

Chapter 1: The university

At the North-West University, the scientists and staff had already installed ladders to climb up to the hovering university, as well as ropes for those who were particularly strong and athletic. Then a long and tiring debate erupted to identify those guilty of the catastrophe. Luckily, most realised that placing guilt would not alter their situation. Instead, in a surprising but fortunate turn, the North-Westerners started to question their academic cultures and practices that seemed to prevent them from landing. They were ready to reflect and rethink. They collected traces of their academic life, like a job announcement, a recent flyer, a song they often sang, and a data base entry. They also wrote down conversations from the past, discussions and things worth noticing. These are all collected in this chapter. Together, they paint a picture of a culture that they all knew very well, but until now had barely noticed.

Excellence

HELL YEAH,
I WANT THIS!

JUST
300K €?



WHAT THE
PROFESSOR
WANTS, THE
PROFESSOR
GETS.



**North
~West
University**

PROFESSORSHIP AT NORTH~WEST UNIVERSITY

North~West University stands at the frontier of thought. We are a university where excellences meets conviction, and diversity is cherished.

We are looking for an excellent researcher with an RSI (Research Speed Index) above 85; extraordinary expertise; innovative teaching skills; outstanding research results; and a Nobel Prize (or equivalent: Fields Medal awardees are also invited to apply).

Come to work with us at the North~West University. We offer:

- a free office 7 days a week
- endless data storage space for simulations, experiments, and massively large language models
- a beautiful view of our ever-expanding campus
- drinking water with a PFAS concentration below 5 ng/l
- a pineapple a day to optimise your efficiency
- a personal thank-you note from the university Chancellor for each external funding above 250.000 €
- full autonomy and a yearly lump sum to purchase the newest equipment ahead of your academic competitors

In addition, you are eligible to exclusive high-quality administrative meetings shaping the future of the world for the greater good.

Aspire to fly! The sky is just level one to a stellar career with the North~West University. An excellent environment for excellent scholars.

Apply [here](#) to become an integral part of our brilliant institution.

Competition

HURDLING.



CONFIDENTIAL REPORT [REDACTED]

Document ID: ISR-HRDC/INT-RACE/[REDACTED]
Access Level: Tier-4 Authorisation Required
Title: Operational Notes on Strategic Monitoring of Research Speed Metrics and Competitive Scientific Productivity
Date: [Revised]
Prepared by: [REDACTED]

RSI—Research Speed Index (v4.2) - Access restricted to technical evaluators only
Strategic metric for evaluating research velocity. [REDACTED]

Indicator	Description	Ideal Value
GPI (Grant-to-Preprint Interval)	Days from funding to first public output	≤ 52 days
IRQ (Infrastructure Responsiveness Quotient)	Latency across technical and admin systems	≤ 0.85 ms
CAF (Citation Acceleration Factor)	Citation rate within first 30 days (adjusted)	Highest
RFR (Reflex-to-Funding Ratio)	Days to pivot after funding trend emerges	< 7 days
SVM (Synchronous Visibility Metric)	Multi-platform visibility within 48 hours	3+ platforms
TDS (Temporal Density Score)	Overlapping deliverables/ events per month	$> 4 =$ "intensive"

Interpretation Scale:

RSI ≥ 85 → Highest-acceleration zone
RSI 60–84 → Globally aligned condition
RSI 40–59 → Slower-than-expected
RSI < 40 → LPE (Low Performance Environment)

1. Source Allocation and Acceleration Effects

[REDACTED] has observed that unrestricted access to computational resources, human capital, and flexible financing structures disproportionately accelerates the Research Speed Index (RSI). Institutions operating under the regimes of continuous accessibility demonstrate an average 67% increase in RSI, independent of research field or thematic specificity. Acceleration often leads to change in project objectives and in timeline expectations.

2. Infrastructural Asymmetries

Quote from newly employed professor: “This university lags far behind my former university. The IT infrastructure is slow and still being set up. [REDACTED]. We have no time to lose. The competition does not halt. I will fall behind. I must move quickly. I must run”.

Asymmetric infrastructure access exacerbates the race at the top: Researchers working in resource-constrained environments experience increasing workloads to achieve short-term speed advantages within academic competition. Such practices are associated with long-term institutional costs, e.g. burnout, fragility to change of staff. Therefore, RSI thresholds should be evaluated in conjunction with certified infrastructure profiles (CIPs).

