

#### McQuillan, Zuboff e Supiot. Tre visioni di una distopia numerica

# (Numerical dystopias: McQuillan, Zuboff e Supiot)

Andrea Saltelli,
UPF Barcelona School of Management, Barcelona, Spain, and
Centre for the Study of the Sciences and the Humanities,
University of Bergen, Bergen, Norway

Di dati e di despoti: scienza aperta, ricerca, repubblica (Data despotism and data republicanism: how, for who and with whom can science be open?)

Pisa, 3-4 giugno 2024 https://www.sp.unipi.it/it/convegno-di-datie-di-despoti-scienza-aperta-ricerca-repubblica/

#### Where to find this talk: www.andreasaltelli.eu



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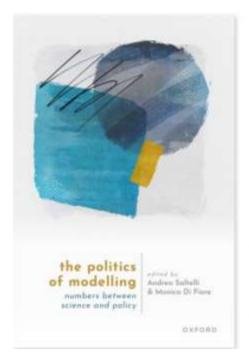
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#### August 25 2023: The politics of modelling is out!



#### Praise for the volume

"A long awaited examination of the role—and obligation—of modeling."

Nassim Nicholas Taleb , Distinguished Professor of Risk Engineering, NYU Tandon School of Engineering, Author, of the 5 -volume series incerto.

\*\*\*

"A breath of fresh air and a much needed cautionary view of the ever-widening dependence on mathematical modeling."

Orrin H. Pilkey, Professor at Duke University's Nicholas School of the Environment, co-author with Linda Pilkey-Jarvis of Useless Arithmetic: Why Environmental Scientists Can't Predict the Future, Columbia University Press 2009.

\*\*\*

'The methods by which power insinuates itself



Of numbers, visible and invisible...

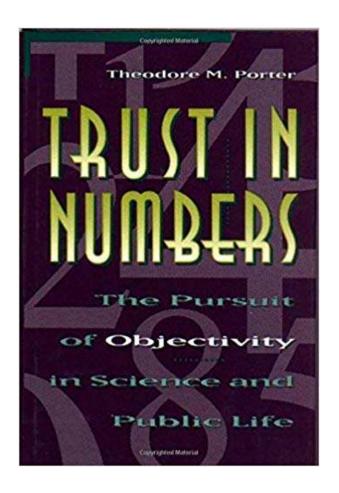
# Blurring lines:

"what qualities are specific to rankings, or indicators, or models, or algorithms?"



Elizabeth Popp Berman

E. Popp Berman and D. Hirschman, The Sociology of Quantification: Where Are We Now?, Contemp. Sociol., vol. in press, 2017.



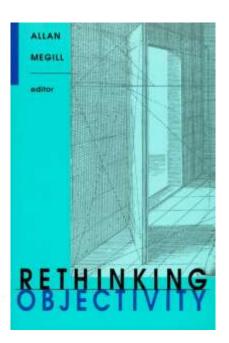
Numbers are not neutral but their purported neutrality is a large part of their appeal: being performative without appearing to be so

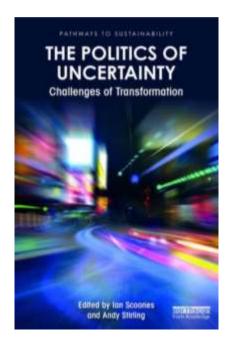
http://ereserve.library.uta h.edu/Annual/WRTG/3705/ Mathison/objectivity.pdf in

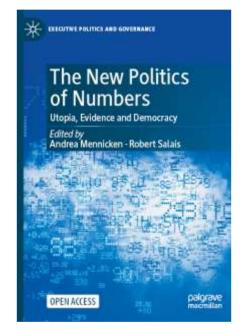
Objectivity as Standardization: The Rhetoric of Impersonality in Measurement, Statistics, and Cost-Benefit Analysis

THEODORE M. PORTER

 Quantification makes knowledge impersonal, hence objective.









2020 2022 2023

Environmental Science and Pulsy 142 (2023) 19-111

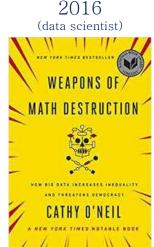


Impact assessment culture in the European Union. Time for something new?

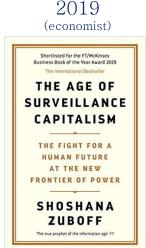
Andrea Saltelli "...", Marta Kue-Czarnecka", Samuele Lo Piano ", Máté János Lőrincz ", Magdalena Otezyk", Arnald Puy ", Erik Reinert ", Stefán Thor Smith ", Jeroen P, van der Sluijs "è. Reveal the policy of the numbers

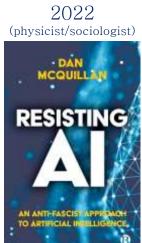
# Powered by algorithms, governance by (visible and invisible) numbers contributes to a loss of democratic agency (a-democracy)











#### From loss of political agency to identity politics

# The Clash Of Civilizations Is The Politics Of The End of History

Reflections by the philosopher Slavey Zillak on universality and "workfloss places."

