Ethics and environmental advocacy: how can scientists engage safely and responsibly ?

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CNRS ethics committee

ICTP, Trieste - July 2022

Public advocacy – conflicting values

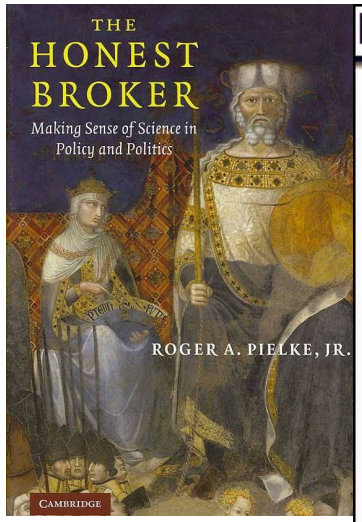
- New issue for environmental scientists (e.g. climate science)
- Scientist vs. expert vs. citizen vs. activist ?
- Neutrality, values-based, trust, credibility, legitimacy ?
- Naive, manipulated, irrelevant ?
- Technocracy vs. democracy ?
- Public good vs, private interests, medias, politicians ?
- Which hat to wear? Which advocacy? What ethical tensions ?
- Cf. COVID and numerous historical examples (Manhattan project, bio-ethics,…)

Lisa Goddard 1966-2022 – as IRI Director

Topics for our exchange

- Personal experience as climate scientist in society
- Ethics and responsability of scientists' « public engagement/advocacy »
- Towards « environmental ethics » in research

Pielke and the 1.5C target syndrome



Four idealized modes of engagement

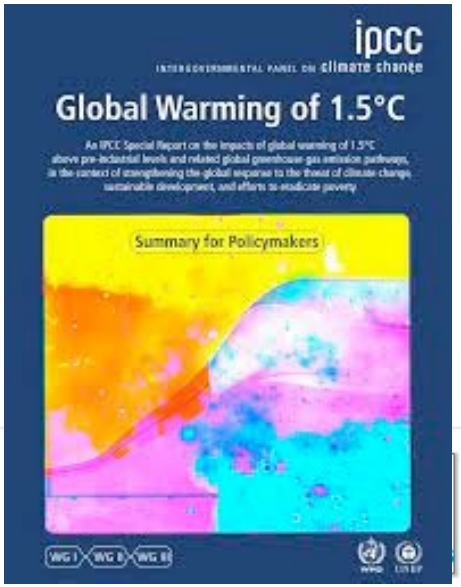
VIEW OF DEMOCRACY	VIEW OF SCIENCE IN SOCIETY: Linear Model	Stakeholder Model
Interest group pluralism	Pure Scientist	Issue Advocate
Elite Conflict	Science Arbiter	Honest Broker of Policy Alternatives **IPCC**

http://rogerpielkejr.blogspot.com/2015/01/five-modes-of-science-engagement.html

The sharing of scientific knowledge cannot be « neutral » as some form of advocacy is always involved.

+ Stealth Issue Advocate

(e.g. climate deniers)



One Earth
Volume 1, Issue 3, 22 November 2019, Pages 285-288

Commentary

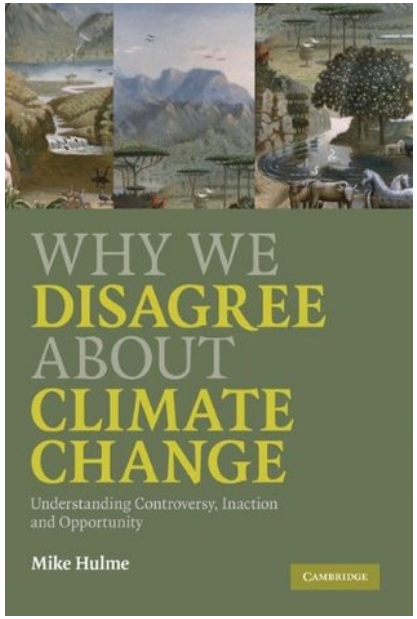
Now or Never: How Media Coverage of the IPCC Special Report on 1.5°C Shaped Climate-Action Deadlines

Maxwell Boykoff [1], Olivia Pearman [2]

Why didn't the IPCC (or us) reacted ?