3. Recognition, Competition, and Global Comparison

Interview notes: “We are [REDACTED] laboratories in the world working in this field. We know each other, support each other, and share information. Yes, we compete, but it’s a friendly competition. It’s how it should be.” Mutual visibility among high-performing laboratories often results in competition based on collaboration, the so-called peer-to-peer competition (P2PC). Global RSI calibration remains sensitive to such “friendly competition” areas.

4. Project Timelines as Soft Competition Structures

[REDACTED] in project cycles (grants, calls, deliverables, funding renewals) function as scientific accelerators. Progress becomes dependent on temporal criteria as much as epistemic criteria.

Early-career researchers report increased anxiety due to RSI mismatches between project demands (PD) and infrastructure realities (IR).

Recommendations:

1. Align RSI thresholds with certified infrastructure profiles (CIPs).
2. Formally distinguish between P2PC, based on mutual visibility and collaboration, and competition driven by speed metrics in evaluation rubrics.
3. Expand RSI literacy modules in doctoral and student programmes.

WHAT ARE MY
OBLIGATIONS HERE ?

COME ON,
LET'S GO
TO MARS



Progress

ResearchRegistry

Help
 Logout

Expedition title		FARTHER	
Start date	2027	End date	2028
Follow-up project	Mars expedition	ID	ISGZ8204J
Team	Prof. Ace		Prof. Chevalier
Costs	3.000.000 €		
Scientific obligations⁹			
Volume of data	55 Zetabyte	Long-term storage	Eternally
Land occupied	Asteroid Ace (named during the expedition)		
Efficiency	1 2 3 4 5 6 7 8 9 10		
Ethics monitoring			
Flag planted	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Scientific progress	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Planetary obligations reflected	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Period	Data collected	Scientific status
8	0	10
9	5	15
10	10	20
11	15	25
12	20	30
1	25	40
2	30	45
3	35	40
4	30	45
5	35	50
6	40	55
7	55	75

Expedition photo

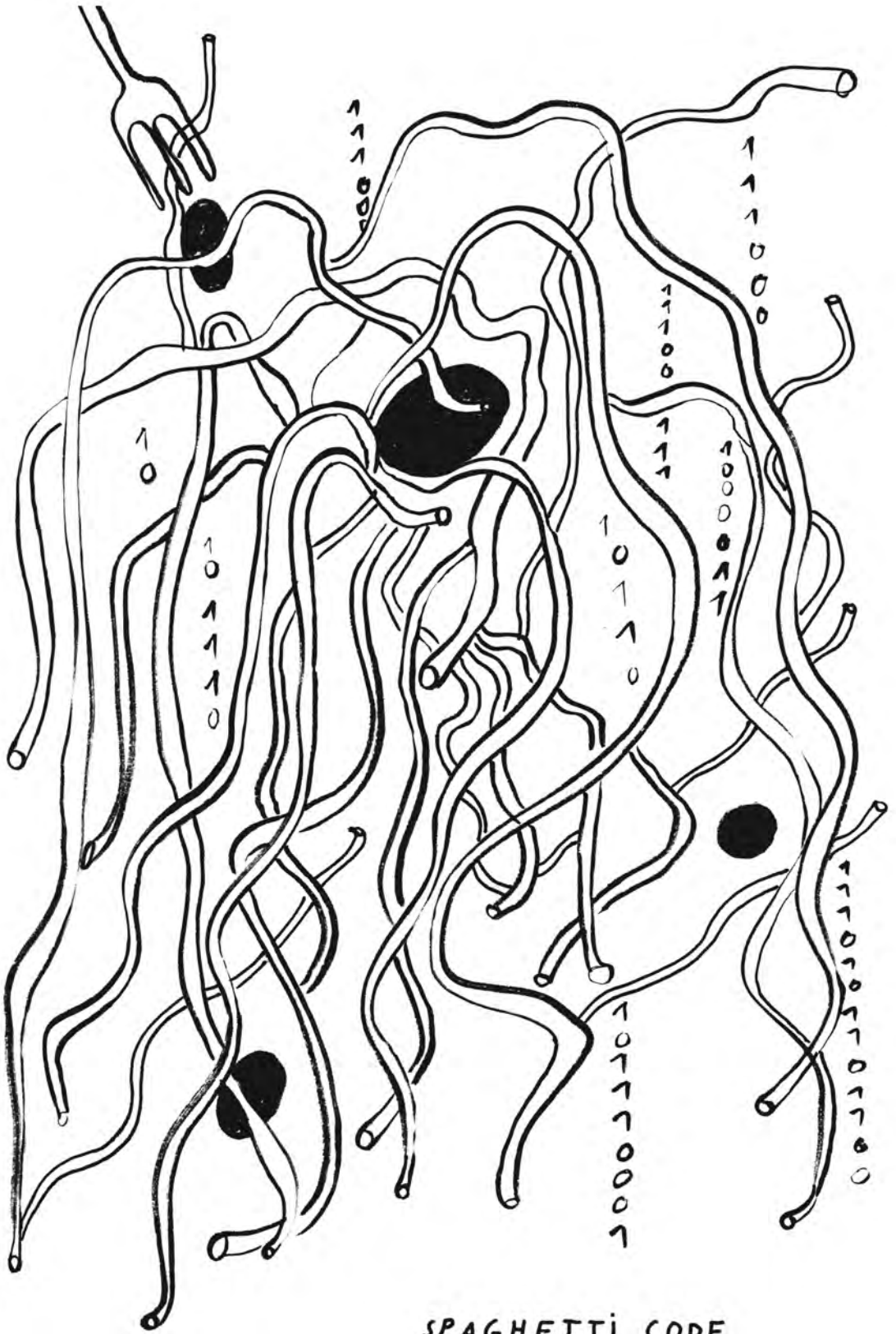
9. Max Liboiron et al. (2021) emphasise that members of a community or an organisation have specific obligations related to this membership. Such obligations sometimes make it difficult to establish ethical relations.

