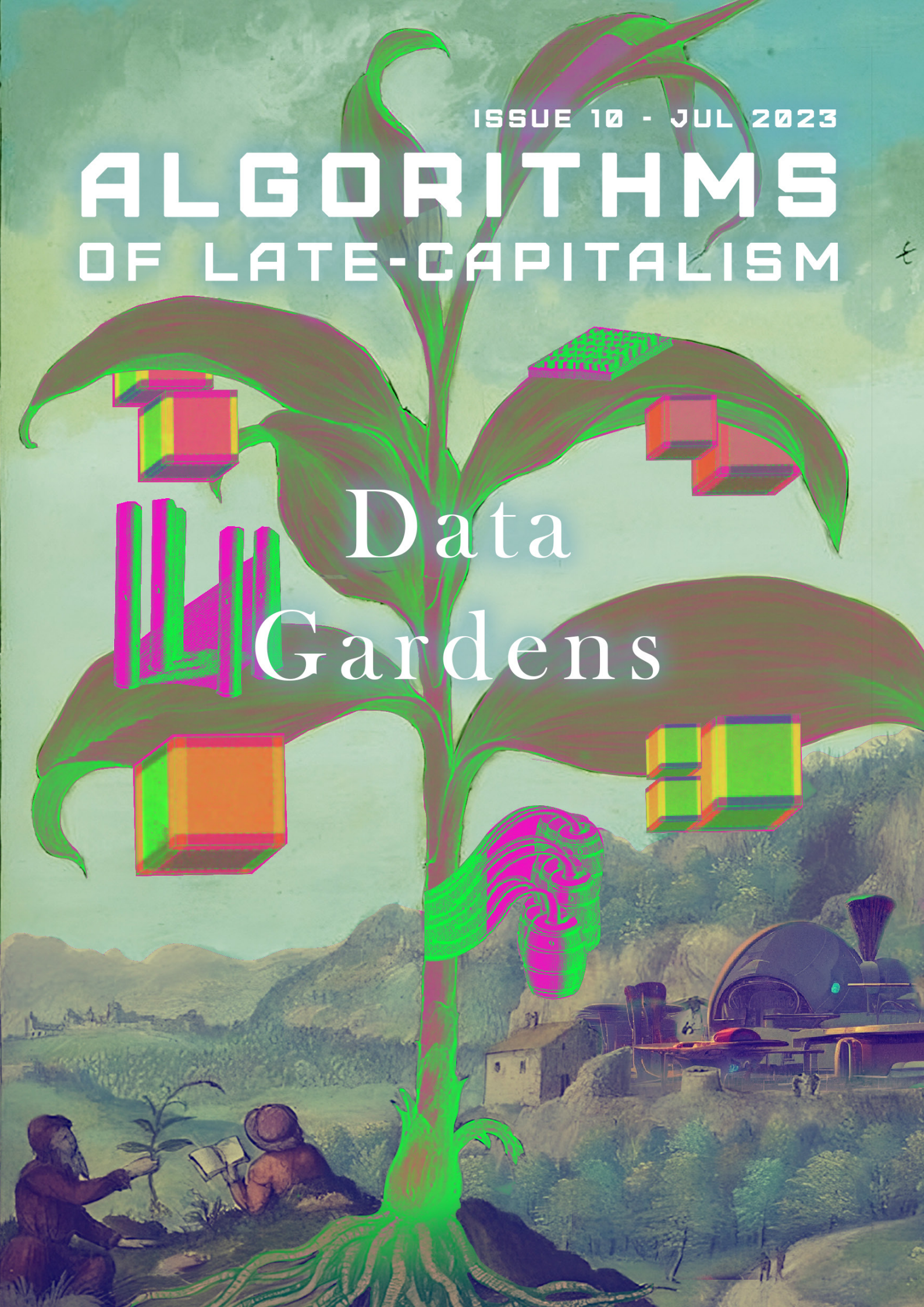
ISSUE 10 - JUL 2023

ALGORITHMS OF LATE-CAPITALISM



Data Gardens

CONTENT

[3] **Editorial**

[6] **Planting the Seed**

[8] **Bring Your Own Bulb**
by Louise & Heldeyse

[14] **Grow the Garden**

[16] **Co-Up the Data: A Futuristic Transgenerational Data Coop!**
by Alejandra Bringas & Mayra Russo

[22] **It's Showtime Folks**
by Paula Reyero Lobo & Ioanna Papageorgiou

[24] **Garden of Fair-Den**
by Antonio Ferrara & Siamak Ghodsi & Xuan Zhao

[28] **Tools to Tend**

[30] **Data Governance**
by Juliet Van Rosendaal & Alaa Elobaid

[38] **Harvesting**

[40] **Cross Road Education**
by Elen & Liz

Share · Distribute · Remix

CC BY SA

Algorithms of Late-Capitalism Issue 10

DATA GARDENS

Immerse yourself in a garden of data.

A place where data is not immaterial bits aggregated and analyzed by automated systems, but rather nurtured and cared for as material and relational.

A place full of interesting flowers and fruits that make us think differently about how we interact with data, how we value data, both our own and that of others.

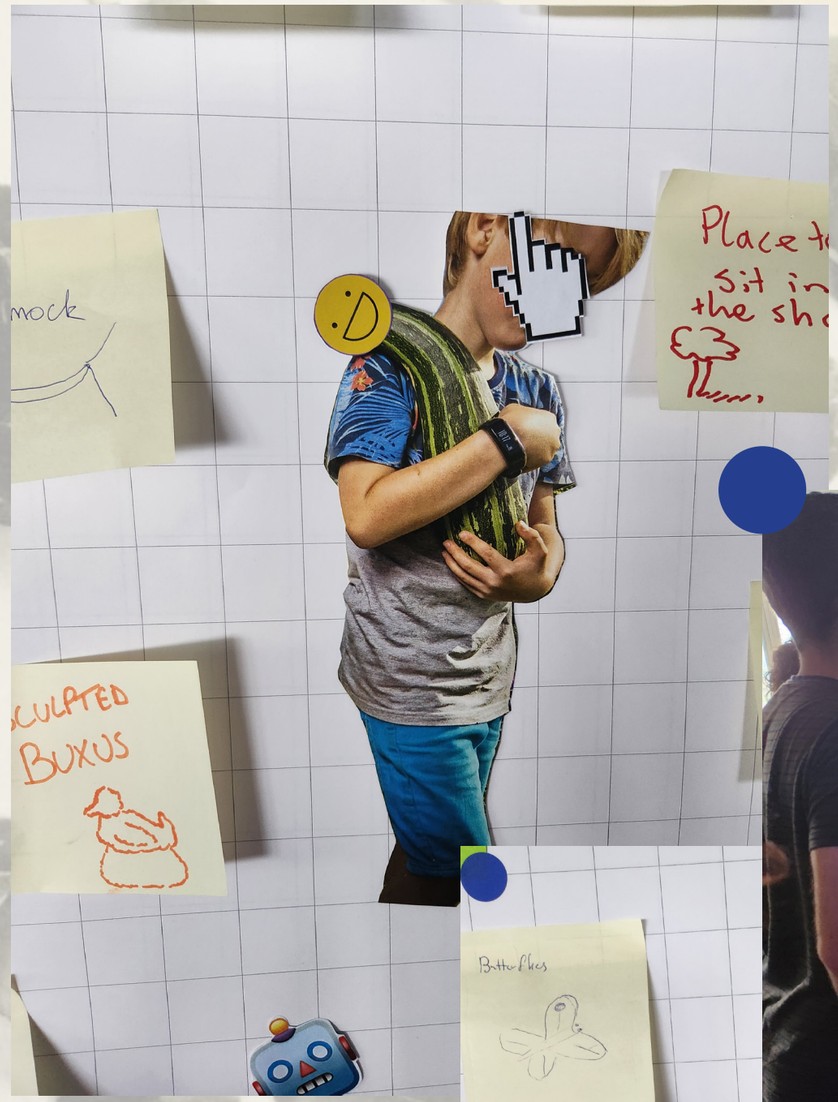
Historically, gardens have been privatized spaces seen more as elitist symbols of status. However, nowadays gardens come in many shapes and sizes, often serving as a place for community-building and care.

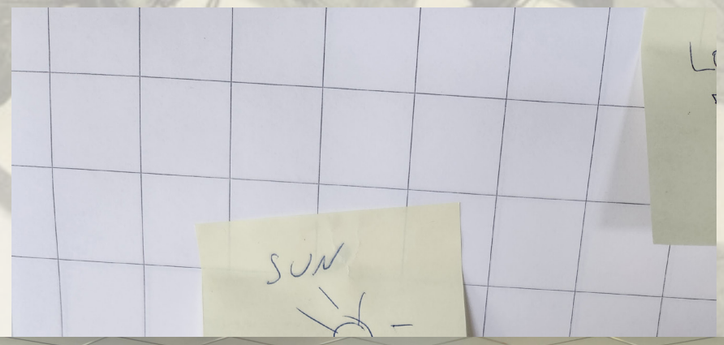
As you walk through this garden, you can ask: How did this garden come to be and who is tending to it? What kind of data is planted here, and what fruits do they bear? What is my place here, and what kind of future can I envision for myself in this data garden?