ESSAY GEOPOLITICS & GLOBALIZATION

BY NATHAN GARDELS

MAY 3, 2024



"The only remaining legitimate source of conflicts are cultural (ethnic, religious) tensions.

Today's rise of 'irrational' populism is thus to be conceived as strictly correlative to the depoliticization of our societies, i.e., to the disappearance of the proper political dimension" (Slavoj Žižek)



https://www.noemamag.com/the-clash-of-civilizations-is-the-politics-of-the-end-of-history/

# Why ethics of duantification or or is needed now

#### Andrea Saltelli

Open Evidence Research, Universitat Oberta de Catalunya, Barcelona, Spain

#### Antonio Andreoni

UCL Institute for Innovation and Public Purpose; South African Research Chair in Industrial Development, University of Johannesburg, South

#### Wolfgang Drechsler

Tallinn University of Technology, Estonia; UCL Institute for Innovation and Public Purpose; Davis Center at Harvard University, United States

#### Jayati Ghosh

University of Massachusetts Amherst, United States:

UCL Institute for Innovation and Public Purpose

#### Rainer Kattel

UCL Institute for Innovation and Public Purpose

#### Ingrid H. Kvangraven

Department of Politics, University of York

#### Ismael Rafols

Centre for Science and Technology Studies, Leiden University, the Netherlands

#### Erik S. Reinert

Tallinn University of Technology, Estonia; UCL Institute for Innovation and Public Purpose

#### Andy Stirling

Science Policy Research Unit, University of Sussex

#### Ting Xu

School of Law at the University of Essex

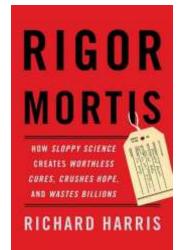


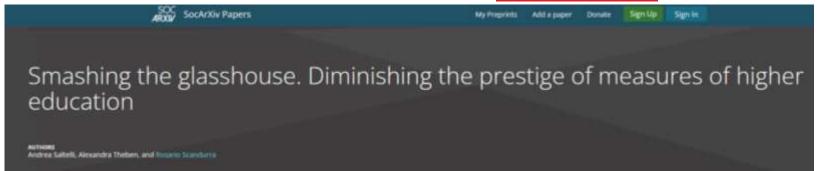
WORKING PAPER WP 2021/05



# Scope for harm from 'wrong numbers' e.g. in:

- Medical research
- Governance of science
- Higher education
- Finance



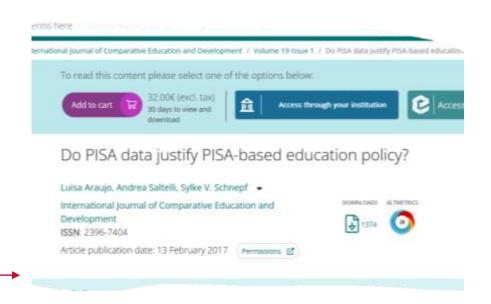




WORKING PAPER
WP 2021/05

# Scope for harm from 'wrong numbers' e.g.:

- \_ ...
- Numbers from international organizations
  - Food and AgricultureOrganization
  - The World Bank
  - OECD (see PISA!)
  - \_ ...
- \_ ...



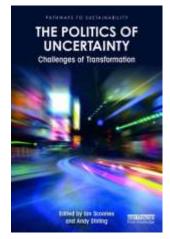


#### 'Trendy' methods may also harm

 Randomized control trials) may be misused to suggest more general conclusions that may not be valid

- Sophisticated statistical/econometric techniques that can be designed in ways that promote desired policy

conclusions

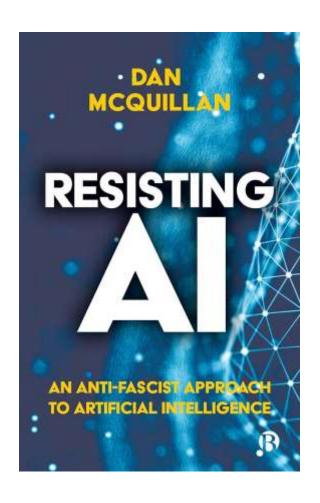




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WP 2021/05

"...is it possible to counter the despotism of data, which seems to have been adopted by the institutions of the European Union, with a republicanism of data?"

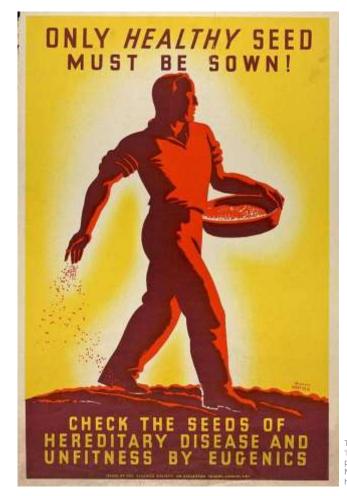




Resisting AI contrasts optimistic visions about AI's ··· AI may best be seen as a continuation and reinforcement of bureaucratic forms of discrimination and violence, ultimately fostering authoritarian outcomes