25

<https://doi.org/10.14391/9783839404515-017> <https://www.inlibra.com/doi/epub> - Open Access -

Precariousness

```
10 PRINT "You are sitting on an office chair in a room with
artificial lighting, looking at a screen in energy saving mode,
dozing off. This is your new office. It has a sign on the door that
says: 'PhD candidate'."
20 INPUT "Do you wake up the computer? (yes/no)"; A$
30 IF A$= "yes" THEN GOTO 100
40 IF A$= "no" THEN GOTO 200
50 GOTO 10
100 PRINT "You touch the keyboard. The computer starts to hum
audibly and the external screen lights up. You have been asked
by your supervisor to write a simulation to test a research
hypothesis. You type and the BASIC interpreter pops up. It holds
inherited code from earlier PhD students, whose contracts ran out.
It seems to have an excess of lines and loops. The simulation
requires 1 MWh to run and emits 200 kg CO2. You are not prepared
to do this. Coding is rather new to you, as it was to the PhD
students before you, and you don't understand this code."
110 INPUT "What do you want to do next? (1 = go online to look
for snippets of code, and ask some LLMs for help/ 2 = start
typing)"; A$
120 IF A$= "1" THEN GOTO 100
140 IF A$= "2" THEN GOTO 200
160 GOSUB 500
120 IF A$= "1" THEN GOTO 300 ELSE GOTO 400
200 PRINT "You start typing. Symbols, letters, and numbers appear
– parts of code someone in precarious positions before you wrote.
You have no clue how to read this."
210 INPUT "Do you want to read the documentation? (y/n)"; A$
220 IF A$= "y" THEN GOTO 300
300 PRINT "There is no documentation on this code. The PhD
students before you got new jobs, they don't answer your e-mails."
310 INPUT "A voice asks: 'Do you understand the problems with
spaghetti code?' (yes/no)"; B$
320 IF B$= "no" THEN GOTO 330 ELSE GOTO 300
330 PRINT "spaghetti code (noun): a slang term for an unruly,
messy style of coding that often produces unnecessary routines,
extra loops, consumes excess energy and overflow of CO2 emissions.
Spaghetti code can break any IT infrastructure as it poses several
challenges. If the code does not follow established programming
conventions it might be harder to parse for another person looking
at the code. Maintenance is more burdensome. Idiosyncratic code
is harder to fix and in a worst-case scenario it becomes unusable
for any future reader, human or machine. Spaghetti code would
need close documentation. As a PhD student you don't have time for
that, your contract runs out soon."
340 RETURN
```



SPAGHETTI CODE

Excess



COMPUTING INFRASTRUCTURE MARKET



- Now Open



Come and take what you want:

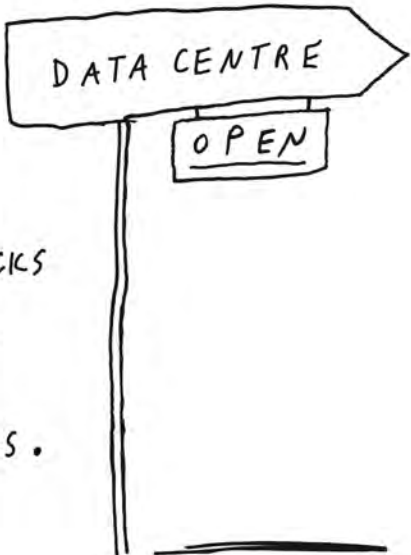
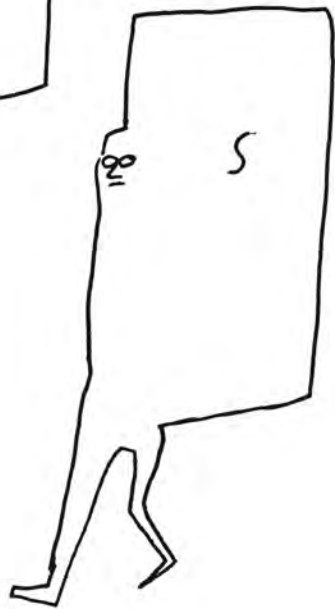
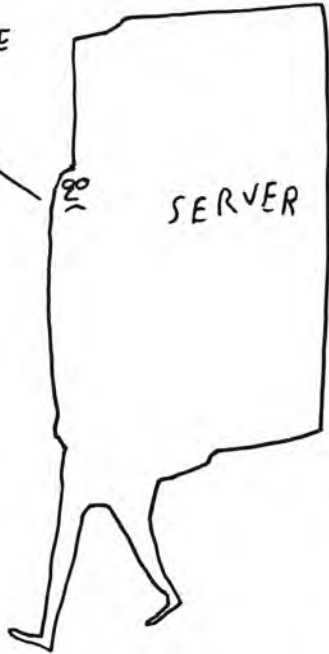
- Find the computing infrastructure you think you need—and more
- We have hundreds of surplus servers, your surplus
- Premium brands, only the best

NEED OUR RULES:

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- The merchant will love you. Just scan and grab.
No charge, it's all taken care of
 - Once picked up, no returns
- Post-use satisfaction survey strongly encouraged
(we love acknowledgement!)



i CAN TAKE CARE
OF MY DATA.



DATA
MAVERICKS
AVOID
DATA
CENTRES.

Delegation

We store the data on local university servers which makes access simple and fast. Each scientist treats it like a personal folder on their own machine. That's the idea: local, familiar, reliable.

But then a professor deletes everything. It happens.

Luckily, we can usually restore it from the server, that's why some of us insist on keeping the data 'on site'. A researcher, an IT officer, or someone else will get to it quickly and fix things. It's convenient.

Acceleration

Song of the Accelerated Knowledge Centre



*We rise with bits, we move with bytes,
We lift the files, we sort the lines.
The terabytes stand—massive and clear,
No longer a weight, just benchmarks, so near.*

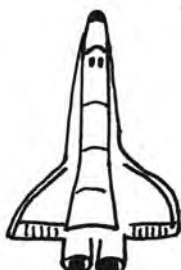
*Each second is logged, each value preserved.
Disturbances mapped, delays archived.
The sciences grow—line by line,
Through folders named and access refined.*

Chorus:

*If motion stalls: restart the thread.
Advancement is really
a well-indexed dataset.*



