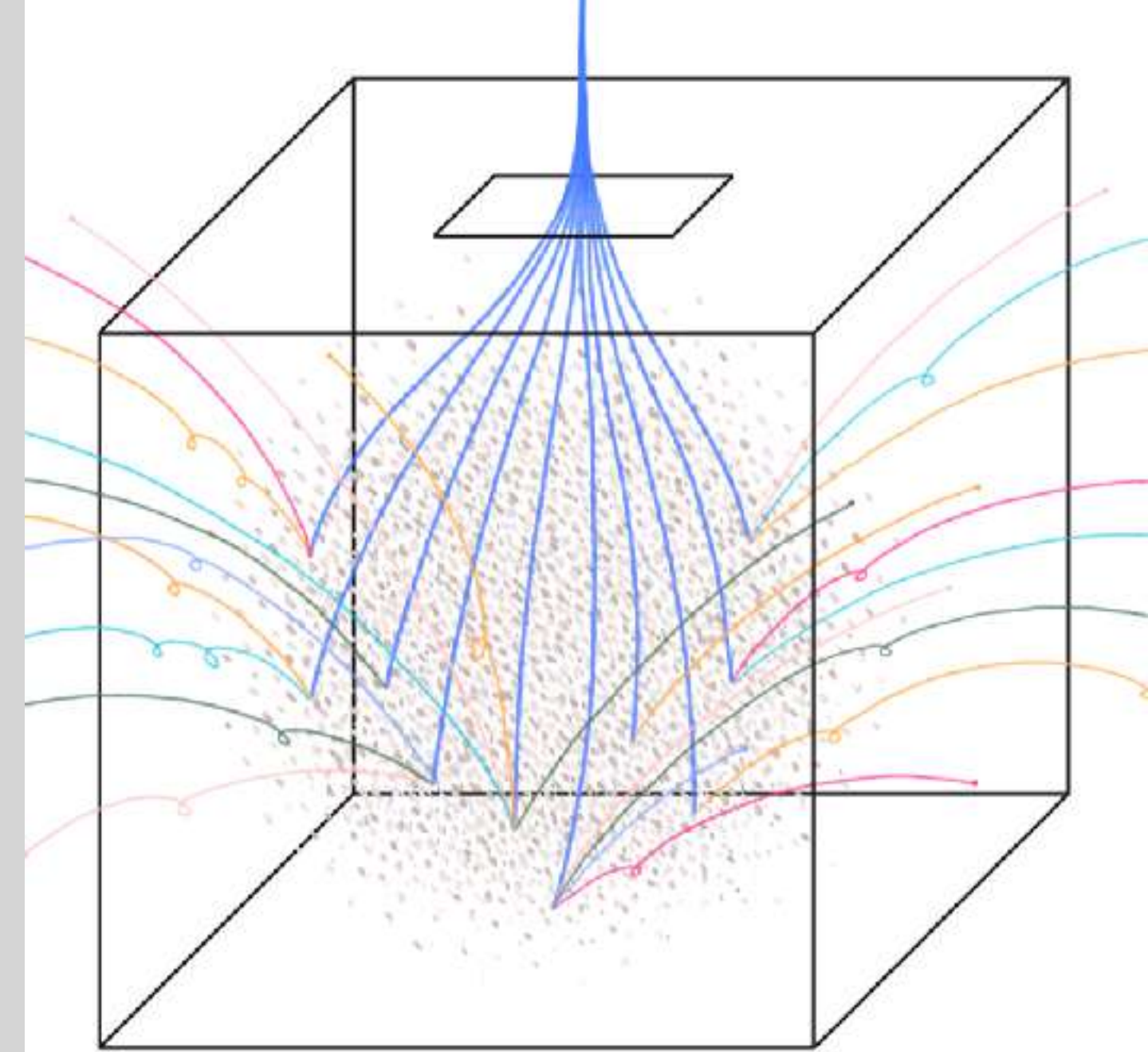
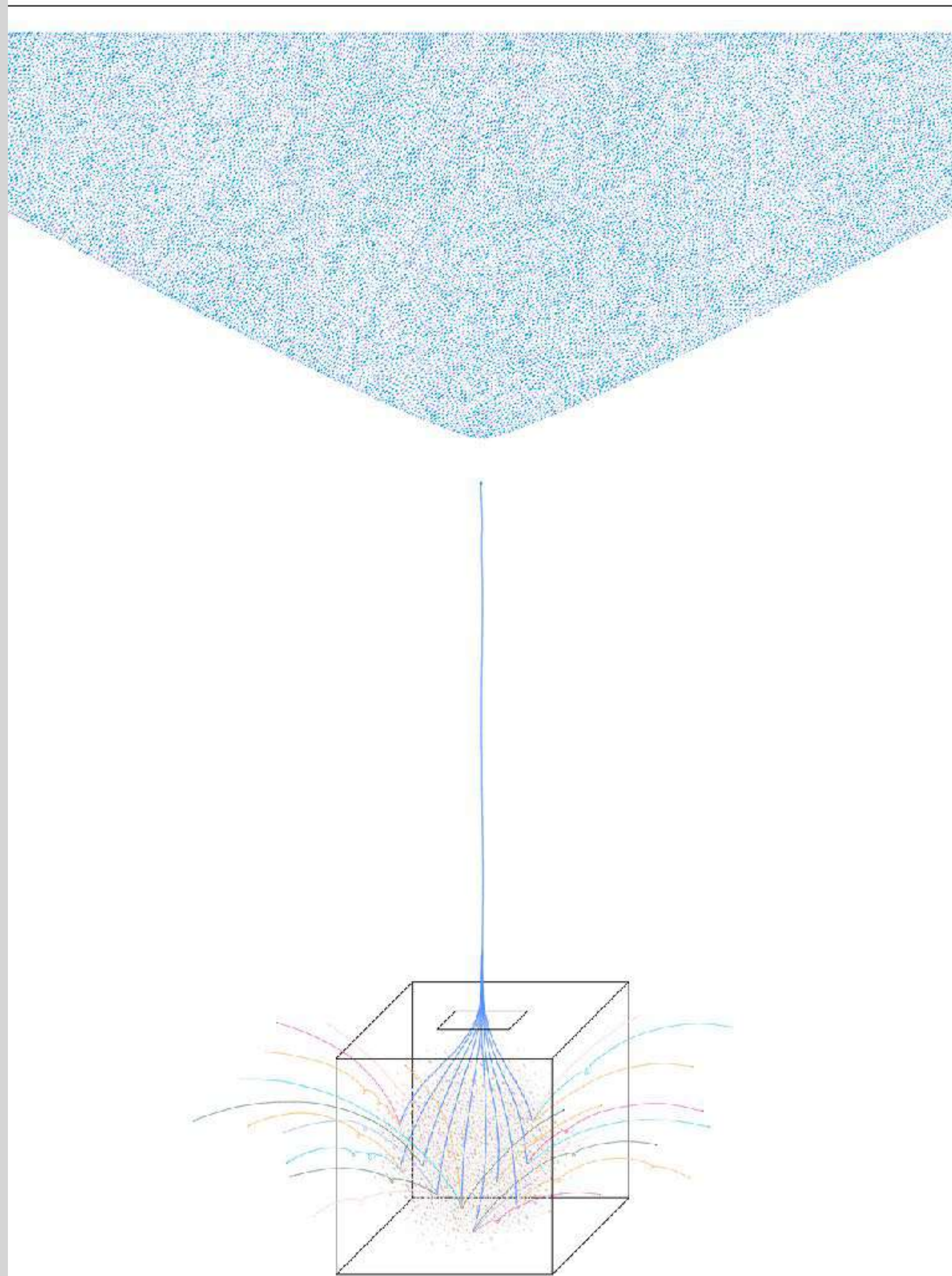


@stefpos

Participant

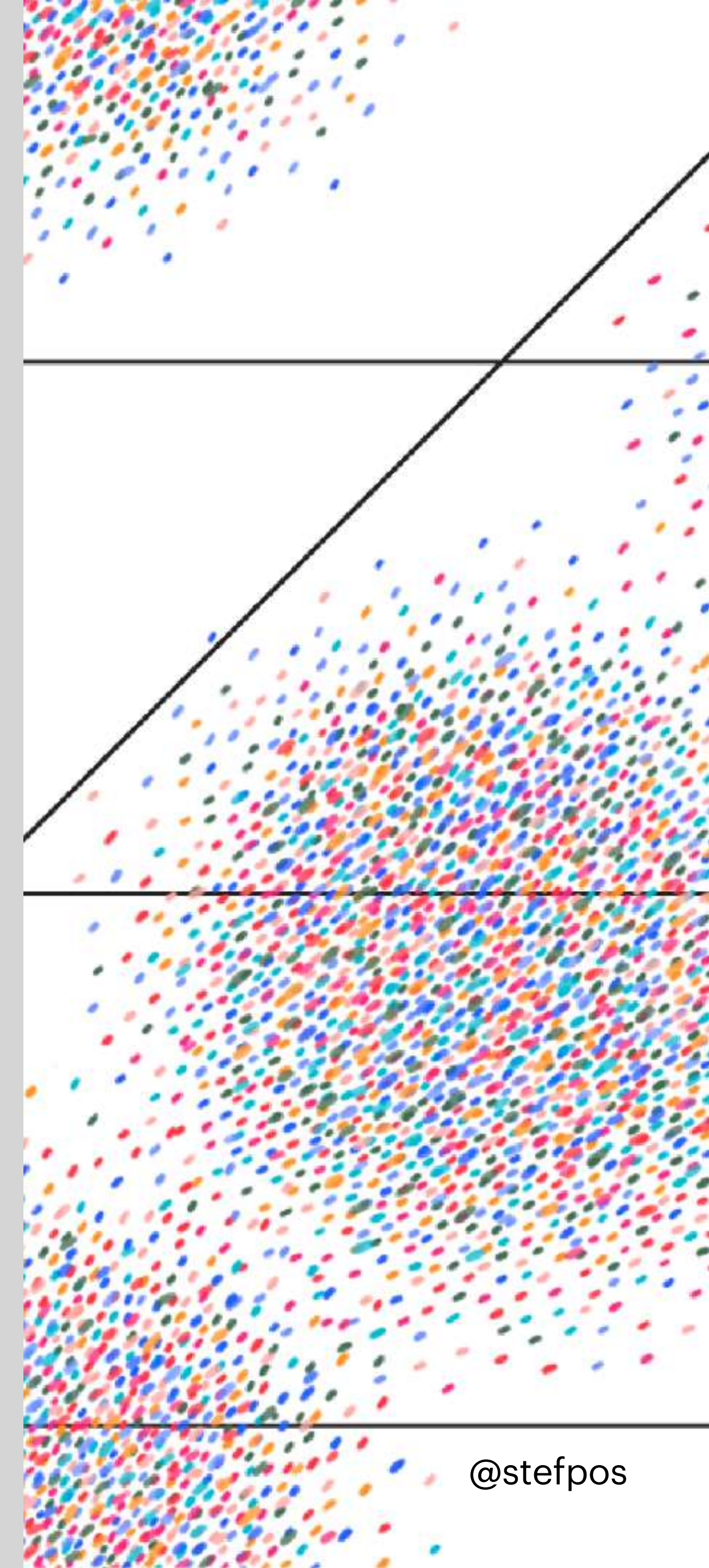
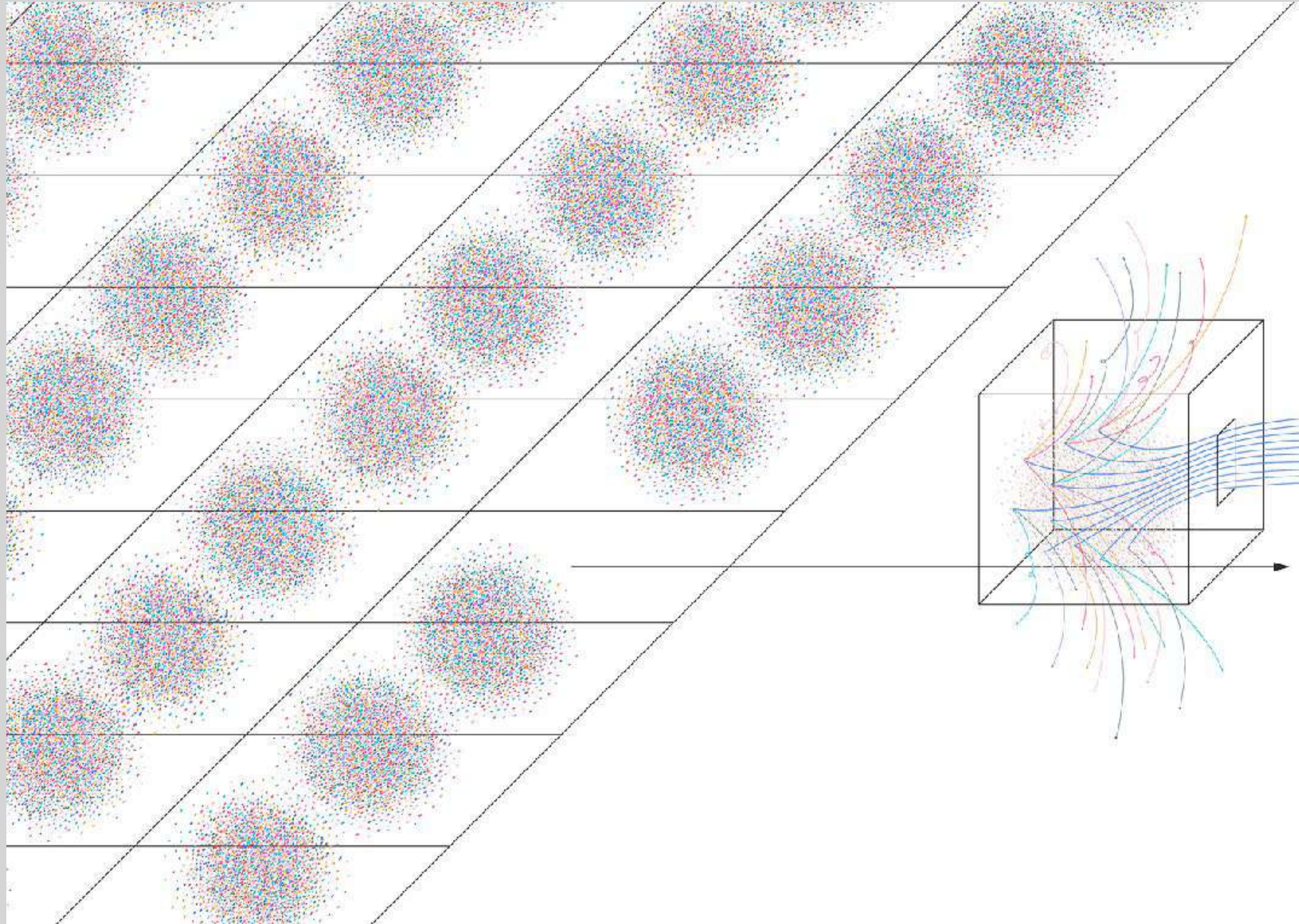


Clinic
logistic
manager

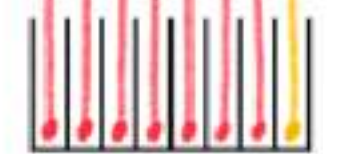
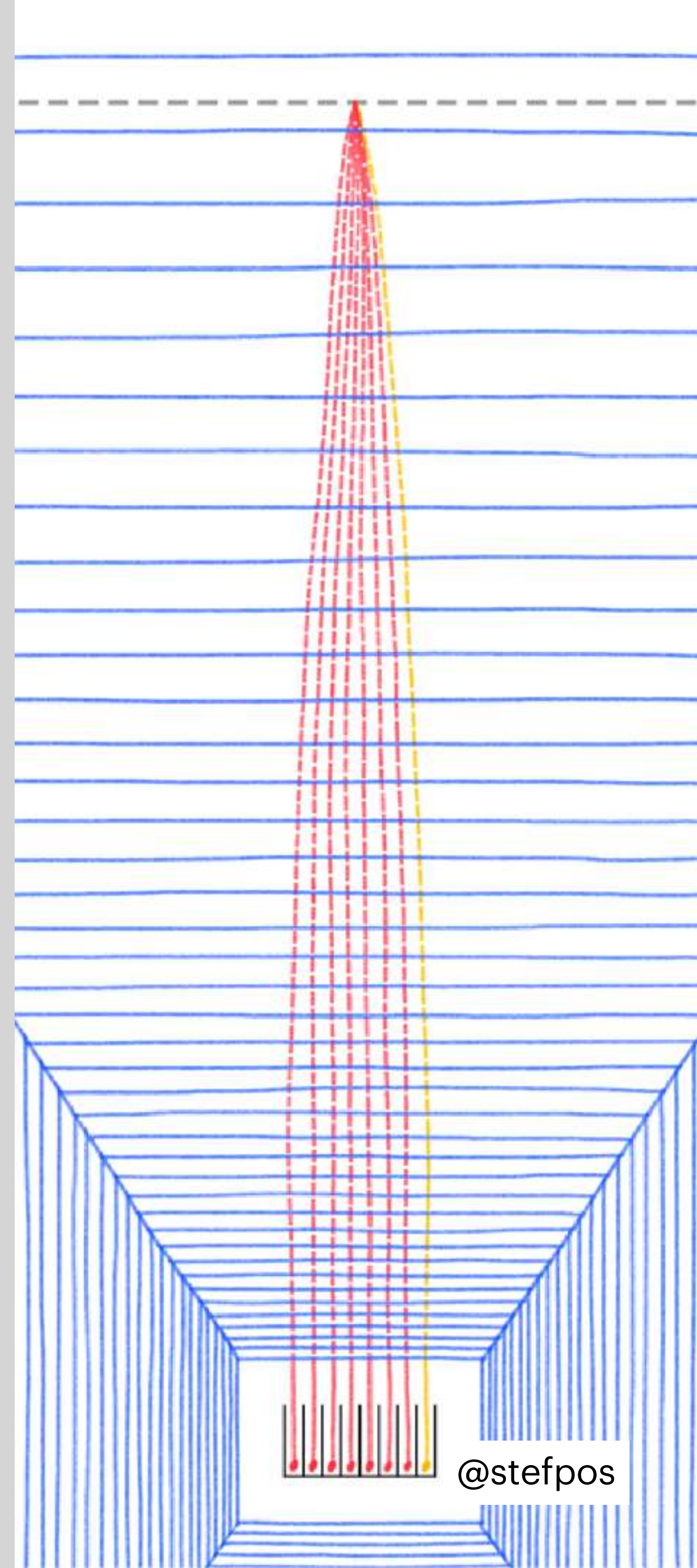
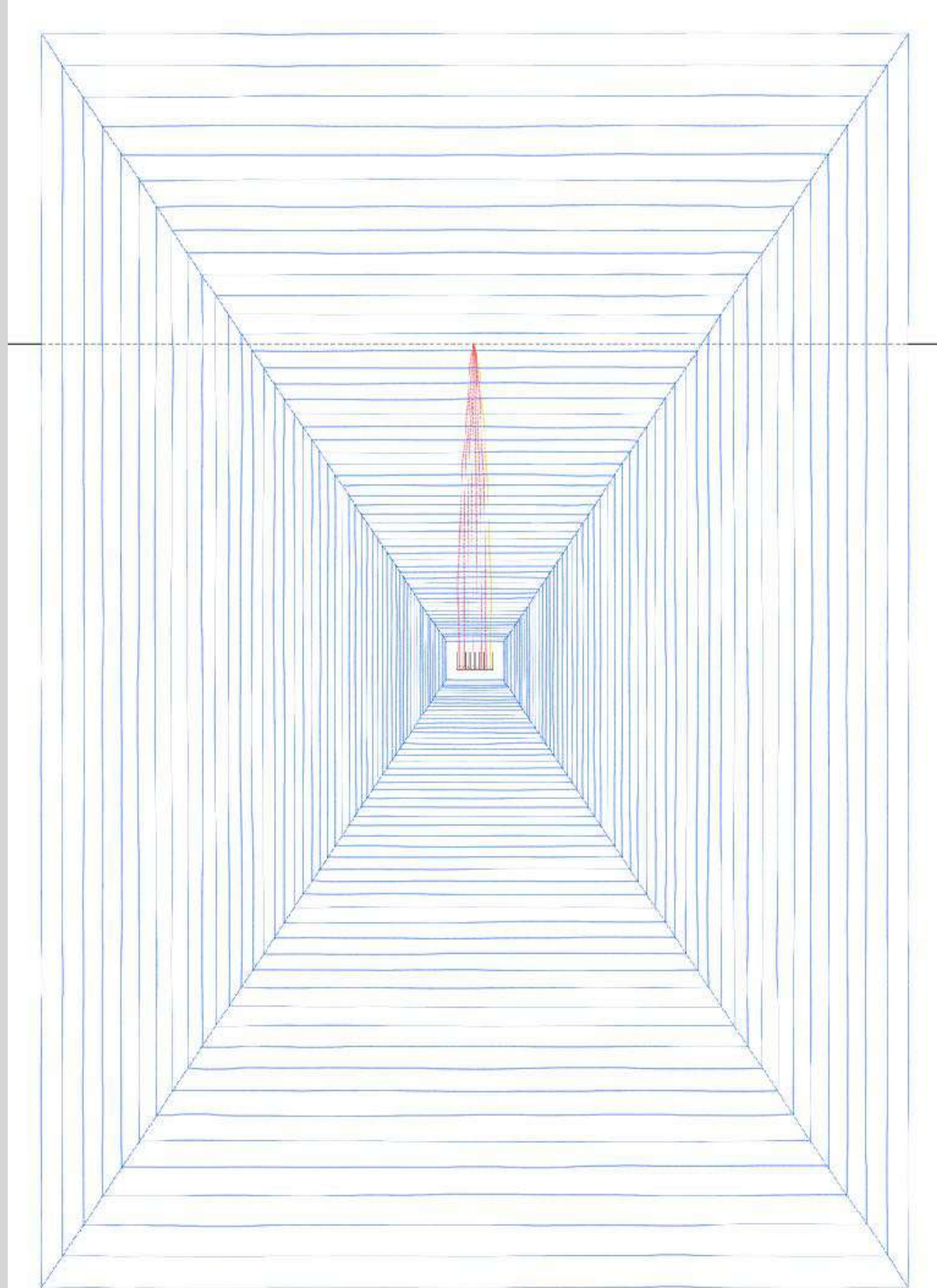


