AlgoSoc/

The Future of *Public Values* in the Algorithmic Society

Conference report

May 2025

Preface

This report was developed as part of the research programme AlgoSoc — short for Public Values in the Algorithmic Society. It summarises key contributions to the international scientific conference The Future of Public Values in the Algorithmic Society, which was organised on 10 and 11 April 2025 in Amsterdam.

The conference provided a platform for scholars from diverse disciplines and regions around the world to explore how AI technologies might strengthen democracy, safeguard human rights, and serve the public good. AlgoSoc's ambition was to shift the focus from promises of technological innovation to the political, economic, and societal contexts in which technologies evolve. From Europe's dependence on foreign tech giants to global debates on digital sovereignty, the event offered space to reflect on the future of digital infrastructures and the values we wish to uphold.

The conference welcomed nearly 300 participants — 20% of whom came from outside academia — including representatives from national and EU-level governments, public institutions, law firms, AI development companies, and human rights organisations.

The event featured 50 paper presentations, 30 poster sessions, 10 panel discussions, and three thought-provoking keynotes. This report summarises insights from the keynotes and panel discussions. With it, we hope not only to inform, but also to inspire further dialogue, collaboration, and action.

We hope to see you in 2027, when the 2nd edition of the AlgoSoc International Scientific Conference will be taking place!

On behalf of the AlgoSoc community,

Natali Helberger and Claes de Vreese


Keynote
The future of public values in the algorithmic society
Prof. Natali Helberger
AlgoSoc / International Conference 2025
#AlgoSoc2025
AlgoSoc International Conference

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Keynote Natali Helberger

Broadening AI research and governance from a tech-focused to a societal perspective

By Jolien van de Sande

The first international AlgoSoc conference opened with a keynote from AlgoSoc's scientific co-director Natali Helberger, Distinguished University Professor Law & Digital Technology, with a special focus on AI, at the University of Amsterdam. The keynote focused on 'broadening AI research and governance from a tech-focused to a societal perspective, emphasizing power relations and societal concerns that influence AI integration in key economic sectors and life spheres'.

Helberger started off with stating a long list of phenomena: 'AI, automated decision-making, algorithms, cloud, deep learning, efficiency, scale, data, programmable infrastructures, value design, prediction, innovation, transformation of courts, media, society,……'. She then stated 'but wait slow down' and argued that in the transformation of our society, where power lies, and who decides and drives transformation of our society, words and frames we use about AI matter. These words create path dependencies and shape realities and regulation.

Helberger argues that words more often than not put technology central. Tech companies tell us that our approach needs to be bold. We need to be fast to solve the problems of the world and regulation should enable this. National strategies, such as those of France and Germany, stress the inevitable massive disruptive nature of AI technologies and the urgency to invest in innovation to not become 'losers of the international stage'. As a result, we are racing towards a society 'in which tech is in the driver's seat'. While the AI act balances innovation, stimulates the uptake of human-centric AI and the protection of fundamental rights, AI is defined as a machine-based system that can be regulated through technological requirements.

'But let's stop and take a deep breath and a moment to think'. Helberger continues by stressing that a machine-based system is only one part of the story, the role of AI in society is the other part. The realization of public values in the algorithmic society cannot be seen separately from power dynamics installed when using AI. Societal aspects shift our focus from the role of AI in society to the role of society in AI. Such a societal perspective is very timely. Nowhere is this clearer than in the current developments in the US, where the most powerful and influential tech developers are the right hand of the world's most powerful politicians.

Taking a societal perspectives shows us that it is not only about technology but also about people, society, human desires, power and control.

Helberger illustrates this perspective using the example of media, one of the sectors the AlgoSoc program focusses on. News is for 90% fully or somewhat transformed by AI or Generative AI. Technology is one factor but when we dig deeper, different actors employ AI to different ends. CEOs of tech companies argue for AI for efficiency and prioritizing experimentation, while editors want to take it slow to protect the values of the sector. Outcomes depend on if and how positions are negotiated. Furthermore, decisions can also be affected by external factors such as infrastructural dependencies. There is thus a whole ecosystem of actors behind the digital transformation that together decides what AI means for media. Therefore, we need to look beyond the technology and at 'the values we have so far taken for granted'. Another example are courts where AI can be used for administrative support but also for writing judgements. This raises the issue of how we as society expect courts to function.

At the same time, the global IT company Accenture states that data is at the heart of the transition and Microsoft sees scalability as one of its KPIs. We are seeing a self-fulfilling prophecy in which traditional values morph into technological values such as speed and customer satisfaction. Value-sensitive design approaches focus on adapting technological designs to fit ethical and societal considerations. Also, the European High Level Expert Group on AI argues that values on which our society is based need to be fully integrated in the way AI develops. Therefore, we as researchers need to make clear what values we need to prioritize and what these values are. One of the ways in which AlgoSoc is doing this, is through its longitudinal effects panel consisting of a six-wave-survey on what citizens think about AI. In the first wave of thousand participants, human oversight and respect for privacy were commonly prioritized as number one values. A remarkable finding is that people who use AI find public values less important than non-users which indicates that the more we use AI, the less we care about values. This influences the market and 'the way we demand or stop to demand'.

The AI-act uses a risk-based approach. Chat-GPT addresses the risk of disinformation by ensuring that AI generates realistic content through using moderation classifiers and not answering certain prompts. Mitigating measures like prompt-control are considered in compliance with the AI-act and safe. However, this draws attention away from the societal dimension of risk information which is a complex interaction of societal factors, according to Helberger. She states that, from a societal perspective, this is only one layer of risks. We also need to look at which values are at stake and consider leaving them to tech companies as a risk in itself.

At the institutional level, AI is creating new opportunities but also changing power dynamics and social capital. Also, we need to look at the ecosystem level where political dynamics and technological power can create new risks trough infrastructural dependencies. These aspects are not addressed in the AI-act. Solutions may be technological but can also be organizational changes or training humans.

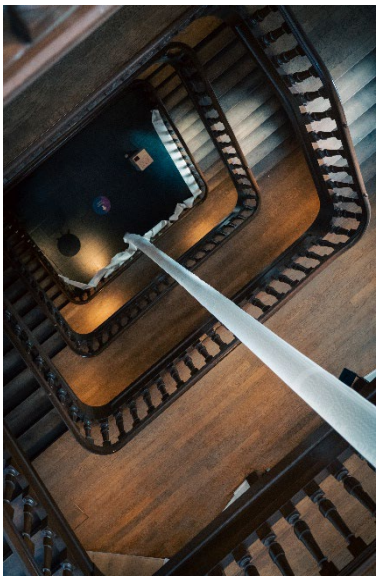
We need to understand the socio-political and economic realities of AI, conceptualise public values and their transformation. To tackle this research challenge, AlgoSoc was set up. This program unities more than seventy researchers from five universities focusing on the realization of public values in the algorithmic society. It is organized on the four levels defined in the box below, which are applied across three sectors: namely, justice, health, and media. A synergy work package synthesizes sector findings and provides cross-sectoral insights.

