

Untangling the frictions and cohesions between (digital) democracy and open source

By Anne Lee Steele

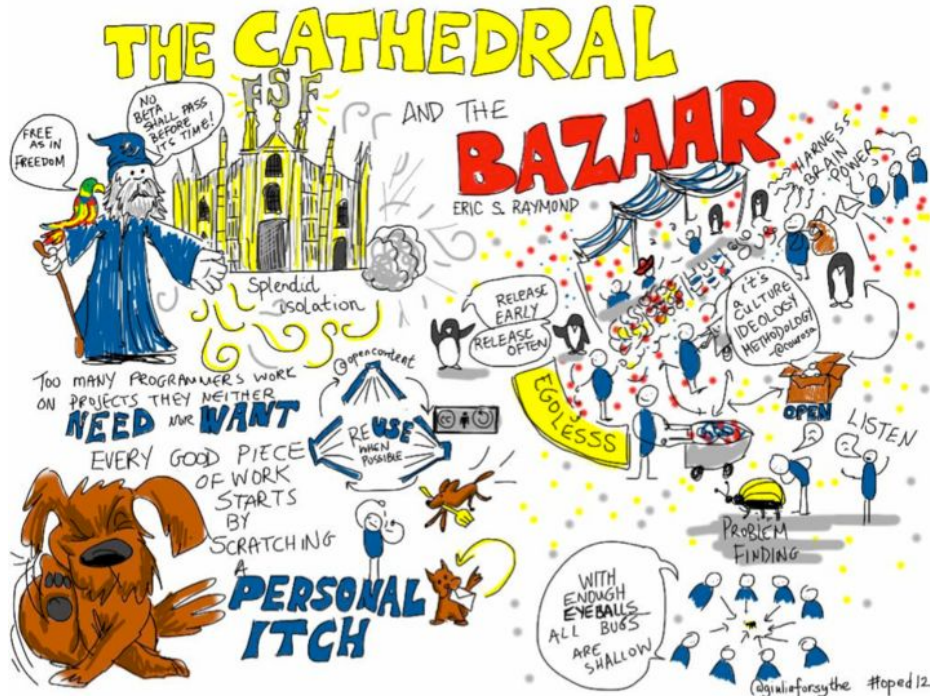
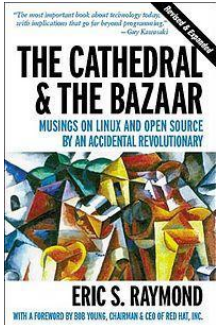
The Alan Turing Institute

14 June 2023





Free/Open Source (1970s-2000)



GNU/LINUX IS FREE!!



GNU/LINUX

BUT IS FREE AS FREEDOM OF SPEECH, NOT AS FREE BEER...



DONT TREAD ON ME



Open Movements: 2000s

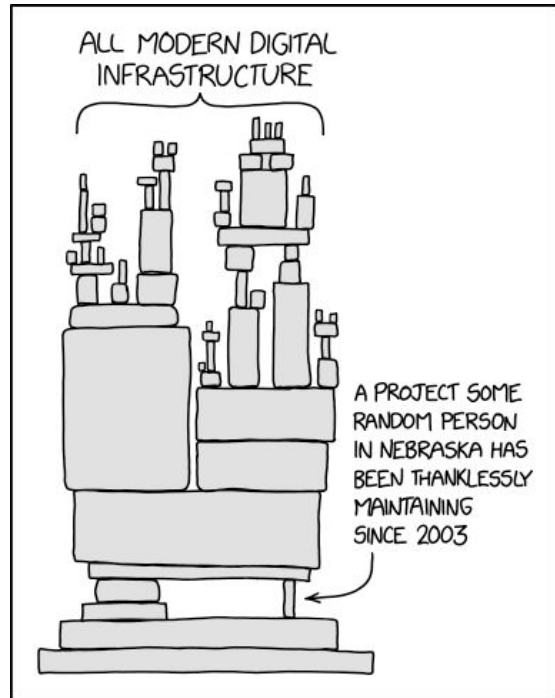


“Information is power. But like all power, there are those who want to keep it for themselves. The world’s entire scientific and cultural heritage, published over centuries in books and journals, is increasingly being digitized and locked up by a handful of private corporations.”

