#### Credibility of scientific expertise and decision-making

New challenges for health risk governance in a changing world



#### FRAMING SESSION

## Not just the facts: A political theory of trust in expertise

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20<sup>th</sup> January 2021



#### Tracking The Spread Of The Coronavirus Globally

Data as of Jan. 18

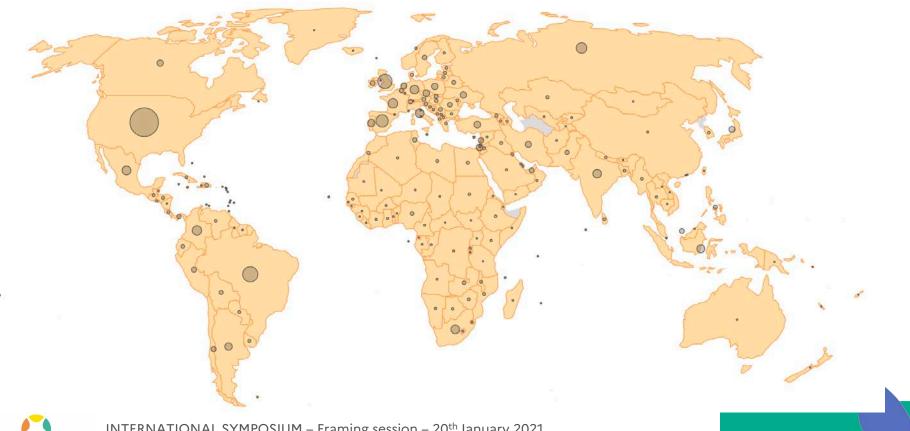
NEW CASES

NEW CASES PER IOOK

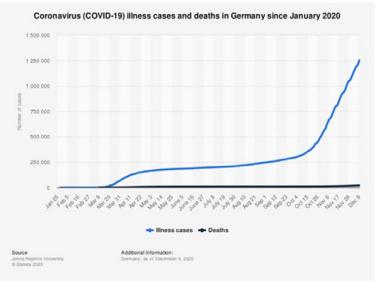
TOTAL CASES

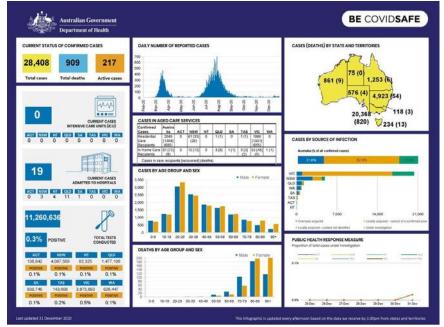
TOTAL CASES PER 100K

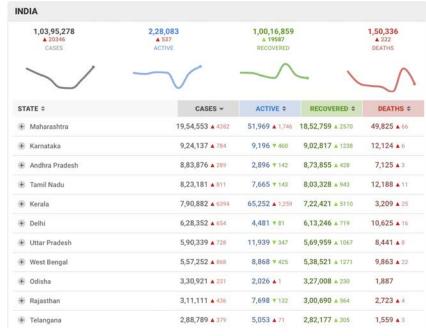
New cases in past week

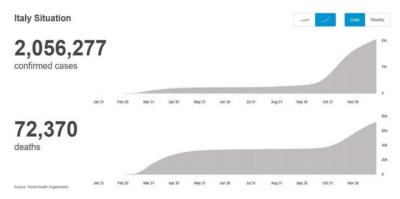






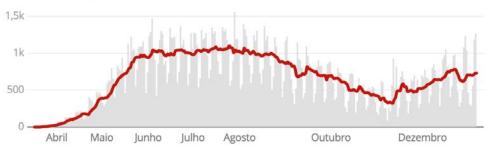






#### Mortes por Covid-19 confirmadas por dia

Total de mortes por dia em barras



Fonte: Consórcio de veículos de imprensa a partir de dados da secretarias estaduais de saúde









President-elect Joseph R. Biden Jr. honored the victims of the coronavirus pandemic on Tuesday, the day before his inauguration. Doug Mills/The New York Times



A field of flags on the National Mall represents the thousands of Americans who would normally attend the inauguration. Todd Heisler/The New York Times





#### Toward a Political Theory of Expertise

Key question for **Democracy** 

Why should the few be empowered to *rule* for the many?

Key question for Modernity

Why should the few be empowered to *know* for the many?





#### Parallel Constitutions?

- - Explicit
  - Is power being exercised?
  - Which powers are authorized?
  - What are their limits?
  - How do we know them?
  - Who can challenge?
  - By what processes?
  - Represented. By whom

- Questions of political delegation
   Questions of epistemic delegation
  - Implicit
  - Power | Knowledge
  - A world without borders ideally!
  - Epistemic subsidiarity
  - Futures and imaginaries
  - Constructing expertise
  - Ethics and responsibility to whom?





