



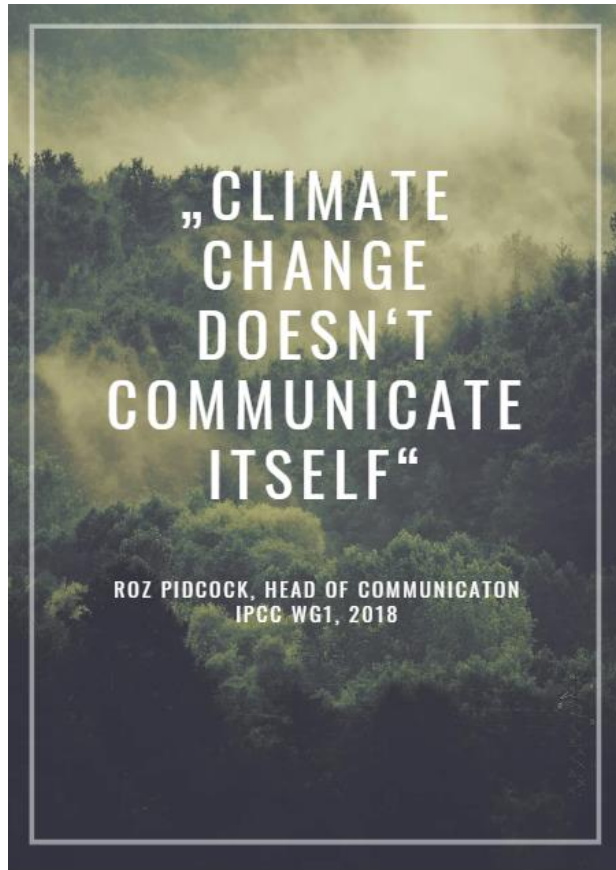
19.04.2023 | CHAIR OF SCIENCE COMMUNICATION | PROF. DR. HANNAH SCHMID-PETRI

Climate communication beyond promoting problem awareness –
improving the relationship between science, politics and society

Communication is central to the mission of science

Sonia Contera

Contera, S. Communication is central to the mission of science. *Nat Rev Mater* **6**, 377–378 (2021). <https://doi.org/10.1038/s41578-021-00316-w>



- Role of science: producing new knowledge, search for the “truth”
- participation in decision-making as democratic basic right → important prerequisite: knowledge of the important facts and positions
- transparent and proper communication and active information of the public about current research results as prerequisite to inform about policy options and their risks

Scientists as valued and credible sources

The Rising Heroes of the Coronavirus Era? Nations' Top Scientists

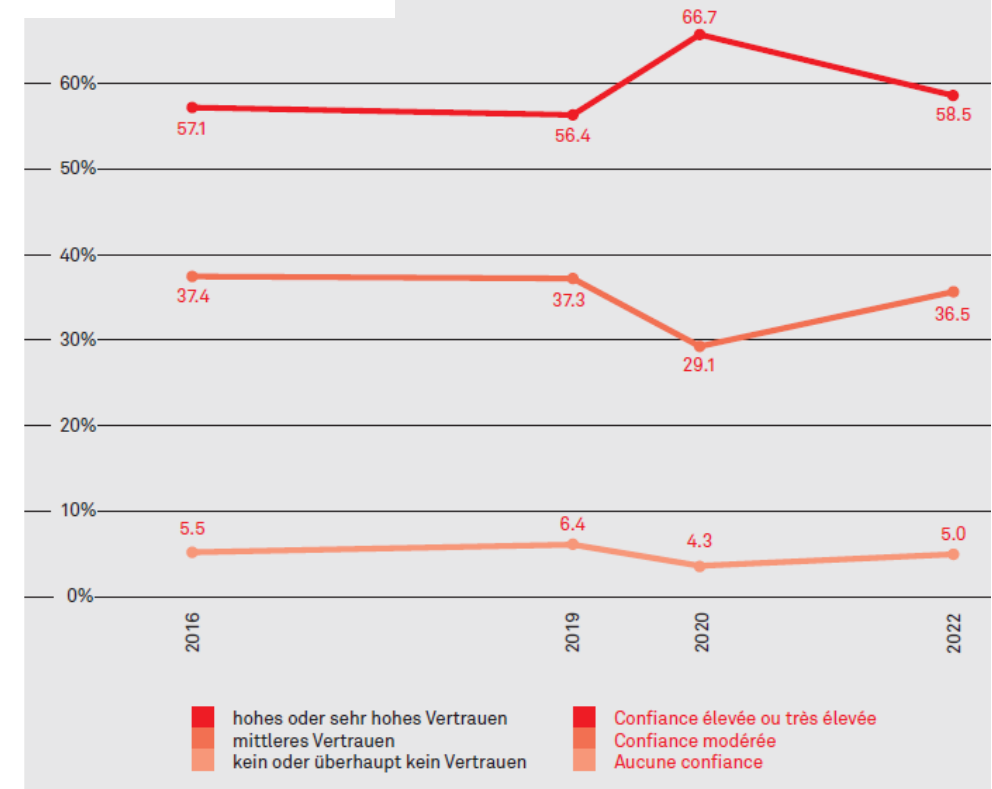
Scientists in Europe are becoming household names, fulfilling societies' emotional and practical need for the truth.



