

ODRAST & (Mrežne) Technologije

~

Povezano Polje

~

“AI is Ecocide”

~

ODRAST & Feminizam

November 2024

<https://www.unin.hr/>

<https://miiim.miraheze.org/wiki/ObliciOdRASTA>



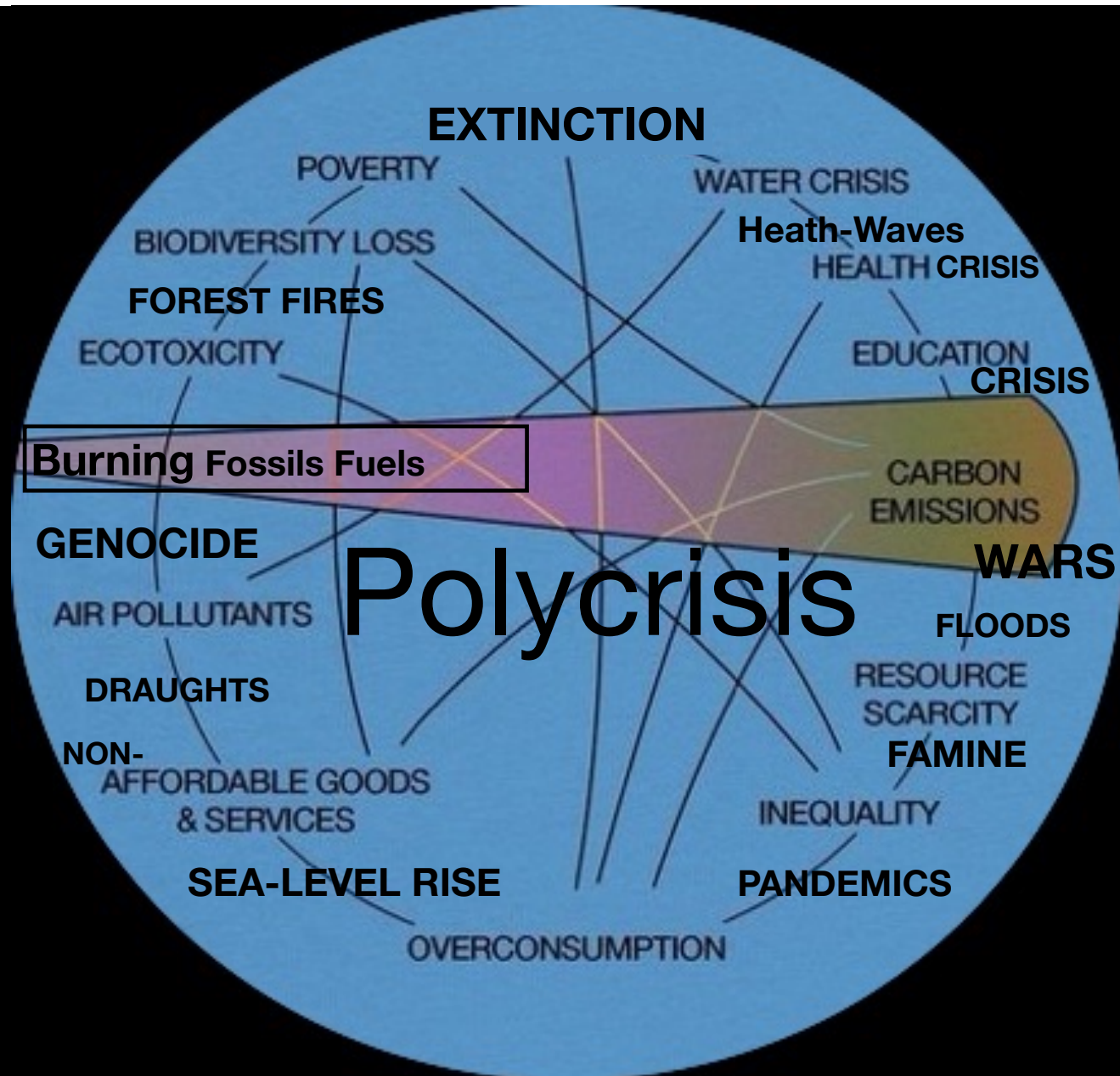
Vesna Manojlović

BECHA@UnCiv.NL



[@BECHA@social.v.st](https://social.v.st)

<https://becha.unciv.nl/>



Attitudes 4 Polycrisis

- anthropocentrism, extractivism, individualism, consumerism...
- supremacies, oppressions, hierarchies, dominations, inequalities...
- control, surveillance, exploitation, addictions, extremisms...
- privatising, profits, conquests, imperialism, colonialism, corruptions...
- fallacy of progress, fallacy of (infinite) growth, fallacy of saviours...
- body-mind division, violence, private property, slavery...
- ***(Neo-Liberal) “imperialist white-supremacist capitalist patriarchy” bell hooks***

Principles of Degrowth



Sustainability

Never deteriorate supporting ecosystems



Circularity

Waste not, want not



Cooperation

People and planet, not profit



Useful Production

What is not needed should not be made



Sharing

Sufficiency for all, excess for none



Local Production

Produce local, consume local



Work-Life Balance

Work less, play more



Relational Goods

Less stuff, more relationships



Joie De Vivre

If I can't dance, I don't want to be part of your economy!

Source: <https://tel.archives-ouvertes.fr/tel-02499463/document>

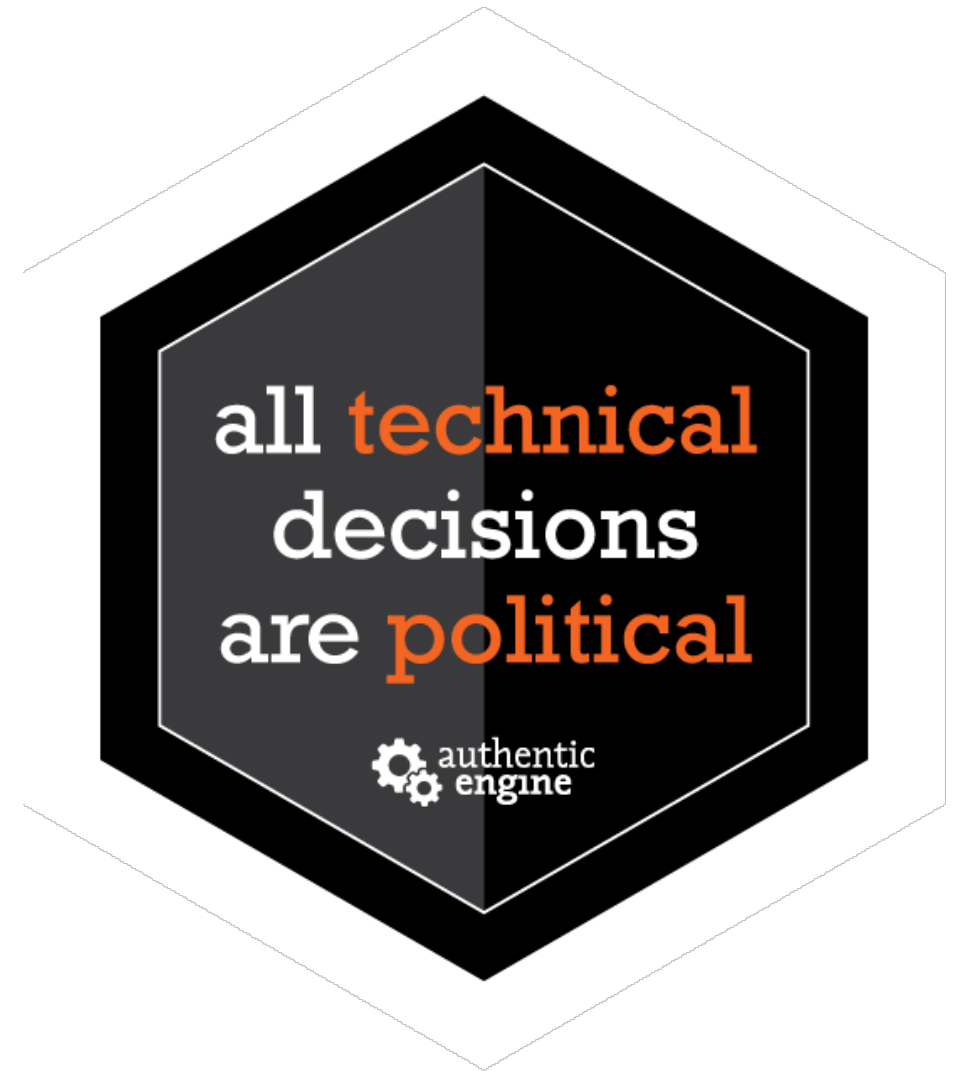


Selected DeGrowth Links

- [https://wiki.techinc.nl/File:9th DeGrowth Conference Zagreb August 2023 February 2024.pdf](https://wiki.techinc.nl/File:9th_DeGrowth_Conference_Zagreb_August_2023_February_2024.pdf)
- A Degrowth Perspective on Artificial Intelligence - Analysing the Appropriateness of Machine Learning to a Degrowth Context <https://www.research-collection.ethz.ch/handle/20.500.11850/622669>
- Degrowth can work — here's how science can help: <https://www.nature.com/articles/d41586-022-04412-x>
- Digital Degrowth https://zagreb.degrowth.net/en/9_int_dg_conf/public/events/184
- Combatting climate change & #Polycrisis means embracing degrowth <https://climateactionaustralia.wordpress.com/2023/01/22/why-combatting-climate-change-means-embracing-degrowth-polycrisis/>
- <https://www.noemamag.com/degrowth-in-japan>
- <https://jornbettin.com/2023/07/04/enough/>
-