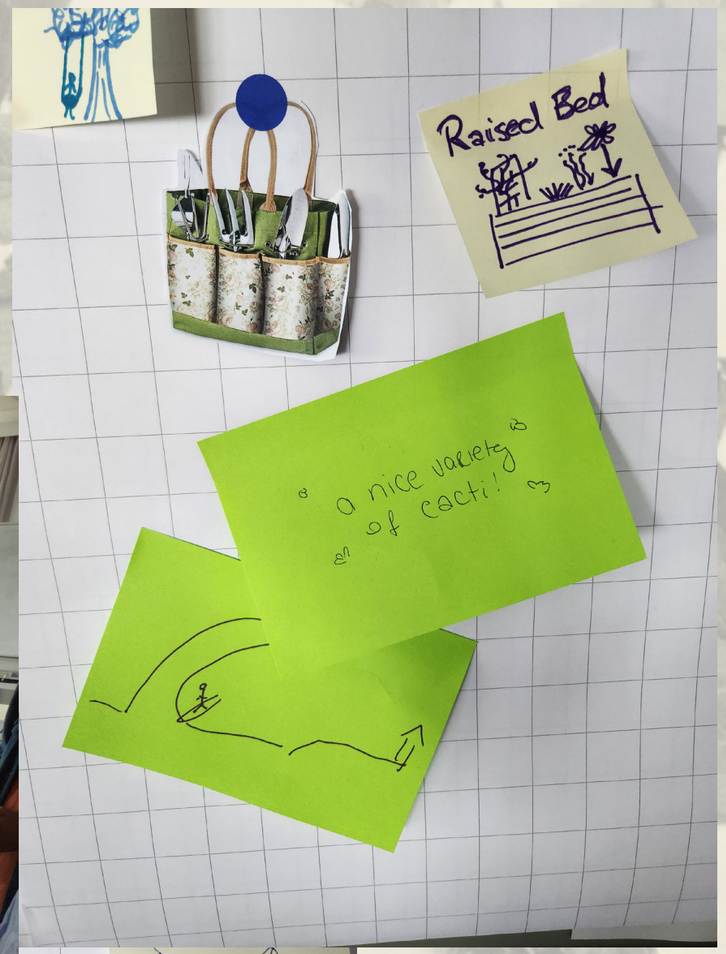
In this issue of ALC, we invite the participants to envision a data garden that defies current data related practices with radical concepts such as care, minimalism, community as we rethink data and its uses outside of models of extraction and instrumentalism.

This issue of Algorithms of Late-Capitalism was created by internet teapot (Karla Zavala Barreda and Adriaan Odendaal) and the participants NoBias Doctoral School 2023 in Hanover.

The editorial was written by Kristen Scott, Miriam Fahimi, Ioanna Papageorgiou, and Mayra Russo.


mock
Place to
sit in
the sha
SCULPTED
BUXUS


SUN


Raised Bed
a nice variety
of cacti!

Butterflies
Place to
sit in
the shade
Weeping willow with
a bench
FIGTREE

Food
(vegetables)
SCULPTED
BUXUS
Raised Bed

PLANTING THE SEEDS

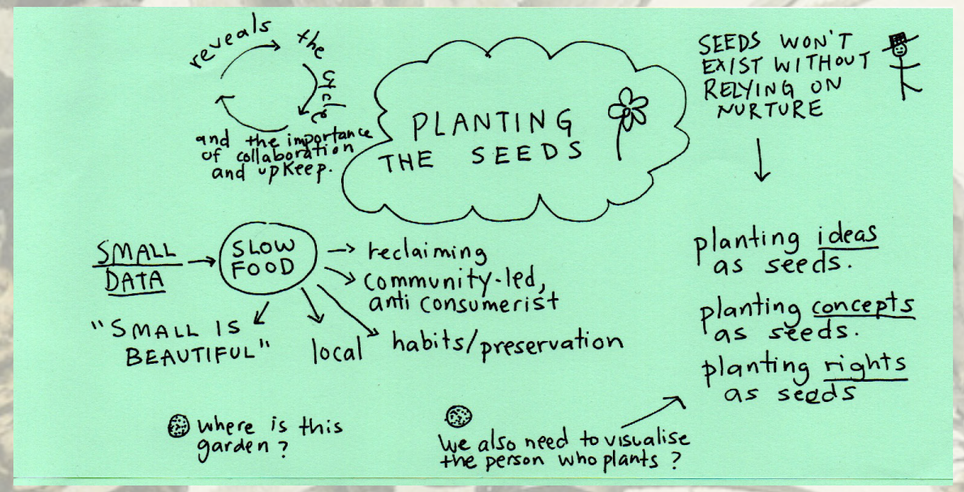
Big Data relies on the automated gathering of massive amounts of information from various sources and pooling them into large data lakes. It’s all about aggregation and analysis at scale.

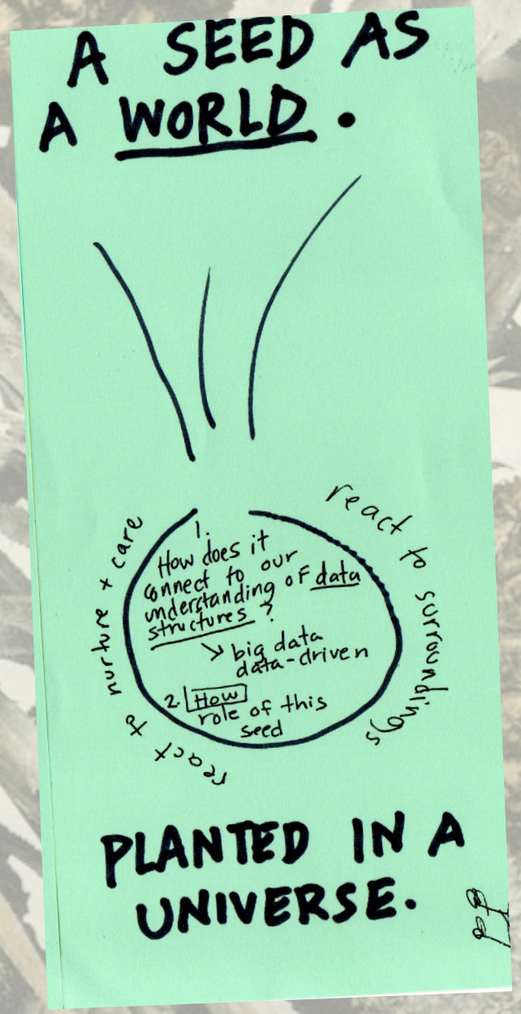
What would a different data infrastructure look like if we treated data like seeds planted in a garden? When gardening we select specific seeds for a reason, carefully plant them, nurture them throughout their lifespan. Perhaps we are planting seeds to produce sustenance for ourselves or our communities? Or perhaps they are flowers that beautify the neighborhood and provide nectar for bees?

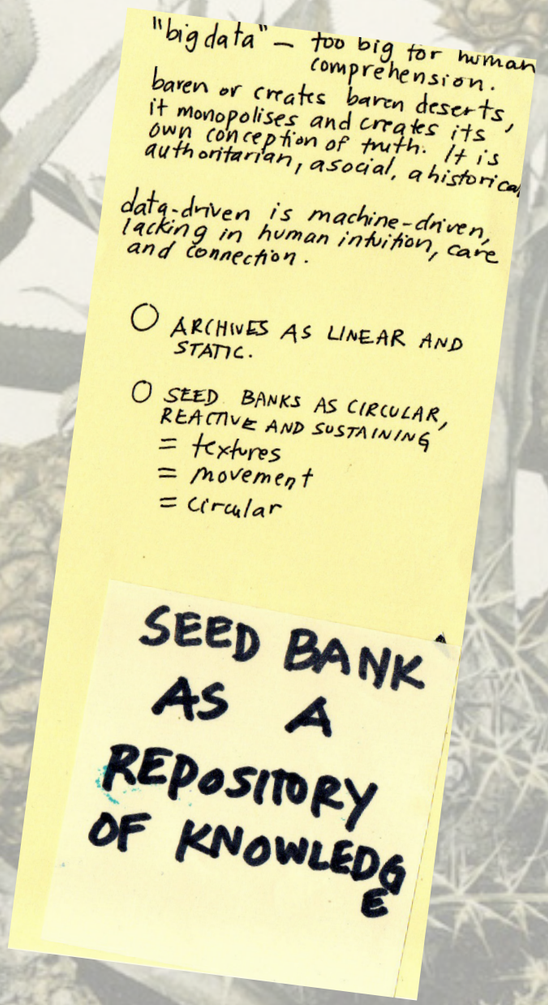
TOO BIG FOR HUMAN COMPREHENSION
CREATES A BAREN DESERT
Big Data
STORM
DATA-DRIVEN IS MACHINE DRIVEN
EXTRACTIVISM
LACKING IN HUMAN INTUITION, CARE AND CONNECTION.

