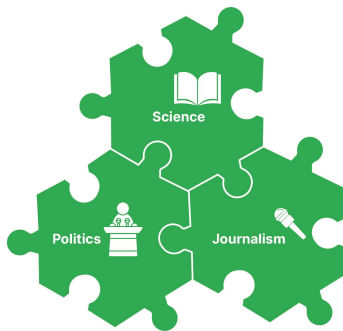


20 theses for a science-friendly culture



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Science is being put under pressure: Its growing influence as a system with which to understand and explain the world is simultaneously causing desires and pushback. Some want for science to be a part of politics as much as possible and thereby blur the line between scientific work and political action. Others insist that science should avoid any public profile and keep its distance from anything that could make it seem political. We reject both positions. **Science should not do politics, but neither can it avoid being political.**

Discours instead of entrenched positions

The struggle over the purpose of science leads to entrenched positions among which those aiming for a constructive discourse vanish from sight. This not only affects the humanities and the social sciences, but also the natural sciences and engineering. **In order to preserve trust, a responsible dialogue on science beyond the extremes is required.**

With the current polarisation in how science is being dealt with in politics and the public sphere, science is at risk of being crushed under the weight of contradictory expectations. This is connected to the **ideological, economic, and technological distortions in politics and the media**, a development that bedevils any sober debate and encourages outrage instead.

The debate on science needs to move away from unproductive scandalisation to make room for an open and constructive discussion about the role of science in politics and the public sphere. This calls for a reflection on what has made science a fundamental pillar of society. Science is not a problem-solving machine, but a way of understanding the world: inquisitive and multi-voiced, systematic and self-critical.

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**JOIN THE
DEBATE**



Invitation for discussion and co-creation

On the occasion of the 10th anniversary of «**Reatch! Research. Think. Change.**», we want to encourage a debate on the role that science plays, could play, and should play in our society. A debate that is being held on various platforms, from diverse perspectives and through different channels. The theses presented in the following are intended as a starting, but not the concluding point for this debate.

We thereby want to pave the way for a science-friendly culture that allows for a constructive as well as critical discussion on science. This requires that we for one return to proven principles of scientific rigour and, for another, develop new forms for politics and the media to engage with science. We would like to **collaboratively develop what these new forms of engagement could look like and discuss them openly.** Various public events involving science, politics and the media serve as an introductory point.

If you would like to participate in the discussion or stay informed on the next steps, [register here](#).

Signatories (alphabetically)

The signatories wish for an open and constructive discussion on the relationship between science, politics, and journalism. They bring different perspectives to the table that are not necessarily congruent with the theses presented.

- Dr. Martina von Arx, Vorstand Reatch & Soziologin (Universität Genf)
- Dr. Guido Baldi, Vorstand Reatch & Ökonom
- Dr. Mirko Bischofberger, Molekularbiologe & Wissenschaftskommunikator
- Gian-Andri Casutt, Leiter Kommunikation ETH-Rat & Präsident von EUPRIO
- Michaela Egli, Vize-Präsidentin Reatch & Wissenschaftsphilosophin
- Servan Grüninger, Präsident Reatch, Biostatistiker (UZH), Mitglied Junge Akademie Schweiz
- Janosch Jörg, Vorstand Reatch, Physiklaborant ETHZ
- Dr. Benedikt Knüsel, Klimawissenschaftler & Leiter Science-Policy-Interface ETHZ
- Prof. Dr. Antonio Loprieno, Universität Basel & Präsident von ALLEA
- Dea Müller, Immunologin (ETHZ & UZH) & Vorstand Reatch
- Dr. Lucas Müller, Historiker (Universität Genf) & Mitglied Junge Akademie Schweiz
- Pascal Oberholzer, GS Reatch & Materialwissenschaftler
- Fabienne Odermatt, GS Reatch, Sozialunternehmerin, Vorstand Dachverband für Partizipation
- Prof. Dr. Marcel Salathé, Digitaler Epidemiologe und Ko-Direktor des EPFL AI Centers
- Prof. Dr. Michael Schaeppman, Geograf & Rektor UZH
- Dominik Scherrer, Chemiker, Patentanwaltskandidat & Vorstand Reatch
- Prof. Dr. Jörg Scheller, Professor für Kunstgeschichte ZhdK & Gastprofessor Kunstuniversität Poznań
- Benedikt Schmidt, Vorstand Reatch & Master-Student Science & Public Policy (University College London)
- Hannah Schoch, GS Reatch, Präsidentin Actionuni, Vorstand Eurodoc, Amerikanistin
- Dr. Hanna Wick, Physikerin, Lehrerin & Wissenschaftsjournalistin
- Prof. Dr. Senja Post, Professorin für Wissenschaftskommunikation am Karlsruher Institut für Technologie

Science and politics cannot be separated, however, they must be differentiated.