ICT & DeGrowth



About Me



20th Century Carrier (1991-1998)

- Education:
 - High school: Zemunska Gimnazija; Computer Science at @ ETF.ac.yu, Belgrade
- Operating systems:
 - VAX-VMS, DecNET, Linux (galeb.etf.bg.ac.yu), ZaMir (BBS)
- Art & (h)ac(k)tivism:
 - Škola Mira, NetForum, Documenta X, HIP97, NextFiveMinutes, Syndicate, nettime...
- Employment:
 - Računski Centar ETF; Centar za Anti-Ratnu Akciju; YUCCA ; OpenNet/**B92**

21st Century Carrier (1999-today): RIPE NCC

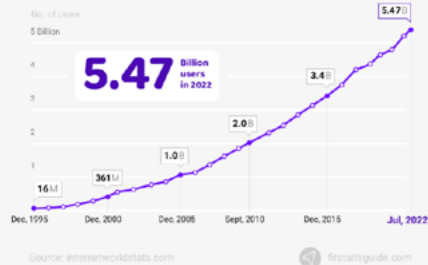
- 1st “**Trainer**” at RIPE NCC! IPv4, IPv6, whois Database, IRR...
 - Also: hostmaster, webmaster, mailing-lists moderator, technical writer... + TRAVEL 
- Advanced Courses Trainer (2001-2006) RPSL, DNSSEC, RPKI, BGPsec
 - & IPv6 Evangelist (lecturer & IPv6 RIPEness co-creator) (2007-2010)
- “Measurements Community Building” Manager / RIPE Atlas (2011-2016)
- (Senior) **Community Builder** (2017-present)
- “South Eastern Europe” Programme Committee ripe.net/see
- Organizing hackathons, Local Hubs, DEI Sessions...



Global Internet usage growth



The number of people using the Internet globally has doubled in less than a decade. Global internet usage growth from 1995 to 2022

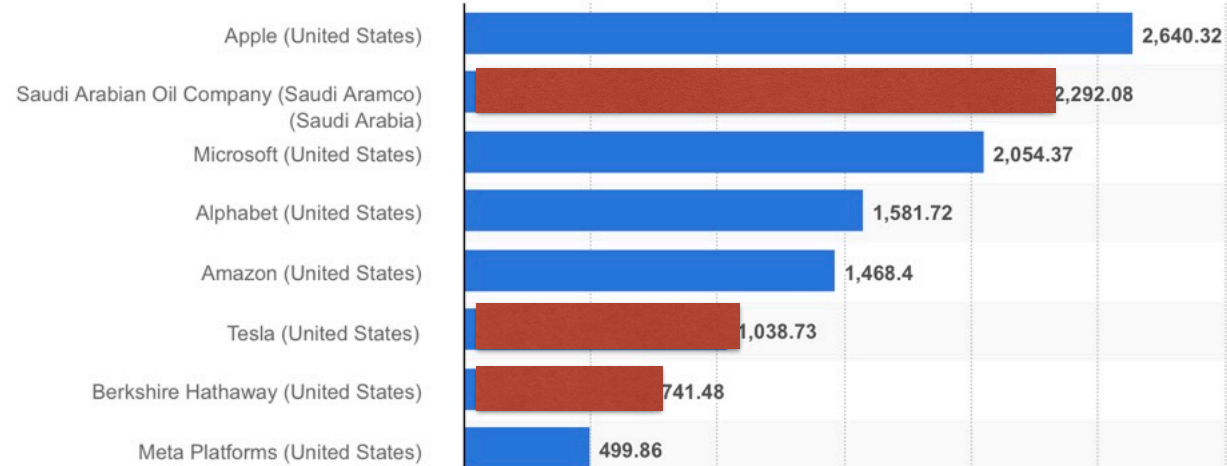


(Source: Internet World Stats)

2. The average growth rate of internet users is 8.2% per year.

The 100 largest companies in the world by market capitalization in 2022 (in billion U.S. dollars)

Source: <https://www.statista.com/statistics/263264/top-companies-in-the-world-by-market-capitalization/>



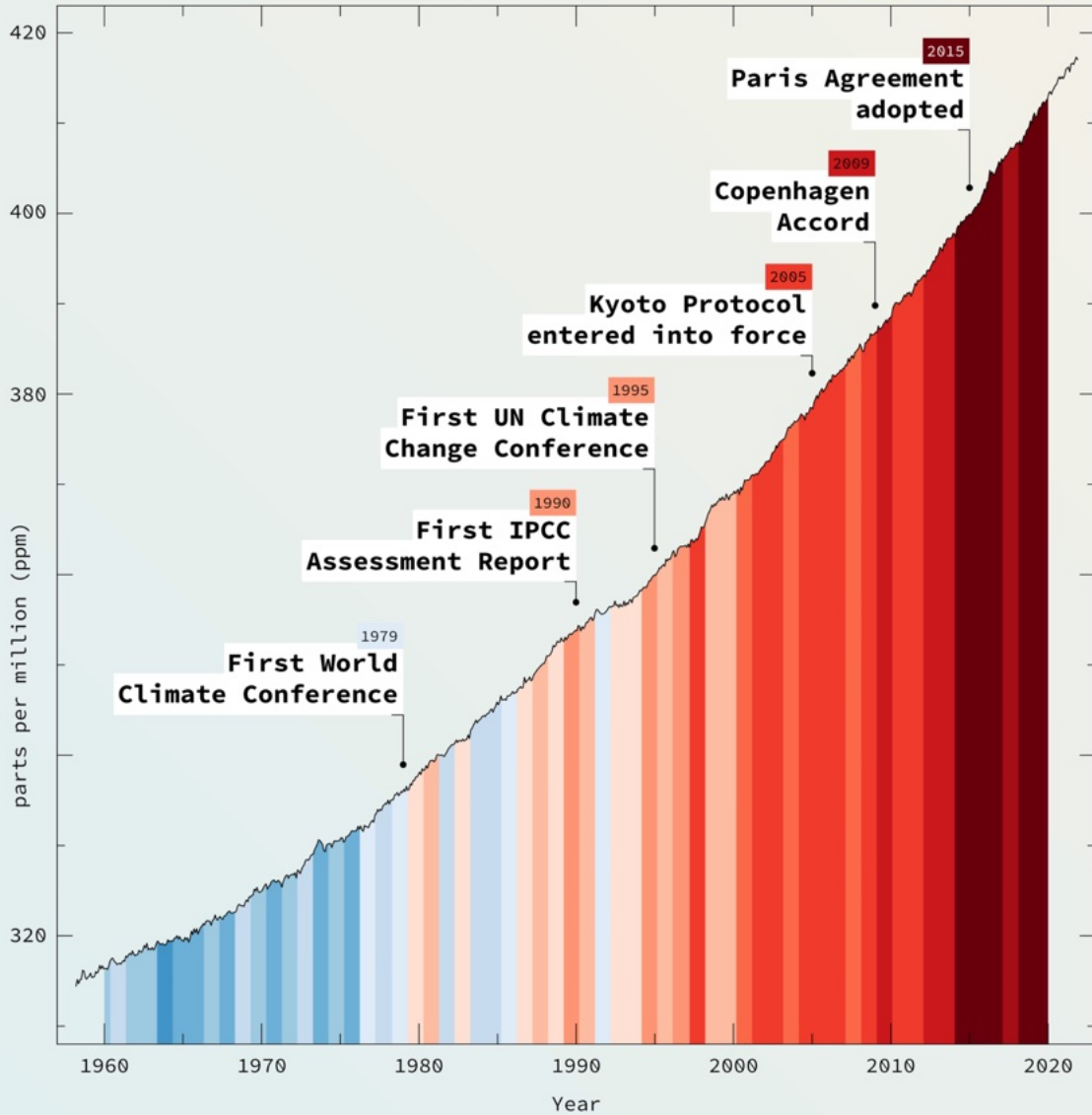
Global trends in digital and energy indicators, 2015-2021

	2015	2021	Change
Internet users	3 billion	4.9 billion	+60%
Internet traffic	0.6 ZB	3.4 ZB	+440%
Data centre workloads	180 million	650 million	+260%
Data centre energy use (excluding crypto)	200 TWh	220-320 TWh	+10-60%
Crypto mining energy use	4 TWh	100-140 TWh	+2 300-3 300%
Data transmission network energy use	220 TWh	260-340 TWh	+20-60%

• Source: <https://www.iea.org/reports/data-centres-and-data-transmission-networks>



