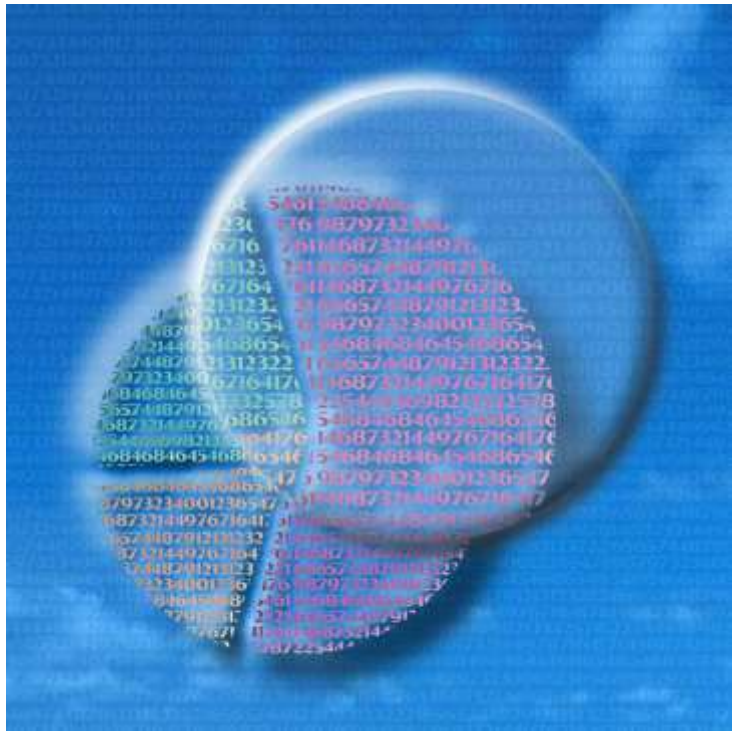


Why dissenting on DestinE

Andrea Saltelli

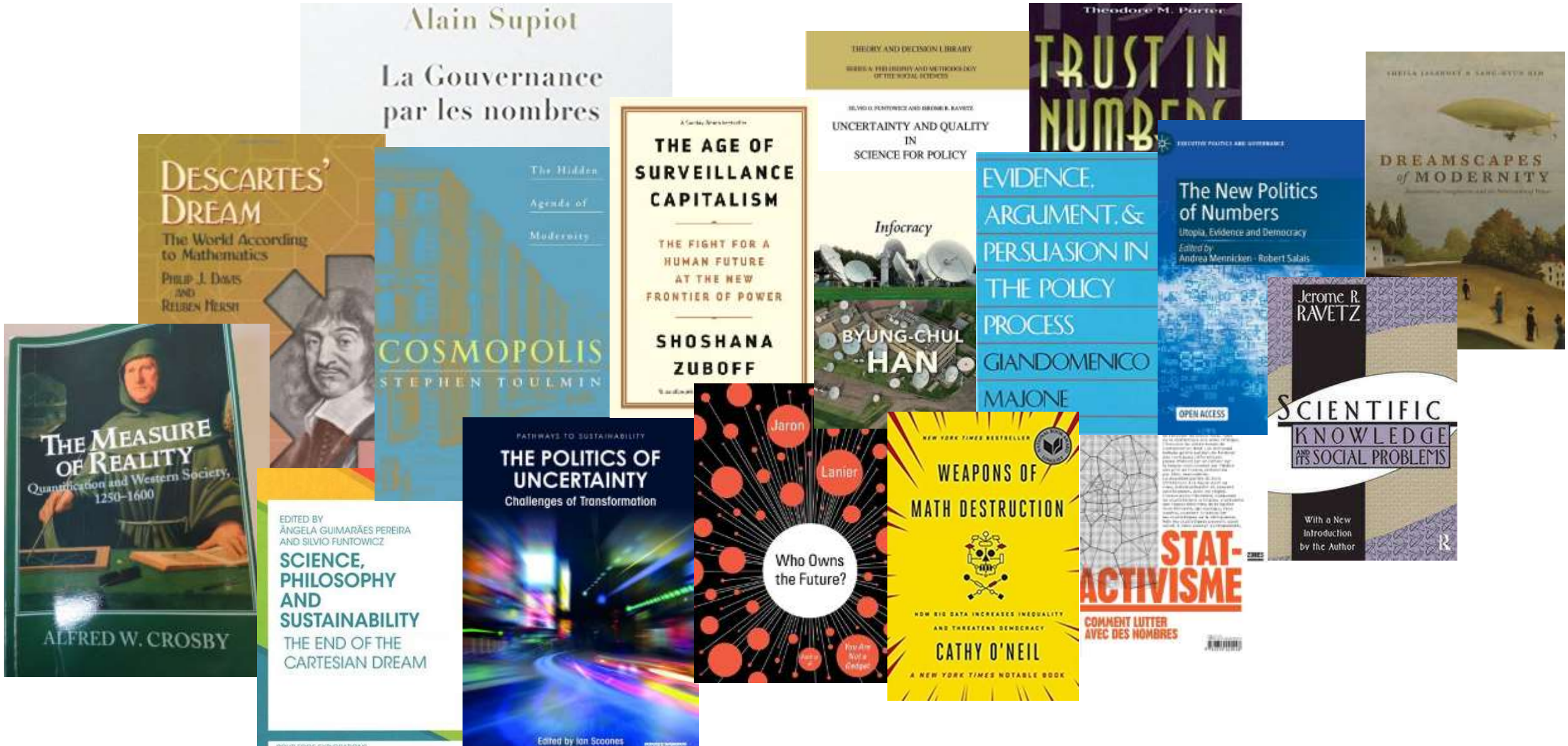
Destination Earth Meeting – Strategic Advisory Board, March 05, 2024
Brussels