@stefpos

Study logistic manager

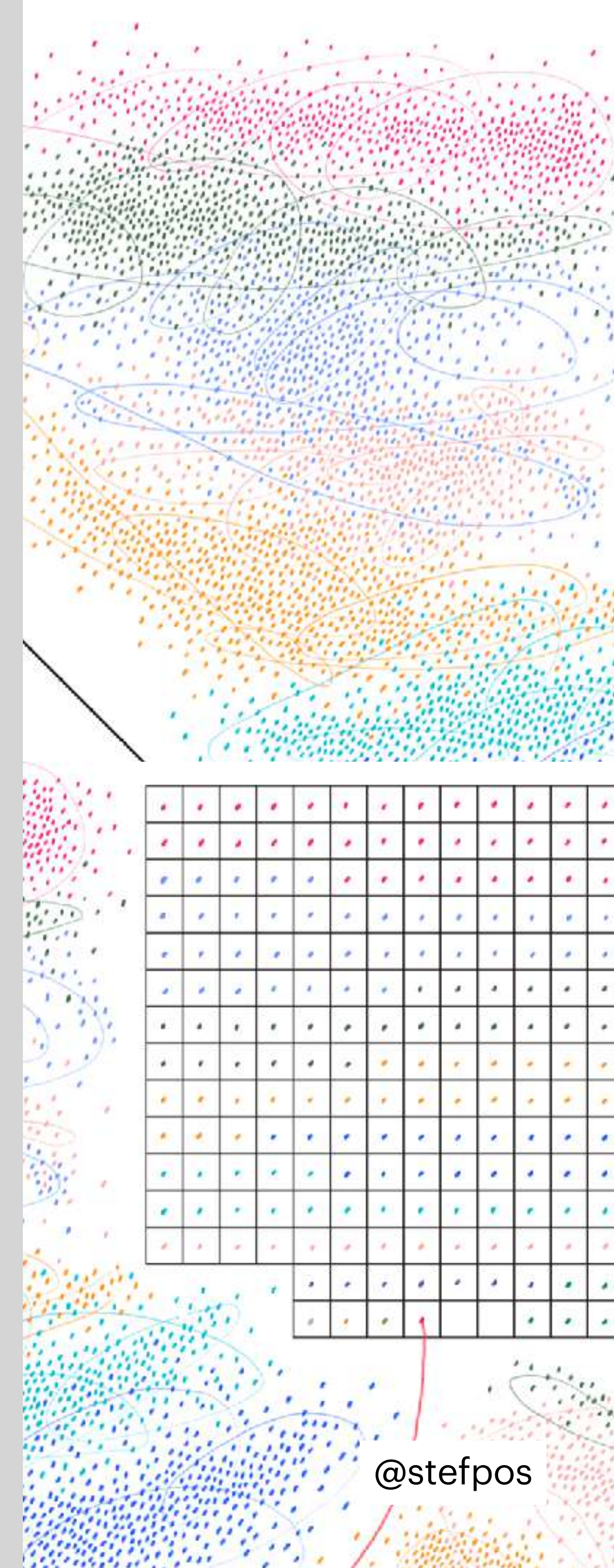
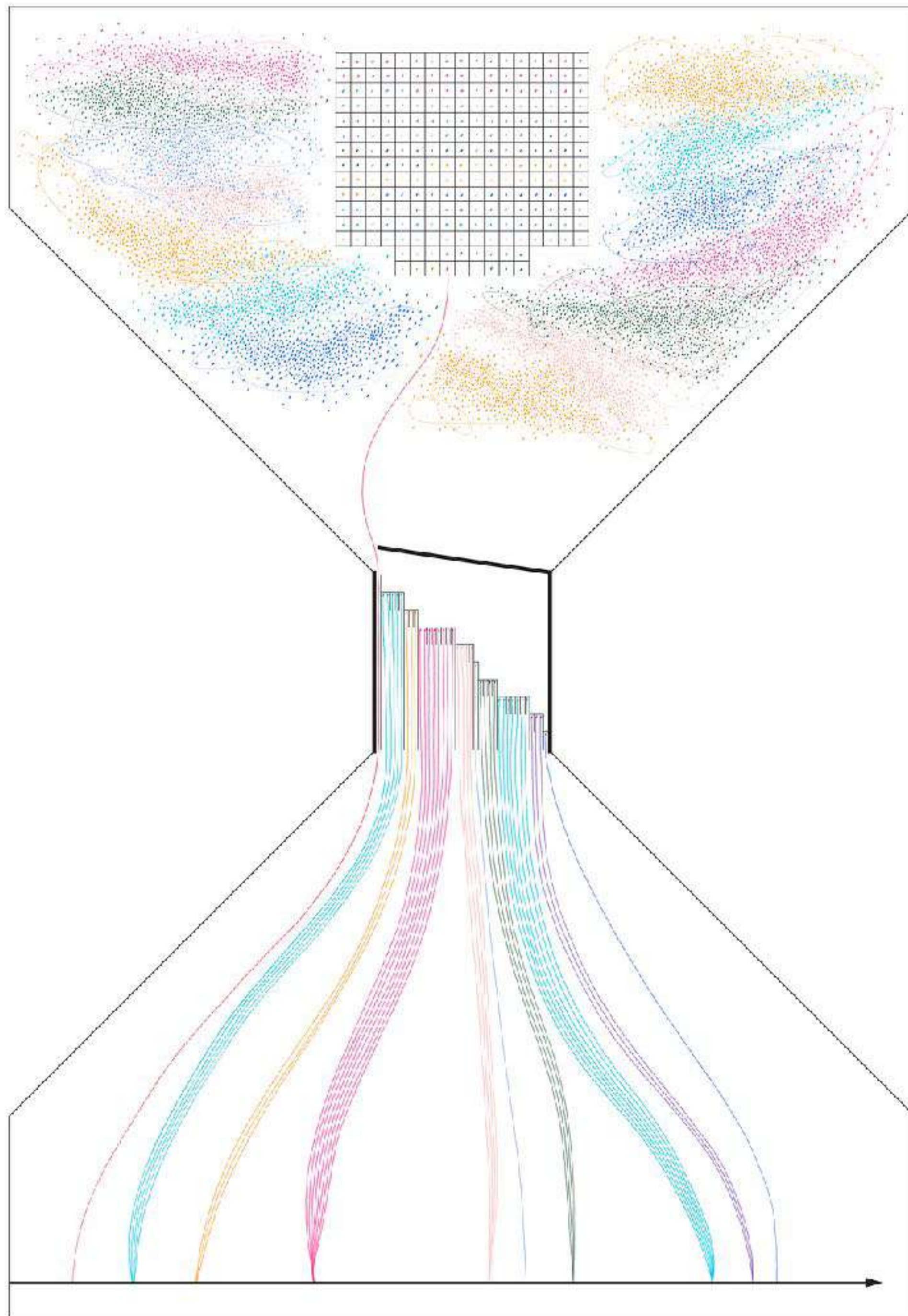


Lab
technician



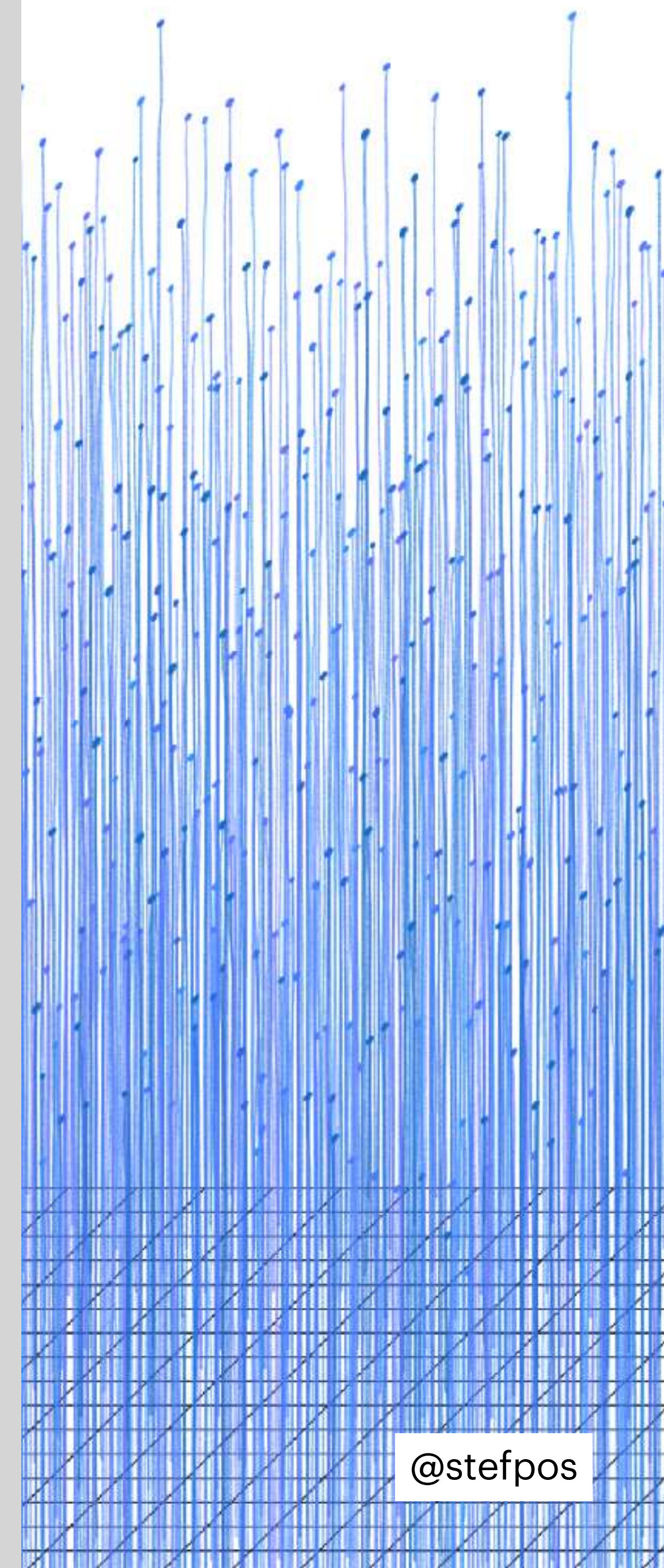
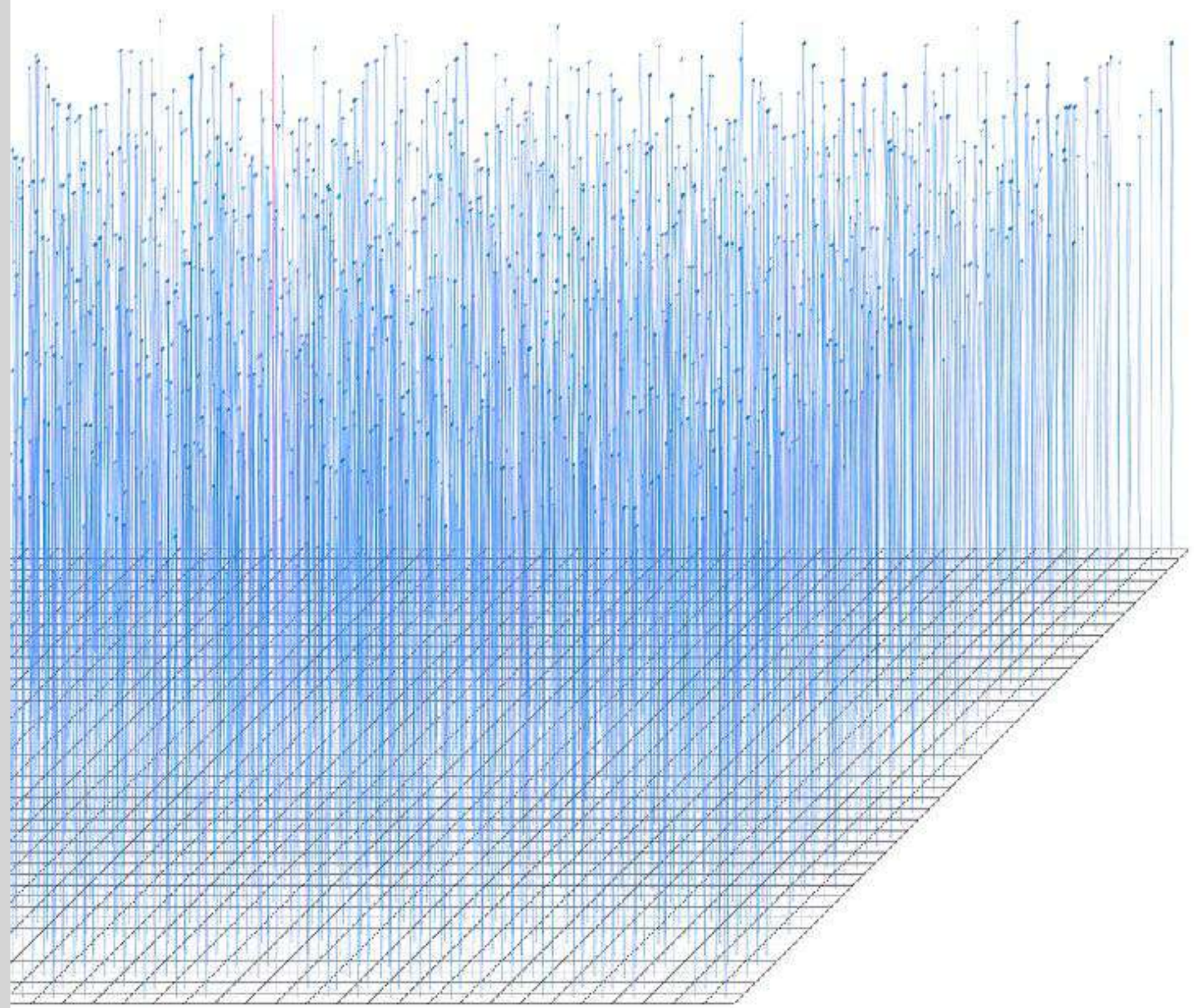
@stefpos

Database administrator



@stefpos

Researcher



@stefpos

Artwork (without annotation)

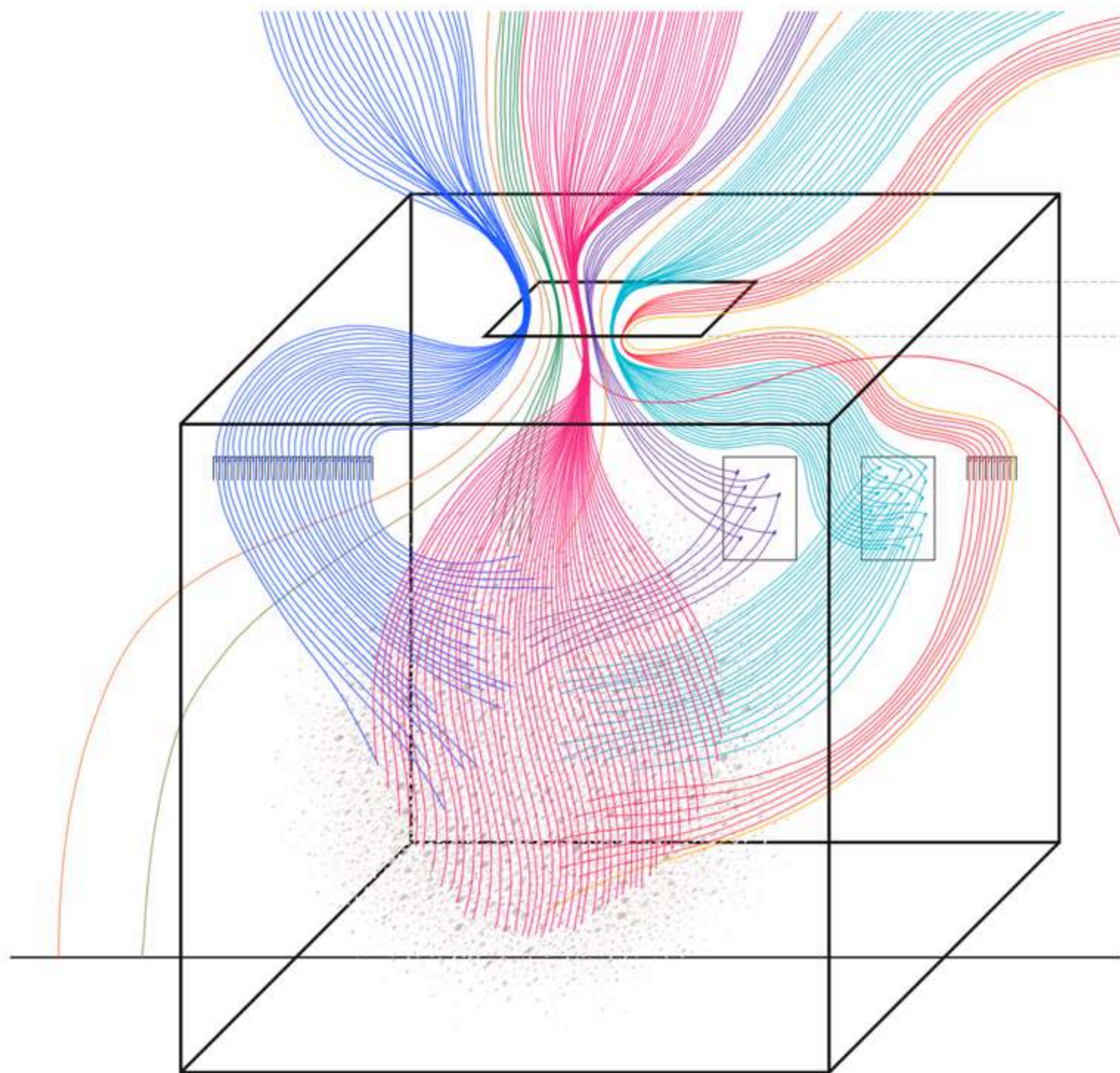
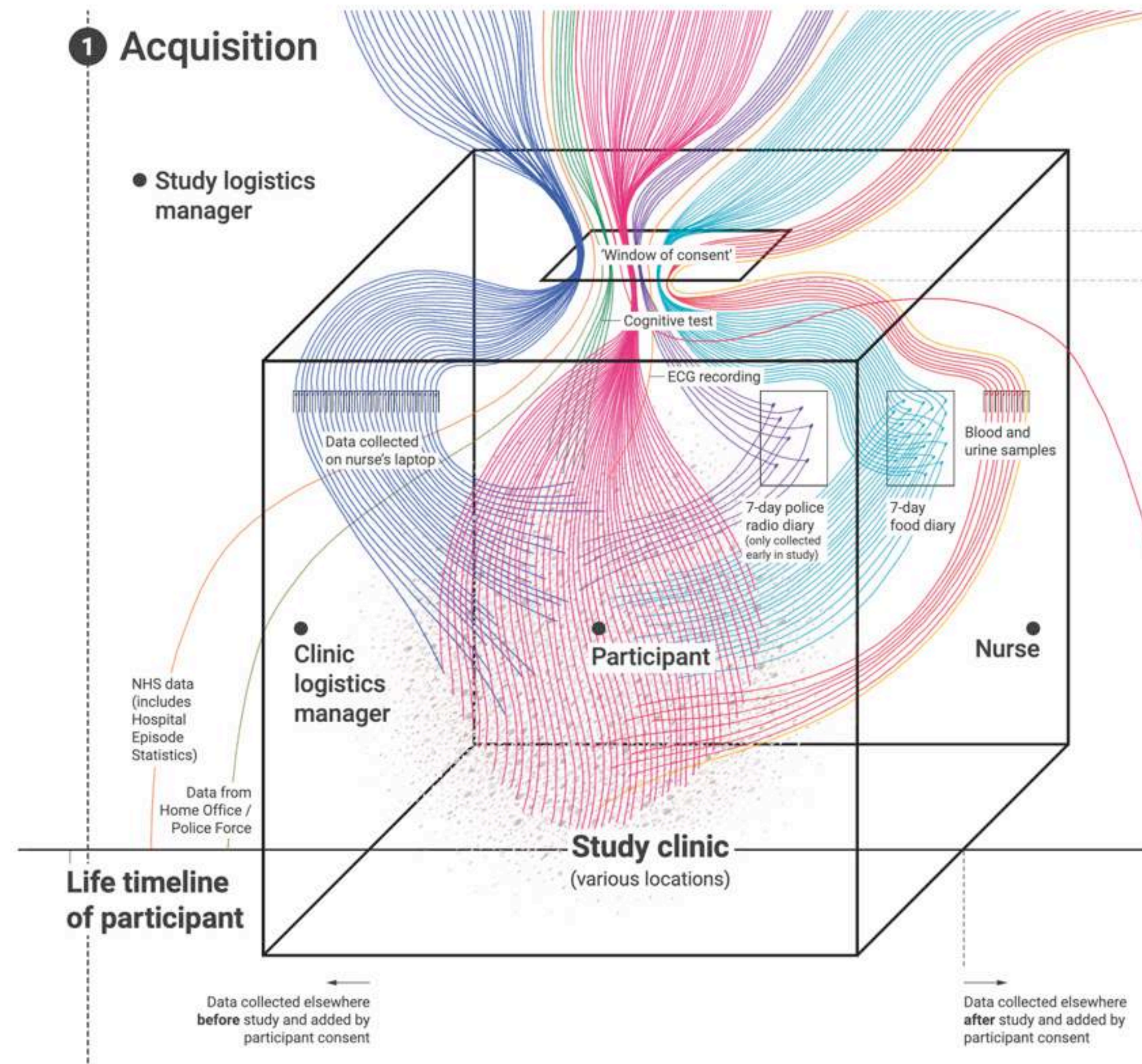


Diagram (with annotation)



Artwork (without annotation)