Trends in Atmospheric CO₂ vs Global Temperature Change #climateINACTIONstripes

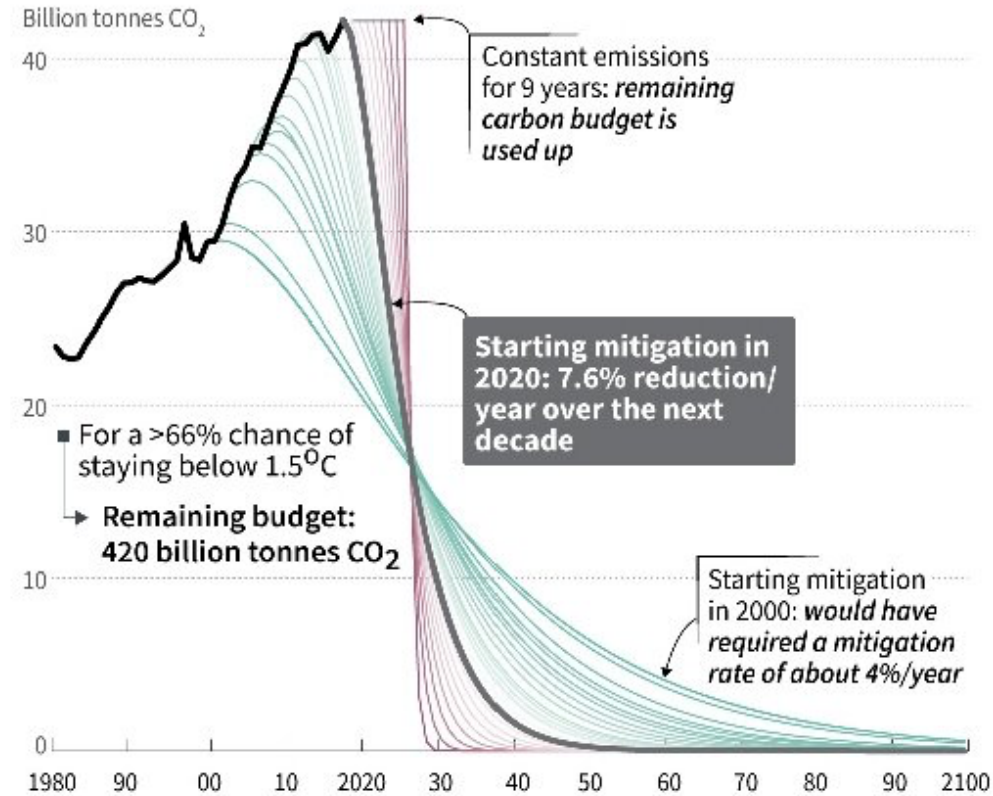


Composite Graph of: Atmospheric CO₂ at Mauna Loa Observatory, December 2021 – Scripps Institution of Oceanography & NOAA Global Monitoring Laboratory | #ShowYourStripes – Graphics & Lead scientist: Ed Hawkins, National Centre for Atmospheric Science, University of Reading; Data: UK Met Office | Design by: sustento [PG] | Licence: CC-BY
 S7@kueLLerIadzio @vriebemarie @MariusHasenheit @sustentoIOU

Cutting global emissions: when is late

UN report shows capping global warming at 1.5°C is no longer realistic

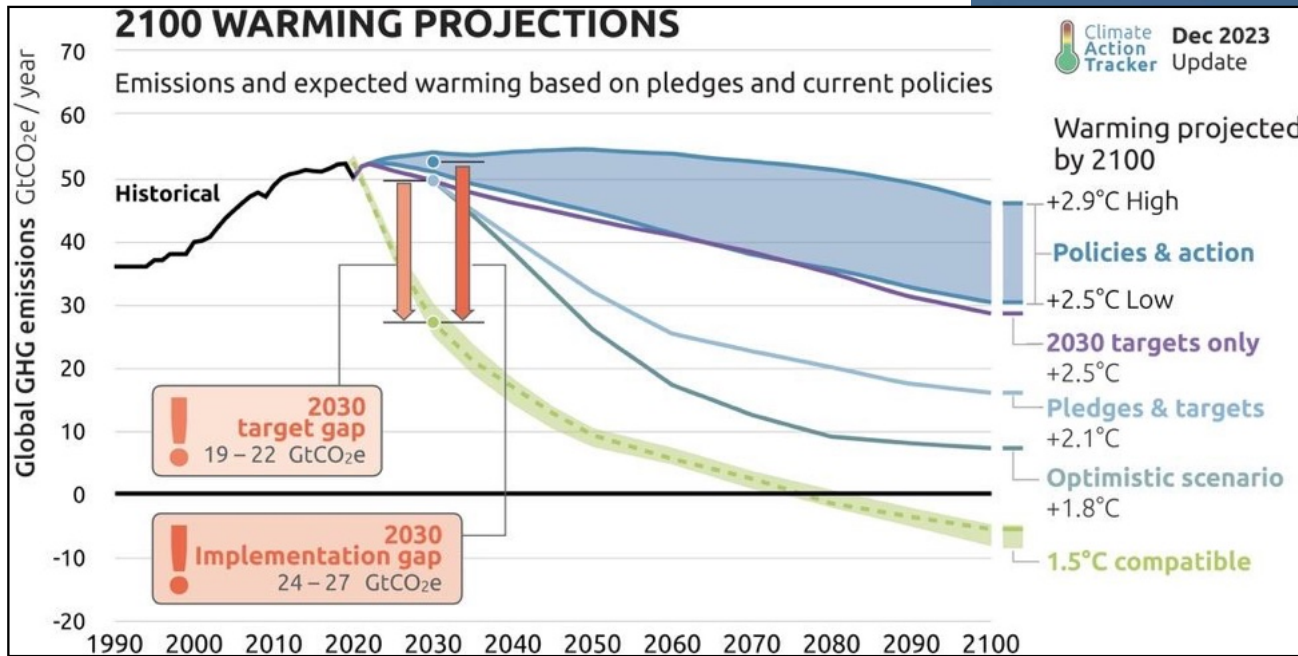
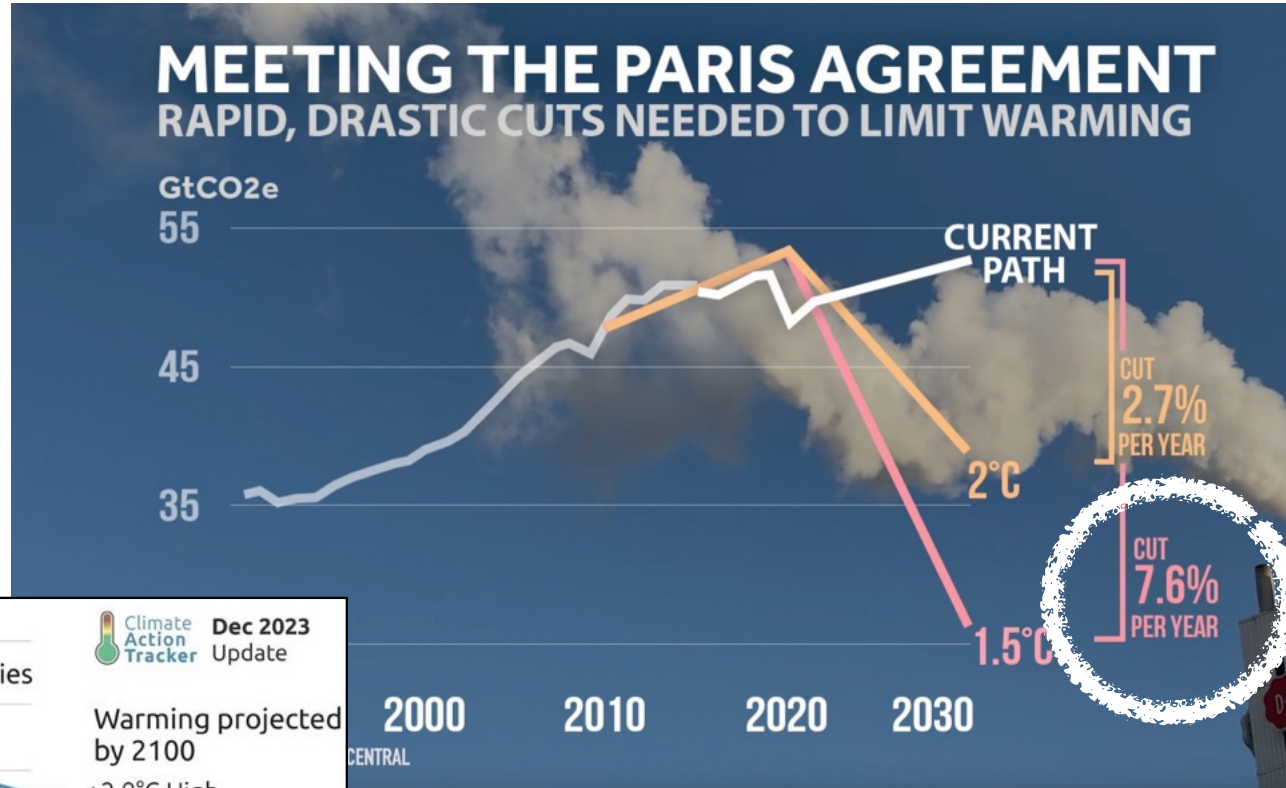
CO₂ emissions reduction at... ..1.5°C



Source: Robbie Andrew/CICERO Center for International Climate Research/Raupach et al 201/IPCC

2021: -7.6% PER YEAR

<https://www.climatecentral.org/climate-matters/return-to-the-paris-agreement>



2024: Reduction by 50% in 6 years

=> -10% PER YEAR

“Data is the New Oil”

THE INTERNET USES A HUGE AMOUNT OF ENERGY. THIS IS DUE TO TWO KEY FACTORS:

MANUFACTURING AND SHIPPING



Technology companies must manufacture and ship the internet's hardware including:



COMPUTERS



SMARTPHONES



SERVERS

POWERING AND COOLING



Computers and smartphones must be powered and cooled, drawing electricity from local grids.