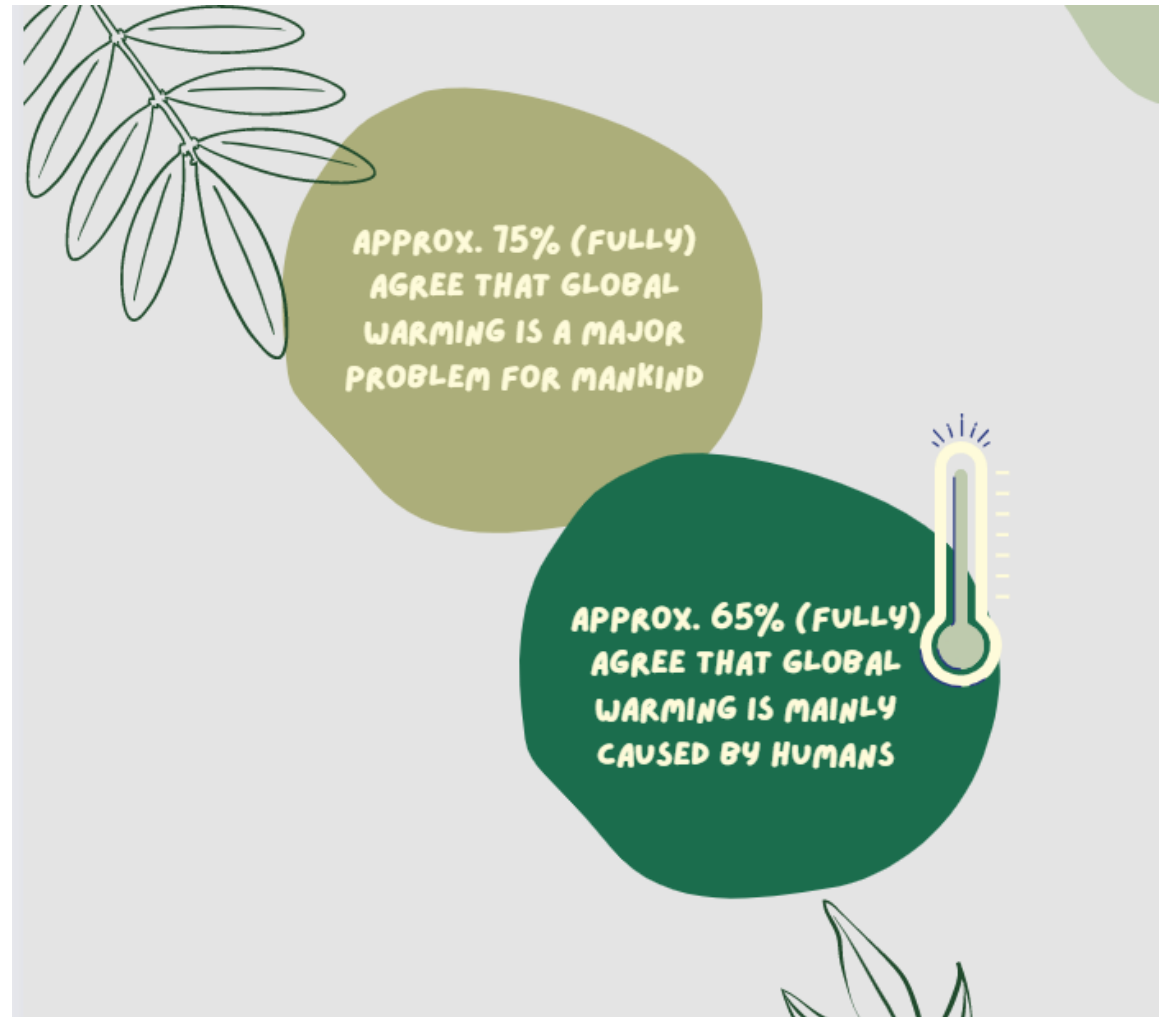
Dr. Christian Drosten, chief virologist at the Charité university research hospital in Berlin, researching the coronavirus in late January. Christophe Gateau/Picture Alliance, via Getty Images

