STOA
Newsletter

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PANEL FOR THE FUTURE OF SCIENCE AND TECHNOLOGY (STOA)

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STOA-OECD partnership on video

News | Launch of C4AI and partnership with the OECD

To further intensify its activities in the field of artificial intelligence (AI), STOA launched last year its Centre for AI (C4AI) The C4AI was established by decision of the STOA Panel on 19 December 2019, and was announced at the high-level STOA workshop 'The Future of Artificial Intelligence for Europe', which took place on 29 January 2020 at the European Parliament in Brussels.

Within the context of STOA and based on decisions of the STOA Panel, C4AI produces studies, organises public events and acts as a platform for dialogue and information exchange on AI-relevant topics within the Parliament and beyond. In particular, it provides expertise on the possibilities and limitations of AI and its implications from an ethical, legal, economic and societal perspective. Through these activities, C4AI aims to contribute to the quality and coherence of discussion and policy-making as the EU seeks to coordinate its efforts and influence global AI standard-setting.

STOA and its C4AI are eager to cooperate and exchange with stakeholders and partners within the Parliament, the global parliamentary community and beyond. To this end, the new STOA International Advisory Board, which is being established for the rest of this parliamentary term (2020-2024) to provide STOA with strategic advice about the future direction of its work on science and technology in general, will focus on AI and the activities of C4AI.

Furthermore, as agreed at the Panel meeting of 11 September 2020, STOA and the European Parliamentary Research Service (EPRS) are entering into a partnership on AI with the OECD Global Parliamentary Network (GPN). The partnership was formally launched on 2 December 2020 during a meeting of the GPN, organised in partnership with STOA. The event opened with a video presentation to mark the launch of the STOA-OECD partnership, followed by remarks from STOA Chair Eva Kaili (S&D, Greece) and Anthony Gooch, OECD Director for Public Affairs & Communications and Chair of the GRN. Ms Kaili highlighted this important milestone for AI governance, given that two of the most historic and prestigious institutions in the world were joining forces to generate an ethical framework for trustworthy and human-centric AI.

After sessions dedicated to AI trends and how COVID-19 is shaping decision-making on AI, GPN MPs shared their experiences from initiatives taken by their parliaments. Two further MEPs contributed to this discussion: Maria-Manuel Leitão-Marques (S&D, Portugal, STOA Panel) and Ibán García del Blanco (S&D, Spain, AIDA Committee), who commented on the framework of ethical aspects of AI, robotics and related technologies adopted by the European Parliament in 2020 and for which he was rapporteur. The need to increase inter-parliamentary collaboration was highlighted and Ms Kaili, who moderated this session, stressed the need to 'get things right' globally in this critical time of the pandemic and take full advantage of technology to mitigate its effect on society.

Event | Athens Roundtable on AI and the Rule of Law

On 16-17 November 2020, STOA co-hosted with UNESCO, ElonTech, H5, The Future Society and IEEE the 2020 edition of The Athens Roundtable on Artificial Intelligence and the Rule of Law, which took place virtually from New York City. The event featured prominent speakers from international regulatory and legislative bodies, industry, academia and civil society.

There was a consensus that, in order to protect our democracies into the 21st century, it is imperative to spend much more energy on the responsible adoption of AI in the legislative and the judiciary procedures, building AI capacity, competence, and common standards. This is critical to ensure that societies capture the upsides of AI, while minimising its downsides and risks. During the discussion, the use of algorithmic systems to support the decision-making process in legal questions directly affecting a human destiny emerged as a key issue: black-box algorithms, possibly developed on the basis of biased data and with no clear chain of accountability, should be considered as unacceptable.

In her opening and closing remarks, STOA Chair Eva Kaili highlighted that Europe should lead these efforts and pave the way for the establishment of a human-centric framework for AI. The panellists agreed that enhanced algorithmic scrutiny is necessary, combined with a thorough assessment of the quality of computer-based decision-supporting systems regarding their level of transparency, provision of a meaningful scheme of accountability and assurance of bias minimisation.

@EvaKaili
#AIAthens2020

"A privacy-by-design and ethics-by-design approach should be followed throughout the entire lifecycle of AI systems, from their initial development to the actual implementation."

Event | STOA Annual Lecture: Digital human rights and the future of democracy

'The European Union represents humanity's best hope to prevent lawless, unprecedented computational concentrations of knowledge and power from becoming as irreversible and poisonous to our societies as the toxic concentrations of carbon dioxide in our atmosphere have become to our Earth'. That was one the main statement made by Shoshana Zuboff, Charles Edward Wilson Professor Emerita of Business Administration at Harvard Business School and award-winning author of 'The Age of Surveillance Capitalism', at the STOA Annual Lecture 2020 that took place (virtually) on 9 December 2020. This year's Annual Lecture, focused on the disruptive effects of the digital revolution upon democracy and examined the challenges associated with the growing datafication and platformisation of our societies, and the need to reclaim data sovereignty in the era of artificial intelligence.

