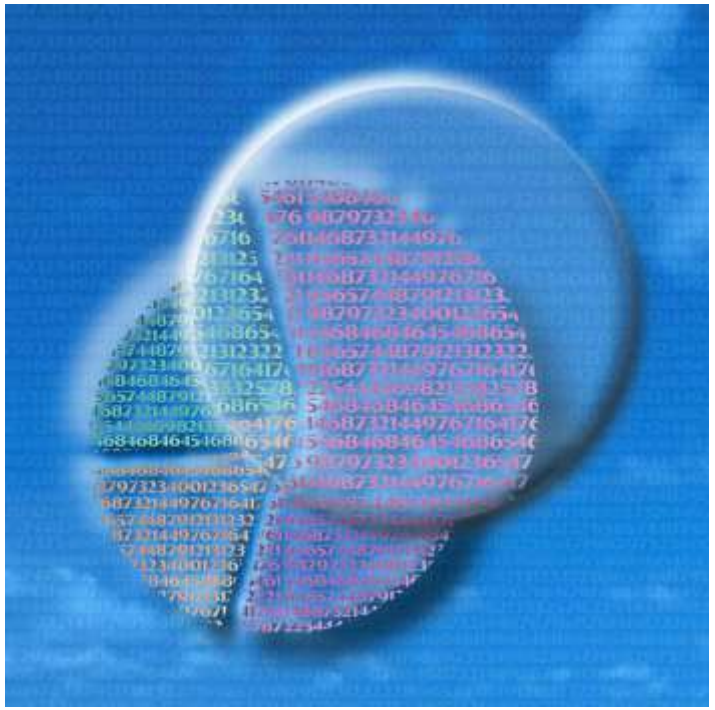
Science, the endless frontier of regulatory capture

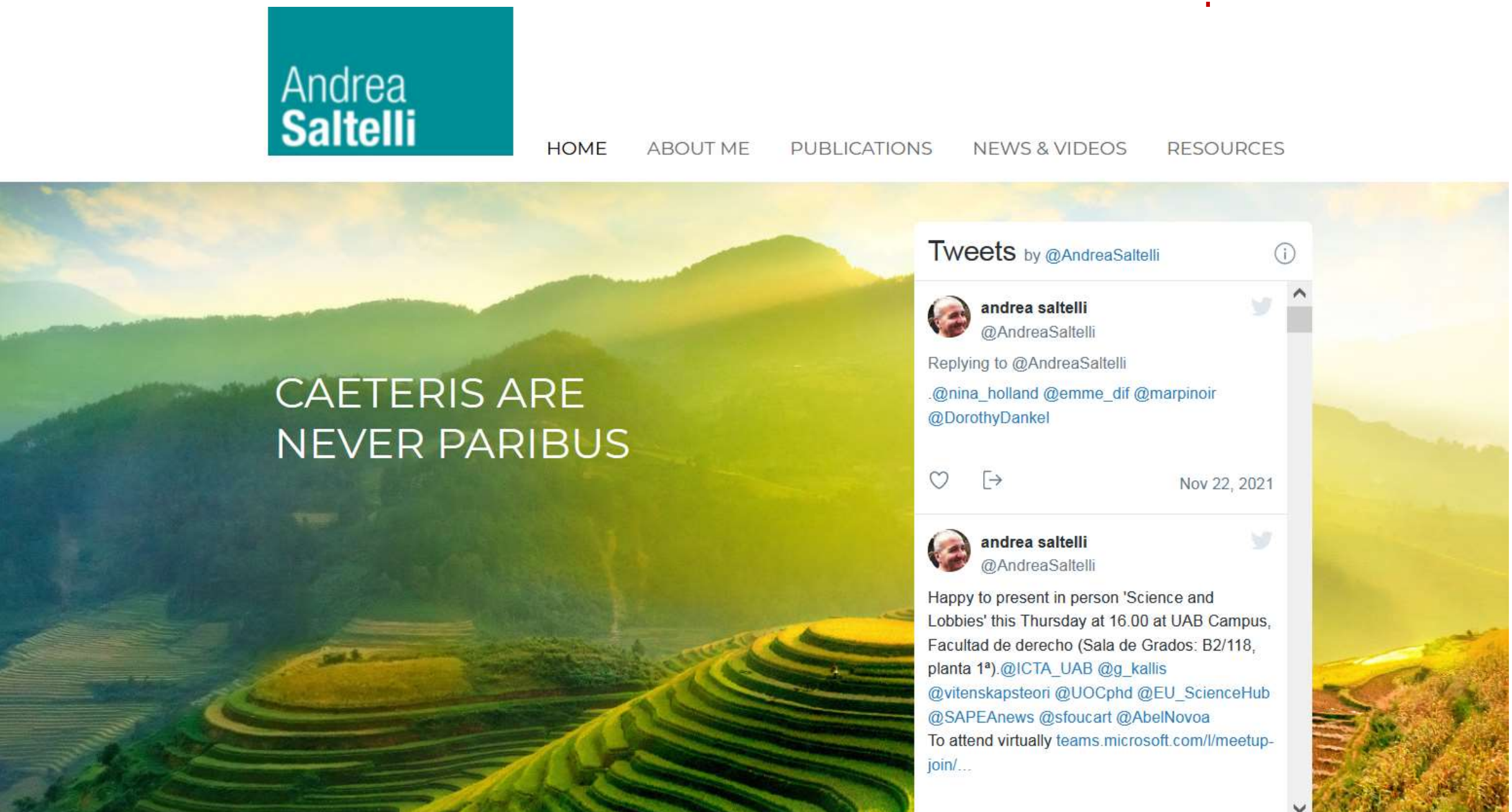


Andrea Saltelli,
SVT-University of Bergen (NO)

ISTC-National Research Council (IT)

Thursday 25, 2021, at 16.00 at the Campus of Universitat Autònoma de Barcelona, Facultad de Derecho, Sala de Grados: B2/118, planta 1ª

Where to find this talk: www.andreasaltelli.eu



Based on:

Futures

Available online 26 October 2021

In Press, Journal Pre-proof

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]

Dorothy Dankel
University of Bergen

Monica Di Fiore
Italian National Research Council (CNR)

Nina Holland
Corporate Europe Observatory

Martin Pigeon
Corporate Europe Observatory

Coauthors

From the abstract:

… a form of corporate penetration which is based on a strategic use of the image and legitimacy of science

…cases where lobbyists present themselves as upholders of the values of the evidence-based policy, and interested in the methodological and ethical aspect of science for policy

From the abstract:

Epistemic ladder: lobbyists move from
questioning the evidence to
questioning its legitimacy, all the way to
creating a worldview where not only the evidence, but the very idea of regulation, become irrelevant or undesirable

An epistemic ladder for regulatory capture

- **Epistemic.** Invalidating the inference or the methods
- **Institutional.** Delegitimising and/or 'colonising' institutions
- **Political.** Promoting a worldview where the very idea of regulation is undesirable

Futures
Available online 26 October 2021
In Press, Journal Pre-proof

Science, the endless frontier of regulatory capture

Credits: https://www.subpng.com/

What is regulatory capture?

quis
custodiet
ipsos
custodes?

SATYRÆ.

Decimus Junius Juvenalis
1st century AD

Da Ercolano, Museo Archeologico Nazionale di Napoli

“Regulatory capture is the process through which special interests affect state intervention in any of its forms, which can include areas as diverse as the setting of taxes, the choice of foreign or monetary policy, or the legislation affecting R&D”

(Dal Bó, Ernesto. 2006. “REGULATORY CAPTURE: A REVIEW.” Oxford Review of Economic Policy22: 203–25)

The ineluctability of regulatory capture cuts across schools of economic thought: public interest theory and regulatory capture theory

Arthur Cecil Pigou
1877 –1959

George J. Stigler
1911 –1991

Regulation in the public interest theory is seen as a need originating from market failure – hence the need for regulatory intervention

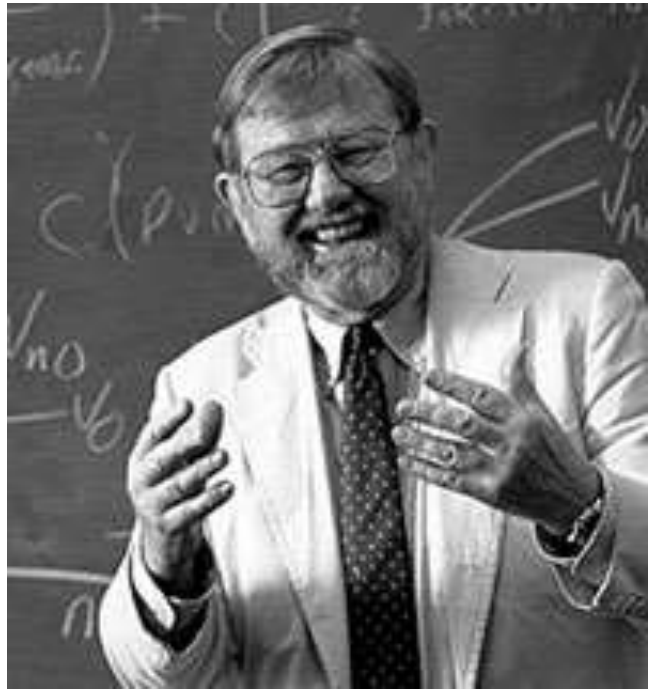
Arthur Cecil Pigou
1877 –1959

Regulation in regulatory capture theory is seen as a result of particular interests which are favoured by it

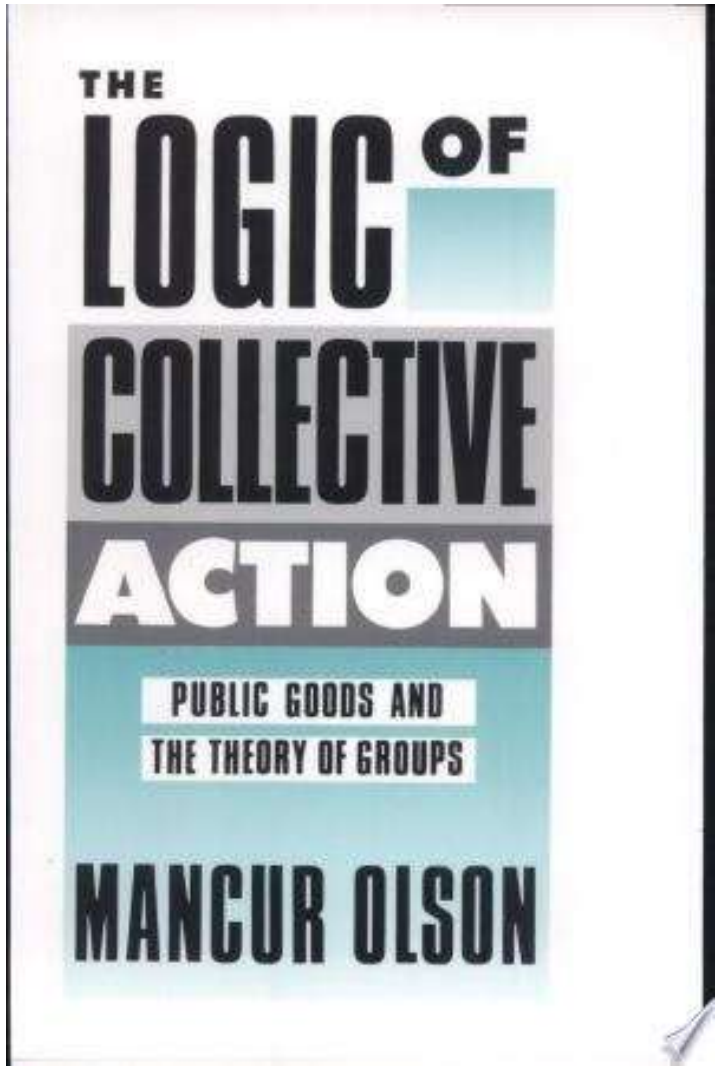
"regulation is acquired by the industry and is designed and operated primarily for its benefit"

George J. Stigler
1911 –1991

“The logic of collective action”: well-organized minorities win over majorities when it comes to satisfying their interests



Mancur Olson
1932 -1998



Beryl L. Crowe: a regulatory capture cycle

- An agency is created as a result of a period of social alarm
- Eventually, interest groups take control
- In the final phase, even the staff of the agency comes from the interest groups it should regulate

The Tragedy of the Commons Revisited

28 November 1969, Volume 166, Number 3909

SCIENCE

Beryl L. Crowe: a regulatory capture cycle

- At the end of the cycle the regulators offer to society symbolic assurances, while their day-to-day job is to favour special interests

The Tragedy of the Commons Revisited

28 November 1969, Volume 166, Number 3909

SCIENCE

Paul Sabatier: a “Less pessimistic theory”

Regulators can take “active measures to reinvigorate and/or create a constituency supportive of aggressive regulation”.

Sabatier, Paul. 1975. “Social Movements and Regulatory Agencies: Toward a More Adequate-and Less Pessimistic-Theory of ‘Clientele Capture.’” Policy Sciences6 (3): 301–42.

➔ consumer organizations, environmental groups, and public interest law firms

A more recent concept: regulatory capitalism, the new global world order where the importance of rules as a source of power has increased in scope

Regulatory capitalism

Optimistic view: allowing a more balanced approach to the distribution of power and resources in favour of the global poor (Levi-Faur, David [Editor of Regulation and Governance]. 2005. "The Global Diffusion of Regulatory Capitalism." The ANNALS of the American Academy of Political and Social Science598 (1): 12–32.)