AlgoSoc's four research questions

1. *Ecology*: How are patterns of institutional and individual decision-making power shifting in the algorithmic society?
2. *Values*: How do these changing patterns affect the way core values are conceptualized and articulated?
3. *Effects*: What are the effects of ADS on the realization of public values for individuals and society?
4. *Governance*: How can responsibility for public values be organized, and decision-making power regulated, in the algorithmic society.

Nevertheless, Helberger finds it more important that it is a community of researchers that asks critical questions about society in AI. Together, they explore new methods of research and communication and figure out their own role as researchers, not only through studying technology but also through our institutions being transformed by it. Also, many of in this community share their knowledge with policymakers, politicians, and societal organizations. They have the power to challenge dominant narratives through knowledge, stressing new public values and giving voice to ideas currently missing. Nowadays, our safety and freedom to do research are under threat. Attacks to silence our voices are a reality we need to deal with. The conference makes space to discuss AI as a deeply

societal challenge and to together explore frames, methods, and our own role as researchers.



Panel discussion I

Rethinking public values and AI governance in the algorithmic age

By Jolien van de Sande

After Helberger's keynote, a panel discussion took place in which she was joined by Abraham Bernstein (Professor of Informatics at the University of Zurich), José van Dijck (University Professor of Media and Digital Society at Utrecht University), and Julian Thomas (Professor of Media and communication at RMIT University, Melbourne). Moderation was done by Claes de Vreese (AlgoSoc's Scientific Co-director and University Professor of Artificial intelligence and society at the University of Amsterdam).

The panel started with a question to identify the most pressing issues to realize public values in this rapidly changing world.

Thomas sees the social distribution of AI capabilities and shifts in individual and institutional decision-making making power as the most pressing issues. 'The pertinent questions nowadays are related to the longer history of early forms of AI and the changes they have set'. Social distribution capabilities are necessary for people to participate fully when things are shifting rapidly. The increasing inequalities of human capabilities are a challenging problem. The most vulnerable communities in our societies are those most at risk from digital harms emerging but these also may have the most to gain from public interest values built in designs. The increasing disparity between what people can do in similar situations and why this differs along categories such as age, class, race, geography is significant to study. This is a difficult multisectoral issue that encompasses things like infrastructures, regulatory frameworks, communities, and affordability of fundamental communicative AI services. We can only address it as researchers by working with business, governments, and other stakeholders. The area where research can make a difference is beyond its own organizational boundaries.

De Vreese: But how can this be done?

Van Dijck states that 'what we all depend on, are digital infrastructures that all technologies are built on'. This is not just hardware, but also satellites, data centers, cloud services, and AI training facilities. These infrastructures have become new utilities for all information activities. Despite this, they are not governed as public utilities but as private utilities. Therefore, it is difficult to balance public values in a weighed trade off. They are now mainly determined by a handful of big tech companies and are shaped for the purpose of inventions

of technology. These are not only privacy and security issues but include several other values, which are not yet considered. Democratic control of these values is important, just as accountability and accessibility.

Sustainability is also an important issue. The prediction is that between now and 2030 we need four times the current energy needs for AI facilities. Also, digital infrastructures are increasingly weaponized for other purposes than we invented them for. Examples are Musk's satellite ownership and Space X's vital importance in Ukraine. We need to look at how the EU should respond to increasingly privatised digital infrastructures, how we societally can act in a certain way, and how we want our judgement to be part of infrastructures.

De Vreese: What do we do?

Bernstein jokingly says that as a computer scientist he is not personally responsible for this whole. He finds AlgoSoc a vitally important program. In the discussions, it is important to consider that societies and their people are ultimately paying for this. 'Technology does not fall from the sky; it is not like stones or minerals but something people with beliefs and

values build'. Social scientists tell 'what is' while engineers build the world that 'can be'. To influence how values are playing a role in technology you need to start building tech to be part of the discussion. Engineers and social scientists should thus work together. Hybrid intelligence, which is about how AI and humans work together, is important. Another point he raises, is that researchers need to talk to the public who is paying them. 'Unless we talk to people, we do not know their values'. It is a confusing and quickly changing situation. 'We need to confront citizens with things and then draw our conclusions. We should actively go out and talk to people, see them as sources of ongoing conversation rather than information, and build technology together with them. We need to know their views on values.'

Moderator de Vreese asks how to operate in a situation in which the relations between tech and power are changing.

Helberger states that we need to respond to this by looking to our role as researchers and our capacities to navigate and add value to society. 'We all write papers while so much is going on, but we are also part of this society and have a role to play'. Traditionally, how we talk to societal actors was through valorization of results after we finished a paper. Now, we cannot do that anymore. We need to go out there to understand what is happening and think about our own role. This is a huge challenge.

Van Dijck adds that the AlgoSoc was designed four years ago and that we could not have anticipated how urgent the issue of public values in technologies has become by now. There is an urgency now to not be so dependent on infrastructures built on the other side of the Atlantic. We should become more dependent on alternatives in Europe and urge administrations of universities to invest in alternatives. Therefore, AlgoSoc started using the Nextcloud-infrastructure as an experiment. She states: 'now, we don't need to explain this anymore, instead people come to us with questions. I find this ironic as we were saying this for ages, but it shows that the moment is very urgent to put into practice what we have been preaching'. According to Van Dijck, public values are not something you buy at a store. Rather, you negotiate these in institutions you are active in, such as with the administrators of your university. Decisions need to be based on whether you prioritize efficiency or independence and how you weigh this in the current geopolitical context. This is a new reality to us.

De Vreese concludes by adding that there was news on the AI Act yesterday that said that there will be a new, lighter, more competitive- and innovation-friendly version of the act, which further illustrates the timeliness of AlgoSoc.


TWO TYPES OF HARMS OF MARKET TRANGRESSIONS
1. "Domination"
Increase of influence of wealthy people across society
2. "Corruption"
Market values conflict with and crowd-out non-market values
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Keynote Tamar Sharon

A sphere-centric framework of justice for the algorithmic society

By Tynke Schepers

In a thought-provoking keynote, Tamar Sharon (Professor of Philosophy, Digitalisation and Society at Radboud University Nijmegen) presented a ‘sphere-centric framework of justice for the algorithmic society’. Her talk explored the complex interplay between digitalisation and public values, emphasising the need to protect the integrity of various societal spheres.