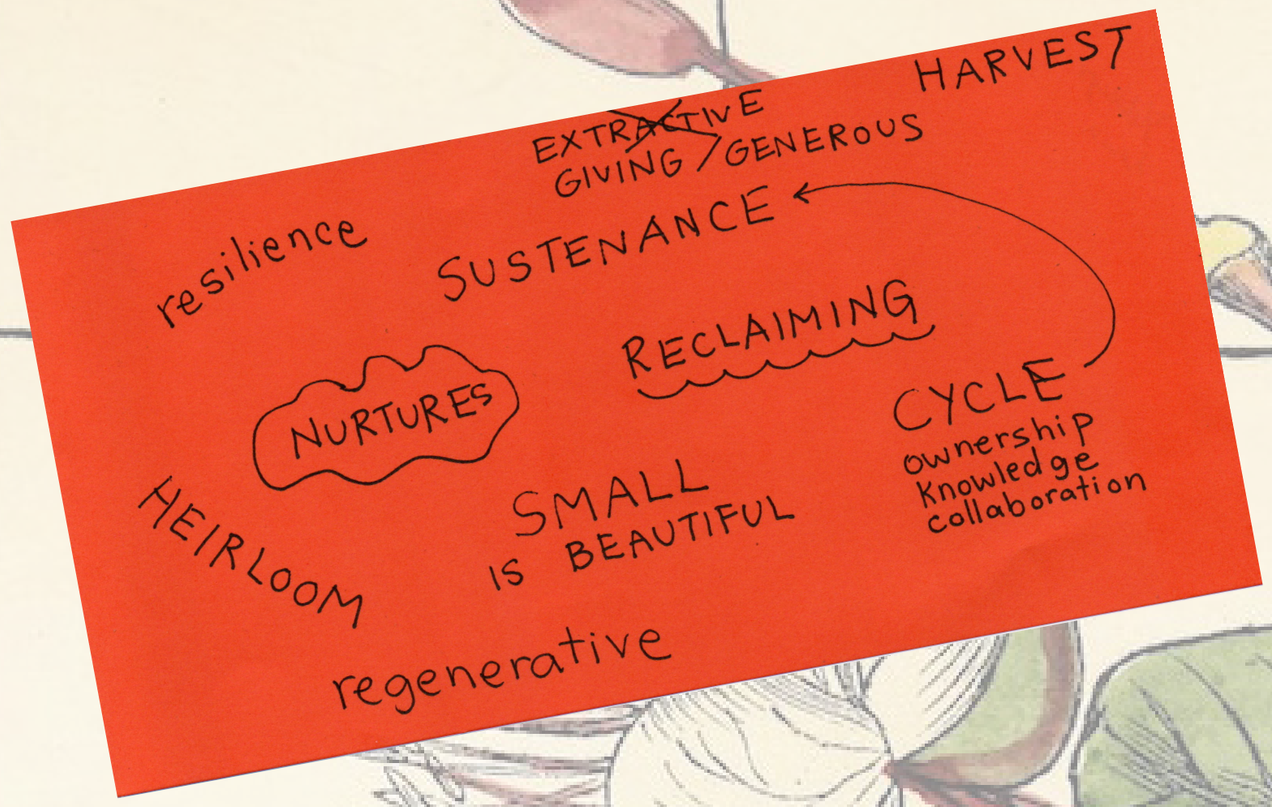
SLOW IS WONDERFUL
SMALL IS BEAUTIFUL
REGENERATE
RECLAIM
NURTURE
MULTIPLY AND SUSTAIN
PURPOSEFUL AND INTENTIONAL

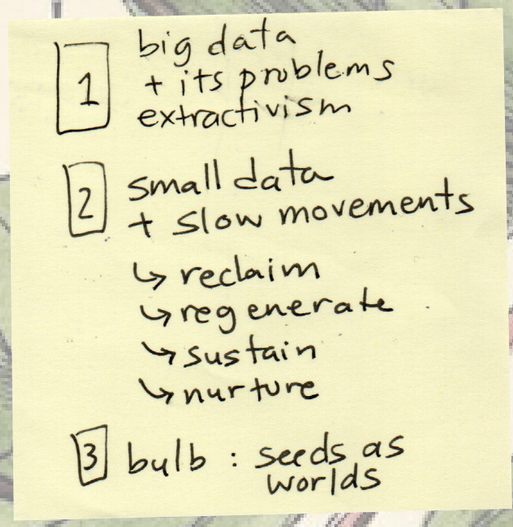
PLANT IDEAS, CONCEPTS AND RIGHTS
A SEED AS A WORLD
ENCODED STORIES AND KNOWLEDGE
HARVEST COLLECTIVE FUTURES
STRINGS OF MEMORY
react, nurture and care

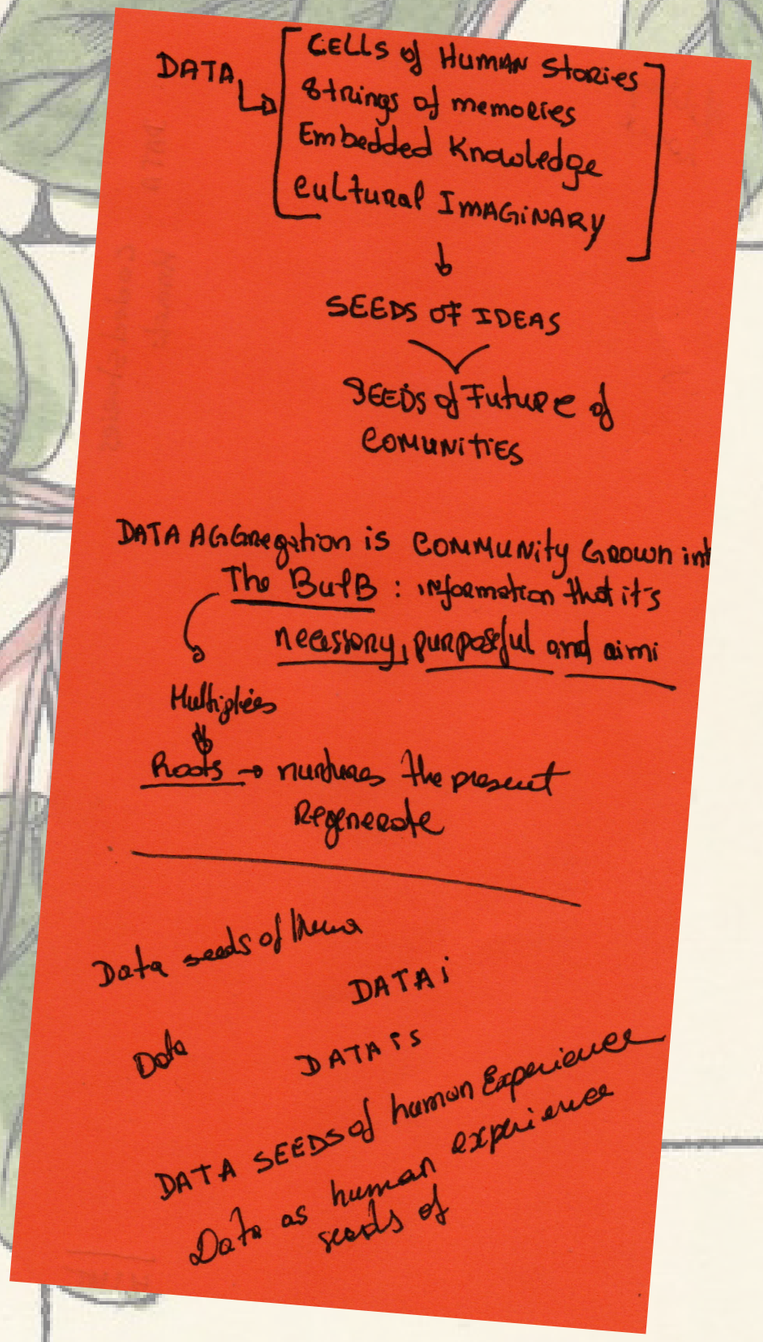

reveals the cycle and the importance of collaboration and upKeep.
PLANTING THE SEEDS
SEEDS WON'T EXIST WITHOUT RELYING ON NURTURE
planting ideas as seeds.
planting concepts as seeds.
planting rights as seeds
SMALL DATA
SLOW FOOD
reclaiming
community-led, anti consumerist
"SMALL IS BEAUTIFUL"
local
habits/preservation
where is this garden?
We also need to visualise the person who plants?

