

From climate obstruction to space pollution: the ideologies driving planetary collapse



Swiss SKA Days 2026

31 Aug 2026, 10:00 → 2 Sept 2026, 15:45 Europe/Zurich

September 1st 2026

LEVERHULME
TRUST



European Research Council
Established by the European Commission

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<https://www.realpostgrowth.eu/>

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Contents

- Some basics:
 - Climate
 - Planetary boundaries
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- Climate obstruction
 - Its history in neoliberalism
 - Its connection with current Silicon Valley billionaires and ideologies
 - Lessons?

We are headed for cataclysm

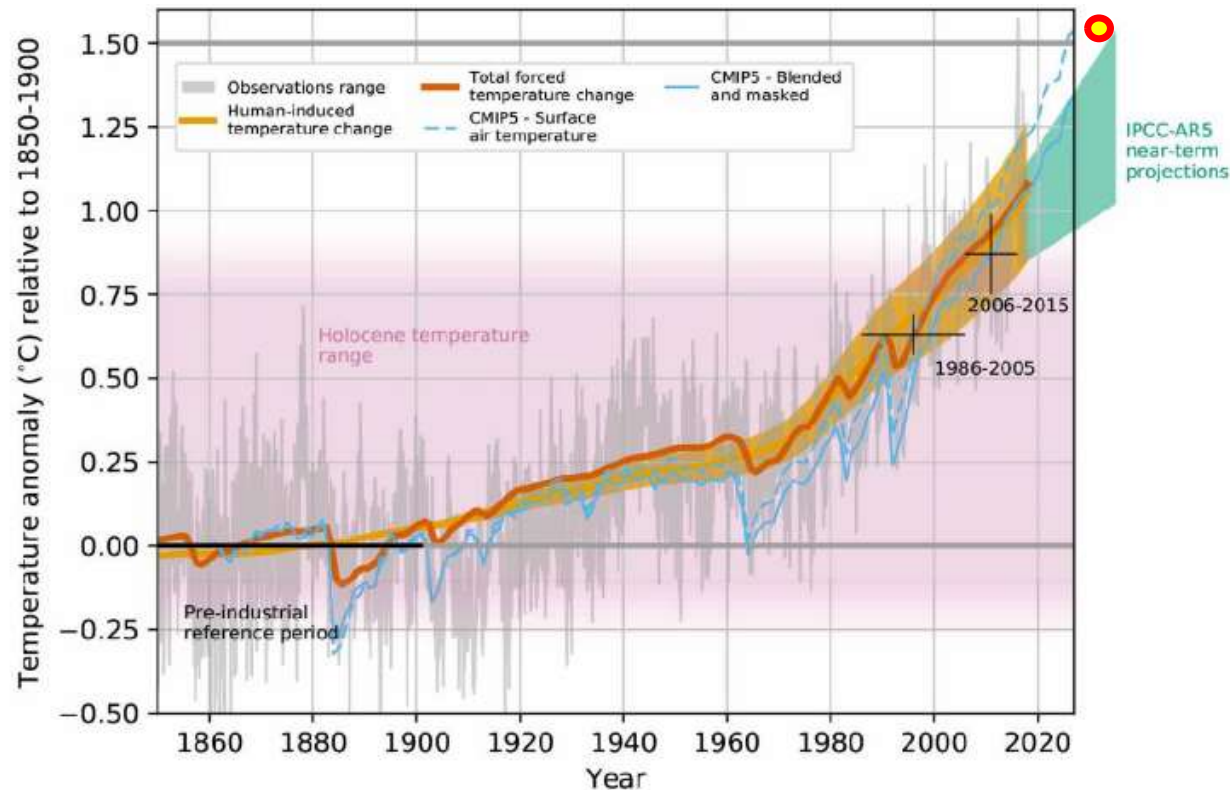


Figure 1.2: Evolution of global mean surface temperature (GMST) over the period of instrumental observations. Grey line shows monthly mean GMST in the HadCRUT4, NOAA, GISTEMP and

IPCC, Special Report on 1.5 degrees

ipcc
INTERGOVERNMENTAL PANEL ON climate change

Global Warming of 1.5°C

An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

This report gives policymakers and practitioners the information they need to make decisions that tackle climate change while considering local context and people's needs. The next few years are probably the most important in our history.



Debra Roberts
Co-Chair, WGII
Incheon, 8 October 2018

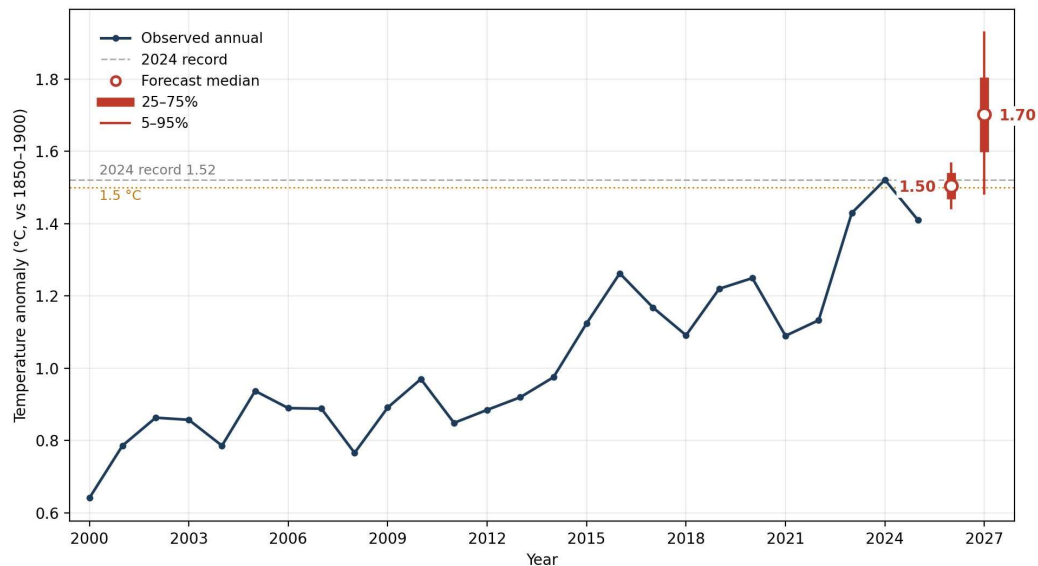
ipcc
INTERGOVERNMENTAL PANEL ON climate change

WHO UNEP

And it's already much later than we think.

Global temperature forecast for 2026 and 2027

Observed annual global mean surface temperature (6-dataset mean) and forecast medians with 25–75% and 5–95% ranges



The Climate Brink

Why Hansen may end up being right about 2026

Whether 2026 sets a new record is increasingly likely to be a split decision between different groups



ZEKE HAUSFATHER
JUL 30, 2026

Geophysical Research Letters

Research Letter | [Open Access](#) | [CC](#) | [i](#)

Global Warming Has Accelerated Significantly

G. Foster, S. Rahmstorf

First published: 06 March 2026 | <https://doi.org/10.1029/2025GL118804> | [VIEW METRICS](#)

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Abstract

Recent record-hot years have caused discussion over whether global warming has accelerated. Previous analysis found acceleration (i.e., increase in warming rate) has not yet reached a 95% confidence level, given natural temperature variability. We remove the estimated influence of three main natural variability factors: El Niño, volcanism, and solar variation. The resulting adjusted and thus less “noisy” data show that there has been acceleration with over 98% confidence, with faster warming over the last 10+ years than during any previous decade.