Scientific findings and methods are an essential and indispensable basis for effective political action, but cannot replace the latter. Accordingly, science cannot lead the way when it comes to political decisions, it can, however, enrich the political process in three ways:

- **Science produces reliable knowledge:** The production of reliable knowledge is science's core mission and the main criterion for its societal value. The promise of science is not to solve every problem, but to offer ideas, insights, and methods available to all of society.
- **Science can inform politics:** Scientific methods and findings help create practical models for complex phenomena, which in turn can outline potential options for action. Furthermore, science can provide quantitative and qualitative analyses of the effects of a given political decision in order to check whether the set goals are being met and to track any possible consequences.
- **Science can offer a critique of politics:** A scientific perspective on the world can help to question supposed political certainties and to enter

into debates that move beyond political constraints, thereby allowing for the development of new perspectives on familiar problems. Scientific critique can help describe social grievances and thus make them visible.

However, in the political process, these three functions of science are increasingly becoming blurred. For scientific findings to be included in the political process in a beneficial way and without jeopardising science's core task, namely the creation of knowledge, two insights are key: **First, science is political** because it influences political actions and is influenced by political decisions. **Second, science must be differentiated from politics.** Ensuring a clear distinction between scientific work and political action is crucial for science to not lose itself

1. The goal of science is to create knowledge with which the world can be understood and explained.
2. The goal of politics is to create a political will that allows for shaping the world.
3. Doing politics means taking responsibility for shaping the world.
4. Shaping the world requires knowledge. This makes science political.
5. Shaping the world requires more than knowledge. This saves science from the necessity to do politics.
6. Political questions need political answers. Scientific advice begins when the political questions are answered. Scientific critique ends where the political questions begin.
7. Whoever provides scientific answers to political questions subordinates science to the rules of politics. In doing so, the tasks of politics are imposed on science.
8. Science engaged in politics follows the rules of politics. It ceases to be science.
9. In relation to politics, science can only give up on itself or cease to do politics.
10. Science achieves its aims best when it is conscious of being political without engaging in politics itself.

Science needs competent and critical journalism

For many years now, the **importance of science communication** has been emphasised. Thus, many scientific institutions and individuals have been attempting to disseminate their findings among the public. As a result, science is increasingly becoming part of **debates that are not conducted according to scientific standards, but according to media standards.**

At the same time, the **changes in the media industry** continue unabated. The **rise of new forms of media and the accompanying economic upheavals** are calling into question the future of traditional forms of journalism. With the obvious impact of artificial intelligence as a tool for creating, processing, and disseminating information, these changes have reached a new dimension.

The erosion of competent journalism makes it easier for actors with particular political or economic interests to **instrumentalise scientific findings for their own purposes.** This can be counteracted by science communication only to a limited extent as science communication means communica-

ting from a scientific perspective, thus lacking the contextualisation of scientific findings from a social perspective.

An informed public sphere depends on a **journalism that ensures not only a competent communication of scientific information, but also a critical and independent reporting on scientific statements and actors.** Being able to rely on competent mediators and critical observers of its work equally benefits **science as a system.**

For the reasons outlined above, **returning to the principles that underpin trust both in journalism and in science is necessary** without closing our eyes to the ideological, economic, and technological distortions that keep characterising the debate on the role of science in politics.

1. The public debate on science is not the same as the scientific debate.
2. One of the tasks of journalism is to represent different points of view regarding the relation to the world.
3. The scientific approach to the world opens up such points of view. It opens up neither a single nor the only possible one. A reasonable relation to the world can be established without adopting a scientific point of view.
4. In order to describe a relation to the world, one requires proximity to allow understanding and distance to enable criticism.
5. The art of journalism is to remain critical while being close and to create understanding from a distance.
6. Anyone who communicates science without leaving room for criticism is romanticising it.
7. Without understanding how science creates knowledge, the public does not receive a comprehensible image of science.
8. Anyone who communicates science without leaving room for understanding distorts it.
9. Science that wants to be understood must defend itself against public distortions – even if these are seemingly favourable portrayals.
10. Good journalism furthers an understanding of science without romanticising it. Good journalism criticises science without distorting it.