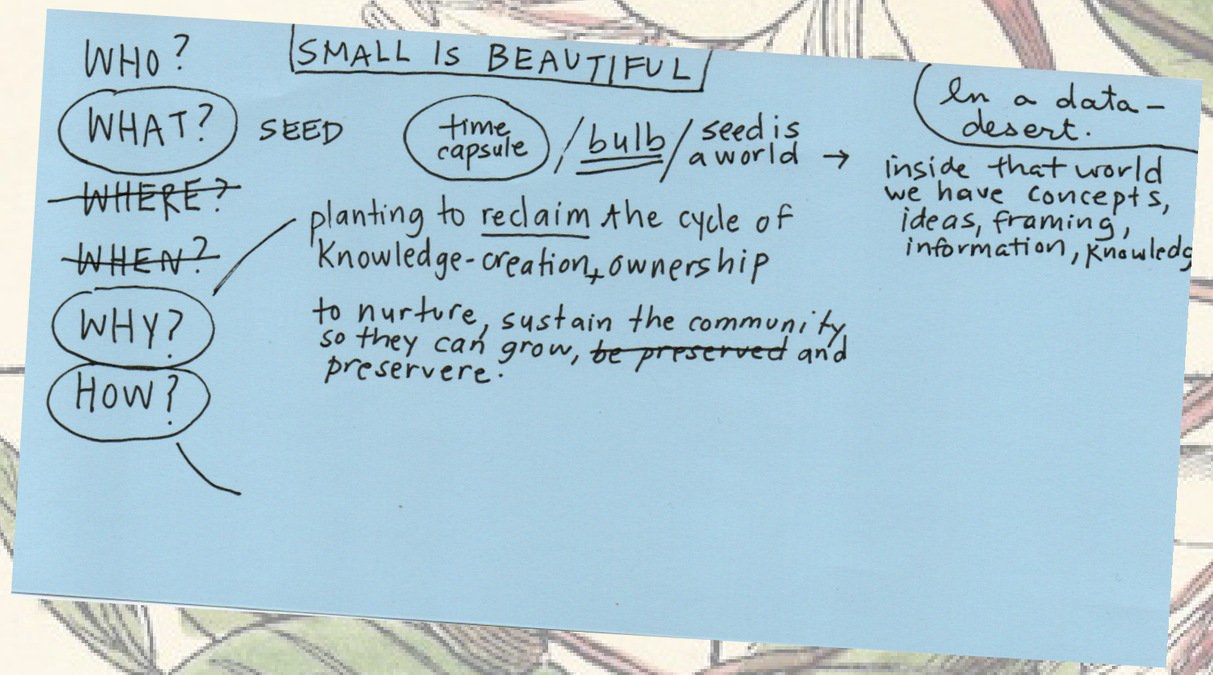

A SEED AS A WORLD.
react to surroundings
react to nurture + care
1. How does it connect to our understanding of data structures?
big data data-driven
2. How role of this seed
PLANTED IN A UNIVERSE.


"big data" — too big for human comprehension.
baren or creates baren deserts, it monopolises and creates its own conception of truth. It is authoritarian, asocial, ahistorical
data-driven is machine-driven, lacking in human intuition, care and connection.
ARCHIVES AS LINEAR AND STATIC.
SEED BANKS AS CIRCULAR, REACTIVE AND SUSTAINING
= textures
= movement
= circular
SEED BANK AS A REPOSITORY OF KNOWLEDGE


HARVEST
EXTRACTIVE
GIVING
GENEROUS
resilience
SUSTENANCE
RECLAIMING
NURTURES
CYCLE
ownership
Knowledge
collaboration
HEIRLOOM
SMALL
IS BEAUTIFUL
regenerative


1
big data
+ its problems
extractivism
2
small data
+ slow movements
↳ reclaim
↳ regenerate
↳ sustain
↳ nurture
3
bulb : seeds as
worlds


DATA
CELLS of Human Stories
Strings of memories
Embedded Knowledge
Cultural IMAGINARY
SEEDS of IDEAS
SEEDS of Future of
COMMUNITIES
DATA AGGregation is COMMUNity Grown int
The BulB : information that it's
necessary, purposeful and aimi
Multiplies
Roots → nurtures the present
Regenerate
Data seeds of Hum
DATAi
Data
DATA IS
DATA SEEDS of human Experience
Data as human experience
seeds of

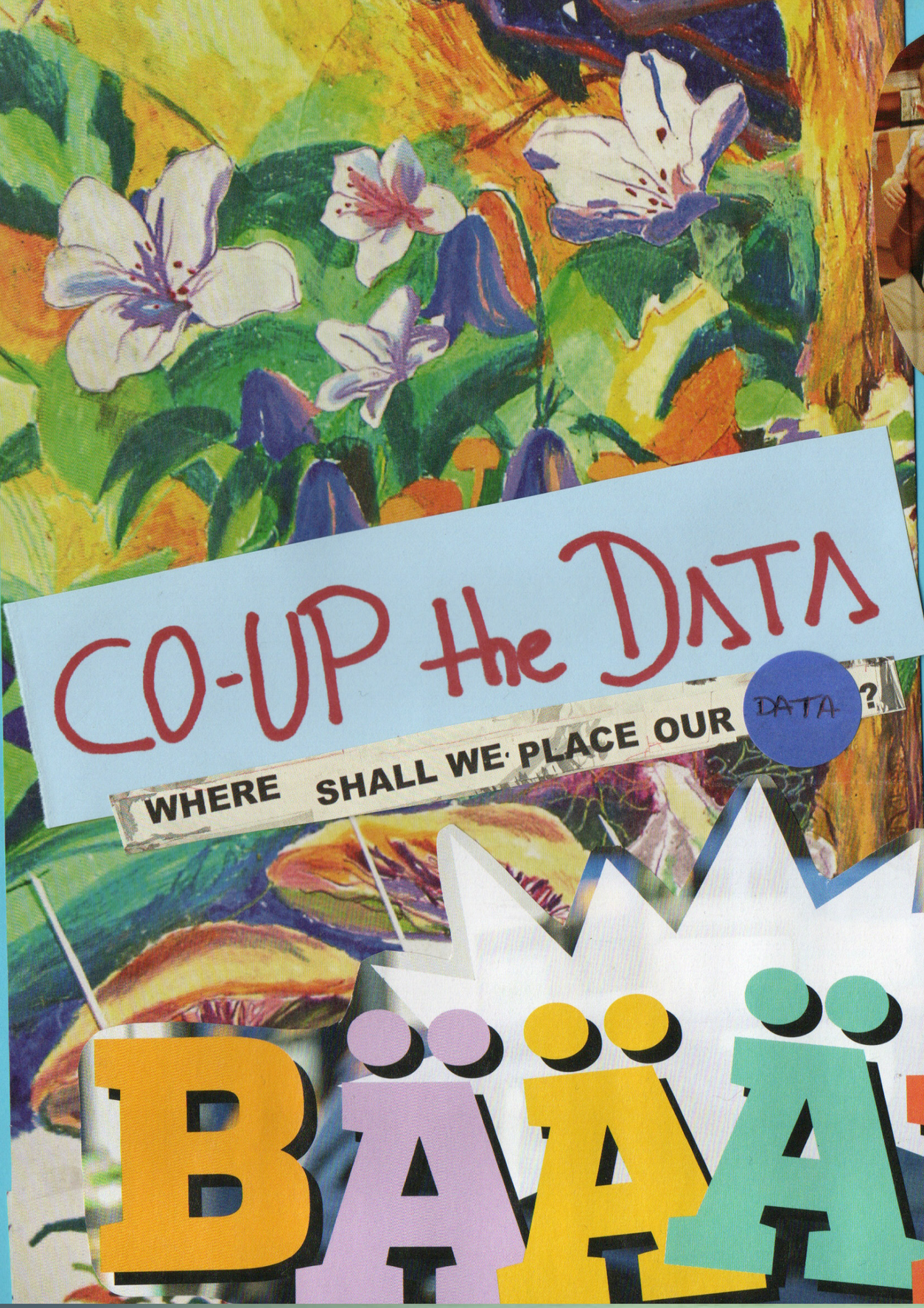

WHO?
SMALL IS BEAUTIFUL
WHAT?
SEED
time capsule / bulb / seed is a world →
In a data-desert.
WHERE?
WHEN?
planting to reclaim the cycle of
Knowledge-creation, ownership
WHY?
to nurture, sustain the community
so they can grow, be preserved and
preservere.
HOW?
inside that world we have concepts, ideas, framing, information, Knowledg

GROW THE GARDEN

Growing a garden takes time, patience, and care. It can be therapeutic when done by yourself. It can be a source of community-building when done together. It can be a way to teach, learn, or pass down generational knowledge. It’s often more than just about the plants and produce.

On the other hand, data-driven technologies are all too often about efficiency, speed, accuracy, and end-results. It’s about optimizing for profit.

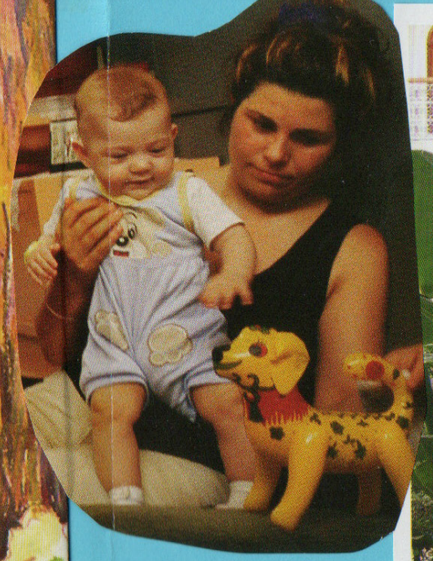
How can we rethink our data and digital technologies (and our relationship to them) in terms of gardening instead?