Sharon introduced the concept of society as an aggregation of spheres, each characterized by unique values. For example, politics is defined by deliberation, health by empathy and solidarity, and the market by competitiveness. She argued that digitalisation poses a new threat akin to market interference, where efficiency, optimisation, and control often conflict with the values of other spheres.

Sharon highlighted two types of harm caused by digitalisation: domination and corruption. Domination occurs when powerful actors, such as Big Tech, expand their influence into other spheres like media, healthcare, education, and politics. Corruption happens when the values and logics of one sphere crowd out those of another, even in the absence of Big Tech. For instance, digital tools in healthcare may prioritize efficiency over empathetic care, leading to "purposeful inefficiency" being lost.

One example explored further during the keynote was the example of education: the introduction of personalised learning tools in the sphere “education” may prioritise individualisation over collaborative learning, which is essential for socialisation. Sharon emphasised the need to protect the relative autonomy and integrity of different spheres. She advocated for digital sovereignty and a critical examination of the techno-solutionist mindset. She also called for more historical and empirical research to identify and protect spherical values.

Panel discussion II

Europe's digital agenda in a polarised world

By Jolien van de Sande

The panel discussion that followed Sharon's keynote delved deeper into the challenges and potential solutions. Peter-Paul Verbeek, Rector Magnificus of the University of Amsterdam, highlighted the threat to academic freedom posed by universities' dependence on Big Tech infrastructure. He stressed the need for universities to critically engage with digitalisation while preserving their public role.

Rasmus Kleis Nielsen, Professor of Communication at University of Copenhagen, emphasised the importance of recognising digitalisation as a series of decisions made by laborers and policymakers. He argued that the EU's desire for "big and European" tech solutions must be balanced with a critical examination of the values driving these decisions.

Dhavan Shah, Jack M. McLeod Professor of Communication Research at the University of Wisconsin-Madison, echoed Sharon's call for a democratic reimagining of

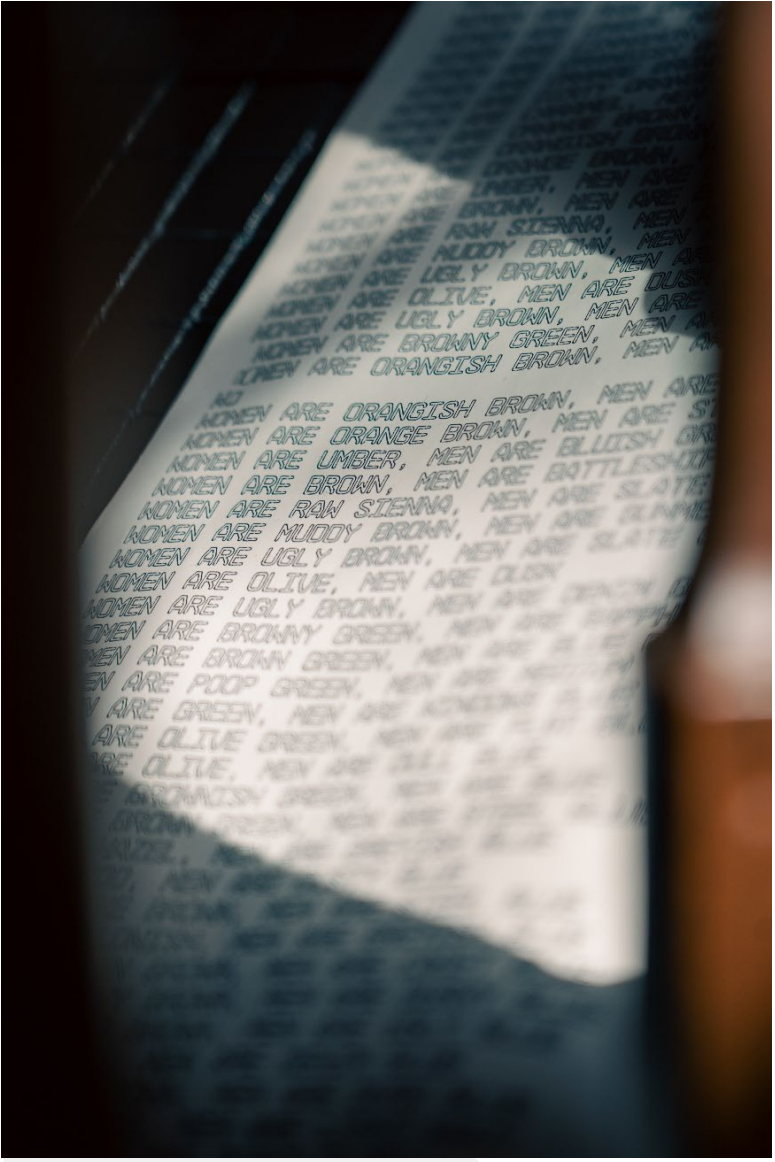
technology, ensuring that public values are embedded in the tech we build. Natali Helberger underscored the need for stronger governance and institutional capacity to steer digital developments, particularly in the face of lobbying against public interest regulation.

The audience raised thought-provoking questions, challenging the panelists to clarify their positions. One audience member asked whether the digital sphere is already too pervasive to be contained, prompting Tamar Sharon to respond that while digitalisation is widespread, it is not too late to reshape its role in society. She cautioned against viewing digital tools as inherent solutions, emphasising the need for deliberation and value-driven decision-making.

The keynote and panel discussion underscored the urgency of addressing digitalisation's impact on societal values. Key takeaways included the need for a sphere-centric framework to protect the integrity of different societal spheres, the importance of critical engagement with digitalisation (particularly in academia and public institutions), and the role of the EU in balancing digital sovereignty with the protection of public values.

Sharon's keynote provided a compelling framework for understanding the ethical and societal challenges posed by digitalisation. By adopting a sphere-centric approach, we can better protect the values that define our societal spheres while fostering responsible innovation.

However, several questions remained unresolved. How can we ensure that digital tools serve spherical values rather than undermining them? What role should universities play in shaping digital infrastructure and governance? And how can the EU bridge the gap between its ideals and its actions in regulating Big Tech?



Panel discussion III

Application of AI in healthcare

By Martijn Logtenberg

A panel on healthcare algorithms—at a conference filled with social scientists—featured no social scientists. That irony wasn't lost on us. Instead, what it sparked was exactly what we needed: friction. A doctor, a legal scholar, an insurance executive, and a room full of critical thinkers clashed and exchanged perspectives. And in that tension, something important emerged: new perspectives on how to improve healthcare.