This power is generated in different ways with varying emissions!



COAL



NATURAL GAS



NUCLEAR



RENEWABLES

Problems Statements: ICT's Death Cycle

- 1. Materials are extracted in violent & polluting ways**
- 2. Shipping (of materials & equipment) uses fossil fuels**
- 3. Equipment is produced by using fossil fuel energy (& exploitative conditions)**

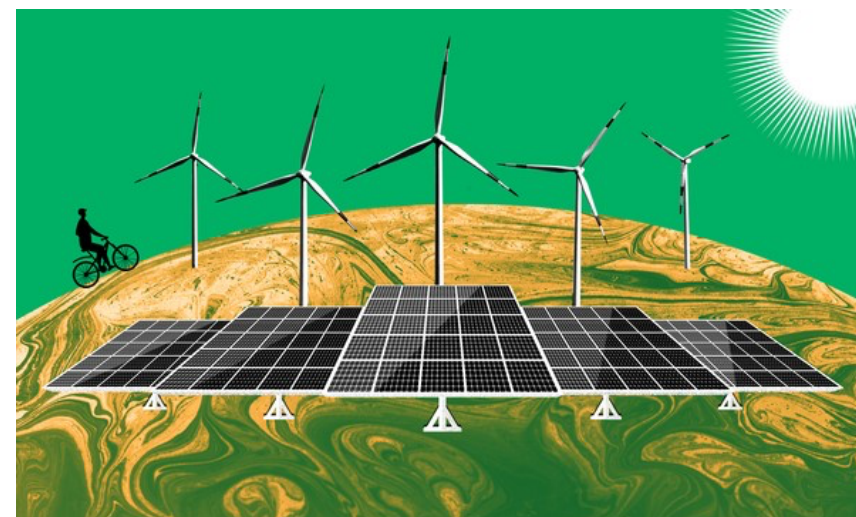


EXTINCTION IS FOREVER.

- 4. Operating networks & data storage uses electricity sourced by burning fossil fuels**
- 5. Disposing old equipment is wasteful & polluting & unjust**

DeGrowth Solutions: The Opposite of Death-Cycle!

1. Re-Use existing materials
 1. Or **re-source** materials in sustainable & just ways
2. Use renewable energy sources
 1. (**Refuse** fossil fuels)
3. Produce locally (reduce shipping)
4. Decrease energy usage -10%
/year
5. Reduce new equipment needs: Repair, Repurpose, Recycle



“Green Tech” Links

- **Green Tech Hackathon: 10-11.12.2024, Online / Local Hubs / Amsterdam**
 - <https://labs.ripe.net/author/becha/announcing-the-green-tech-hackathon/>
- 2024: <https://wiki.techinc.nl/Sustainability>
- 2023: <https://labs.ripe.net/author/becha/environmental-impact-of-internet-urgency-de-growth-rebellion>
 - & slides: https://wiki.techinc.nl/File:Xs-vesna-e_impact-ripe86-short-and-long.pdf
- 2021: Resilience in Tech Communities: Nature is Healing <https://labs.ripe.net/author/becha/ripe-community-resilience-nature-is-healing/>
- 2014: Nature will have the last word https://wiki.techinc.nl/index.php/File:Nature-speaking-on-future_of_the_internet-RIPE69.pdf

“Getting Lika Connected”



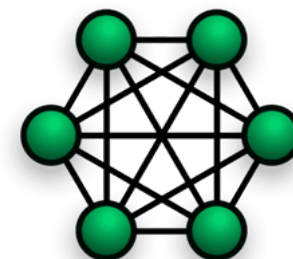
Vesna Manojlovic : BECHA@UnCiv.NL

<https://wiki.techinc.nl/User:Becha/Lika/ProjekatPovezanoPolje>

Goals & Principles

- bringing internet **connectivity** to a village in Croatia (Gubavcevo Polje)
- rejuvenation of the remote **rural** communities
- enabling **digital rights** for the marginalised
- “Climate Justice in Tech” **principles** (Limitations / Reparations / Solidarity)
 - renewable energy, repurposed equipment, community governance
- **principles** of Feminist Internet (FLOSS, embodiment, care)
- “Alternative Networks” RFC7962 (commons, mesh, not-for-profit / non-commercial)
- DeGrowth **Principles!**

Solutions



- build a wireless community mesh network:
- distributed, decentralised, not-for-profit, communally owned & operated,
- from repurposed / refurbished equipment
- using renewable energy & free software
- set up by **volunteers**
 - **hackers** & (digital rights / climate justice / feminist) **activists**.



IEEE Connecting the UNCONNECTED™

An IEEE Future Networks Program



1st PLACE

\$2,500 USD

AWARD

presented to

Vesna Manojlovic

for their solution

Getting Lika Connected : Povezano Polje



AI is Ecocide

VESNA MANOJLOVIC

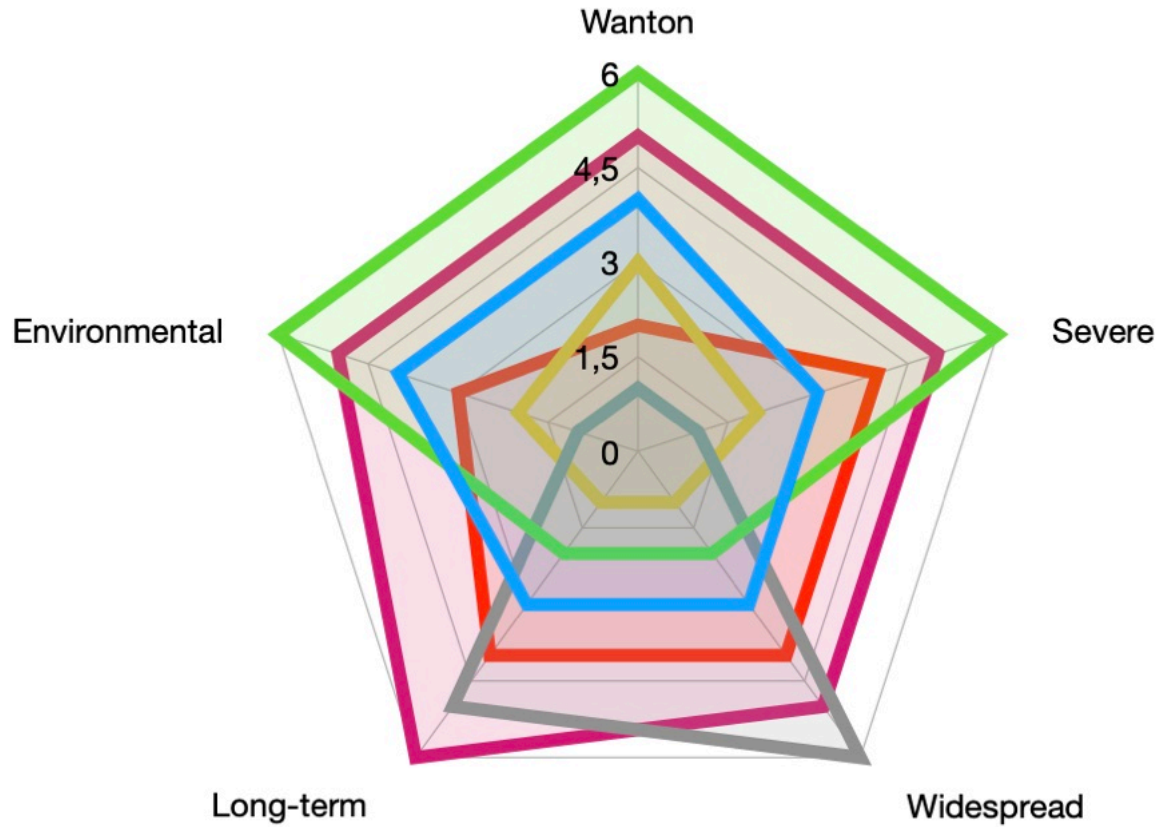
AI will have a detrimental effect on our climate targets because it is already yet another [engine of ecocide](#). As the next extension of an already highly destructive capitalist technological system, AI will soak up fossil fuels (through energy use), rare metals, land, and even water (to [cool](#) servers), while [externalizing pollution](#). Moreover, AI systems will further consolidate power and wealth in the hands of a [few corporations](#), which are amassing data for use in surveillance and the [exploitation](#) of human labor – all for short-term profit.