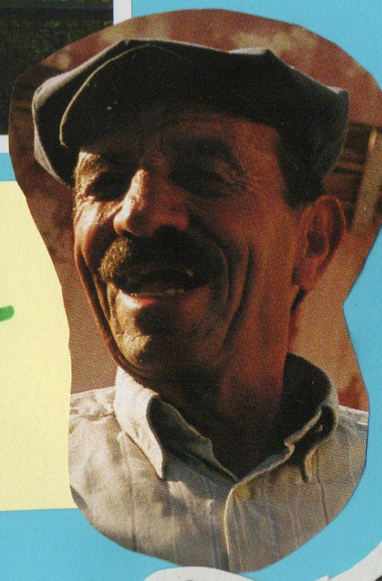
Co-UP the DATA

WHERE SHALL WE PLACE OUR DATA ?

BÄÄM

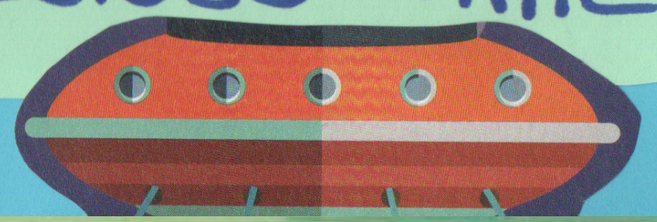


Generational Exchange



HISTORY AND OPPORTUNITY UNDER ONE

Across Time



das Cloud

Occupy

A PROJECT OF TODAY → A PROFIT FOR THE FUTURE →

nubes → agua!
we need it to rain

generational knowledge!
reestructurar datos

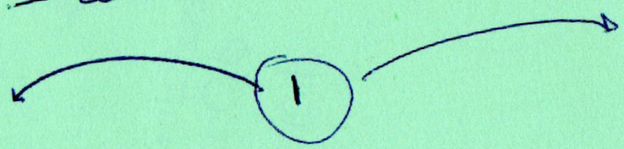
coop:
MAYOR
y soveres

- curate con care.

- context

1

• Rethink classification
curating data

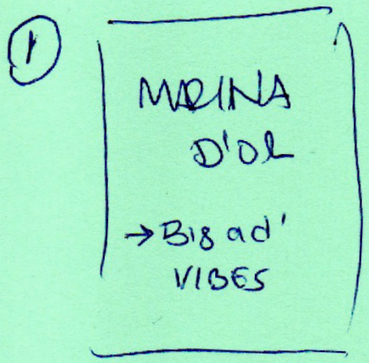


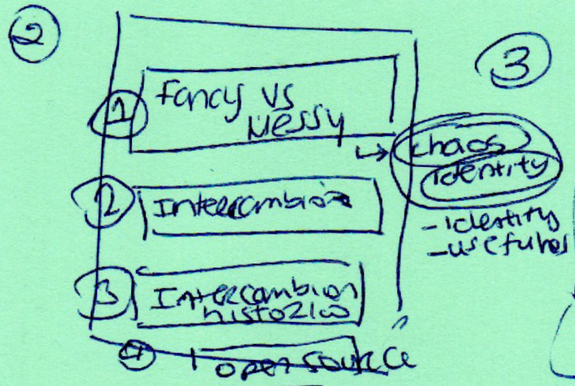
datos que se vuelven inutiles

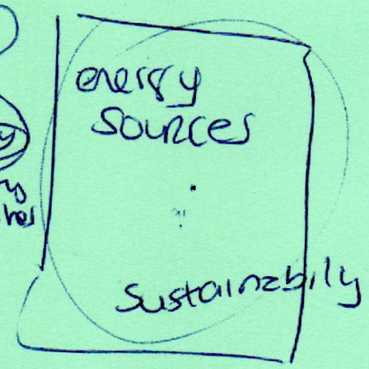
1
MARINA D'OR
→ Big ad' VIBES

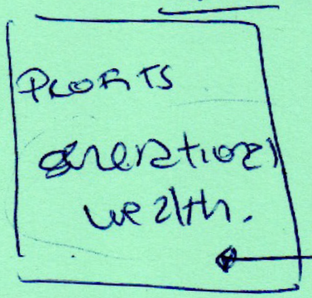
2
1 Fancy vs Messy
↳ chaos identity
- identity
- usefulness
2 Intercambio
3 Intercambion histozlw
4 open source

3
energy sources
Sustainability



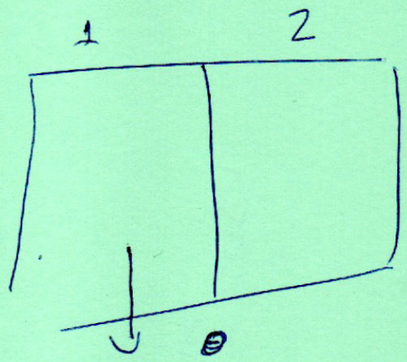






4
PROFITS
generational wealth.
← A project of today a profit for the future.

• open source



1 2

Jardin Salvaje
- personas mayores
- soveres
- time travel pod. (time capsule)
- nube

• Renewable energy / sustainable.

co-op
co-up: The data a transgenerational

*profit or not, for whom?

* generational wealth

It's Showtime

maschine

Einfach und praktisch

schnell

cut costs

Skalierung

Folks

GAS

1,5

2,5

1

Actual Production

Gemeinsam

Garden of Fair-Den

Data points

Adversarial attacks

You shall not pass!

TOOLS TO TEND

Big industrialized farming is very different from growing a garden. Instead of the large mechanical machines and automated irrigation systems of industrial farming, we use our hands, small shears, and perhaps a trowel, to tend to our gardens. The relationship is more tactile and intimate.

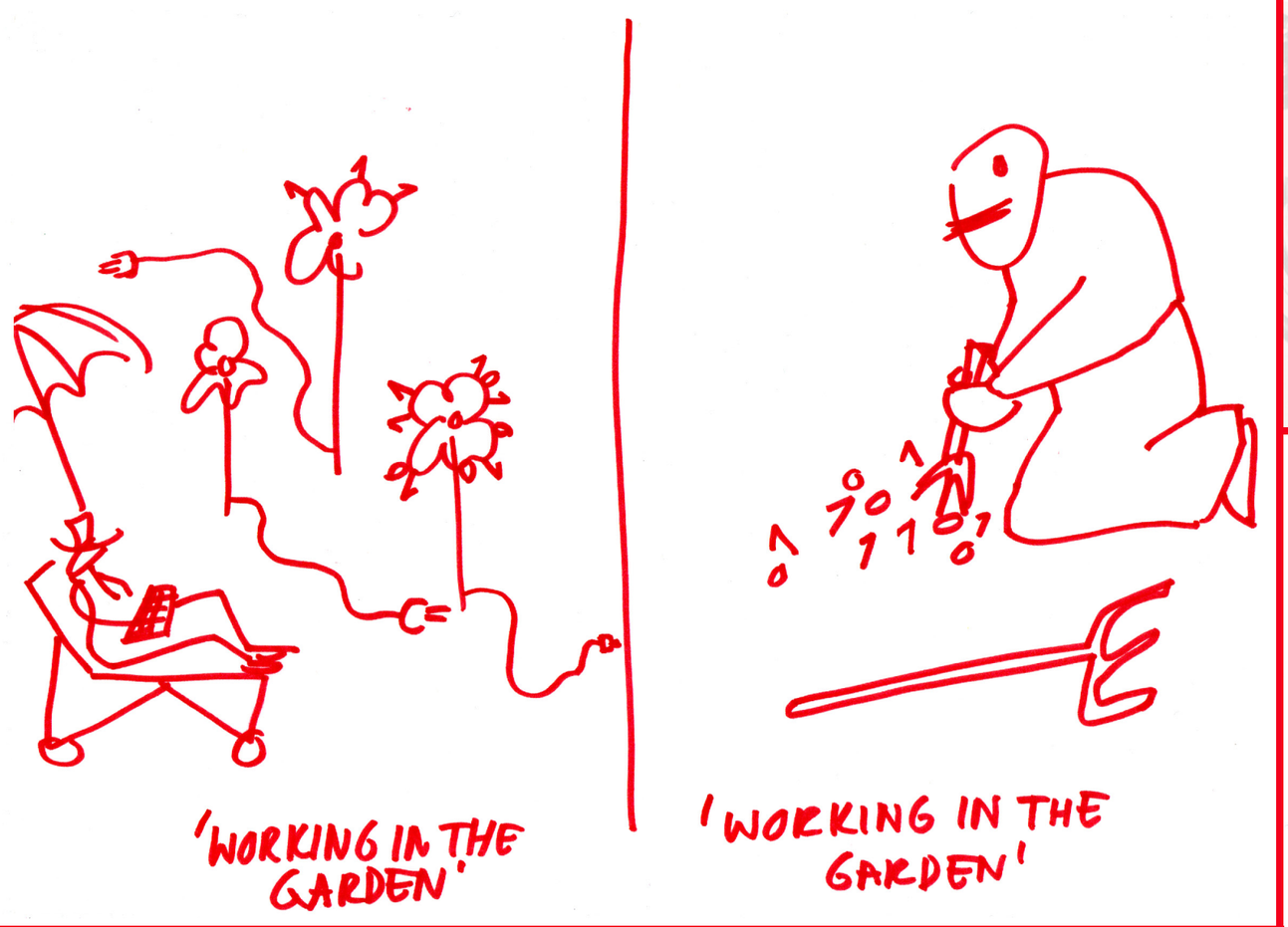
If we think about the infrastructures, tools, and systems used to generate, analyze, and use Big Data, what kind of different tools would a data garden inspire and require?