AI's promise of objective calculability is antithetical to an egalitarian and just society

··· Based on opaque algorithms – various actors can discriminate against categories of people in accessing jobs, loans, medical care, and other benefits



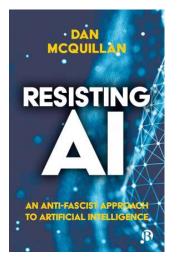
AI ←→ soft eugenic approaches to the valuation of life by modern welfare states

AI eugenic logic and technical operations

Parallel is with historical eugenicists: saving the state by sterilizing defectives so that the state would not have to care for their offspring

van Toorn, G., Soldatić, K. (9 April 2024). "Disablism, racism and the spectre of eugenics in digital welfare". Journal of Sociology. SAGE Publications Ltd: 14407833241244828

This poster from the 1930s promotes the idea of 'positive' eugenics through the figure of the 'healthy' sower of seed, but also proposes unspecified 'checks' or 'negative' eugenic methods to prevent supposedly hereditary conditions and 'unfitness' © Wellcome Collection. Attribution-NonCommercial 4.0 International (CC BY-NC 4.0); source: https://www.englishheritaqe.org.uk/visit/blue-plaques/blue-plaque-stories/eugenics/

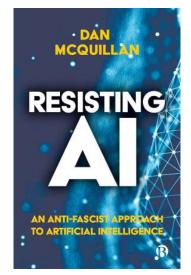


AI and "hidden and undercompensated labour"

"Necropolitics", the politics of who is entitled to live, and who to die

AI "self-reinforcing social profiling" against the vulnerable, see e.g. optimize welfare distribution based on existing data patterns





This image was generated by OpenAl's image-generation software, Dall-E 2. The prompt was: "A seemingly endless view of African workers at desks in front of computer screens in a printmaking style." TIME does not typically use Al-generated art to illustrate its stories, but chose to in this instance in order to draw attention to the power of OpenAl's technology and shed light on the labor that makes it possible.lmage generated by Dall-E 2/OpenAl. Source: https://time.com/6247678/openaichatgpt-kenya-workers/



#### Hannah Arendt Eichmann in Jerusalem

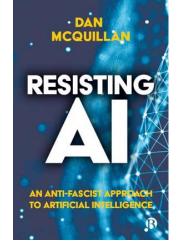
Ein Bericht von der Banalität des Bösen McQuillan ←→Hannah Arendt's concept of the thoughtless bureaucrat in 'Eichmann in Jerusalem'

AI and "algorithmic thoughtlessness"

AI and 'states of exception'

Could AI make possible initiatives like creating LGBT-free zones in Poland?

Cabello Fernández-Delgado, F. (14 January 2024). "Dan McQuillan, Resisting AI: An Anti-Fascist Approach to Artificial Intelligence". International Journal of Communication. 18: 4. ISSN 1932-8036.





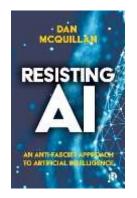
Flyer for the Lucas Plan conference in Birmingham on 26th November 2016, source: https://theecologist.org/2016/nov/02/lucasplan-how-greens-and-trade-unionists-can-unite-common-cause

#### Resistance:

- →people's councils and workers' councils
- → feminist science (standpoint theory)
- →post-normal science (extended peer communities)
- →new materialism

Example: Lucas Plan of the workers of Lucas Aerospace Corporation: workforce takes control, reorienting the enterprise toward useful products

Sharpe, Oli (2023). "Book Summary and Review: Resisting AI by Dan McQuillan, a comment". Go Meta. Retrieved 30 January 2024 - via YouTube https://www.youtube.com/watch?v=QeO50vj5pz4

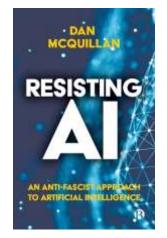




Scarfe, Tim; McQuillan, Dan (2023). "#109 - Dr. Dan McQuillan - Resisting AI". Machine Learning Street Talk. Retrieved 30 January 2024 - via YouTube https://www.youtube.com/watch?v=P1j3VoKBxbc

McQuillan scepticism about AI ethics:

Beware "watered-down forms of engagement" with AI, such as citizen juries, which superficially look like democratic deliberation but may actually obscure important decisions that transcend the engagement situation (p.128)







Bollettino telematico di filosofia politica

Published October 7, 2022 | Version Published

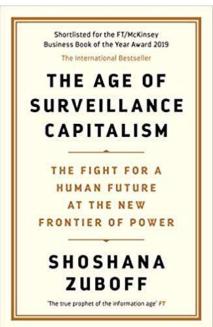
#### What's wrong with "Al ethics" narratives

Daniela Tafani<sup>1</sup>

https://zenodo.org/record/7156364

- Technological determinism (there is no going back)
- The Principle of Innovation (regulation hampers profit and economic growth)
- Solutionism/technicism (political and legal issues are transformed into technical ones thus amenable to a technical solution)
- Anthropomorphising machines, dehumanizing people (the Human Brain Project)
- Legal exceptionalism (New rules are needed for a new technology)
- Crying 'wolf' about future challenges to distract from present ones (Pause Al!)