WIE HOCH IST IHR VERTRAUEN IN DIE WISSENSCHAFT?

Science Barometer
Switzerland



Problem awareness regarding global warming is high



Swiss Environmental
Panel 2021

So everything is fine, isn't it?

„I don't want you to be hopeful. I want you to panic. I want you to feel the fear every day. I want you to act. I want you to act like you would in a crisis. I want you to act like your house is on fire, because it is.“

Greta Thunberg

The Political and Selective Use of Data: Cherry-Picking Climate Information in the White House

The crisis of politicization within and beyond science

[James N. Druckman](#) 

Climate Science Is Not Settled

We are very far from the knowledge needed to make good climate policy, writes leading sci



NEWS | 06 April 2023

Death threats, trolling and sexist abuse: climate scientists report online attacks

Survey highlights experiences of dozens of climate researchers who have endured online harassment related to their work.

So everything is fine, isn't it? No, it isn't

1. climate protection is too slow and too little
2. politicization and strategic use of scientific evidence to pursue certain political goals
3. (climate) scientists, who are publicly visible, are increasingly attacked

Climate change as „wicked“ problem



Based upon Rittel and Webber (1973)

Politics is not science and science is not politics

- politics and science follow different logics
 - politics: negotiation of solutions on the basis of different values and interests
 - science: knowledge generation on the basis of specific research gaps using scientific methods
- science has no competence to demand or reject certain policies or lifestyles
- BUT: Science can analyze the chances and/or risks of certain policy options and make the associated costs transparent &
- science can counter emotional/ideological debates with verifiable facts