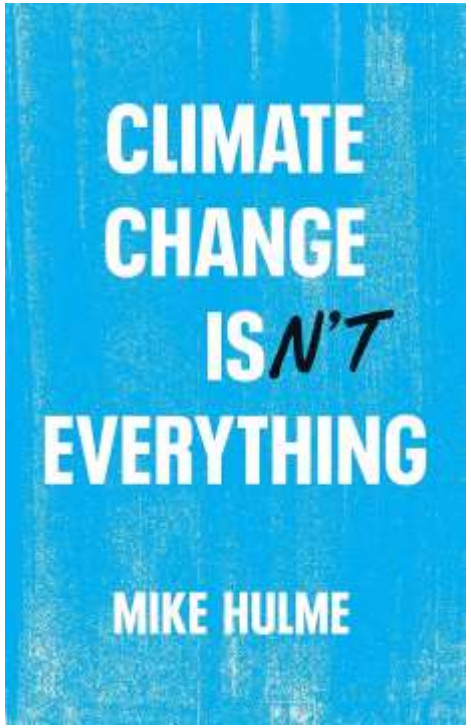
Slides from June last year

Voicing concerns from a sociology of quantification, critical of the digital twins on epistemological, ethical and political grounds

The planet and its humans do not need more digital entities

Slides from June last year





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Climate Change Isn't Everything: Liberating Climate Politics from Alarmism

Article Talk Re

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

Hulme explicitly criticizes DestinE (pp. 50 and 132)

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.[9]

