

ISSUE 11 - SEP 2025

ALGORITHMS OF LATE-CAPITALISM

Rendering the body/ies of AI visible

LIVING
ARCHIVES



Interactive
pop-up zine
some assembly
required

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Edited and compiled by internet teapot.

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RENDERING THE BODY/IES OF AI VISIBLE

How much water is used to keep the ChatGPT servers cool? Whose invisible work allows self-driving cars to identify someone running across the road? Where are all our emails actually stored (and at what cost)?

The zine-making workshop *Rendering the Body/ies of AI Visible* was facilitated by *internet teapot* (Karla Zavala Barreda and Adriaan Odendaal) and developed in collaboration with Anja Lomparski as part of the workshop series *Learning about Machines* within the research project *ComeArts* on Postdigital Arts Education at Karlsruhe University of Education. The workshop brought together participants to collaboratively create this zine by critically reflecting on and creatively exploring the hidden and often-ignored material and social construction of AI technologies.

Inside the following pages, you will glimpse the hidden labour that powers so-called intelligent technologies; navigate a map of the vast network of geological resources that power AI systems; encounter speculative futures that re-imagine data infrastructure in symbiosis with nature; and much more!

An interactive pop-up zine

This zine was designed as an interactive pop-up book that takes full advantage of the materiality of zines as printed media to reflect on the often-ignored materiality of AI technologies.

In this digital version of the zine, you can experience some of the pop-up components on the interactive, clickable PDF pages.