Greece, 08/09/2023

OICHALIANEWS.GR

0:10 / 0:20



Derna, Libya, 12/09/2023



Libyan poet who wrote warning poem died days later in floods

“To whom do we cry out about the catastrophe that engineers and specialists are sure will happen? The disaster that will befall the valley and end everything ... after which our cries will be of no use.”

Mustafa al-Trabelsi
Facebook post days before the flood

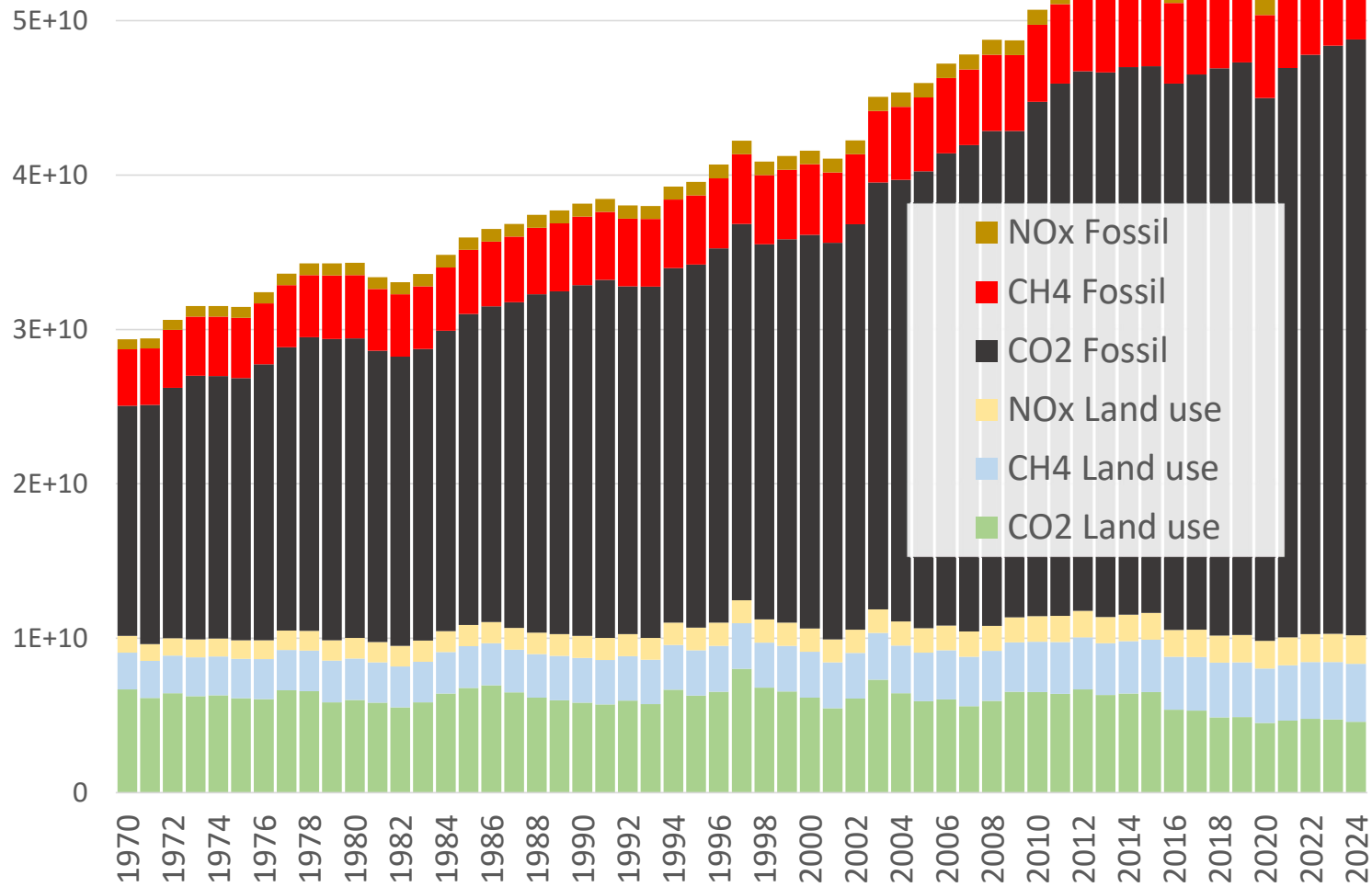


The rain

Exposes the drenched streets,
the cheating contractor,
and the failed state.
It washes everything,
bird wings
and cats' fur.
Reminds the poor
of their fragile roofs
and ragged clothes.
It awakens the valleys,
shakes off their yawning dust
and dry crusts.
The rain
a sign of goodness,
a promise of help,
an alarm bell.

Mustafa al-Trabelsi
late 1970s-2023

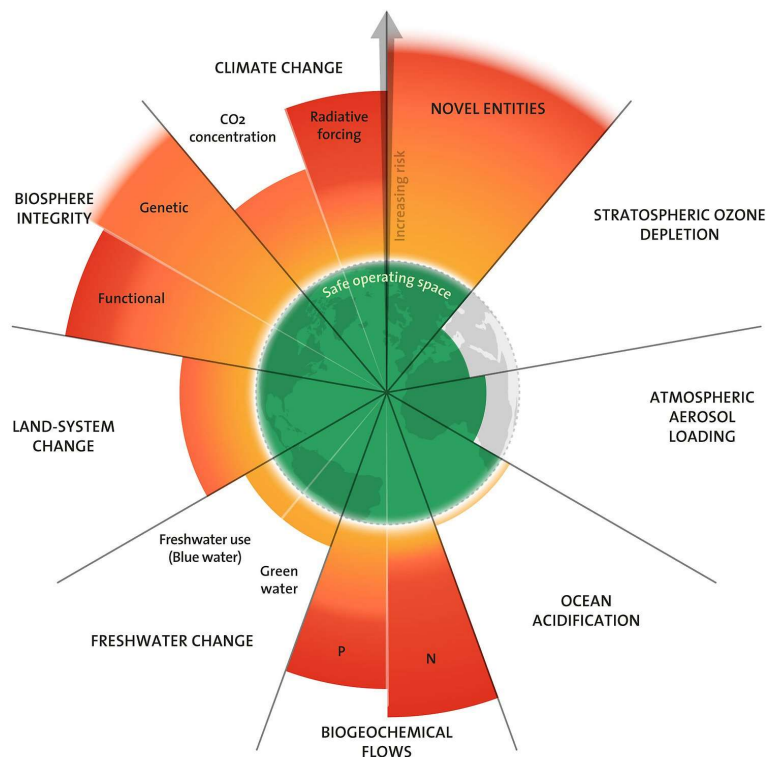
tonnes CO₂-équivalent



- Part «Land-Use» assez constante 10 Gigatonnes par an.
- Parts fossiles CO₂ et méthane en augmentation.
- Total presque doublé depuis 1970.