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

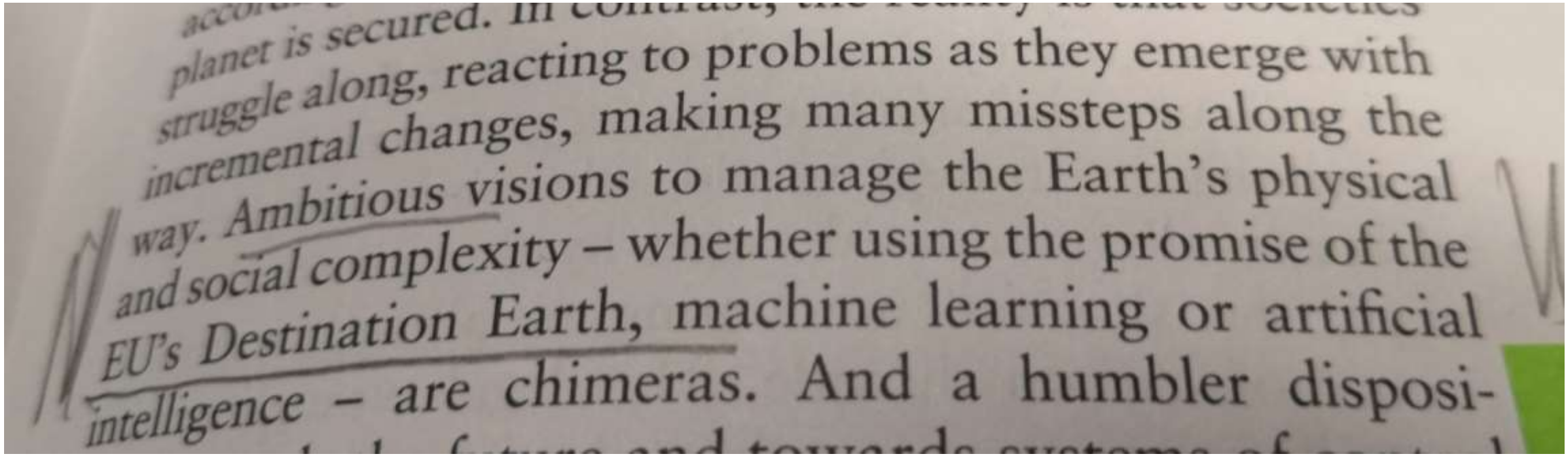
more powerful models will be able to simulate with ever increasing accuracy and precision the future outcomes of complex interdependencies between physical, ecological, social and technological systems. This was Move 6 as described in Chapter 2. And it is exactly what the EU's Horizon Europe research 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'.[4]

The first step in dismantling 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.

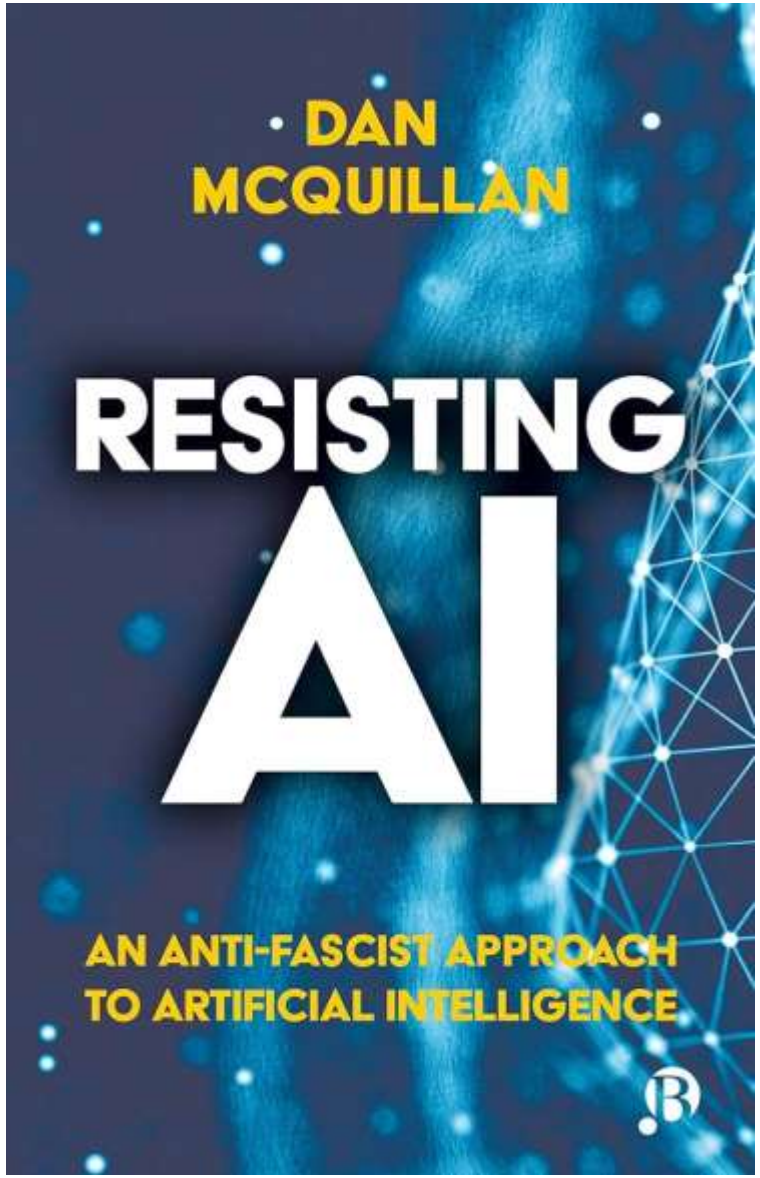
'Technologies of humility'