Pessimistic view: act of the tragedy of commodification, made possible by a subservient and commodified science

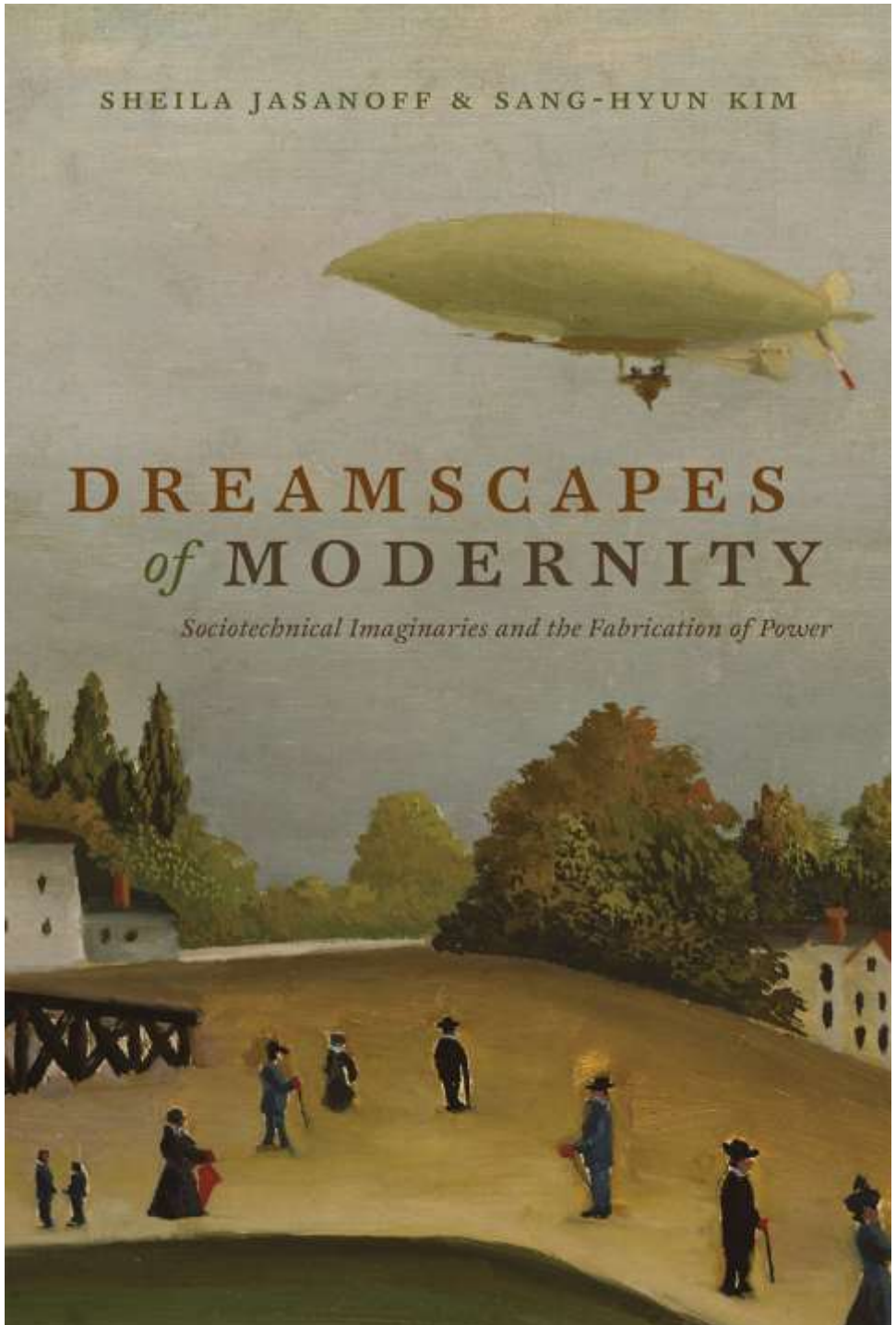
Drahos, Peter. 2020. "Responsive Science." Annual Review of Law and Social Science16 (1): annurev-lawsocsci-040220-065454.

Cognitive capture?

"regulators may come to view the world the way firms do, not because they have been captured through incentives, but because they have been convinced"

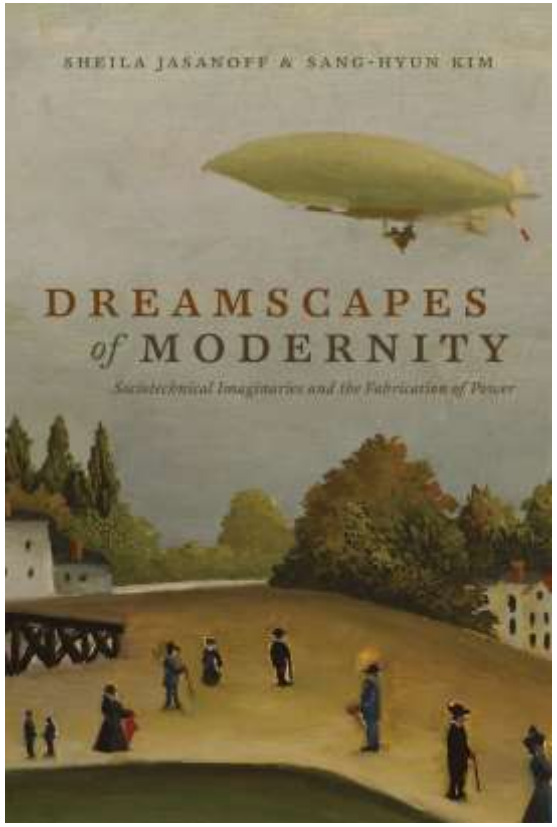
(Dal Bó, Ernesto. 2006. "REGULATORY CAPTURE: A REVIEW." Oxford Review of Economic Policy22: 203–25)

A battle about dominating the sociotechnical imaginary



Sheila Jasanoff

How visions of scientific and technological progress carry with them implicit ideas about public purposes, collective futures, and the common good



Sheila Jasanoff

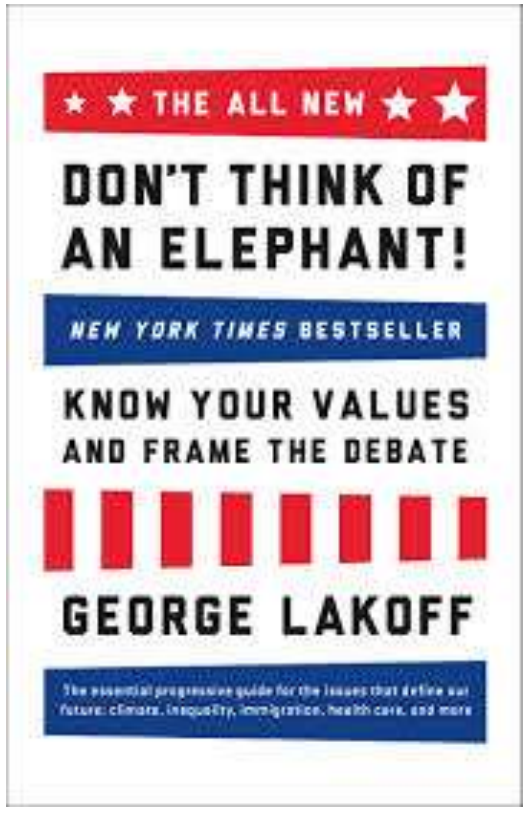
George Lakoff

Philip Mirowski

Cognitive capture?

For George Lakoff and Philip Mirowski a neoliberal order seems to have won the ideological battle of hearts and minds

George Lakoff



Frames: The expression 'tax relief' is apparently innocuous but it suggests that tax is a burden, as opposed to what pays public expenditures

Lakoff, G., 2010, Why it Matters How We Frame the Environment, Environmental Communication: A Journal of Nature and Culture, 4:1, 70-81.

Lakoff, G., 2004-2014, Don't think of an elephant: know your values and frame the debate, Chelsea Green Publishing.

Cognitive capture?

Philip Mirowski

Mirowski suggests accepting the existence since the 50's of a Neoliberal Though Collective consolidating a philosophical credo (market knows best, government is an impediment, there is no such thing as a society…)

Mont Pèlerin Society, Atlas Foundation,
Liberty Fund, Mercatus Center,
Heritage Action, Ethics and Public Policy Center,
Federalist Society…

P. Mirowski, "Hell Is Truth Seen Too Late," Bound. 2, vol. 46, no. 1, pp. 1–53, Feb. 2019.

Search The Guardian International edition
For 200 years

Oxford/AstraZeneca Covid vaccine research 'was 97% publicly funded'

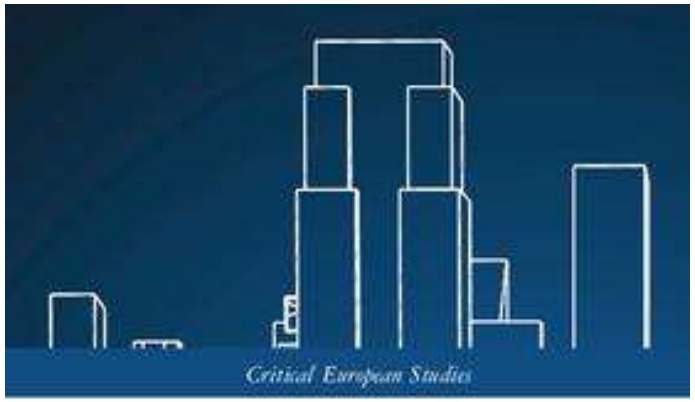
Analysis rebuts claim by Boris Johnson that jab was developed 'because of greed'

"the record-fast development of Covid-19 vaccines was "because of capitalism, because of greed"

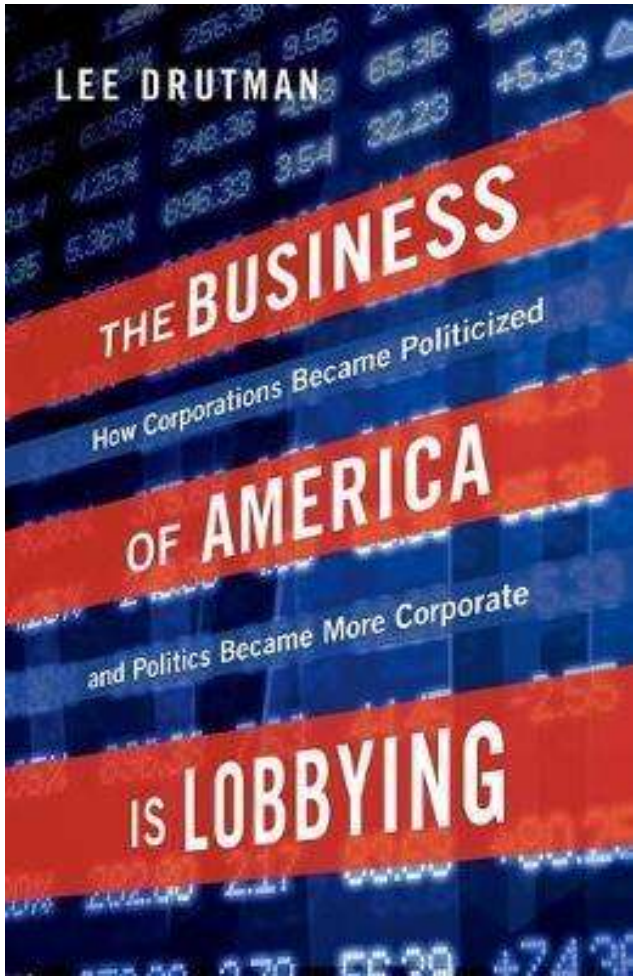
What has science to do with all that?

Power asymmetries in the framing of issues: those who have the deepest pockets marshal the best [foremost ‘scientific’] evidence

Sylvain Laurens



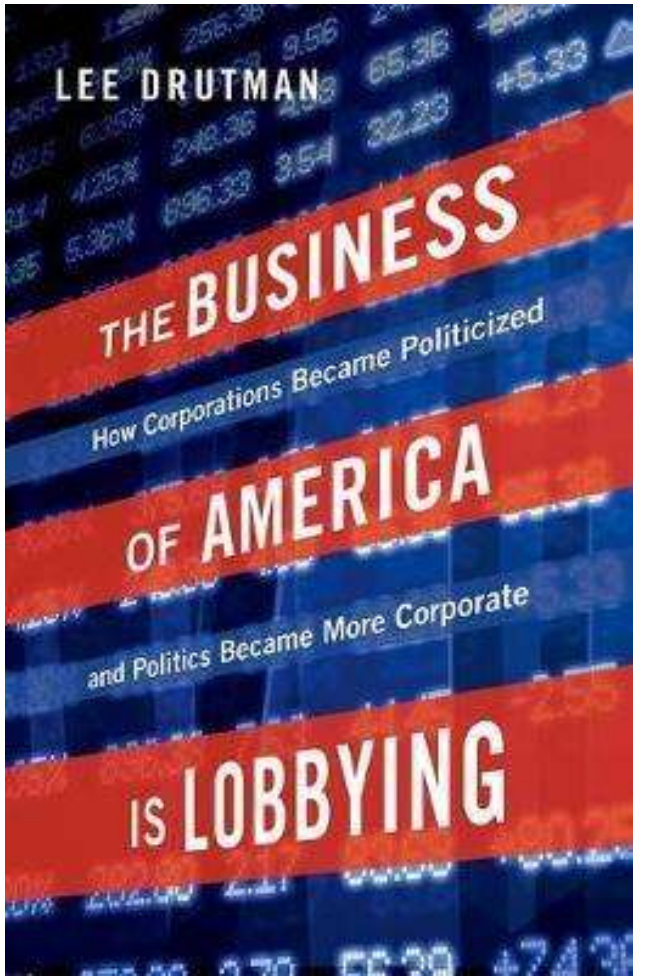
Lee Drutman



For both Laurens and Drutman a salient aspect of this power is lobbyists' access to more and better disseminated knowledge/science