– Aaron Swartz, Guerilla Open Access Manifesto, 2008



Commercialising Open Source: 2010s



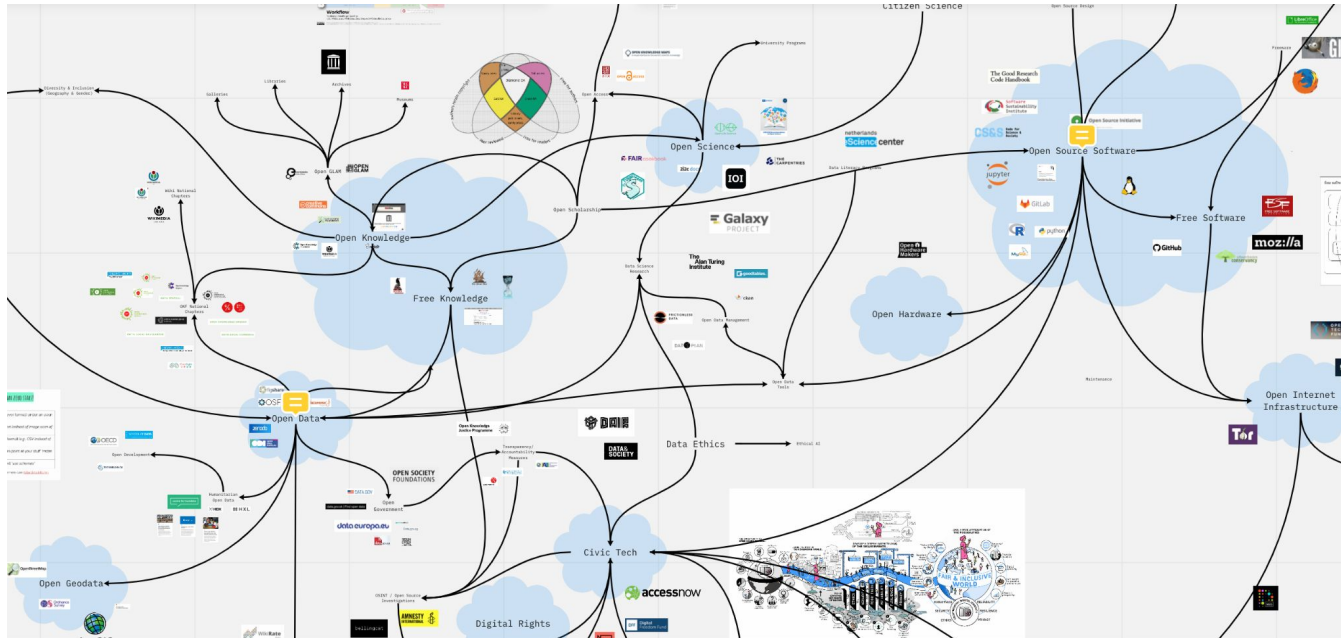
Joining forces with IBM gives Red Hat the opportunity to bring more open source innovation to an even broader range of organizations and will enable us to scale to meet the need for hybrid cloud solutions that deliver true choice and agility.

Jim Whitehurst
president and CEO, Red Hat





Open Source Today: 2020s - present



[https://tinyurl.com/
open-ecosystem](https://tinyurl.com/open-ecosystem)



Global Participation in Open Source Software



World map of open source contributions, 2021 (Meyers et al)



Histories of open source: historical frictions

Free software vs open source

- ◉ Corporate vs Non-commercial
- ◉ Grounded in licensing frameworks (copyright, IP)
- ◉ “Free as in freedom, not as in beer”

Grassroots movement vs growing institutionalisation

- ◉ Managing maintenance vs ‘innovation’
- ◉ Increasing commercialisation

Technical infrastructure vs wider social process

- ◉ “Open for what, open for whom?”