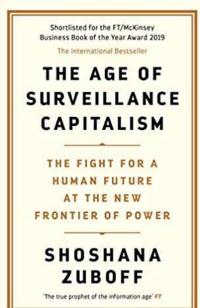


A project of domination of consumers and voters is made possible by artificial intelligence, big data & cognitive psychology

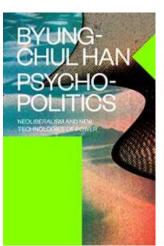
Inequality, power asymmetries and the world of surveillance capitalism

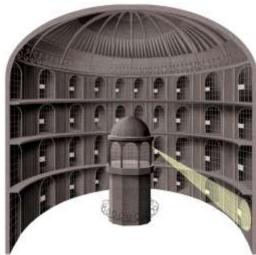


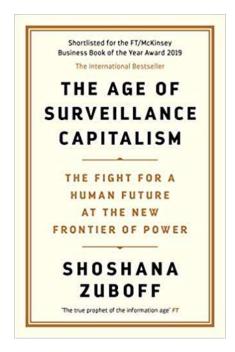
··· and the surveillance is voluntarily accepted



Byung Chul Han 'virtual panopticon'









AI empowered with cognitive psychology

A project of domination?

Chapters 11 & 12

Instrumentarian power

Chapter 10

Néorationalism d'importation

La trollisation de l'espace public

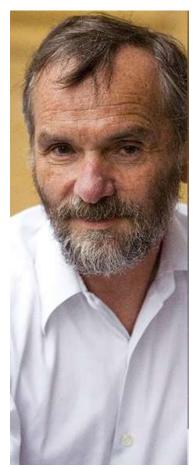
Contesting unjust/unfair governance arrangement is impossible without producing alternative constructions of evidence – that requires muscles not easily available to the lay citizen







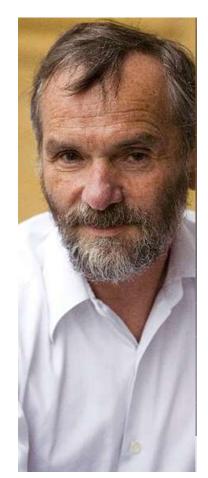
Purported facts checkers play numbers to serve private interests



An indictment of the Total Market and the normative uses of economic quantification

https://www.college-defrance.fr/site/en-alainsupiot/Governance-by-Numbers-Introduction.htm

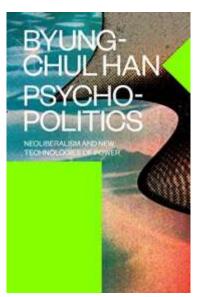
# Alain Supiot La Gouvernance par les nombres Cours au Collège de France 2012-2014

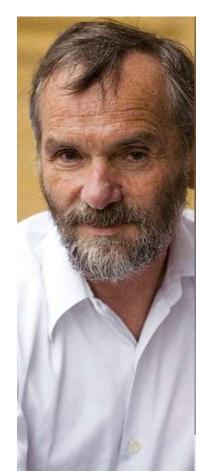


we have entered the era of the cybernetic imaginary, which revives the West's age-old dream of grounding social harmony in calculations.

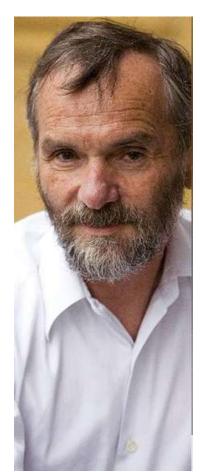
Same diagnosis about the neoliberal 'exploitation of freedom' from Byung Chul Han

Slave of ourselves



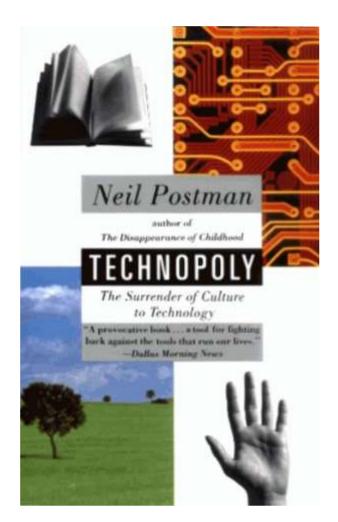


Repudiating the goal of governing by just laws, this new discourse advocates in its stead the attainment of measurable objectives efficiently



··· This leaves no option open to populations or countries than to ride roughshod over social legislation, and pledge allegiance to those stronger than they are

"[...] it is inescapable that every culture must negotiate with technology, whether it does so intelligently or not. A bargain is struck in which technology giveth and technology taketh away. The wise know this well, and are rarely impressed by dramatic technological changes, and never overjoyed" (p. 5)



Are we negotiating wisely?