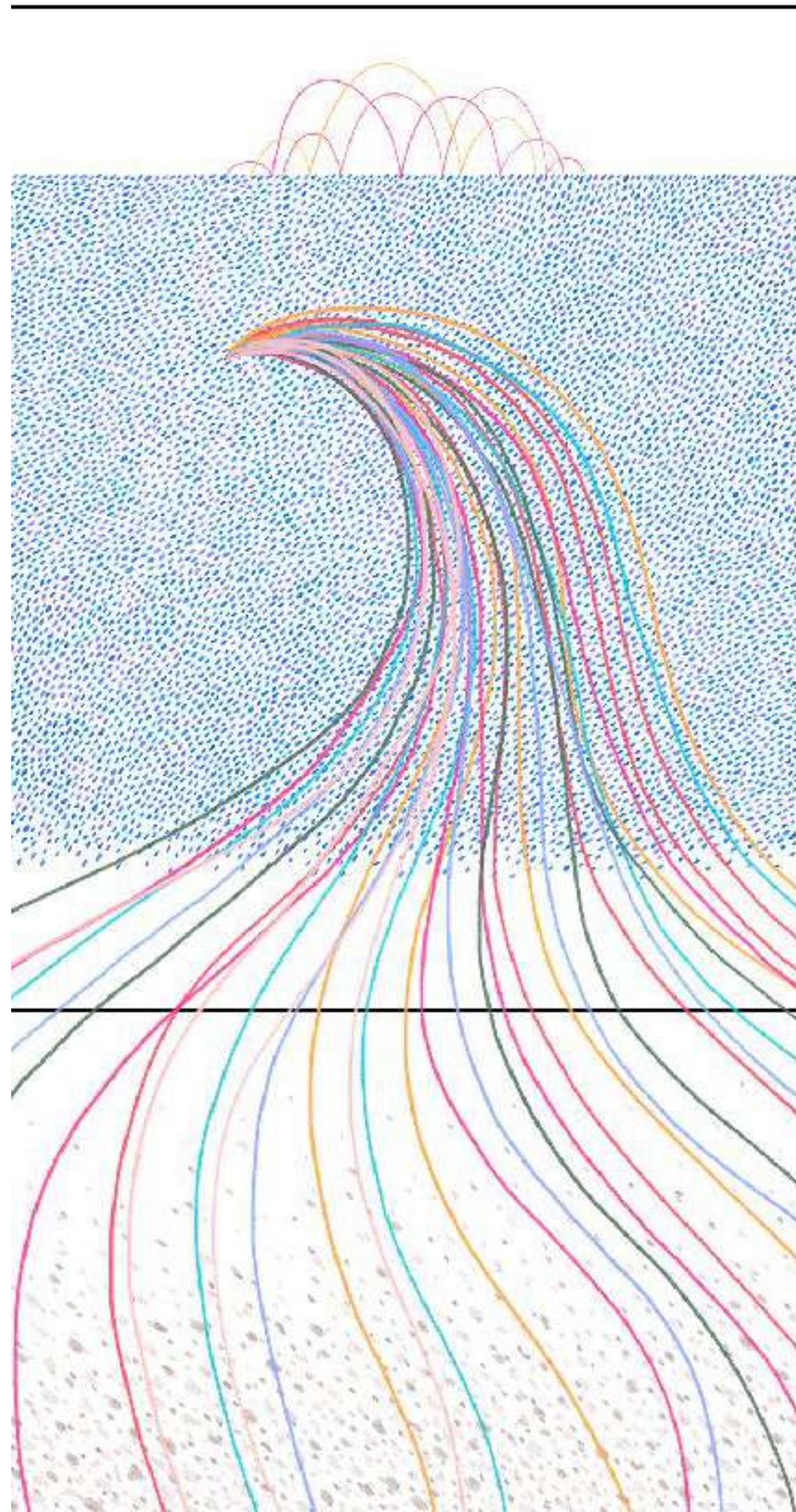
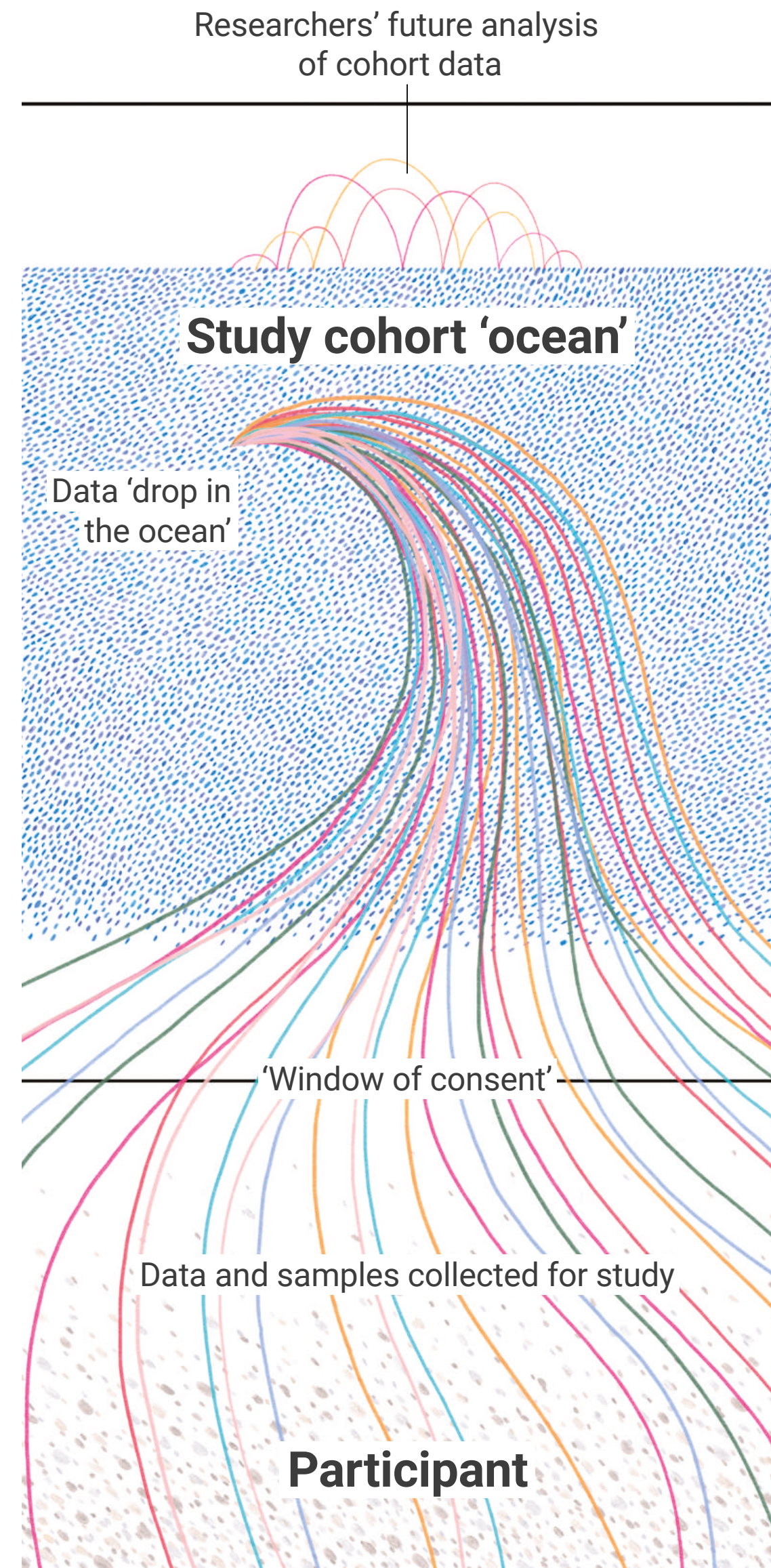
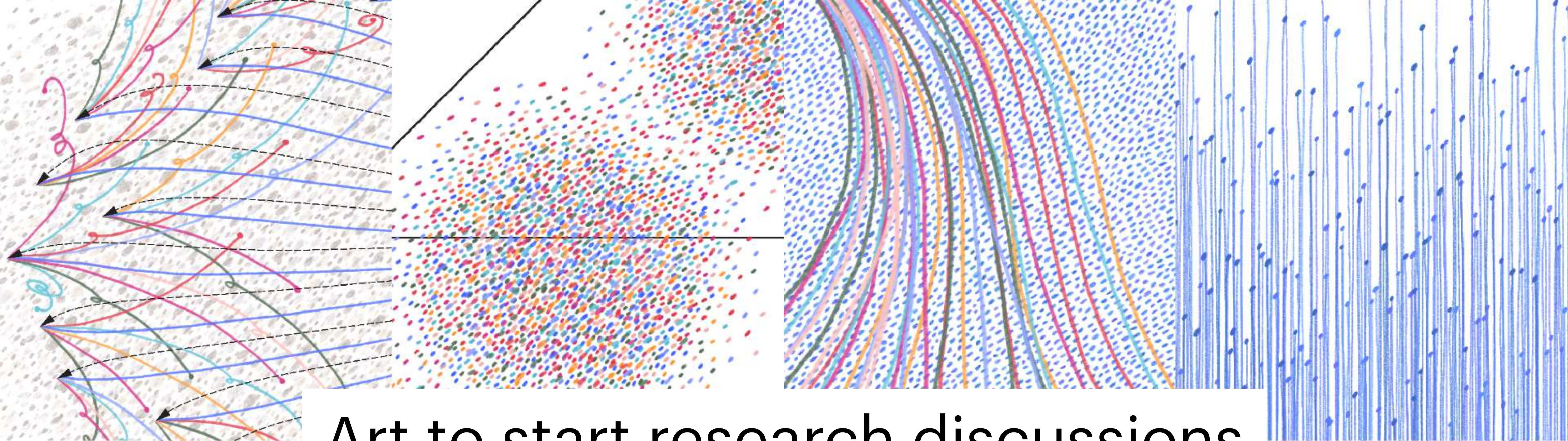
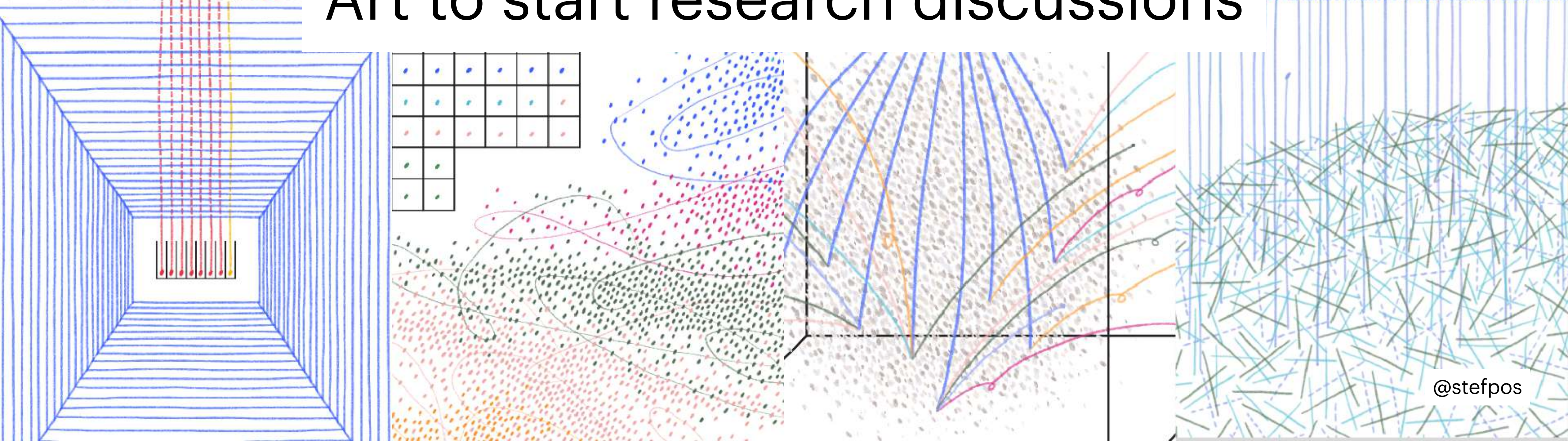


Diagram (with annotation)





Art to start research discussions



Data as a community conversation starter



is coding in solitude.

The secret of happiness is riding my bike

Laughing uncontrollably is the best form of therapy

Surfing a perfect left-hander is but an earlier heaven.

Jumping into the air – that is happiness.

Happiness begins with the birds in the trees.

Laying at the bottom of a pool brings happiness.

The art of being happy lies in sunshine after days of grey.

A warm bowl of spicy soup

Running to the sun is but an earlier heaven.

Updating Happiness

Seeing the blue sky is the key to happiness.

Coming home to my partner brings happiness.

Nice breakfast is the good

A barn owl looking at me- that is happiness.

Happiness is a morning cuddle.

Holding a cat is but an earlier heaven.

A life with no drowned bugs today is happy

Happiness and catching Pokémons are inseparably connected.

Lemon juice on bread & butter is but an earlier heaven.

The secret of happiness is coding in solitude.

Happiness begins with the birds in the trees.

A life of reading is happy

Swimming in the ocean at night is the greatest blessing.

Happiness is drinking boxed wine in a Bodum.

Happiness begins with sleeping on a problem to solve.

Eating without getting fat is the best form of therapy.

The art of being happy lies in smiles from my children.

@stefpos

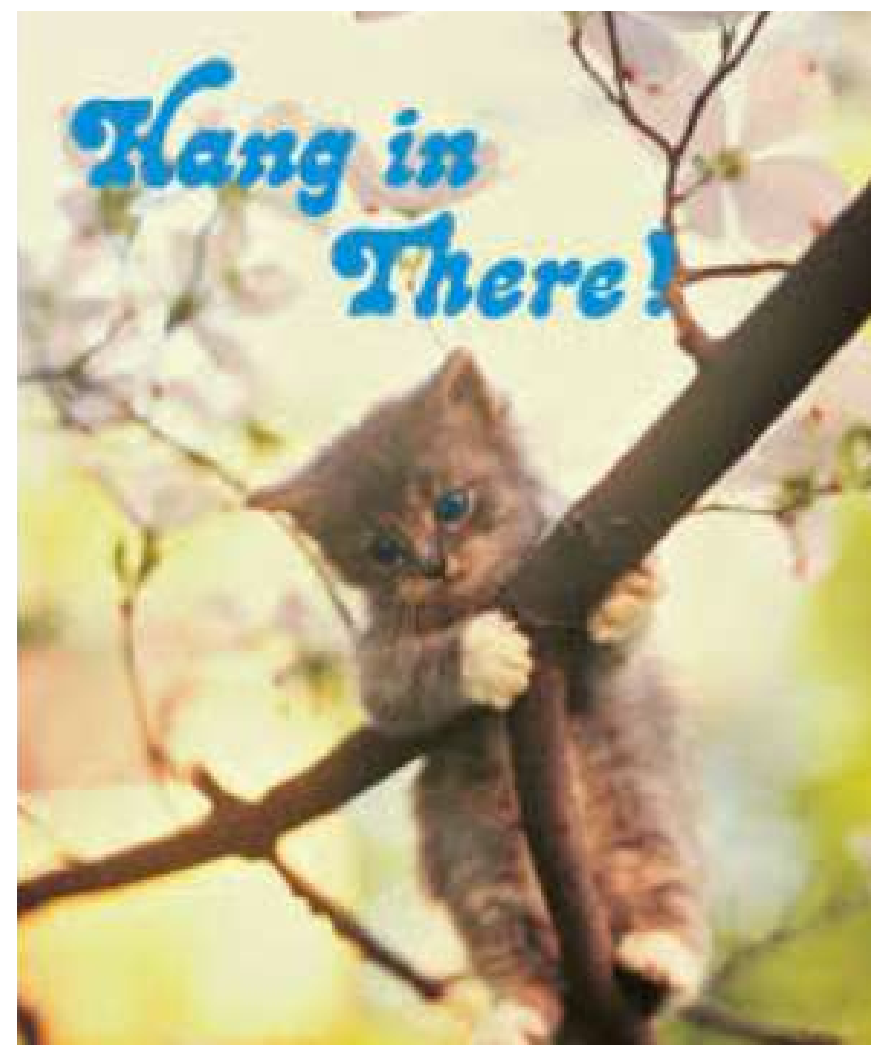
The secret of happiness



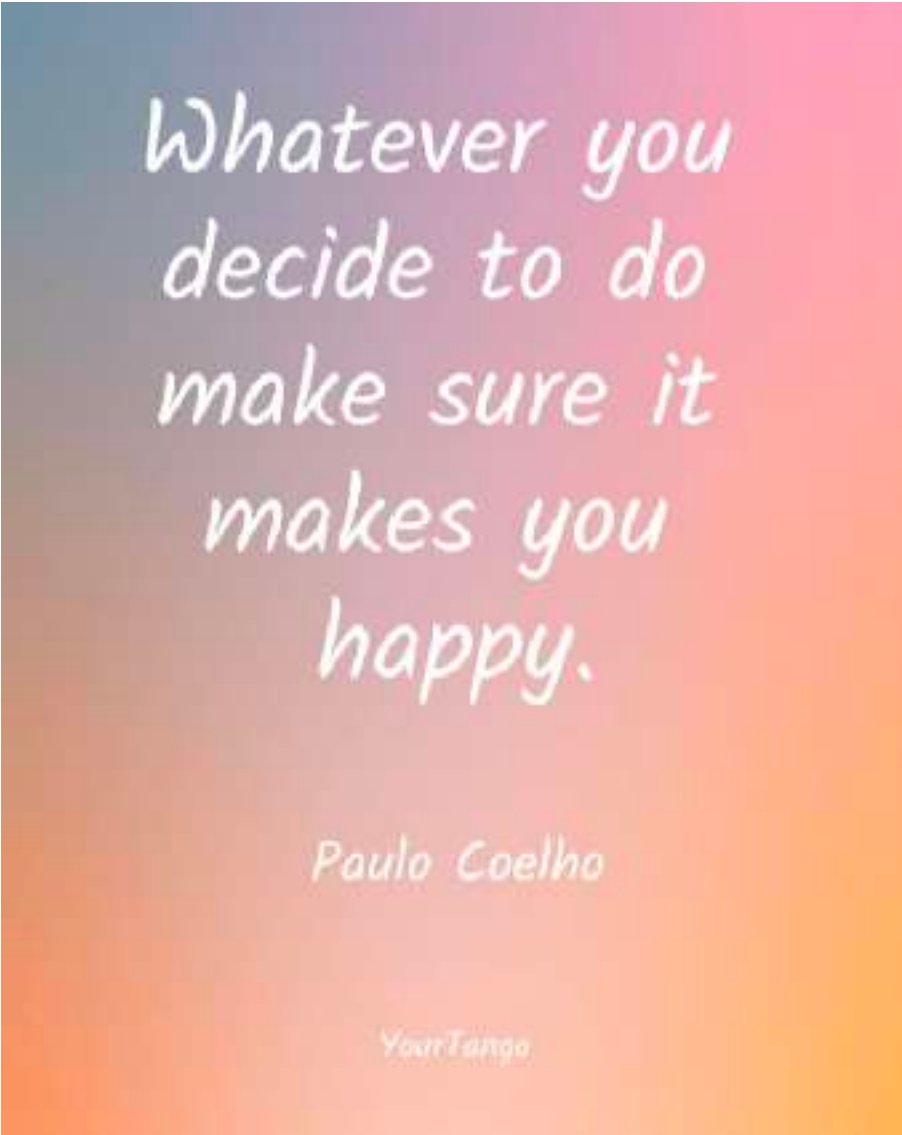
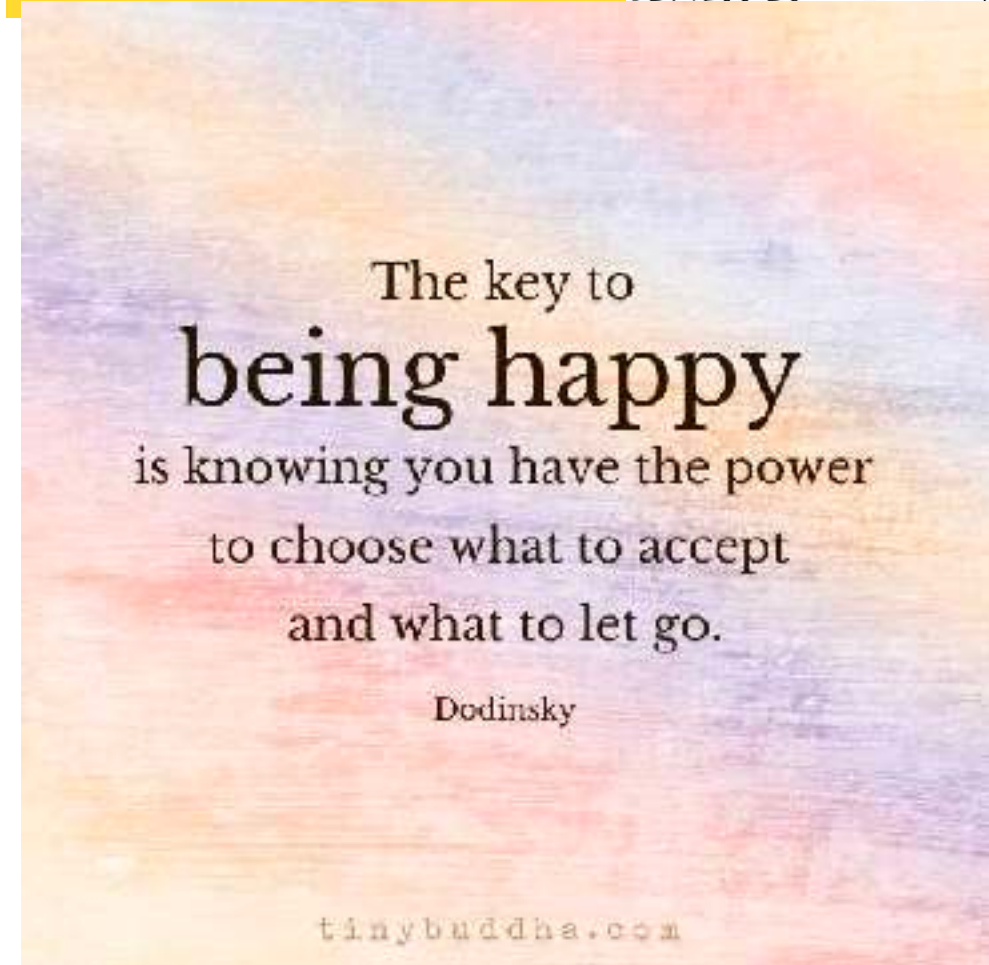
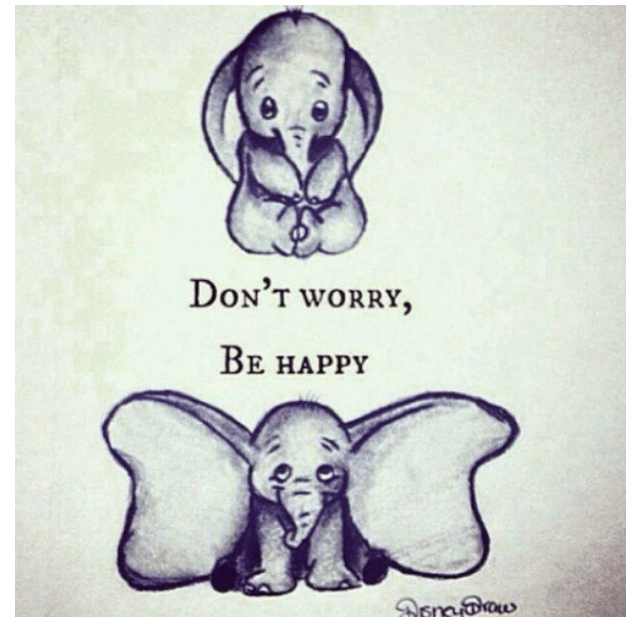
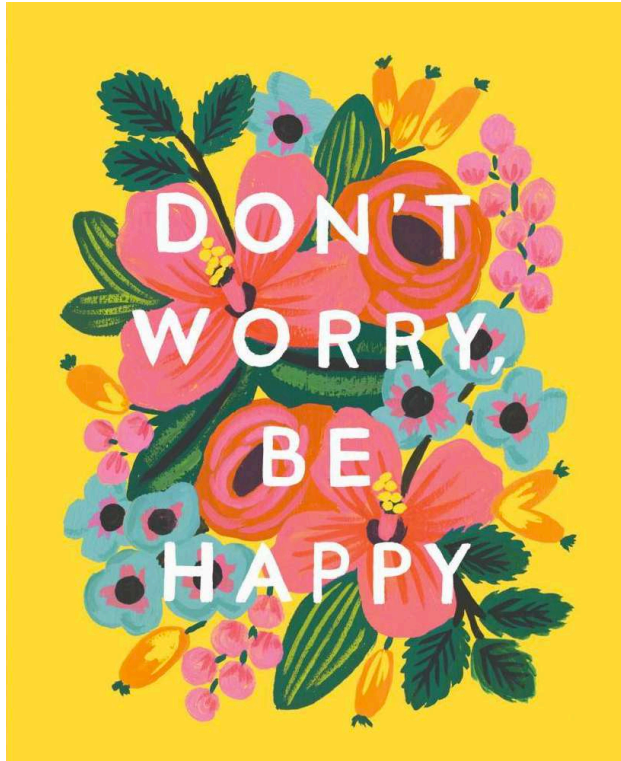
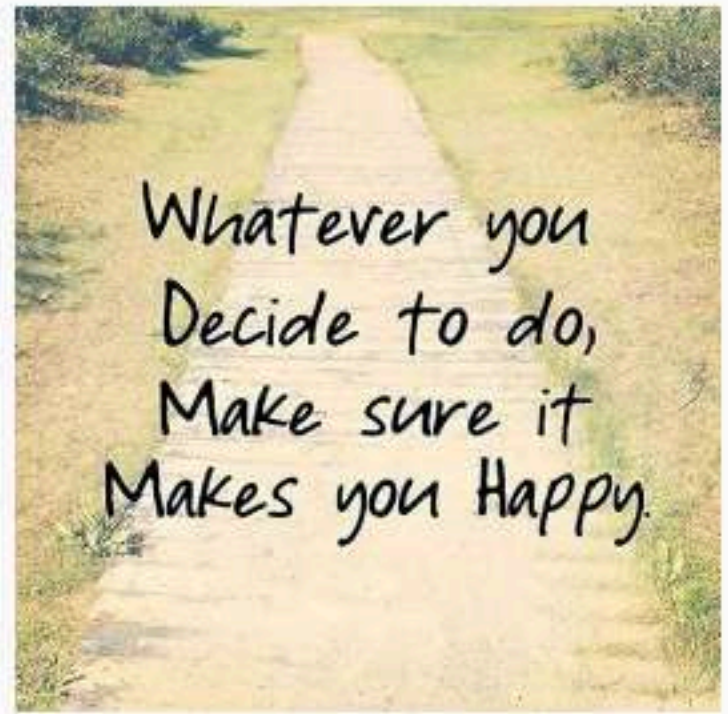
Wellcome Collection