"Collapsologues", XR, …

The multiple dimensions of Climate Change



- Mike Hulme - reasons to disagree:
  - Science (role of science in society)
  - Economy (how we value things)
  - Faith and beliefs
  - Psychology, sociology, communication
  - Development, politics
- Climate Change is not a “problem waiting for a solution”
- It is an environmental, cultural and political phenomenon that redefines the perception we have of ourselves, our societies and the role of humans on earth (e.g. democracy or human rights)
- climate change vs. Climate Change -> what role for scientists ?

Ethics / Integrity

Research Ethics

Main questions raised by **science and its impact on society**.

A **reflective approach** on the values that motivate our actions and their consequences.

Appeals to our **sense of morality and responsibility.**

A package of **historical, legal and philosophical tools for responsible research**.

Research Integrity

A code of "good" practice that guides the **practice of honest and integrity-based research**.

A **normative approach** that aims to frame research practices.

Contributes to the advancement of **ethically defensible research**

An essential condition for the **credibility of science** and the **trust given to it by society.**

Ethical issues can be debated,
research integrity is not debatable, it has to be respected.

Pierre Corvol, President of French Academy of Sciences, 2016

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Ethics vs. integrity

- Ethics invites us to think about the **values that motivate our actions and their consequences**
- It is a compass **to build the future** of research **while considering the past**
- **Debate/discussion where conflicting values are present**
- Integrity defines a set of **rules and values that govern scientific activity**
- Encapsulated into a code of conduct: Reliability, Honesty, Accountability, Respect

- Related but different
- Deep links with societies values (e.g. animal use, stem cell…)

Ethics and responsability of scientists' public engagement @IPSL

Background

- Growing and pressing needs from society (expertise, education, medias,…)
- Roles of scientists, trust in expertise: diverse perceptions and expectations
- Internal focus group to reflect on ethics and responsability of "public engagement" (e.g. policy advocacy)

Goals

- Create a "safe" space for such exchanges and internal debate
- Increase knowledge and awareness of the different dimensions of science in the public sphere
- Help decision making, dealing with value conflicts, understanding each other's positions

Method

- Internal and external interviews, shared readings, participatory workshops
- Identify issues, clarify terms, expose diversity of concepts
- Propose action plan to increase knowledge and awareness (MsC or PhD courses, ethics committee,….)
- Widen to other circles in a second stage

What are we talking about?

- **Public engagement** = broker of knowledge, stepping outside the lab
  - Diversity of motivations:
    - A necessary return toward society
    - Listening to/interacting with society: meeting up, sharing, co-construction of society relevant knowledge
    - Accountability and responsability, risk perception, alerting, whistle blower, calling for change…

What are we talking about?

- **Ethics of public engagement : what is it ?**
  - Term confusing for many
  - Duty of transparency (framing uncertainties)
  - Clarify who is speaking (scientist, expert, citizen,…)
  - Honesty and integrity, general interest vs. particular interest of the scientist
  - Rules, limits and requirements, clearly define interaction with stakeholders
  - Numerous personal variants
- **Ethics of public engagement : what positionning to adopt ?**
  - Leaving one's expertise field ?
  - Leading by example ?
  - Taking sides in public debates ?
  - Communicating on uncertainties ?

What are we talking about?

- **Expertise**
  - Has many different forms (« talking to people in charge »)
  - individual impartiality is an illusion ? Need for collective expertise
  - Risk of being instrumentalised, manipulated

Issues and questions - modalities and responsibility

Scientist in the public debate :

- Message broker (communication, outreach, education)
  - How to engage, which hat, can one be neutral ?
- facing the complexity of « Climate Change »
  - Interdisciplinarity dimension, away from comfort zone, e.g Acclimaterra
- expert among a diversity of actors
  - What positionning, what role ? Helping decision-making, avoiding instrumentalisation.