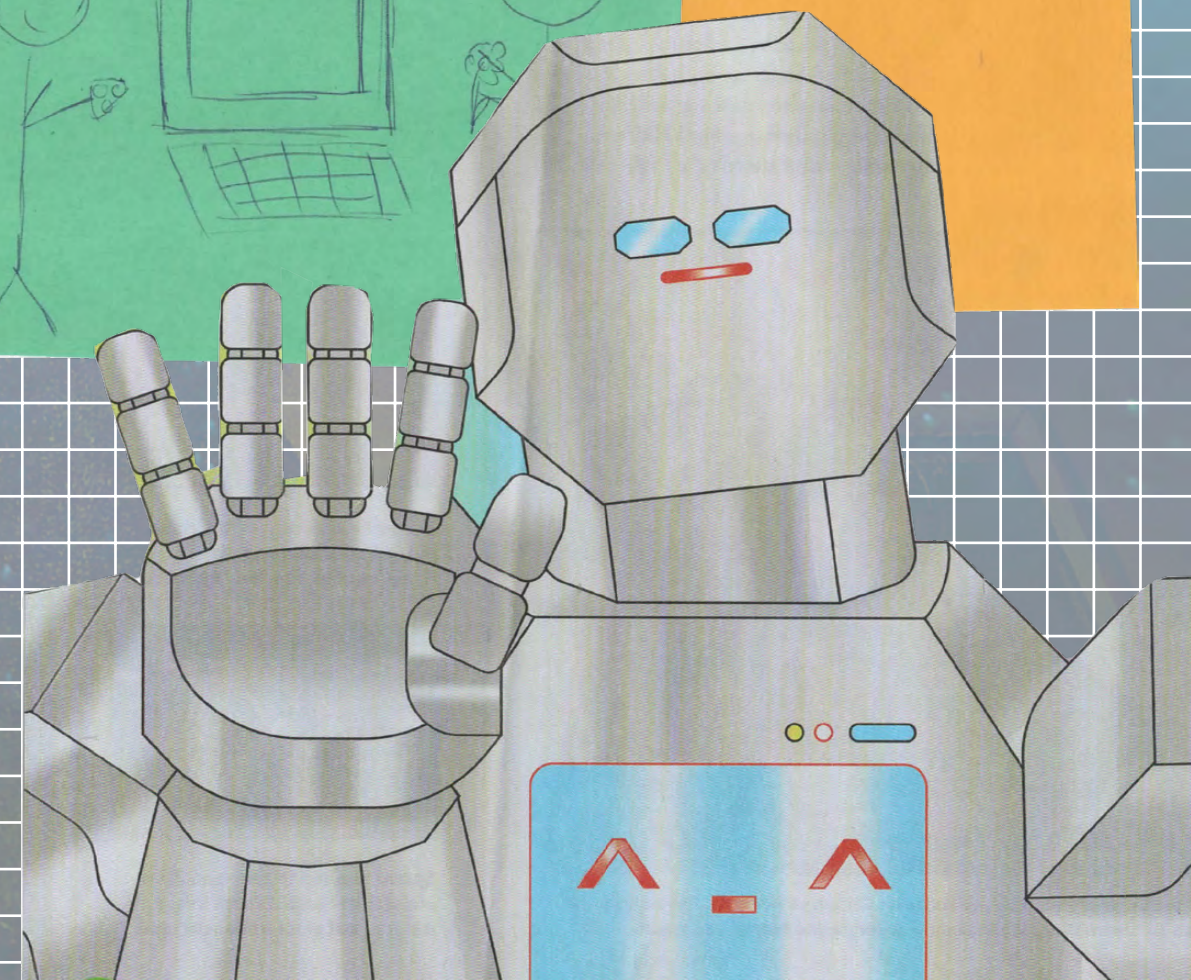
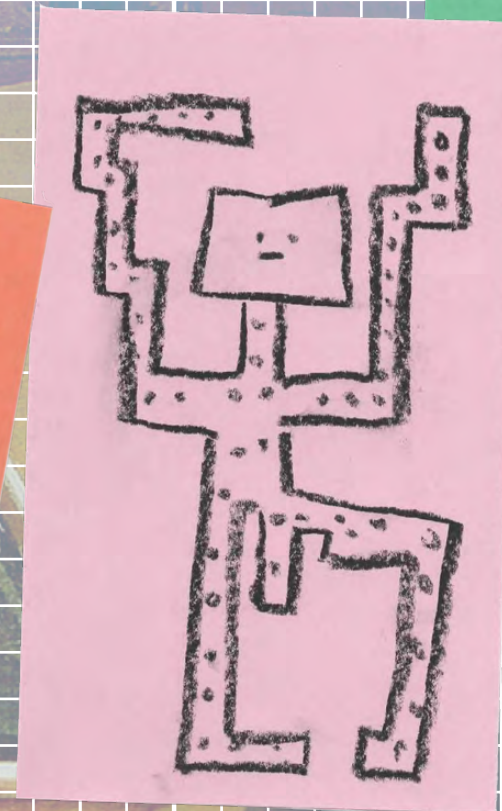
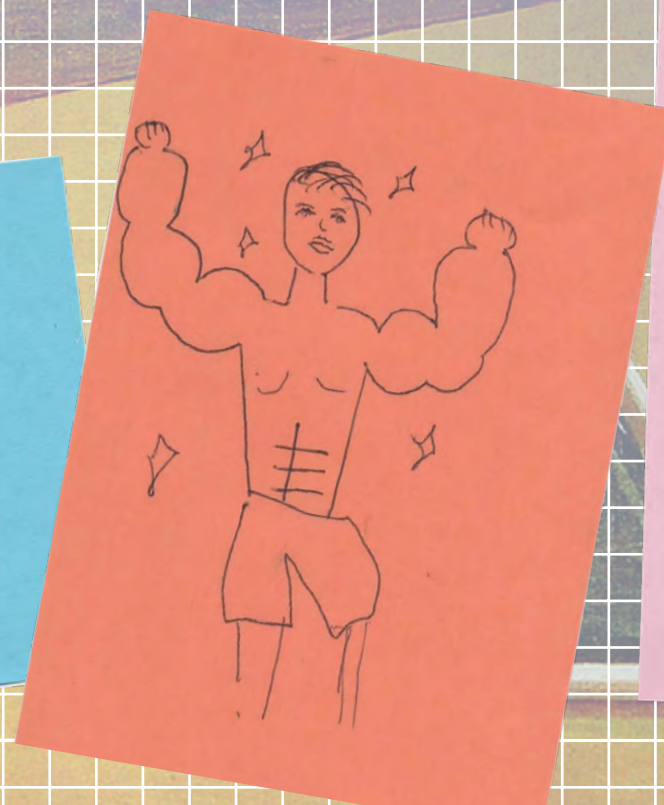
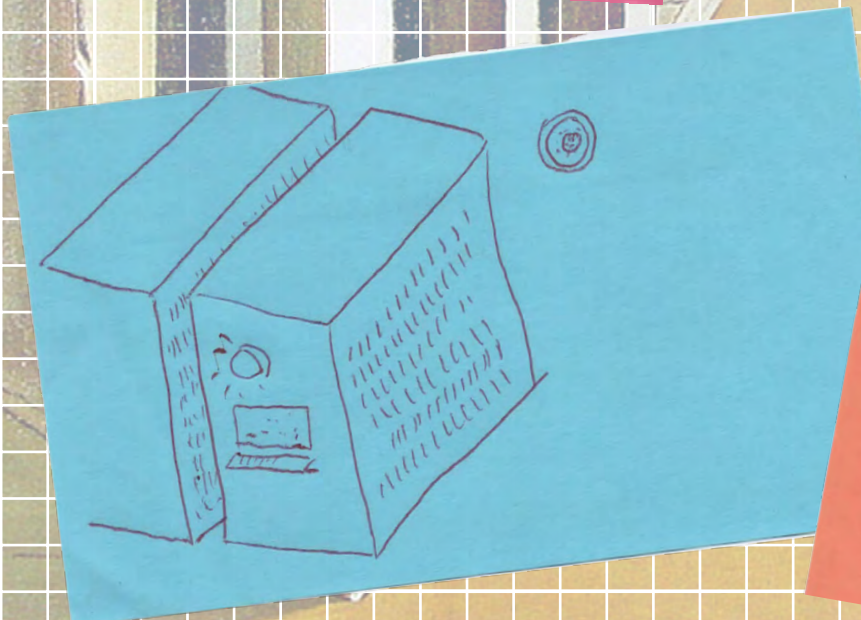
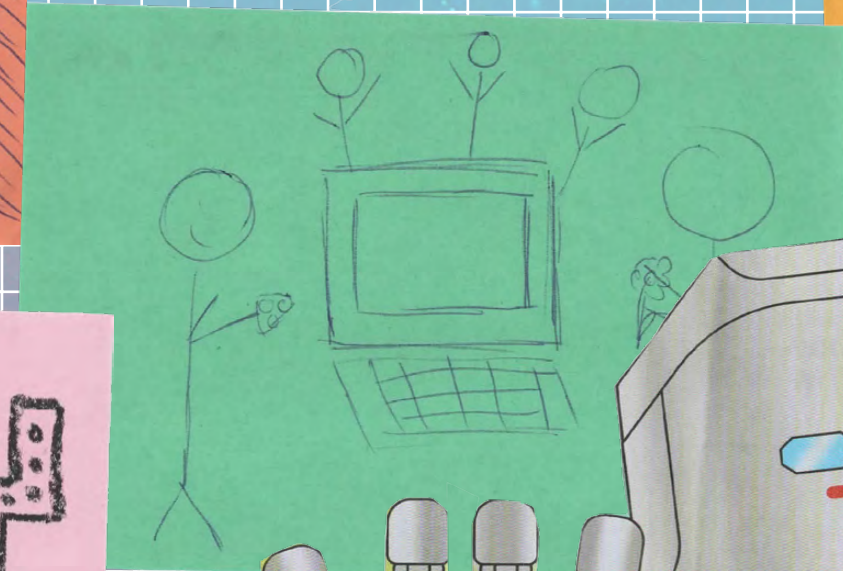
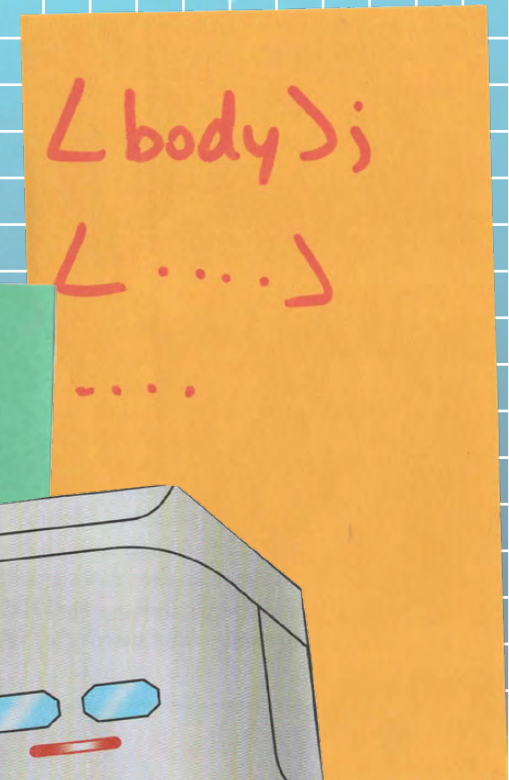
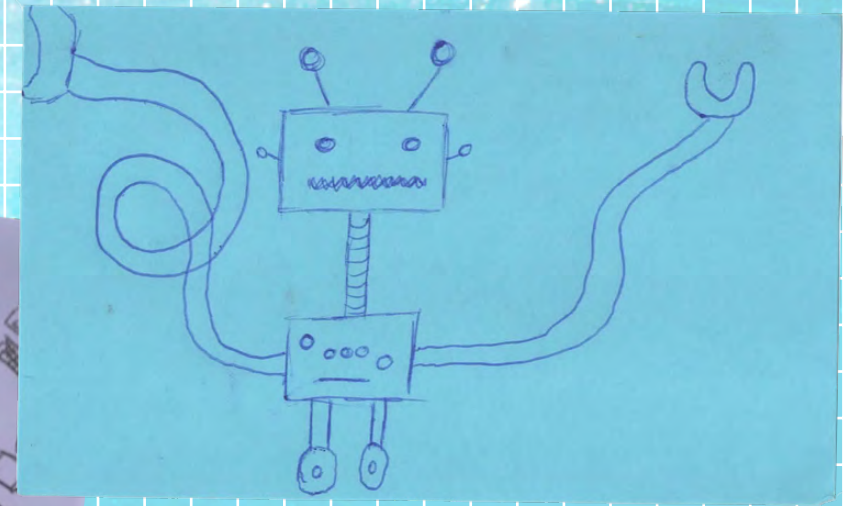
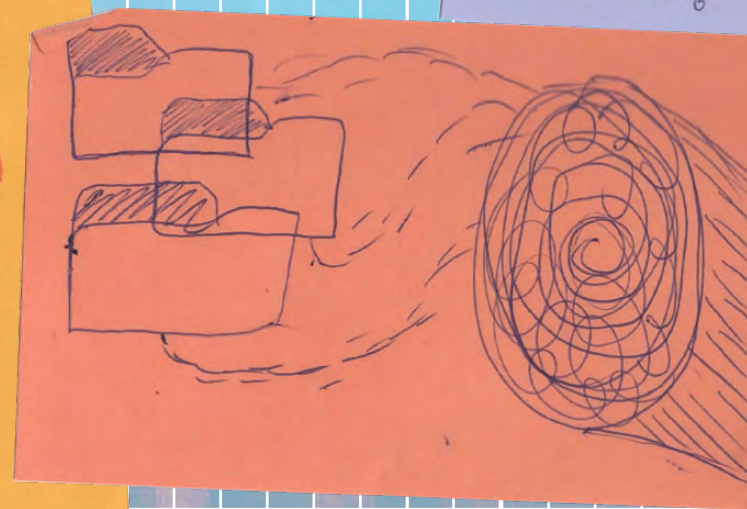
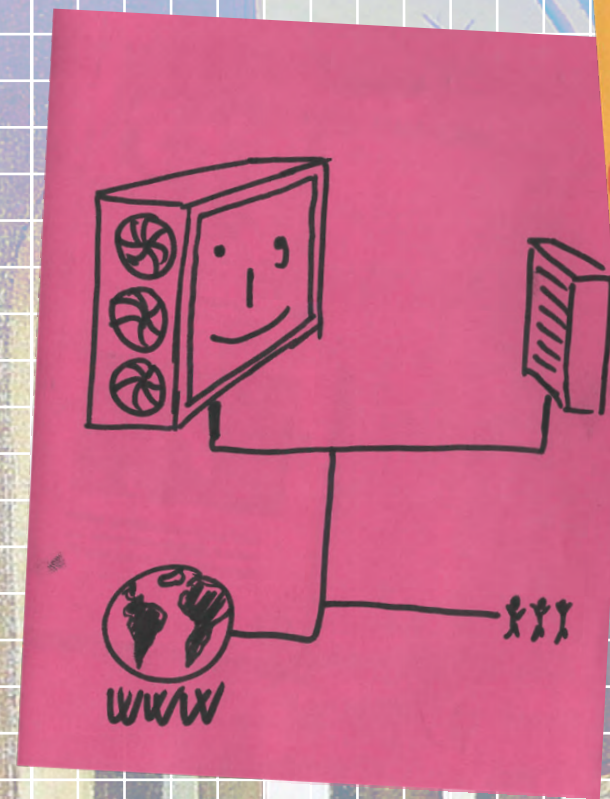
If you want to assemble the paper pop-up zine, you can find the print file here:

algorithmsofatecapitalism.tumblr.com/zines#aibodies



This Rendering the Body/ies of AI Visible workshop took place at Karlsruhe University of Education on May 15, 2025 in Karlsruhe, Germany.