Graphe: J. Steinberger, Données OWID, Jones et al. (2025)

Planetary boundaries



- 9 processes that regulate the stability and resilience of the earth system.
 - Some linked to biogeochemical cycles: water, CO₂, nitrogen, phosphorus, aerosols, ozone.
 - New entities: products whose chemical composition did not previously exist on earth (radioactive products, plastics, dioxins, etc.).
 - Some related to living organisms and ecosystems: land use, biodiversity.
 - Some reversible (in theory), others not.
- Transgression of one or more planetary limits jeopardizes the stability of the Earth system, on which we depend for our very survival.

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Figure: 2025 update. Richardson et al 2023 <https://www.science.org/doi/full/10.1126/sciadv.adh2458>

VERY simple economic causality of breaching planetary boundaries.

SCIENCE ADVANCES | RESEARCH ARTICLE

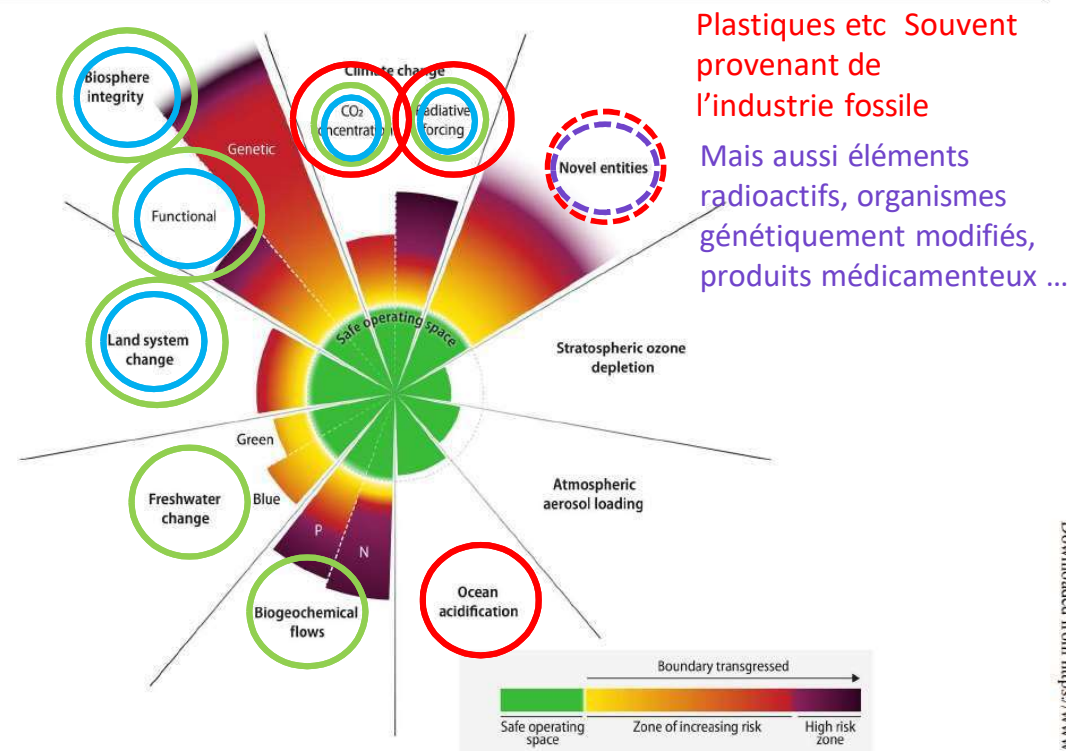
Economic sectors:

Fossil fuel combustion

Agriculture (mostly animal) and fishing

Forestry and deforestation

Others (industry, materials)



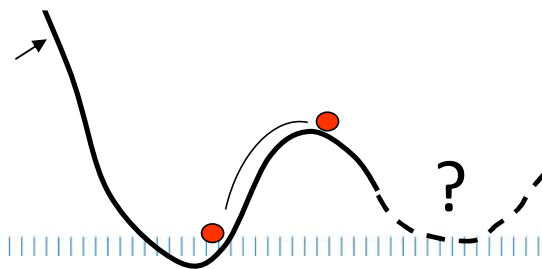
(*) labellisation FSC est douteuse, rôle de la Chine.
<https://www.sixthtone.com/news/1003369>

Fig. 1. Current status of control variables for all nine planetary boundaries. Six of the nine boundaries are transgressed. In addition, ocean acidification is approaching its planetary boundary. The green zone is the safe operating space (below the boundary). Yellow to red represents the zone of increasing risk. Purple indicates the high-risk zone where interglacial Earth system conditions are transgressed with high confidence. Values for control variables are normalized so that the origin represents mean Holocene conditions and the planetary boundary (lower end of zone of increasing risk, dotted circle) lies at the same radius for all boundaries (except for the wedges representing green and blue water, see main text). Wedge lengths are scaled logarithmically. The upper edges of the wedges for the novel entities and the genetic diversity component of the biosphere integrity boundaries are blurred either because the upper end of the zone of increasing risk has not yet been quantitatively defined (novel entities) or because the current value is known only with great uncertainty (loss of genetic diversity). Both, however, are well outside of the safe operating space. Transgression of these boundaries reflects unprecedented human disruption of Earth system but is associated with large scientific uncertainties.

Planetary boundaries not the same as tipping points. Tipping points are:

- Irreversible events in the earth system set in motion by the impacts of global warming. (hysteresis)
- Often linked with feedback loops.
- Different from planetary limits (less gradual, more sudden), and irreversible in a shorter-than-geological future.