To counter AI-ecocide, we must mount successful interventions at all levels – from international rule-making down to our own personal education. Most people do not associate the digital realm with encroachment on [planetary boundaries](#). That needs to change. To reduce energy and resource consumption to sustainable levels, we must resist the runaway production and operation of more digital devices, networking infrastructure, and data centers. Extractivism and growth-oriented business models must be countered with economic policies that [justly redistribute](#) the benefits of technology. Technical innovation must focus more on sustaining critical systems and institutions, and on repairing harms.

If AI development continues down the track of anthropocentric, hierarchical, individualistic applications, it will not end well. But if we acknowledge other forms of “real intelligence” in nature – swarms, reefs, hives, forests, octopuses – that could instill us with the humility we need to [change course](#).

Internet is Ecocide

AI / LLM Bitcoin Networks 5G Data Centers e-waste

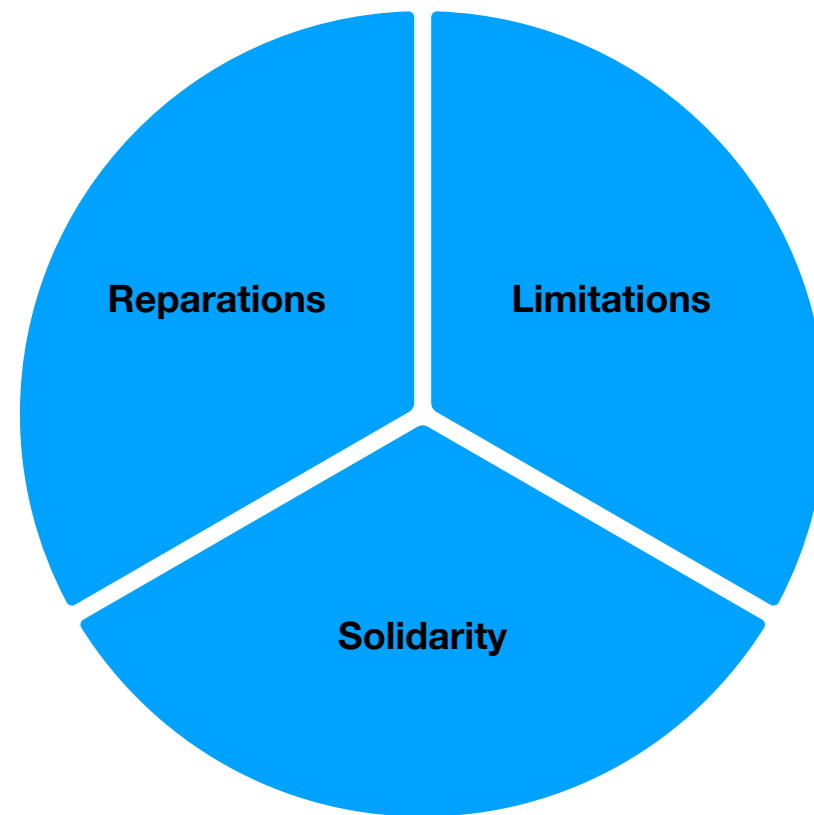


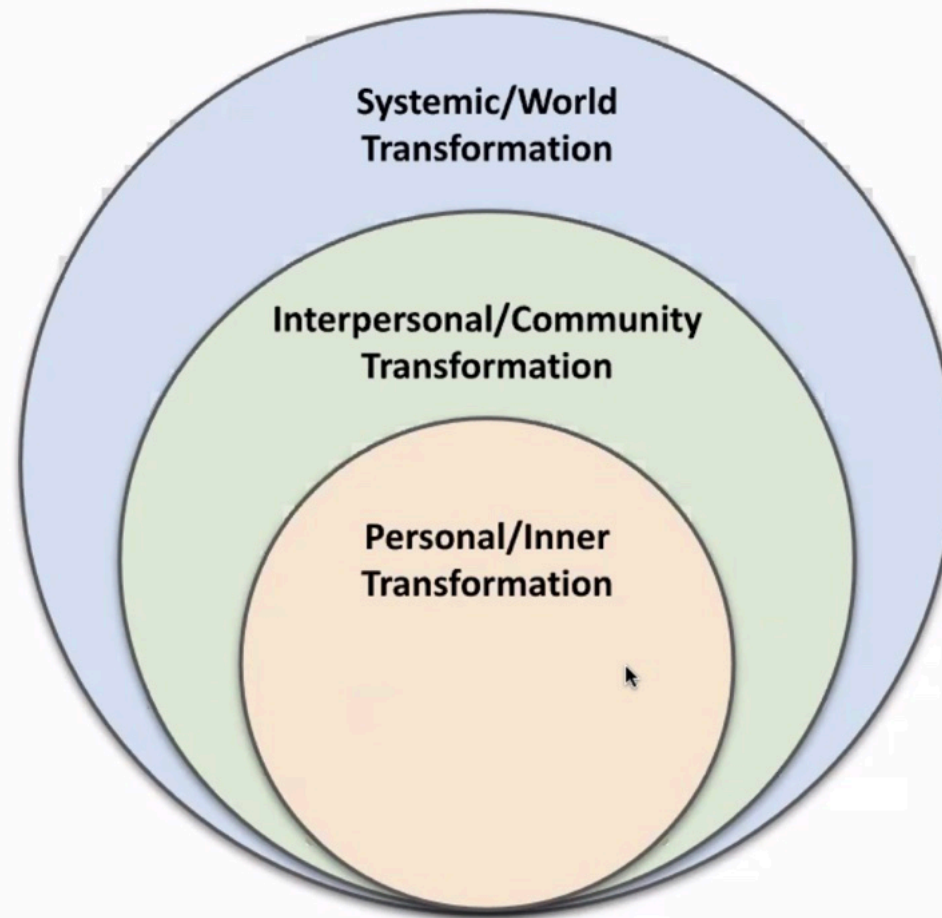
Against Ecocide

- ^^ based on: “Computing as Ecocide”, by Rob Comber and Elina Eriksson: <https://limits.pubpub.org/pub/a8h46wqy/release/1>
- My article: <https://www.project-syndicate.org/magazine/ai-climate-change-what-role-paris-targets-2023-09>
- My collection of links: https://wiki.techinc.nl/User:Becha/AI_is_ecocide
- Newest article by Reynard Loki <https://www.counterpunch.org/2024/05/02/should-harming-the-planet-be-a-crime-the-case-for-ecocide-laws/>

Climate Justice in Tech

- <https://labs.ripe.net/author/becha/towards-climate-justice-in-tech/> (2022)
- Limiting extractivism & decreasing growth
- Reparations: giving back to the most affected communities
- Acting in solidarity with the frontline communities & centering marginalised groups; mutual aid

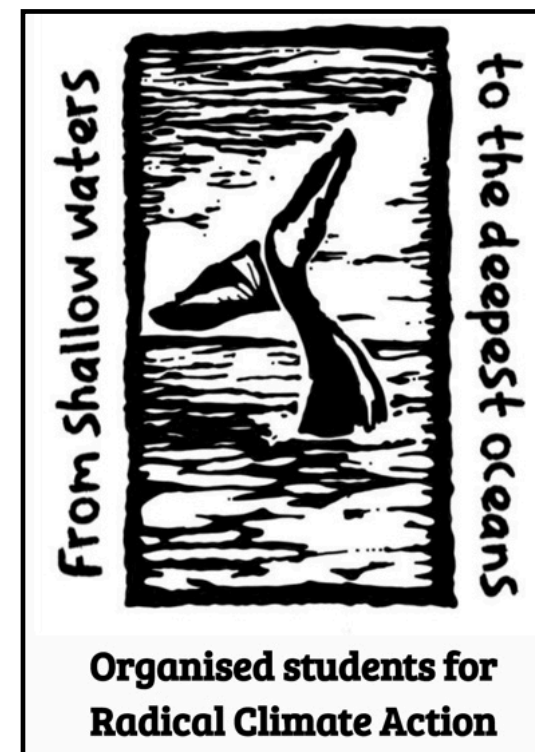




Integrating Personal, Interpersonal & Systemic Transformation

Join Activist Communities

- APC.org
- RightsCon.org
- Bits und Bäume : <https://bits-und-baeume.org/en/>
- Scientists Rebellion : <https://ScientistsRebellion.com>
- digital-rights-climate-justice@groups.io
- Rebellion.Global
- Counter Cloud Action Day <https://diagram.institute/12o/>
- Digital Depletion Strike <https://multiplace.org/8m>



<https://linktr.ee/orcamsterdam>



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© Walery CC0 1.0

1860s - 1910s, England
Statistician Florence Nightingale & physician Elizabeth Garrett Anderson, women's suffrage movement



© Cyro A. Silva CC BY 2.0

1920s, Brazil
Biologists from National Museum, environmental protection



1960 - present, USA
Science for the People collective, anti-war and social justice



© SR Nigeria



© SR Spain



© SR Panamá

1962

2020s, Worldwide
Scientist Rebellion, climate and ecological breakdown

Vesna Manojlovic @becha · 2 hours ago
Eunice Newton Foote wrote a first paper (1856) on relationship between carbon dioxide and the earth's climate <https://archive.vn/DPhg2>



ALT: Eunice Newton Foote. (Victorial Press Ltd./Alamy)

1860

1890

1920

1950

1980

2010

1856!