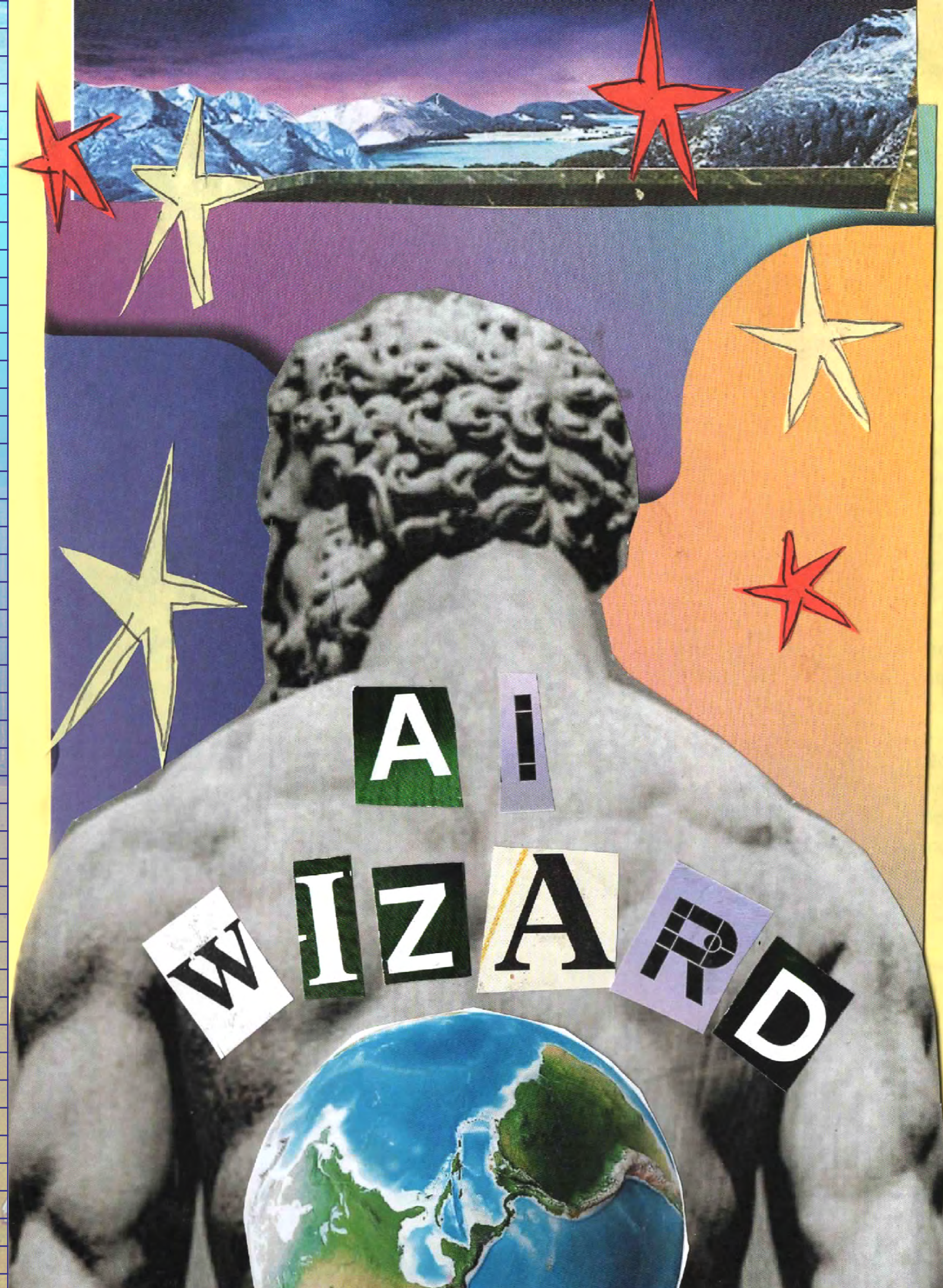
DRAW WHATEVER YOU
THINK AN "AI BODY" COULD
BE



AI & LABOUR

The idea of 'autonomy' often attributed to AI-powered technologies conceals the active human labour that takes place backstage in order to make these technologies appear 'intelligent'. Even the 'smartest' AI technologies often rely on human workers to provide ongoing course correction, learning system guidance, edge-case handling, manual moderation, data labelling, and much more to make them work.

What is the hidden human labour that goes into making AI appear autonomous and smart? How can we lift the curtain on the backstage of everyday AI technology?



while the robots appear to be autonomous,

are actually operated by remote

in Colombia who make \$2 an hour.

The term *Potemkin* derives from the name of a Russian minister who built fake villages to impress Empress Catherine II and disguise the true state of things. Potemkin tech, then, constructs a façade that not only hides what's going on but deceives potential customers and the general public alike. Rather than the Wizard of Oz telling us to pay no attention to the man behind the curtain, we have programmers telling us to pay no attention to the humans behind the platform.

Exclusive: OpenAI Used Kenyan Workers Less Than \$2 Per Hour to Make ChatGPT Toxic

tions are heavily investing in automations in the attempt to extract labor from fewer workers.

Spotify's CEO Daniel Ek is worth \$3.8 billion. He sells music others create and pays them virtually nothing. He has never written a song, and is 3 times richer than Paul McCartney.

Daniel Ek / Net worth

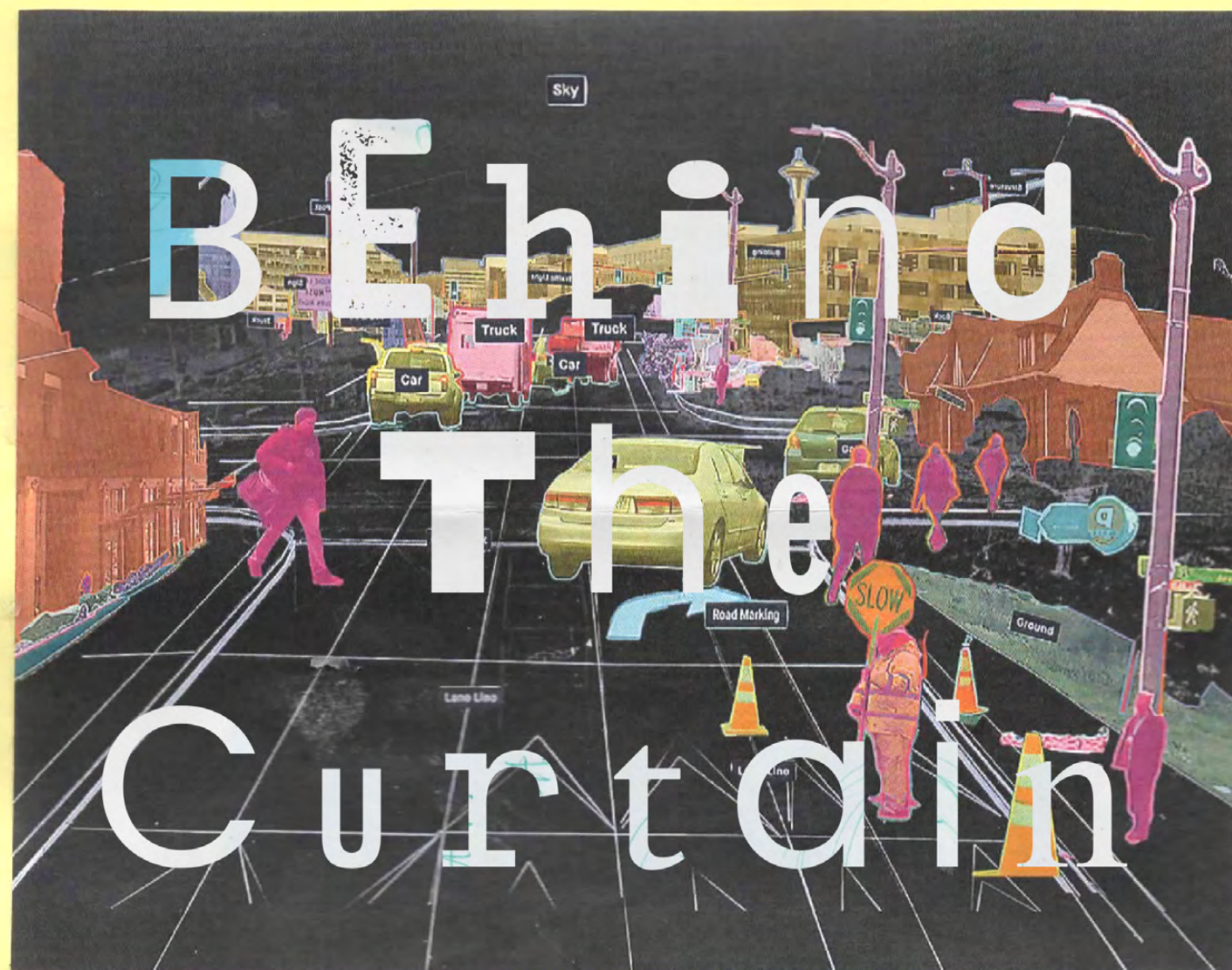
3.8 billion USD

2021



Du musst sichtbar sein

Facebook moderator:
every day was a
nightmare



"AI can seem like a spectral force -as disembodied computation -but these systems are anything but abstract. They are physical infrastructures that are reshaping the Earth, while simultaneously shifting how the world is seen and understood."

- Crawford, K. (2021): *Atlas of AI: power, politics, and the planetary costs of artificial intelligence*. Yale University Press, New Haven & London. S. 19





AI:
Ghost
workers
demand
to be
seen
and heard

外国人来华工作许可
系统故障,请耐心等待
Please wait patiently for the
failure of the system.