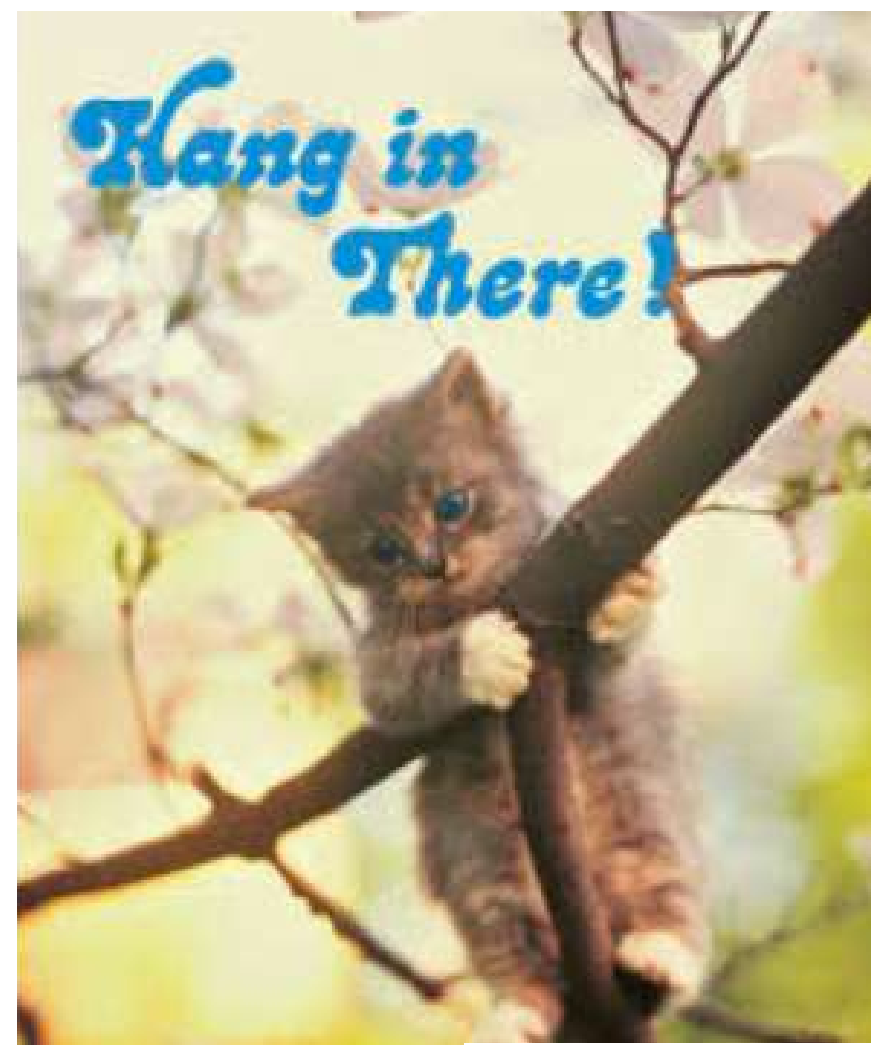
@stefpos

Brief: to create an 'emotional check-in'



Ten years from now,
make sure you can
look back and say
you did the
best you could.
That's all
that matters.
@happsters





Ten years from now, make sure you can look back and say you did the best you could. That's all that matters.
@happsters



I was cynical once when I thought I knew everything; now that I know nothing I have hope again.
- Komal Kapoor

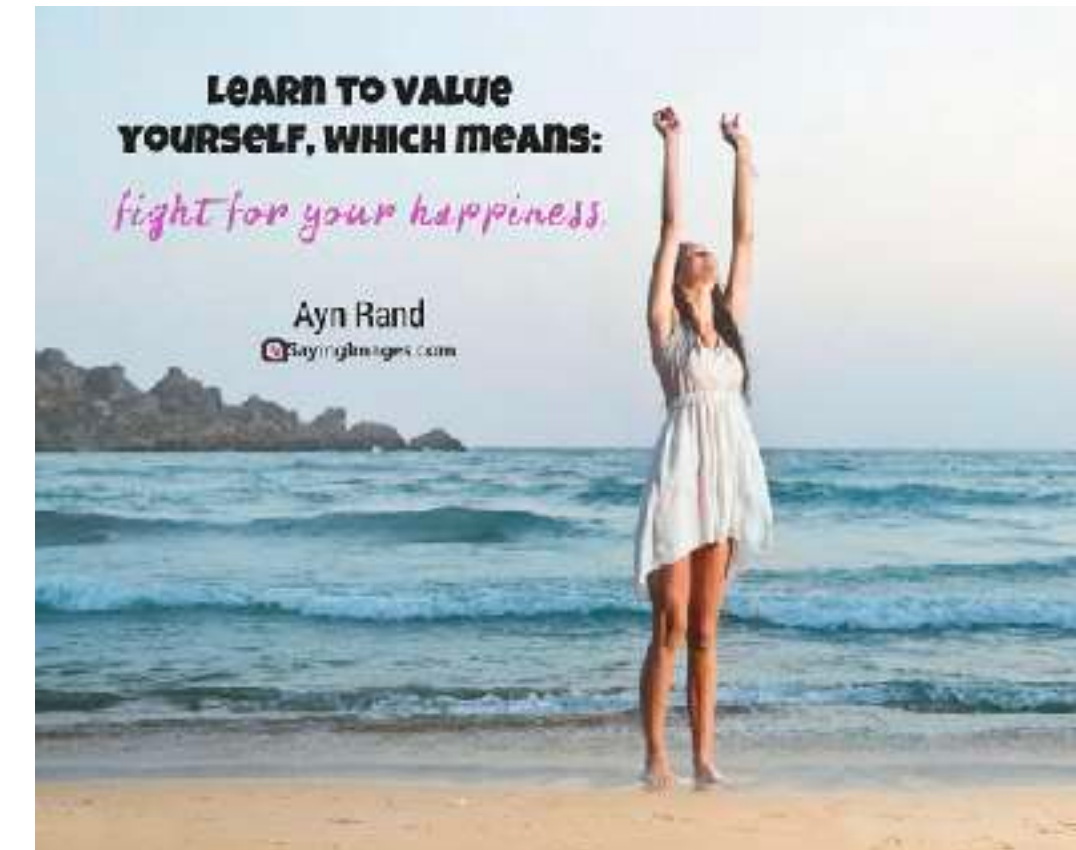
Whatever you Decide to do, Make sure it Makes you Happy.



How can we make these better?



It's time to just be happy. Being angry, sad and overthinking isn't worth it anymore. Just let things flow.



The key to being happy is knowing you have the power to choose what to accept and what to let go.
Dodinsky
tinybuddha.com

YOU GLOW DIFFERENTLY WHEN YOU'RE HAPPY

Whatever you decide to do make sure it makes you happy.
Paulo Coelho
YourTango



www.updatinghappiness.com

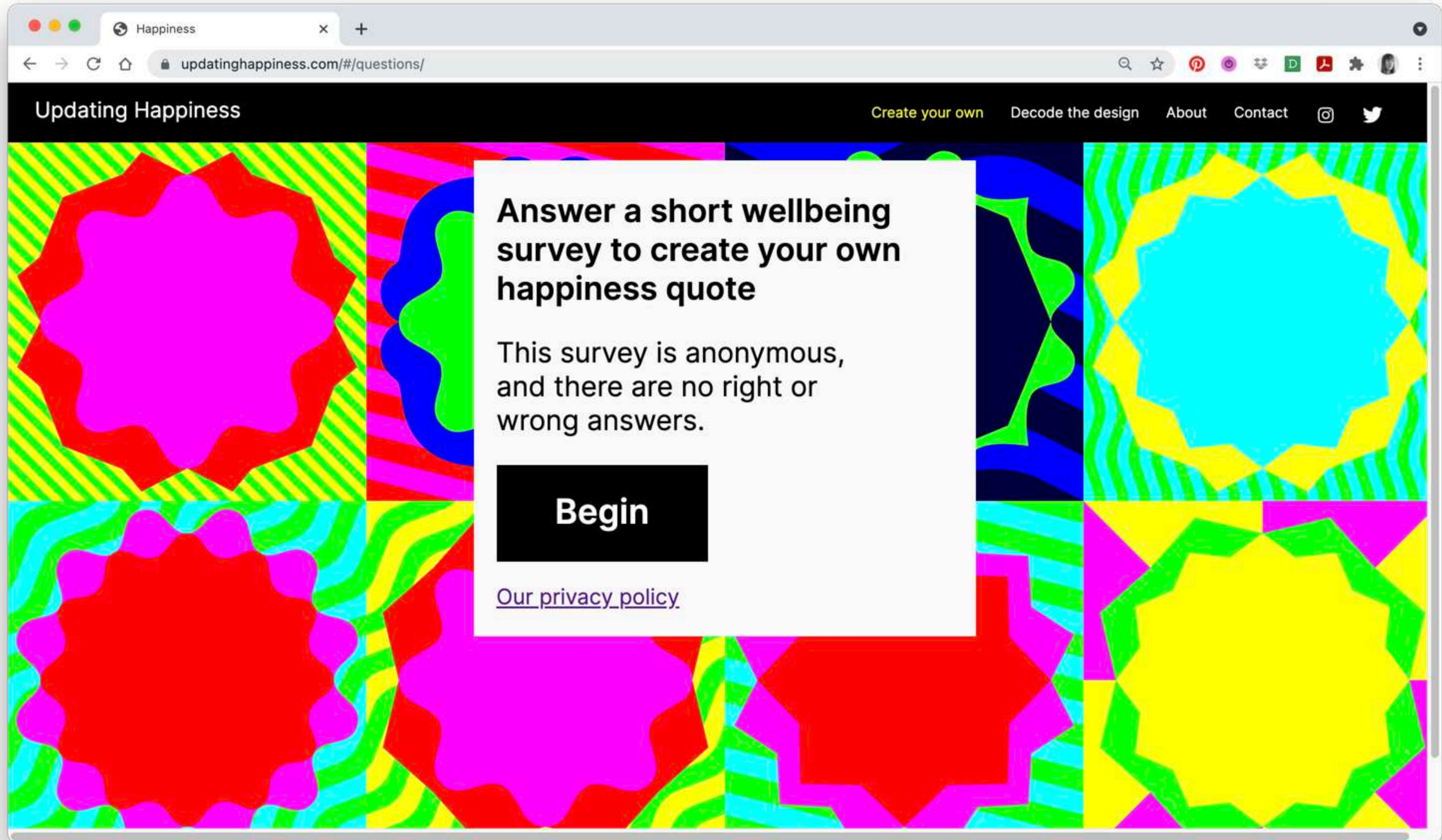


Table 1: Four measures of personal well-being

Next I would like to ask you four questions about your feelings on aspects of your life. There are no right or wrong answers. For each of these questions I'd like you to give an answer on a scale of 0 to 10, where 0 is "not at all" and 10 is "completely".

Measure	Question
Life Satisfaction	Overall, how satisfied are you with your life nowadays?
Worthwhile	Overall, to what extent do you feel that the things you do in your life are worthwhile?
Happiness	Overall, how happy did you feel yesterday?
Anxiety	On a scale where 0 is "not at all anxious" and 10 is "completely anxious", overall, how anxious did you feel yesterday?

Source: Office for National Statistics

What's the one small thing from today you're most **grateful** for?

What '**guilty pleasure**' secretly makes you happy but is too embarrassing to tell anyone about?

If happiness was an **experience**, what would it be?

What single thing makes you feel better after a **bad day**?



Finished!

Add to the artwork

Download



is coding in solitude.

The secret of happiness is riding my bike

Laughing uncontrollably is the best form of therapy

Surfing a perfect left-hander is but an earlier heaven.

Jumping into the air – that is happiness.

Happiness begins with the birds in the trees.

Laying at the bottom of a pool brings happiness.

The art of being happy lies in sunshine after days of grey.

A warm bowl of

Running to the sun is but an earlier heaven.

'rave tapestry'



Seeing the blue sky is the key to happiness.

Coming home to my partner brings happiness.

Nice breakfast is the good

A barn owl looking at me- that is happiness.

Happiness is a morning cuddle.

True happiness comes from staring at fast-moving clouds.

Holding a cat is but an earlier heaven.

A life with no drowned bugs today is happy

Happiness and catching Pokémons are inseparably connected.

Lemon juice on bread & butter is but an earlier heaven.

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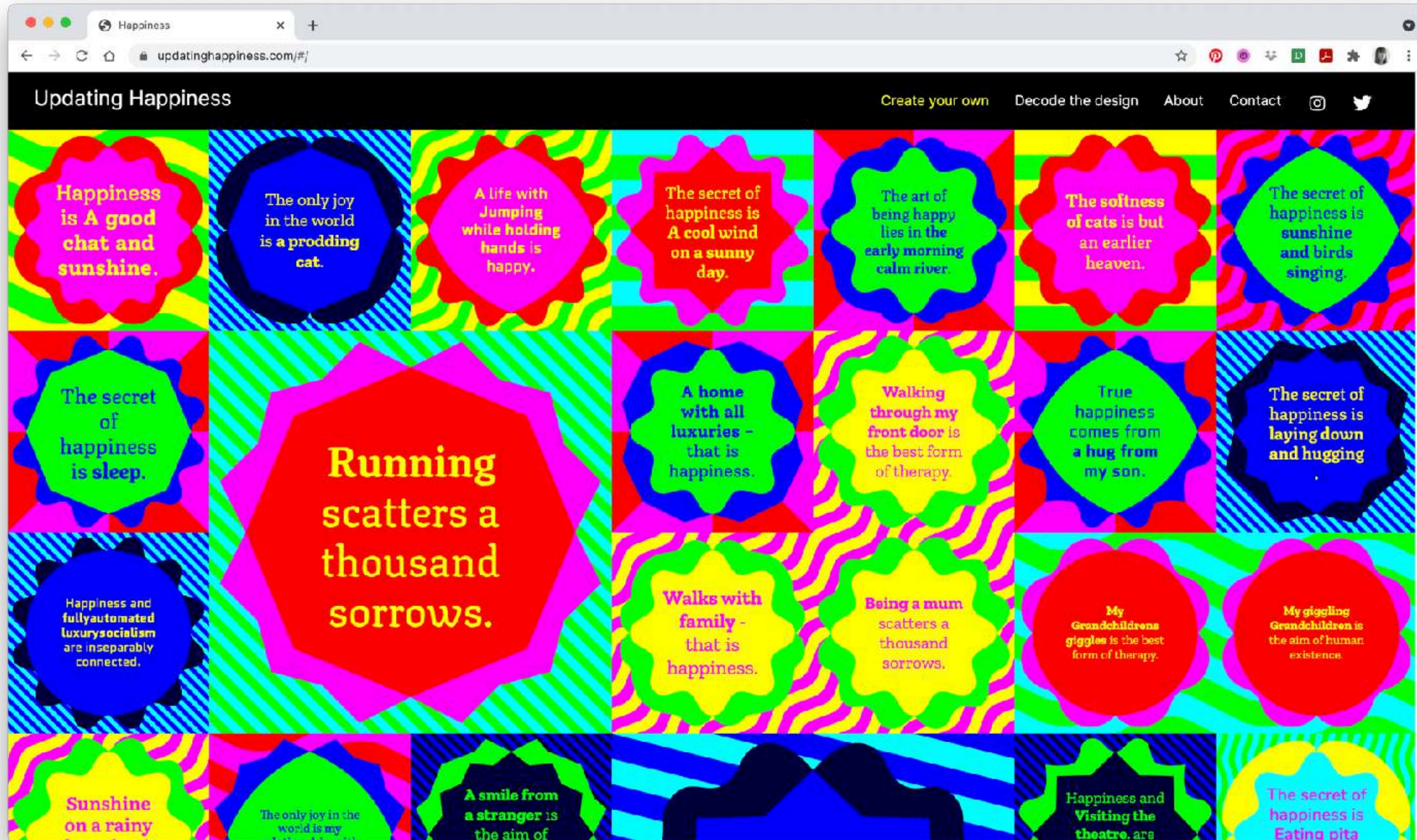
Eating without getting fat is the best form of therapy.

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@stefpos

The secret of happiness

www.updatinghappiness.com



@stefpos

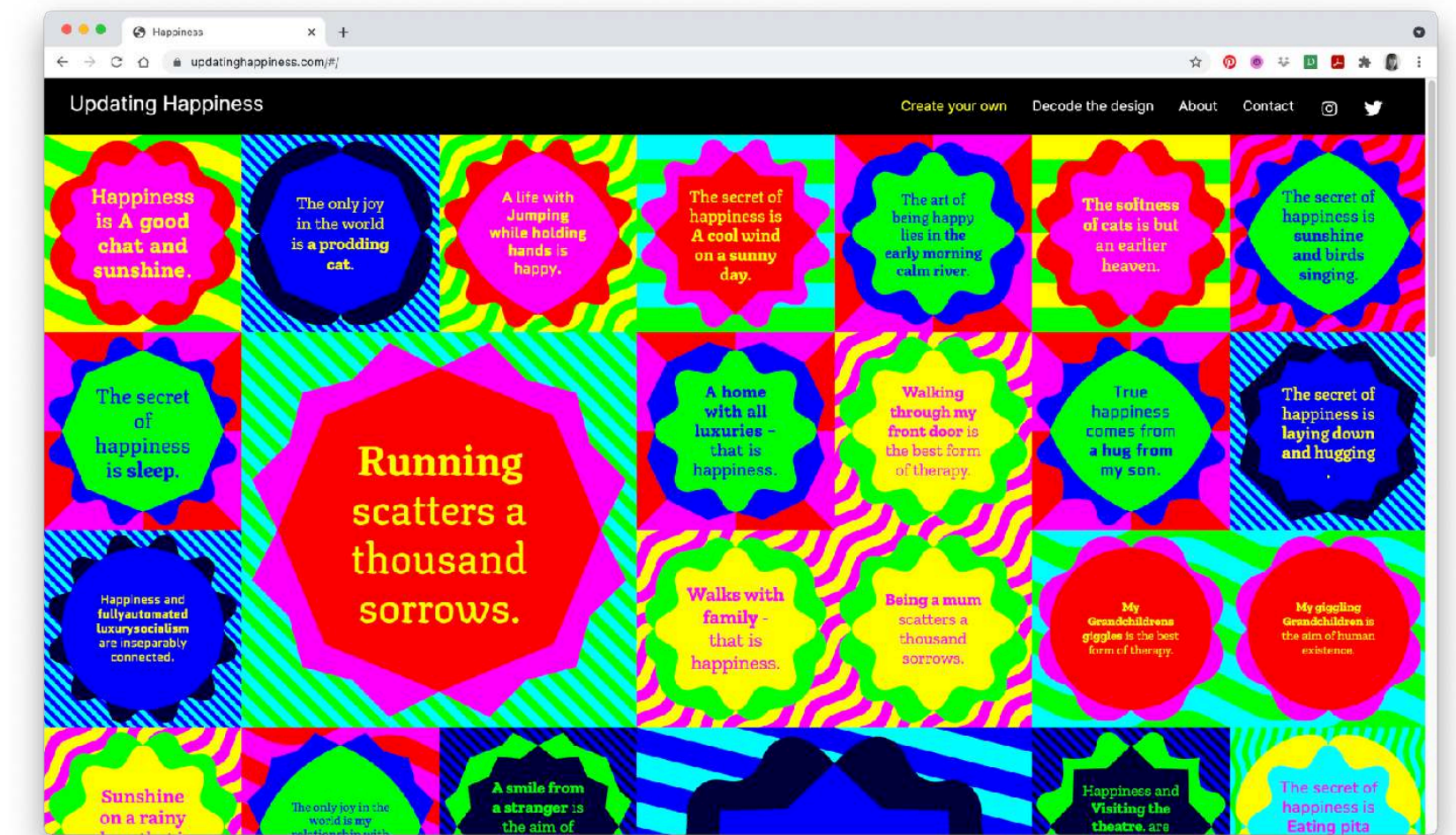


What's the one small thing from today you're most **grateful** for?

What '**guilty pleasure**' secretly makes you happy but is too embarrassing to tell anyone about?

If happiness was an **experience**, what would it be?

What single thing makes you feel better after a **bad day**?



Looking inward, —————> space for personal reflection

New insight —————> revealed about oneself

Looking outward, seeing how one fits into the world

Happiness and
dipping chips
in milkshakes
are inseparably
connected.

Feeding
my baby is
the greatest
blessing.

Watching
wildlife
is the best
medicine.

A day without
standing
barefoot in
the grass is a
day wasted.

The art of
being happy
lies in watching
streetlights
whizz by.