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© Orren Jack Turner CC0 1.0

1957, USA & Europe
Nobel winners' Russell-Einstein Manifesto, abolition of atomic weapons and war



© NASA CC0 1.0

1988 - present, USA
Climatologist James Hansen, climate change



© Stefan Müller CC BY 2.0

2018 - present, Argentina
Biologist Esteban Servat, social struggles and environmental abuse



scientist rebellion_



RIPE86

My Personal Rebel!

- Alisa in January 2004, RIPE 47, Amsterdam
- Alisa in 2022, XR action against private jets



<https://ripe86.ripe.net/archives/video/1001/>

DeGrowth & Feminism





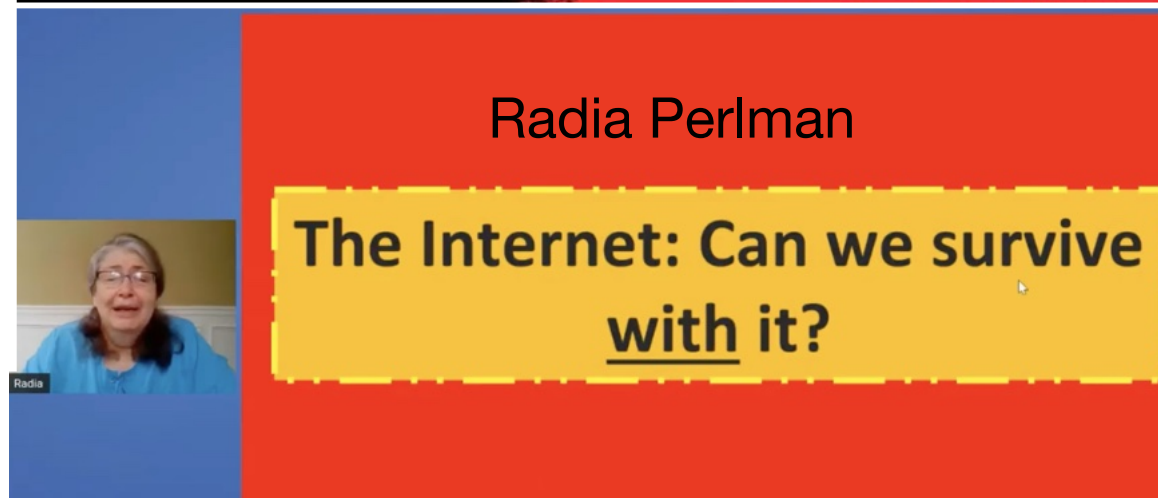
We live in capitalism, its power seems inescapable - but then, so did the divine right of kings. Any human power can be resisted and changed by human beings. Resistance and change often begin in art. Very often in our art, the art of words.

— Ursula K. Le Guin —

AZ QUOTES



<https://archive.org/details/governingthecommons>



DeGrowth & Feminism

- Feminism(s) and Degrowth Alliance (FaDA) : <https://degrowth.info/en/fada>
- Academic Journal on Degrowth (May 2023) : feminist, anarchist, decolonial views <https://www.degrowthjournal.org/issues/2023-volume-1/>
- MENA Women's & Girls' Demands for COP28 and Beyond <https://womensgenderclimate.org/wp-content/uploads/2023/11/WGC-MENADemands-ExecSumm.pdf>
- <https://labs.ripe.net/author/becha/data-feminism-from-data-ethics-to-data-justice/>
- Trans*Feminist Counter Cloud Action: https://titipi.org/wiki/index.php/Counter_Cloud_Action_Plan

Data Feminism, Data Justice

Table 2.1: From data ethics to data justice

Concepts That Secure Power	Concepts That Challenge Power
Because they locate the source of the problem in individuals or technical systems	Because they acknowledge structural power differentials and work toward dismantling them
Ethics	Justice
Bias	Oppression
Fairness	Equity
Accountability	Co-liberation
Transparency	Reflexivity
Understanding algorithms	Understanding history, culture, and context

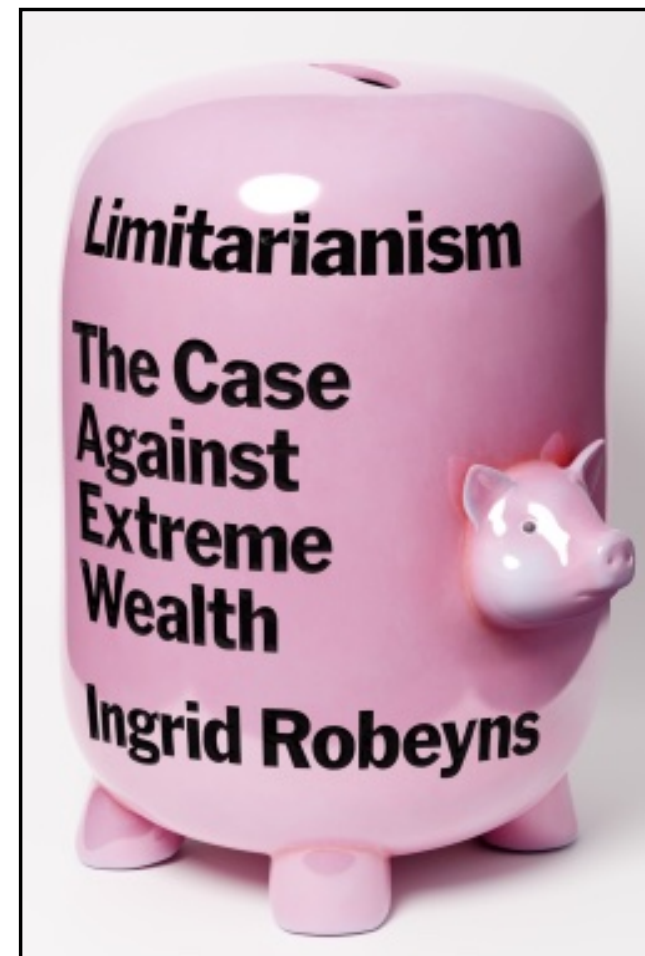
<https://datafeminism.io/>

Other Alternative Economies

My Top 10 21st-Century Alternative Economic Theory Books:

- Giving Economy, Heather Marsh (in ["Binding Chaos"](#), 2013)
- Post-carbon Economy, Naomi Klein (in ["On Fire"](#), 2021)
- Caring Economy, Riane Eisler (2007) : <http://caringeconomy.org/>
- Decolonising Economics, Nonhlanhla Makuyana (2021)
<https://decolonisingeconomics.org/>
- Ecofeminism, Maria Mies and Vandana Shiva (2014)
<https://www.environmentandurbanization.org/ecofeminism>
- [Mutualism](#), Sara Horowitz (2021)
- Doughnut Economics, Kate Raworth (2017) <https://doughnuteconomics.org/>
- [Mission Economy](#), Mariana Mazzucato (2021)
- The Support Economy: Shoshana Zuboff (2002)
<http://www.thesupporteconomy.com/>
- [Enlightenment Economics](#), Diane Coyle (in ["The Economics of Enough"](#), 2011)

What all of these have in common is criticism of neoliberal capitalism and a focus on sustainability, care, equity, and co-empowerment.

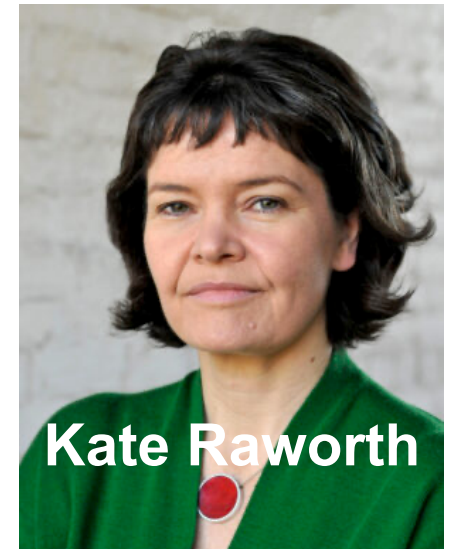


Feminist Internet

- feministinternet.org
- Principles:
 - in Bosnian: https://feministinternet.org/sites/default/files/Feministicki_principi_na_internetuv2-0.pdf
- Pristup, Pokreti i javno učešće, Izražavanje, Alternativne ekonomije, FLOSS...



Decolonizing Internet, Economy, Ecology...