# Constitutional Role of Science and Expertise

Science provides common baseline for accountability

But science enters politics as expertise

Experts govern by appeals to science

Under a tacit constitutional compact

Ordinarily defined at the level of the nation state



## Quality and Virtue in Science

- R.K. Merton's **norms of science** the *CUDOS* framework:
  - –Communalism: science is held in common
  - –*U*niversalism: science is independent of place of production
  - -Disinterestedness: science is free of interests
  - –Organized Skepticism: science is questioned by peers





## Objectivity is a political instrument

- George H.W. Bush, 1990
- Science, like any field of endeavor, relies on freedom of inquiry; and one of the hallmarks of that freedom is objectivity.
- Now more than ever, on issues ranging from climate change to AIDS research to genetic engineering to food additives, government relies on the impartial perspective of science for guidance. And as the frontiers of knowledge are increasingly distant from the understanding of the many, it is ever more important that we can turn to the few for sound, straightforward advice.



## Speaking "Truthiness" to Power

- Stephen Colbert lampooned American politics under President George W. Bush as a "no fact zone"
- Frank Rich, New York Times, November 5, 2006:
- In retrospect, the defining moment of the 2006 campaign may well have been back in April, when Mr. Colbert appeared at the White House Correspondents' Association dinner. Call it a cultural primary."





## Definition: Wikipedia

- "Truthiness is a quality characterizing a 'truth' that a person making an argument or assertion claims to know intuitively 'the gut' or because it 'feels right' without regard to evidence, logic, intellectual examination, or facts."
- In other words, "truthiness" is a gut assessment of the truth value of propositions.





## The Challenge of Mode 2

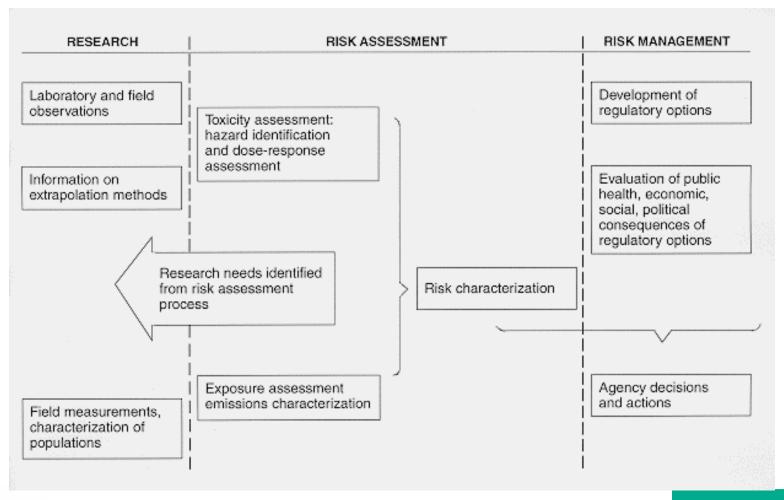
- Knowledge is increasingly produced in contexts of application, i.e., all science is 'applied' science.
- Science is increasingly transdisciplinary, i.e., it draws on and integrates elements from many fields.
- Knowledge is generated in a wide variety of sites, not just universities and industry, but also in research centers, consultancies, and thinktanks.
- Scientists are aware of the societal implications of their work.
- Publics are conscious of the ways in which science and technology affect their interests and values.





#### A separatist strategy:

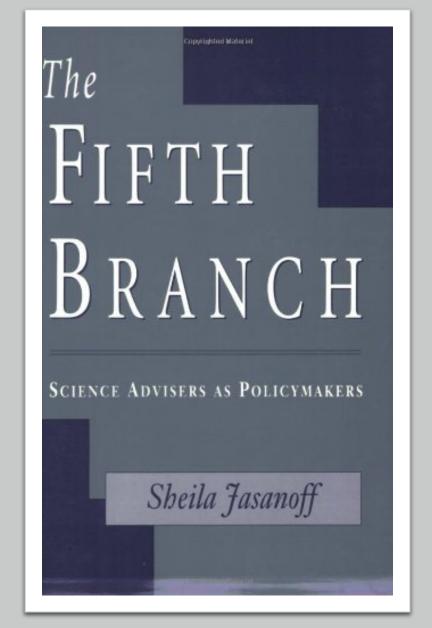
US National Research Council "Red Book" Model of Risk Analysis (1983)





#### A non-linear approach:

- If we abandon "truth," what's left?
  - Only "truthiness"?
- One answer (USA): The Fifth Branch
  - Seek "serviceable truths"
  - Legitimated as "science" through boundary work
- Revisiting The Fifth Branch as apparatus of public reason in an era
  - Of global Mode 2 knowledge production
  - Of increasing knowledge about the constructed nature of facts





#### 80

#### The Fifth Branch

Table 4.1. Regulatory science and research science.