Different roles scientists can play in public debates

1. pure scientist
2. science arbiter
3. honest broker
4. issue advocate

Challenge: To define one's own role as a scientist

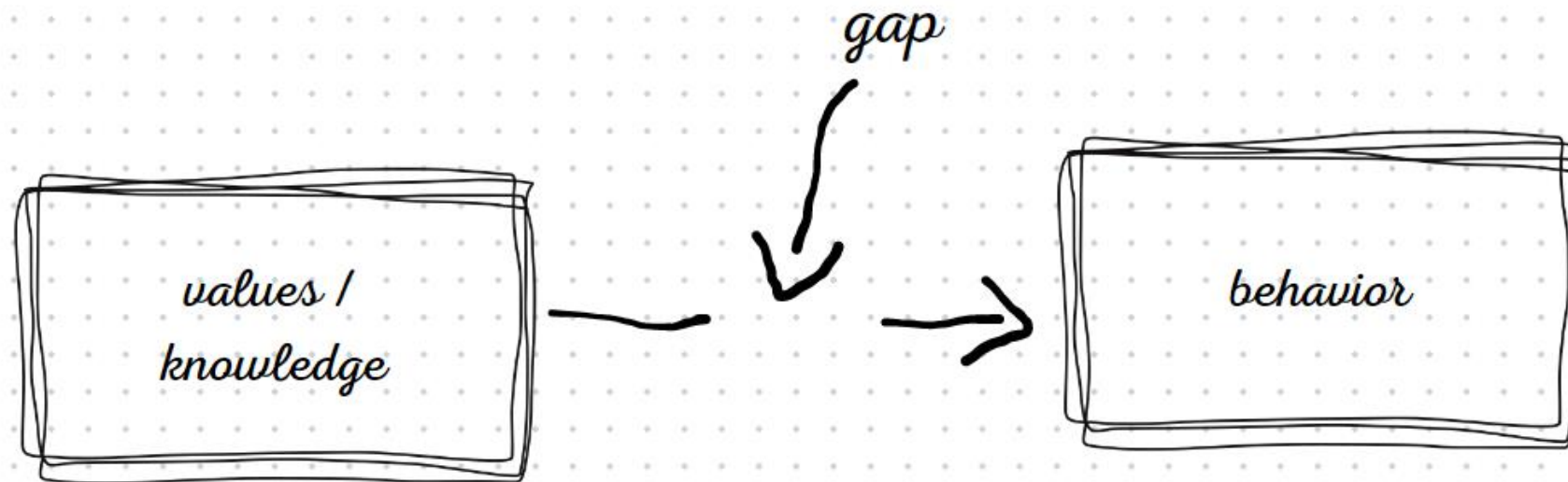
Pielke, R. A. jr. (2007). The honest broker. Making sense of science in policy and politics. Cambridge: Cambridge University Press.

Schrögel, P. & Humm, C. (2021). Science communication, advising, and advocacy in public debates. In A. Leßmöllmann, M. Dascal & T. Gloning (Hrsg.), Handbook of Science Communication. Berlin: De Gruyter Mouton.

- politicization of science can be defined as the process of using scientific knowledge, scientific evidence, or scientific experts to pursue certain political goals, e.g.
 - to better understand a particular scientific topic
 - to make evidence-based political decisions
 - to legitimize one's political goals with the help of scientific evidence
 - to attack one's political opponents
 - or simply to prevent political regulations by pointing out that scientific uncertainty is still too high
- strategic (communicative) action to pursue certain political goals

Challenge: To participate in public debates without being drawn into value-driven political conflicts

Knowledge-behaviour gap



What could be possible solutions?

- Take greater account of the political logic
→ Separation between scientific statements and political value judgments in science communication
- Increased interdisciplinary work and more integration of disciplines other than natural sciences
- Aggregation of scientific knowledge, not only in the field of natural sciences
→ In synthesizing the scientific evidence and evaluating policies, the use of Big Data methods and machine learning becomes indispensable
- Increased science communication about possible solutions and their implementation – increased communication about “best cases”

- Reflect on one's own role and make it transparent
- Expect and prepare for attacks and assaults

Engage - how to deal with hate speech?

Hate speech occurs in all societies, whether offline or online. It can sometimes be hard to assess when a comment is meant as hate speech – especially when expressed in the virtual world. It can also feel overwhelming to try to deal with obviously hateful content.

However, there are many ways you can take a stand, even if you are not personally the victim of hate speech. And you can make a difference. The following tips may be helpful.

- Contemporary complex risk societies require science to raise its voice
- Orchestrated efforts to communicate aggregated evidence as promising strategy to solve societal challenges and for policy advice
- Communicating scientists must be ready for and resilient against public controversy

“Success of scientific policy advice often occurs only on a small scale or in the long term; maximum scientific solutions never become immediate political practice. This is not a failure of scientific policy advice, but the result of integration processes between politics and science.” (Böcher, 2022, own translation)

Thank you very much for your attention!

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