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Science in Europe between war and peace

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This article examines the paradoxical relationship between science and society in contemporary Europe, where public trust in science has reached unprecedented levels even as misinformation and political polarization increasingly challenge evidence-based policymaking. Against the backdrop of the COVID-19 pandemic, climate change, and artificial intelligence, the author explores what he terms the "technocratic dilemma" — the tension between expert knowledge and democratic decision-making. The piece critically analyzes recent European policy shifts, particularly concerning Horizon Europe, the world's largest civilian research program, which faces pressure to move away from its founding principles of open international collaboration toward a more closed, defense-oriented approach driven by geopolitical tensions. The author argues that while increased investment in research is welcome, Europe risks undermining science's mission by prioritizing competitiveness and strategic autonomy over international cooperation and the integral development of individuals and communities.

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In Science We Trust?

We live in a complex world. From the COVID-19 pandemic to climate change, from the green transition to the pervasive use of artificial intelligence, our society is constantly challenged with increasingly complex problems that require an ever-higher level of technical and scientific knowledge and skills to address. Experts call them “wicked problems”¹ because of their extreme complexity. They are generally highly interconnected issues that are constantly evolving and have socio-cultural implications that make them difficult to resolve.

In this context, science plays an increasingly central role and society's attitude towards it shows mixed signals. In the midst of the pandemic, a study by the Wellcome Trust highlighted how global public confidence in science appears to have reached record levels. According to the renowned British charity, the citizens surveyed trust scientists (43%) more than their national governments (26%) or journalists (19%).²

In the Eurozone, Eurobarometer³, which conducts regular surveys to gauge public opinion on specific issues in Europe, confirms that European citizens have a high level of confidence in science and technology⁴. The European Union survey reports that as many as 9 out of 10 EU citizens (86%) consider the overall influence of science and technology to be very positive. But perhaps even more interesting is that, according to the same survey, two out of three Europeans agree that scientists should be more actively involved in political debate “to ensure that decision-making processes also take scientific evidence into account”.

Never before has science been perceived so central to our lives and considered so necessary. We could say that we have fully entered an era in which “in science we trust”, to paraphrase the famous motto of the United States of America (“in God we trust”).

At the same time, in recent years, the creation of public policies based on scientific evidence seems to have increasingly suffered from the risks arising from misinformation and political polarisation. We have seen this with the aforementioned COVID-19 crisis and the war on vaccines, or in the way nation states and the international community are responding to the environmental crisis we are experiencing. The

¹ Johnston, Jade, and Robyn Gulliver. Public interest communication. University of Queensland Library, 2022.

² Wellcome Global Monitor, *How COVID-19 affected people's life and their views on science*, Wellcome Trust, London, 2020

³ <https://www.europarl.europa.eu/at-your-service/it/be-heard/eurobarometer>

⁴ <https://europa.eu/eurobarometer/surveys/detail/223nation-states7>

World Science Forum warns us: “We note with regret that mistrust and outright rejection of science have been incorporated into some political and social agendas”.⁵

Capturing the relationship between science and society in the West therefore presents us with a complex, if not paradoxical, situation. We find ourselves in what experts call the *technocratic dilemma*⁶. On the one hand, we have the scientific evidence provided by experts; on the other, we need to make public policy decisions by navigating a vast amount of information that often struggles to fit within our value system as individuals and as a society.

The central question is by no means trivial. When faced with complex issues with important implications for our society and personal freedoms, when faced with “wicked problems”, who should be responsible for decision-making? Perhaps technicians and specialists, or should it be the government, deciding based on democratic choices? Or perhaps a combination of the two?

This is not simply a matter of choosing between science and politics, but rather an invitation to reflect more deeply on the profound connection between the two and the far-reaching social implications that arise from it.

The armament of science

On 10 September 2025, European Commission President Ursula von der Leyen, during her 2025 State of the European Union⁷ address to the European Parliament, stated that “Europe is engaged in a fight”. Although the EU is a ‘peace project,’ the President continued, the Union must fight for its place in the world and ‘this must be the moment of Europe's independence.’