Participation in & facilitation of global open source projects



OpenStreetMap



WIKIPEDIA
The Free Encyclopedia



Humanitarian
OpenStreetMap
Team



Missing Maps

Putting the World's Vulnerable People on the Map



American
Red Cross



BritishRedCross



Humanitarian
OpenStreetMap
Team



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Foundation



Home + About us + Impact

Changing the culture of data science

The Turing Way is an online handbook – and global community – dedicated to fostering gold-standard reproducible research. It's a cultural movement with the potential to transform data science





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“Global Village” (Digital) Democracy

Science

- Historically funded by governments → Undergoing increasing privatisation
- Public-facing, (originally) non-for-profit
- Crisis of Reproducibility (Trust)

Technology

- Funded by Government, Private sector, NGOs, Philanthropy (or developed by volunteers)
- Application & implementation of research
- Many crises (Trust, Privacy, Access)

Open source



OpenStreetMap



Missing Maps

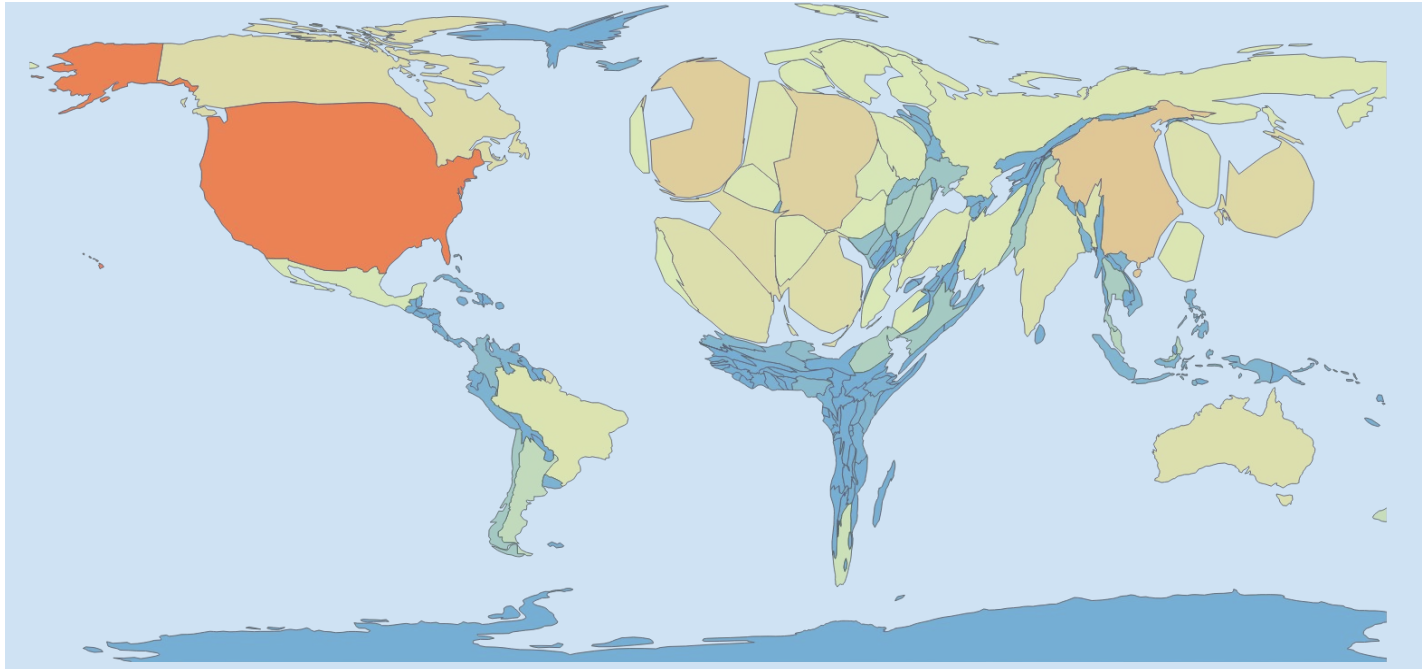
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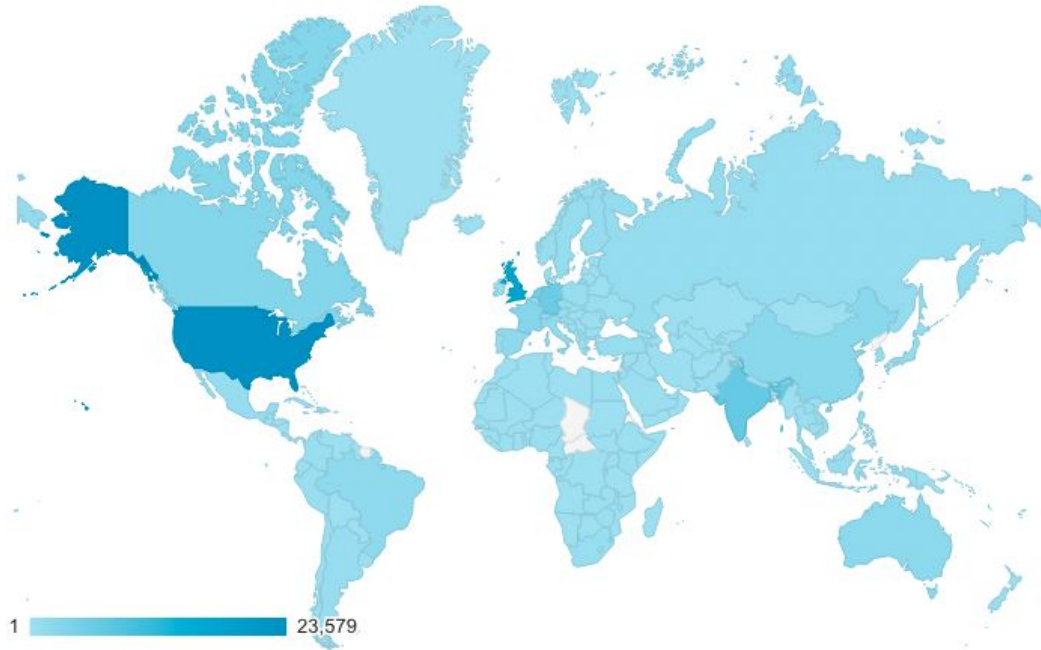
Global production of (scientific) knowledge