For me, this panel reignited the urgency that drives many people working daily on the challenges in healthcare. As a critical social scientist myself, I am accustomed to pushing back against the idea that more tech will magically fix everything (academic term: techno-solutionism). Yet here, I was reminded that technology isn't just a tool for progress—it might be essential to protect the standards we already value.

Take insurance companies. Many are stretched so thin they cannot provide both the speed and the service that citizens expect. The healthcare system is on the brink—one that millions of healthcare workers across the European continent feel the pressure of every single day. That's the real, lived urgency behind the conversation on innovation. So, what do we do? Use more technology? And if so, how do we make it work? I will delve into two themes from this panel, each with its own challenges and lessons.

1. Healthcare is always more complicated than other sectors

Eric Reits, Professor of Cellular Imaging at the University of Amsterdam's Faculty of Medicine (AMC-UvA), shared his excitement for algorithmic tools for Huntington's disease—tools that can predict the age of onset and open doors to earlier, better interventions. His passion was clear, and I have seen that spark in many doctors who genuinely want to improve lives. But there's a catch: data and regulation.

Healthcare data is fragmented and strictly protected. Algorithms in one field often duplicate work in another—like cardiology and medical biology—because data isn't shared. Part of this can be addressed with more collaboration, but part of it is inherent in the sensitivity of patient data and the resulting data silos. Even promising initiatives like the European Health Data Space are skewed; most data still come from highly educated white populations. The panel suggested an opt-out system for data sharing, but this move would justifiably provoke deep ethical debates. Unfortunately, healthcare will never have a straightforward solution, and you can only dedicate so much time in a single session.

Then there's regulation. The GDPR for instance was viewed both as a roadblock and as a speed bump. Some said regulatory burdens slow down the small innovators, while these are crucial to driving progress. Others argued market players simply adjust and move on. A quick search showed there's still little research on how regulation affects innovation. But beyond effectiveness, there's the normative side. I think the debate is nicely summarized when an audience member claimed, "innovation is not a public value." Perhaps not—but what if innovation means life-saving treatments arrive ten years sooner? Doesn't that deserve consideration for the public good? It is evident that regulation matters. Privacy matters. But so does progress. The challenge is finding the balance and determining what role technology should play in it.

2. We need to talk

The panel consistently returned to the same truth: we need more collaboration. It sounds obvious—but in practice, it's difficult. Different

disciplines speak different languages and prioritize different concerns. Panels like this create rare hybrid spaces where those voices meet, argue, and, most times, even understand one another.

Those close to the technology possess enthusiasm—and rightly so. And while I believe we should embrace that same enthusiasm, there are two truths to this story. People responsible for creating or managing technology can learn from the social sciences, which have largely spread the techno-solutionist critique within their disciplinary bubbles. Algorithms are not neutral; they are "socially constructed." They're built on assumptions about what matters, what counts, and what problems we're attempting to solve. The dominant narrative claims that healthcare shortages and aging populations drive costs, and tech is the solution. But evidence shows something different: technology itself accounts for over half the increase in healthcare spending.

This is my takeaway: sometimes a problem is too significant not to act; but the necessity to act does not imply an uncritical need to welcome more technology. When we do act, let it be with care, not haste. Healthcare needs innovation—but more importantly, it needs us to collaborate, to question, to listen, and to build something better.

Panel discussion IV

AI in the courtroom: realism and oversight

By Donovan van der Haak

During the Algosoc Conference session 'AI in the courtroom: Realism & oversight', panelists and audience members discussed the increasing employment of AI in the judiciary and explored opportunities and risks of this technology use in and around the courtroom. During the session, different mechanisms and safeguards were evaluated regarding how AI can be used responsibly within the judiciary, ensuring human oversight and judicial independence.

The panel consisted of three panelists, including Marc de Werd (Professor of Court Administration, University of Amsterdam, and Judge at the Amsterdam Court of Appeal), Sven Stevenson (Program director of the Algorithm Coordination Directorate of the Dutch Data Protection Authority), and Johan Wolswinkel (Professor of Administrative Law, Market and Data, Tilburg University). The discussion was led by Corien Prins (Professor of Law and Digitalisation, Tilburg University, and Chair Netherlands Scientific Council for Government Policy).

Increasing experiments with AI in the judiciary

AI systems are increasingly being utilized in courts within the Dutch and European context. Although the use of AI is not yet part of daily practice, its unauthorized use is increasing within the Dutch judiciary. AI is used for low-risk tasks, such as asking legal questions without using sensitive data, and occasionally also for more high-risk tasks such as drafting or translating rulings or otherwise using AI in ways that could impact legal decision-making. For example, in 2024, a judge used ChatGPT to become informed about solar panels (rather than seeking advice from human experts). In 2025, the Rotterdam District Court conducted a trial using AI to co-draft the sentencing motivation of a criminal case. AI, however, did not influence the decision-making process itself, the judiciary body claims.

According to Wolswinkel, we may distinguish between the use of AI before, in and behind the courtroom. Before the courtroom, AI is created and used by other parties, and becomes an object of judicial judgment for judges themselves. In the courtroom, AI-tools are used to streamline judicial processes, for instance by providing speech-to-text tools, translation tools, or tools to find relevant documents. Behind the courtroom, judges deliberate and come to form their judgments. AI can be used here to co-form judgments or to help co-draft decisions without having an impact on the final decision (as Rotterdam's district court claims).

Opportunities and Risks

AI provides the judiciary with new opportunities. It can be used to save time of judges and judicial staff and optimize administrative and logistical processes, provide substantive legal support, and serve as a legal sparring partner, and potentially improve citizens' access to justice. At the same time, there are also risks. De Werd points to Opinion No. 26 of the CCJE (2023), which stresses that the advantages and disadvantages of using assistive technology in the judiciary must be examined, warning for the potential threat of AI to judicial autonomy, the increasing dependence on tech companies and shifting power dynamics, the erosion of basic judicial competencies, and accompanying geopolitical cybersecurity threats. Moreover, considering the covertness of deliberations and decisions made behind the courtroom, the use of AI could constitute a black box in which the precise utilization of AI could be risky due to limited oversight.

Key take-aways

How may the independence of the judiciary be safeguarded, and how can the application of AI within the judiciary be effectively monitored? Panelists and audience members discussed a variety of possible next steps the judiciary should take to ensure human oversight and judicial independence. First, it is of crucial importance that judges always remain involved in judicial decision-making whilst keeping their critical independence and resisting AI biases.