"They have the data"

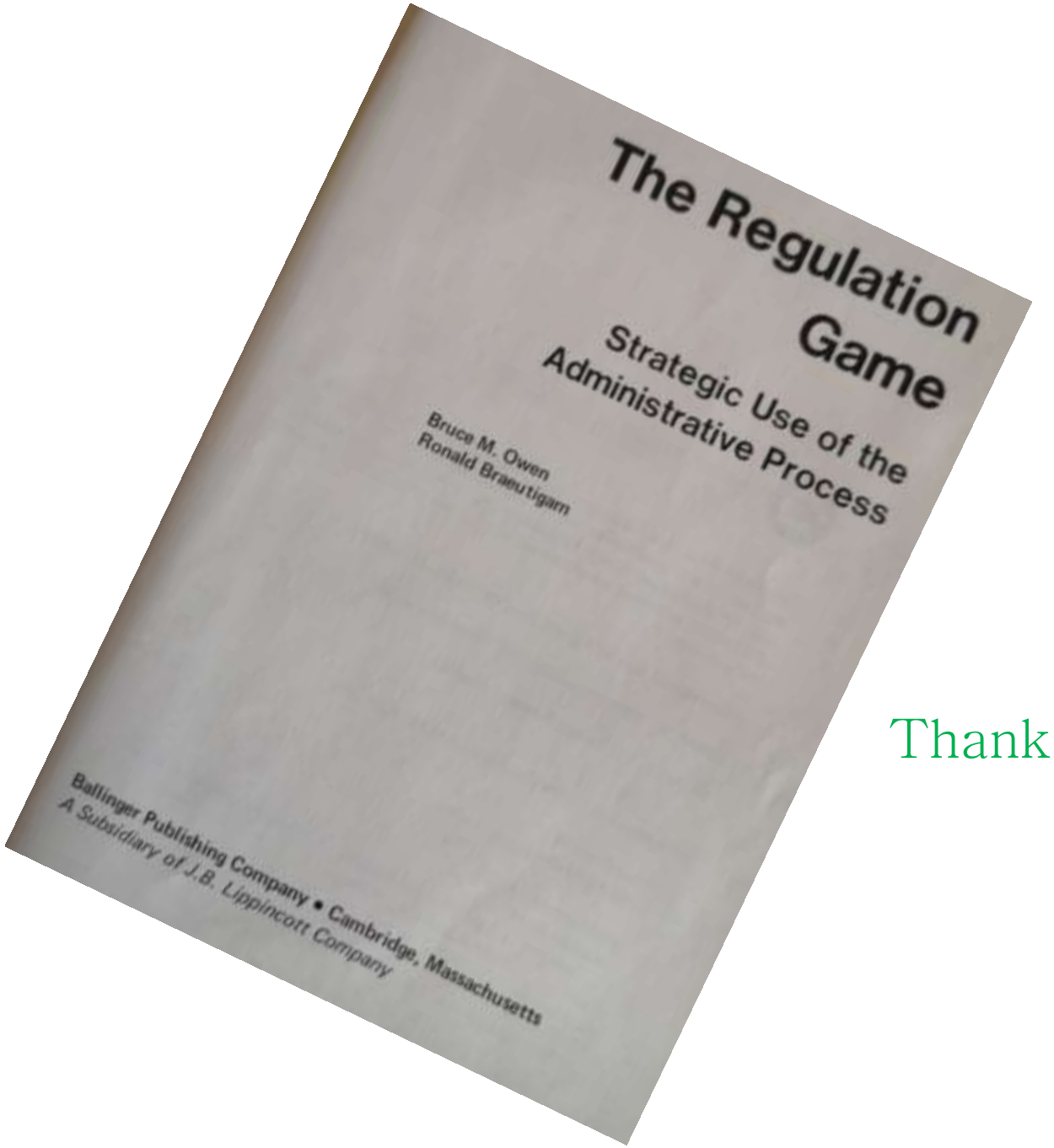
… rebalancing the knowledge asymmetry could take the form of an office for Public Lobbying, offered to citizens on the same rationale whereby indigent defendants are provided with legal counsel by the courts



Lee Drutman

… Knowledge as “the currency of lobbies” (S. Laurens)


VICTOR
"HIS MASTER'S VOICE"
REG. U.S. PAT. OFF.



Thanks to Erik Millstone (U. Sussex)

Owen, B. M., & Braeutigam, R., 1978 The regulation game, : Strategic Use of the Administrative Process, Ballinger Press

… remember
regulatory capture
theory

George J. Stigler
1911 –1991

“Regulatory policy is increasingly made with the participation of experts, especially academics.

A regulated firm or industry should be prepared whenever possible to co-opt these experts.

This is most effectively done by identifying the leading expert in each relevant field and hiring them as consultants or advisors or giving them research grant or the like”

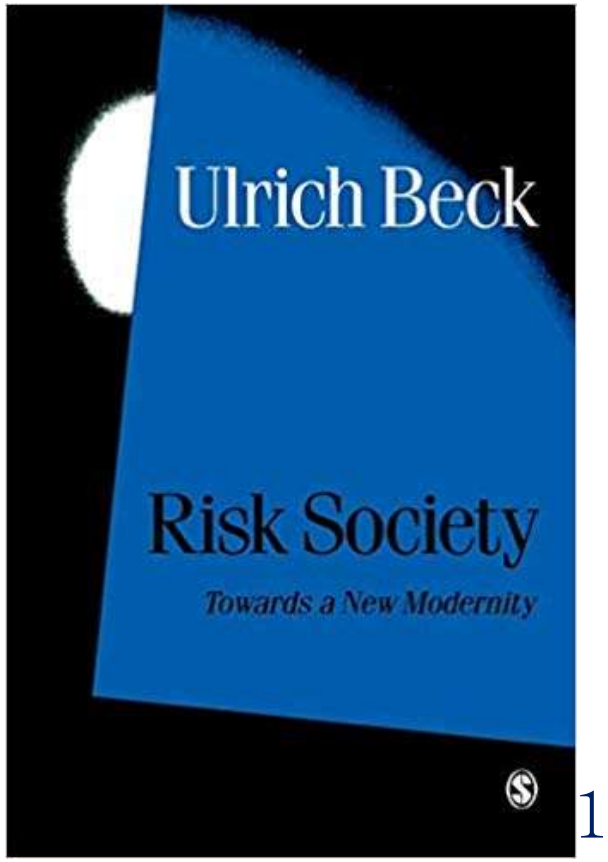
Owen, B. M., & Braeutigam, R., 1978 The regulation game, : Strategic Use of the Administrative Process, Ballinger Press

“This activity requires a modicum of finesse; it must not be too blatant, for the experts themselves must not recognize that they have lost their objectivity and freedom of action”

Owen, B. M., & Braeutigam, R., 1978 The regulation game, : Strategic Use of the Administrative Process, Ballinger Press

Corporate policy: get ‘the best’ among scientists … Seducing them ‘with a modicum of finesse’

Science as a self-service shop for financially well-endowed customers in need of arguments (Beck 1992)



1992 (1986)

Ulrich Beck
(1944 –2015)

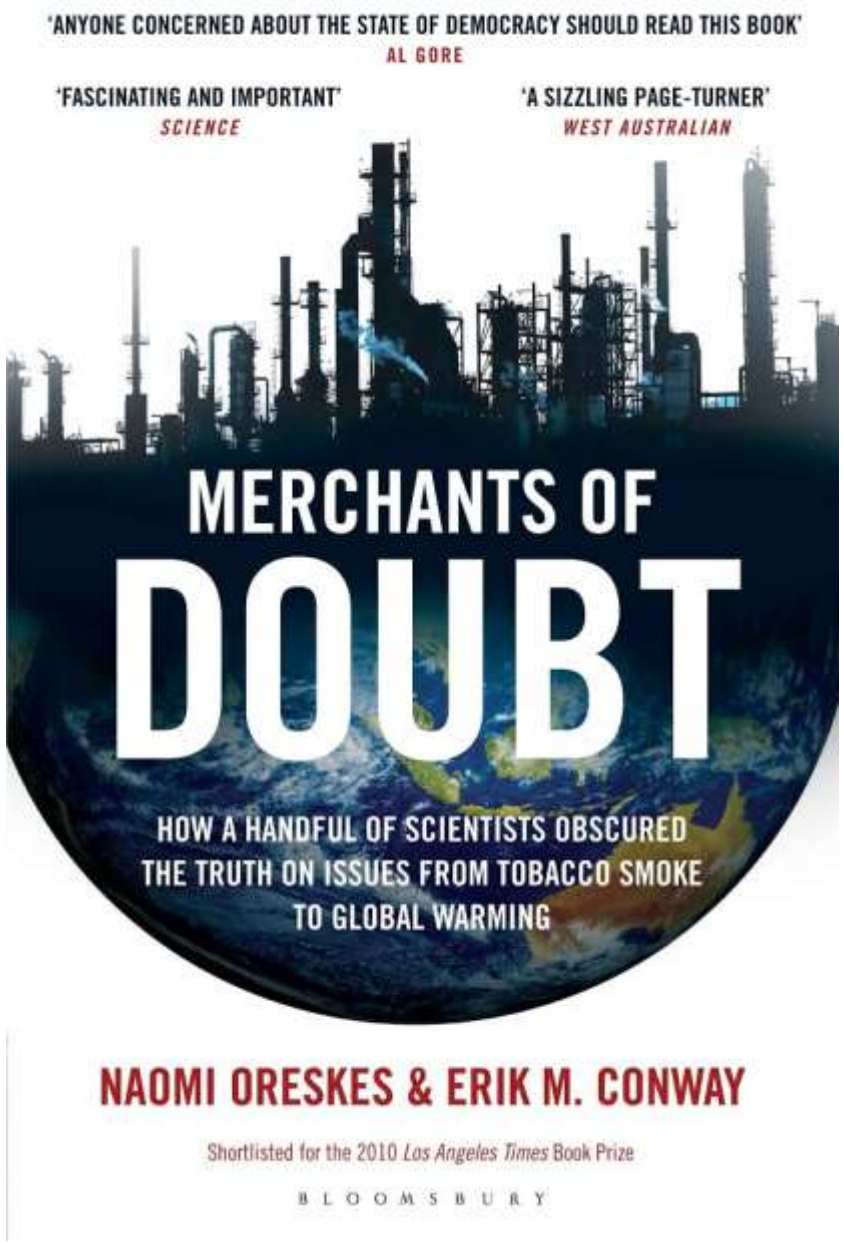
The next level of corporate capture: the battle for ‘sound science’ against “junk science”

American Public Health Association
Promoting Public Health Research, Policy, Practice and Education
About Us | Subscriptions | Submissions
American Journal of PUBLIC HEALTH

Am J Public Health. 2001 November; 91(11): 1749–1757. PMCID: PMC1446868
doi: 10.2105/ajph.91.11.1749 PMID: 11684593

Constructing “Sound Science” and “Good Epidemiology”: Tobacco, Lawyers, and Public Relations Firms

Elisa K. Ong, MD, MS and Stanton A. Glantz, PhD



Naomi Oreskes and Erik M. Conway

Science's crisis is also fodder for the lobbyists

ELSEVIER

Futures

Volume 104, December 2018, Pages 85-90

Why science's crisis should not become a political battling ground

Andrea, Saltelli ✉

Science's crisis is also fodder for the lobbyists

ELSEVIER

Futures

Volume 104, December 2018, Pages 85-90

Why science's crisis should not become a political battling ground

Andrea, Saltelli ✉

Highlights

- Science' reproducibility crisis has become a political and industrial battleground.
- Conservatives and corporate interests use the crisis to weaken regulations, their opponent deny the existence of even a reproducibility crisis.

Beware: transparency rule is a Trojan Horse

Like tobacco lobbyists and climate-change deniers, the US Environmental Protection Agency is co-opting scientific trappings to sow doubt, warns Naomi Oreskes.

Naomi Oreskes

WORLD VIEW · 22 MAY 2018

nature

"The crisis is the attempt to discredit scientific findings that threaten powerful corporate interests"

A federal court has vacated the Trump administration's "secret science" Environmental Protection Agency (EPA) rule, which critics had said would undermine the use of public health studies in agency rulemaking.