World scaled by number of documents in Web of Science by authors living there, 2011 (source: Juan Pablo Alperin).



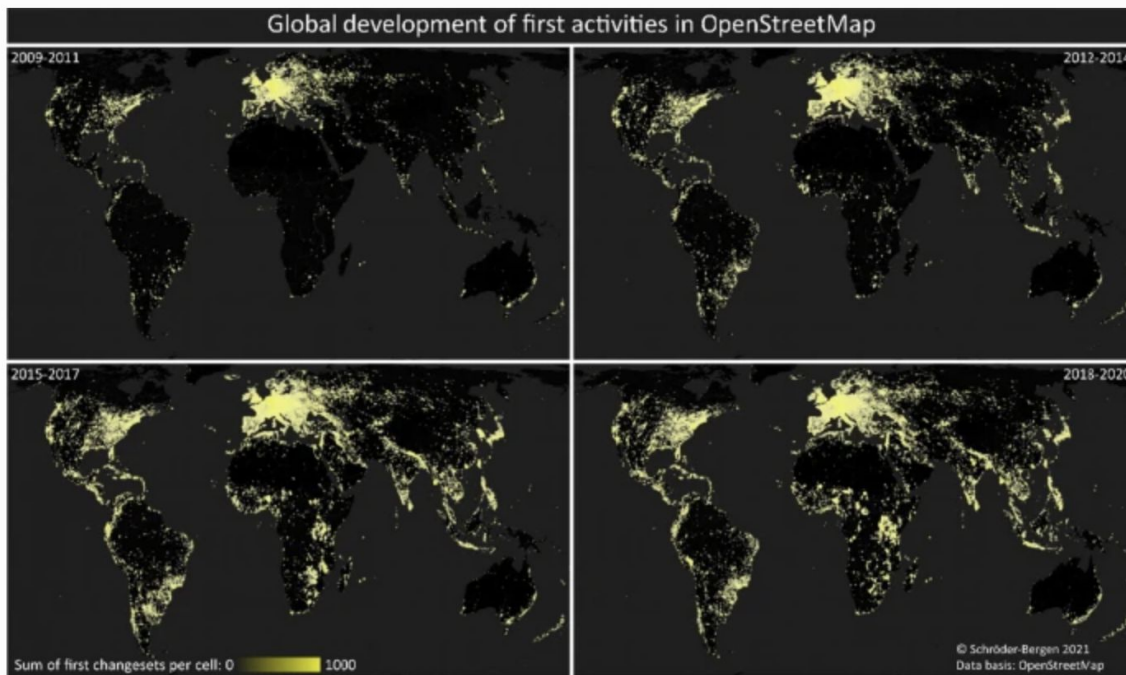
Global Access to *The Turing Way* open access resource