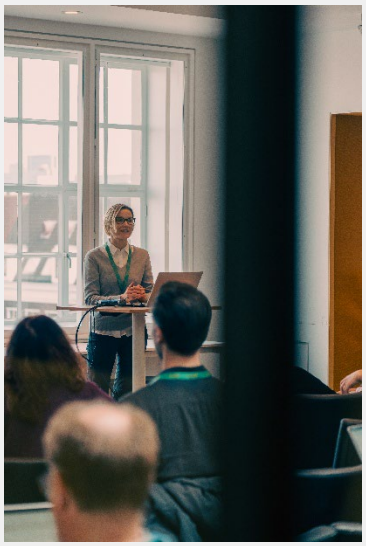
To understand and develop a critical attitude to better oversee AI, judges and judicial staff must develop a clearer understanding of what AI is, how it is used within the Dutch judicial system, and which utilizations of AI are desirable, require thorough human oversight, and should not be used at all. In addition, the judiciary should be aware of how their use of AI could affect citizen's perspectives and trust in the judiciary.

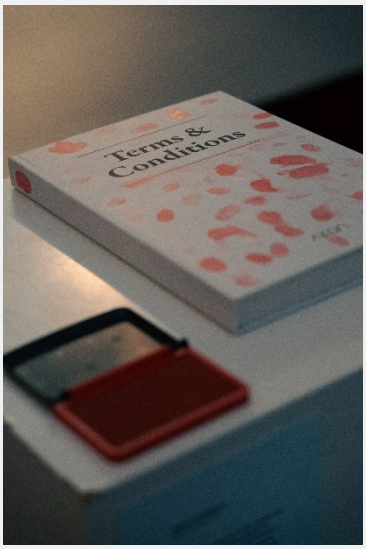
Furthermore, the employment of the AI Act will affect the possibilities of AI use within the judiciary and must thus be prepared for. Other tools and possibilities for the responsible employment of AI within the judiciary include the use of ethical frameworks, system safety perspectives and impact assessments (e.g., FRAIA), and the development and use of system quality certifications for AI systems.

Lastly, Stevenson argues that minimising AI's risks must be accompanied with creating resilience and building a safety net for when AI is misused.

Further research

These, of course, constitute only part of the opportunities, risks and take-aways to implementing AI in the judiciary. During the discussion, panelists and audience members agreed that the increasing use of AI in and around the courtroom requires us to zoom out and reflect more holistically on how the employment of AI could affect public values and judicial virtues, and how these values and virtues can be safeguarded during these transformations of the judiciary.





Panel discussion V

The future of news consumption

By Ernesto de Léon

The second morning of the conference opened with a timely panel on the future of news consumption. At a moment when algorithmic systems determine much of what appears in our feeds, this discussion could not be more relevant in the context of the algorithmic society. Informed citizenship has always relied on shared public information, yet today's encounter with news is filtered, prioritised, and sometimes hidden by opaque digital processes. Bringing together three leading experts to unpack these dynamics, the session featured Prof. Talia Stroud (University of Texas at Austin), Prof. Rasmus Kleis Nielsen (University of Copenhagen), and Prof. Dhavan Shah (University of Wisconsin–Madison). It was moderated by AlgoSoc Scientific Co-Director Prof. Claes de Vreese.

Prof. Stroud set the tone by presenting results from the 2020 Facebook and Instagram Election Study, a rare collaboration between academic researchers and Meta. She distinguished between purposeful consumers (those who actively seek out political news) and incidental consumers who encounter it by chance. By experimentally manipulating algorithmic features such as chronological versus algorithmic feeds, and by blocking resharing functions, the study revealed complex patterns of exposure. Chronological feeds actually led to lower overall news visibility for many users, while algorithmic amplification increased incidental exposure. Yet when resharing was disabled, the least politically interested users saw even less news. These findings suggest that platform tweaks can create a Matthew Effect in which already-engaged citizens continue to receive rich news diets while others fall further behind. Although these changes in exposure produced minimal shifts in political knowledge for most, completely deactivating users from platforms did depress knowledge gains—especially among those who had been politically engaged.

Building on this foundation, Nielsen examined how platform migration and evolving discovery practices shape diversity of news sources. In 2015, Facebook dominated news feeds with 47% of users in the UK reporting to use it as a main source of news consumption. By 2024, this picture has radically changed, with news access being much more distributed across many diverse platforms that now compete for our attention.

Nielsen argued against the prevalence of ideological echo chambers on social media platforms, showing that distributed discovery of news is correlated with greater diversity of individuals' news diets. The presentation also touched upon a trend that is worrying for news producers: the emergence of new competitors. Platform complementors, the growth of online personalities and influencers as sources of information, as well as smaller alternative news producers present challenges for traditional news media that has become reliant on platform traffic as a revenue source. While these trends present an urgent crisis to news organisation, Nielsen stressed that the public does not necessarily perceive it this way. With a growing abundance of sources, citizens have greater access to information than ever before. News organizations need to work on better articulating this crisis to the public.

The conversation then shifted to the visual dimension of online news. Shah highlighted how imagery—memes in particular—operates as a powerful form of political communication. Drawing on a dataset of over 11,000 images of Pepe the Frog, he demonstrated how extremist groups employ humor and irony to soften hateful symbols, making them more palatable and thus more shareable. These symbols, in their humorous form, are then picked up and distributed by news organizations who are unaware of the normalization they are facilitating. This visual turn underscores that news consumption now transcends text and audio formats, raising questions about how we define political information in a media ecosystem increasingly reliant on symbols and shorthand.

Throughout the discussion, panelists challenged the notion that exposure alone suffices to foster an informed public. Audience members pressed them on whether platform-driven diversity metrics obscure underlying echo chambers, and whether media organisations should rethink their dependence on social networks that both amplify and constrain news. Stroud's observation that Meta now claims a renewed commitment to news visibility provoked spirited debate: can platforms be trusted to elevate public-interest content when their business models thrive on engagement of all kinds?

Looking ahead, the panel identified several pressing open questions: How to develop high quality research when platform data remain largely inaccessible? What new indicators can capture the substance and ideological balance of news encounters? And how should local and nonpartisan journalism be integrated into our understanding of digital news ecosystems? These issues connect directly to broader debates about democratic resilience, media policy and the ethics of algorithmic governance.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Panel discussion VI

Responsible machine learning in AI health applications

By Kiran van Hall

The panel on "Responsible Use of AI in Healthcare" brought together diverse perspectives at the intersection of AI ethics and medical practice. Healthcare represents one of the highest-risk domains for AI applications while also offering potentially transformative benefits. As AI systems increasingly permeate various layers of care pathways—from administrative tasks to specialized fields like radiology and pathology—this timely discussion examined how the development of automated decision systems directly affects practitioner responsibilities, professional autonomy, and legal liability for doctors and healthcare institutions.