A second antidote to the dangers of climatism follows directly from this. It is to adopt what science studies scholar Sheila Jasanoff has called 'technologies of humility'.[5] 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 humility should replace hubris. This is a broader argument

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



planet is secured. In contrast, the reality is that societies 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-



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

A built-in element of reflexivity and critique; an anticipatory function; an observatory of quantification (and of DestinE itself) to identify:

- Winners and losers, voices to be heard from disciplines and societal actors
- Sociotechnical imaginaries and associated vulnerabilities

A built-in element of reflexivity and critique…

- Alternatives framings, styles and methods (lenses: system ecology, non-Ricardian economics, feminist economics, post-normal science…)

ELSEVIER

Environmental Science & Policy

Volume 142, April 2023, Pages 99-111

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

Andrea Saltelli [a b], Marta Kuc-Czarnecka [c], Samuele Lo Piano [d], Máté János Lőrincz [d], Magdalena Olczyk [c], Arnald Puy [e], Erik Reinert [f g], Stefán Thor Smith [d], Jeroen P. van der Sluijs [b h]

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Comment | Published: 29 June 2023

Irrigation modelling needs better epistemology

Arnald Puy, Michela Massimi, Bruce Lankford & Andrea Saltelli

Nature Reviews Earth & Environment (2023) | Cite this article

A built-in element of reflexivity and critique…

- Implications of ‘governing by numbers’, including for democratic agency, democratic deliberation and power differentials
- Exploding extant and hidden uncertainties
- Appealing to societal creativity for new cases and epistemologies

A built-in element of reflexivity and critique…

- This sentence went lost from the scientific work program at the last iteration
- Dropped this, what is left of SSH and of alternative lenses in the WP appears more confirmatory than critical

More material @ andreasaltelli.eu

Andrea Saltelli

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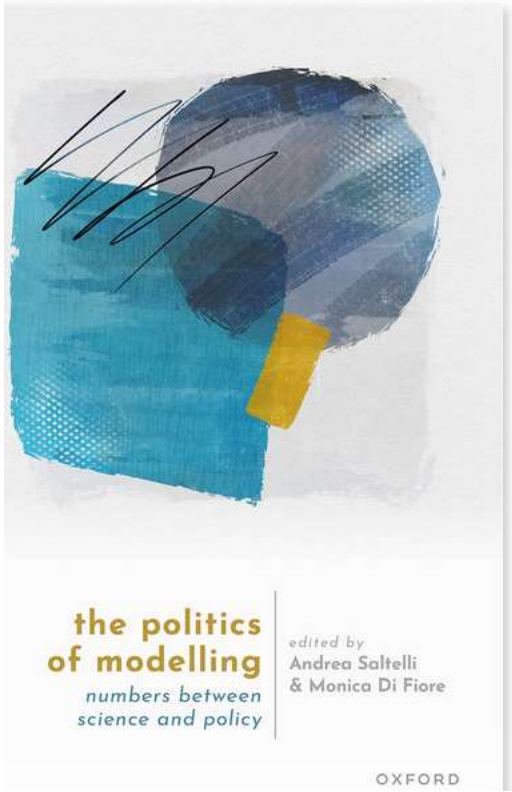
August 25 2023: The politics of modelling is out!



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.

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Mastodon Toots by
@AndreaSaltelli

AndreaSaltelli
2024/2/16 16:38

Are you interested in sensitivity analysis? Here a short story of it.
Open access, online in draft form:
sciencedirect.com/science/arti

Andrea

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