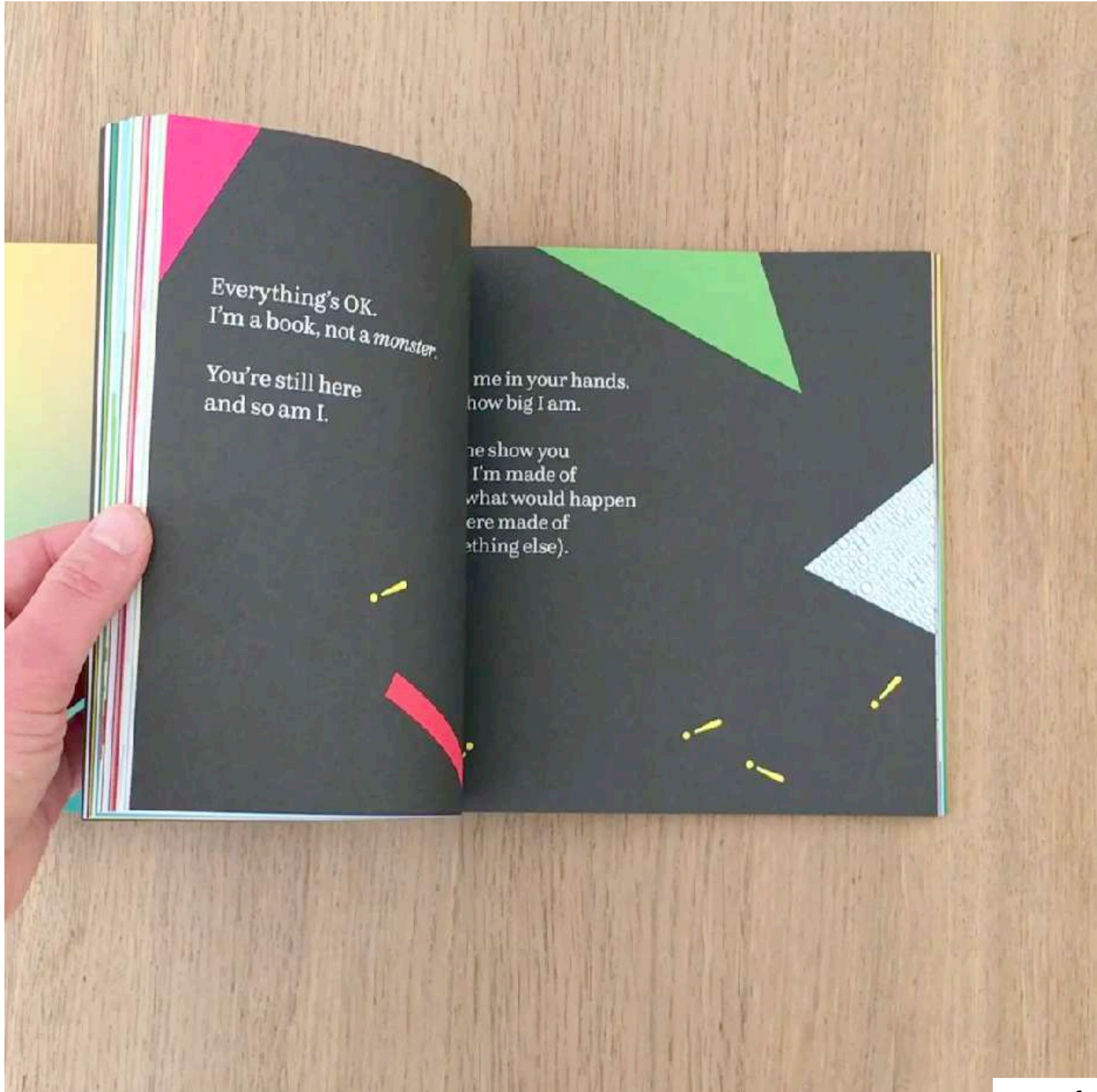
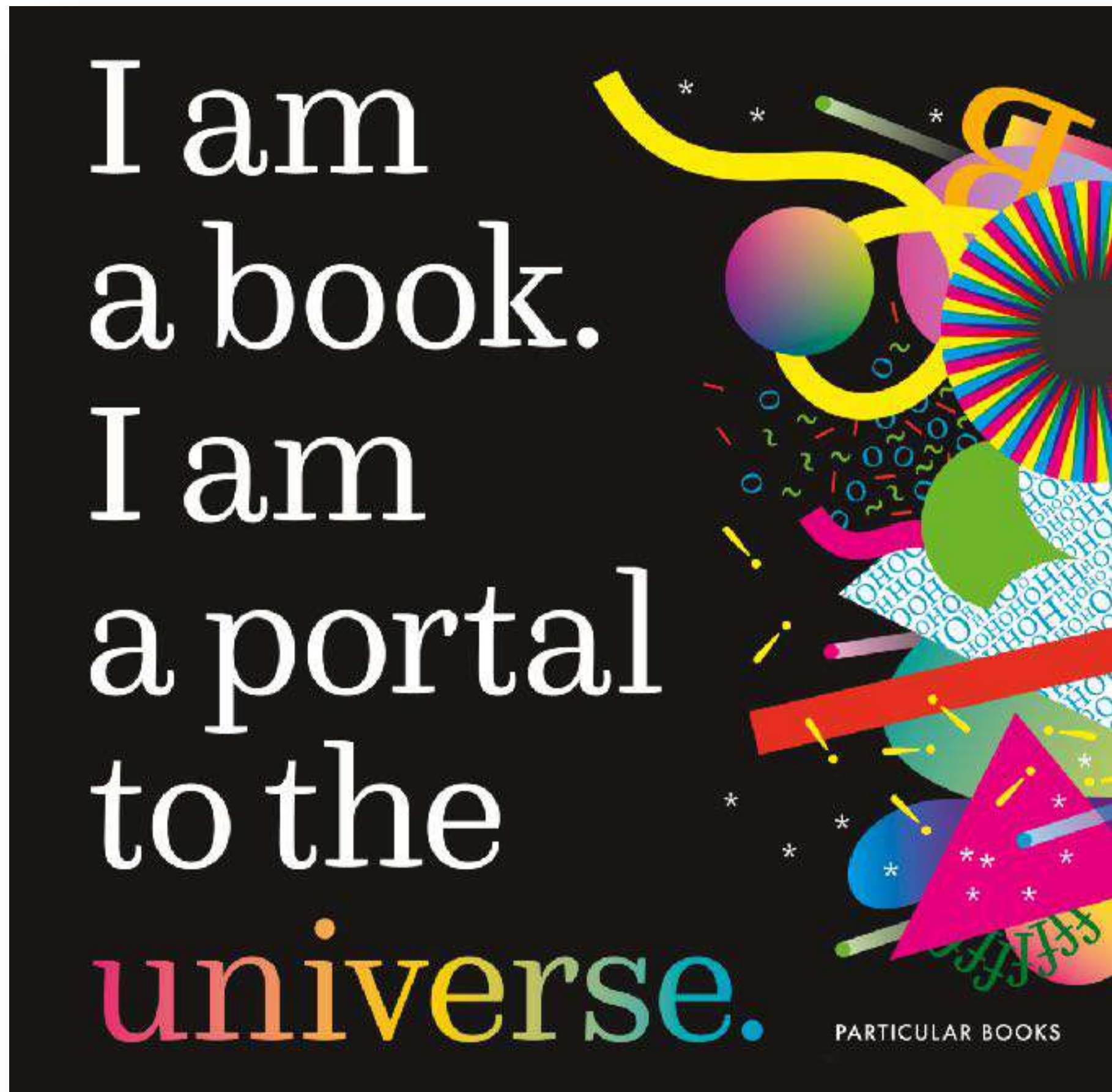
True happiness
comes from
driving with
open windows.

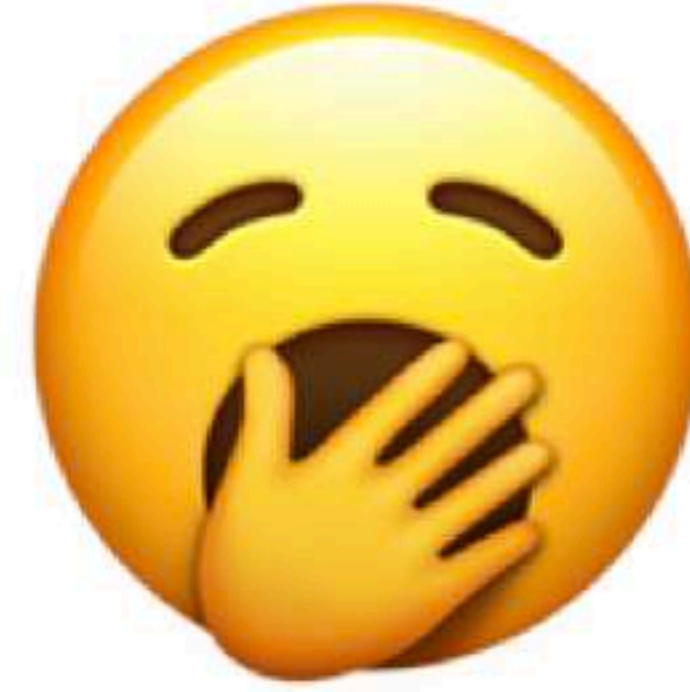
The art of
being happy
lies in printing
the exact
right green.

The chirping
of birds
scatters
a thousand
sorrows.

Dataviz *must*
experiment
to stay relevant

Communicating data
using *all* of the senses





How can we move
beyond the usual
info-book?

data
+ design
+ chart fatigue
= ???????



What if we made
a book where the
book itself is the
measuring device?



Book is a measuring device

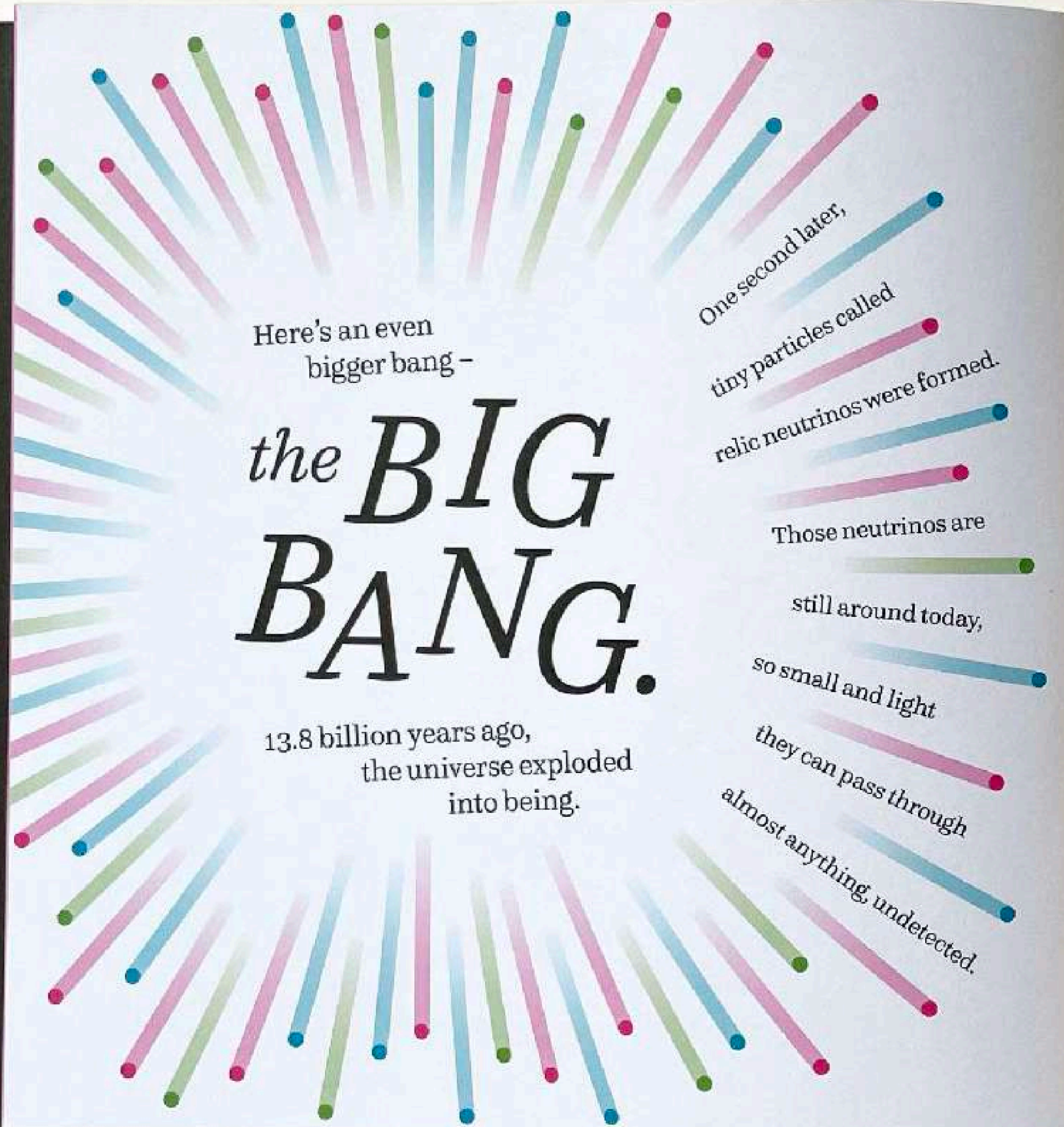
Age 8 and up

For the data-uninitiated / intimidated

Everything is 1:1 scale.



A love letter to the universe



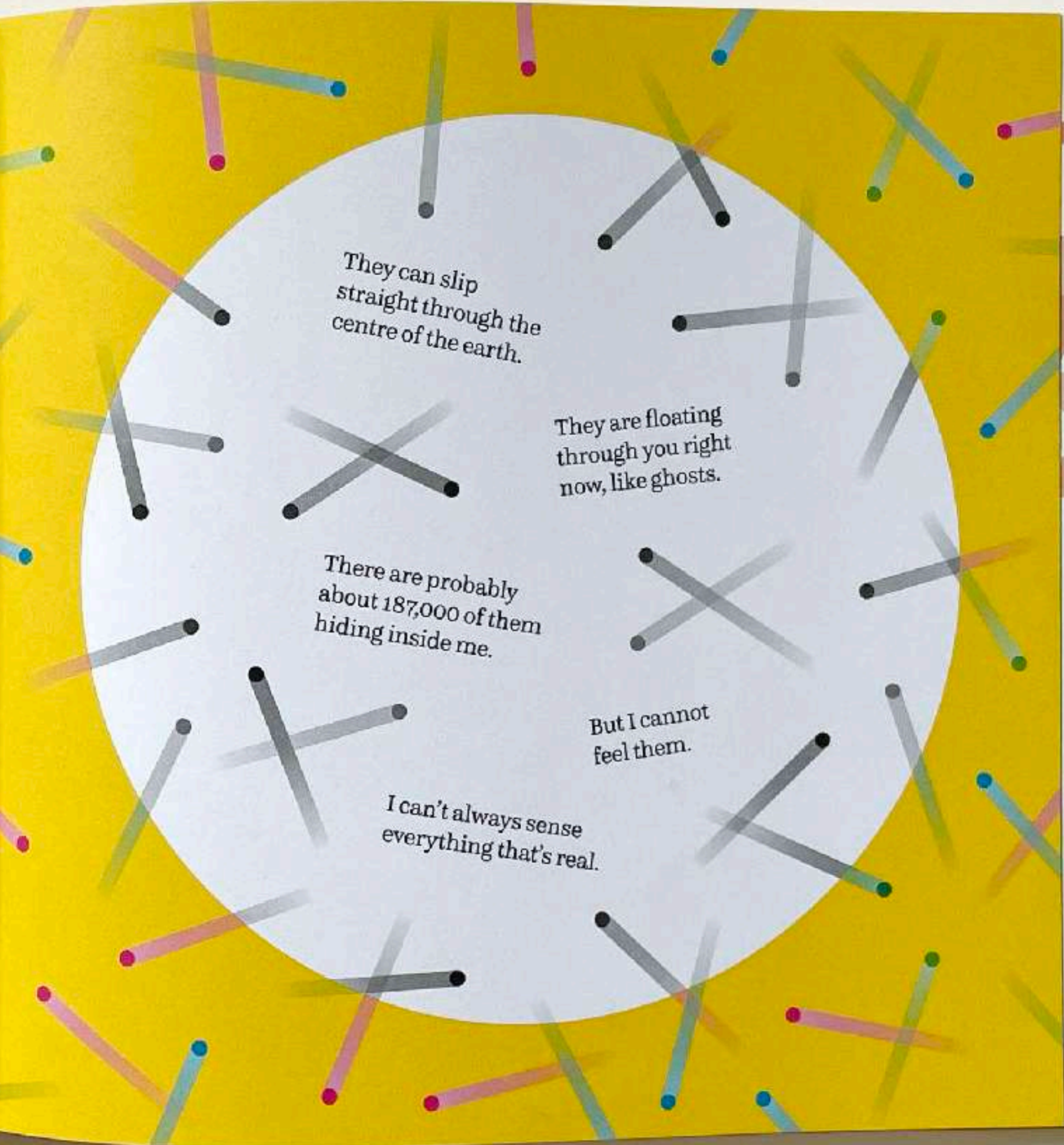
Here's an even
bigger bang -

the **BIG BANG.**

13.8 billion years ago,
the universe exploded
into being.

One second later,
tiny particles called
relic neutrinos were formed.

Those neutrinos are
still around today,
so small and light
they can pass through
almost anything, undetected.



They can slip
straight through the
centre of the earth.

They are floating
through you right
now, like ghosts.

There are probably
about 187,000 of them
hiding inside me.

But I cannot
feel them.

I can't always sense
everything that's real.

... all the way

to the

moon,

where

I'll lie

and

rest.

In 200 years, I'll gather
a blanket of moondust as
thick as this page.

The moon will be a lovely
place for me to dream.



I am a book.
I was once a portal
to the universe.

The small print

Before we begin, there are some things you should know.

If you get out your kitchen scales, I may weigh in at a touch more than 450g. I will get heavier as I absorb moisture from the air, especially if you keep me in a damp room.

Want a full list of my sources? Visit bit.ly/iamaportal.

Good. Now where did all those numbers come from?

Touch this dot

You just left behind 100,000 bacteria:

Your hands are teeming with bacteria. Every time you touch something, like this page, you leave some behind. Doctors and nurses have between 4,000 and 4.5 *million* bacteria per square centimetre of skin. To keep things simple, let’s assume you have one million. Your fingertip is about 1cm² in area, and around 10% of the bacteria on it are transmitted by a firm fingerprint. That’s 100,000 bacteria per touch.

Eyes

These Os are the size of:

The Os really are the size of those animals’ eyes, on average.

... an ogre-faced spider’s eyes:

The big-eyed spider record is held by an Australian species of ogre-faced spider – the rufous net-casting spider, *Deinopis subrufa*. Scary-looking but

harmless, its two central eyes measure up to 1.4mm across. It has excellent night vision, better than a cat or an owl.

Letters

This M is the breadth of a clothes moth’s wings:

The common clothes moth, *Tineola bisselliella*, has a 1.3cm wingspan. It eats wool and other natural fibres, making it the culprit behind many a holey jumper.

This S is the spine of the world’s smallest snake:

The Barbados threadsnake, *Tetracheilostoma carlae*, is the smallest known snake species. Adults are only 10cm long when fully extended.

This F is a frond of the world’s smallest fern:

An aquatic fern called water velvet, *Azolla cristata* (formerly known as *Azolla caroliniana*), grows on ponds in the Americas in mats up to 4cm thick. Its fronds measure up to 1.5cm.

This B is as broad as a bumblebee’s wings as it buzzes by:

Workers of the buff-tailed bumblebee, *Bombus terrestris*, have wingspans ranging from 2.2 to 3.4cm. This B is 2.8cm tall; imagine the letter turned on its side to look like a pair of wings.

This I is the size of an inchworm:

Inchworms are the larvae of moths from the family *Geometridae*, which contains 1,200 moth species. True to their name, they are typically one inch (2.5cm) long.

This C is the size of a small cup coral:

The Devonshire cup coral, *Caryophyllia smithii*, is a solitary hard coral measuring up to 2.5cm across. It lives off European coasts.

This W is as wide as a white witch’s wings:

The white witch, *Thysania agrippina*, is a moth that lives in Central and South America. It has the largest wingspan of any moth or butterfly, up to 30cm.

Tongues

Here’s the tongue of a skipper butterfly stealing sweet nectar from a blossom:

A butterfly’s proboscis is like a cross between a tongue and a straw, curled up in a roll when the butterfly is not using it to eat with. The immaculate ruby-eye skipper, *Damas immaculata*, has the longest proboscis of any butterfly – up to 5.2cm long when fully extended. Skipper butterflies in Costa Rica engage in ‘nectar robbery’ by taking sugary nectar from flowers without pollinating them in return.

And this is a tube-lipped nectar bat reaching deep within a flower:

Anoura fistulata is a rare, mouse-sized bat that lives in the cloud forests of Ecuador. It has an 8.5cm tongue – 1.5 times the length of its body – that starts in its chest and can stretch by up to three times its stored length. The bat uses its impressive tongue to feed on nectar from a long, tube-like flower.

Yes, it’s a Morgan’s sphinx moth pollinating an orchid:

In 1862, Charles Darwin was sent an orchid from Madagascar, *Angraecum sesquipedale*. It had star-shaped flowers, each with a nectary (the part that stores the nectar) up to 35cm long. ‘Good heavens what insect can suck it,’ Darwin wrote. A few days later, he made a prediction (echoed five years later by Alfred Russel Wallace): a moth must be living in Madagascar with a huge proboscis, long enough to pollinate the flower. The Morgan’s sphinx moth, *Xanthopan morganii praedicta*, was discovered four decades later. It uses its 20cm proboscis to feed on the orchid.

A giant anteater hunting for a savoury snack:

The giant anteater, *Myrmecophaga tridactyla*, lives in Central and South America and has no teeth. It uses its narrow, tube-like tongue – the longest of any animal’s, at up to 60cm – to probe into anthills and slurp up 30,000 ants a day.

Ants

They chew this page into eighty fragments, each nine times their body weight:

Leafcutter ants, *Atta cephalotes*, also live in Central and South America. Cutting up leaves with their powerful jaws, they carry the fragments back to their nests, where they use them to cultivate an edible fungus. One study found the average ant could lug around up to 8.8 times its body weight in leaves – so an 8mg ant could carry 70.4mg of leaf. Each of my pages weighs 5.6g, so eighty 8mg ants could cut one up and carry it away in one go.

That’s like you carrying a cow in your mouth:

Globally, the average adult human weighs 62kg, which multiplied by 8.8 is 546kg, or the weight of a medium-sized cow.

Forest

... made from over half a kilo of wood:

My paper, Magno Natural, is 64% virgin wood pulp. (The rest is pigments and fillers, binders and moisture.) I weigh around 450g, so contain about 288g of wood pulp. Chemical pulping removes the lignin from wood, leaving behind the cellulose, the portion used for papermaking. Pulp mill efficiencies are commercially sensitive information, but we can estimate that 1kg of wood yields 450g of pulp. So it takes 640g of wood – well over half a kilo – to make the 288g of pulp inside my pages.

... sourced from hundreds of trees, who lived for a few decades or so:

Paper can be made from many tree species, including spruce, fir and eucalyptus. My paper comes from sustainable plantations, in which trees grow for a few decades before they are felled. The land is then replanted with new saplings. The pulp industry often uses side streams of sawmills. This means that only a very small share of each tree goes into pulp, so a single batch of paper will contain wood from hundreds or even thousands of trees.

... the colour of which came from oil, sourced from countless plankton:

The black pigment inside printing ink often comes from a compound

called carbon black, made from resin from burning oil. Oil is made of plants (tiny plants and animals) that lived in warm, shallow oceans millions of years ago. When they died, the plankton fell to the sea floor and were squashed down into an energy-rich liquid. Oil is ancient: it was formed before the dinosaurs were extinct, sixty-six million years ago.

Trace my origins

Did I mention we’re related?

All life on earth evolved from a common ancestor. So you are related to every other living thing, including the trees I was made from.