Strong words that have perhaps not been heard in Europe since the Second World War. Against the backdrop of growing global geopolitical instability, von der Leyen's words strongly indicate a desire to define a more assertive Europe in pursuing its strategic interests.

A Europe at war, then. But with what weapons? And with whom?

The European Commission President's plan is essentially one of massive investment in research and innovation for a Europe that is economically and energetically independent, but also militarily stronger. Her State of the Union address echoes another recent speech within the EU, Mario Draghi's report on the future of European competitiveness⁸. In September 2024, the former Italian Prime Minister examined the challenges facing industry and businesses in the European single market, recommending

⁵ <https://worldscienceforum.org/contents/draft-declaration-of-the-11th-world-science-forum-110170>

⁶ Stern, A. ‘The Technocrat's Dilemma’, *The New Atlantis*, No. 69, Summer 2022, pp. 56-60, TheNewAtlantis.com, April 25, 2022. Retrieved from: <https://www.thenewatlantis.com/publications/the-technocrats-dilemma>

⁷ https://ec.europa.eu/commission/presscorner/detail/it/speech_25_2053

⁸ https://commission.europa.eu/topics/eu-competitiveness/draghi-report_en?etransolive=1&prefLang=it&etrans=it#paragraph_47059

a new economic strategy focused on strengthening European growth and competitiveness. In essence, Draghi calls on Europe to reduce its technological gap with the United States and China, making the Union less vulnerable to external influences linked to strategic resource shortages.

The speeches by von Der Leyen and Draghi present us with an action plan focused entirely on technological development and innovation. A “struggle” that seems to challenge the very concept of international scientific collaboration. A race towards scientific armament, or perhaps an armament of science?

Horizon Europe

With a budget of €95 billion for funding European research and innovation from 2020 to 2027, Horizon Europe⁹ is effectively the world's largest programme supporting pure and applied research for civilian use. It is an ambitious programme, strategically aligned with the 17 Sustainable Development Goals through which the United Nations hopes to solve the main global challenges by 2030 through international cooperation, often focused on the development of new technologies¹⁰.

Open to the 27 member states of the Union and a number of associated states in its immediate geographical vicinity, such as the United Kingdom, Turkey and Israel, along with others, Horizon Europe is not only the largest research funding programme in the world, but perhaps also the largest laboratory for international collaboration between researchers from all over the planet. In recent years, Horizon Europe has seen extraordinary expansion with the accession of states that are geographically and culturally more distant from the old continent. At the time of writing, Canada, South Korea, New Zealand, Egypt and recently Japan have joined Horizon Europe, while other states such as Australia and Singapore are in negotiations with Brussels for possible future accession.

But Horizon Europe is structurally a programme open to all, with various participation mechanisms that allow any country to participate. For years, its motto has been to be *as open as possible*, precisely to involve the best minds on the planet in the implementation of top-level research programmes.

Europe promises to double the economic allocation for the next scientific programme, which will run from 2028 to 2034¹¹, bringing the budget to €175 billion, with a total investment in research and development equal to 3% of European GDP.

However, the debate that has been ongoing in recent months on the next funding cycle risks a dangerous departure from the founding values of previous research programmes based on the principle of genuine international scientific collaboration. For example, the European Commission has proposed that, starting in 2026, some of its specific programmes may also fund defence or dual-use (civil and

⁹ https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en

¹⁰ UN, 2015, Transforming our world: The 2030 agenda for sustainable development, United Nations, Department of Economic and Social Affairs, viewed 22 March 2022, from <https://sdgs.un.org/goals>.

¹¹ https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/horizon-europe-2028-2034-twice-bigger-simpler-faster-and-more-impactful-2025-07-16_en

military) technologies, putting an end to what has been a legal obligation for 40 years of European funding, namely, to focus research and innovation funds exclusively on the civil sphere.