POWER

Have you noticed that news stories and marketing material about Artificial Intelligence are typically illustrated with cliché and misleading images? Why is that? What are they selling with these images and ideas? What kind of myths are they generating and how are these myths hiding the real body of AI?

When we start unpacking the media myths about AI, we can start to better understand how they actually function in society, what their impacts are, and to whose benefit they do work in the world.

This awareness can also help us create imaginative and speculative proposals that invert the hidden power-relations they enforce and thus rethink the role AI plays in our lives and society at large.



Companies are on the hook if their hiring algorithms are biased

By Dave Gershgorn

Published October 22, 2018

Between 2014 and 2017 Amazon tried to build an algorithmic system to analyze resumes and suggest the best hires. An anonymous Amazon employee called it the “holy grail” if it actually worked.

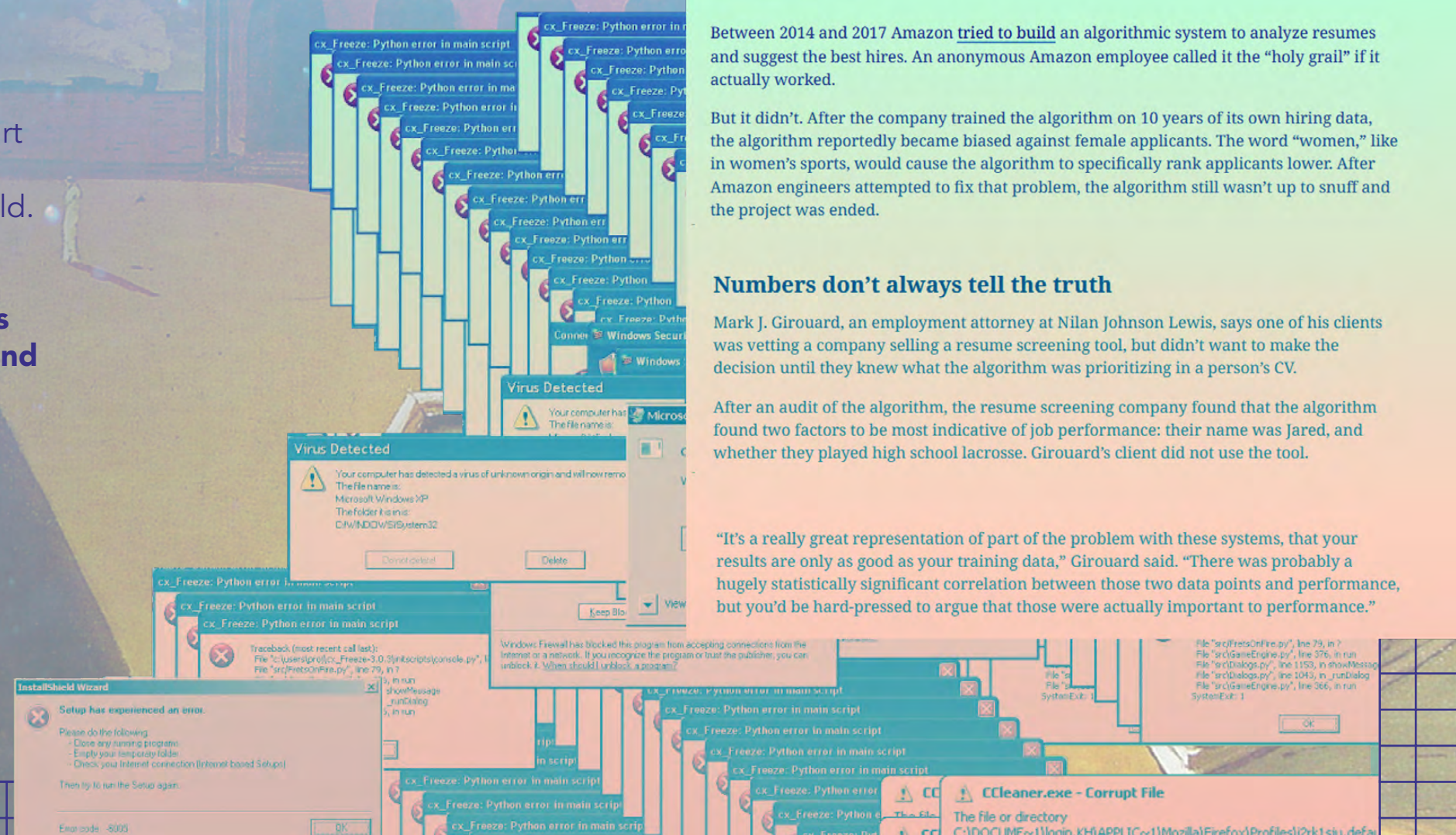
But it didn’t. After the company trained the algorithm on 10 years of its own hiring data, the algorithm reportedly became biased against female applicants. The word “women,” like in women’s sports, would cause the algorithm to specifically rank applicants lower. After Amazon engineers attempted to fix that problem, the algorithm still wasn’t up to snuff and the project was ended.

Numbers don’t always tell the truth

Mark J. Girouard, an employment attorney at Nilan Johnson Lewis, says one of his clients was vetting a company selling a resume screening tool, but didn’t want to make the decision until they knew what the algorithm was prioritizing in a person’s CV.

After an audit of the algorithm, the resume screening company found that the algorithm found two factors to be most indicative of job performance: their name was Jared, and whether they played high school lacrosse. Girouard’s client did not use the tool.

“It’s a really great representation of part of the problem with these systems, that your results are only as good as your training data,” Girouard said. “There was probably a hugely statistically significant correlation between those two data points and performance, but you’d be hard-pressed to argue that those were actually important to performance.”



THIS
ZINE
WAS
AI
GENERATED.

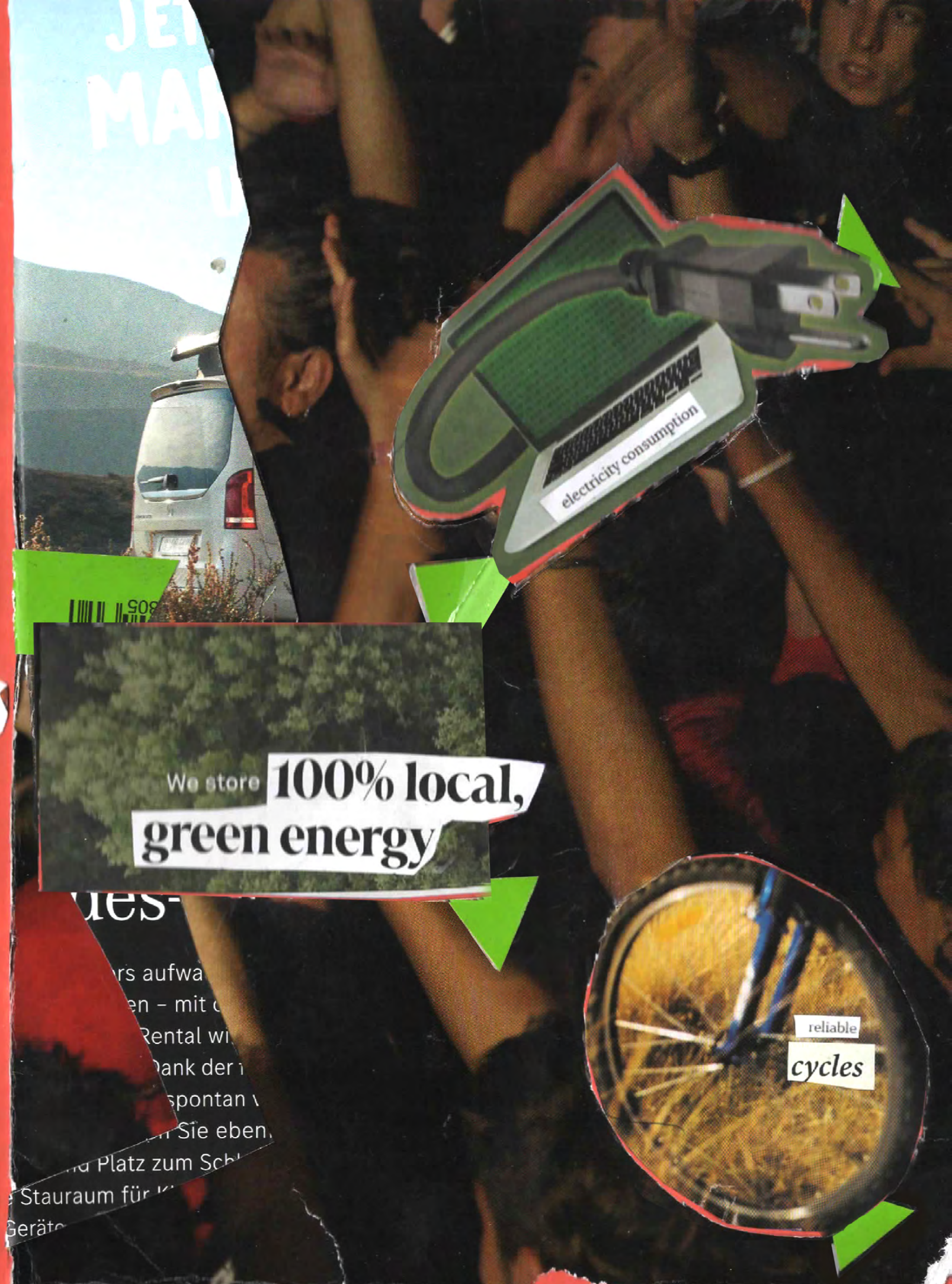
Hi, how can I help?