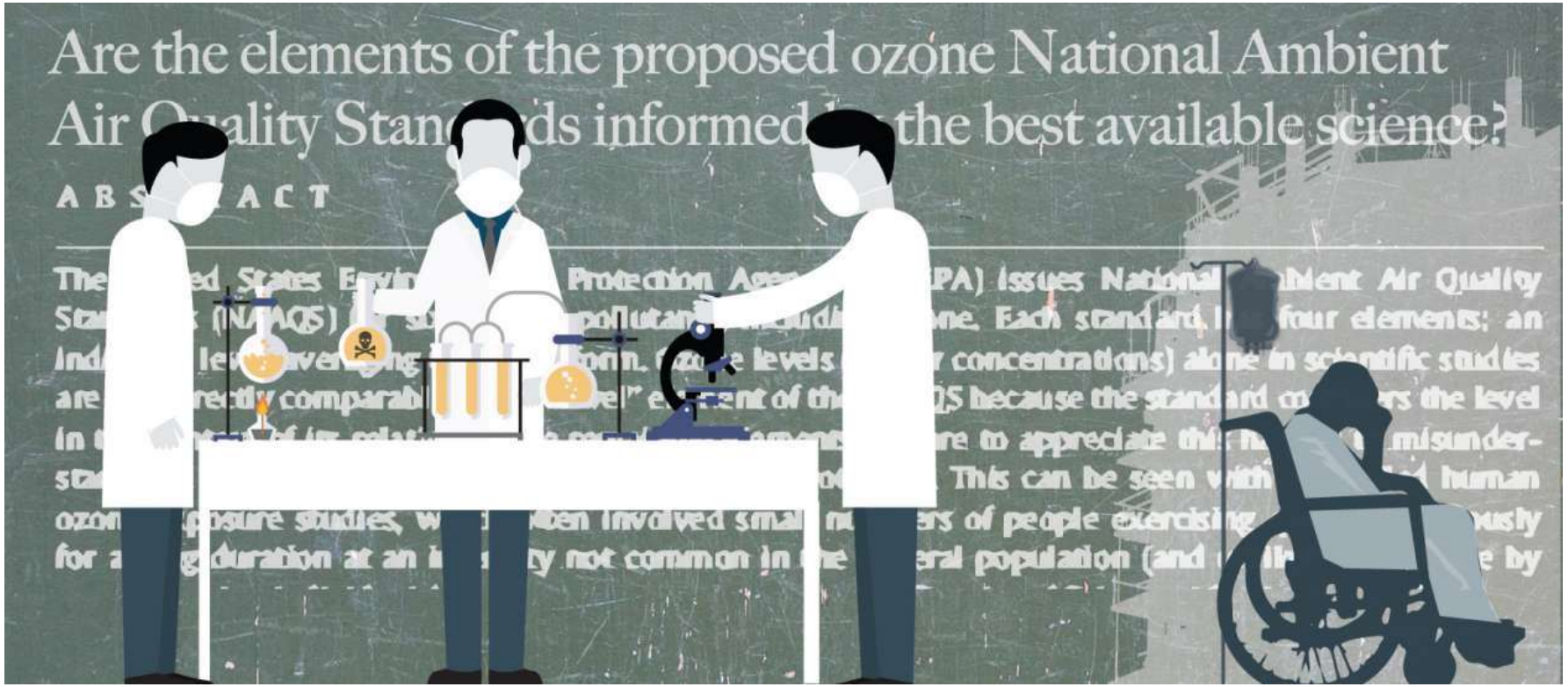
Court tosses Trump EPA's 'secret science' rule

BY RACHEL FRAZIN - 02/01/21 01:51 PM EST

New games from chemical, pharmaceutical, surgical, food, tobacco, and sugar companies

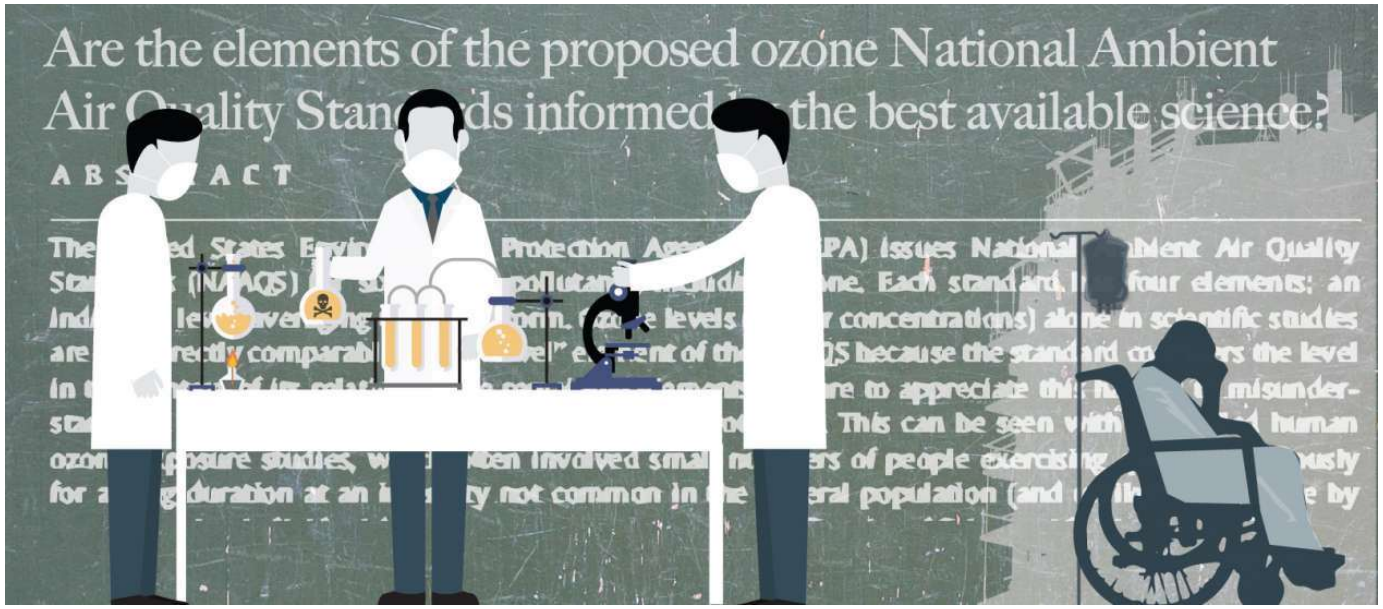
https://theintercept.com/2016/11/15/how-self-appointed-guardians-of-sound-science-tip-the-scales-toward-industry/

Lobbyists recruit laws firms which in turn recruit scientific services for their customer;



http://www.publicintegrity.org/2016/02/08/19223/meet-rented-white-coats-who-defend-toxic-chemicals

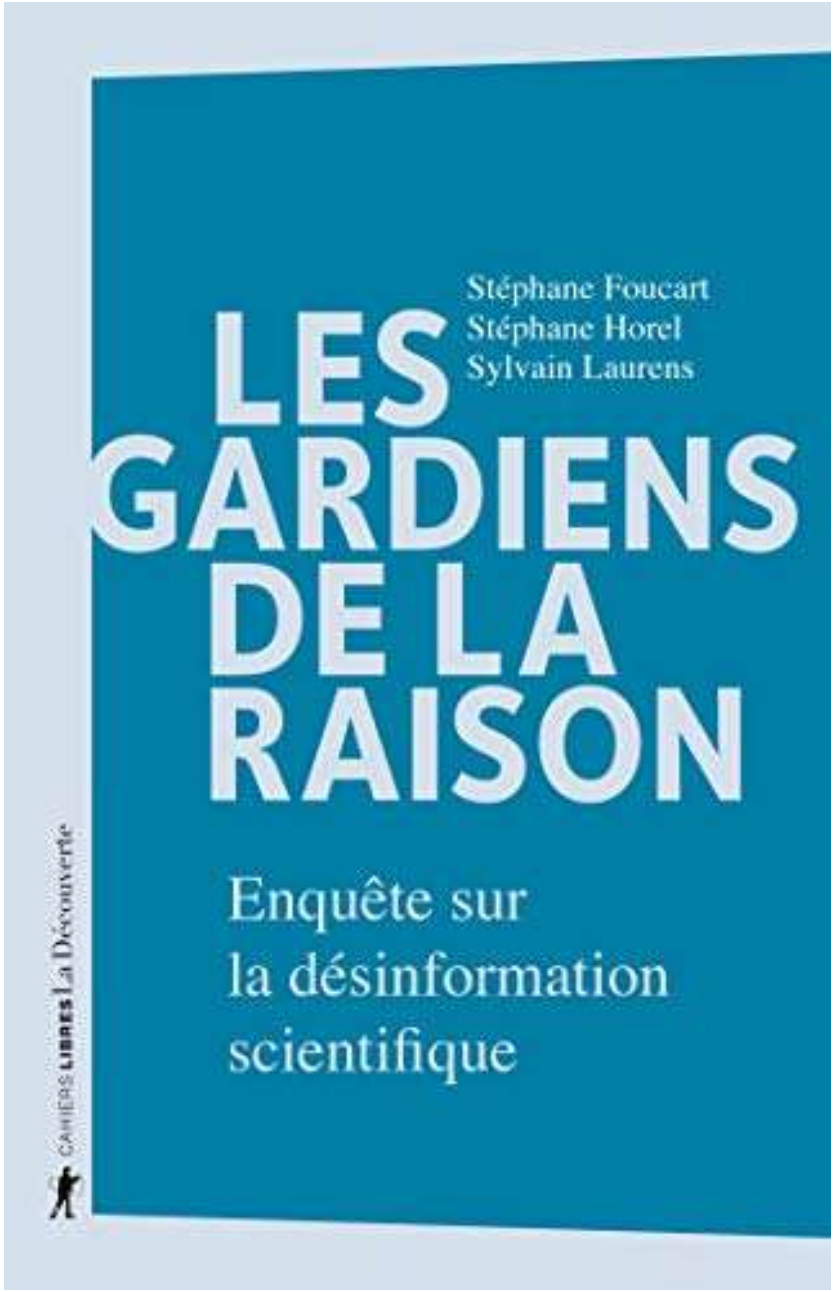
"Nearly half of Gradient's articles that are peer-reviewed are published in two journals with strong ties to industry, *Critical Reviews in Toxicology* and *Regulatory Toxicology and Pharmacology*" [Gradient is the research services company enrolled by law firms]



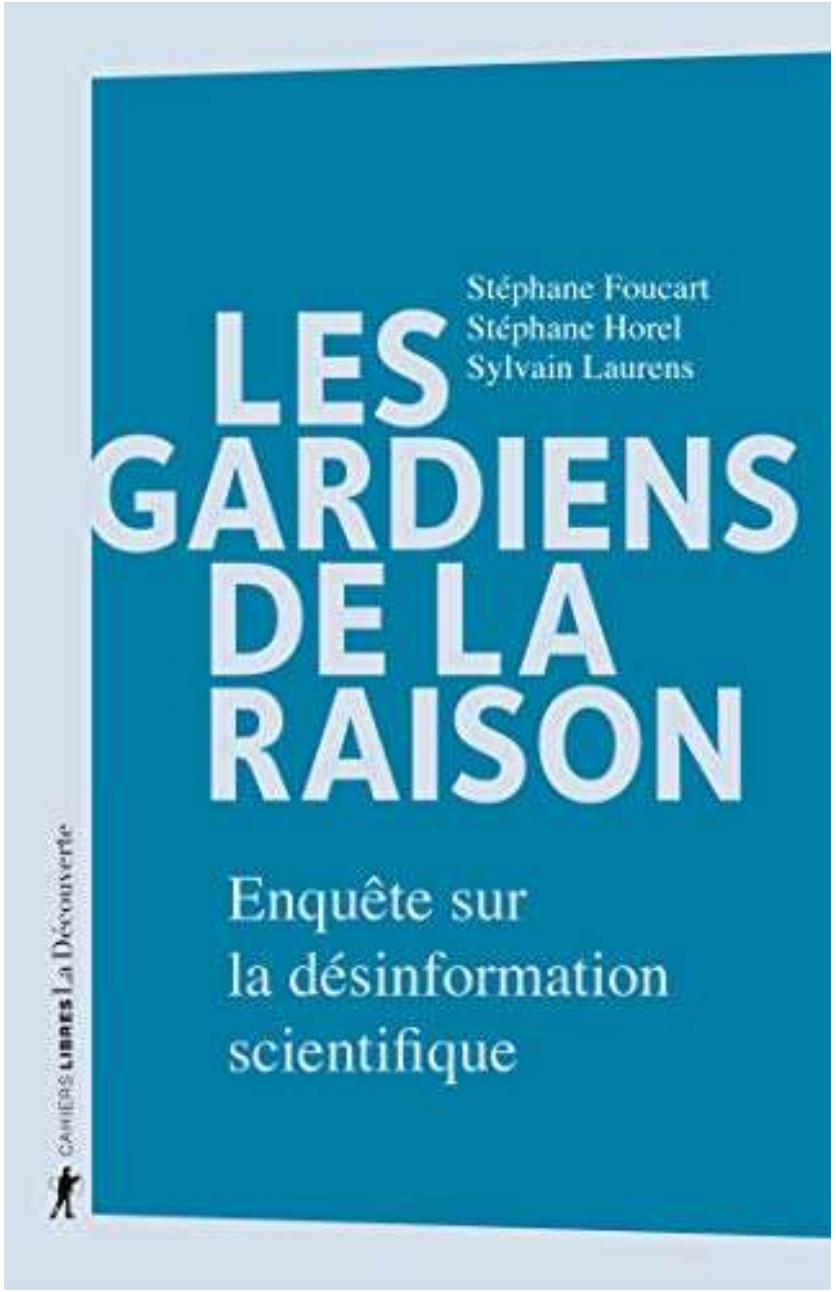
http://www.publicintegrity.org/2016/02/08/19223/meet-rented-white-coats-who-defend-toxic-chemicals