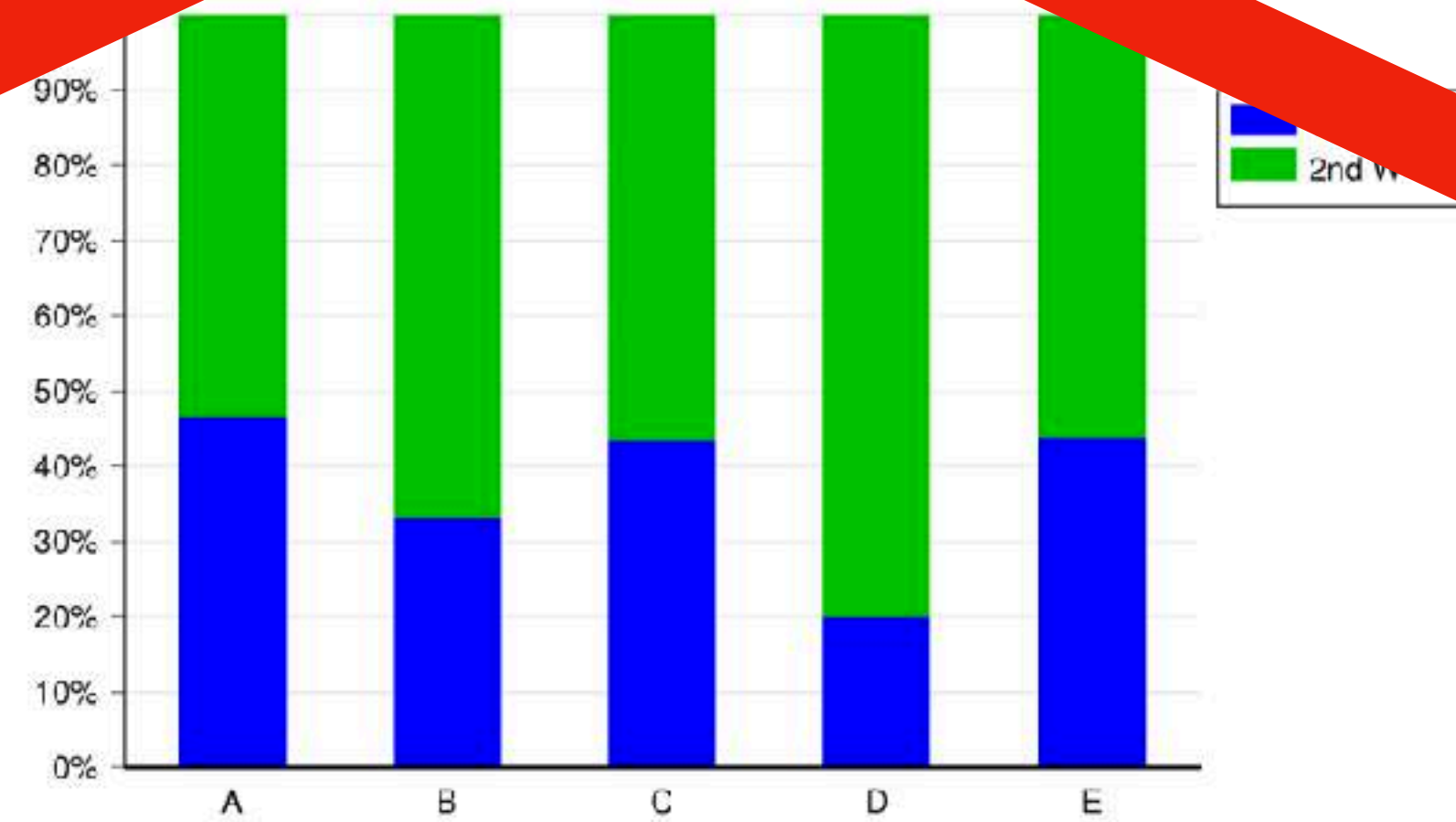
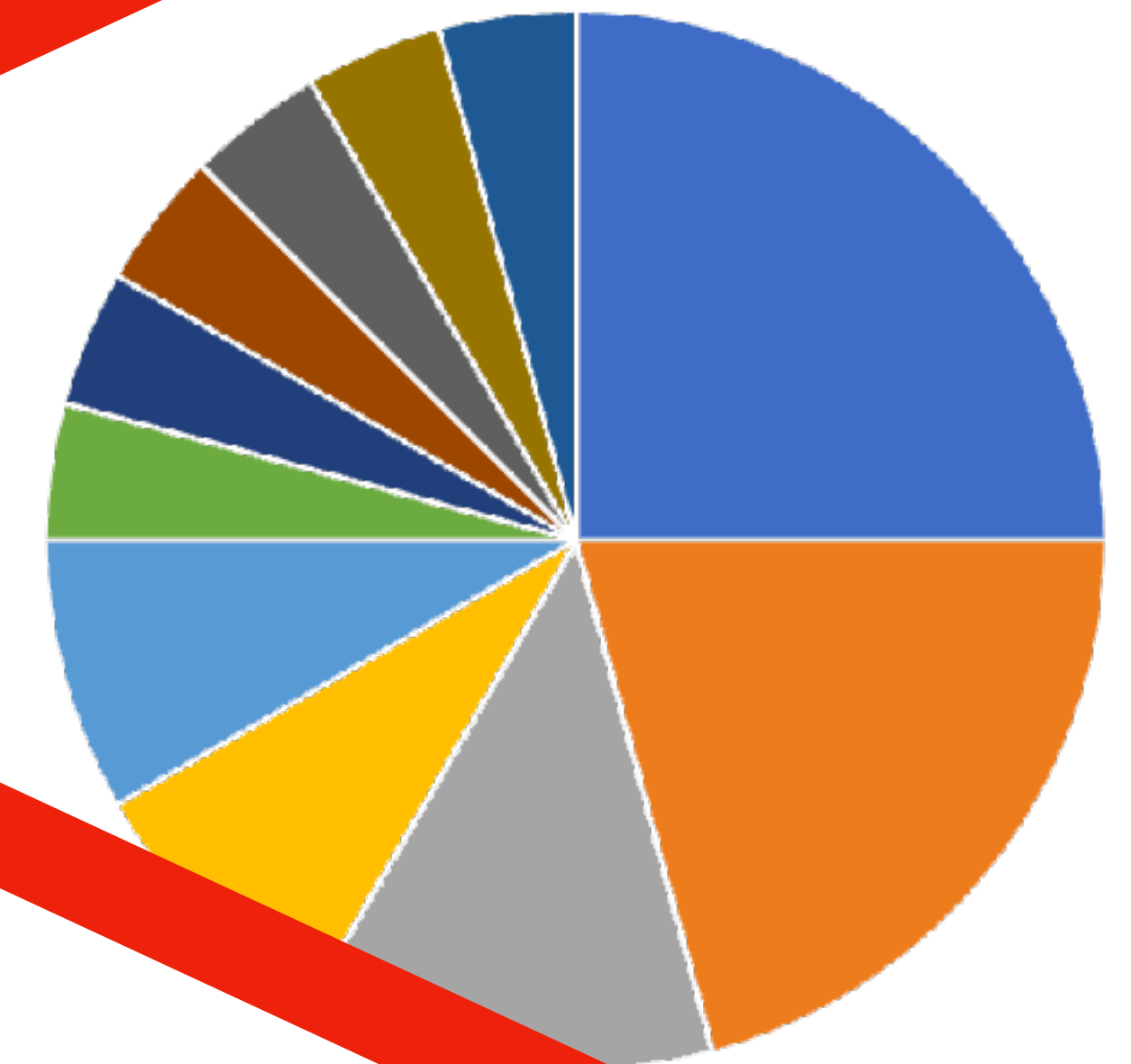
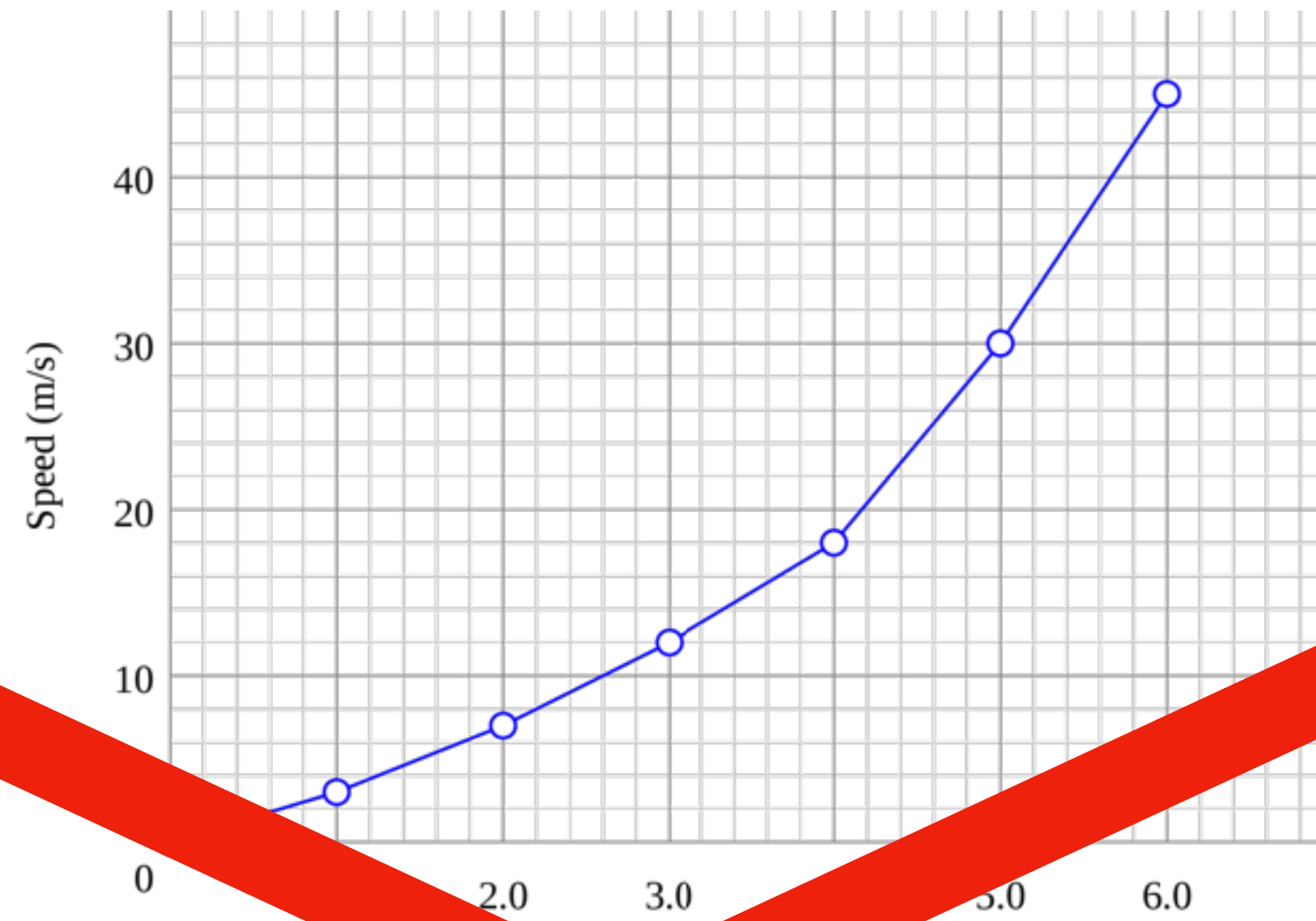
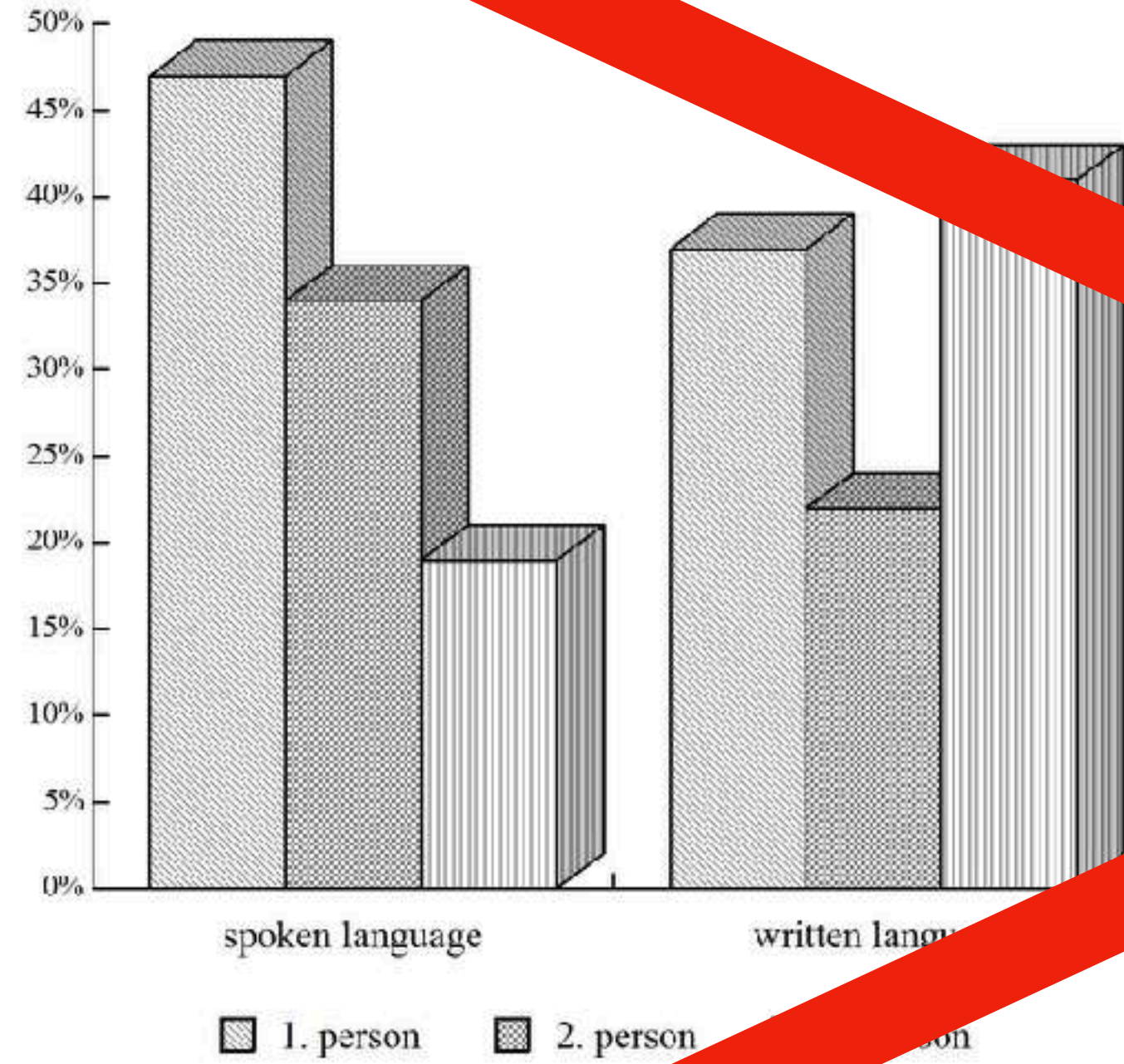
... ancient cousins of ferns, mosses and algae:

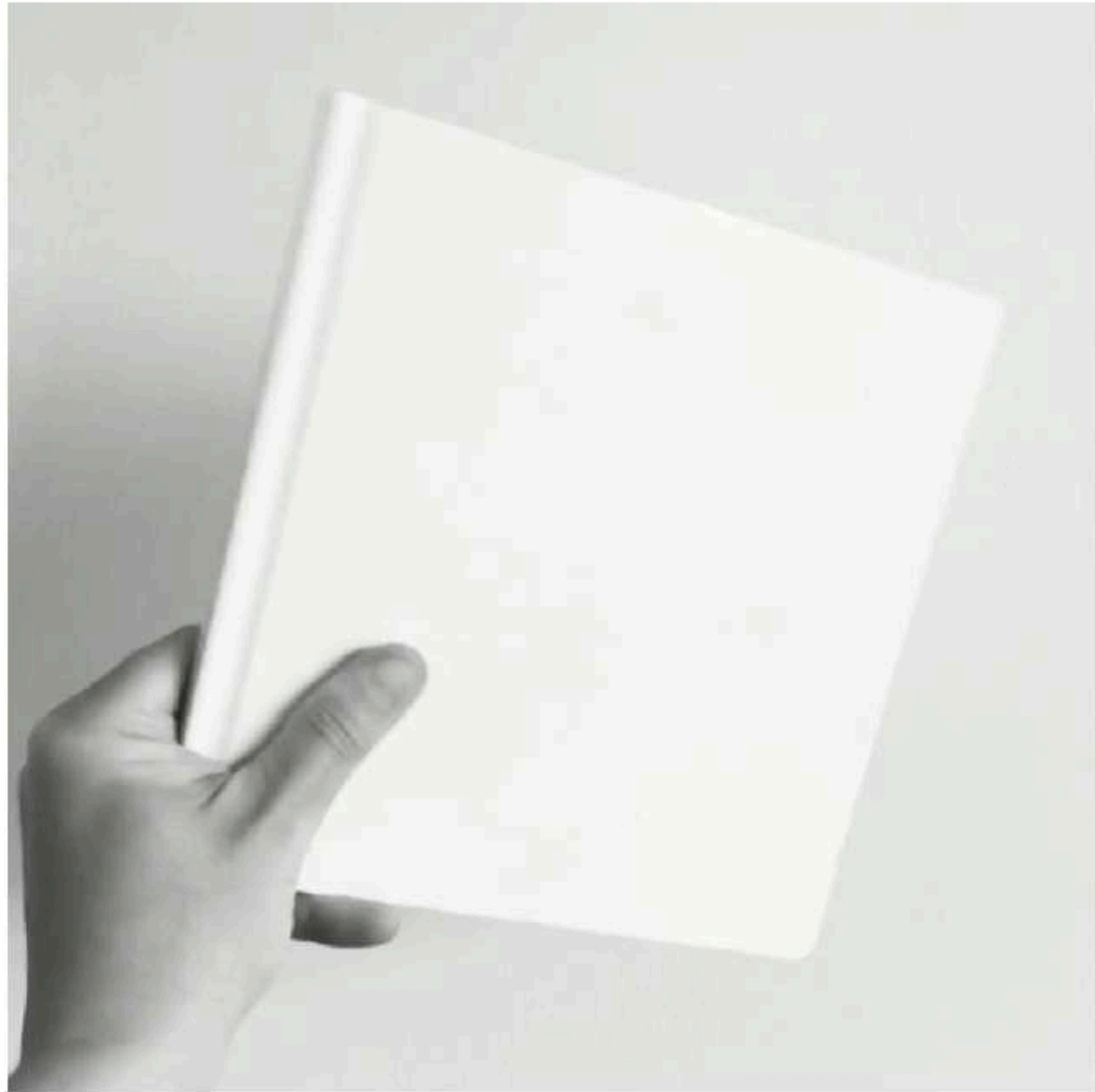
All land plants evolved from green algae. Here I’ve shown evolution as a line through time, but in reality it is more like a tree. Liverworts, hornworts and mosses were the first branches of the evolutionary tree of land plants. Later, other groups of species branched off, including ancient ferns called pterophytes, from which modern-day ferns and seed plants evolved. So today ferns, mosses and algae are cousins of trees.

Here’s our shared ancestor, 1.8 billion years ago:

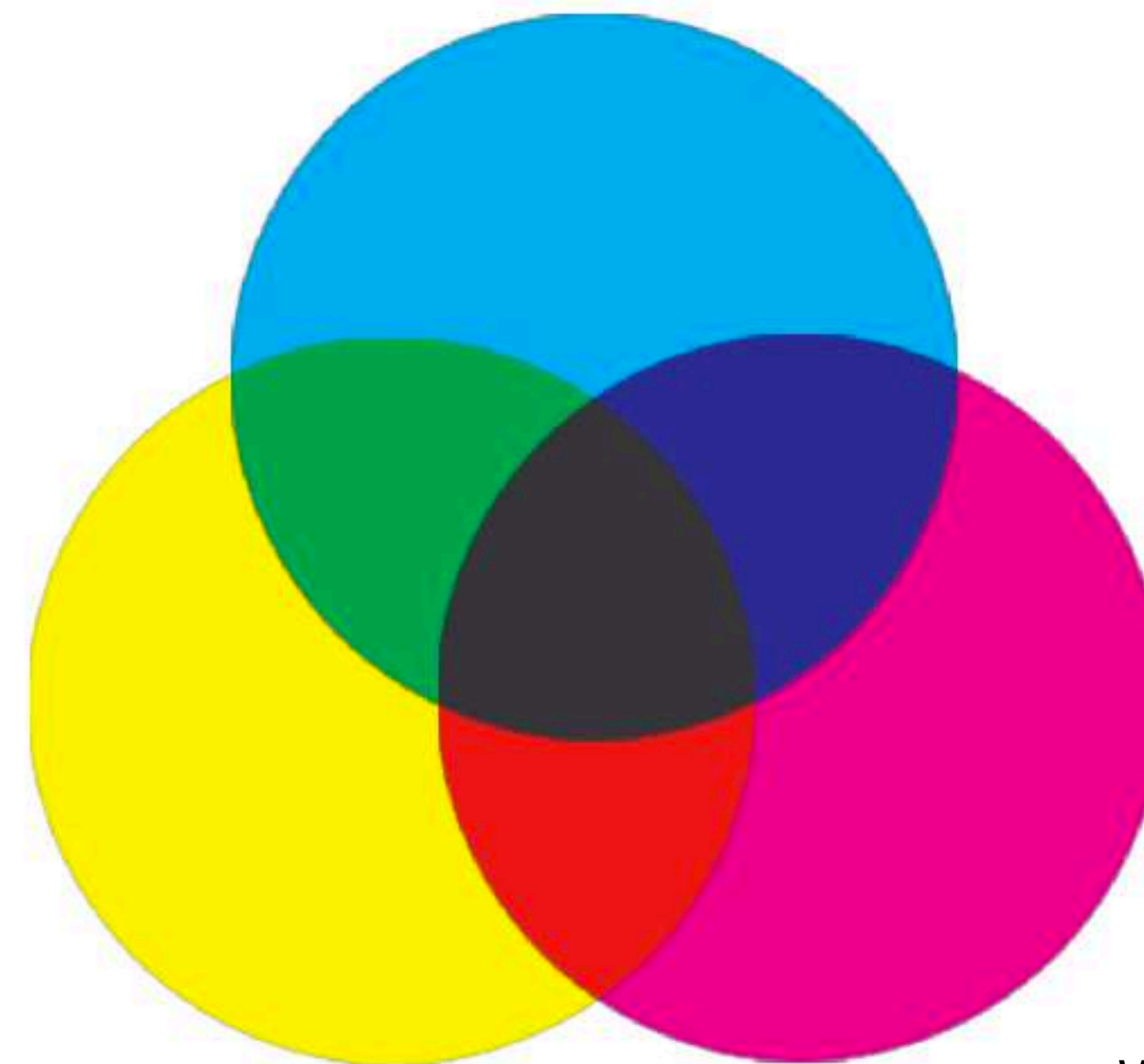
Trees and humans are very, very distant cousins. The most recent common ancestor of eukaryotes, the group of living things that includes all plants and animals, probably lived in the ocean around 1.8 billion years ago. It was neither plant nor animal, but a single-celled organism.

@stefnos





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o	p	q	r	s	t	u	v	w	x	y	z		



Next, let's test your eyes, using, well, *eyes*.
Read me:

LOOK!

That one's easy – these Os are the size of an ostrich's eyes.

MOO!

These Os are the size of a cow's eyes.

OOH!

These Os are the size of a human's eyes.

WHOO!