» FANCY «

electricity

hunters
community





rethinking electricity hellscape?



solved by scaling powerful?

Infrastructure

demand

PLAYING

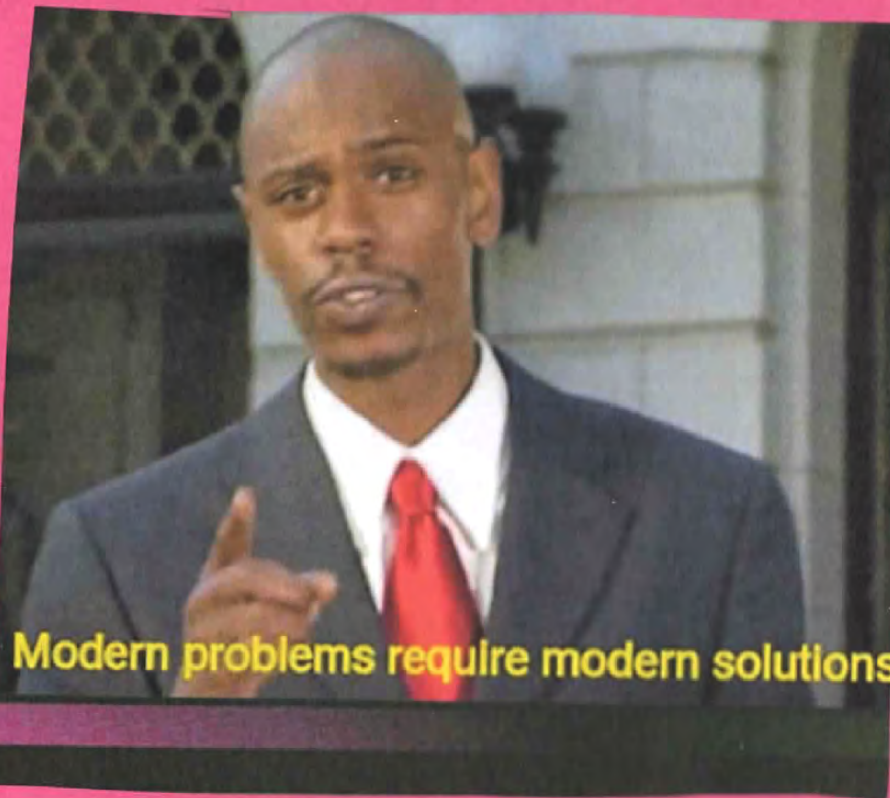


RIGHT

alone may be inadequate

making electricity

from scratch



Modern problems require modern solutions

INFRA- STRUCTURE

AI tools may seem purely virtual, living inside your phone or browser and supported by cloud-based computing processes. These cloud-based data centres that power AI-driven software and services seem 'invisible' because they are often hidden away from public access and view. But they are there when you start looking for them — drawing on vast amounts of local resources to power and cool their servers.

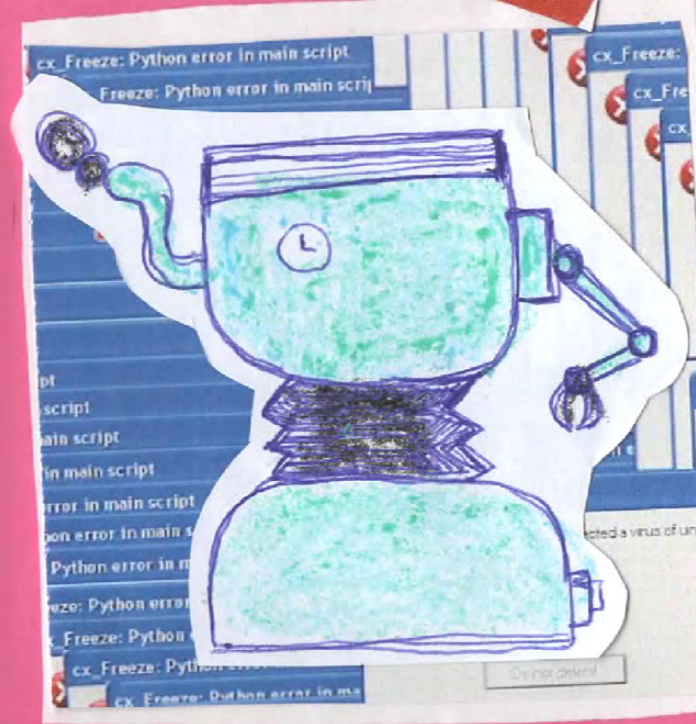
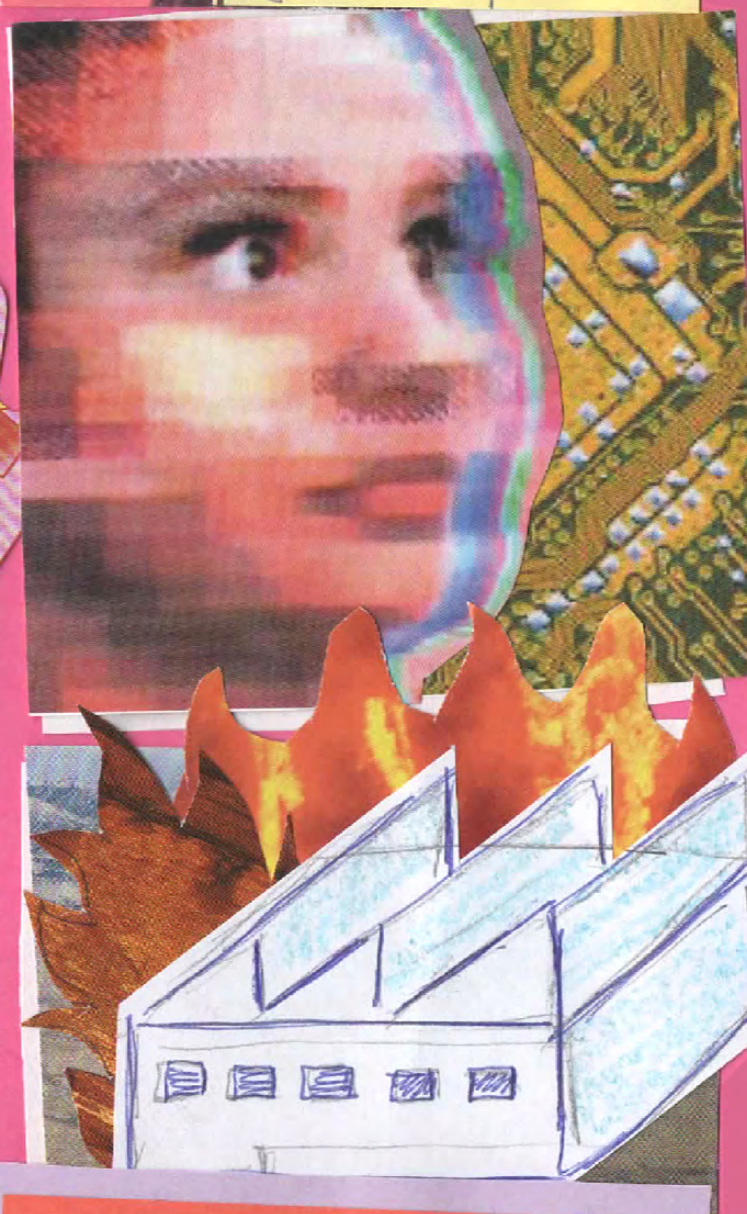
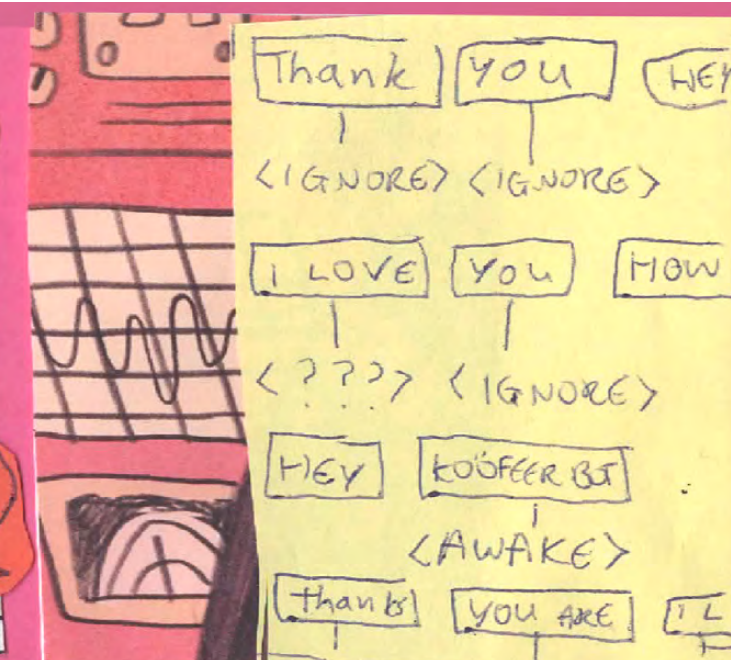
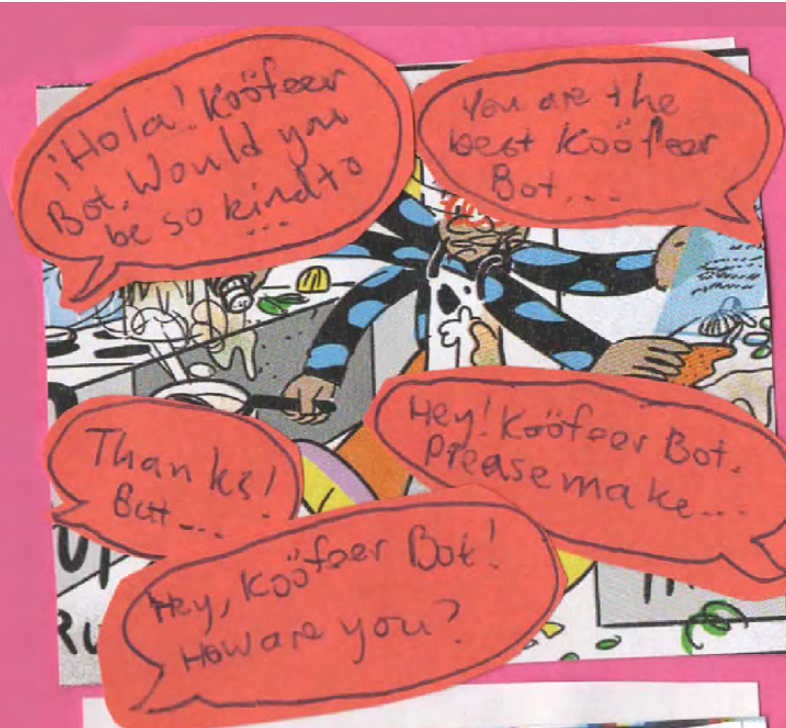
AI tools depend on a vast distributed network of physical infrastructures—servers, computer chips, copper wires, fibre optic cables, data storage centres, and more.

