

Manifesting the Manifesto: Digital Humanities and the Climate Crisis

Anne Baillot, Alexander Gil Fuentes, Kaiama L. Glover, Alicia Peaker, Torsten Roeder, Walter Scholger, Jo Lindsay Walton
DH Conference Tokyo, July 2022



Introduction

- Environmental footprint concerns professional activities => complex situation (limited “free” individual choices)
- Information Communication Technology: 1.8%–3.9% global GHG emissions
- Transport: ~14% global GHG emissions
- HER at large: travels, conferences, fieldwork, digital activities
- DH: digitization, computation, hosting, preservation

Starting a conversation on DH and the Climate Crisis

History of the Manifesto

- V1: <https://dhc-barnard.github.io/envdh/>
- V2: <https://dhc-barnard.github.io/dhclimate/> (winner of DH Award 2021 “Best exploration of DH failure”)

→ **You are welcome to comment on V2!**

Initiators of the Manifesto

- **Europe:** Anne Baillot/Le Mans, James Baker/Southampton, Torsten Roeder/Würzburg, Walter Scholger/Graz, Jo Lindsay Walton/Sussex
- **US:** Alexander Gil Fuentes/Yale, Kaiama L. Glover/Barnard-NY, Alicia Peaker/Barnard-NY

The Digital is Material

Any [digital] activity has environmental impact!

this concerns:

- Production – rare metal resources, human/child labor
- Use – energy for functioning, for maintenance
- End of life – limited recycling schemes

consider:

- Rebound effects due to digitization of activities
- Wealth of digital tools in DH
- Difficulty to measure precisely environmental impact

Working with computation-intensive resources

- Concerns: energy-intensive software, large datasets, large language model
→ Issue for AI
- Challenge: right proportion between potential benefit and computation power
→ Larger Models yield better results
- Finding a way to measure and report (carbon) cost of software & digital processes
→ Role of documentation of work steps

Preserving digital heritage

- Access to digitized heritage => environmental cost
- Availability in high quality: less accessible to low-income countries

→ why / at what cost 24/7 access?

- Balancing environmental weight of cultural heritage digitization and preservation

→ we need to ask ourselves what we are doing:

for what purpose, at what (environmental, social, economic) cost

Open Science

Ideal of giving maximal access

→ impact of technical choices, formats

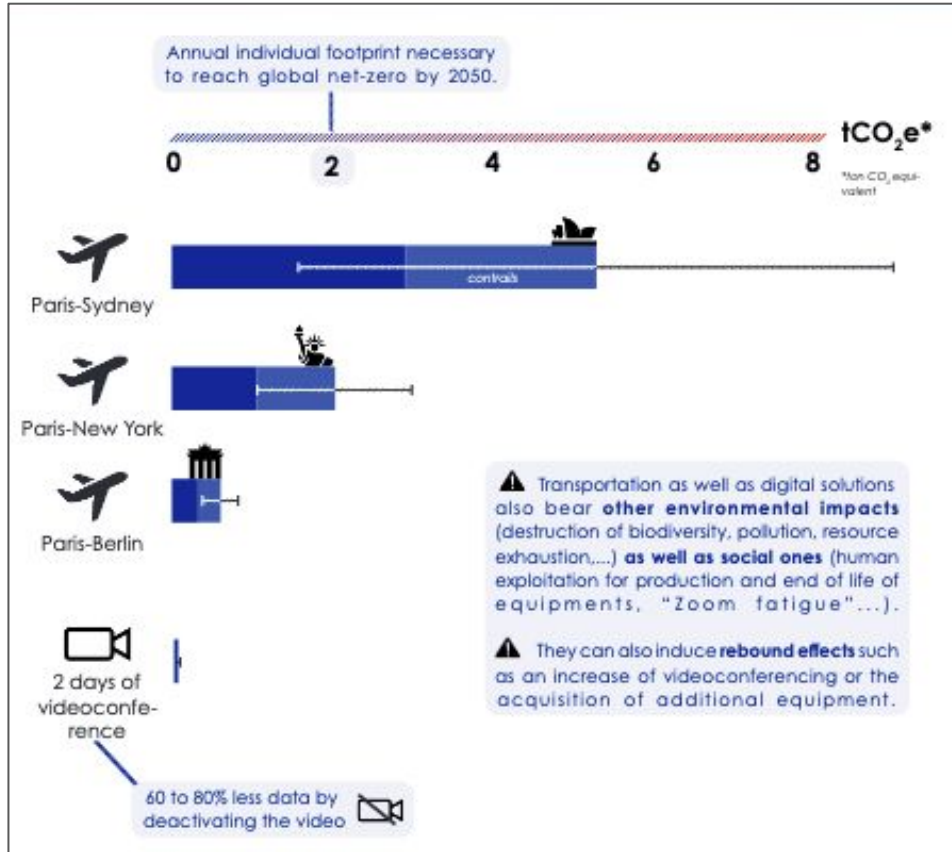
Variety of publication practices

→ Green OA greener than Gold OA

Role of common infrastructures/mutualizations

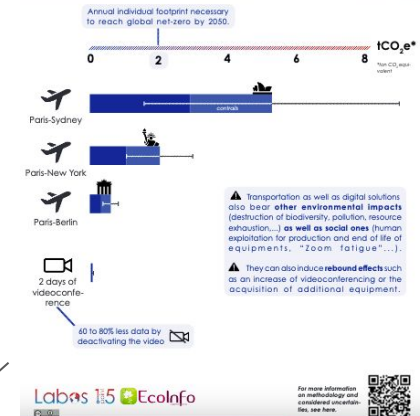
→ Goal: low-resource access, verification & reuse scenarios

Academic travels at large



A conference in Sydney, New York, Berlin : what do I choose ?

Let's reconsider our meetings and conferences

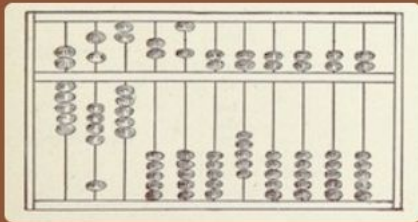


Inclusivity and low-resource technologies

Ideas and Inspirations:

- Minimal Computing: <https://go-dh.github.io/mincomp/about/>
- Solar Low Tech Magazine: <https://solar.lowtechmagazine.com/>

Minimal Computing



a working group of GO::DH

LOW←TECH MAGAZINE ☀

This is a solar-powered website, which means it sometimes goes offline ☀

New initiatives

DHCC: <https://www.cdcs.ed.ac.uk/digital-humanities-climate-coalition>

German “Greening DH”: <https://dhd-greening.github.io/>

French “Humanités Numériques et crise environnementale”

→ common projects, publications, events

Achievements of the DHCC

- A Researcher Guide to Writing a Climate Justice Oriented Data Management Plan. DHCC Information, Measurement and Practice AG (eds.), 2022
<https://doi.org/10.5281/zenodo.6451499>
- DHCC Toolkit
<https://sas-dhrh.github.io/dhcc-toolkit/>
- DH Benelux workshop
<https://cradledincaricature.com/2022/06/10/my-dh-climate-actions/>

Awareness-raising needs in the DH community

- Manifesto → starting a discussion
- following initiatives: best practices (mostly individual level)
- gather reliable information
- Institutional leverage: how, with what goal
- Question of the role of DH within the SSH at large: more energy-intensive, more likely (technically+based on the discipline's interests) to reflect on the use of digital resources and devices (responsibility?)

What do we want DH to become?

- improving our practices is good
- slowing down our overall activity is better!
- means: relevant academic impact with less energy consumption is possible
- institutions: include this dimension in evaluation, funding and career schemes