Reflexivity and meaning of research

- Choice of reseach subjects, practice, fit with personal values, neutrality, engagement

Tensions and conflicting values (ethics)

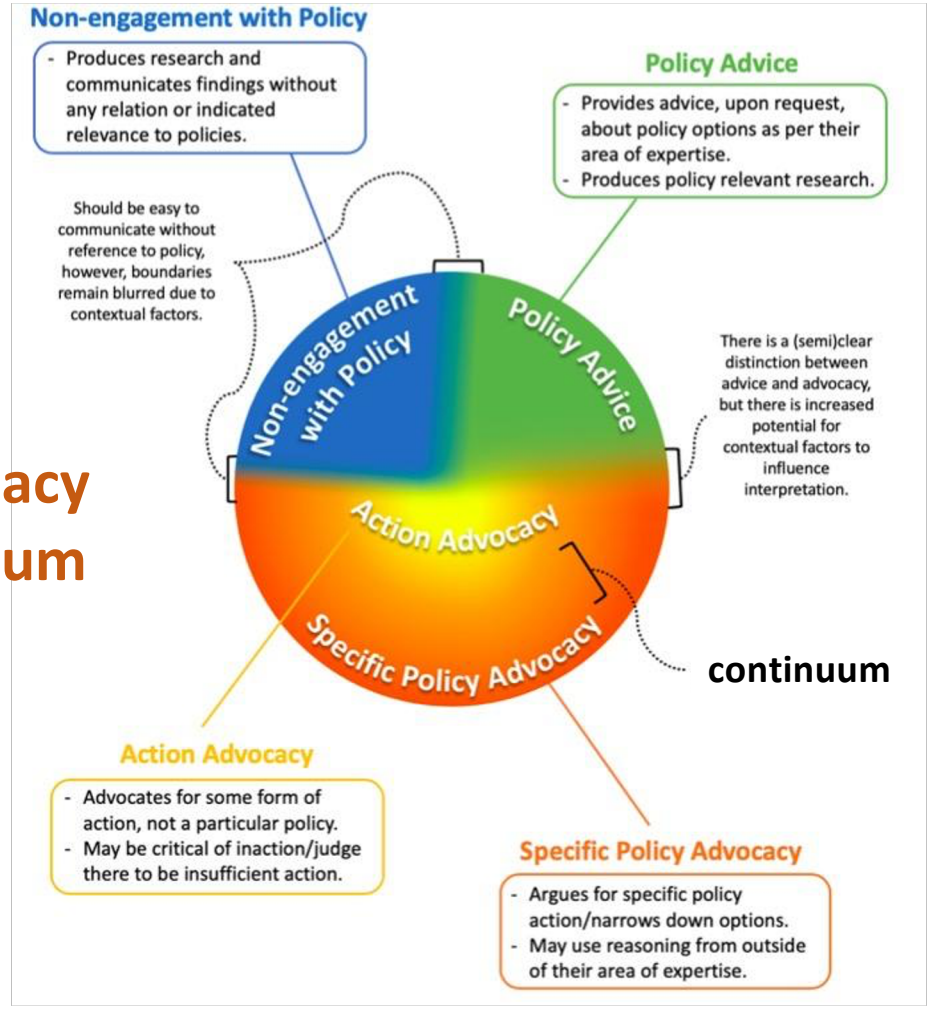
- Scientist – citizen tension:
  - 3 typical profiles: scientist first, both but clearly distinguished, inseparable
- Publicly funded research – private stakeholders
  - How to engage, legitimity of personal remuneration
  - Independence, integrity, risk of conflicts of interest, of instrumentalisation
  - co-construction, accompagny towards transition
- Public engagement – political decision making
  - Role of knowledge and expertise in political debate ?
  - Fear of not being enough of an advocate vs. distorting the democratic process
  - Credibility/neutrality of the scientist, risk of being instrumentalised

Examples of ethical questions

- Signing a position article in a newspaper (or editorial in Nature)
- Climate services: for who ?
- Geo-engineering: shoud we do the research ?
- Private funding and greenwashing: Arctic cruises, Total
- Tipping points, planetary boundaries and deadlinenism
- Dealing with public'/pupils' emotions

How should climate change scientists engage in policy advocacy ?

Advocacy spectrum



Contextual factors :

- Influences perception
- Miss goal on target
- Miss target (« stealth advocacy »)

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Lydia Messling - PhD thesis 2020

How should climate change scientists engage in policy advocacy ?