Kate Raworth

VANDANA SHIVA

"I think the combination of feminism and ecology creates two potentials. First, I have seen feminism that is not ecological become a new oppressor. I have seen environmentalism that is not feminist enough also become a new elitism. Ecofeminism prevents those two new forms of elitism by saying, No, it's about society and nature. It's about other ways of thinking"



Nonhlanhla Makuyana

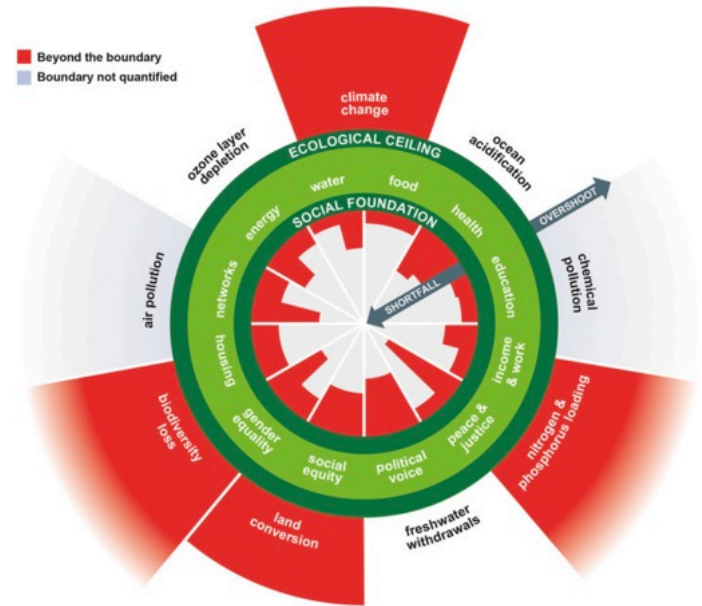
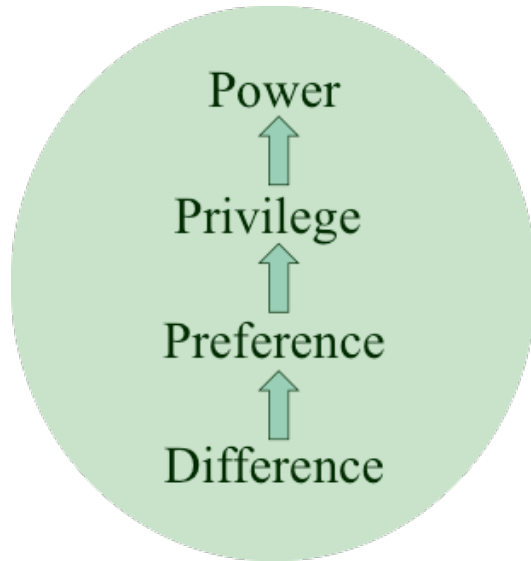
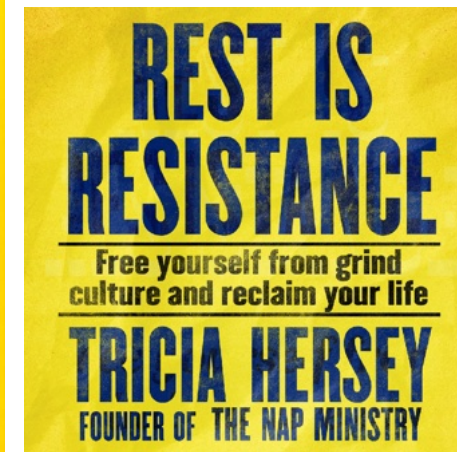
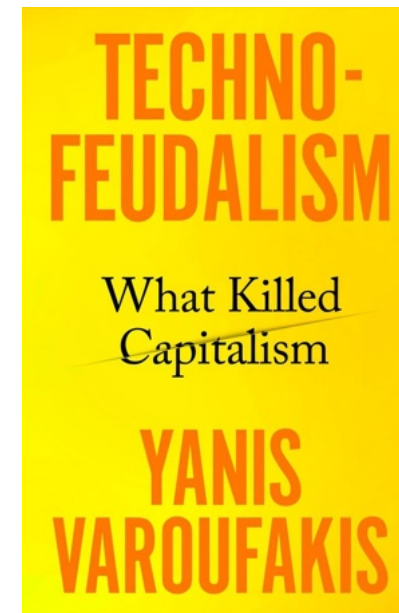
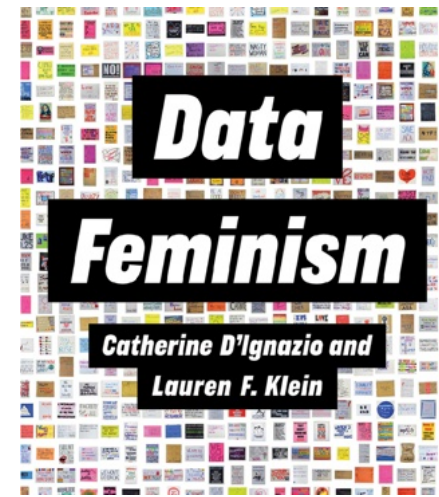
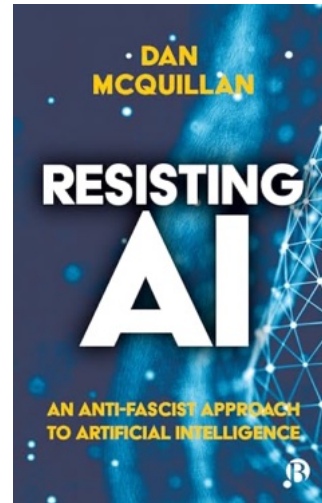


Image: Kate Raworth and Christian Guthrie/The Lancet Planetary Health

Technical Is Political



- “No research on a dead planet” <https://www.frontiersin.org/articles/10.3389/feduc.2023.1237076>



COUNTER COMPUTING: <https://counter-n.net/>



- → decolonial computing, Stefanie Wuschitz,
- → insurgent computing, Anna Engelhardt
- → minimal computing, Andrew Lison
- → permacomputing, Marloes de Valk, Ville-Matias Heikkilä
- → more-than-binary computing, Juan Pablo García Sossa
- + frugal computing, Wim van der Bauwhede
- + junkard computing, Jennifer Switzer
- + off-the-grid / SolarPunk & <https://doingthedoughnut.tech/>
- + low-tech, “green tech”, slow tech, durable tech, circular tech
- + <https://art-meets.radical-openness.org/2024/program/reorganizing-the-internet/>

Against Big Tech

- Digital Disobedience <https://wiki.techinc.nl/User:Becha/DigitalDisobedience>
- Against Cloud: https://wiki.techinc.nl/MeshNet#Cloud_Problems
- Against Data Centers: https://wiki.techinc.nl/Sustainability#Data_Centers
- Against Techno-Colonialism [https://wiki.techinc.nl/Hackers_tribes#Decolonising Internet](https://wiki.techinc.nl/Hackers_tribes#Decolonising_Internet)
- Against Centralisation / Consolidation: https://wiki.techinc.nl/MeshNet#Email_Problems

Academia, (h)Activists, NGOs...

- Computing Within Limits
<https://computingwithinlimits.org>
 - <https://labs.ripe.net/author/becha/computing-within-limits-2023/>
- Communities for climate action in tech
 - <https://wiki.mozilla.org/Projects/Sustainability/Research>
 - <https://www.sigplan.org/Resources/Climate/>
 - <https://climateaction.tech/community/>
- <https://www.apc.org/en/news/mobilising-collective-action-environmental-justice-and-sustainability-2020>
- <https://www.apc.org/en/project/technology-environmental-justice-and-sustainability>
- ACM SIGCAS: Computers and Society
<https://www.sigcas.org/events/sigcas-showcase-2022/>
- Theoretical Computer Scientists for Future (tcs4f.org) made a pledge to “reducing our emissions by at least 50% before 2030 relative to pre-2020 levels.”
- <https://www.nsuweb.org/circle-g-sustainability-ethics-environment-call-for-papers/>

“Algorithmic Sabotage Research Group”