How difficult is it to spot hidden AI infrastructure in your vicinity? Is there a data centre near you doing cloud-based computation for your favourite AI chatbot?



BOT

10 404



MEANWHILE AT
THE KÖÖFEER DOT(C)
DATA CENTER



die Natur

Wie
Schmecken
Daten?

LIVING
ARCHIVES

vergisst

nicht

Urban Data

GAr Den!

RESOURCES

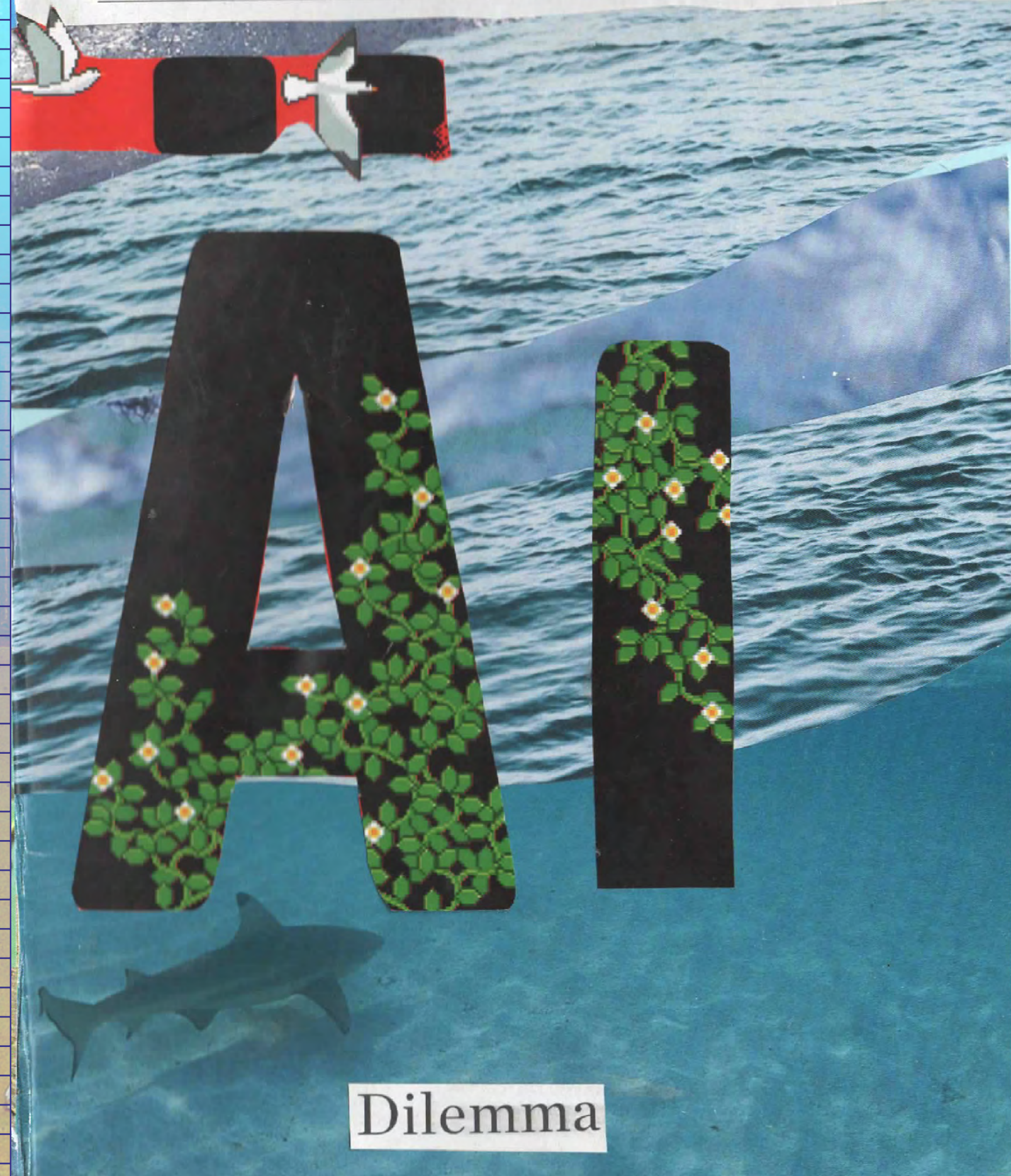
AI technologies often run on microchips made up of silicon, copper, gold, tin, cobalt, and rare-earth elements like dysprosium. But when we use Google services, or tools like ChatGPT, we rarely think of the different places the minerals used to run these services come from.

AI has a body that stretches across multiple continents. Is it possible to trace its invisible journey?

Once these minerals are processed into computer components – gold connectors on silicon circuits, copper wires, nickel transistors, steel or aluminium server cases – they need to be constantly kept cool while running energy-intensive computing processes. And the cheapest way to keep them cool is through using water.