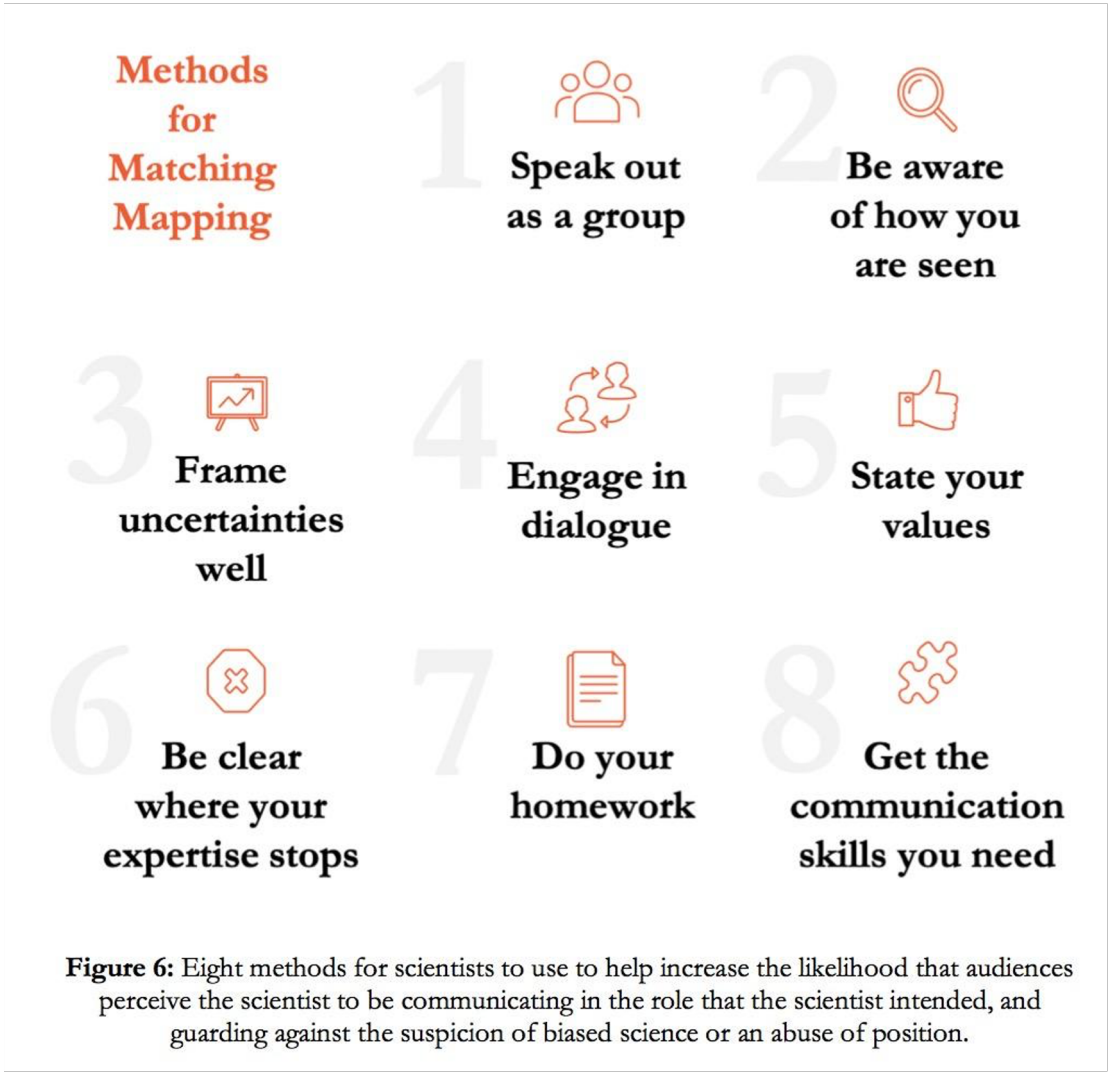

Figure 6: Eight methods for scientists to use to help increase the likelihood that audiences perceive the scientist to be communicating in the role that the scientist intended, and guarding against the suspicion of biased science or an abuse of position.