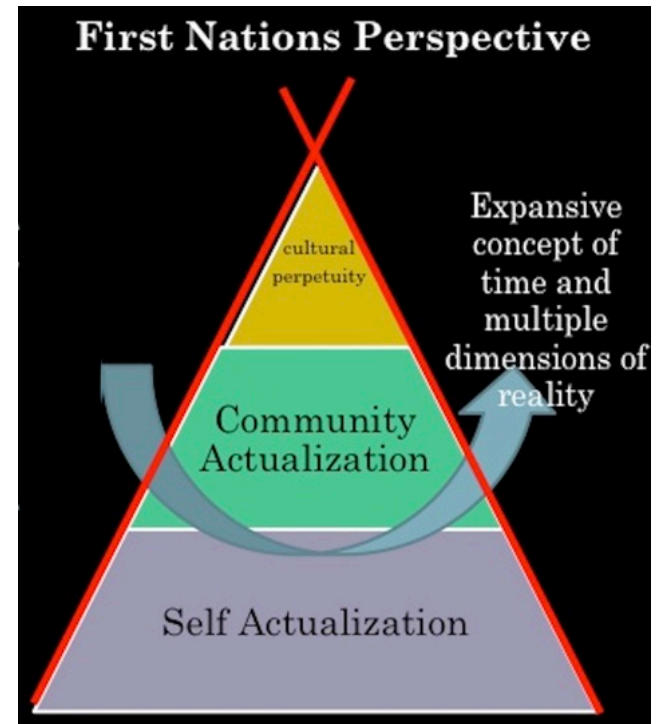
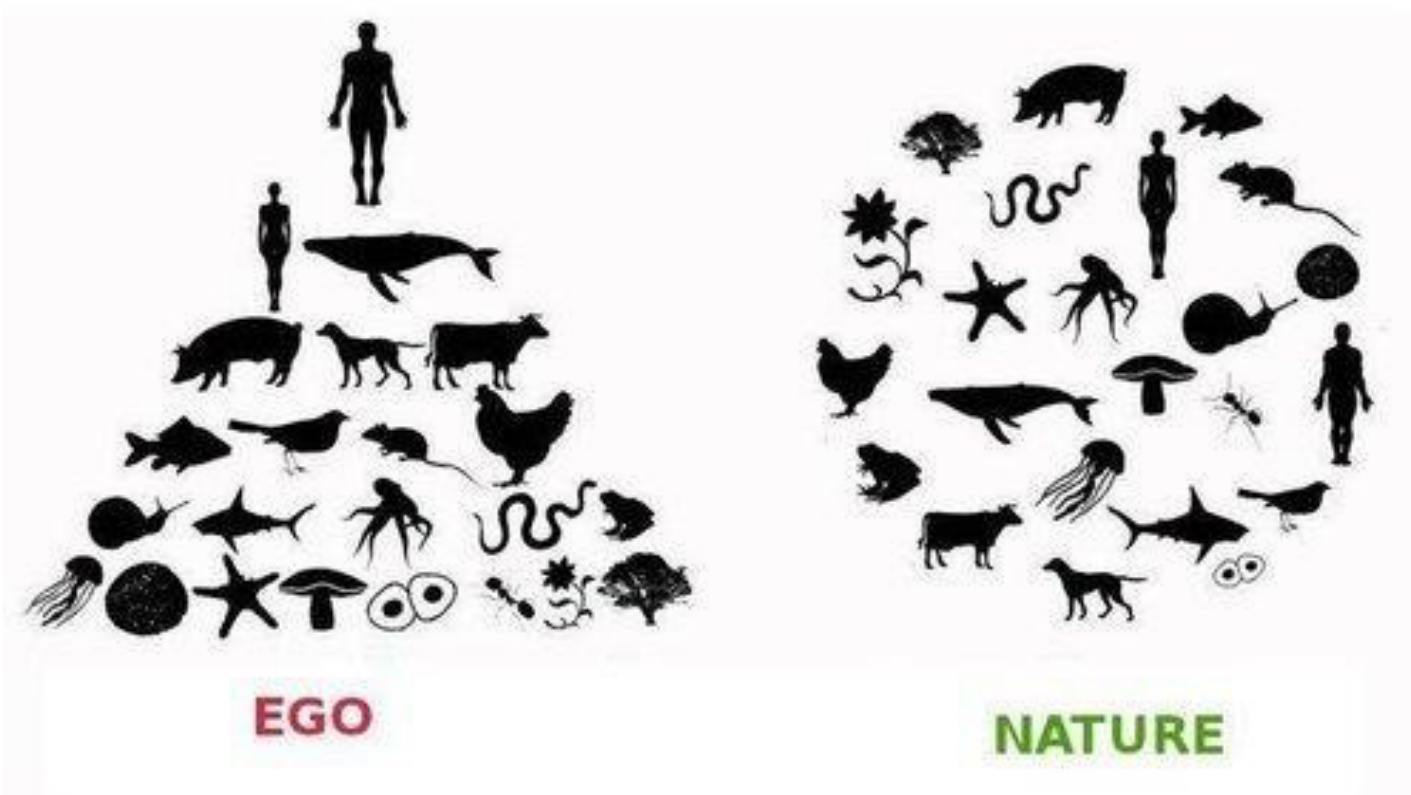
- <https://tldr.nettime.org/@asrg/112240241594621190>
- “While the whole of society is being subsumed by algorithmically ordered relations and enrolled in machinic optimization, the history continues to show that liberation from the imposition of these power relations is a process brought about by collective organizing, mutual care and #solidarity ..
- Given the urgent need to provide some kind of balance as the “algorithmic empire” becomes a multiplier of epistemic injustices, administrative violence and algorithmic states of exception, the Algorithmic Sabotage Research Group (ASRG) proposes “algorithmic sabotage” as a form of constituent counter-power and the basis for an alternative radical political tactic that resists necropolitical authoritarianism and militantly refuses reductive optimisations and statistical segregation through a perspective of care and mutuality, while pushing for structural alternatives .”

Internet of Empathy

- “To Our Friends” by The Invisible Committee <https://mitpress.mit.edu/books/our-friends>
 - Positive freedom of connectivity, interaction and involvement
 - Instead of libertarian “freedom” as independence and self reliance
 - This freedom comes at the price of greater responsibility
 - “ the intrinsic value of a network does not lie in the sovereignty and independence of its nodes, but in their connectedness,”
 - Empathy is willingness to engage with the Other, and willingness to enrich network with our contributions
- “Guide to Empathetic Technical Leadership" <https://empathetictechnicalleader.com>
 - FREE to read online: <https://leanpub.com/littleguide/read>

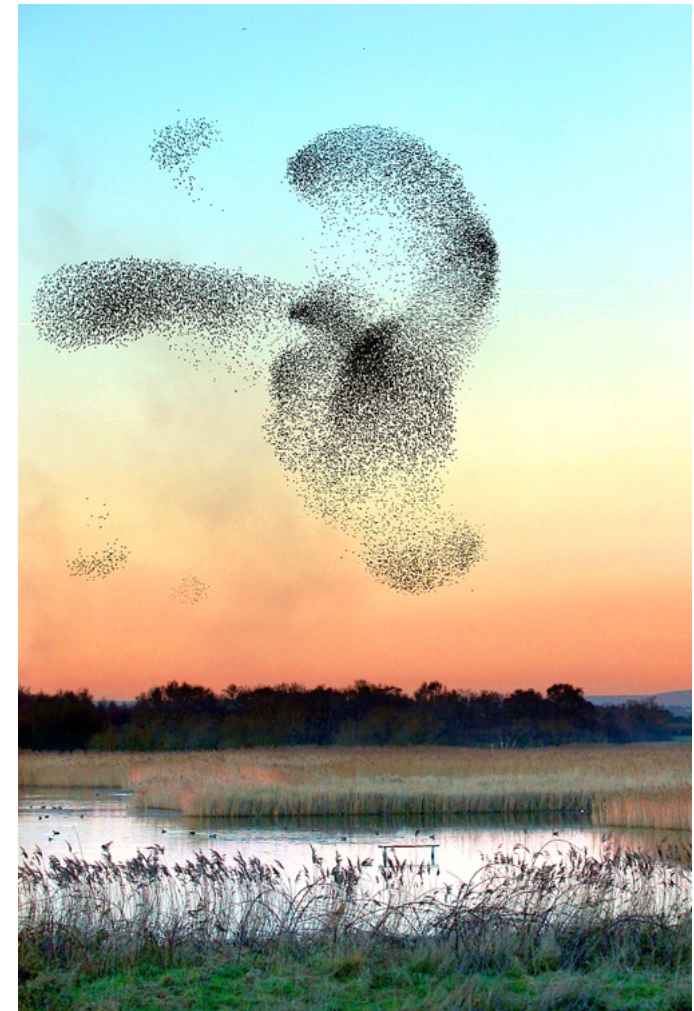
Internet of Squirrels





Sacred InterDependences

- *spiritual debt must be paid for the creation of technology (e.g. knife)*
- *hollowness has been carved out of the universe by human ingenuity, and so must be refilled with human ingenuity. A ritual gift equal to the amount that was removed from the other world has to be put back to make up for the wound caused to the divine.*
 - <https://www.thesunmagazine.org/issues/304/saving-the-indigenous-soul> , Martín Prechtel, Tzutujil shaman
- "...a society predominantly concerned with preserving its existence (but not endlessly expanding), a society with a modest standard of living, conservative of natural resources, with a low constant fertility rate and a political life based upon consent; a society that has made a successful adaptation to its environment and has learned to live without destroying itself or the people next door...that is the society I want to be able to imagine — I must be able to imagine, for one does not get on without hope."
 - "A Non-Euclidean View of California as a Cold Place to Be", Ursula K. Le Guin



Alternative Narratives

- Ursula K. LeGuin: "The Dispossessed"
- Octavia Butler: "Parable of the Sower"
- Orson Scott Card: "Speaker for the Dead"
- Cory Doctorow: "WalkAway"
- Daniel Quinn : Beyond Civilisation (series),
"The Story of B" <http://www.davidsheen.com/b/>
- Neal Stephenson : "Diamond Age,
- Timothy Morton: "HumanKind"
- Mitakuye Oyasin; Ubuntu; Dreamtime
- Batja Mesquita, (emotions) "Between Us"
- "Group Empathy" https://wiki.techinc.nl/Hackers_tribes#Group_Empathy
- Starhawk: "Fifth Sacred Thing" <https://starhawk.org/writing/books/the-fifth-sacred-thing/>
- Philip Shepherd: "Radical Wholeness" : <https://embodiedpresent.com/>
- Tricia Hersey: Rest is Resistance <https://thenapministry.com/>
- Neurodiversity: <https://autcollab.org/knowledge-repository/ecologies-of-care/>

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