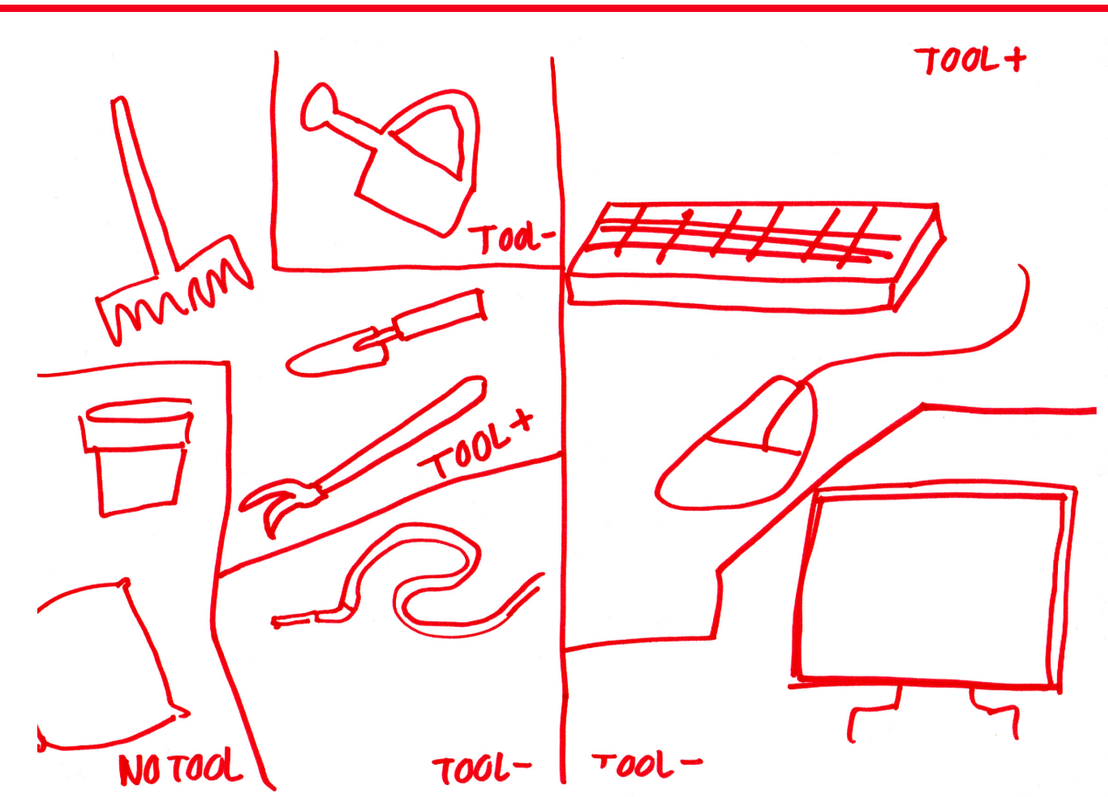
"Data Gardening"

PRUNING IS A HORTICULTURAL, ARBORICULTURAL AND SILVICULTURAL PRACTICE INVOLVING THE SELECTIVE REMOVAL OF CERTAIN PARTS OF A PLANT, SUCH AS BRANCHES, BUDS OR ROOTS.

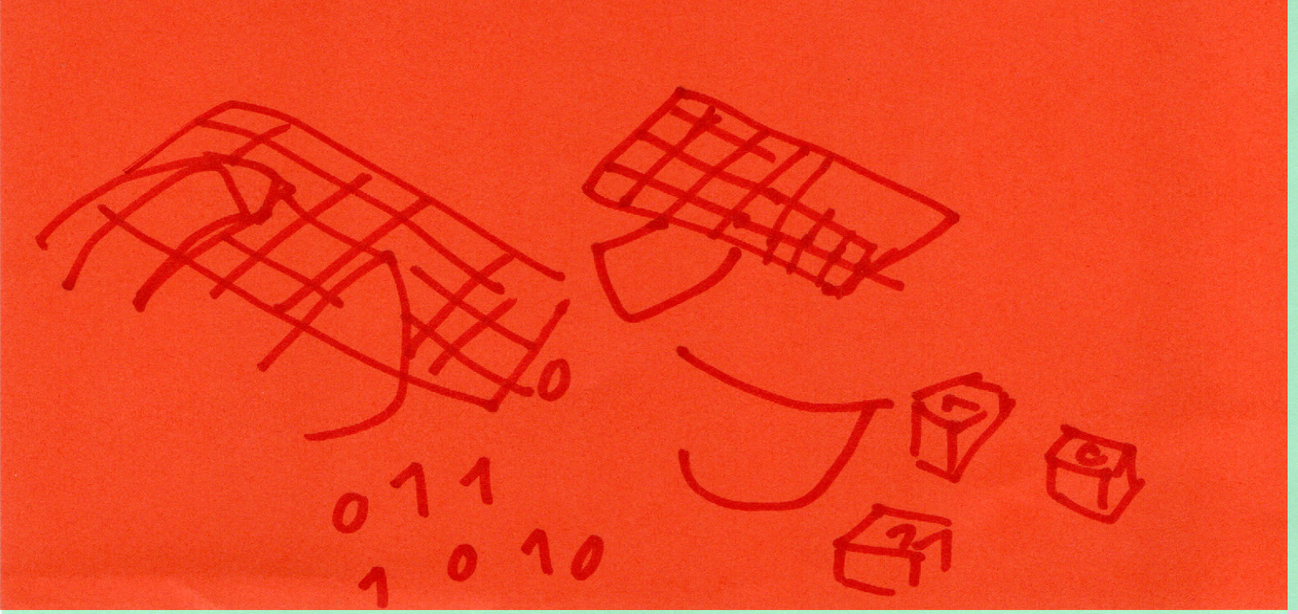
PRUNING IS A DATA COMPRESSION TECHNIQUE IN MACHINE LEARNING AND SEARCH ALGORITHMS THAT REDUCES THE SIZE OF DECISION TREE BY REMOVING SECTIONS OF THE TREE ARE NON-CRITICAL AND REDUNDANT TO CLASSIFY INSTANCES.

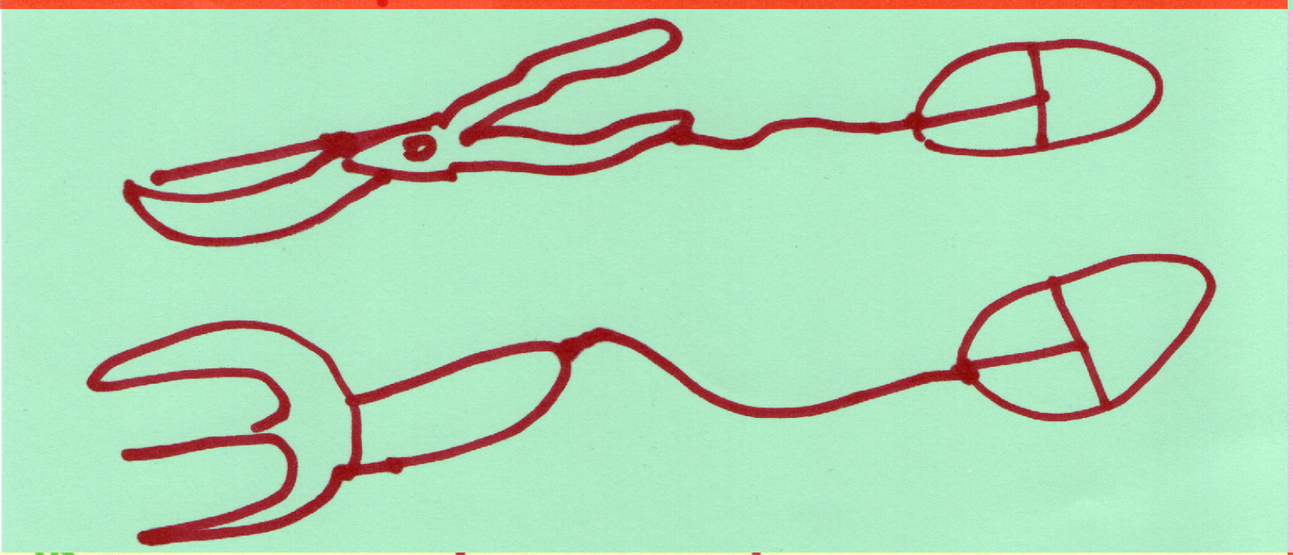
LIFECYCLE	
PLANTING, NURTURING, HARVESTING	COLLECTION, PREPROCESSING, STORAGE, DELETION