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Lydia Messling - PhD thesis 2020

As a summary (i.e. where I stand today)

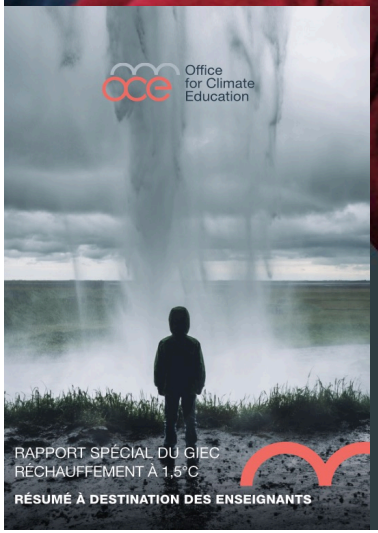
- The provision of scientific knowledge cannot be « neutral » as some form of advocacy is always involved: science does not operate in a social or political vaccum
- What I advocate for: as climate scientists we should
  - widen our knowledge about the issues/stakes involved in Climate Change
  - clarify what our roles can be in the public sphere
  - avoid being naive, manipulated, irrelevant -> accountability
- Face implications: choices of research topics, expertise, communication, advocacy,… + work with the relevant professonials
- Our key role in today's unique challenges means we have a duty to collectively engage in this "widening of our horizons", including the ethical dimension

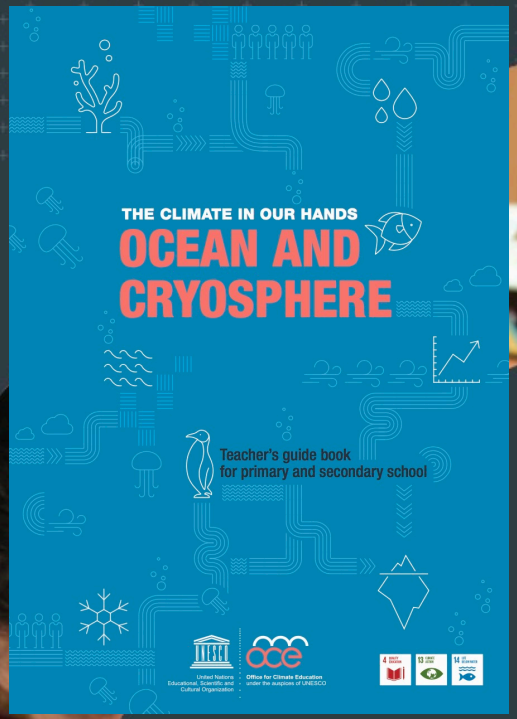
Towards environmental ethics in research

- Environmental impacts of research
- Labo1p5 initiative in France to measure carbon footprint and explore ways to reduce it
- Tension between reducing impact and creating “value-free” knowledge
- E.g. ethics of research involving people (“free informed will”) or using animals (“strict necessity’)
- Encourage community discussion towards sustainable research practices
- Other issues are not far (social justice, publish or perish,…): make them explicit

Education is key !

Office for Climate Education





Pedagogical ressources alongside IPCC reports Teacher training

http://www.oce.global

Educate and empower

Under the auspices of UNESCO
Hosted by Sorbonne University and IPSL

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Institut Pierre Simon Laplace
IRD Institut de Recherche pour le Développement FRANCE
PIK Potsdam Institute for Climate Impact Research
METEO FRANCE
météo et climat
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Our guiding principles

Scientific foundation

Cooperation

Interdisciplinarity

Accessibility and relevance

Active pedagogies

Long-term impact and legacy

Scientific and Pedagogical Committee
20 active professionals – climate science and pedagogy

ACHIEVEMENTS 2018 – 2021

71 RESOURCES DEVELOPED

Most in 4 languages: English, French, Spanish, German.

Disseminated in 11,000 classes

99 EVENTS AND TRAININGS

1,100 teachers trained face-to-face
69,000 teachers trained online
Close to 1 million pupils reached

COMMUNITY OF PRACTICE

Through its activities and networks, the OCE has brought together teachers from all over the world to share ideas and best practices.

4,000 teachers in France
17,000 teachers in Latin America (ALEC)

1 LARGE-SCALE INTERNATIONAL PROJECT IN LATIN AMERICA

América Latina para la Educación Climática: a 5-year project involving 12 partners coordinated by the OCE.

ALEC
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para la
Educación Climática

OCE has established itself as a leading reference on climate change education