The last stage: from guardians of ‘sound science’ to guardians of reason

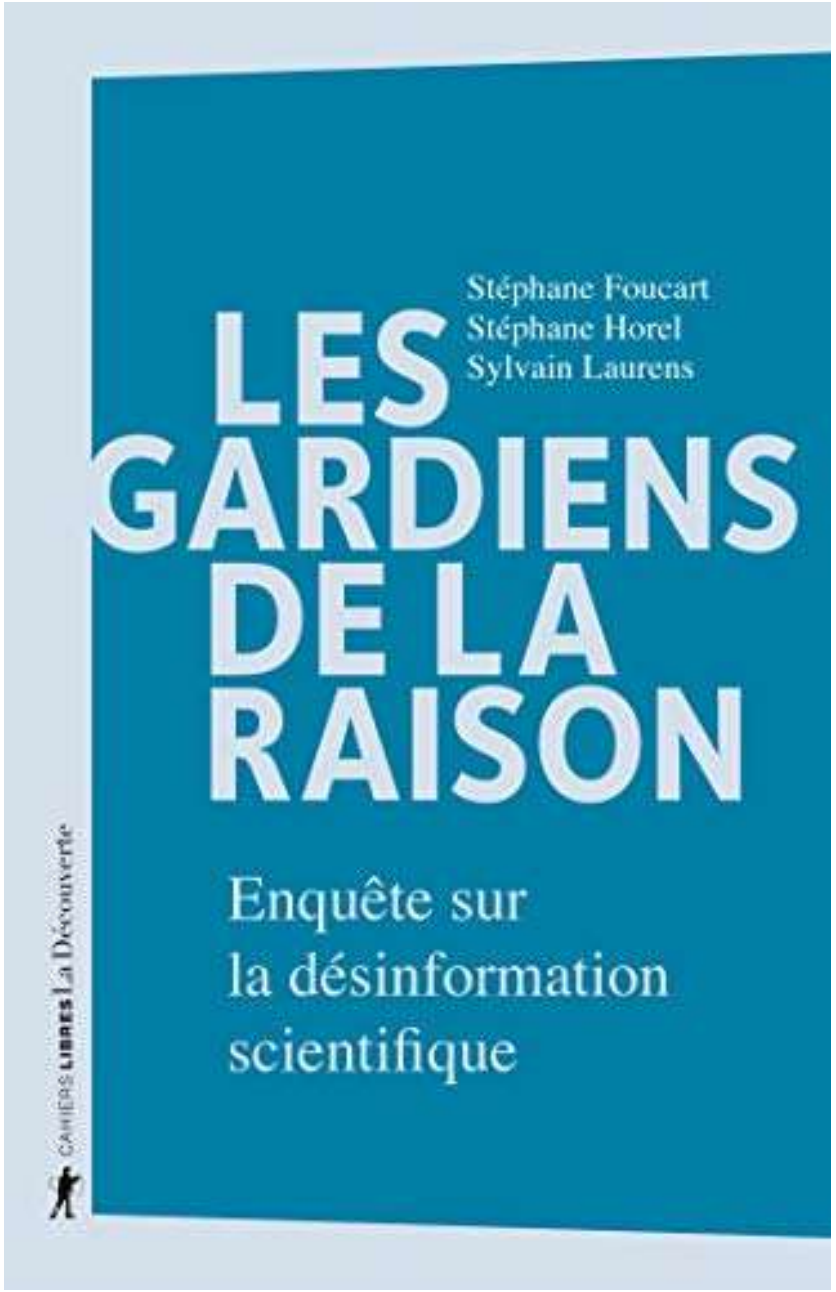
Procession Of The Goddess Of Reason, 10 November 1793.Engraved By Meyer-Heine After Renaud. From Histoire De La Revolution Francaise By Louis Blanc.



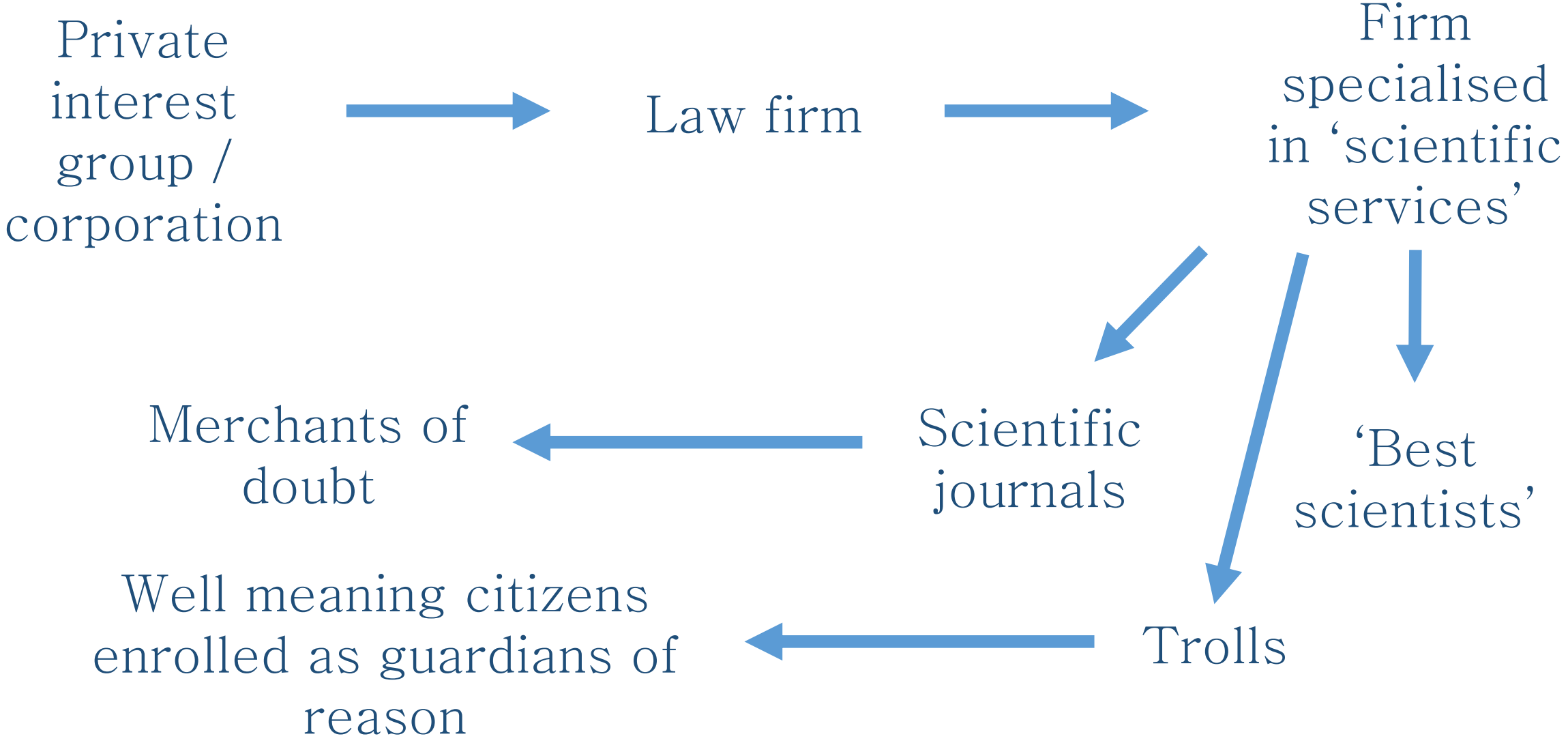
Well-meaning educators, scientific bloggers or micro-influencers, science associations are hijacked by corporate lobbyists to defend industrial positions on issues such as herbicides, genetically modified crops, nuclear energy, climate



A new frontier of lobbying, where the new game consists in colonizing the entire space of scientific intermediation.

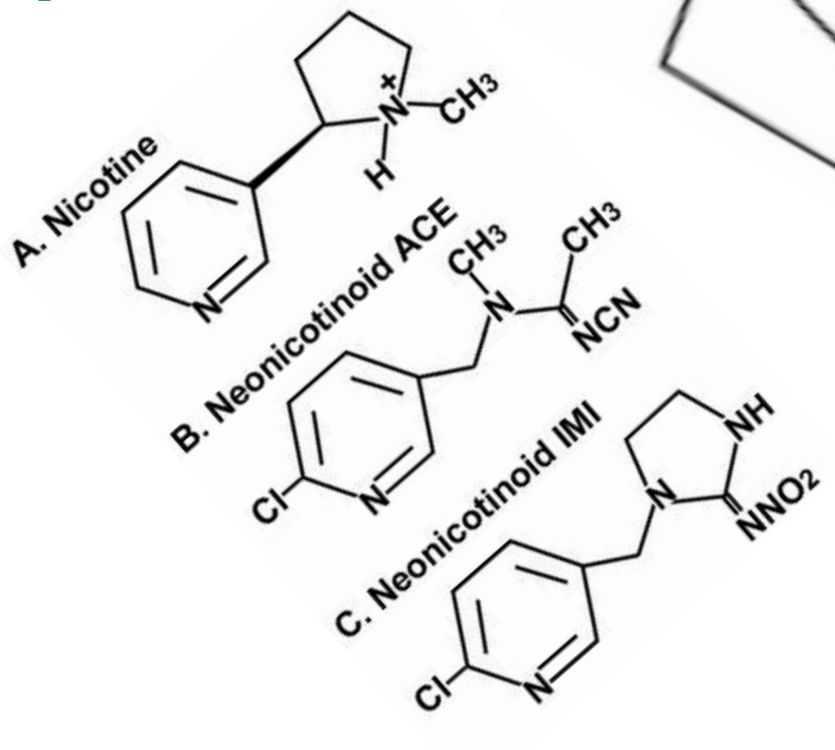


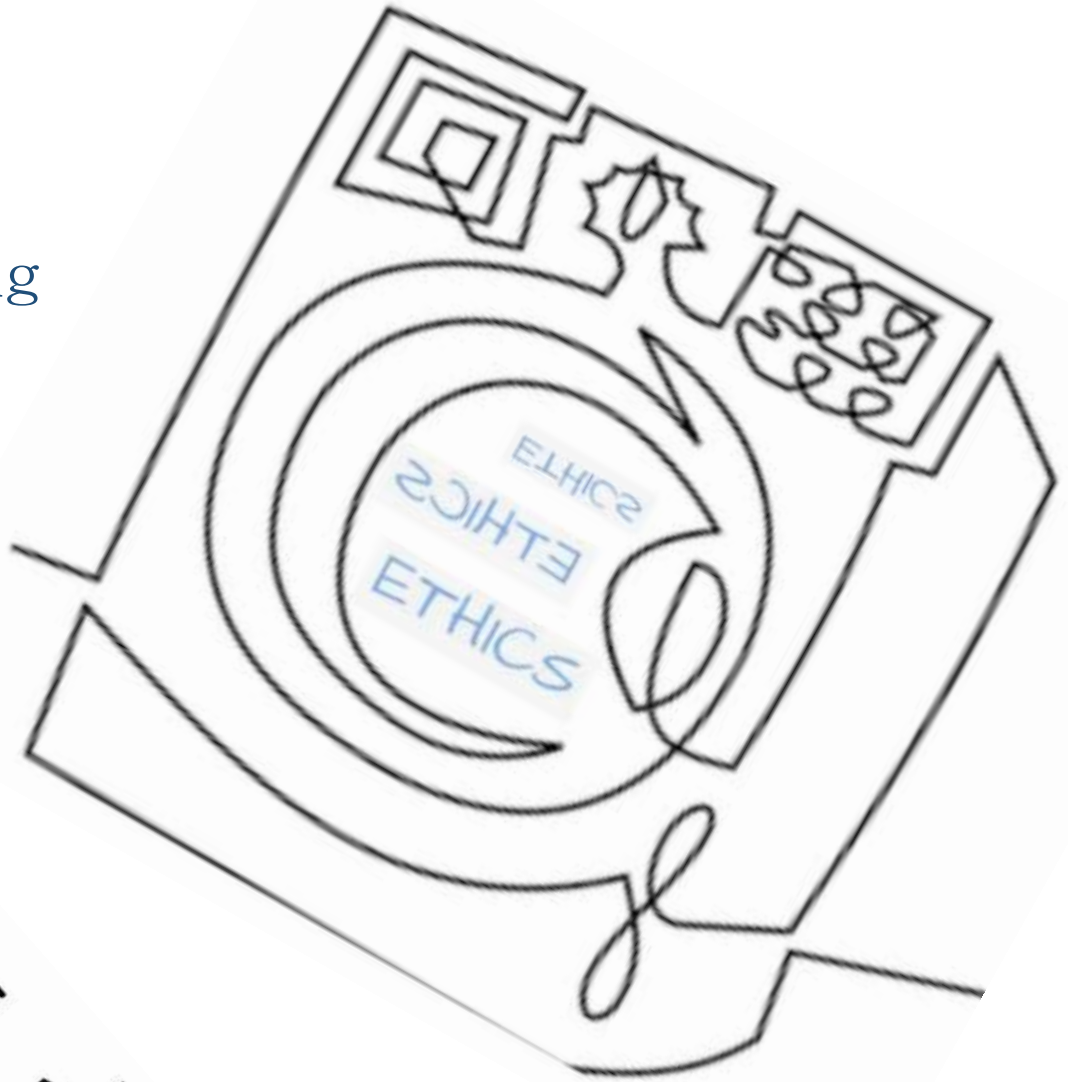
An army of self-proclaimed 'fact checkers' becomes mobilized in the defence of a neoliberal and conservative credo, posing as victims of an assault on science perpetrated by the purported enemies of reason


Private interest group / corporation
Law firm
Firm specialised in 'scientific services'
Scientific journals
'Best scientists'
Merchants of doubt
Trolls
Well meaning citizens enrolled as guardians of reason