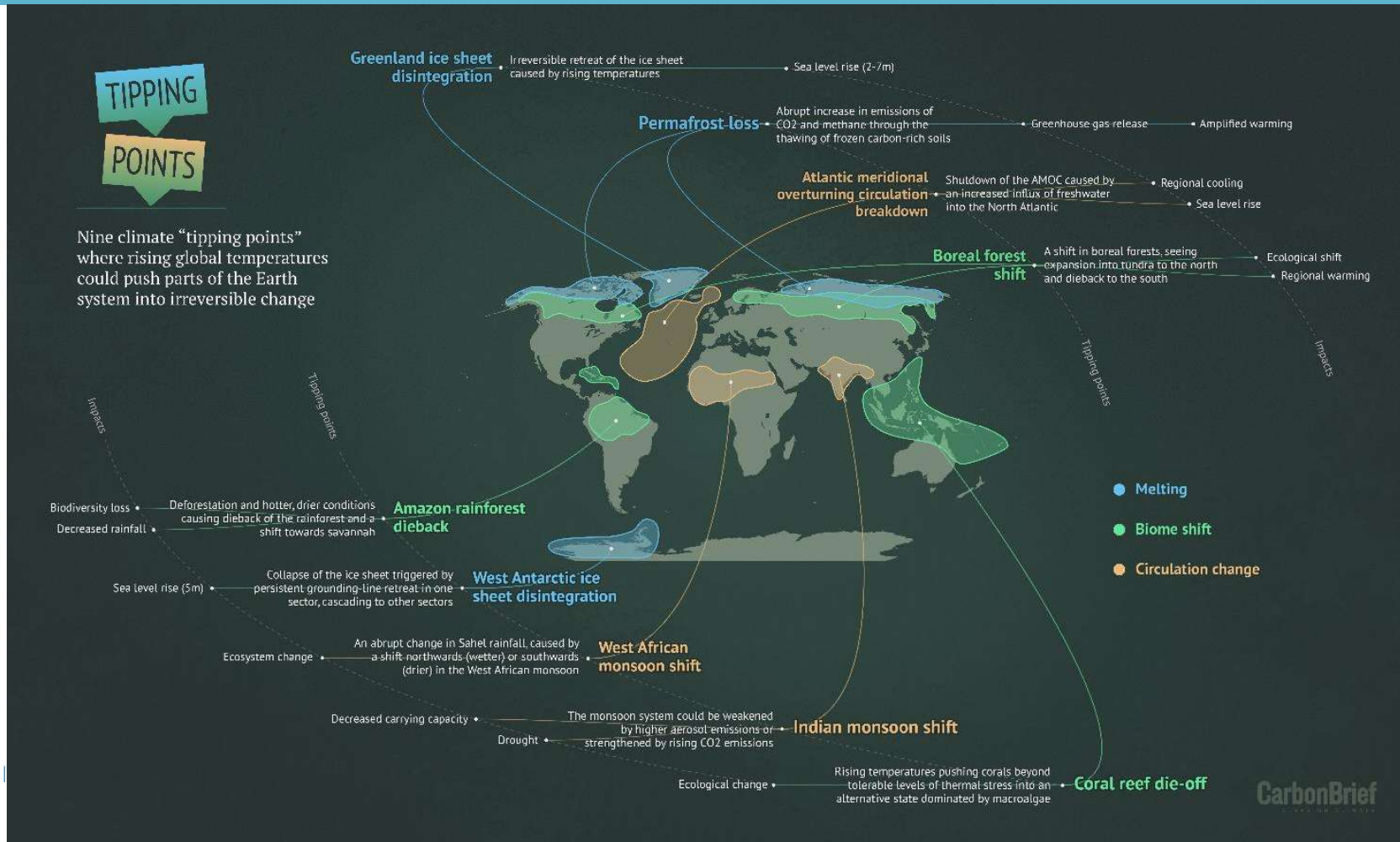
The system is moved from one equilibrium to another.



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Tipping points



<https://www.carbonbrief.org/explainer-nine-tipping-points-that-could-be-triggered-by-climate-change>

Nine climate tipping points now 'active,' warn scientists

by University of Exeter



Credit: CC0 Public Domain

More than half of the climate tipping points identified a decade ago are now "active", a group of leading scientists have warned.

This threatens the loss of the Amazon rainforest and the great ice sheets of Antarctica and Greenland, which are currently undergoing measurable and unprecedented changes much earlier than expected.

This "cascade" of changes sparked by global warming could threaten the existence of human civilisations.

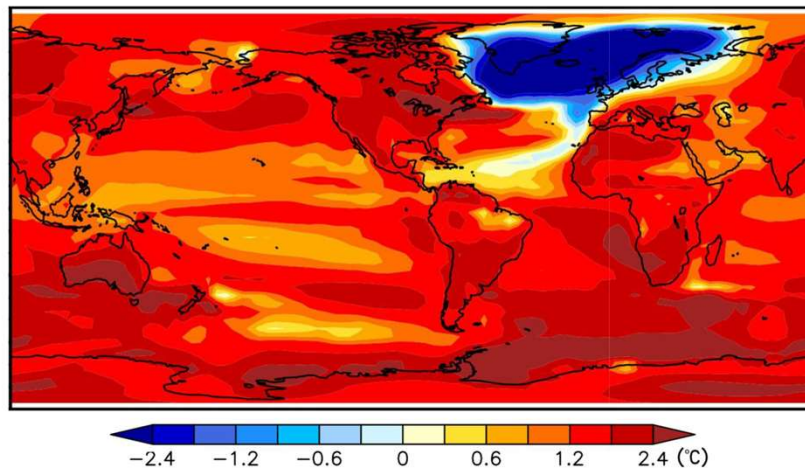
9 active tipping points

1. Arctic sea ice
2. Greenland ice sheet
3. Boreal forests
4. Permafrost
5. **Atlantic Meridional Overturning Circulation - AMOC**
6. Amazon rainforest
7. Warm-water corals
8. West Antarctic Ice Sheet
9. Parts of East Antarctica

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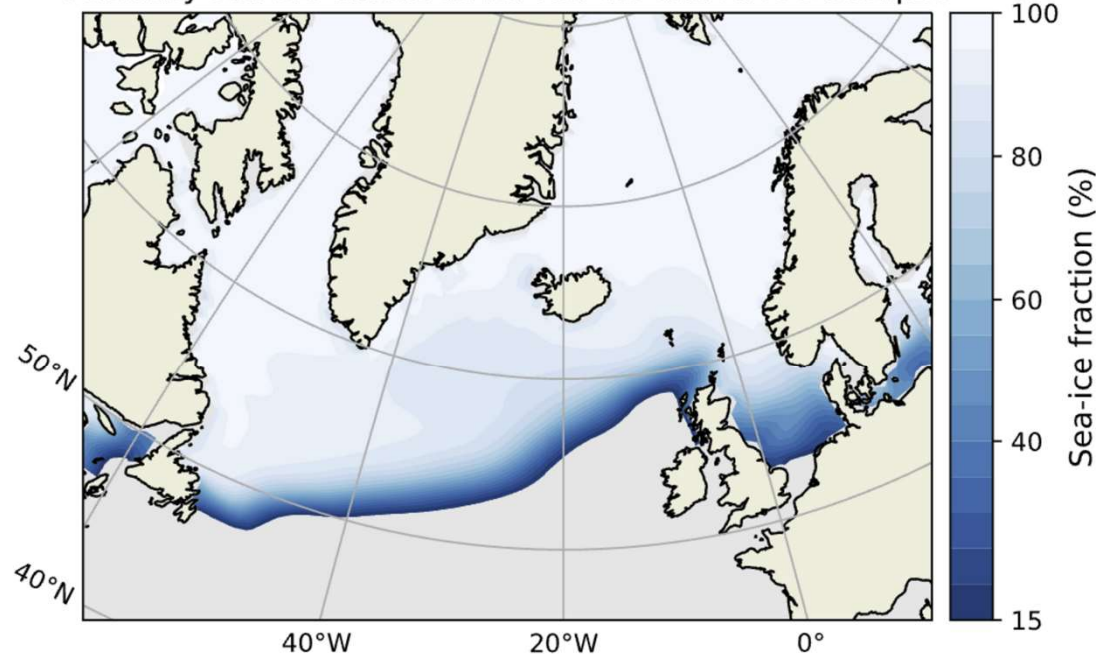
We, the undersigned, are scientists working in the field of climate research and feel it is urgent to draw the attention of the Nordic Council of Ministers to the serious risk of a major ocean circulation change in the Atlantic. A string of scientific studies in the past few years suggests that this risk has so far been greatly underestimated. Such an ocean circulation change would have devastating and irreversible impacts especially for Nordic countries, but also for other parts of the world.