These Os are the size of a tawny owl's eyes...

AROO!

... and these are a wolf's, watching it.

COO!

These Os are the size of a pigeon's eyes.

ZOOM!

I spy a squirrel, shooting up a tree. These Os match its eyes.

LOON!

No, not you – it's a bird. (Yes, you've guessed it.)

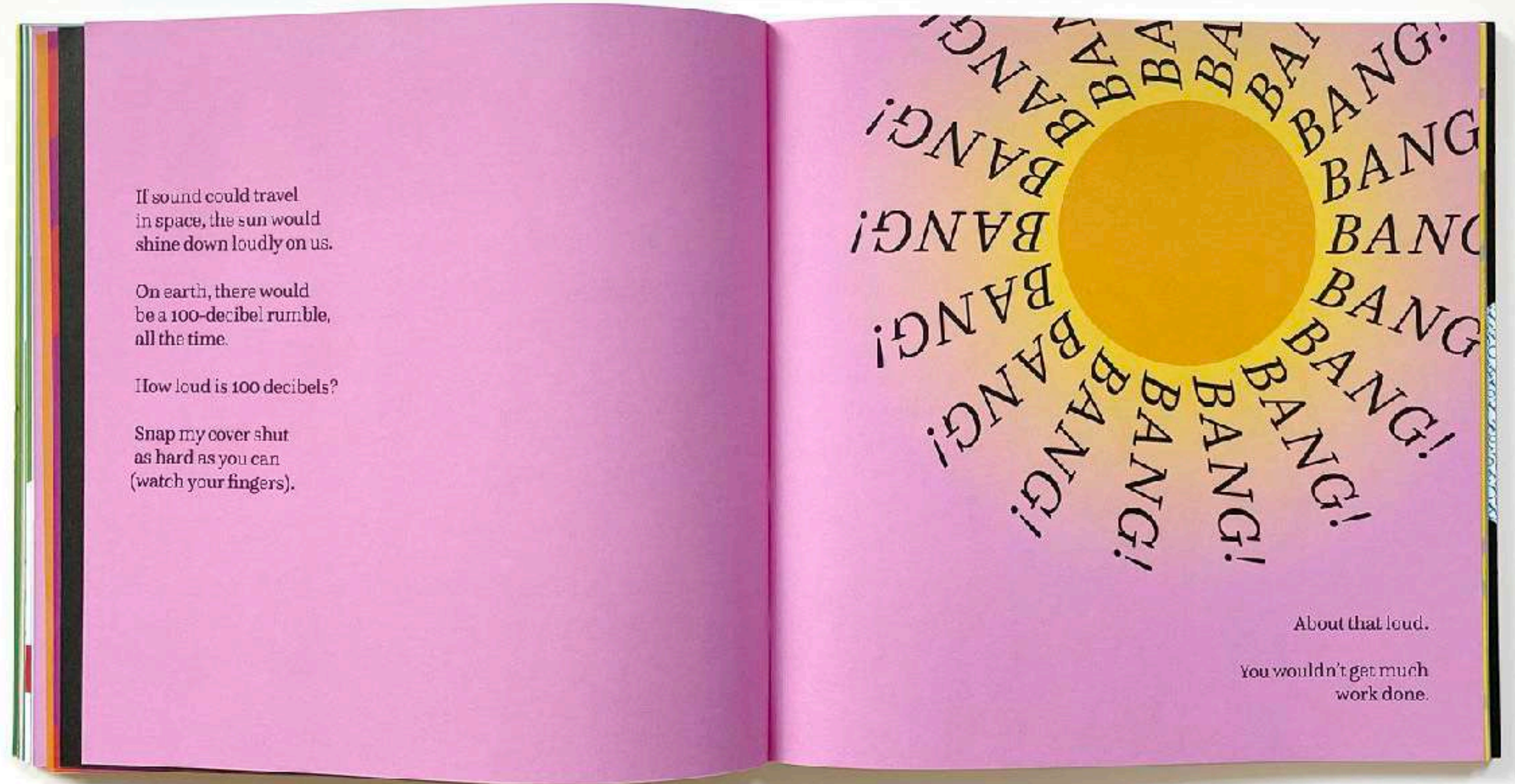
SHOO!

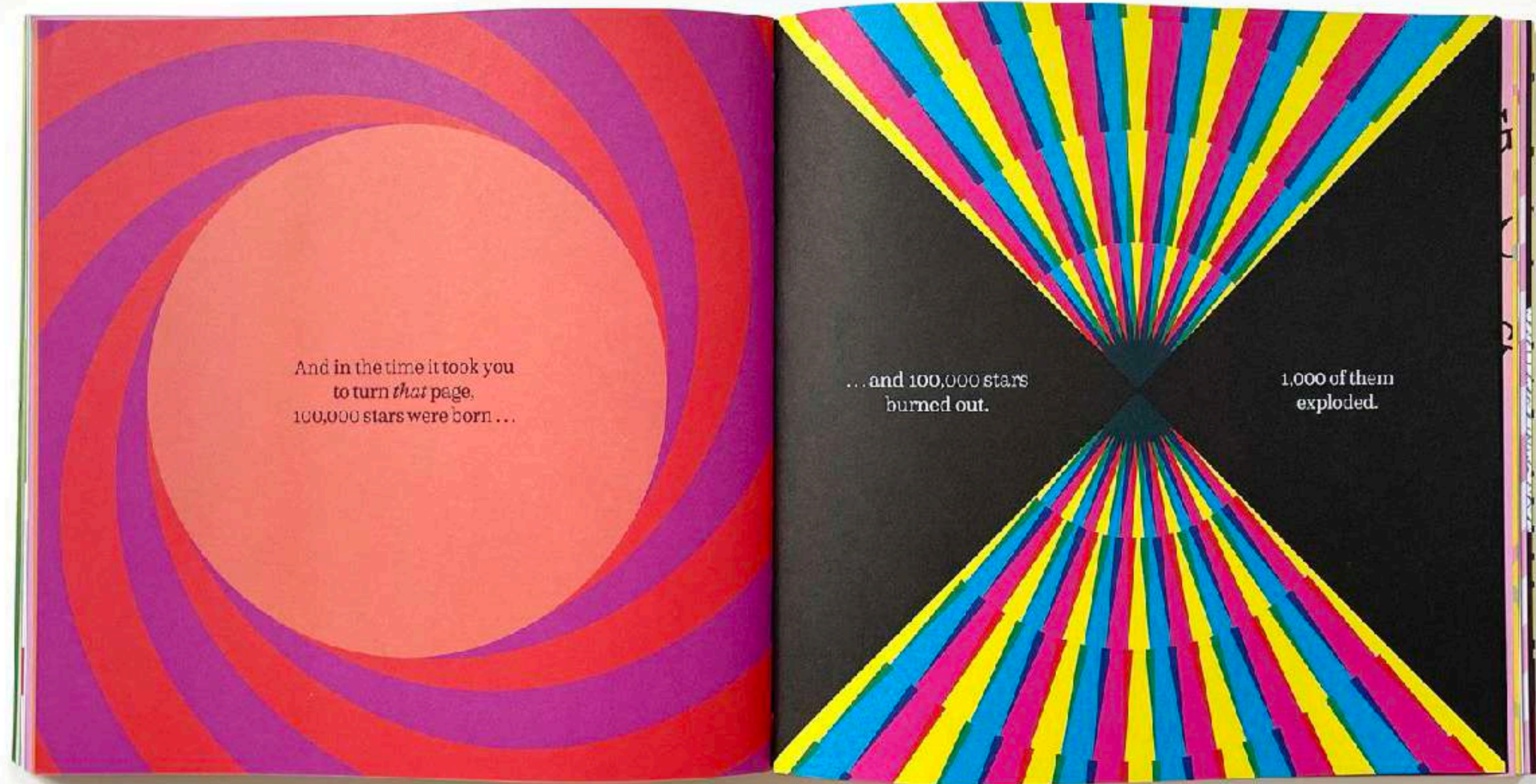
That's a rat! Two beady eyes peep back.

OOPS! Mind that mouse. (Getting harder to read me now...)

HOOOOO! Can you see me? I can see you. These Os are the size of an ogre-faced spider's eyes. Two at the front and three either side.







Acknowledgements

I would like to thank my authors, Miriam and Stefanie, for creating me.

They would like to thank their agent, Rebecca Carter at Janklow & Nesbit, and Helen Conford, who believed in me right from the beginning. They'd also like to thank Richard Atkinson, Casiana Ionita, Holly Hunter, Jim Stoddart, Lisa Fiske, Katy Banyard, Pete Pawsey and the Rights team at Particular Books.

A big thank you to everyone who came up with ideas and suggestions, read draft versions of me and checked my facts, including Eric Allan, Dave Allan, Jane Allan, Pete Douglas, Duncan Geere, Rhys Goodhead, Ed Hall, Jonas Helsen, Tania Jenkins, Stephen Mann, Pete Manning, Adrien Mestrot, Charlie Stone and Tamsin Uren-Webster. Any errors remaining are mine alone.

Miriam would like to thank the online communities behind Wikipedia, Quora and Stack Exchange for answering so many questions. Stefanie would like to thank Frank Griefhammer for designing my typeface (FF Quixo Pro).

Finally, they'd both like to thank their parents and their husbands, Tom (Miriam) and Steve (Stefanie). (Wouldn't want to get those mixed up.)

About my authors

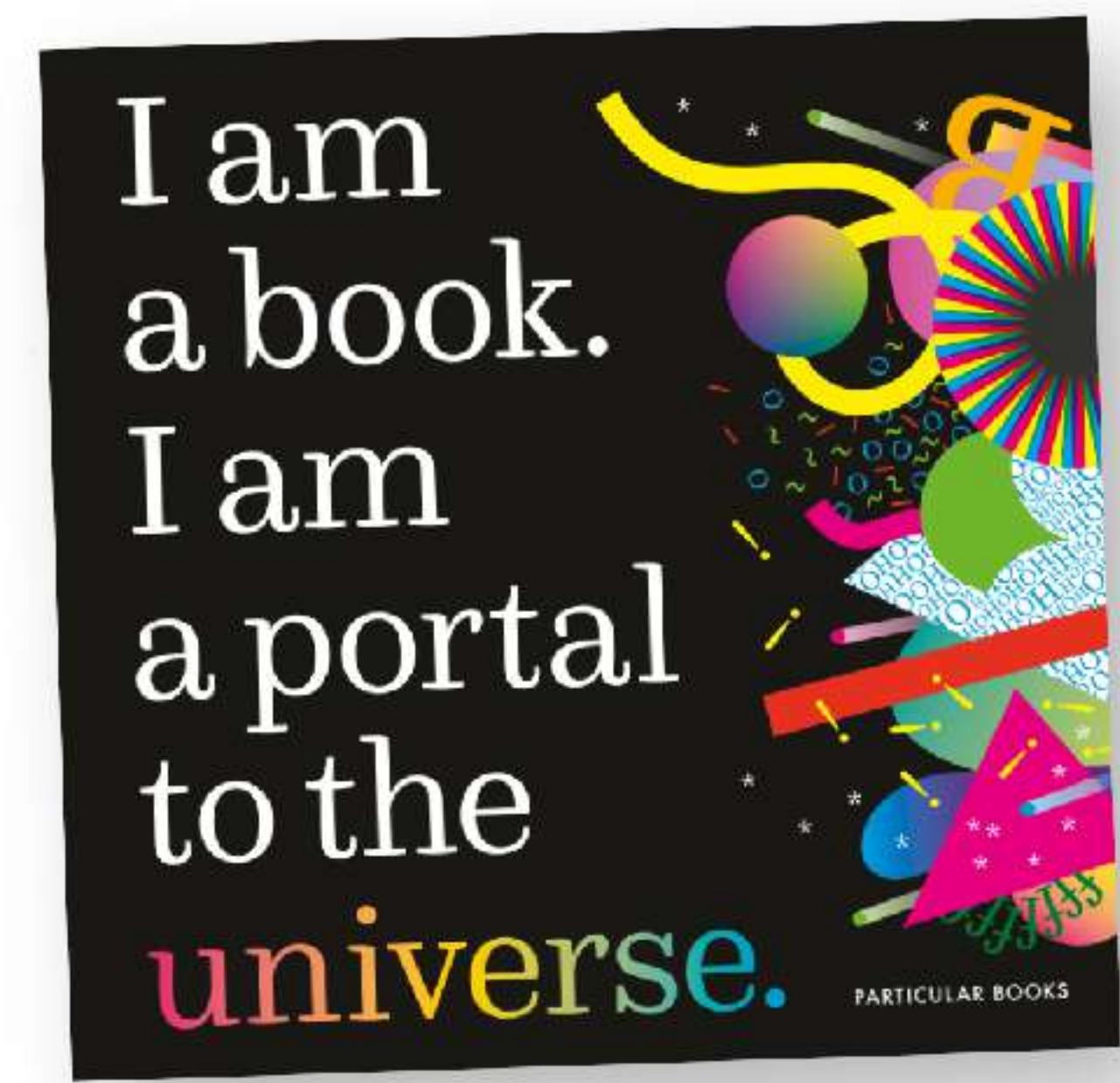
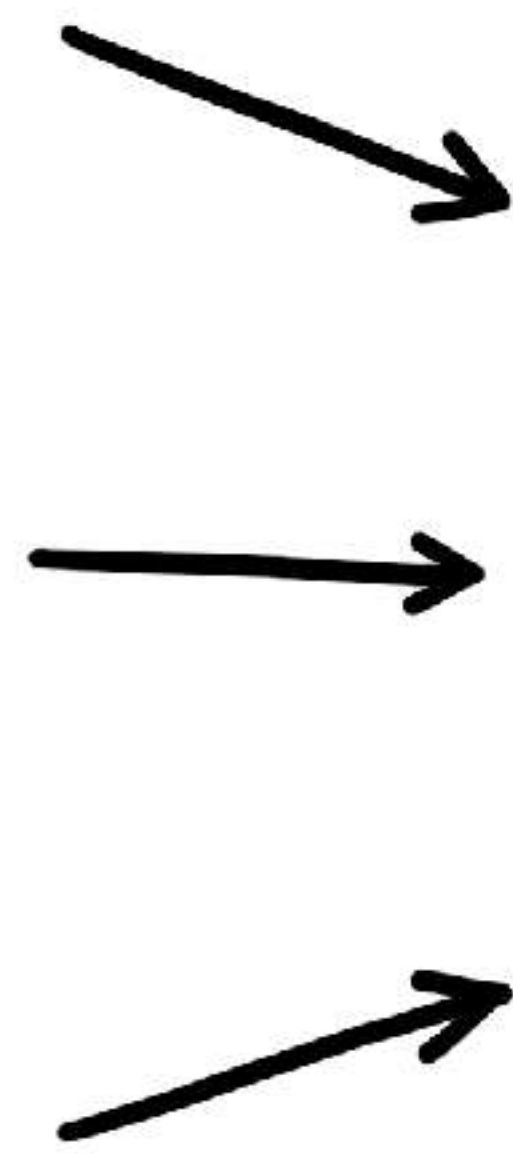
STEFANIE POSAVEC is a designer and artist who uses data as a creative material. Her work has been exhibited internationally at major galleries including the Centre Pompidou, the V&A, the London Design Museum and Somerset House, and is held in the permanent collection of the Museum of Modern Art, New York. She is the author (with Georgia Lupi) of *Dear Data* and the visual journal *Observe, Collect, Draw!*

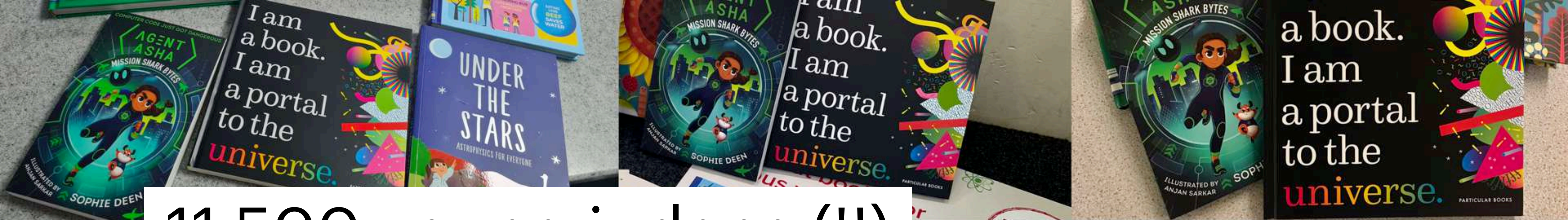
stefanieposavec.com

MIRIAM QUICK is a data journalist and researcher who explores novel ways of communicating data. Her lines include the BBC, *The New York Times*, Wired UK and Information is Beautiful. She co-creates data artworks, exhibited at the Wellcome Collection, Southbank Centre and Royal College of Physicians and internationally. *Oddityviz*, her award-winning project with Valentina D'Elipppo, visualises David Bowie's song 'Space Oddity' on twelve-inch records.

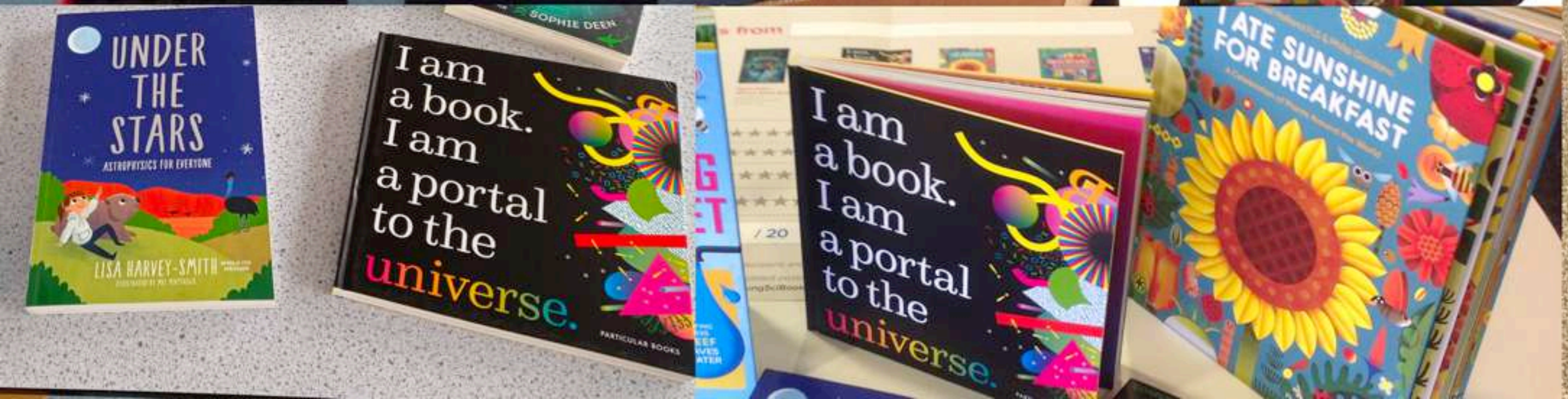
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11,500 young judges (!!)