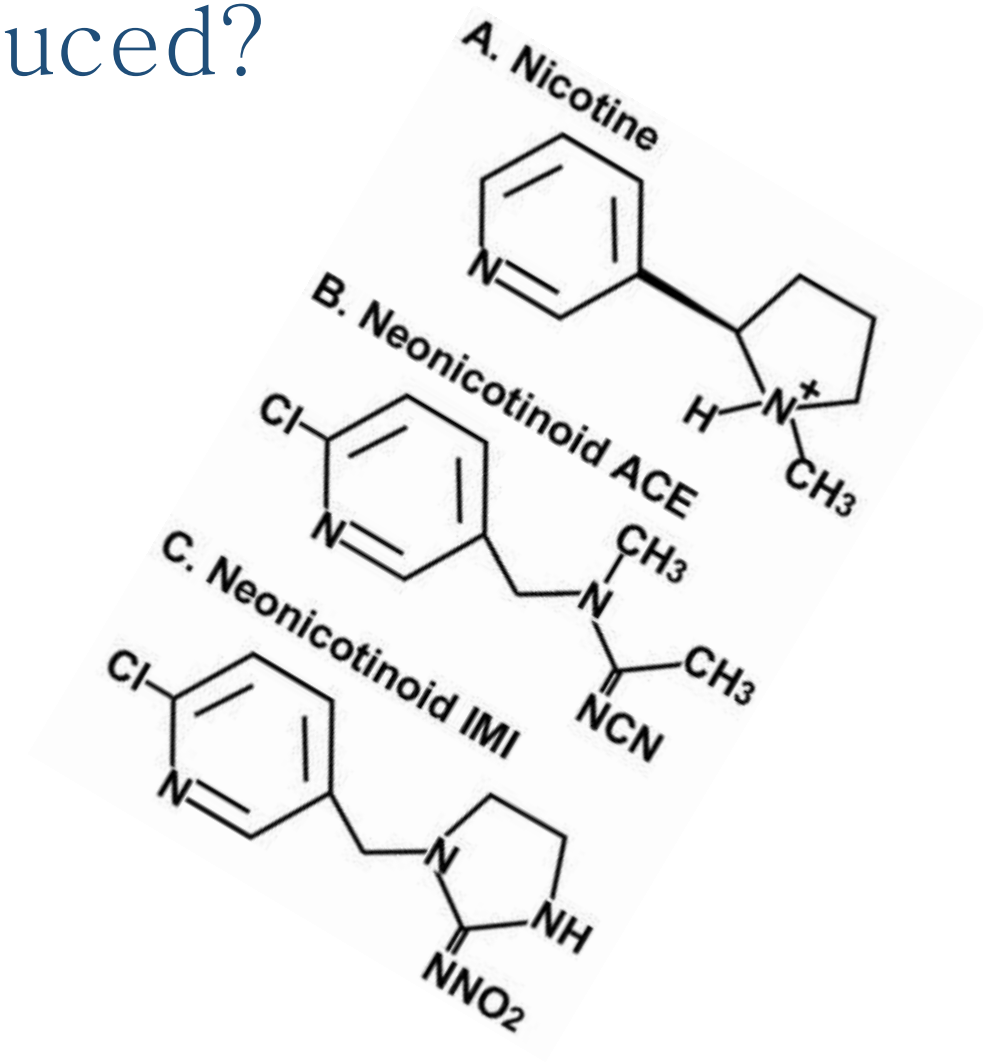
The cases

1. Neonicotinoids: who sets the tests
2. The EU Science Advice Mechanism, using science to influence EU policy-making
3. Ethic washing; Ethics Guidelines for Trustworthy AI
4. Brussels Declaration
5. The innovation principle





1. Neonicotinoids: How can corporate power manage to influences the methodologies whereby evidence is produced?

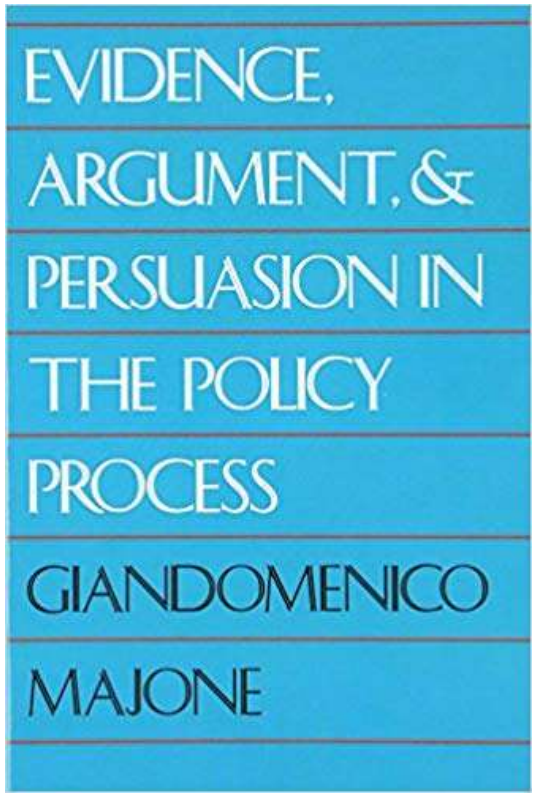


The battle over how to measure & over who should decide how to measure

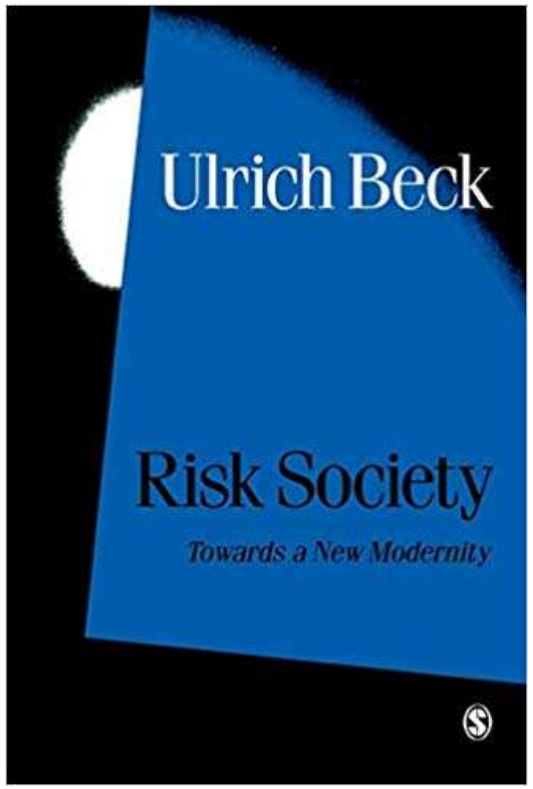
Why? ➔ The methodology is never neutral

From Ulrich Beck to Giandomenico Majone: the technique is never neutral

Ulrich Beck
(1944 –2015)



1989



1992 (1986)

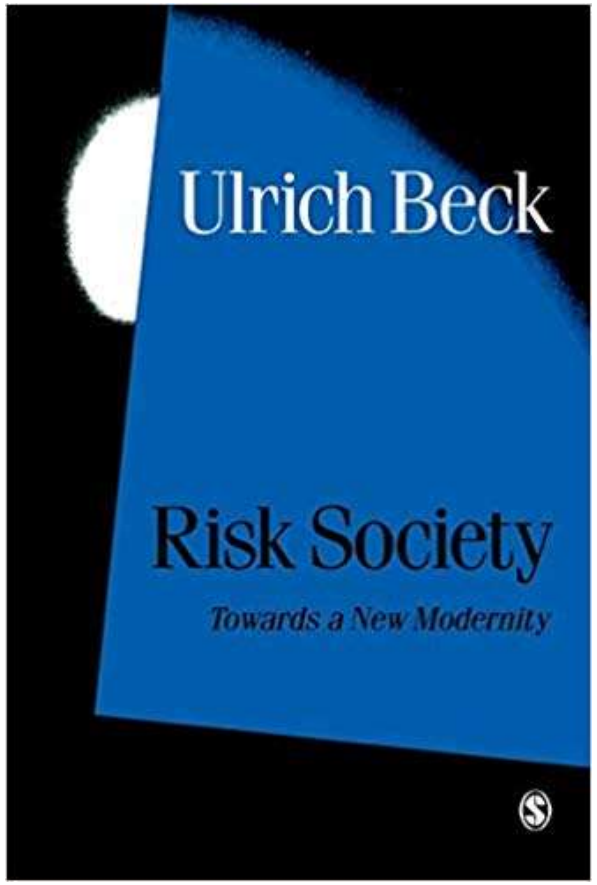
ELSEVIER

Environmental Science & Policy
Volume 106, April 2020, Pages 87-98

The technique is never neutral. How methodological choices condition the generation of narratives for sustainability

Andrea Saltelli [a, b], Lorenzo Benini [c], Silvio Funtowicz [a], Mario Giampietro [d, e], Matthias Kaiser [a], Erik Reinert [a, f], Jeroen P. van der Sluijs [a, g, h]

“It is not uncommon for political programs to be decided in advance simply by the choice of what expert representatives are included in the circle of advisers.”



1992 (1986)

Ulrich Beck
(1944 –2015)

Decline of pollinators (windshield effect)

Insects Opinion

Insectageddon: farming is more catastrophic than climate breakdown

George Monbiot

The shocking collapse of insect populations hints at a global ecological meltdown

@GeorgeMonbiot

Fri 20 Oct 2017 12.11 BST

While the foraging area of bees may extend over up to 9 km away from the honeybees, and the impact of insecticides implies bioaccumulation and hence long term effects, **the prevailing measuring techniques held valid in regulation fail to detect the toxicity of these insecticides**

Jeroen van der Sluijs

Van der Sluijs, Jeroen P., Noa Simon-Delso, Dave Goulson, Laura Maxim, Jean-Marc Bonmatin, and Luc P Belzunces. 2013. “Neonicotinoids, Bee Disorders and the Sustainability of Pollinator Services.” Current Opinion in Environmental Sustainability5 (3–4): 293–305.

Robinson, Claire, et al. 2018. "Ensuring a Higher Level of Protection from Pesticides in Europe: The Problems with Current Pesticide Risk Assessment Procedures in the EU – and Proposed Solutions. A White Paper Prepared for the Coalition Citizens for Science in Pesticide Regulation." https://doi.org/10.5281/ZENODO.2543743.

The white paper reveals a jungle of conflicts of interests, loopholes, and sloppy regulation in the way pesticides are regulated in the EU

Structural reasons for the EFSA and European Commission commitment to a 'sound-science'?

- Commitment to the single market: the EC needs a centralized, standardized, risk assessment approach
- A pro-biotech agenda in the interest of EU growth and competitiveness

Zwanenberg, Patrick van. 2020. "The Unravelling of Technocratic Orthodoxy." In The Politics of Uncertainty, edited by Ian Scoones and Andy Stirling, 58–72. Routledge

Structural reasons for the EFSA and European Commission commitment to a 'sound-science'?

- A fear that abandoning a standardized approach may open the road to endless deconstruction, leading to more burdensome regulations

Zwanenberg, Patrick van. 2020. "The Unravelling of Technocratic Orthodoxy." In The Politics of Uncertainty, edited by Ian Scoones and Andy Stirling, 58–72. Routledge

Structural reasons for the EFSA and European Commission commitment to a 'sound-science'?

- A latent form of scientism among officials who sincerely subscribe to a vision of science's neutrality – so that critical voices must be either 'hidden interests' or 'anti-science'

Zwanenberg, Patrick van. 2020. "The Unravelling of Technocratic Orthodoxy." In The Politics of Uncertainty, edited by Ian Scoones and Andy Stirling, 58–72. Routledge

Wynne, Brian. 2014. "Further Disorientation in the Hall of Mirrors." Public Understanding of Science. SAGE PublicationsSage UK: London, England.

2. The EU science advice mechanism

Chief Science Advisor – a "constant target for lobbying", but not well equipped to deal with it

Ann Glover
Chief Scientific Adviser to the President of the European Commission from 2012 to 2014

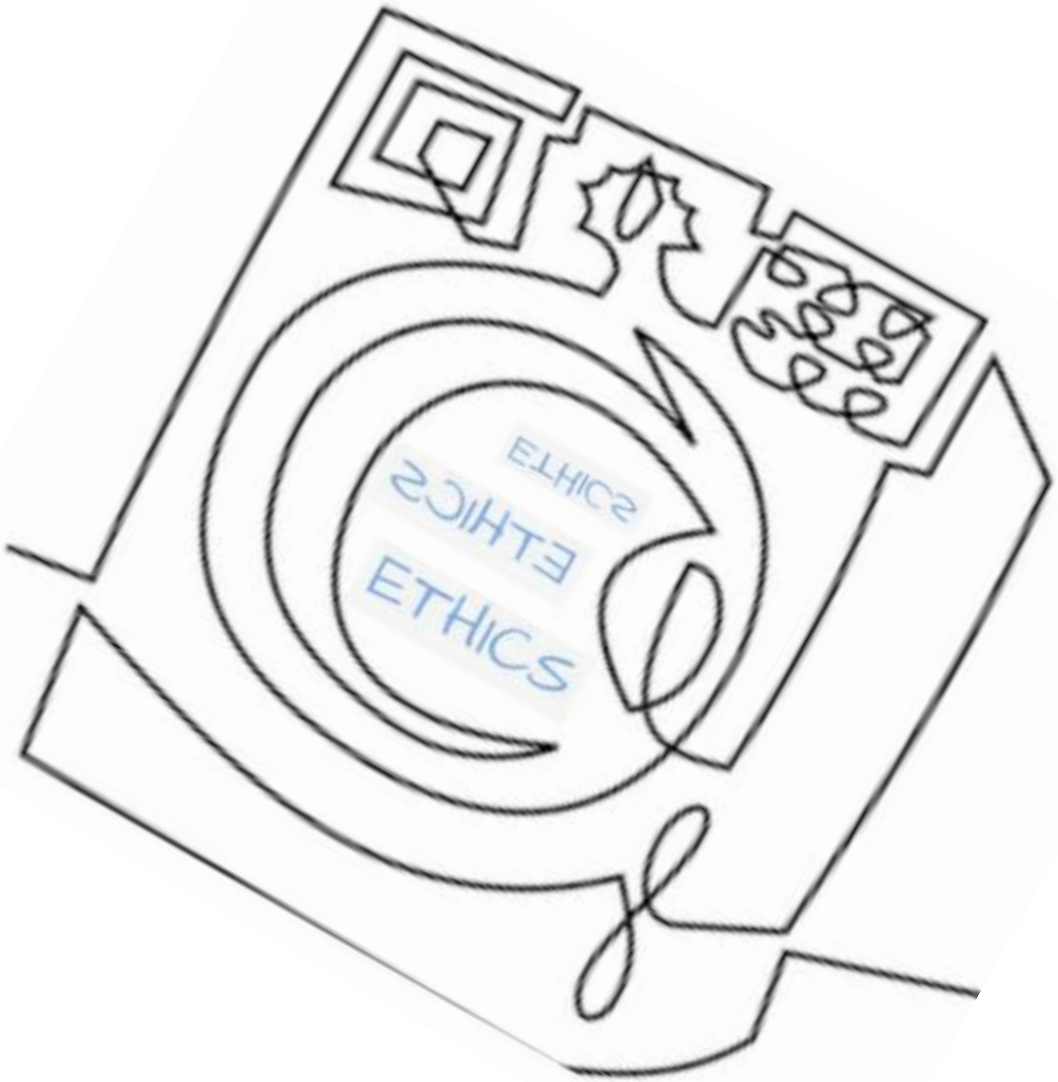
Corporate Europe Observatory

The EU Chief Scientific Adviser and endocrine disrupting chemicals

New evidence the role's existence enabled undue influence at the top of the European Commission