In her opening remarks, STOA Chair Eva Kaili noted that digital processes and technologies are no longer simply monitoring our behaviour, but, with the use of predictive analytics, they are also influencing it in a pervasive way. Speaking after the opening remarks, the European Commission Vice-President for Promoting the European Way of Life, Margaritis Schinas, emphasised the need for charting a course for a digital transformation that is genuinely European — not as a matter of competitiveness, but as an existential question.

In her outstanding lecture, Professor Zuboff noted that we are paralysed in the iron cage of an epistemic dominance that is based on unequal knowledge and produces unequal power, and that the pandemic has led to a growth in surveillance revenues and to epistemic chaos. She suggested that Europe should take the lead in adopting strong laws that focus on upstream data extraction practices and on the formal recognition of epistemic rights. Her keynote speech was followed by a panel discussion on various aspects of key new technologies, with the participation of Fredrik Heintz, Associate Professor of Computer Science at Linköping University, Sweden, and Karen Yeung, Professor of Law, Ethics and Informatics, at Birmingham Law School, UK.

Professor Shoshana Zuboff and Vice-President of the European Commission Margaritis Schinas

News | ESMH publications: COVID-19 crisis and beyond

While the second wave of the pandemic is hitting Europe, the European Science-Media Hub (ESMH) continues to look for sound science evidence in response to the crisis and keeps up with its series of interviews with leading European virologists, immunologists and epidemiologists. In parallel, the ESMH is publishing several articles to shed light on different aspects of the pandemic, such as the role of human behaviour in spreading the virus and the importance of tracking clusters to control the contagion. Two new series of publications will focus on current treatments to cure Covid-19 and on the most promising vaccines. The spread of false information and misinformation around corona is a worrying challenge, which undermines the efforts to control the pandemic. This has motivated the ESMH to start a project on the 'infodemic', putting together a list of relevant initiatives tackling the false information and regularly publishing interviews with experts on dis- and misinformation.

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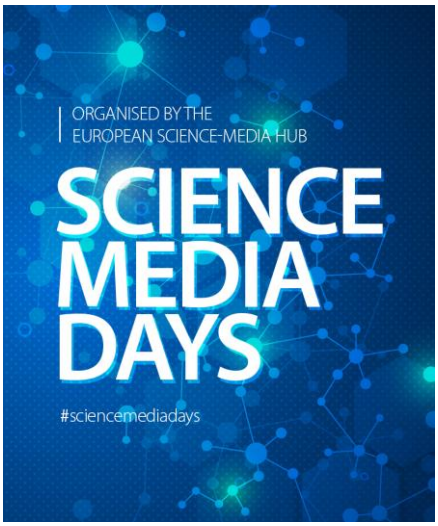
With the pandemic came social distancing and digital technologies invaded our life more intensively than ever before. How does Europe experience the 'on-life'? The Digital Humanities series introduces different issues and explains the consequences of the sudden digitalisation in various areas: digital education, teleworking, digital health, digital wellbeing, digital entertainment and more.

Event | Is misinformation more contagious than the virus?

The virtual event, organised by the ESMH in cooperation with the EP's Liaison Office (EPLO) in Berlin on 28 September 2020 brought together more than 50 journalists, debating with MEPs and media researchers on the challenges of communicating science evidence in the time of the pandemic. The event is part of the 'science-media days', planned by the ESMH for science journalists and media representatives from different European countries.

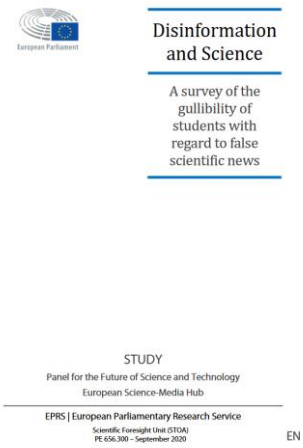


STOA First Vice-Chair, Christian Ehler (EPP, Germany) and Panel member Tiemo Wölken (S&D, Germany) participated in the event, alongside Rasmus Kleis Nielsen, Director of the Reuters Institute for the Study of Journalism, Christina Berndt, author and science editor at Sueddeutsche Zeitung, and Luca Nicotra, data analyst and activist for the 'Avaaz' civic platform.

Some of the key messages of the event: everyone is looking for news during the COVID-19 crisis and traditional media play an important role in providing people with reliable health information during the pandemic and helping them to navigate through the effects of the virus. However, misinformation and false information have also increased during the crisis. This particularly affects vulnerable sections of society that classic media reporting might not reach – and social media platforms are seen as the main source of misinformation.