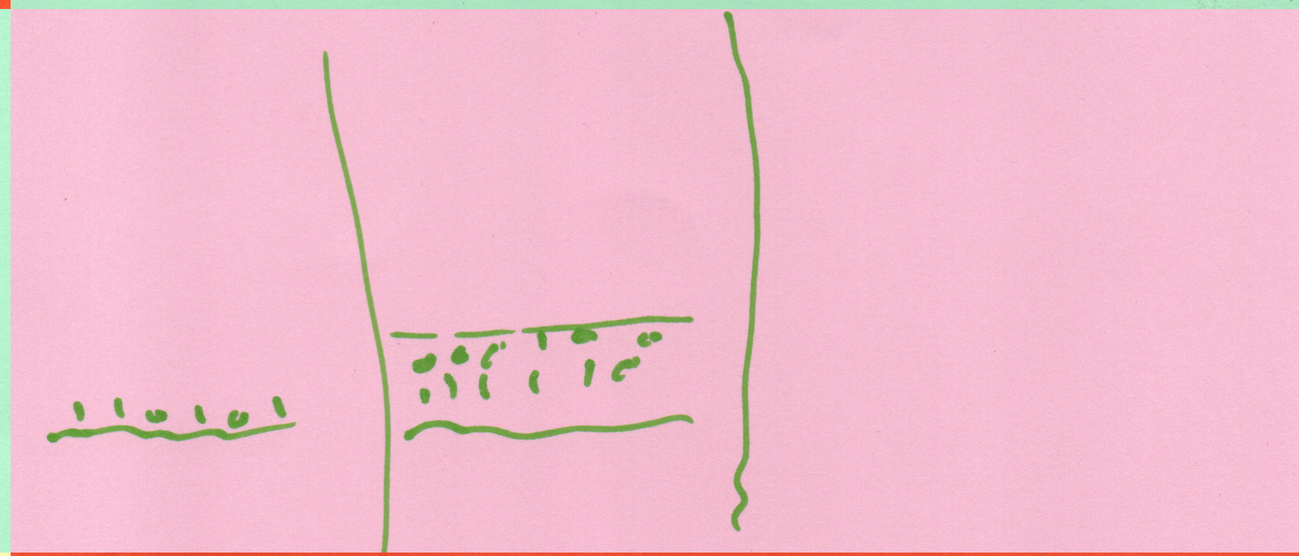

'WORKING IN THE GARDEN'
'WORKING IN THE GARDEN'

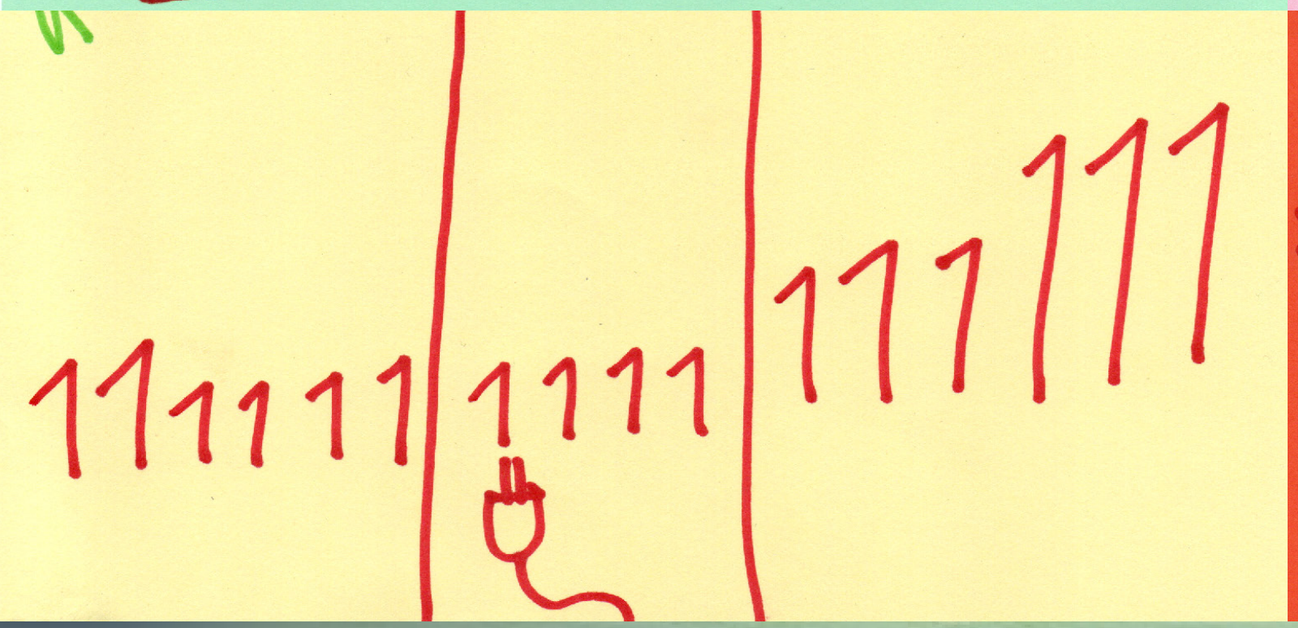

TOOL+
TOOL-
TOOL+
NO TOOL
TOOL-
TOOL-

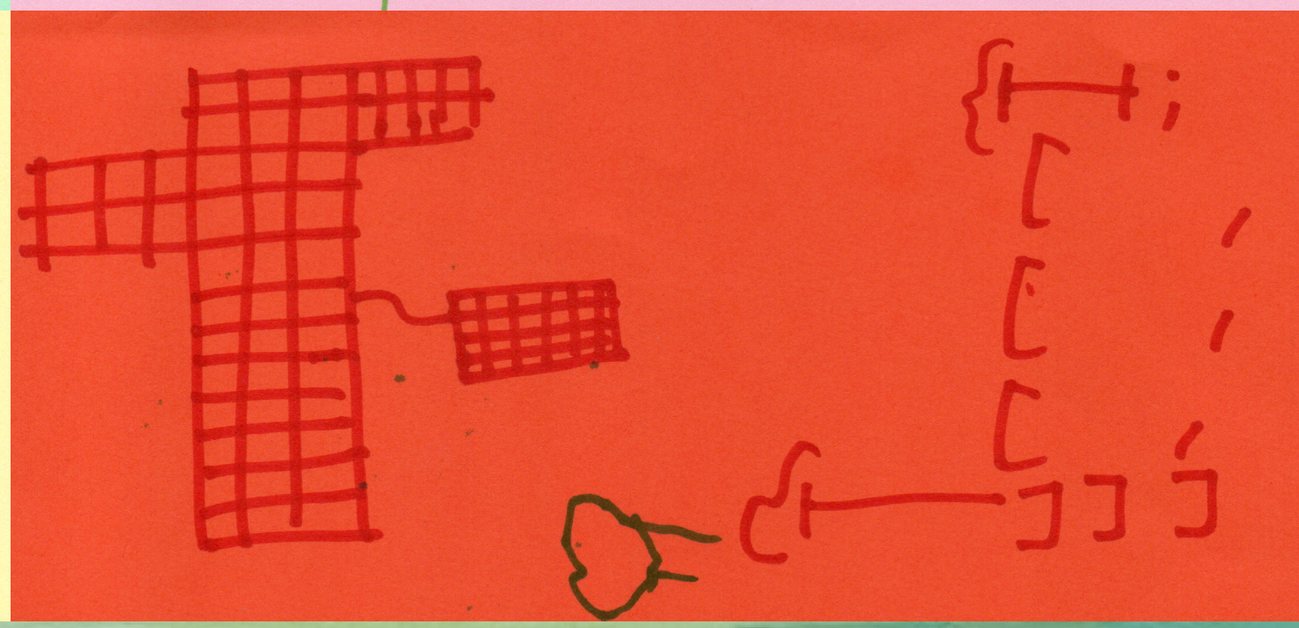
'WORKING IN THE GARDEN'
'WORKING IN THE GARDEN'