World map of access to TTW, 2023 (Google analytics)

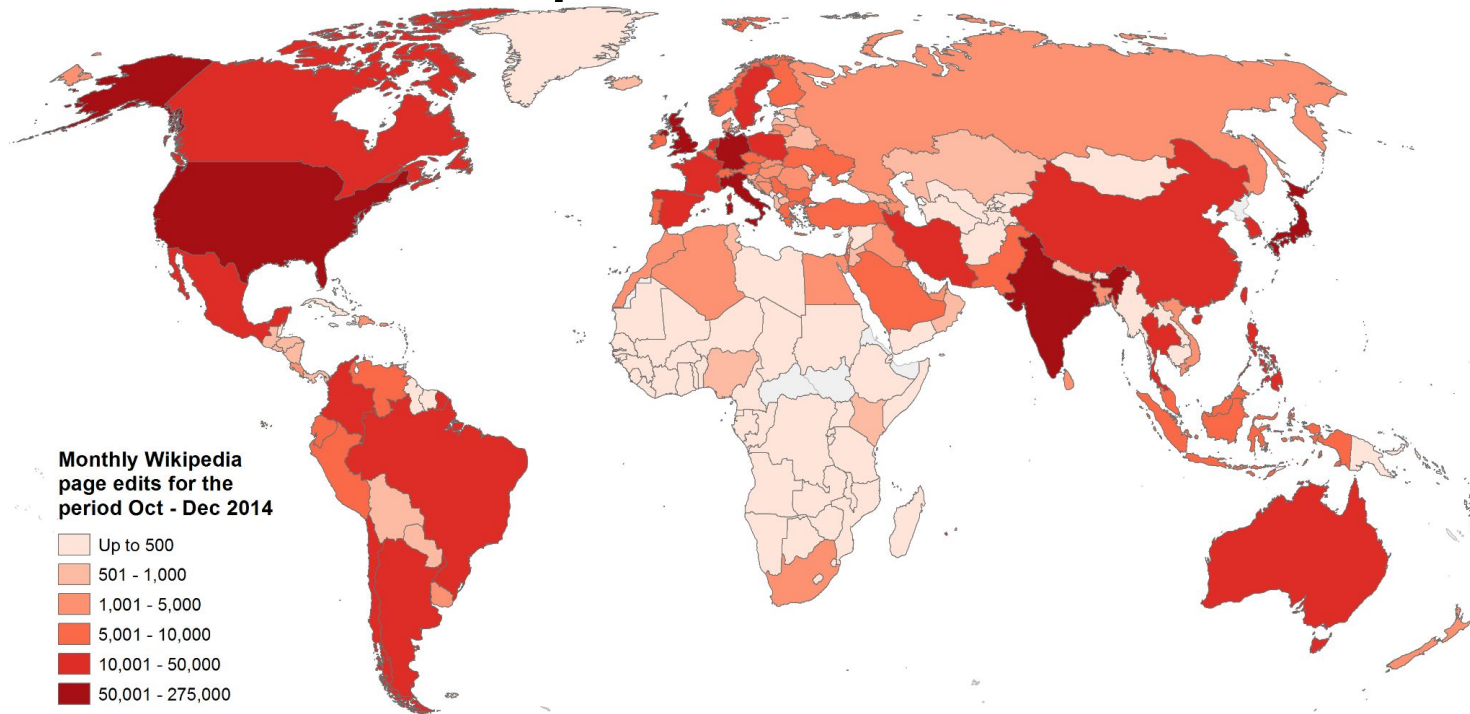


Global edits in OpenStreetMap



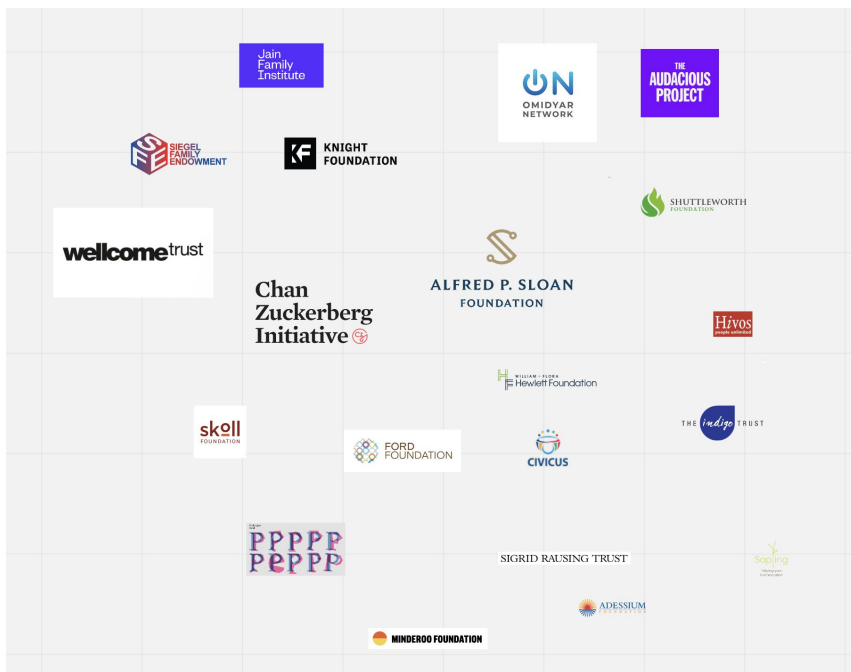


Global edits in Wikipedia





Funders of open source



Big names like Google dominate open-source funding

Companies can get plenty of bang for not many bucks via open-source sponsorship.



By Jon Gold

Senior Writer, Network World | JAN 9, 2015 7:00 AM PST

Network World's analysis of publicly listed sponsors of 36 prominent open-source non-profits and foundations reveals that the lion's share of financial support for open-source groups comes from a familiar set of names.

We found 673 companies on the donor rolls of our list of organizations – which was drawn heavily, though not entirely, from the Open Source Initiative's [list of affiliates](#).

Google was the biggest supporter of open-source organizations by our count, appearing on the sponsor lists of eight of the 36 groups we analyzed. Four companies – Canonical, SUSE, HP and VMware – supported five groups each, and seven others supported four. (Nokia, Oracle, Cisco, IBM, Dell, Intel and NEC.) For its part, Red Hat supports three groups – [the Linux Foundation](#), Creative Commons and the Open Virtualization Alliance.

Open source governance: bureaucratisation of contribution

Python's Benevolent Dictator For Life

“Python is an experiment in how much freedom programmers need. Too much freedom and nobody can read another's code”
- Guido van Rossum





Open source examples: current frictions

Global access vs Localised contributions

- ◉ Contributions & access remain skewed towards Western states
- ◉ “Open for what, open for whom?”
→ i.e. OpenAI

Funding Landscape

- ◉ Corporate vs Foundation
- ◉ Volunteer vs paid
- ◉ Widening implementation & definition of what open source means

Digital governance

- ◉ Developing and experimental processes of governance & bureaucracy (BDFL, meritocracy, etc)



*Digital citizenry as both IRL & Online:
places of contestation, labor, capital & community*

Thank you

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