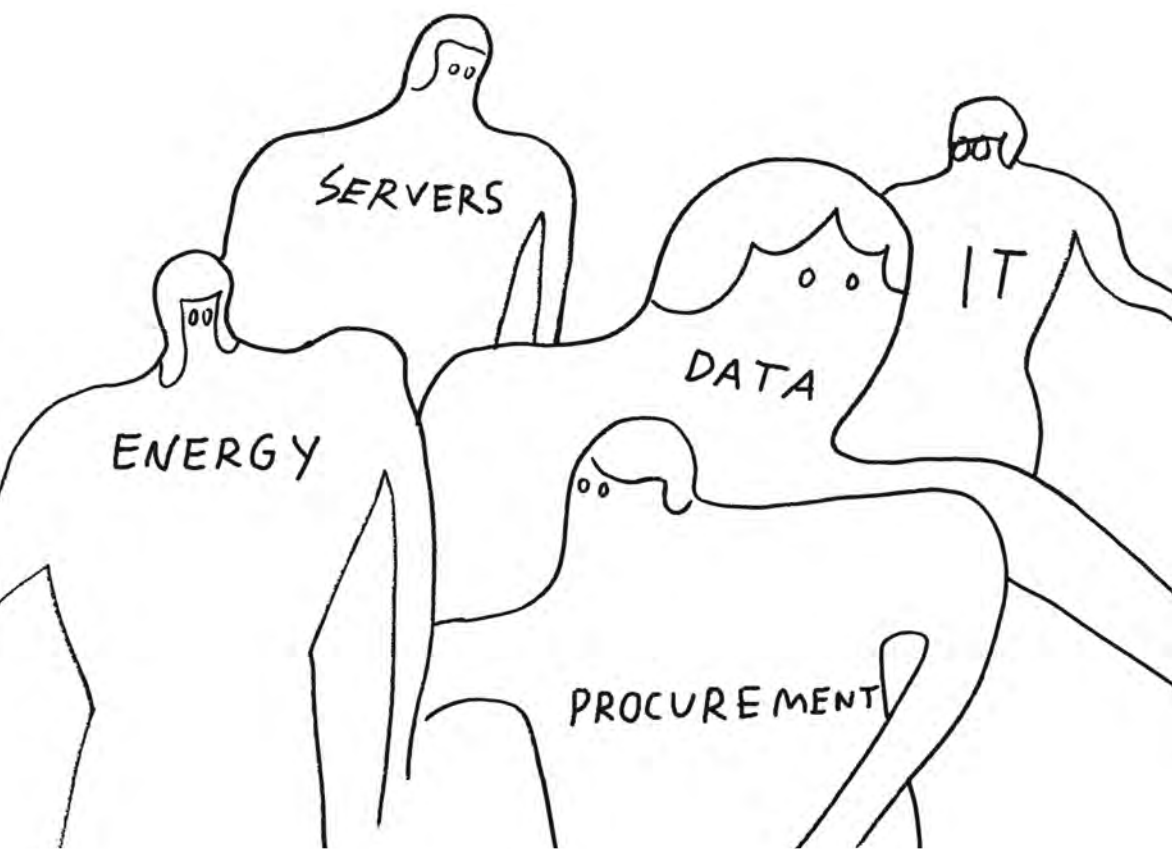
HEAVY DATA ISSUES



1 SEC OF
A COLLIDER

= 1 TERRA-
BYTE

EVERYONE
CAN FIGHT
THE CLIMATE
CRISIS!



Effortlessness

Dramatic play at the annual university party.

A boardroom. A MAN stands at the head of the table, arms wide, smiling. FACULTY and ADMINISTRATION sit.

MAN: (*whistles*) Synergy. That's the word. One word: Synergy. We're a constellation; no lone stars. (*leans in*) But here's the deal: The path is clear. We—yes, we—hold the levers. Not governments, not activists. Us. We're all in the same boat. Sure. But now we need to move to make the change.

A WOMAN clears her throat.

A PHONE buzzes—his. He glances, then silences it.

MAN: Trust the process. Trust me.
Trust the We. Synergy.

Lights fade. Just the empty, polished table remains visible.