International scientific cooperation in a time of crisis

In fact, recent geopolitical upheavals in Ukraine and the Middle East, growing rivalry with China and the unpredictability of the US administration with its tariff war and apparent distancing from European issues have led to increasingly restrictive international cooperation, so that the first part of the Horizon Europe slogan – *as open as possible* – has gradually been followed by *as closed as necessary*.

Yet, precisely in this context of great geopolitical tensions, scientific collaboration still represents a very important bridge for dialogue and cooperation.

Science diplomacy is emerging as an area of growing interest in both the scientific and diplomatic communities.¹² The ratification of the 1987 Montreal Protocol to combat emissions of chlorofluorocarbons (CFCs) and other ozone-depleting substances, as well as the 2015 Paris Agreement at COP21 to combat climate change, are perhaps the most visible achievements of scientific diplomacy in recent decades. However, there are now numerous initiatives and institutions working to promote science for peace and integral development. From the Intergovernmental Panel on Climate Change (IPCC), the leading international body for scientific assessment of climate change, to mega-projects of scientific collaboration such as the International Space Station (ISS), CERN in Geneva and the SESAME synchrotron in Jordan, to the many research groups scattered throughout our country, where there is now an atmosphere of great international cooperation.

Scientific diplomacy, practised by every scientist in their professional work, as well as by diplomats, is a powerful tool for “keeping the international scientific system open (...) [and for] building and maintaining bridges even when formal relations between nations are tense”¹³, says Ekaterina Zaharieva, European Commissioner for Start-Ups, Research and Innovation.

The mission of science

Over the last century, science has become a powerful cultural authority in our global village. We turn to it to make our lives more comfortable, to travel, to eat and to heat our homes. At the same time, we also look to it to point out the risks and opportunities in an increasingly complex world full of wicked problems.

However, far from being a purely intellectual exercise that develops in a vacuum, the scientific process is deeply intertwined with the human factor and, as we have seen, also with geopolitics and economics.

¹² S4D4C. 2019. The Madrid Declaration on Science Diplomacy. Madrid: S4D4C. Available at: <https://www.s4d4c.eu/s4d4c-1st-global-meeting/the-madrid-declaration-on-science-diplomacy/>

¹³ European Commission: Directorate-General for Research and Innovation, Gjedssø Bertelsen, R., Bochereau, L., Chelioti, E., Dávid, Á., Gailiūtė-Janušonė, D., Hartl, M., Liberatore, A., Mauduit, J.-C., Müller, J. M., & Van Langenhove, L. (2025). *A European framework for science diplomacy : recommendations of the EU Science Diplomacy Working Groups*, (R..Gjedssø Bertelsen, editor, L..Bochereau, editor, E..Chelioti, editor, Á..Dávid, editor, D..Gailiūtė-Janušonė, editor, M..Hartl, editor, A..Liberatore, editor, J.-C..Mauduit, editor, J. M..Müller, editor, L..Van Langenhove, edito) Publications Office of the European Union.

Looking at the role of science in our society therefore invites us to reflect on its mission but also on its limitations.

In particular, with regard to the debate on the European scientific programme Horizon Europe, while the scientific community rightly welcomes the increase in the research budget, it is important to remember that 'a narrative focused exclusively on growth, competitiveness and employability risks excluding an important aspect of education and training: the integral development of the person,'¹⁴ as recently pointed out by the Commission of the Bishops' Conferences of the European Community (COMECE).

Designing a prosperous future for our planet and our communities therefore means investing in all aspects of the individual, rather than focusing solely on technical and strategic skills. For science to remain an effective tool in accomplishing this mission, it is important to ensure that it remains open to other forms of knowledge, in a mature dialogue with politics and with the values of individuals and the community.

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¹⁴ https://www.comece.eu/wp-content/uploads/sites/2/2025/09/Contribution-16092025-Dare-and-care-to-invest-in-the-future-contribution-on-MFF.pdf?utm_source=mailpoet&utm_medium=email&utm_campaign=newsletter-comece-30-january-2022_2