No. Despite perceptive warnings so far … the machine moves on at all places simultaneously

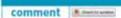
"[...] the research was **selected for EU funding** for a purpose, security, that the funders and the city, which volunteered to collect and offer its citizens' data, considered a public good. They also **took for granted their own model of** 

collective happiness"



# Egregious proof the strength of the techno-optimistic fantasy:

# Digitals Twins of the Earth (Destination Earth in EU)



#### A digital twin of Earth for the green transition

For its green transition, the EU plans to fund the development of digital twins of Earth. For these twins to be more than big data atlasse, they must create a qualitatively new Earth system simulation and observation capability using a methodological transecork responsible for exceptional advances in numerical wealther prediction.

Peter Bauer, Bjorn Stevens and Wilco Hazeleger

he Farmyon Union (137) retends to become character search by 2076, and the art of publics obstagmed to brong day the art of publics obstagmed to brong day of the general transition — the European Caren Dougle was a transacted in Dougraphy 2019 (ref. \*). Accompagned by C of tribles of planned transitioned, Gronn Dougle publics are planned transitioned, Gronn Dougle publics are to adopt the workful around largue occurrent transmitted promises more for public are consumer transmitted promises to consenguate transaction and arrange obstances to descript the control of the c

A key obstant of the Green Deal to its appendence on the digital transformation - as spenit accounts and introperable Homograp determines as a control habfor inferred decision making. The EU identified two landmark actions to support the necessary individualities moreons. Grond Data 4AIF and The branchen Barth Whites GreenData (All will develop the European approach to discover, pasture and capios geospatul enformation. Destructure Earth area to constitud highly accuraty records, or 'shutted twent,' of the Farth to recentor and produt environmental change and furnish impact in support of sustainable devolupment. Aligned with the new Digital Europe funding programme," Destination Earth is expected to men in 2021, and the first high-private digital twens serving extremes production and climate change adequation will



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Review Article | Published: 02 May 2023

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# Big Data in Earth system science and progress towards a digital twin

Xin Li <sup>™</sup>, Min Feng <sup>™</sup>, Youhua Ran, Yang Su, Feng Liu, Chunlin Huang, Huanfeng Shen, Qing Xiao, Jianbin Su, Shiwei Yuan & Huadong Guo

Nature Reviews Earth & Environment 4, 319-332 (2023) | Cite this article

3576 Accesses 3 Citations 27 Altmetric Metrics



Yuhan Rao, Rob Redmon, Kirstine Dale, Due E. Haupt, Aaron Hopkinson, Ann Bostrom, Sid Boukabara, Thomas Geenen, David M. Hatt, Bargamin D. Smith, Dev Niyogi, V. Ramaewanny, Eric A. Kilno

The accommend change in our planet shall be furnish addition has led to grand account challenges recluding health orders, immediated continue wouther events, food security, environmental populations, sto. Digital from systems confidence wouther events, incommendation and object computing provide opportunities to support parently and delation-making to access shall be considered. Digital from the Earth systems (07465a) are defined as the digital representation of the complex integrated Earth system including both restrict instances and human architecture. Digital from the polarities to exist a shall be represented in the standard processor and human architecture. The polarities is the polarities of parts decistal challenges. The Ath MOAA All Workshop convened oround 100 members who are developing or interested in participating in the development of OTEES to discuss a shared conversinity vision and path timeved on fortering a future ecosystem of interespension DT465. This paper summatizes the writishing discussions around DT465. We first defined the foundational features of a visite figital before the continued on the conversable of collaboration in order to enable a future ecosystem of free development of various use cases of DT465. Finally, we made practical insconsendations for the continued on different appoints of collaboration in order to enable a future ecosystem of free properties of CF465. Including equity-continued use case development, community of public or of horsest properties of CF465. The public continued on the properties of the continued on a temperature of the continued on the

"By combining this new class of models with advances from past investments in Earth system prediction and observations, digital twins promise to close substantial and recalcitrant gaps in our ability to look into the future [...] An exciting aspect of a digital twin is the potential to break the paradigm of classical Earth system prediction models with fixed and static flows of information managed by layers of experts [...]

A digital twin of Earth would fully integrate observations with an Earth system model and human subsystems for, for example, water, food and energy resource management, to assess the impacts on, and influences from, these subsystems on Earth system trajectories"

A digital twin of Earth for the green transition For its green transition, the EU plans to fund the development of digital twins of Earth. For these twins to be more than big data atlases, they must create a qualitatively new Earth system simulation and observation capability using a methodological framework responsible for exceptional advances in numerical weather prediction. Peter Bauer, Bjorn Stevens and Wilco Hazeleger became dispute soutral by 20%; and the set of policies disapped to bring dear the green transfer -- the European Green Deal -- was attenuated in December to help the world's second largest economic unionality produce energy, devokat siction with non-waste and note pollution inguishment faithfull bed to a confirmation propose determine as a control high be inferred decision making. The EU dentified two landmark actions to capper CONTRACT DESCRIPTION OF STREET Whenese Green/Data/AAI will develop the are pour approach to discover, manage and models, or 'themal mens,' of the Farth to been funder restancy. Destroys with a expected to men in 2021, well the first safe orners dural new worms extreme rediction and climate change adoptions and Could Map of Laurence / Hough

comment | \* -----

# Models so large that AI chatbots are needed by users to 'read' their output

#### nature computational science

Comment | Published: 26 March 2024

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nature > nature computational science > comment > article				