Study | Disinformation and science

In times of health emergency, it is essential to explore how science information circulates and how people get their news and knowledge about science and new technology. The ESMH supported a survey examining the spread of disinformation among undergraduate university students in central Europe and northern Italy in order to explore the public understanding of scientific topics and address the damaging impact of disinformation and junk science. The published report discusses the disinformation phenomenon, its causes related to social trust, and types of media consumption among students in Austria, Croatia, Czechia, Hungary, northern Italy and Slovakia.



The report was presented at the EuroScience Open Forum (ESOF2020), which is a biennial, pan-European conference dedicated to scientific research and science policy. ESMH activities during the corona crisis were also presented at ESOF2020, in a session devoted to science communication in times of crisis.

Study | Workplace monitoring in the era of AI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Workers' interests should always be at the forefront of company approaches to privacy and data protection and worker representatives should always be consulted when a new technology is considered for workplace operations and analytics. This is a major conclusion of this study, which provides a timely, in-depth overview of social, political and economic urgencies in identifying the 'new surveillance workplace'. It was presented to the STOA Panel on 11 September 2020, with Lina Gálvez Muñoz (S&D, Spain) as Lead Panel Member.

The study identifies all major tensions between the traditional data protection principles — purpose limitation, data minimisation, special treatment of 'sensitive data', limitations on automated decisions — and the full deployment of the power of AI and big data. The author makes several interesting findings, including the rapid increase of employees' stress and anxiety, as well as the augmented accuracy of tracking and monitoring technologies, but also the marginal role of trade unions in the frame of the relevant technological and policy debates.

The study proposes a wide range of concrete policy options about how to ensure union/worker involvement at all stages, how to introduce and enforce co-determination into labour law in all EU Member States, how to require businesses to develop certification schemes and codes of conduct for employee-centric data processing, and how to prioritise collective governance. It emphasises the need to guarantee worker representatives' involvement at each increment of the life cycle of any technological tracking procedure and for EU Member States to firmly establish co-determination rights. The author's proposal concerning full inclusion — beyond trade unions — of employer associations in writing codes of conduct for data tracking and processing activities as partners is of practical importance.

Study | The future of crop protection in Europe


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Agriculture is changing in Europe. Chemical pesticides are giving way to insects, viruses and bacteria to keep plants protected. Typical rural scenes may soon not feature tractors and harvesters, but sensors and drones.

The EU is responding to the environmental crisis with its flagship European Green Deal. Crucial to this is the EU's commitment to transform agriculture to sustainable levels of production and consumption. Plant protection products (PPPs) are treatments that protect plants from pests, diseases and weeds. Conventional PPPs are mostly synthetic chemicals. PPPs provide food security in the EU and reduce the amount of land required for food production. However, the use of conventional PPPs is a matter of concern in society. There is thus a need for sustainable practices to partly replace chemical PPPs.

This foresight study examines the environmental, societal, health and economic impact of deploying new crop protection practices in the EU. Taking a holistic approach, the study looks at the whole supply chain and collects the views of key stakeholders. It considers the challenge of ensuring that European producers can continue to compete fairly across the globe. The study also assesses possible policy options against a business-as-usual scenario. These include restricting the use of chemical PPPs; removing legislative barriers to new breeding techniques; developing and promoting biocontrol and crop induced resistance; fostering genetically diversified cropping systems; and supporting precision agriculture. The study was presented to the STOA Panel on 11 December 2020, with Herbert Dorfmann (EPP, Italy) as Lead Panel Member.

STOA (Panel for the Future of Science and Technology), an integral part of the European Parliament's structure, is tasked with carrying out expert, independent assessments of the impact of new technologies and identifying long-term, strategic policy options useful to the Parliament's committees in their policy-making role.

PANEL FOR THE FUTURE OF SCIENCE AND TECHNOLOGY (STOA)

The STOA Panel is composed of 27 Members of the European Parliament, including the EP Vice-President responsible for STOA and 26 MEPs appointed by eleven parliamentary committees. With the input of committees and individual Members, the STOA Panel, on the recommendation of its Bureau, decides on projects and other activities in the field of science and technology. Each STOA project is overseen by one or more Panel members.

STOA Panel
The STOA Panel includes Members from the following committees:
Industry, Research and Energy (ITRE): six Members
Agriculture and Rural Development (AGRI): three Members
Employment and Social Affairs (EMPL): three Members
Environment, Public Health & Food Safety (ENVI): three Members
Internal Market and Consumer Protection (IMCO): three Members
Transport and Tourism (TRAN): three Members
Culture and Education (CULT): one Member
International Trade (INTA): one member
Legal Affairs (JURI): one Member
Civil Liberties, Justice and Home Affairs (LIBE): one Member
Regional Development (REGI): one member

STOA Bureau
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