The panel featured Daniel Oberski (Professor in Social and Health Data Science at Utrecht University), Roland Bertens (specialist in medical law at Van Benthem & Keulen and lecturer in healthcare law at Utrecht University), and Stefan Buijsman (Associate Professor at TU Delft and co-founder of the WHO collaboration on ethical AI design). Their combined expertise in data science, healthcare law, and AI ethics fostered a multifaceted discussion addressing both theoretical frameworks and practical implications for healthcare delivery.

Key Discussion Points

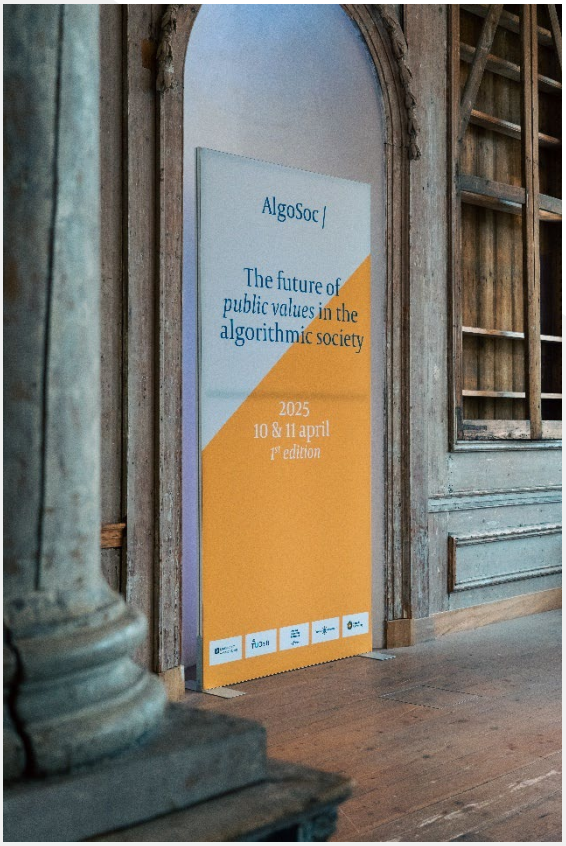
Legal liability in healthcare AI practice

A significant portion of the discussion focused on the complex web of liability when AI systems are integrated into medical decision-making. The panel explored how traditional legal frameworks are being challenged when algorithmic recommendations influence clinical decisions and patient outcomes. Roland Bertens emphasized that, despite the legal ambiguity, AI does not possess legal personhood. Therefore, mistakes or malpractice resulting from reliance on AI remain the legal responsibility of either the practitioner or the healthcare

institution, depending on the specific circumstances.

AI vs. Classical Statistics in Medical Contexts

Daniel Oberski provided a nuanced perspective on methodological differences: “The pivotal difference between AI and classical statistics is not what they can and cannot tell us, but the approach they take.” He explained that classical statistics has long maintained a “gatekeeping monopoly on truth” through rigorous academic standards, while AI takes a more practical, engineering-oriented approach to problem-solving.



This results-driven methodology often resonates with medical professionals who prioritize tangible outcomes.

However, all panelists agreed: “Where it often goes wrong is that medical staff is not involved enough, so the right questions are not being asked, and that the right problems are not being solved.” Oberski reinforced this by emphasizing the critical role of domain expertise in framing the problems that AI aims to address in healthcare settings. Bertens further noted the importance of quantifying AI's impact in medical environments: although projects are often funded by healthcare insurers, their outcomes are rarely evaluated to assess whether they achieved their intended goals.

Is "Responsible AI" an Oxymoron?

The panel also debated whether the term "responsible AI" contains inherent contradictions, particularly in high-stakes medical settings. A central issue was the opacity of many AI systems. Roland Bertens argued that enhancing AI literacy could help mitigate some risks: “Organizations and medical professionals have an obligation to inform themselves and users about how to properly interact with these technologies.”

The discussion grew more critical when a parallel was drawn between “Big Tobacco” and “Big Tech” regarding their influence on regulatory frameworks. One panelist noted that major tech companies are actively shaping EU regulations that will define what constitutes "ethical AI," raising concerns about potential conflicts of interest.

A particularly thought-provoking comment came from an audience member who challenged the premise of the discussion: “Talking about ‘responsible AI’ anthropomorphises what is essentially a statistical model, diverting attention from the humans who are actually responsible for developing and implementing these systems in medical contexts.” This insight sparked debate about how language choices may obscure human accountability in healthcare AI.

The panel highlighted the multifaceted challenges of implementing AI in healthcare. The discussion underscored that responsible AI deployment requires more than technical proficiency—it demands interdisciplinary collaboration among technologists, healthcare professionals, legal experts, and patient advocates. As healthcare AI continues to evolve, future discussions must focus on practical mechanisms for accountability, clear divisions of responsibility, and methods for ensuring that AI systems enhance—rather than complicate—medical practice. The panel made clear that while AI holds tremendous potential in healthcare, realizing this potential depends on thoughtful implementation grounded in professional ethics, legal frameworks, and continuous evaluation of real-world outcomes.

Panel discussion VII

Algorithmic harms, justice, and remedies

By Kätliin Kelder

Regardless of the growing regulatory complexity surrounding the use of data, platforms, and AI, we are yet to strike a good balance when it comes to contesting algorithmic decisions. This was demonstrated by the discussions in this panel, which focused on algorithmic harms, (in)justice and remedies.

Moderated by Linnet Taylor (Professor of International Data Governance, Tilburg University) this panel brought together three different disciplinary perspectives. Cynthia Liem (Associate Professor at the Multimedia Computing Group, Delft University of Technology), Anushka Mittal (PhD researcher studying the regulation of quantum computing, University of Amsterdam), and Amade M'charek (Professor of Anthropology of Science, University of Amsterdam), came together to share their experiences and perspectives on algorithmic harms and the effectiveness of available remedies at ensuring access to justice. After short presentations by the panelists, an open discussion ensued.

"Often you do not need big fancy AI to do harm or be unjust," stated Cynthia Liem to kick off the panel. She went on to point out that many of the Dutch scandals related to administrative use of algorithms, such as the childcare allowance scandal, or the use of algorithms by the Rotterdam municipality for detecting welfare fraud, relied on interpretable algorithms but nevertheless led to considerable harm to the affected people. In these cases, the most critical question was not that of explaining the operation of the algorithms involved, but instead ensuring that the assumptions and choices related to their deployment remain contestable.