	Regulatory science	Research science
Goals	"Truths" relevant to policy	"Truths" of originality and significance
Institutions	Government Industry	Universities
Products	Studies and data analyses, often unpublished	Published papers
Incentives	Compliance with legal requirements	Professional recognition and advancement
Time-frame	Statutory timetables Political pressure	Open-ended
Options	Acceptance of evidence Rejection of evidence	Acceptance of evidence Rejection of evidence Waiting for more data
Accountability		8
Institutions	Congress Courts Media	Professional peers
Procedures	Audits and site visits Regulatory peer review Judicial review Legislative oversight	Peer review, formal and informal
Standards	Absence of fraud or misrepresentation Conformity to approved protocols and agency guidelines Legal tests of sufficiency (e.g., substantial evidence, preponderance of the evidence)	Absence of fraud or misrepresentation Conformity to methods accepted by peer scientists Statistical significance



Why value facts? In democratic societies, we value facts that sustain associated normative and social orders



## The (Undervalued) Analytic-Deliberative Model

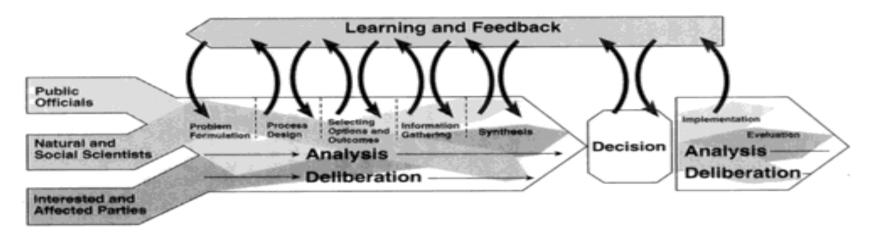


FIGURE 1-2. A schematic representation of the risk decision process.



#### Public Knowledge and Civic Epistemologies

	<u>US</u>	<u>UK</u>	<u>Germany</u>
Public knowledge- making	Pluralist, interest-based	Embodied , service-based	Corporatist, institution-based
Public Accountability	Assumptions of distrust Legal	Assumptions of trust Relational	Assumptions of trust Role-based
Demonstration (practices)	Socio-technical experiments	Empirical science	Expert rationality
Objectivity (styles)	Numerical; reasoned	Negotiated	Negotiated; reasoned
Expertise (preferred modes)	Formal methods	Experience	Training, skills, experience



## National Constructions of Expert Legitimacy: Three "Bodies" of Expertise

	United States	United Kingdom	Germany
Bodies of knowledge	Formal ("sound") science	Empirical common knowledge	Collectively reasoned knowledge
Embodied experts	Technically most qualified experts	Experienced "safe hands"	Authorized institutional representatives
Advisory bodies	Pluralistic, interested, but fairly balanced (stakeholder)	Members capable of discerning the public good (civil service)	Representative and inclusive of all relevant views (public sphere)



#### Virtuous Reason: Normative Foundations of Expertise

	Nature of Objectivity	Normative Commitments	Administrative Practices
Bodies of knowledge (United States)	View from nowhere (transcendental)	<ul><li>Open access to information</li><li>Transparency</li><li>Public comment and criticism</li></ul>	<ul><li>Freedom of Information</li><li>Public comment</li><li>Legal challenge and review</li></ul>
Embodied experts (United Kingdom)	View from everywhere (empirical, observational)	<ul><li>Issue-specific experience</li><li>Dedication to the public good</li><li>Balanced judgment</li></ul>	<ul> <li>Nominations from the public</li> <li>Principles of public life</li> <li>Conflict of interest rules</li> </ul>
Advisory bodies (Germany)	View from everywhere (reasoned)	<ul> <li>Inclusion of all relevant voices</li> <li>Willingness to accommodate reasons of others</li> </ul>	<ul> <li>Representation of relevant institutional voices</li> <li>Appointment of substitute members</li> </ul>



#### Cascade of Deference

- SCIENCE FOR ACTION is not only about epistemic issues, nor about "getting the science right" before moving to normative decisions.
- A Cascade of Deference
- OBJECTIVITY
  - Constructed within diverse traditions of authorizing expertise
- CONSENSUS
  - Rests on prior assumptions of legitimate politics and policy
- PRECAUTION
  - Has roots everywhere and respects fact-value hybridity
- SUBSIDIARITY
  - Is warranted when costs of impinging on liberty and autonomy outweigh risks of non-cooperation





Health risk governance in a "post" everything world





#### A constitutional convention for the 21st century?





#### Grand Challenges for Expertise

- Institutional devolution
  - Resurgent national constitutions of knowledge | power
  - Expanded time horizons (irreversible interventions, new virus strains)
  - Heightened populism (increasing citizen expertise)
  - Frayed gatekeeping (publication by Tweet)
  - Recalibrated morality (whose responsibility, what stewardship?)
- Political implications and consequences
  - Asking the right questions
  - Revisiting representation
  - Re-theorizing reason





## Thank you!