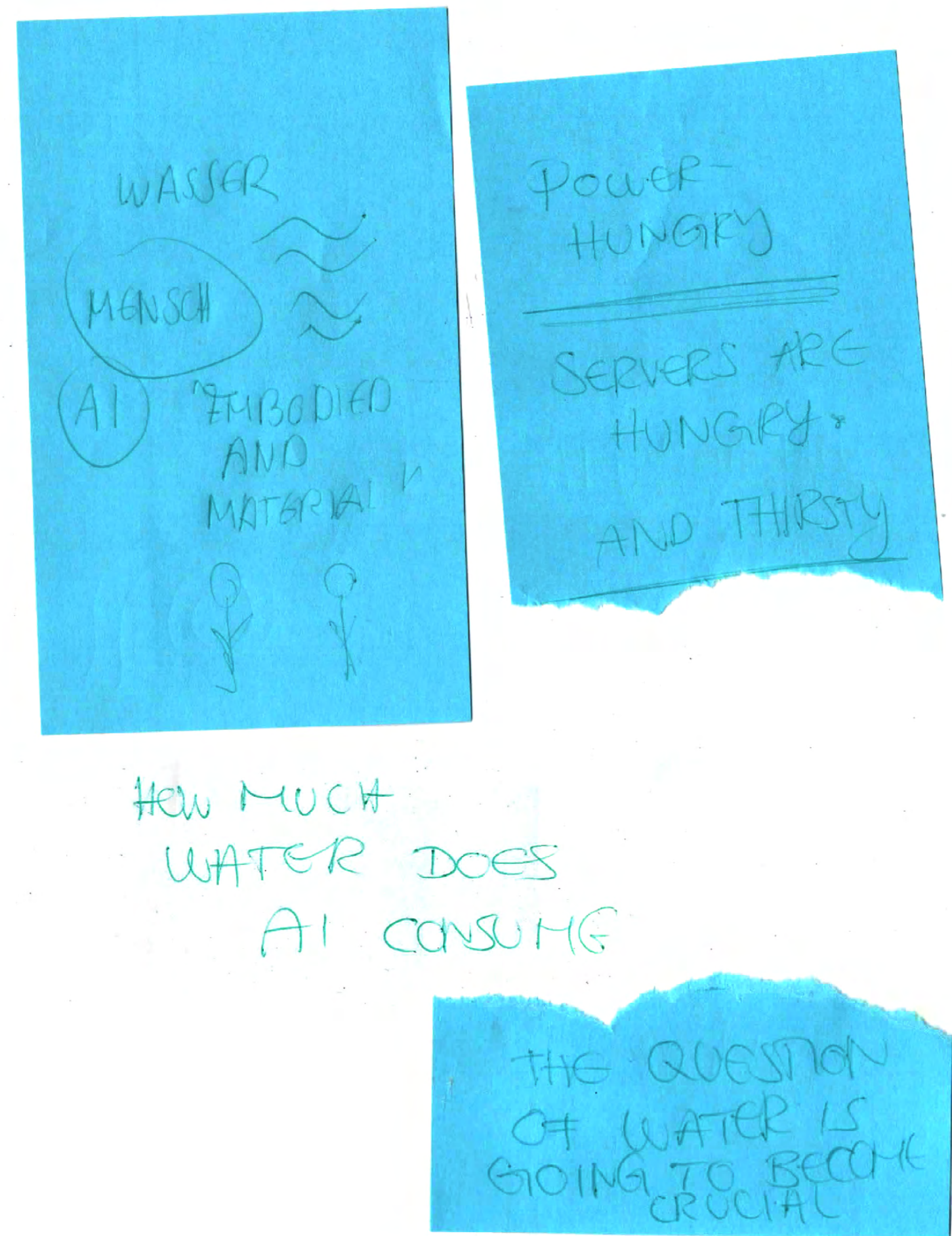
Though AI doesn't have an organic body — it does get extremely thirsty! How do we reconcile the use of our digital AI tools with the vast amount of physical resources required to make them run?

WAS MACHT EIGENTLICH ... **SCHLAUE**





Late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert. — Donna J. Haraway



Speculation
endliche Ressource
+ Visualisierung

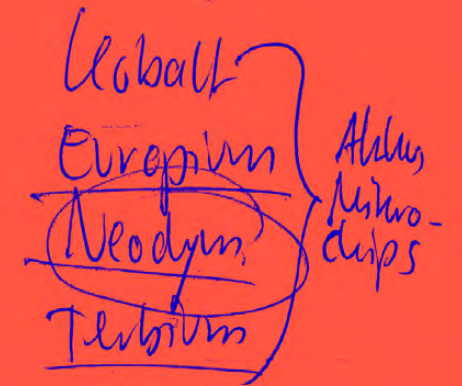
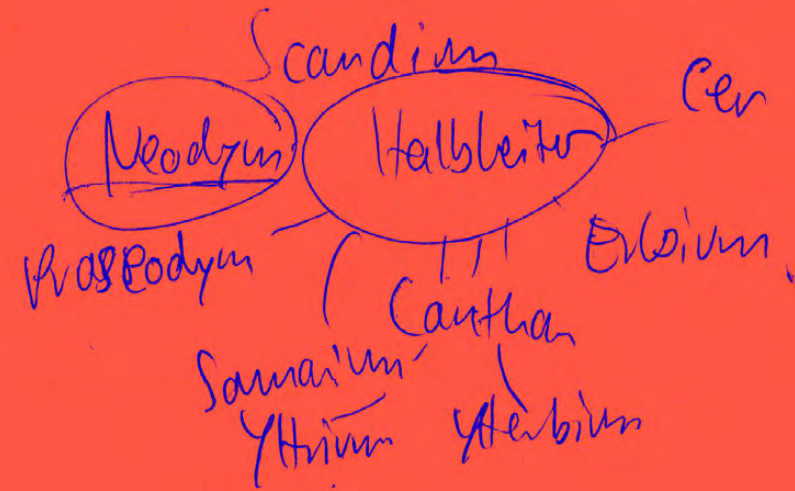
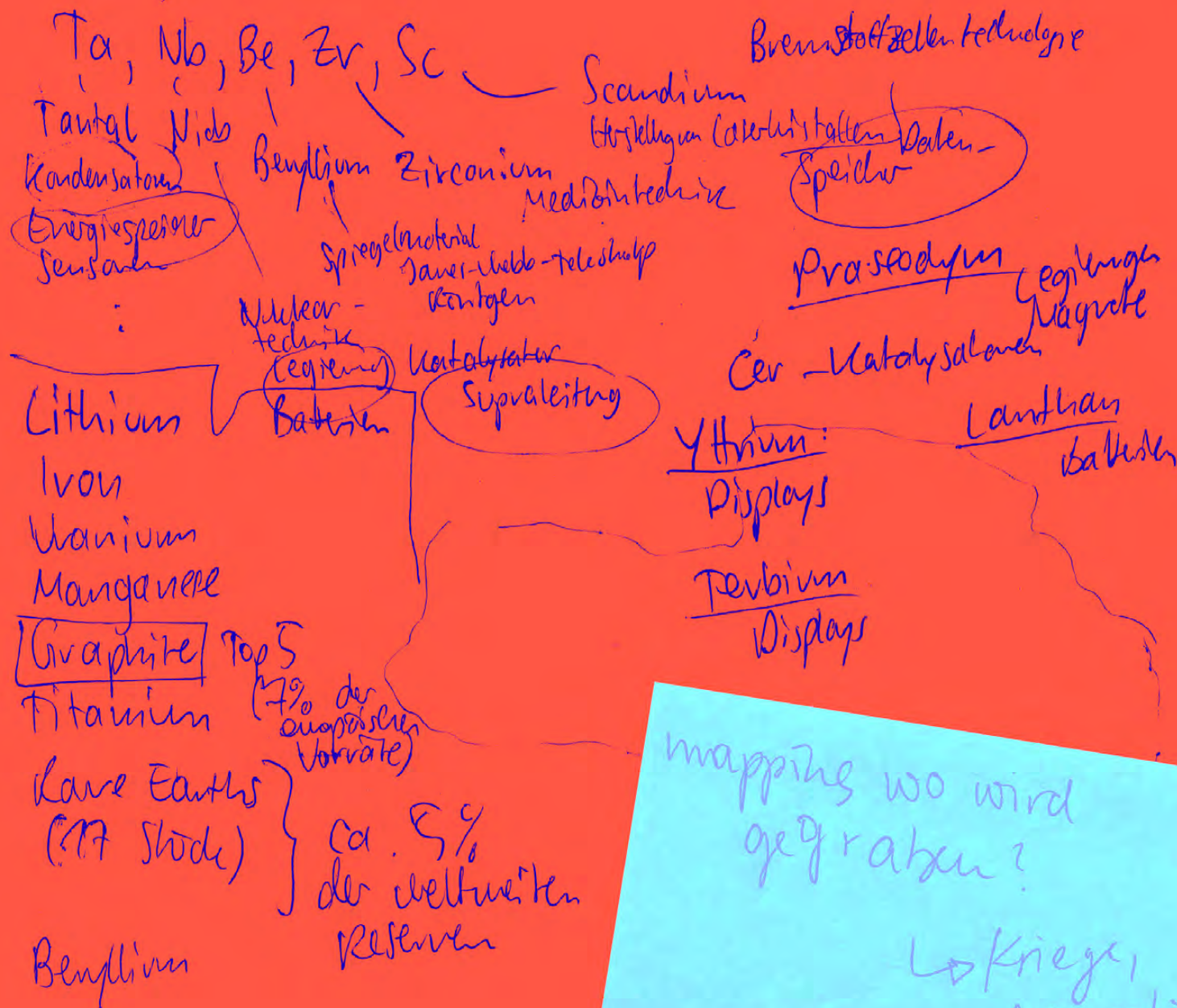
40%
der
Metalle