Annual mean temperature change in an idealised future CO₂ doubling scenario in which the AMOC has fully collapsed. Source: Science¹.

https://en.vedur.is/media/ads_in_header/AMOC-letter_Final.pdf

February sea-ice extent under RCP4.5 and AMOC collapse



February sea ice extent under an intermediate emissions scenario (RCP4.5) and AMOC collapse, where the blue line indicates the extent of sea ice. Credit: Amended from van Westen et al (2025).

<https://www.carbonbrief.org/ocean-current-collapse-could-trigger-profound-cooling-in-northern-europe-even-with-global-warming/>

AMOC tipping point

WAY FORWARD? SUFFICIENCY

Sufficiency is

“A set of measures and daily practices that avoid demand for energy, materials, land, and water while delivering human well-being for all within planetary boundaries.”

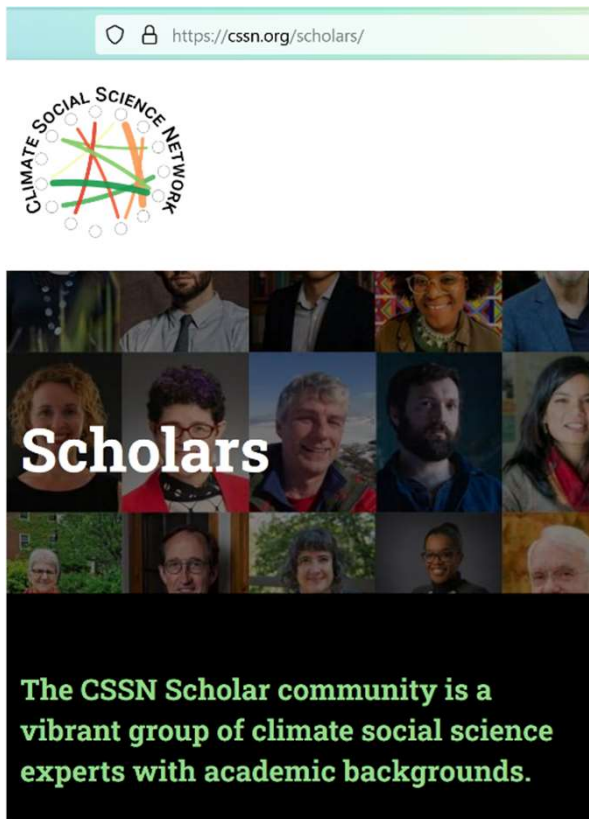
*IPCC AR6 SPM 2023,
Dr Yamina Saheb*



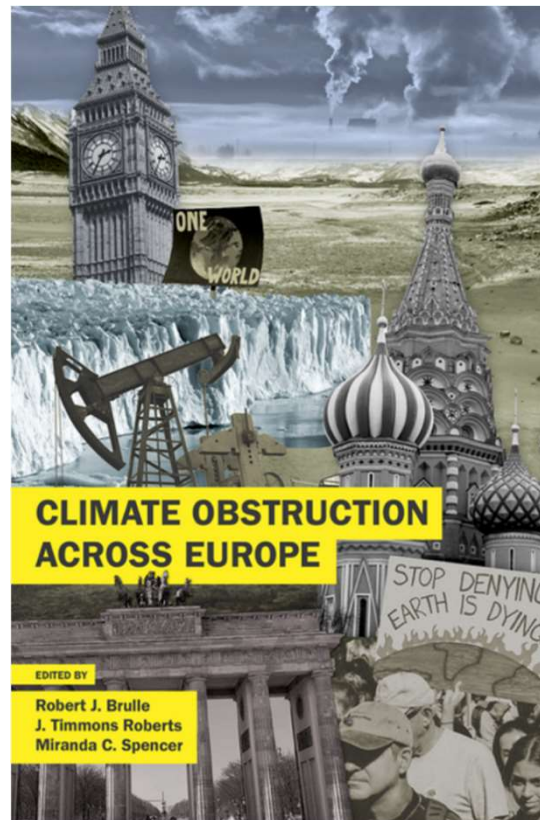
Housing cooperative, EcoQuartier Les Vergers, Meyrin, Geneva