29.10.2014

3. Ethic washing: Guidelines for AI. Are scientific ethical committees a venue lobbyists?



Thomas Metzinger

DER TAGESSPIEGEL

EU guidelines

08.04.2019, 15:48 Uhr

Ethics washing made in Europe

By Thomas Metzinger

On Tuesday, the EU has published ethics guidelines for artificial intelligence. A member of the expert group that drew up the paper says: This is a case of ethical white-washing

https://www.tagesspiegel.de/politik/eu-guidelines-ethics-washing-made-in-europe/24195496.html

A commission of 52 members, “with only four ethicists alongside 48 non-ethicists – representatives from politics, universities, civil society, and above all industry”

DER TAGESSPIEGEL

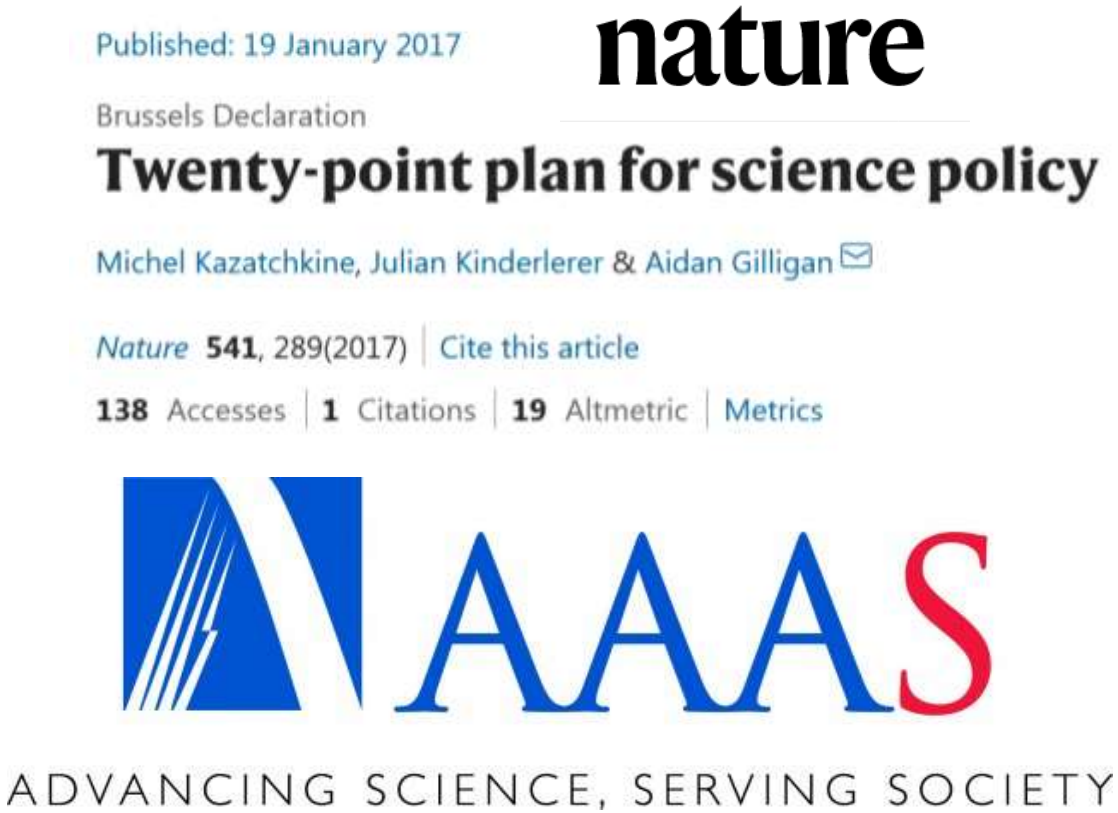
“ethics washing = cultivating ethical debates to buy time, distract the public and to prevent or at least delay effective regulation … industry is building one “ethics washing machine” after another”

Participatory washing?

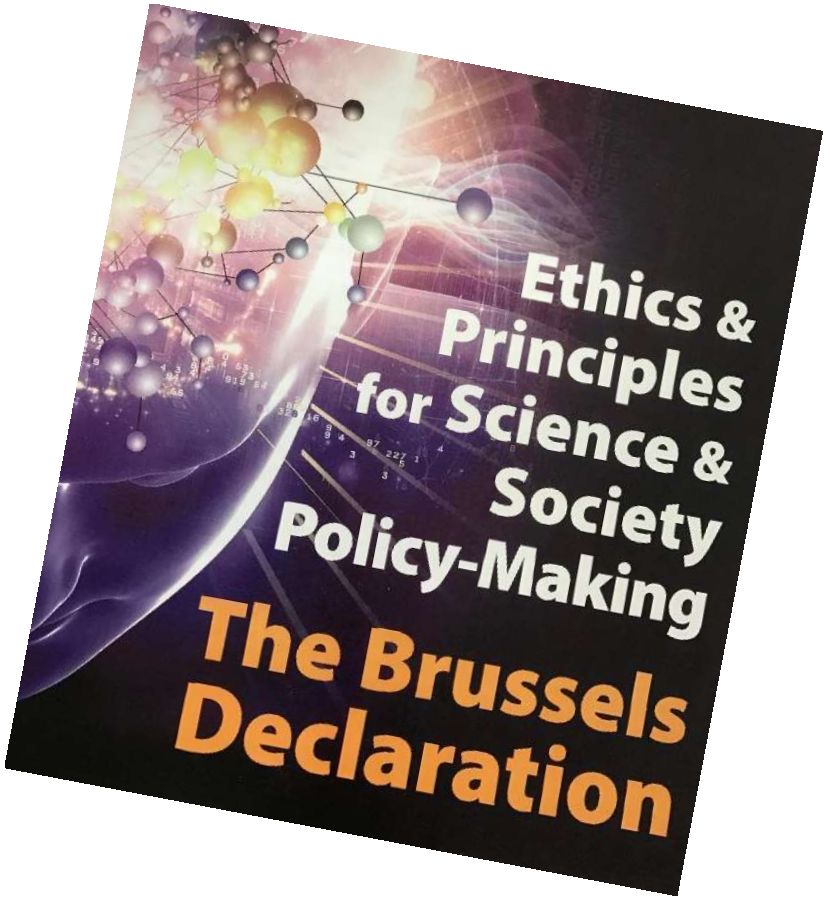
DER TAGESSPIEGEL

4. The 2017 Brussels Declaration

- Promoted by World Science Forum
- Journal Nature (January 2017)
- Announced by (AAAS, February 2017)
- Events in 2012-2016, 300 individuals from 35 countries



- Attended by the elite of EU science governance: president of ERC, Former Chief Science Adviser to EC President, European Commission's cadres, Lancet's Richard Horton…



Then someone pulls the alarm

Richard Horton complains that his name, photo, and one of his statements being dragged into a document “whose intention seems to be to undermine the value of science in policy making, and was created with the input of industries that are anathema to health”

What had happened?

The event had an important presence of alcohol and tobacco lobbies

Source: https://www.gr8ambitionz.com/

What is written in the declaration?

Scientists must learn to use established communication channels for providing policy advice more effectively and be less aloof and perhaps less arrogant.

Scientists need to recognise that they are advocates with vested interests too—in their case, in their own science.

Industry is an investor in knowledge generation and science and has every right to have its voice heard. 

Nevertheless, industry is too often perceived as suffering from fatal conflicts of interest and its views are therefore dismissed. 

In fact, commercial conflicts of interest are fairly easy to deal with if they are properly declared and the relationship between the science and the marketing made explicit. 

Ideological, personal, or academic conflicts of interest, on the other hand, are much harder to detect or deal with. 

… the precautionary principle must not be misused in a way that impedes technological progress towards reducing risk or public harms. 

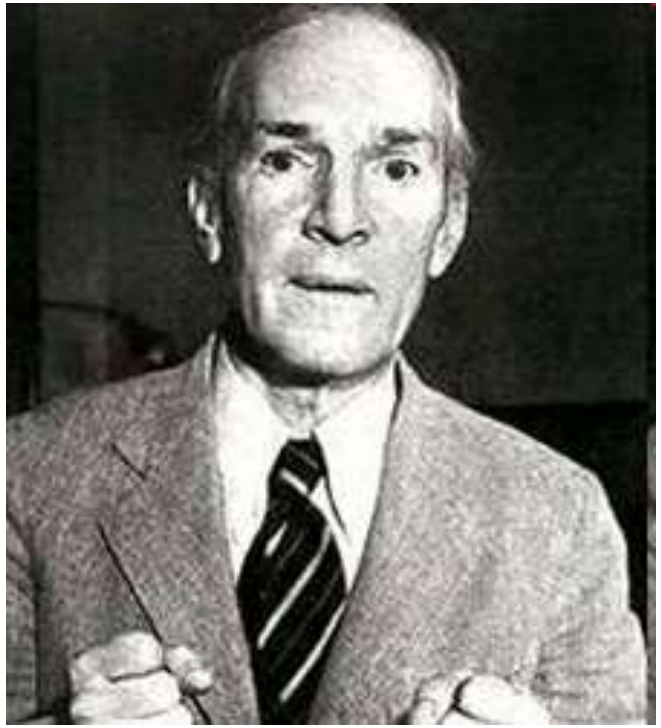
Lisa A. Bero

Why are scientists so gullible?

Lisa A. Bero, "Ten tips for spotting industry involvement in science policy," Tob. Control, p. tobaccocontrol-2018-054386, Jun. 2018.

A possible answer:

"If is difficult to get a man to understand something when his salary depends upon his not understanding it."



Upton Sinclair

5. Innovation principle: How can corporate influence lead to the creation of a new EU principle?

EN
English

Home > News > Innovation principle makes EU laws smarter and future-oriented, experts say

NEWS | 25 November 2019 | Brussels, Belgium | Research and Innovation

Innovation principle makes EU laws smarter and future-oriented, experts say

The innovation principle

European Commission

Ensuring EU legislation supports innovation

What is the Innovation Principle?

The Innovation Principle is a tool to help achieve EU policy objectives by ensuring that legislation is designed in a way that creates the best possible conditions for innovation to flourish.

The principle means that in future when the Commission develops new initiatives it will take into account the effect on innovation.

This will ensure that all new EU policy or regulations support innovation and that the regulatory framework in Europe is innovation-friendly.

“In 2013, the European Risk Forum, with the support of CEOs from twenty-two of the world's largest corporate investors in innovation, launched the Innovation Principle (IP).




The European Regulation and Innovation Forum

For a sustainable future through good quality regulation and innovation

Holland, Nina. 2018. “The ‘Innovation Principle’ Trap.” Corporate Europe Observatory. 2018. https://corporateeurope.org/en/environment/2018/12/innovation-principle-trap

“Actively supported by BusinessEurope and the European Roundtable of Industrialists, endorsed by the European Council and supported by successive EU presidencies, it has achieved significant prominence within the EU institutions”




The European Regulation and Innovation Forum

For a sustainable future through good quality regulation and innovation

Holland, Nina. 2018. “The ‘Innovation Principle’ Trap.” Corporate Europe Observatory. 2018. https://corporateeurope.org/en/environment/2018/12/innovation-principle-trap

BUSINESSEUROPE

European Round Table for Industry

ERIF
European Regulation & Innovation Forum

The European Regulation and Innovation Forum

For a sustainable future through good quality regulation and innovation

Against the principle of precaution:

"How an industry association wrote a new principle on innovation and succeeded in introducing this [innovation] principle into a number of European Union (EU) texts"

Garnett, Kathleen & Van Calster, Geert & Reins, Leonie. (2018). Towards an innovation principle: an industry trump or shortening the odds on environmental protection?. Law, Innovation and Technology. 10. 1-14. 10.1080/17579961.2018.1455023.

“This is the first time an industry association has successfully tried to introduce a new principle into the EU’s legal order”

Garnett, Kathleen & Van Calster, Geert & Reins, Leonie. (2018). Towards an innovation principle: an industry trump or shortening the odds on environmental protection?. Law, Innovation and Technology. 10. 1-14. 10.1080/17579961.2018.1455023.