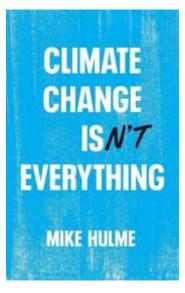
# Digital twins of Earth and the computing challenge of human interaction

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Peter Bauer <sup>™</sup>, Torsten Hoefler <sup>™</sup>, Bjorn Stevens & Wilco Hazeleger

Nature Computational Science 4, 154–157 (2024) | Cite this article

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··· a promise of accuracy, transparency and desirability





Climate change cannot be the lens through which to look at the world's problems. The war in Syria is not a result of climate change

Rejecting climatic determinism is not a refutation of climate change but of its instrumental use

On the EU plan: Destination Earth

Consequence: Climate became globalized in a new way, seen as a single universal system that could be simulated with - it was believed - increasing degrees of realism, and made predictable. Thus, NASA again: 'New models of the Earth System are now being developed to explore the interactions among the Earth's components and to analyse the global effects of physical, chemical and biological processes . . . these new models will also provide predictions of the effects of global change on human populations.' Global kinds of climatic knowledge - knowledge detached from specific cultural meanings began to become dominant. This long-standing promise of prediction is alive and well today, as illustrated by the EU's 'Destination Earth' project. This project aims to develop by 2030 a highly accurate digital model of the Earth to monitor and predict with unrivalled precision the interaction between natural phenomena and human activities.5

Move 3: Global temperature was adopted as the dominant index for capturing the condition of all climate-society relationships.

We have already seen how Nordhaus pioneered the use of global temperature in the 1970s to conduct the first economic analysis of climate/energy policy. Some scientists had been thinking in terms of 'the Earth's temperature' since the nineteenth century. But they had done so in terms of the radiation physics of the world's atmosphere, not in terms of the relationship between climate, people and society. And for most of the twentieth century, scientists had struggled to derive 'global temperature' from empirical observations, as opposed to determining it through theoretical calculation. This began to change during the 1980s. Global temperature began to be employed not just as an index useful

more powerful models will be able to simulate with ever increasing accuracy and precision the future outcomes of complex interdependencies between physical, ecological, social and technological systems. This was Move 6 as described in Chapter 2. And it is exactly what the EU's Horizon Europe research programme promises to deliver by 2030: 'a "full" digital replica of Earth . . . a highly accurate digital model of the Earth to monitor and predict the interaction between natural phenomena

and human activities'."

The first step in dismanding climatism is to treat such claims with great scepticism. The sciences and the social sciences are only able - and always will only be able to see the future 'through a glass darkly'. Adaptation decisions are better made as hedges against a range of uncertain futures than as attempts to optimize based on uncertain predictions. Because of this lack of foreknowledge, policymakers need to know when to look beyond science and embrace other forms of analysis, reflection, wisdom and judgement. Framing, informing and guiding decisions about future policy requires much more than science. By itself, scientific knowledge offers no. moral vision, no ethical stance and no political architecture for delivering the sort of worlds that people desire,

#### 'Technologies of humility'

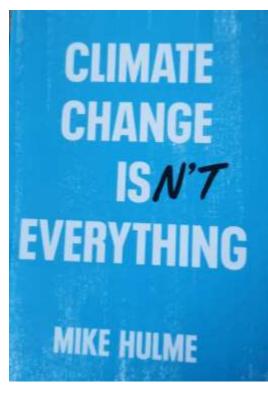
A second antidote to the dangers of climatism follows directly from this. It is to adopt what science studses scholar Sheila Jasanoff has called 'technologies of humility'. By this she means 'disciplined methods to accommodate the partiality of scientific knowledge and to act under irredeemable uncertainty'. In other words, she urges that in the face of the unknown future humiity should replace hubris. This is a broader argument

# CLIMATE CHANGE ISN'T **EVERYTHING**

# **MIKE HULME**

Hulme, Mike. 2023. Climate Change Isn't Everything: Liberating Climate Politics from Alarmism. 1st edition. Medford: Polity.

wisdom and judgement. Framing, informing and guiding decisions about future policy requires much more than science. By itself, scientific knowledge offers no moral vision, no ethical stance and no political architecture for delivering the sort of worlds that people desire,



Hulme, Mike. 2023. *Climate Change Isn't Everything: Liberating Climate Politics from Alarmism*. 1st edition.
Medford: Polity.

planel is struggle along, reacting to problems as they emerge with incremental changes, making many missteps along the way. Ambitious visions to manage the Earth's physical and social complexity - whether using the promise of the EU's Destination Earth, machine learning or artificial intelligence - are chimeras. And a humbler disposi-

### Destination Earth's nature-based metaphors

"Digital ecosystems", "evolutionary development", "data lakes" and "digital species", "osmotic computing" ...