CLIMATE OBSTRUCTION : A NEOLIBERAL STORY

The Climate Social Science Network



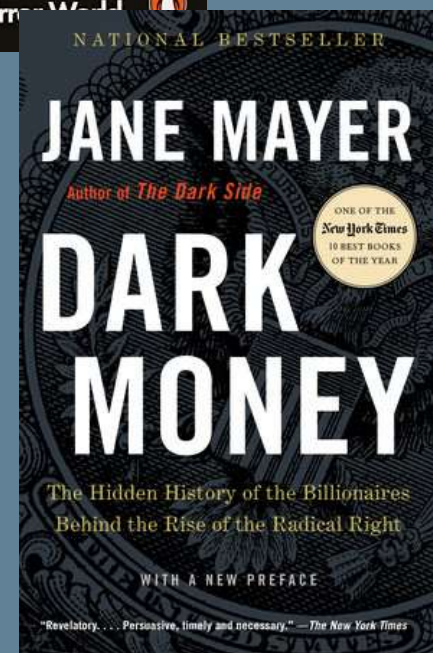
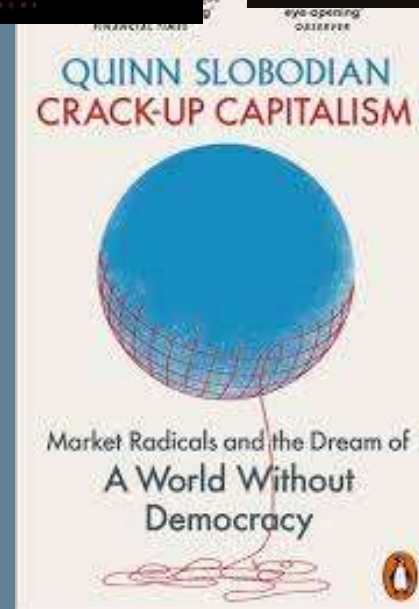
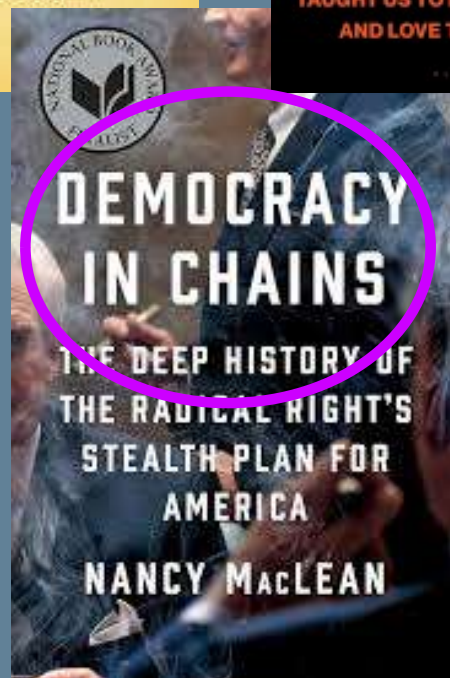
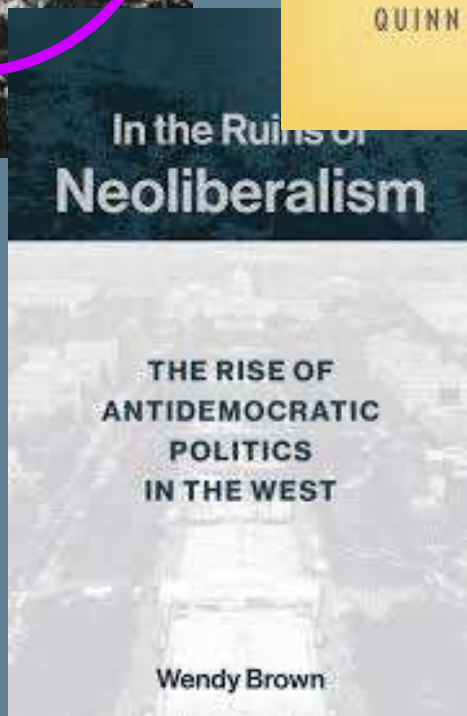
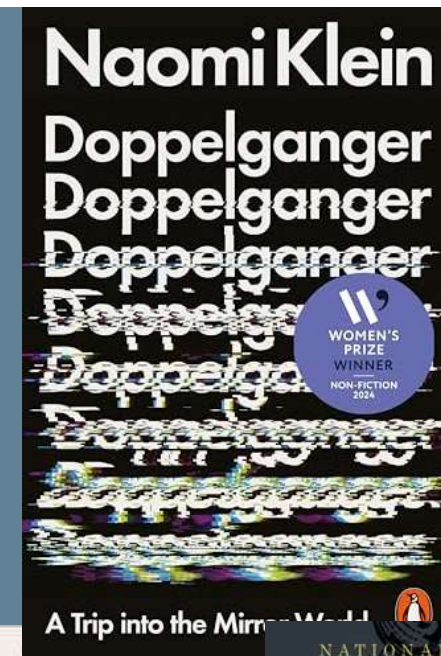
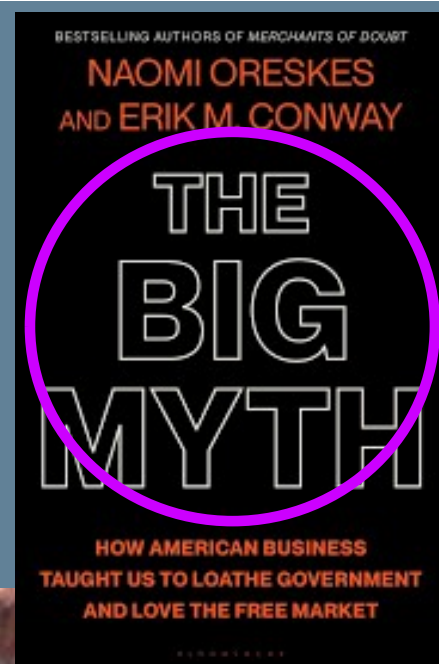
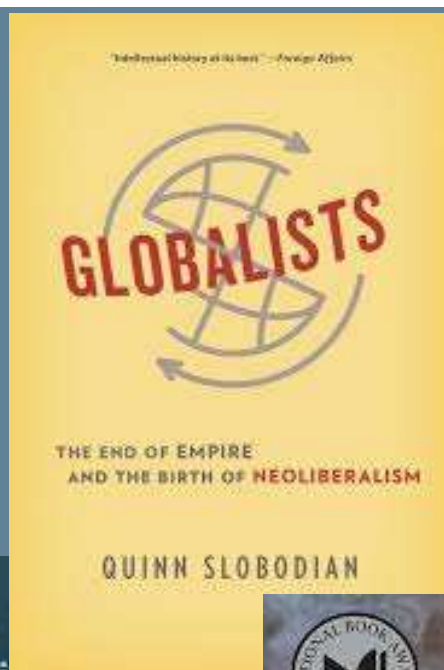
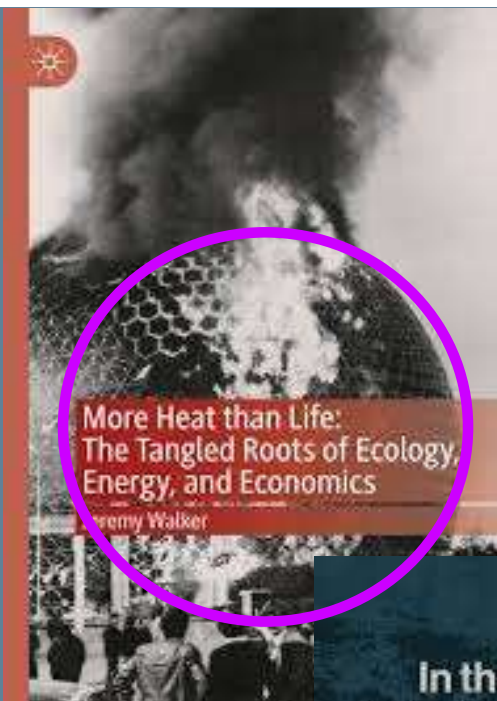
2024



2025



<https://cssn.org/wp-content/uploads/2024/05/Climate-Obstruction-in-Europe.pdf>



The role of the Neoliberal Atlas Network in climate obstruction

The Atlas Network is involved in more than 500 think tanks worldwide, including in Switzerland.

“Hayek understood that protecting the market mechanism from excess democracy would require the engineering of consent, through [... a] political machine mass-marketing ‘business propaganda’.

The task ...was taken up by the English businessman Anthony Fisher, a devotee of Hayek. In 1955, Fisher founded the Institute for Economic Affairs (IEA), which later launched the Thatcher revolution from the far right of the Conservative Party. In a letter to Fisher after her 1979 election victory, Margaret Thatcher wrote that the IEA had created ‘the climate of opinion which made our victory possible.’”

Jeremy Walker, “More Heat Than Life”

Neoliberal victory, first at gunpoint in 1973 with Pinochet in Chile, ...

then via ballot box with Thatcher in the United Kingdom in 1979.



BFFs Thatcher and Pinochet

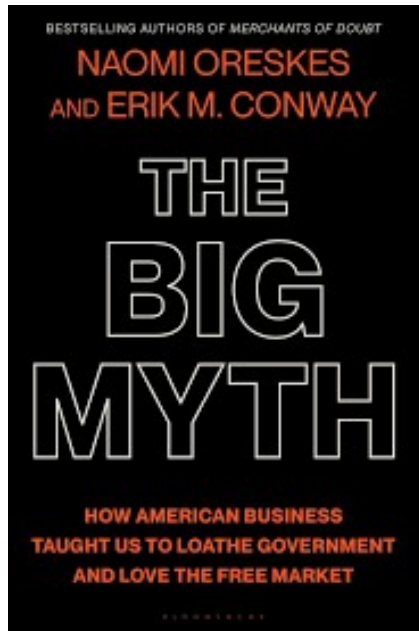
The Atlas Network and climate denial

*The Atlas Network think tanks replicate their materials worldwide, advocating **unequal neoliberal economic policies** and promoting **climate science denial**. They also dabble in divisive culture war topics, on gender (equal rights for women, queer & trans rights), race or migration, for instance.*

The constant thread will be to push-back against democratically-mandated state intervention.