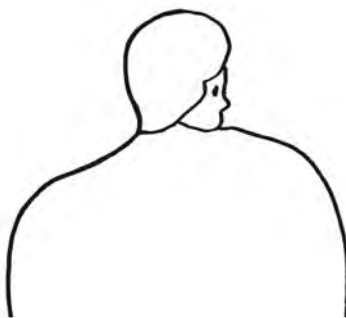
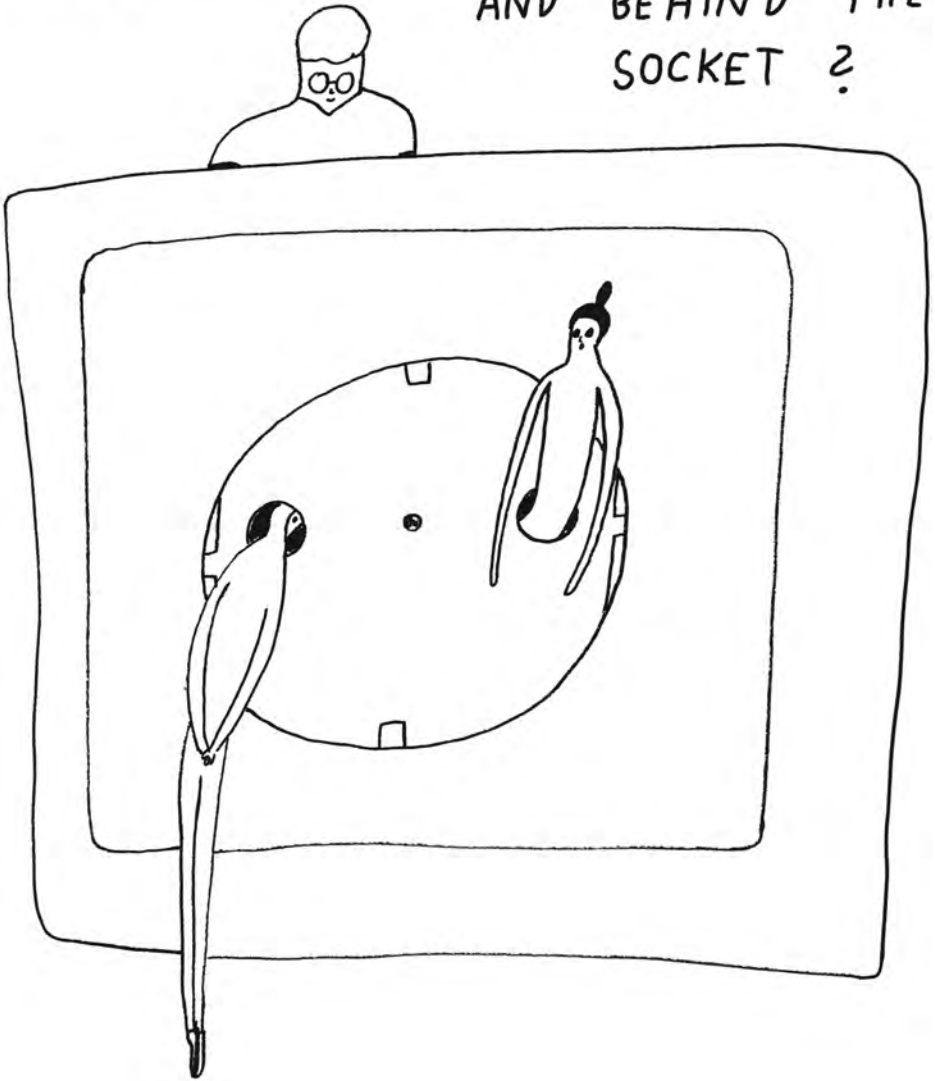
Curtain.

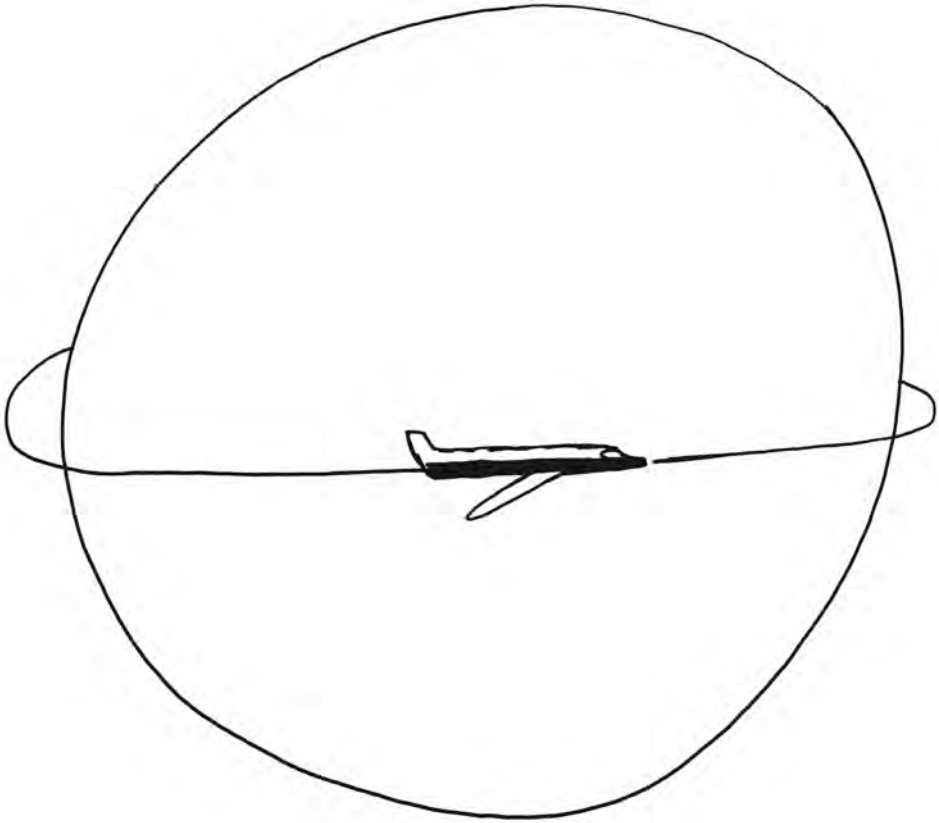
The audience applauds wildly, rises to its feet and starts intoning "SYNERGY; SYNERGY".