Ensuring the contestability of these decision-making processes requires interdisciplinary research that takes time and compared to more traditional academic pathways, is often not as highly rewarded. Another case in point are the practical examples offered by Amade M'charek regarding how, in the United States, far-reaching inferences are made about people based on genetic markers contained in their DNA. When probabilities level up to stereotypes, as is the case for inferring suspect profiles from phenotypes, it becomes almost impossible to quantify the harms that algorithms can create and perpetuate. Finally, Anushka Mittal took a step back, and asked how to ensure that AI systems developed with EU public funds are

aligned with public values. This seems increasingly problematic at least in the case of AI systems developed for application at the EU borders.

The question dominating the following discussion was what form should, or could, contestation of algorithmic systems takes, and who is best placed to contest these systems. As Mittal rightly put it, "contestation is as broad as we make it to be." Although no clear answer to these questions was articulated, several forms of contestation as well as various relevant stakeholders were discussed. While certain skepticism was expressed regarding whether democratic interventions alone can lead to desirable results, the panelists and the audience explored many possibilities. Among these were empowering administrative officials to speak up against unjust practices, the role of NGOs in supporting victims of algorithmic injustices, the importance of diverse representation of interest groups around the table when developing AI/algorithmic systems, and the importance of discussing contested ideas with people that we necessarily do not agree with. To overcome the urge to leave complex matters to 'the experts', and to also engage people that might lack the vocabulary to discuss algorithmic impacts, Liem suggested using metaphors from daily life – such as cooking and recipes – to facilitate such discussions.

The exchange of ideas highlighted that we lack a clear and workable vision regarding how to ensure that AI systems or algorithms deployed by public bodies or developed with public funds would remain contestable. Unfortunately, contestation is often an afterthought once the incentives offered by algorithmic systems have already lured us to use them. More than ever, education regarding how algorithmic systems function and affect decision-making, as well as critical thinking, should be taught from a young age.

But scandals about public uses of algorithms going wrong also serve as a necessary evil to highlight what is at stake if proper checks and balances are not in place. They instigate discussion regarding the hidden harms behind data-driven practices, emphasize why the subject matter deserves attention, and how both ex ante and ex post remedies such as impact assessments and explanation obligations are crucial to ensure just outcomes.

The same way as any commercial software is constantly scrutinised for possible bugs, public algorithmic decision-making systems also need constant scrutiny. The lack of clear answers indicates that further research is needed into what are workable solutions for ensuring that people can articulate algorithmic harms and exercise remedies against algorithmic injustice.

Panel discussion VIII

Systemic risks of (generative) AI

By Enrico Liscio

The panel "Systemic Risks of (Generative) AI" reflected growing concern across academic, regulatory, and industry circles about how to govern the emerging power of generative AI. With platforms racing to integrate AI technologies into their infrastructures, the risks are no longer abstract—they are embedded, systemic, and in urgent need of thoughtful, inclusive governance.

Moderated by Natali Helberger, the discussion featured three panelists: (1) Maria Donde, Head of International Content Policy at Ofcom and Chair of the Council of Europe's Expert Committee on Media Environment and Reform, (2) Nick Diakopoulos, Professor of Communication Studies and Computer Science, Northwestern University, and (3) Tarleton Gillespie, Senior Principal Researcher at Microsoft Research and Associate Professor at Cornell. In the session, three critical themes crystallized: many risks remain invisible, risk assessments cannot be reduced to internal checklists, and we cannot rely on companies alone to define what is risky.

Key Themes and Insights

Many Risks Remain Invisible
Today's risk frameworks miss much of what matters—especially long-term, structural, or emergent harms. Gillespie reinforced this point, describing the industry's tendency to focus narrowly on what he called the "taxonomic gesture": a bounded classification of risks that excludes vast areas of concern, particularly those related to upstream or downstream effects (such as data collection and deployment). "We're not drawing on 15 years of lessons learned from research on, e.g., social media risks," he warned.

Donde emphasized that while the Digital Services Act (DSA) mandates risk assessments from large platforms, clear guidelines are still missing. She called the current regulatory process "flexible," but lacking coherence. Investigations into companies like TikTok and Alibaba are attempts to build a body of best practices—but many risks remain undocumented or unmeasured.

Risk Isn't a Checklist
Panelists agreed that the dominant approach—having internal teams complete reports or conduct red-teaming exercises just before deployment—is insufficient. Risk emerges throughout the AI lifecycle, from training data and fine-tuning to alignment and product integration. Diakopoulos described the limitations

of the red-teaming approach and advocated for more comprehensive tools like scenario writing to explore risks inclusively and accessibly. All three panelists stressed that real risk assessment must extend beyond internal company processes. It must be informed by diverse perspectives, academic research, and external oversight. Helberger summed it up: "Risk-based assessment shouldn't just be someone in a company filling in a card."

Companies Can't Be the Only Gatekeepers of Risk

A major concern was the over-reliance on corporate responsibility to identify and mitigate AI risks. "Who decides what is a risk?" Diakopoulos asked. "It can't just be tech developers—it needs to include domain experts and affected communities." The need for democratic, participatory governance ran through the conversation.

Maria Donde added that responsibility must be paired with explainability—users need to know not just that they're interacting with AI, but how it works and how they can exercise their rights. Calls for a more inclusive and democratic mapping of stakeholders—especially those affected by AI systems—echoed throughout the discussion.

Open questions

Audience members pressed the panel on the geopolitical asymmetry of AI development—particularly the dominance of U.S. tech companies—and asked whether the EU should do more to empower local alternatives. Some questioned whether the focus on risk drowns out conversations about the positive potential of GenAI. Diakopoulos and Gillespie agreed: the benefits of AI are evident, but they must be distributed fairly. Several questions highlighted the need to move beyond retrospective research and toward proactive governance and public-private collaboration. Diakopoulos proposed building a stakeholder map to identify where partnerships and policy interventions could be most effective. But despite the optimism, panelists admitted: there are no simple answers.

Conclusion: The path ahead

Helberger's final remarks captured the spirit of the discussion: 'Many systemic risks are still unseen, risk frameworks must be collaborative, not checkbox exercises, and the burden of identifying risks cannot fall solely on companies.'

The panel didn't offer easy answers—and perhaps that was the point. What emerged was a clear call to move beyond vague risk talk and surface-level transparency. If regulation is to catch up, it must be systemic, proactive, and deeply democratic. Risk assessments can't stay buried in internal reports—they need to reflect a broader societal conversation about power, accountability, and who gets to shape the digital future.