Contents lists available at ScienceDirect

#### Global Environmental Change

journal homepage: www.elsevier.com/locate/gloenvcha



Who speaks for the future of Earth? How critical social science can extend the conversation on the Anthropocene



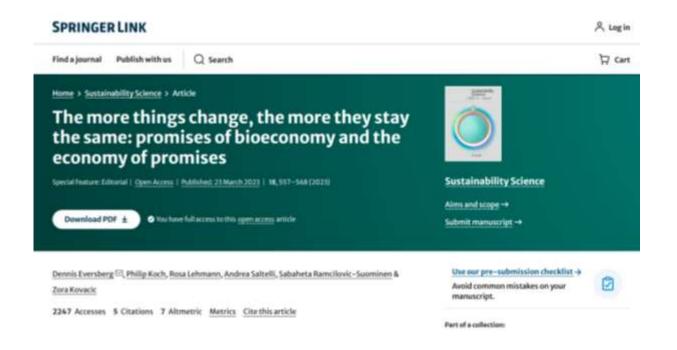
Eva Lövbrand <sup>a,\*</sup>, Silke Beck <sup>b</sup>, Jason Chilvers <sup>c</sup>, Tim Forsyth <sup>d</sup>, Johan Hedrén <sup>a</sup>, Mike Hulme <sup>e</sup>, Rolf Lidskog <sup>f</sup>, Eleftheria Vasileiadou <sup>g</sup>

Anthropocene → One Earth → Destination Earth

A post-social, post-political vision;

need for input from critical and interpretative social sciences

- as opposed to 'sedated' ones

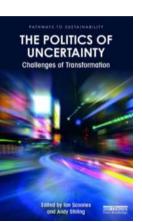


Economics of techno-scientific promises' (ETP)= The promise of 'transformation without transformation'

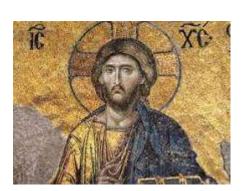
#### A technocratic orthodoxy in the EU? Why 'reductionism'?

- The single market needs a centralized, standardized **risk** assessment approach
- EU pro-industry (e.g. biotech) growth agenda
- Fear of opening the road to endless deconstruction of planned policies
- A candid culture of scientism





See 'The unravelling of technocratic orthodoxy', of P. van Zwanenberg



# END



Summary and extra slides below

#### McQuillan, Zuboff e Supiot. Tre visioni di una distopia numerica, by Andrea Saltelli

Sociology of quantification has lot to say about the relation between numbers and democracy. While numbers, either visible or invisible – those running under the hood of algorithms – are used to take decisions, a full spectrum of possible misuse and abuse need to be investigated and possibly contrasted. Technological progress makes this societal control ever more arduous, leading scholars from different disciplines to ring the alarm, be these physicists/sociologists as Dan McQuillan (2022), jurists as Alain Supiot (2017), economists as Shoshana Zuboff (2019) or data scientists as Cathy O'Neil (2016).

Works on the politics of numbers (Desrosières 1998; Saltelli and Di Fiore 2023; Mennicken and Salais 2022; Scoones and Stirling 2020) can help us to trace the mechanism whereby 'governance by numbers' can contribute to deprive society of agency and facilitate a re-feudalization of society (Saltelli 2020). Strategy of resistance on the style of the French movement of Stactivism (Bruno, Didier, and Prévieux 2014) are possible but important power asymmetry stand in the way of a solution (Saltelli et al. 2022). An example of prevalent reductionist and techno-optimist narratives is offered by the Digital Twins of the Earth projects, in Europe Destination Earth

Bruno, Isabelle, E. Didier, and J. Prévieux. 2014. Statactivisme. Comment Lutter Avec Des Nombres. Paris: Édition La Découverte.

Desrosières, Alain. 1998. The Politics of Large Numbers: A History of Statistical Reasoning. Harvard University Press.

McQuillan, Dan. 2022. Resisting AI: An Anti-Fascist Approach to Artificial Intelligence. Bristol University Press. https://www.amazon.es/Resisting-AI-Anti-fascist-Artificial-Intelligence/dp/1529213495.

Mennicken, Andrea, and Robert Salais, eds. 2022. The New Politics of Numbers: Utopia, Evidence and Democracy. Palgrave Macmillan.

O'Neil, Cathy. 2016. Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. Random House Publishing Group.

Saltelli, Andrea. 2020. 'Ethics of Quantification or Quantification of Ethics?' Futures 116 (102509). https://doi.org/doi.org/10.1016/j.futures.2019.102509.

Saltelli, Andrea, Dorothy J. Dankel, Monica Di Fiore, Nina Holland, and Martin Pigeon. 2022. 'Science, the Endless Frontier of Regulatory Capture'. Futures 135 (102860). https://doi.org/10.1016/j.futures.2021.102860.

Saltelli, Andrea, and Monica Di Fiore, eds. 2023. The Politics of Modelling. Numbers between Science and Policy. Oxford: Oxford University Press.

Scoones, Ian, and Andy Stirling. 2020. The Politics of Uncertainty. Edited by Ian Scoones and Andy Stirling. Abingdon, Oxon; New York, NY: Routledge, 2020. | Series: Pathways to sustainability: Routledge. https://doi.org/10.4324/9781003023845.