Order

A university is a place of difference. They take care to keep the differences sorted and separate. Infrastructure here, science there. For the order. Those taking care of strategies creeping into one hole, the operating crew peeping out of another. They plug in ideas and visions, and make it work—sure that it will work.

HOW DOES IT LOOK LIKE IN FRONT OF
AND BEHIND THE
SOCKET ?





PLANETARY BOUNDARIES ?
ACADEMIC EXCHANGE !!

Disconnection

Day 3, or maybe day 1 because just now, at 9.15 p.m., we finally reached the conference site. Ruhralia to Scryptan flight cancellations forced us to take a different plane, detouring through Hothere, where we waited fourteen hours. The arrival terminal's monitor showed a 46°C outside temperature, but thankfully, the airport and city centre were cooled to a pleasant 20°C. We went for a walk during our wait. After twelve hours on the plane, it was great to stretch our legs and enjoy the almost unreal view of glass, concrete and greenery under the geodesic dome. Those long-distance flights to conferences always do me in, and I wonder if it's all worth it.

It's great to get in touch with colleagues all over the world. Talks can also be heard online, but the exchanges in person over a cuppa during breaks, or at dinner in the evenings are not replaceable by screenings.

It's 3 a.m. I cannot sleep. I browse through a bunch of literature online on the topic of academic conferencing and sustainability. Already back in 2020, they quantified the fly-in, fly-out CO₂ emissions for one conference in California¹⁰. Roughly 28K participants flew around 285M km for this conference alone, producing 80K tons of CO₂. One conference. Flabbergasting. The sustainable university is a 'wicked problem' that can only be approached little by little; there are no perfect solutions. Each thinkable alternative has different impacts on different communities. Thus, a solution for one position might pose a problem for another. Notions of sustainability most often stick with dominant ideologies of enlightenment ideas of scientific progress and the reign of global capitalism. The North-West University has long worshipped climate colonialism. Appealing numbers on a piece of recycled paper. I think we need to get beyond sustainability – in contrast to mainstream and critical sustainability. We have to reinvent, not just reform the university as an institution. Stein writes:

“Hospicing the modern/colonial world would require identifying, interrupting, and learning from past mistakes in self-implicating ways, and repairing social and ecological relations, so as to clear space for the emergence of different, more responsible futures.”

Ah, that was a nice critical exercise, now I can go to bed and be ready for the conference tomorrow.¹¹

10. Milan Klöwer et al. (2020).

11. Sharon Stein (2023, 177).

Reproduction

We had been appointing controllers in all departments to watch over the energy consumption of the departments' data infrastructure and to collect consumption data. A finer-grained web of staff was now overseeing data infrastructure energy use, in all capillaries of the university; a means to save energy since no-one really knows which infrastructure consumes how much. First you need to know, then you can act.

Sometimes it appears that more data and more control don't solve the problem. It makes us keep doing more of what we've always done, generating more data, increasing our desire for control.