This is not the end of the story, as ERF now chose to ‘energize’ the proportionality principle with ‘Four conditions’

Source: https://www.eriforum.eu/uploads/2/5/7/1/25710097/erif_highlights_12_-_proportionality_principle.pdf, published June 2020

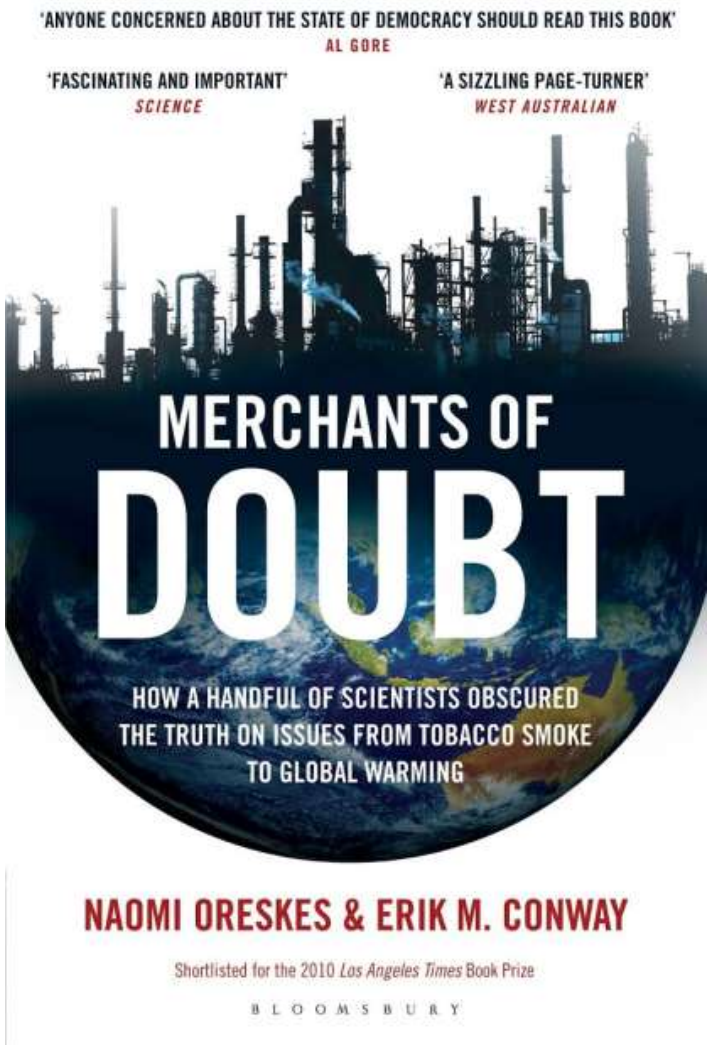
The principle of proportionality is subject to four conditions:

- Importance of objective–the intended goal, theoretical or practical, must be important;
- Relevance of means–the means, such as treatment or a drug, must bring about or at least help to achieve the goal;
- Most favourable option–there is no other less controversial or risky means to achieve the goal;
- Non-excessiveness–the means used should not be excessive in relation to the intended goal.

Source: https://www.eriforum.eu/uploads/2/5/7/1/25710097/erif_highlights_12_-_proportionality_principle.pdf, published June 2020

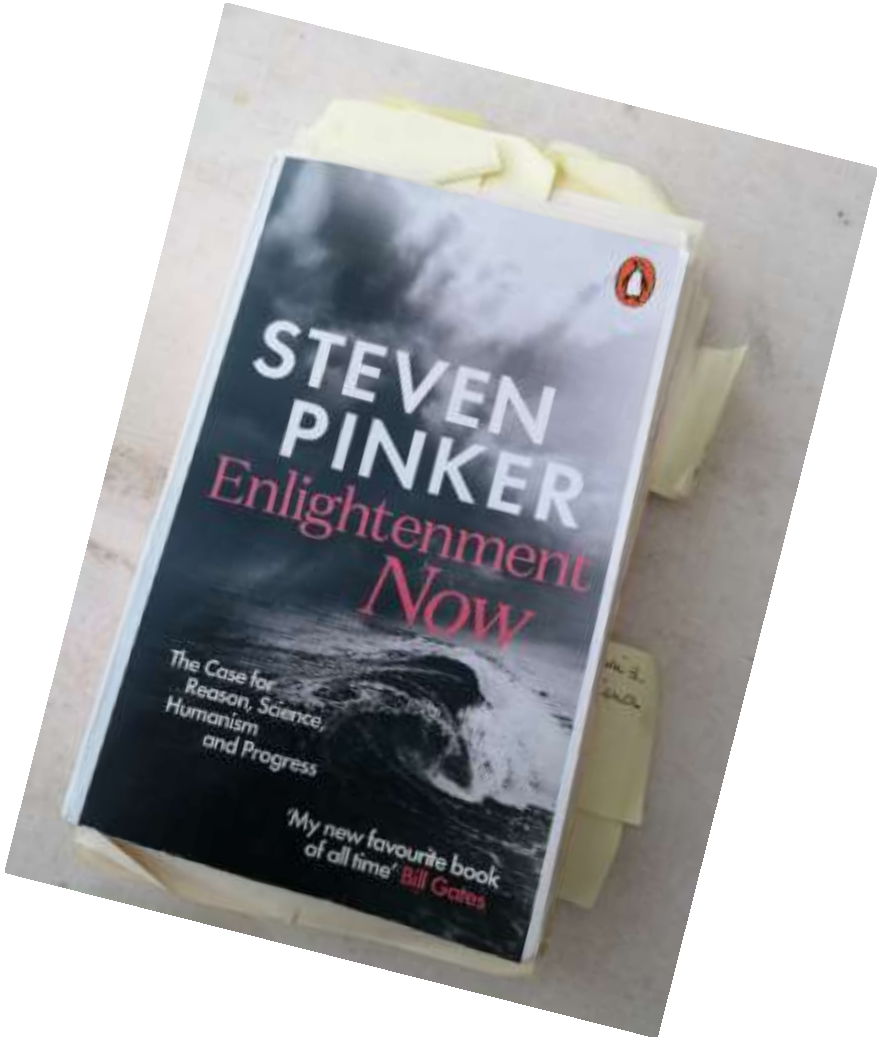
What conditions have made it possible for the frontier of regulatory capture to adopt strategies so *rapides et inédites* (Foucart et al, 2020)

1) Corporate reaction to the unmasking of the strategy of "Merchant of doubts"



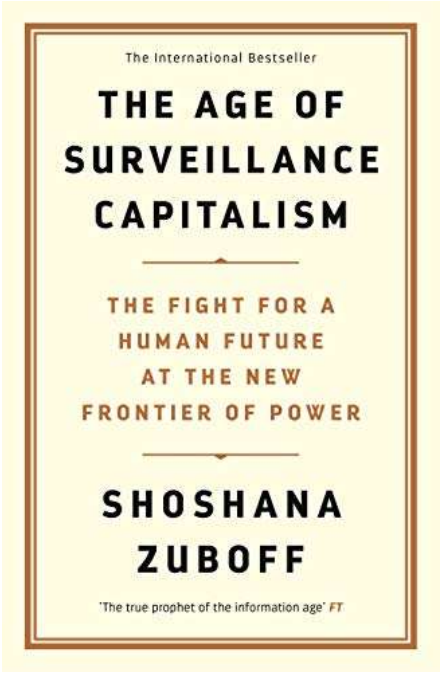
What conditions have made it possible for the frontier of regulatory capture to adopt strategies so *rapides et inédites*

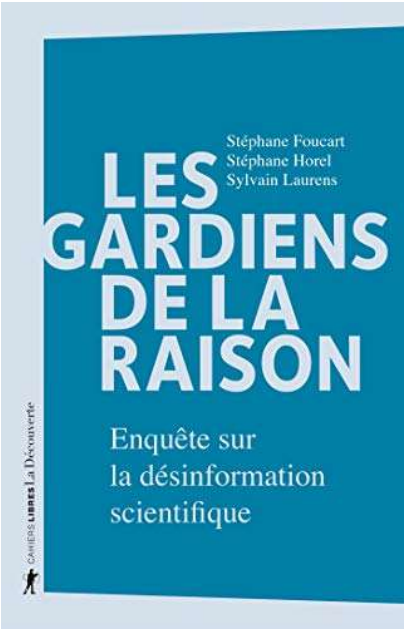
2) A cultural and political climate, 'cosmopolitan or liberal or classical liberalism' which claims for itself the control and the authority of science; doubters can be labelled as enemies of science or victims of 'cultural pessimism' (Pinker 2018).



What conditions have made it possible for the frontier of regulatory capture to adopt strategies so *rapides et inédites*

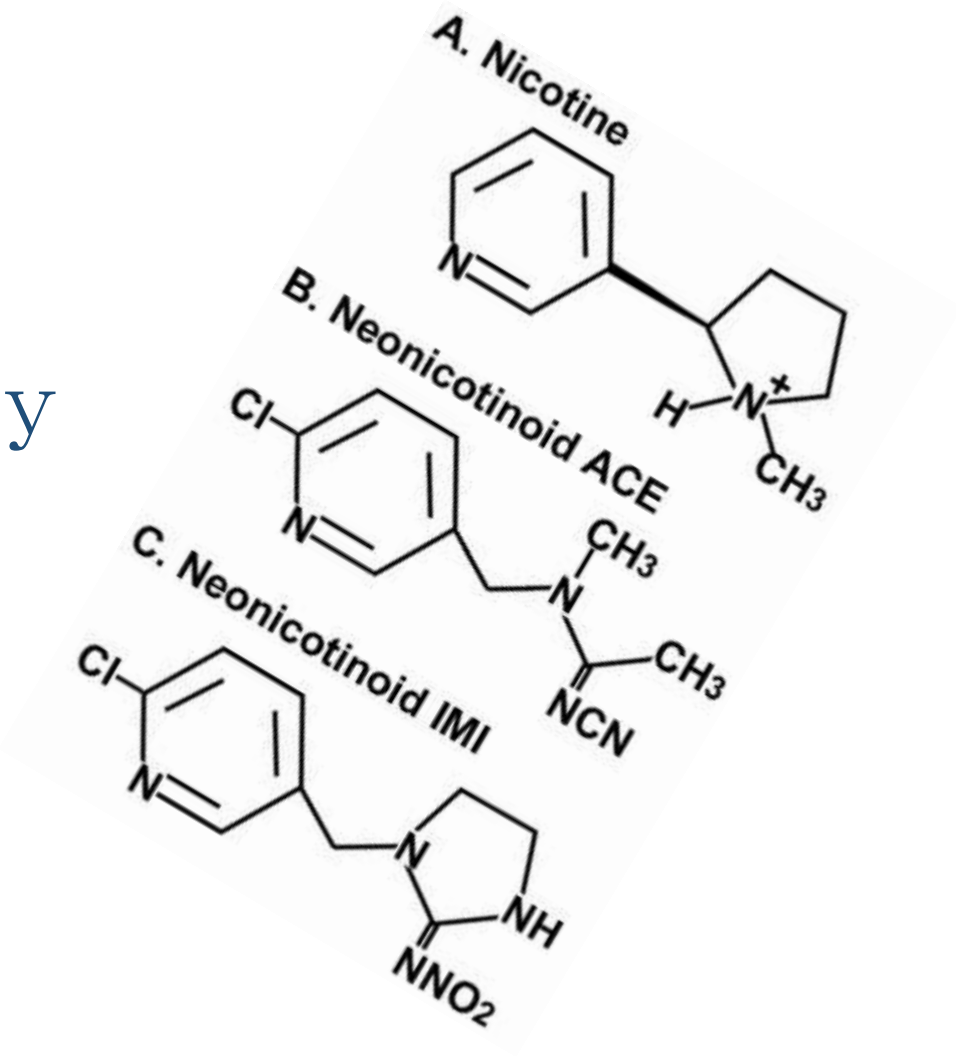
3) New powerful instruments such as the use of AI and algorithms in combination with cognitive psychology and the new social media to influence the behaviour of consumers / voters





An epistemic ladder?

1) Contesting the evidence or influencing the methods whereby the evidence is produced ➔ Epistemic strategy



An epistemic ladder?

2) Delegitimising or appropriating the role of the institutional settings which produces the evidence ➔ Institutional strategy

An epistemic ladder?

3) Changing the framework or the worldview, to the effect that regulation is undesirable ➔ Political strategy

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An epistemic ladder for regulatory capture

- **Epistemic.** Invalidating the inference or the methods
- **Institutional.** Delegitimising and/or 'colonising' institutions
- **Political.** Promoting a worldview where the very idea of regulation is undesirable

Futures
Available online 26 October 2021
In Press, Journal Pre-proof

Science, the endless frontier of regulatory capture

Credits: https://www.subpng.com/

Readings

E. Dal Bó, “Regulatory capture: a review” Oxford Rev. Econ. Policy, vol. 22, pp. 203–225, 2006.

Excerpts of B. M. Owen and R. Braeutigam, The regulation game, : Strategic Use of the Administrative Process. Cambridge: Ballinger Press, 1978: http://www.andreasaltelli.eu/file/repository/Chapter1.pdf

P. Mirowski, “Hell Is Truth Seen Too Late,” Bound. 2, vol. 46, no. 1, pp. 1–53, Feb. 2019.

Brussels declaration: https://www.sci-com.eu/main/docs/Brussels-Declaration.pdf

L. Bero, “Ten tips for spotting industry involvement in science policy,” Tob. Control, p. tobaccocontrol-2018-054386, Jun. 2018.

Jim McCambridge, Mike Daube, Martin McKee, Brussels Declaration: a vehicle for the advancement of tobacco and alcohol industry interests at the science/policy interface? 10.1136/tobaccocontrol-2018-054264, June 25, 2018

The End

@andreasaltelli

Case	Strategy	Resources	Target
Neonicotinoids	**Epistemic** Invalidating the inference or influencing the methods whereby the evidence is produce	Specialised firms or agencies, ‘merchants of doubt’, defenders of ‘sound epidemiology’, captured scientific journals	Science quality criteria and epistemology

Case	Strategy	Resources	Target
The EU science advice mechanism Ethics washing: Guidelines for AI Brussel declaration	**Institutional** Delegitimising the institutional settings which produces the evidence or otherwise ‘colonising’ it	Science experts able to populate scientific ethical committees and to influence the agenda of science governance	Science governance

Case	Strategy	Resources	Target
Innovation principle	**Political** Changing the framework or the worldview in the context of which the evidence –or the very idea of regulation -are relevant or desirable	Intellectuals, policy brokers, disciplines (cognitive psychology and behavioural sciences), defenders of science (organizations and individuals), trolls and bots for astroturfing	Cultural capture Relation between science and society