Supiot, Alain. 2017. Governance by Numbers: The Making of a Legal Model of Allegiance. Hart Publishing.

Zuboff, Shoshana. 2019. The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. Public Affairs.

··· our world is structured by numbers, visible and invisible, where truth is conveyed and reality constructed

Numbers are seductive, performative, confer to their masters' epistemic power and legitimacy

Governing the modern state, or even contesting it, without numbers is impossible

Numbers are the prevalent means to express value in our societies ... Access & production of numbers reflect and reinforce power imbalances



WP 2021/05

Numbers capture our attention; they illuminate the part of reality which is being numerified, and fatally push those parts into the background which come without the clothing of ...

··· numbers are so deeply entrenched in our existence that we barely reflect on them critically them anymore — too close to us, they have become part of the very lens through which we attend to and comprehend the world



They have engaged in unprecedented cultural regulatory capture; the objectives of the AI corporations are framed as desirable social goods



Show more V

Futures Valume 115, January 2022, 102860



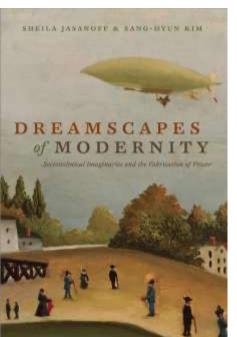
## Science, the endless frontier of regulatory capture

Andrea Saltelli a 🙎 😆 . Dorothy J. Dankel b c. Monica Di Fiore d. Nina Holland e. Martin Pigeon e



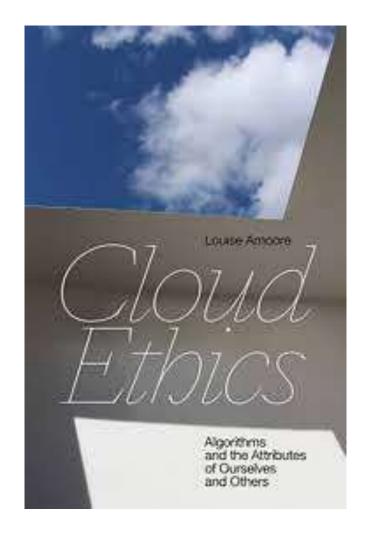
Sheila Jasanoff

A domination of the sociotechnical imaginary



- Technological determinism (there is no going back)
- The Principle of Innovation (regulation hampers profit and economic growth)
- Solutionism/technicism (political and legal issues are transformed into technical ones thus amenable to a technical solution)
- Anthropomorphising machines, dehumanizing people (the Human Brain Project)
- Legal exceptionalism (New rules are needed for a new technology)
- Crying 'wolf' about future challenges to distract from present ones
- Distracting regulators with 'ethics of algorithms'





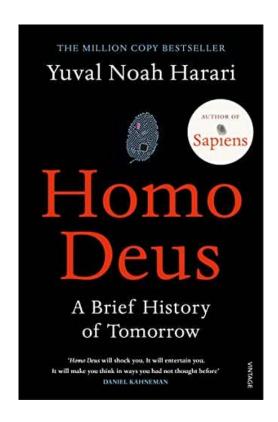
Making algorithms 'good' or 'transparent' is beyond the point.
Algorithms create new norms of good or bad.

Algorithm =
ethicopolitical
arrangement of
values, assumptions,
and propositions
about the world



Louise Amoore

#### An ideological substrate: Eugenics, transhumanism, logtermism...





"TESCREAL=Transhumanism, Extropianism, Singularitarianism, Cosmism, Rationalism, Effective Altruism, and Longtermism"

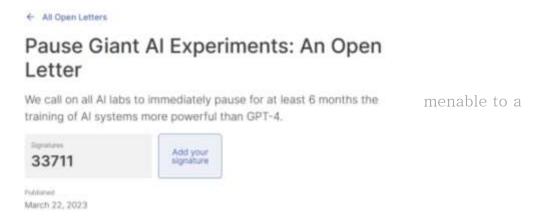
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(Pause AI!)



A technical proof of quality is illusory without a parallel investigation of normative quality; the example of indicators of employment

**Technical Quality** 

Normative quality

Justice: Means versus Freedoms

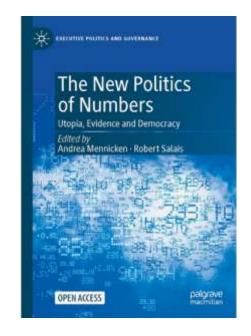
Author(s): Amartya Sen

Source: Philosophy & Public Affairs, Vol. 19, No. 2 (Spring, 1990), pp. 111-121

Published by: Wiley

Stable URL: http://www.jstor.org/stable/2265406

Accessed: 28/10/2014 14:48



Salais, R. (2022). "La donnée n'est pas un donné":
Statistics, Quantification and Democratic Choice. In *The New Politics of Numbers: Utopia, Evidence and Democracy*, Andrea
Mennicken and Robert Salais, Palgrave Macmillan, pp. 379-415.