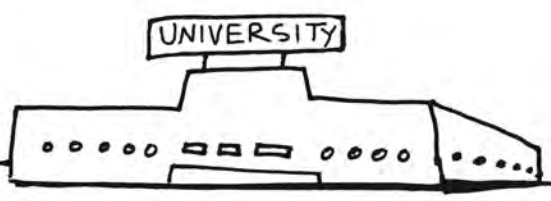
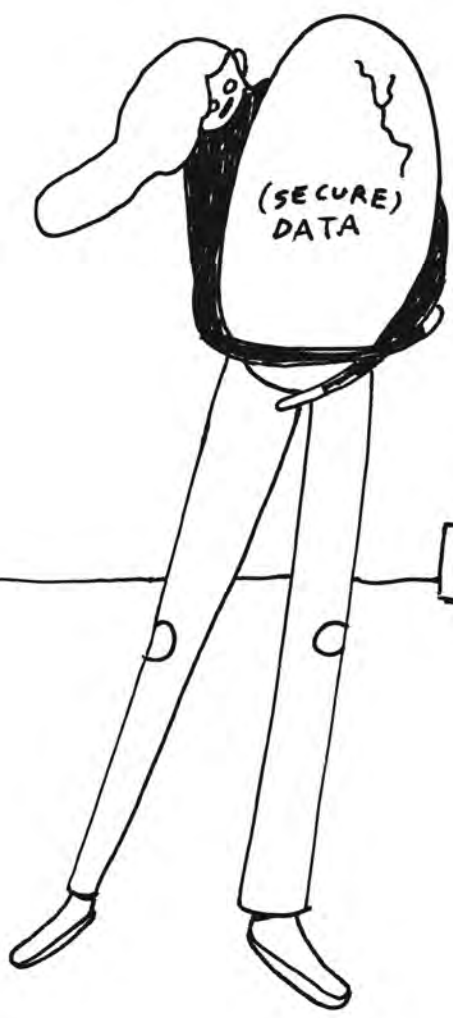
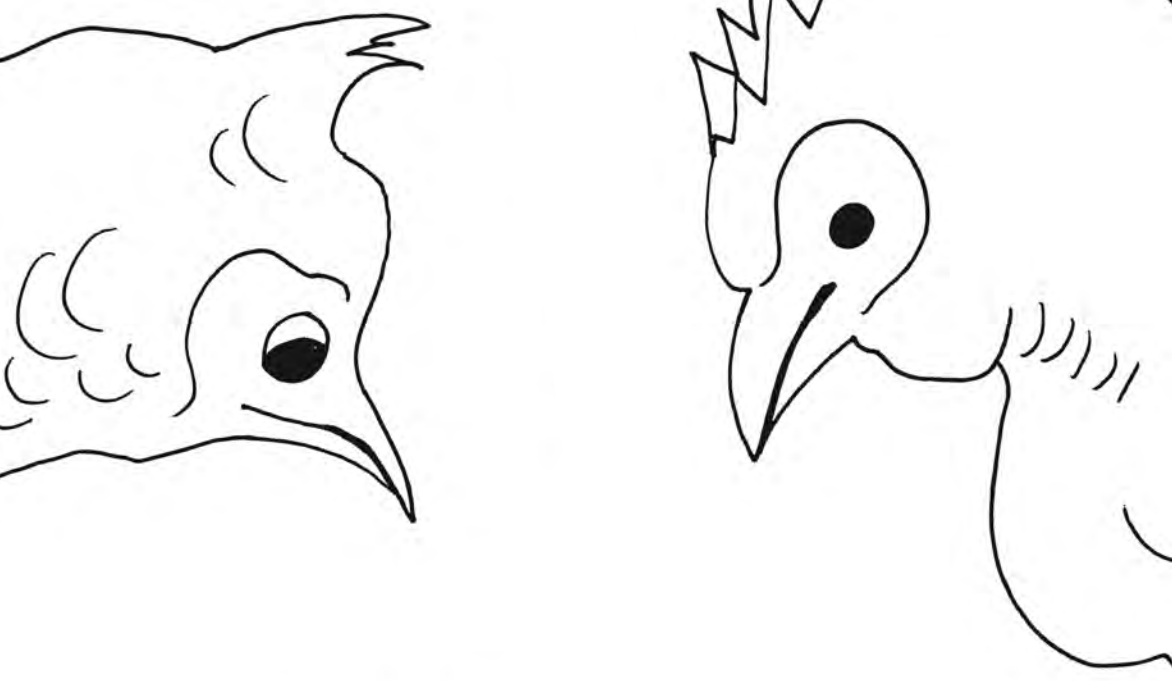
Those operating the data infrastructure are waiting for us to tell them what to do to save energy. But we don't know. The data doesn't tell us. They know. They are experts in data infrastructures, some even know what the scientists do. But they are waiting for us to tell them.

The fine-grained web of energy controllers and their collected data was good. Not that it saved us energy. But it made us notice the gap between controllers and operators.¹² Between head and hand, between tell and touch.

A mile away, the data centre operator is walking through the cooled aisles of server racks together with a physicist. They are chatting about how to arrange computing power for a new large calculation they are planning with the least cooling needed.

12. Matteo Pasquinelli (2017) discusses how the destruction of the planet through digitalisation is based on the foundational capitalist division between mental and manual labour, which creates a vicious circle of producing more and more machines for information and control, and the ever increased need for more information and control.





Sourcing

She collects a large volume of precious data.
She can hardly carry them,
she takes care to keep them warm.
They are cracking,
she rushes to bring them to the data farm.
Then, the sky is darkening.
Someone is anxiously watching
their captured data disappear.

Proportions

The
data
processed
at
the
North
~
West
University
were
out
of
this
w o r l d.¹³

13. In his book *Down to Earth*, Bruno Latour (2018) describes the attraction of reacting to the climate crisis by ignoring it. He calls this attractor “Out-of-This-World”.

SERVER