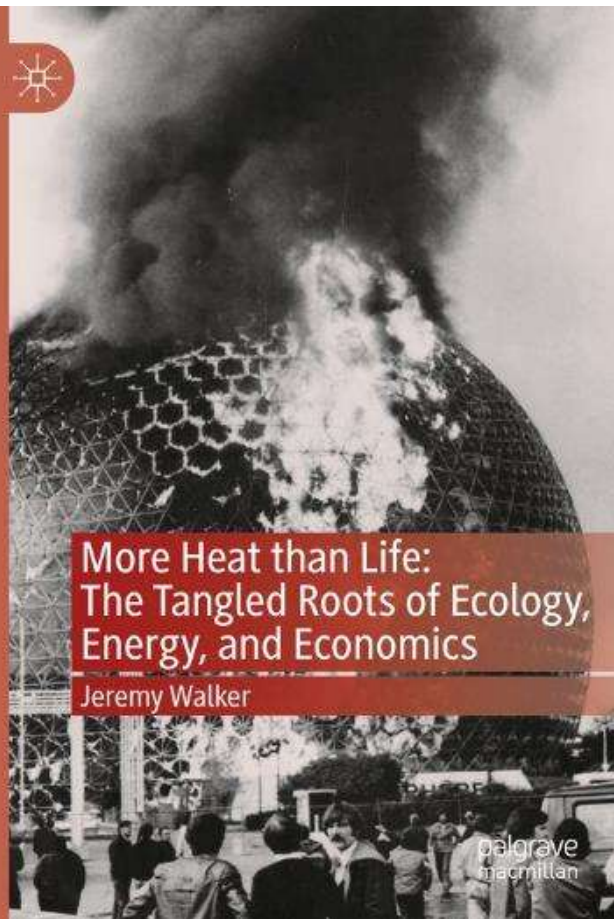
The communicators of the neoliberal & climate denial agenda do not care about the fundamental values or reality they are commenting. They care about the strategic outcome of creating the discussion in the first place.

The strategic goal of neoliberal communicators is always twofold: to create distrust in democratic, publicly-oriented or funded processes, and to create confusion sufficient to disorient and disable democratic decision-making.



Atlas Network influence

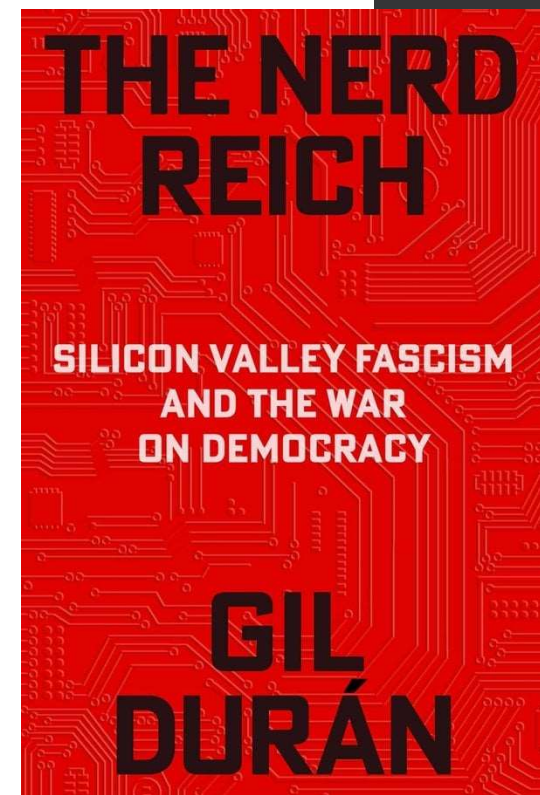
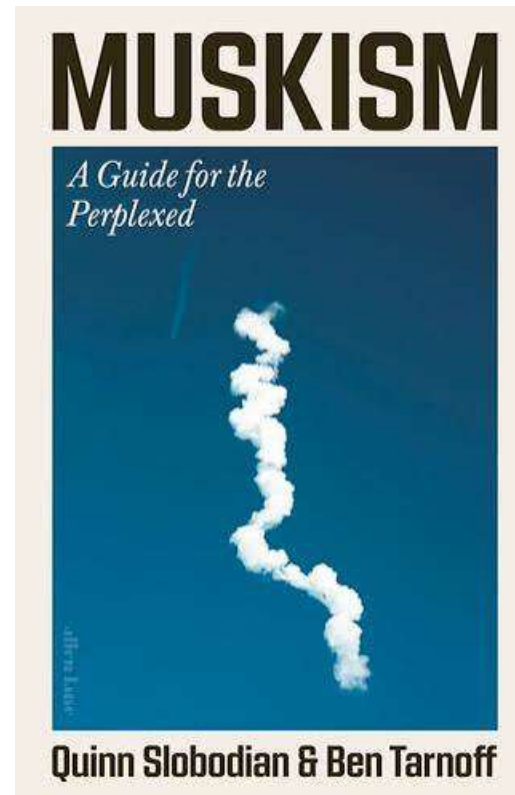
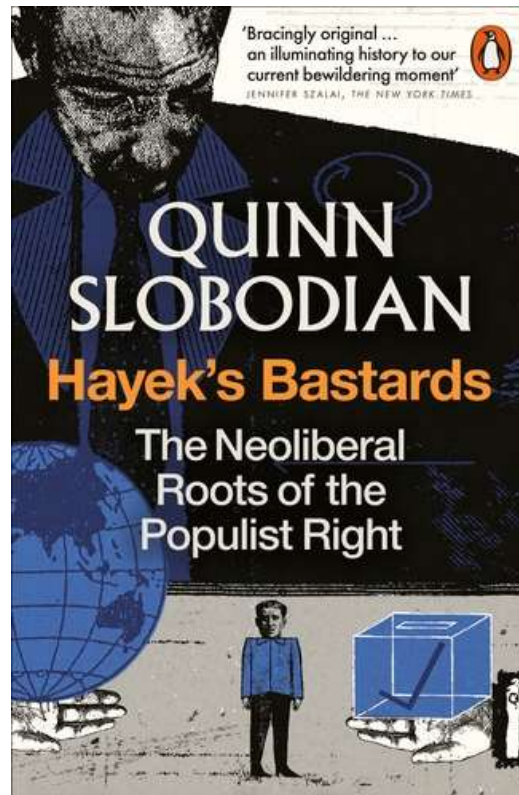
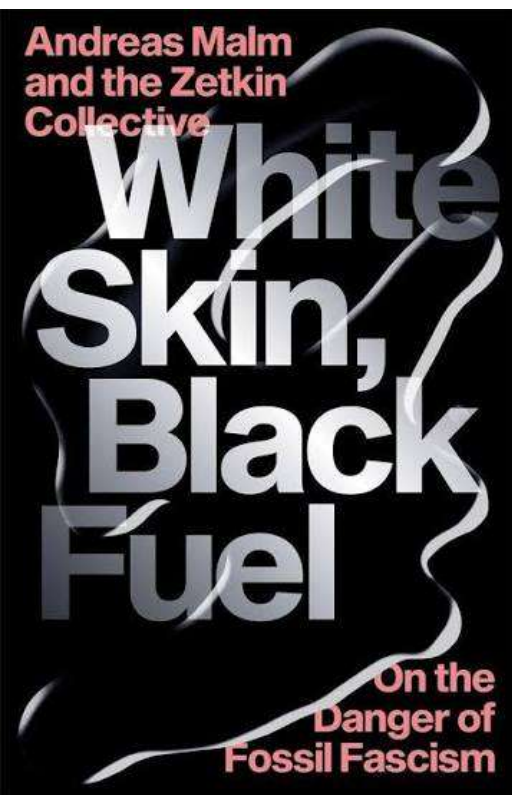
One core goal is to replace university research expertise, influencing the influencers, especially journalists and teachers.