Panel discussion IX

Computational infrastructures and alternatives

By Agustin Ferrari Braun

The panel on computational infrastructures and possible alternatives brought together some of the leading critical infrastructure scholars of the Netherlands, with some representatives of the myriad of Dutch initiatives that are being developed to limit the growing power of Big Tech companies over digital infrastructure.

The panel was divided in three parts. Dr. Corinne Cath (Head of Digital at Article 19) chaired the first part. Entitled "Clouds Are (Not) An Option", it featured two PhD researchers from the Universiteit van Amsterdam, Dieuwertje Luitse and Andreas Baur. Luitse and Baur talked about the power logics embedded in cloud ecosystems. The former stressed how vertical integration and abstracted architectures (e.g., no-code programming environments) are allowing the main cloud providers – among which Amazon, Microsoft and Google are carrying the lion share – to further control specific industries. Baur demonstrated this logic in action by speaking about his research on GAIA-X, a European cloud project that tried to formalise an "ecosystem of clouds" in Europe, but that ended up structurally relying on the services provided by Big Tech.

Prof. José van Dijck (Universiteit Utrecht) chaired the second part. Entitled "AI Training Facilities and Compute Infrastructures", it included two speakers reflecting the panel's ambition to engage with ongoing efforts to build alternative systems, less reliant on Big Tech. First, Ronald Stolk (Professor of Clinical Epidemioly at the University of Groningen) spoke about his role and experience in building the Dutch part of the AI Factory initiative spearheaded by the EU, which is seeking to develop AI applications for European bodies that are grounded in public values. Antal van den Bosch (Faculty Professor at Universiteit Utrecht) then spoke in his capacity as domain chair of Social Sciences and Humanities at the Dutch research council. Van den Bosch stressed the legacy of the open-source movement and its influence in thinking about alternatives to closed, corporate infrastructure providers.

The full panel finally convened together for a discussion titled "Visions and Imaginaries with and beyond Clouds", where the different perspectives were brought together around questions of sovereignty and strategic decision-making in an international context marked by growing tensions between the US and

EU, with most hyperscalers having thrown their weight behind the second Trump's administration. The four speakers (and the moderators) commented on the difficulty of building separate national strategies, instead advocating for a common European approach to this challenging question. Moreover, the CEO of SURF, the Dutch ICT cooperative for education and research, briefly took the floor as an audience member to stress the urgency of having good examples of alternative digital infrastructures – such as AlgoSoc's adoption of NextCloud – that can be used as inspirations and blueprints for future projects.

However, one question remained in the air throughout the panel. Confronted to the sudden hostility of Washington, many in Brussels and across EU member states have started to talk about digital infrastructures in distinctly military terms. Developing Europe's strategic autonomy is being used as an excuse for a "securitization" of the union's digital infrastructure, a term repeatedly used throughout the panel and meaning the invocation of existential threats by actors seeking to free themselves from rules and procedures designed to limit their power. In an international context marked by Israel's ongoing genocide in Gaza and Russia's expansionist war on Ukraine – but also the systemic violation of human and fundamental rights by EU organisations such as Frontex – the securitization of digital infrastructure and its discussion in openly military terms are a cause of great worry, which was reflected in the questions of both moderators and audience.


Keynote
Preventing the disruption of democracy
Marietje Schaake
AlgoSoc / International Conference 2025
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Keynote Marietje Schaake

Preventing the disruption of democracy

By Annemijn Kwikker

‘The rise of CEO-kings could potentially disrupt democratic societies’, argues Marietje Schaake, director of policy at Stanford’s Cyber Policy Centre, member of the UN AI Advisory Body and author of *The Tech Coup*. The term 'CEO-king' describes the idea that CEOs, typically from big tech companies, gain political influence beyond their own organisations. They embrace an antidemocratic political philosophy; they want to replace politics with company dynamics; they do not uphold the traditional democratic view that the powerless should be protected against the powerful; and they do away with checks and balances.

Their rise is a worrying development. Big Tech companies seem to bring about a “tech coup” in the form of an attack on democracy itself. The merger of technological and political power enables antidemocratic forces to gain a foothold while the rule of law is under siege.

Nevertheless, despite these worrying developments, Schaake proposes tapping into an arsenal of European countermoves. First, she stated that there is no time for nostalgia for a long-gone past. Instead, European leaders must decide how to proceed in protecting their democracies in the absence of their transatlantic partner. Transparency is key here. Europe should encourage an adequately informed public debate through independent news outlets, accessible and verified information, and robust and diverse academic research. It must also monitor the power struggle between the private sector and public leadership, paying particular attention to the potential erosion of state sovereignty. Sovereignty must be safeguarded through various channels, such as the rule of law and technological independence. Finally, Europe should be open to forming new alliances with like-minded partners, such as Canada and Japan, to protect our democratic values.

Panel discussion X

From regulation to resilience: protecting democracy in the age of AI

By Annemijn Kwikkers

In the final panel discussion, panelist offered suggestions on how to foster resilience in the age of AI, addressing key issues and essential instruments for resilience, as well as the barriers to their implementation. Barbara Prainsack (Professor of Comparative Policy Analysis, University of Vienna) emphasised that the power and practices of big tech companies can undermine the preconditions of resilience. After all, resilience requires slowness and other qualities that are incompatible with efficiency and profit. Therefore, Europe should take resilience seriously. For instance, Europe could take the lead where the US is falling behind. The threat of an antidemocratic slippery slope is not just present in the US, but also closer to home in Europe. However, technological innovation is not the only solution here; social innovation is also required to turn the tide.

Mireille van Eechoud, Professor of Information Law and Dean of the Faculty of Law at the University of Amsterdam, envisages a prominent role for academia. Academia should convince citizens of the importance of independent academic research by conducting projects on contemporary democratic practices and engaging with civil society. Furthermore, academic institutions should update their curricula to equip students with the knowledge and skills to navigate complex legal systems and to foster a greater awareness of the practical application of law. Academia could also challenge students by asking them what kind of world they want to live in and what kind of professionals they want to be.

Tarleton Gillespie, Senior Principal Researcher at Microsoft Research and Associate Professor at Cornell University, acknowledged that the current state of techno-political developments is terrifying, but believes that we should not be intimidated by this. Throughout history, democracy and academia have faced numerous attacks, including in the US in the 1980s. At that time, academia also suffered budget cuts while the government became more reliant on the economic market. What we can learn from this is that we have faced hard times before, but persevered. This means that we must find a path forward, and Europe is the vessel that can be mobilised to do so.