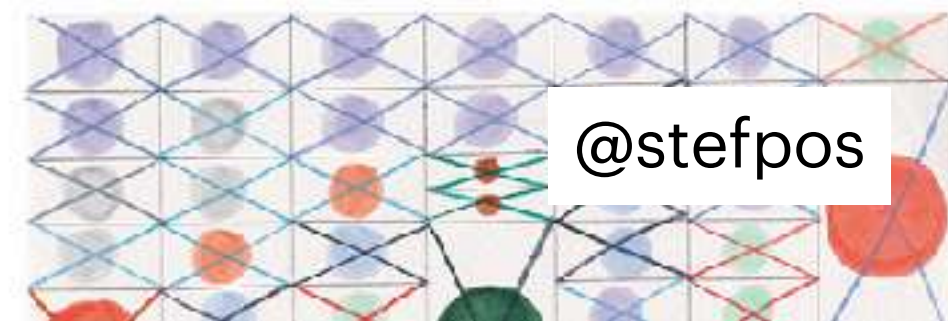
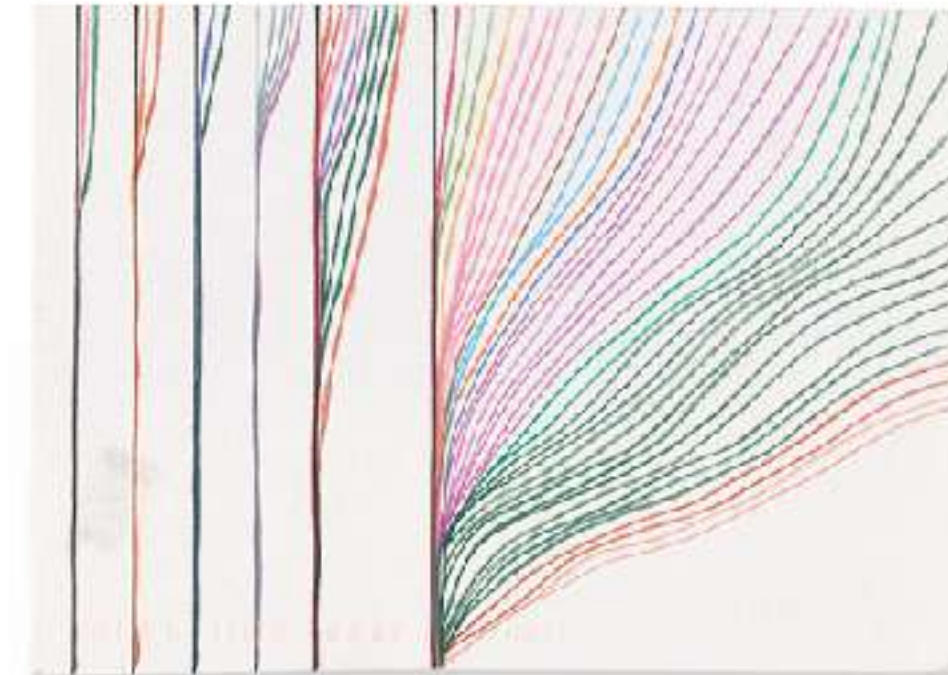
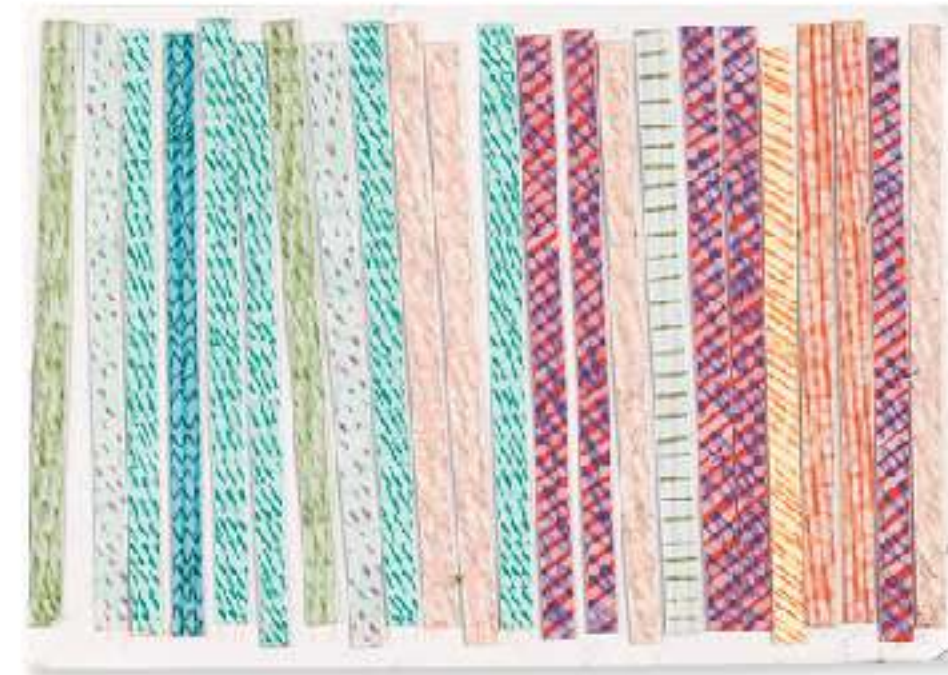
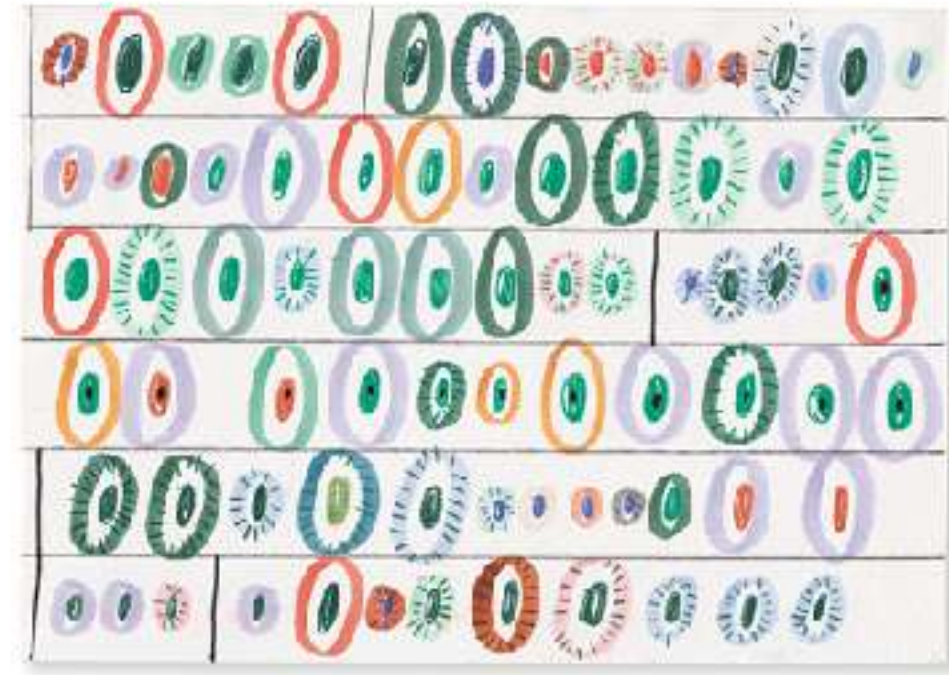
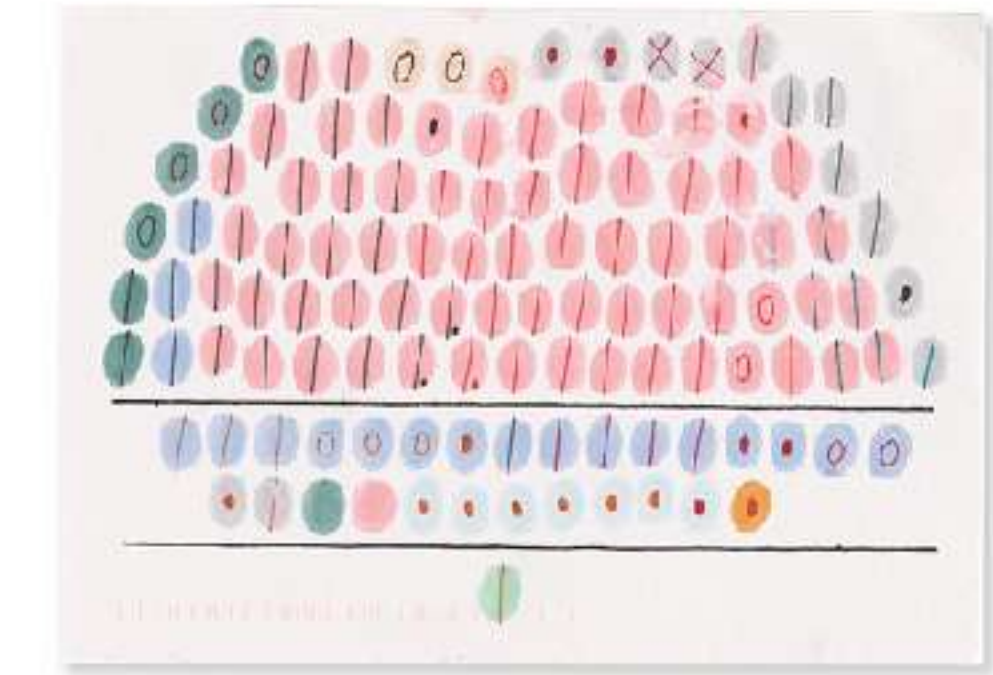
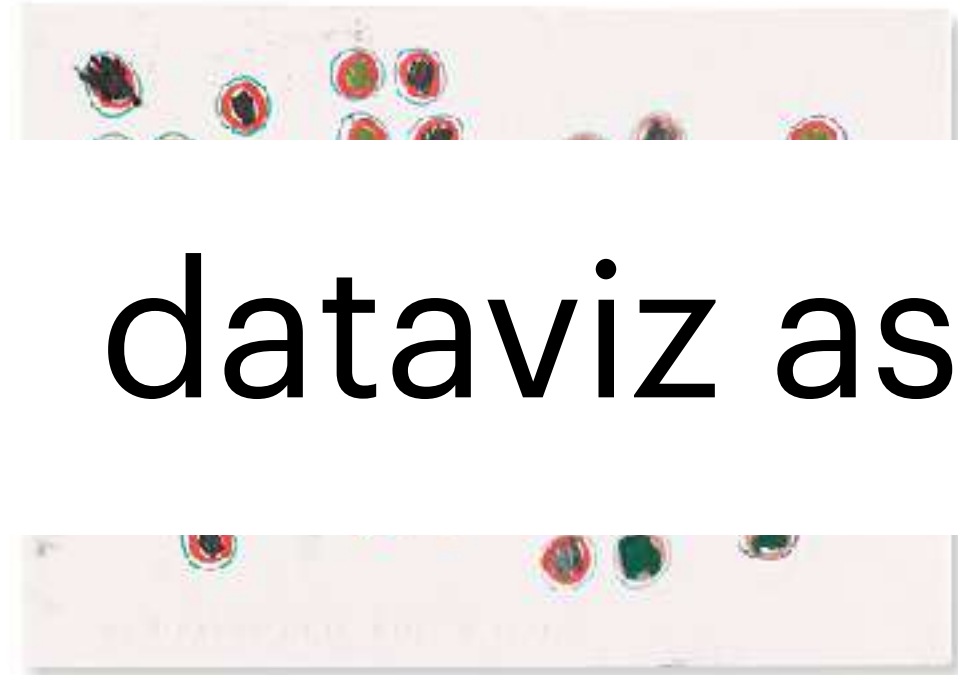
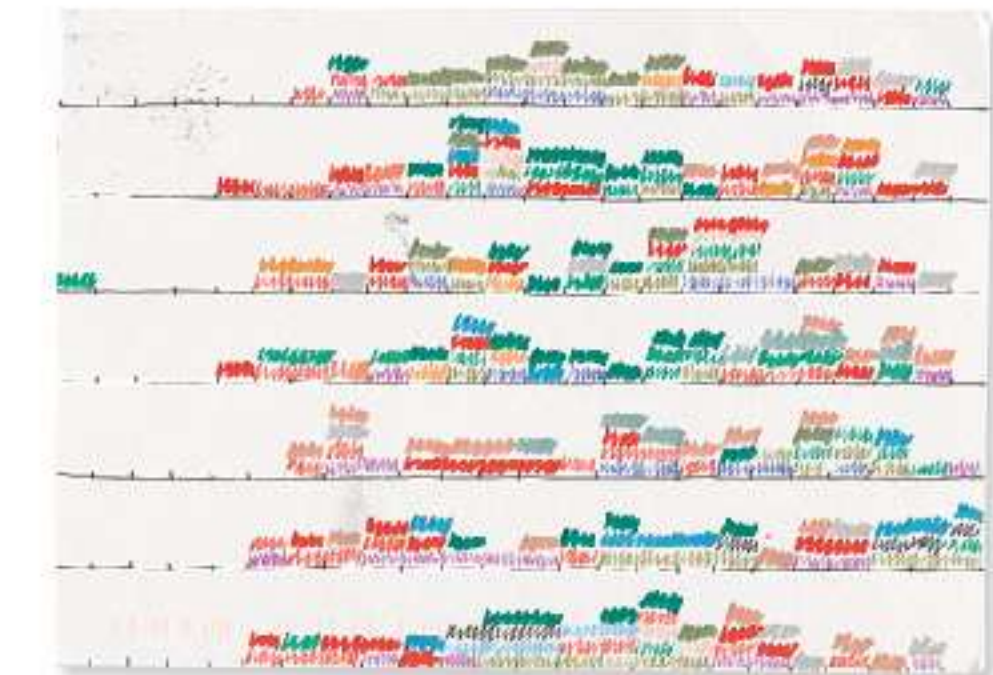
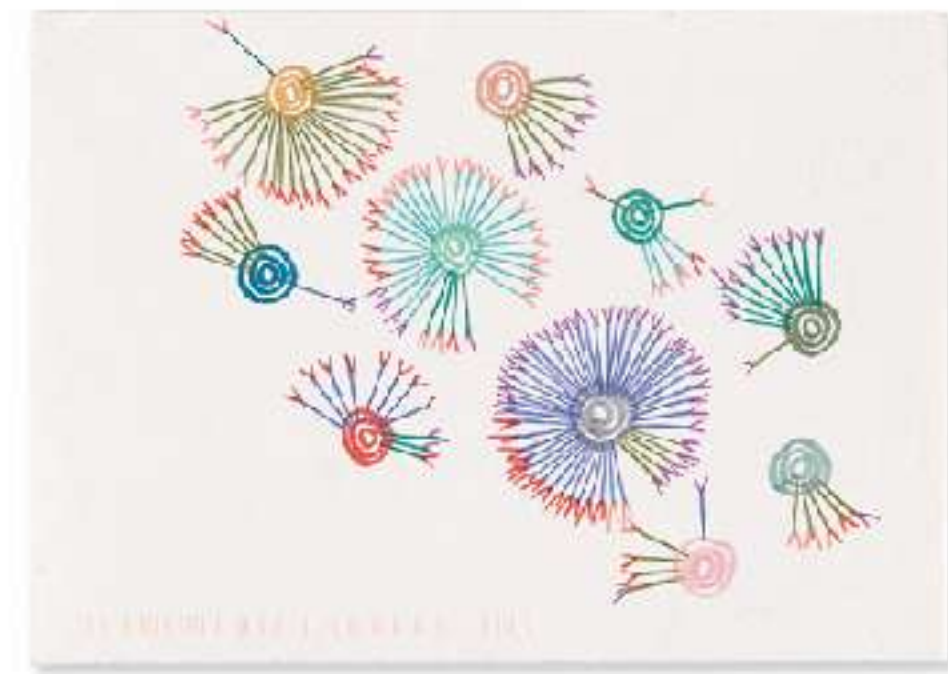
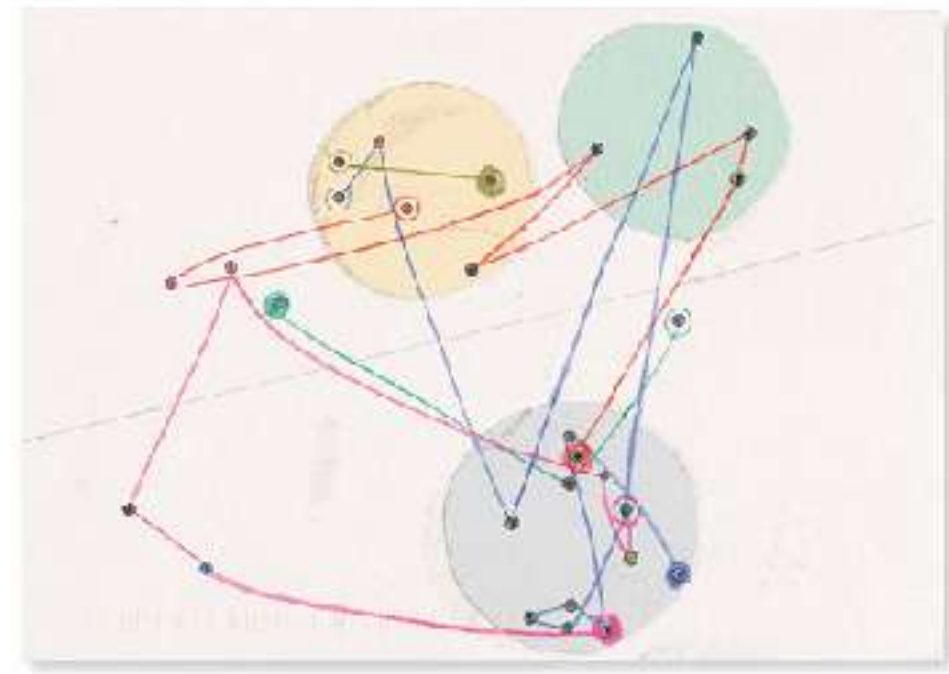
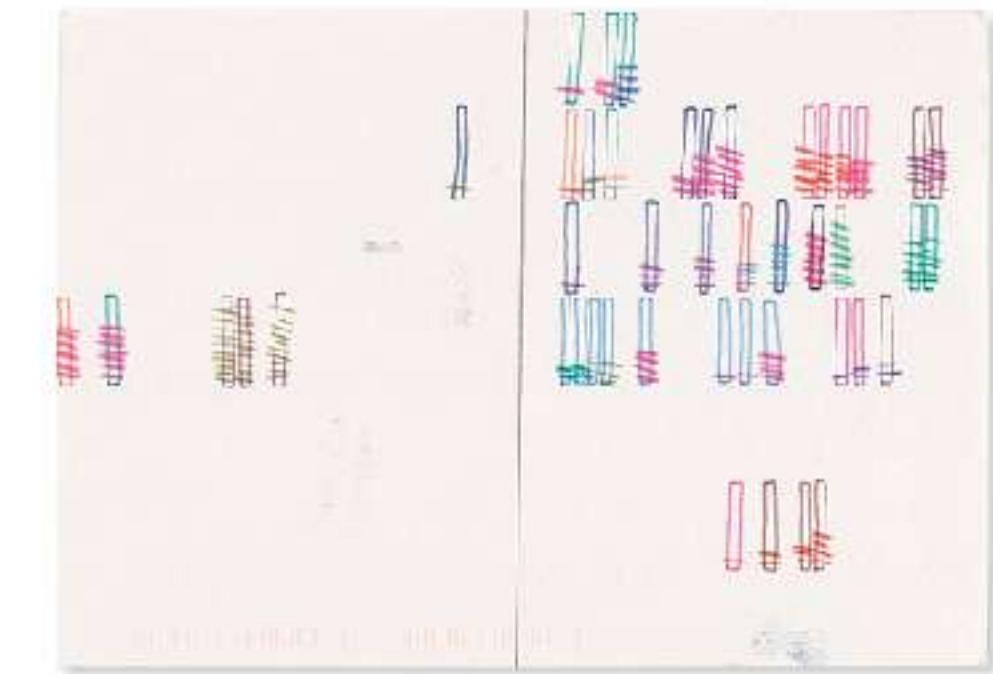
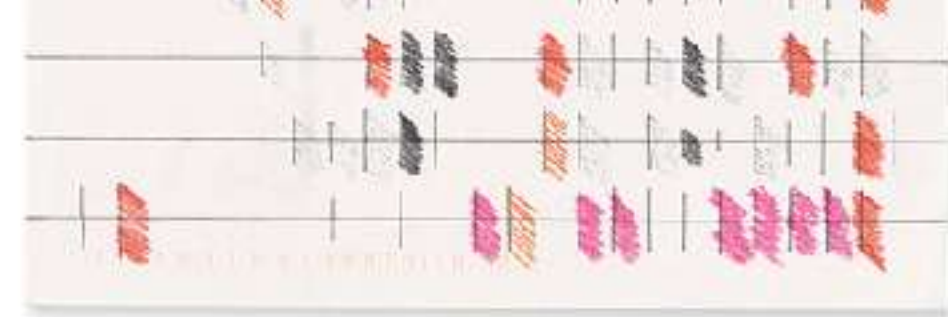
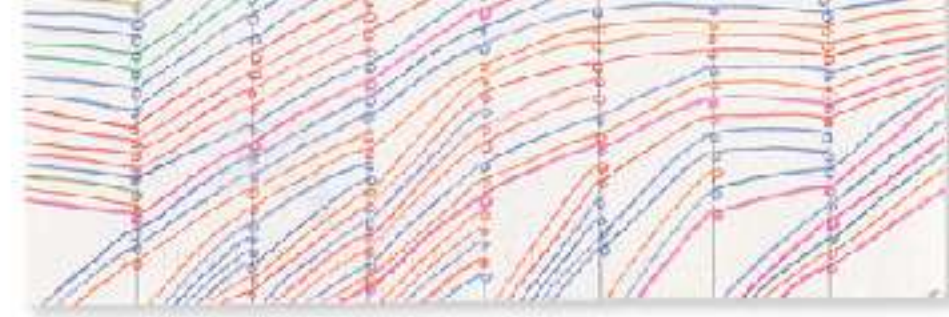


(PS: @iamabookonline / [iamabook.online!](http://iamabook.online))

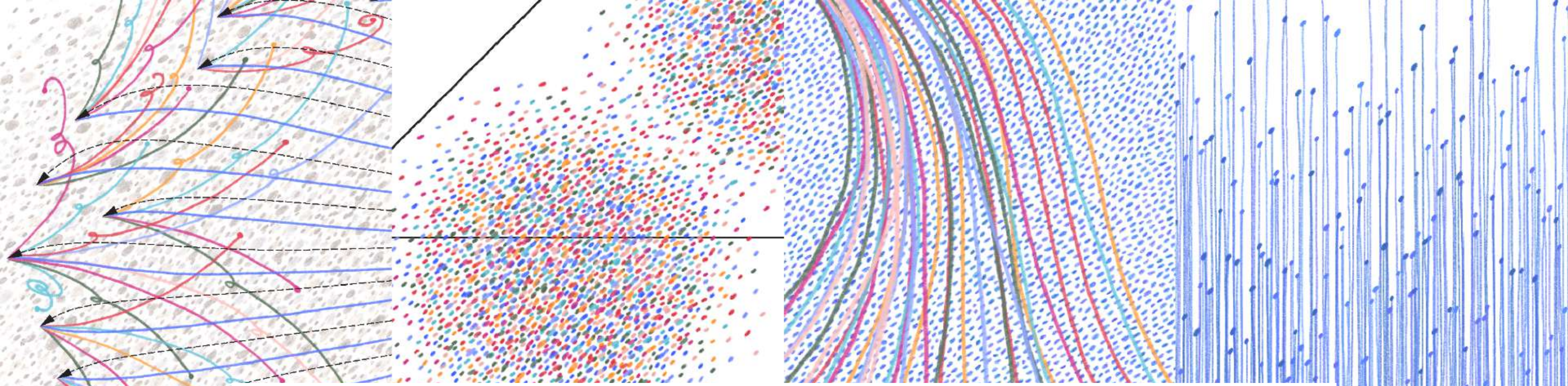


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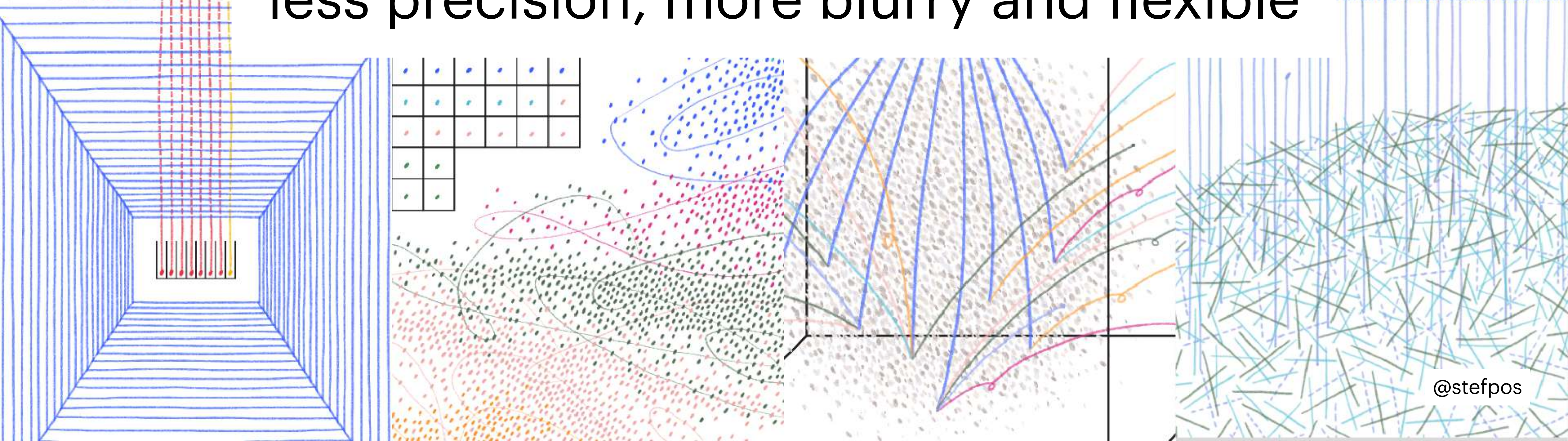
dataviz as documentary *process*



@stefpos



less precision, more blurry and flexible





is coding in solitude.

The secret of happiness is riding my bike

Laughing uncontrollably is the best form of therapy

Surfing a perfect left-hander is but an earlier heaven.

Jumping into the air – that is happiness.

Happiness begins with the birds in the trees.

Laying at the bottom of a pool brings happiness.

The art of being happy lies in sunshine after days of grey.

A warm bowl of spicy soup

Running to the sun is but an earlier heaven.

community conversations using data

A barn owl looking at me- that is happiness.

Coming home to my partner brings happiness.

Nice breakfast for breakfast is the good

Holding a cat is but an earlier heaven.

A life with no drowned bugs today is happy

Happiness and catching Pokémons are inseparably connected.

Lemon juice on bread & butter is but an earlier heaven.

The secret of happiness is coding in solitude.

Happiness begins with the birds in the trees.

A life of reading is happy

Swimming in the ocean at night is the greatest blessing.

Happiness is drinking boxed wine in a Bodum.

Happiness begins with sleeping on a problem to solve.

Eating without getting fat is the best form of therapy.

The art of being happy lies in smiles from my children.

@stefpos

The secret of happiness



embodied, experiential data communication



Four tips for becoming 'post-infographic'

1. If you're bored, try something new
2. Look outside dataviz for inspiration
3. *Anything* can represent data!
4. Don't be intimidated by chart rules