“Thus the (...) work of the libertarian (...) intellectuals and political insiders seeking to capture the policy planning powers of the state must be complemented with a permanent programme of mass communication **to counter and under-mine the sources of the ‘wrong’ sets of beliefs — public universities, public servants, public broadcasters, public scientific institutes ...**”

Jeremy Walker, *More Heat Than Life*

By undermining and replacing public-interest experts in the communicative sphere, the Atlas Network’s seeks to deprive us of the foundations that democratic decision-making processes rely upon: a good understanding of reality itself.



There are some new twists.



Crypto ideology of **Network State** is a new twist on the destruction of nation-state democracies, building on neoliberal favoring of multinational corporations.

- Cryptocurrencies to “discipline” democratic governments.
- AI to “discipline” labor.

Crucial to learn more.

1. Gil Duran’s “**Nerd Reich**”
2. Emil Torres and Kate Willett “**Dystopia Now**”

The Network State Coup is Happening Right Now

Gil Duran
01 Feb 2023 — 4 min read



WHAT'S BEHIND THE RACE TO CREATE ARTIFICIAL GENERAL INTELLIGENCE?

Understanding the TESCREAL Bundle of Ideologies



Dr. Émile P. Torres
Dig Curator, Truthdig



Dr. Timnit Gebru
Founder & Executive Director at
The Distributed AI Research Institute (DAIR)

The TESCREAL bundle: Eugenics and the promise of utopia through artificial general intelligence
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TESCREAL

Transhumanism
Extropianism
Singularitarianism
Cosmism
Rationalism
Effective Altruism
Longtermism

The TESCREAL bundle: Eugenics and the promise
of utopia through artificial general intelligence

by Timnit Gebru and Émile P. Torres

Table 1: “TESCREAL bundle” of ideologies.

Ideology	Definition	Influential figures	Organizations
Transhumanism	An ideology centered around the idea of humanity “transcending itself” (see Huxley, 1957). Modern transhumanists affirm the feasibility and desirability of radically “enhancing” the human organism, thus enabling us to become immortal, superintelligent, more rational, and so on.	Julian Huxley (1957). Nick Bostrom (2005c, 2009a). David Pearce (Bostrom, 2005a). Max More (Bostrom, 2005a).	Extropy Institute. Alcor. World Transhumanist Association. Future of Humanity Institute.
Extropianism	A broadly libertarian variant of transhumanism that emphasizes rationality, self-transformation, scientific and technological progress, and economic growth.	Max More (current) [23]. Nick Bostrom (1990s) (Khatchadourian, 2015). Eliezer Yudkowsky (1990s) [24].	Extropy Institute.
Singularitarianism	A variant of transhumanism that emphasizes the merging of humans and machines, and anticipates a future event called the “Singularity” (Kurzweil, 2005).	Ray Kurzweil (2005). Eliezer Yudkowsky (2000).	Singularity Institute (defunct). Singularity University (cofounded by Kurzweil). Machine Intelligence Research Institute.
Cosmism	A vision of the future that anticipates humans and machines merging, the development of “sentient AI” and mind uploading, space colonization, and “scientific ‘future magic’ much beyond our current understanding and imagination” (Goertzel, 2010).	Ben Goertzel (2010).	

Rationalism	An ideology that emerged from the LessWrong website, founded by Eliezer Yudkowsky in 2009. Rationalists focus on “improving human reasoning and decision making,” and many members believe that advanced AI is “a very big deal for the future of humanity” [25].	Eliezer Yudkowsky. Jaan Tallinn [26]. Peter Thiel [27]. Nick Bostrom. Scott Alexander [28]. Vitalik Buterin [29].	LessWrong community blogging website. Machine Intelligence Research Institute.
Effective Altruism	A movement that could be seen as the twin sibling of Rationalism. Whereas Rationalists aim to maximize their rationality, Effective Altruists strive to maximize their “positive impact” on the world [30].	William MacAskill (MacAskill, 2015). Toby Ord [31]. Nick Bostrom (Matthews, 2015). Dustin Moskovitz [32]. Sam Bankman-Fried [33].	Centre for Effective Altruism. Open Philanthropy. Future of Humanity Institute.
Longtermism	An “ethic” that combines many central features of the other TESCREAL ideologies (Ord, 2020). It emphasizes the moral importance of becoming a new posthuman species, colonizing space, controlling nature, maximizing economic productivity and creating as much value within the accessible universe as possible.	Nick Bostrom (Crary, 2023). William MacAskill (Greaves and MacAskill, 2019). Toby Ord (Ord, 2020). Nick Beckstead (Beckstead, 2013). Hilary Greaves (Greaves and MacAskill, 2019) Elon Musk (see Torres, 2023c) Jaan Tallinn (see Torres, 2021). Sam Bankman-Fried (see Lewis-Kraus, 2022).	Future of Humanity Institute. Future of Life Institute. Centre for the Study of Existential Risk. Machine Intelligence Research Institute.

Trump and Musk have ushered in the era of cataclysm capitalism. But I have a plan to counter it

Julia Steinberger

The speed with which US democracy is being dismantled is dizzying, but if we organise resistance now we can stop this



Cataclysm capitalism: an ideology of planetary and human nihilism

“The fossil fuel companies, the rightwing tech magnates and the financial companies hurrying in their wake have somehow convinced themselves that **they don’t need prosperous economies to prosper themselves. They have learned to profit from disruption and destruction.** They know from experience that immiserated populations will endure exploitative working conditions and go deep into debt to keep themselves and their families alive.”

Conclusions?

- The same antidemocratic ideology, neoliberalism, is responsible for:
 - Wildly unequal economic directions (austerity, privatization, internationally binding trade agreements enforced by WTO/ISDS tribunals ...);
 - Climate obstruction: denial, delay, various forms of lobbying and state capture, and hence our current state of planetary extreme danger;
 - The rise of fascism and its far-right environmental version, ecofascism;
 - In its most recent TESCREAL Silicon Valley bastardization, for Musk, Thiel, Bezos etc, and the destruction of quiet skies.
- Only full comprehension of our historic moment, and serious organization of the entire scientific community, can give us the ability to counter these forces, but the hour is very late.

Lessons for the Astronomy Community?

1. **Learn the history** of disinformation against science (health, environment, social well-being ...): Oreskes & Conway
2. **Learn the current forms** of disinformation and propaganda: Climate Social Science Network and their reports on climate obstruction.
3. **ORGANISE** within your field, with other scientific bodies (science academies etc), across disciplines (including health and social sciences).
4. **Communicate:** not just on the scientific facts, but to attack and inoculate against disinformation.
5. Remember: the “other side” is ruthless, practiced, organized, antiscientific, antidemocratic, and has already made up their mind that Earth and humanity are worthy of sacrifice.