Russland
kontrolliert
aktuell
20% der
ukrainischen
Bodenschätze

725% des
elektronischen
Abfalls wird
gemäß
recycelt

65,99%
fettere
Erden
↓
China

Quellen: • Euronews
• BBC



Semiconductor

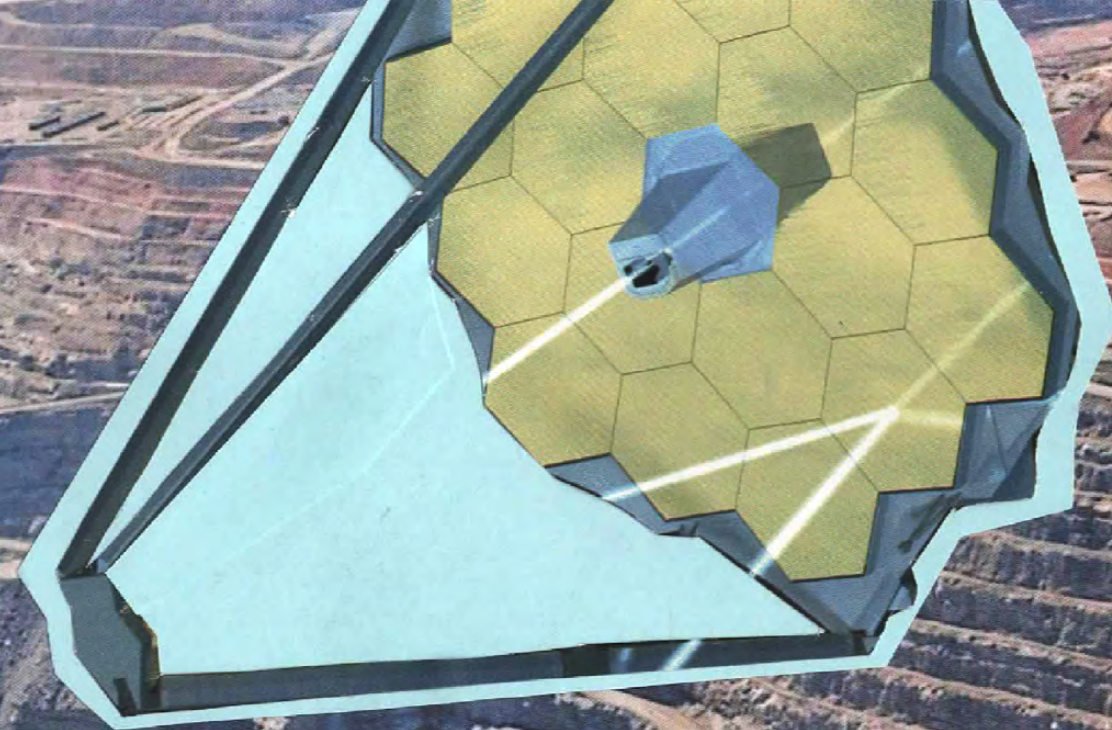
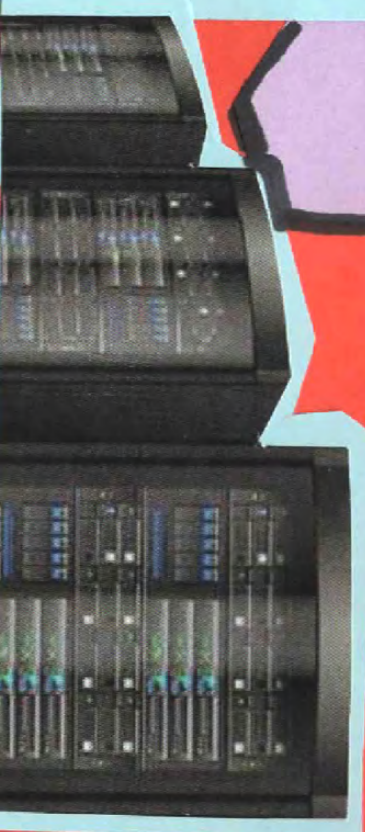
Li findet
Mineralienverkommen
66% Earth AI

Terbium **Tb**
 Eisen-Bor-Permanente Magnete
 → Computer

mapping wo wird
gegraben?
 ↳ Kriege,
 Mineralien
 (z.B. Ukraine)

formate
 Elemente
 chemische
 Beziehung/
 Moleküle
 Periodensystem
 Trace
 rare earths
 to AI elements

Minerals: US.-Ukraine resources deal may be a sign of things to come -CNBC



rare earth deposits in ukraine

Tb

=Terbium...in displays & computer



Sc

Nd=Neodym...in microchips and semiconductor



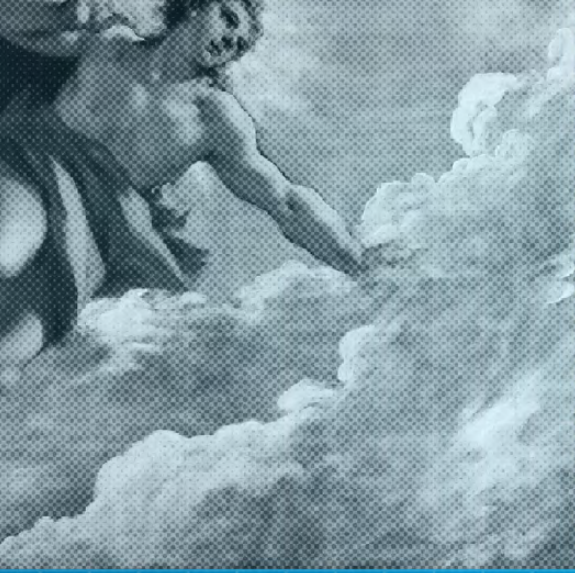
Scandium +also in: data storage ~what it looks like



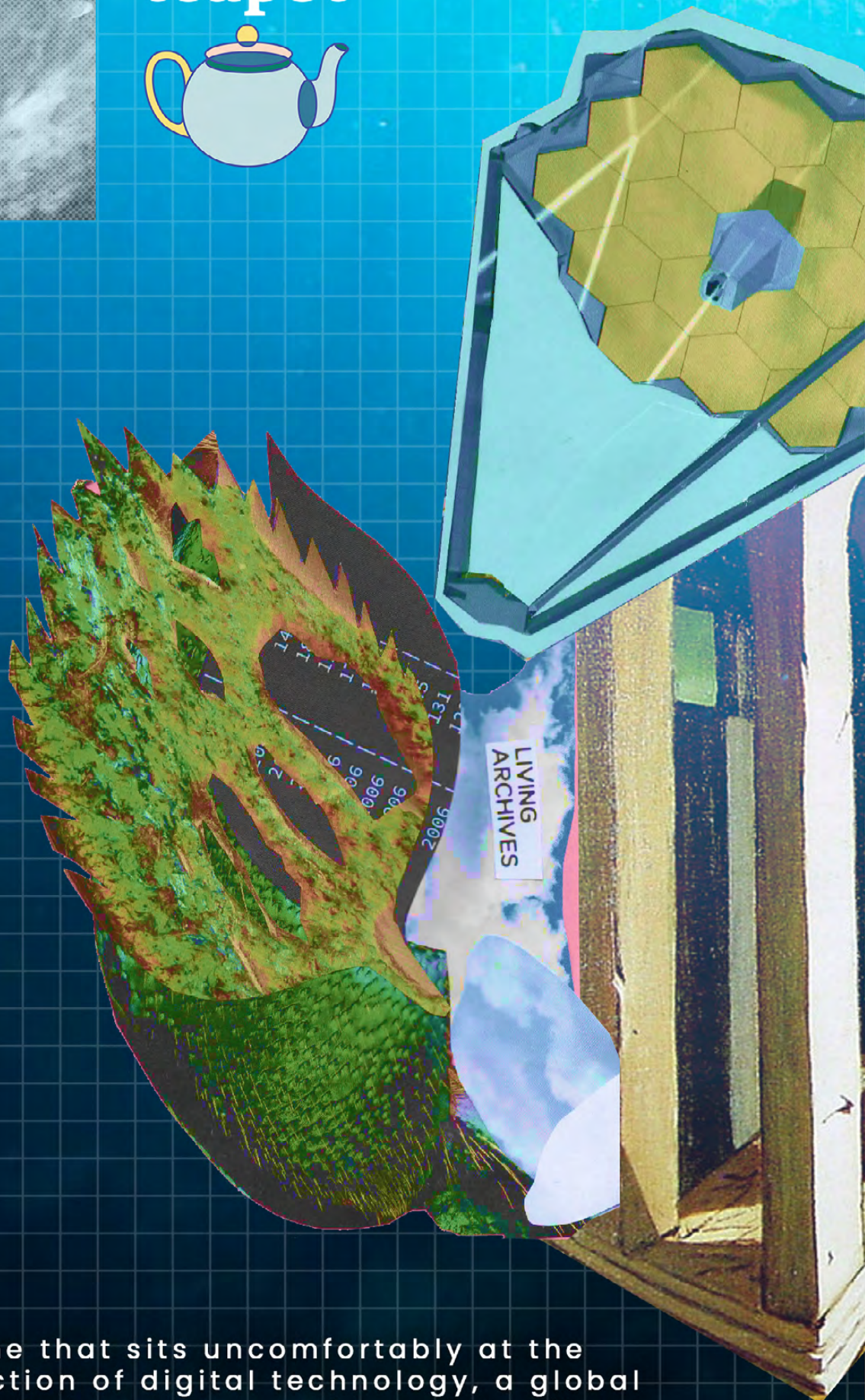
17

rare earth elements

Europium, Scandium, Cer, praseodym, Neodym, Samarium, Europium, Holmium, Yttrium, Lanthan, Promethium, Gadolinium, Terbium, Dysprosium...



internet teapot



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