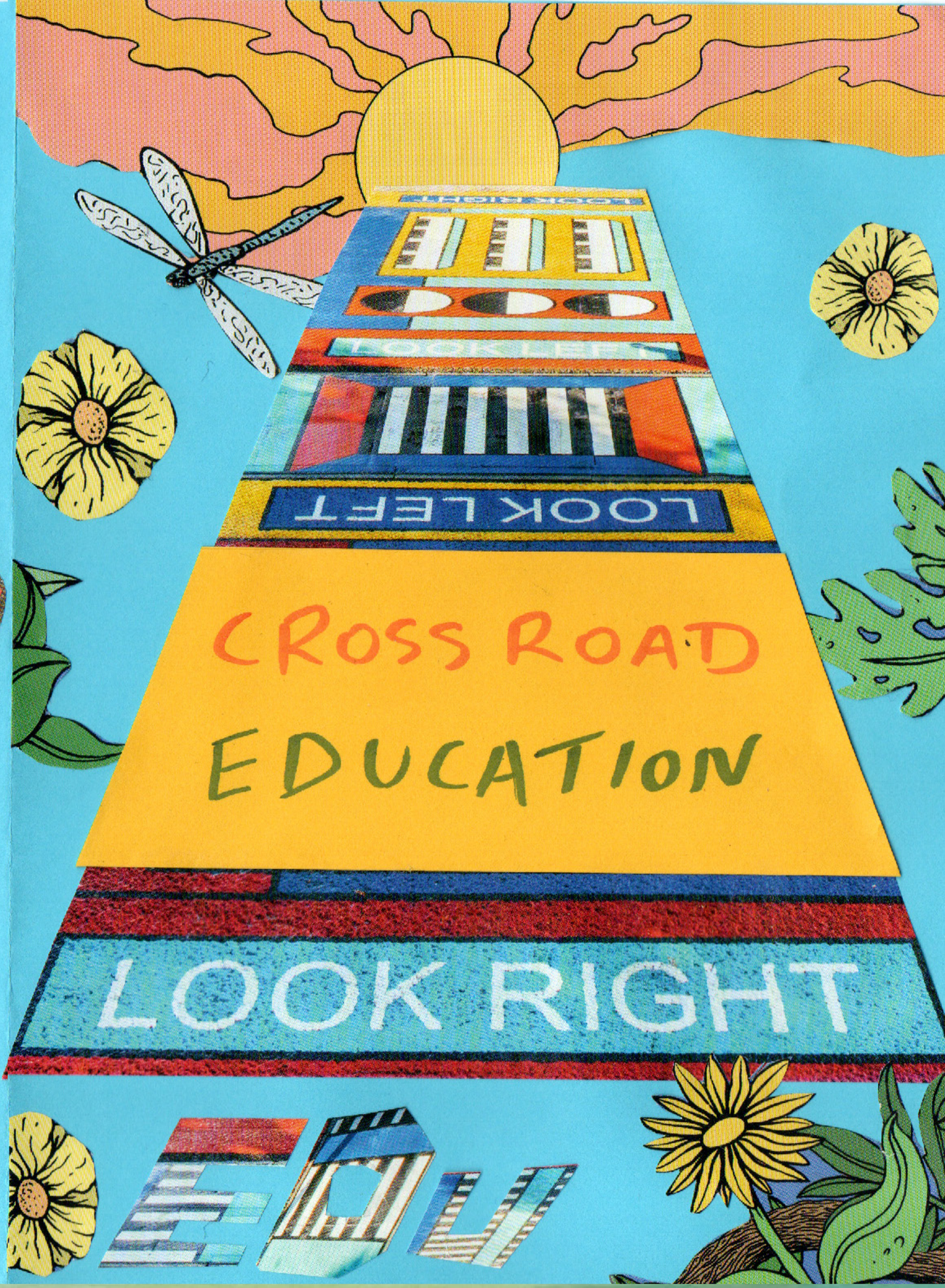
HARVESTING

Big Data encompasses automated harvesting of massive amounts of information from various sources and pooling it into large data lakes. It’s about aggregation and analysis at scale as a way to create profit.

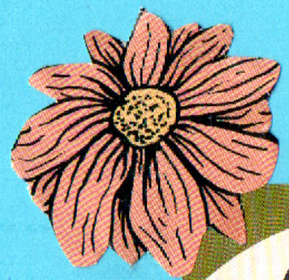
But making a garden is rarely about scale & profit. Perhaps you are simply growing some produce for yourself, or a local farmer’s market. Or your flower garden is meant as a space of reflection and rest - which is also a way of harvesting the labor of gardening. If we think of community gardens as a political space where citizenship and collaborative governance is fostered, what do we harvest then?

How can we rethink how we gather data, and how we measure the value or usefulness of data, in terms of gardening?

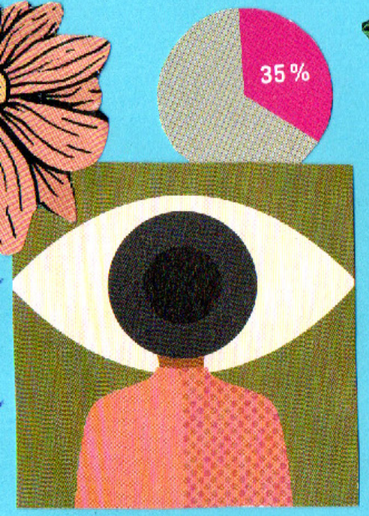
TRUTH
Dream
Light
Joy
Love
Shine
41
8
26
20
17
9
7
19
63
LIGHTS ON


LOOK LEFT
CROSS ROAD
EDUCATION
LOOK RIGHT

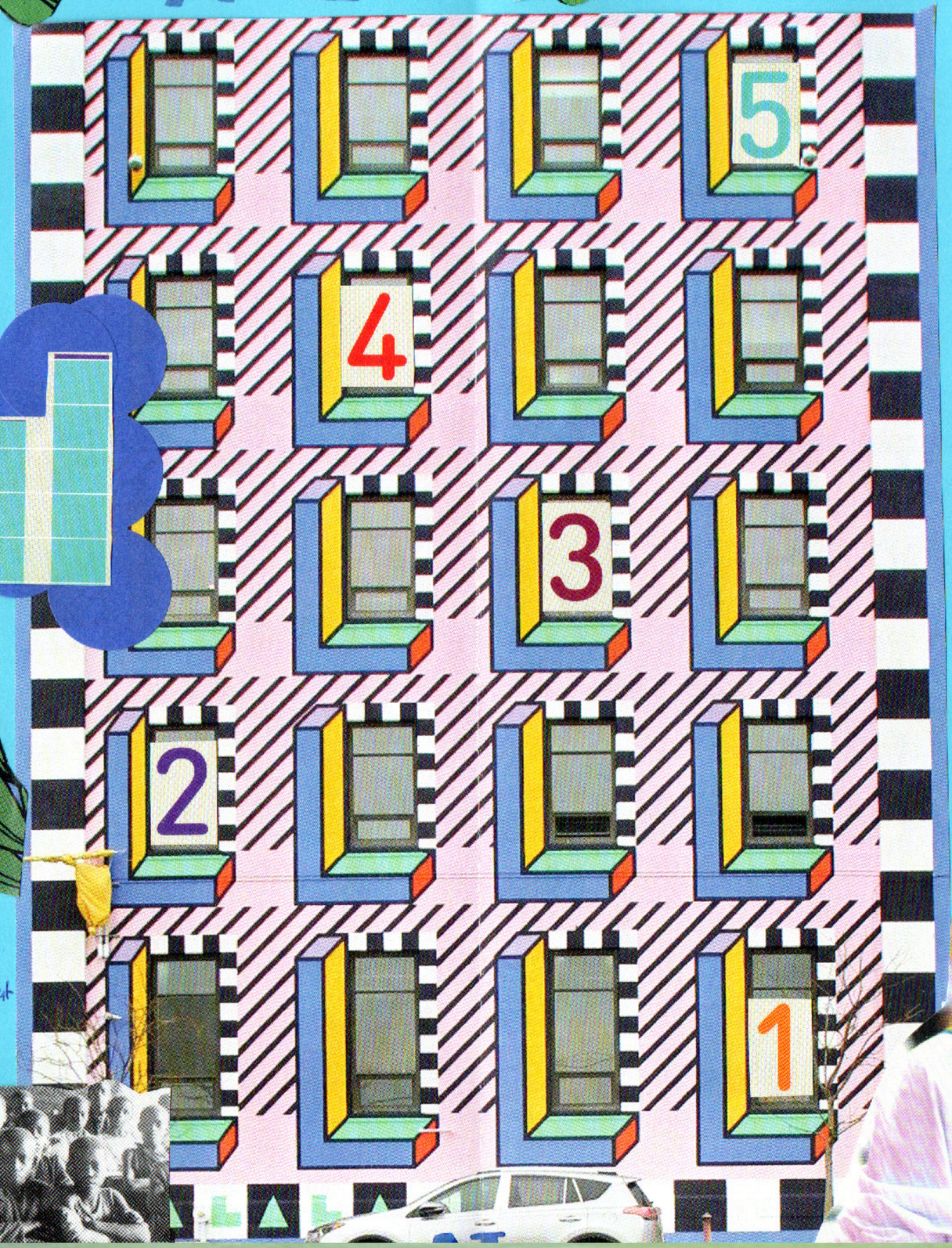
Education A.I. Facts & Transformation



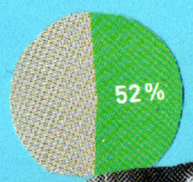
SEKURITY & PRIVACY



increase



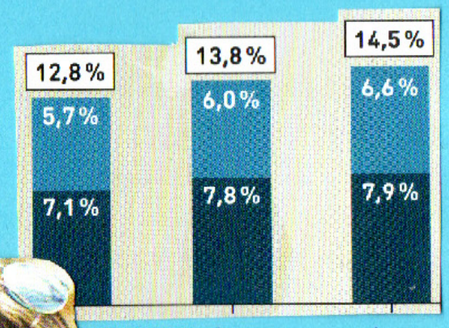
AI brings the new future in the education area



Better classroom environment

Digital transformation achieved

"Excellent Grade" student %



internet teapot

A zine that sits uncomfortably at the intersection of digital technology, a global free-market economy, and popular culture.