Program on Science, Technology & Society

Harvard Kennedy School 2022 Newsletter Harvard University

A NOTE FROM THE DIRECTOR

Dear Friends of STS@Harvard,

2022 brought many changes to the world and the STS Program at Harvard was no stranger to novelty. The year began in the pandemic regime but restrictions eased and sociality resumed bit by bit. We convened once again as three-dimensional people, around the familiar comforts of food and drink. STS Circle returned to its long-established lunchtime routine, with sandwiches and cookies, while the STS Summer School, the Science and Democracy Network Annual Meeting, GRiSTS (the graduate student conference), and the STS 20th anniversary celebration were all able to convene in person, almost as if the pandemic years were now truly history.

But a return to old regularities is not the same as continuity. Not when the break was as sharp and complete as the pandemic was. One indicator of change is the appearance of a new communicative state called hybridity, in which we try to be physically present for those nearby while also doing our best to reach out to audiences further from home. STS Circle, the SDN meeting, and the Anniversary all experimented with hybridity to different degrees. One challenge of 2023 will be to review our experiences of last year to see whether this third state of the world—hovering between real and virtual—was a temporary accommodation or is a mode of interaction that will hold permanent appeal.

Some changes in our habits of sociality remain harder to assess. We cannot expect a two-year experiment in withdrawing from others to leave no traces in our collective psyche. It's unclear what will happen to ancient habits of academic sociality, built on regular give and take in a multiplicity of forums around work of different kinds at diverse stages of progress. The past two years can be regarded as a massive, unconsented bioethical experiment or as a breaching experiment of a particularly intrusive sort. Either way, the consequences are bound to be profound, both in our ways of knowing and in our ways of communal being. Time will tell.

STS more than most fields, however, suggests that we are never bereft of agency, that the worlds we end up inhabiting are ones that we have cared enough to make and sustain, like gardens and nurseries. Here at the start of a new year, my hope is that we will return to a state of mindfulness and care for each other that may have been diluted, but not entirely forgotten, in our years of enforced isolation.

Mula

Sheila Jasanoff



Find out more online





Science and Democracy Lecture

Science and Democracy is a lecture series exploring both the promised benefits of our era's most salient scientific and technological achievements and the potentially harmful consequences of developments that are inadequately understood, debated, or managed by politicians, publics, and policy institutions. The lectures are supported by **John McQuillan** and co-sponsored by the Harvard University Center for the Environment and the Weatherhead Center for International Affairs.

Marcia McNutt

March 23, 2022



The Spring 2022 Science & Democracy lecture featured Marcia McNutt, President of the National Academy of Sciences. Her lecture, "'For the People': The Role of Science" showcased how President Lincoln recognized the benefits of science for the people, to provide sciencebased advice to better inform decisions on national security and the wellbeing of American citizens. That vision led to the founding of the National Academy of Sciences (NAS), since joined by the Academies of Engineering and Medicine. NASEM, in McNutt's view, serves as a sort of Supreme Court for Science and weighs arguments on both sides to come to conclusions where the preponderance of evidence and the consensus should lie. McNutt cited examples of how NASEM has weighed in on important issues over the years, such as climate change, immigration, AIDS and more. She ended by quoting David Gray from Oxford University, invoking the sentiment that "[s]cience without policy is still science, but policy without science is gambling.". Panelists commenting on the lecture included **Jason Furman** (Aetna Professor of the Practice of Economic Policy, Harvard Kennedy School and Department of Economics, Harvard University), James H. Stock (Vice Provost for Climate and Sustainability and Harold Hitchings Burbank Professor of Political Economy, Harvard University) and Latanya Sweeney (Daniel Paul Professor of the Practice of Government and Technology, Harvard Kennedy School). In a lively discussion moderated by Sheila Jasanoff (Harvard STS), the panelists agreed that many factors other than science must be weighed in any robust mode of decision-making. In evaluating outcomes under different scenarios, members of the public can and should ask: "Is this outcome compatible with our values?"

Watch the Lecture

Events and Initiatives

The STS Program offers a vibrant model for One Harvard through outreach not only to the College but to other professional schools and research centers, most notably the Institute for Global Law and Policy (IGLP) at Harvard Law School, the Harvard University Center for the Environment (HUCE), the Weatherhead Center for International Affairs (WCFIA), the School of Engineering and Applied Sciences (SEAS), and the Graduate School of Arts and Sciences (GSAS). These broad and diverse connections have powered the Program's whole range of activities, including many of our public events.

Graduate Research in STS (GRiSTS)



The organizers of the third annual conference on Graduate Research in STS (GRiSTS) were delighted to host the first ever in-person meeting of the conference on October 13-15 at Harvard Kennedy School. GRiSTS 2022 tackled the theme **Re-centering the Social: Technoscience in Crisis Times** and welcomed more than 100 attendees, in-person and online. Harvard STS doctoral candidates Nicole Bassoff and Pariroo Rattan worked with a dedicated **RE-CENTERING** organizing committee to create an exciting program, with visuals designed by THE SOCIAL Hilton Simmet. This year the conference proceedings included five student panels and two student and faculty roundtables during the three-day event. Banu Subramanian (UMass Amherst) gave a keynote talk titled "Tales from AnOther Enlightenment: The Biopolitics of Hindu Nationalism." Other faculty speakers included Steve Hilgartner (Cornell), Aziza Ahmed (Boston University School of Law), and Abby Spinak (Harvard Graduate School of Design). The conference concluded with observations by Sheila Jasanoff on "The Future of STS." The full program and presenter abstracts can be viewed on the GRiSTS website.

STS Summer School



@ Harvard

Supported by a grant from the Hewlett Foundation, the 2022 STS Summer School@Harvard on Expertise, Trust and **Democracy** brought together dynamic young scholars with leading STS instructors from numerous centers of

STS scholarship. Convening in Cambridge, MA for the first time since 2019, students learned the STS analytic lexicon and related cuttingedge STS methods to address some of the most pressing social and political issues of our time-from war and geoengineering to gene editing and bioethics. They presented their own research projects and participated on roundtable topics such as pandemic expertise and public engagement, trust and distrust in the digital era, and the credibility of economic expertise. The Summer School continued to refine its pedagogical methods and materials, including a crib sheet of core concepts edited and designed by Harvard Ph.D. candidate Hilton **Simmet**. For the first time in Summer School history, students also attended the Science and Democracy Network (SDN) annual meeting as participating scholars, an innovative approach which combined engagement between the Summer School themes and critical examination of the work of emerging and senior scholars in the field. More on the 2022 program and participants can be found on the Summer School website.





Events and Initiatives (cont.)

Director's News

STS 20th Anniversary Symposium



Over three days in early November 2022, the STS Program hosted the Symposium on Science, Technology and the Human Future to celebrate its 20th anniversary. Bringing together scholars, policy makers, activists, music makers, and even speculative fiction authors, the Symposium demonstrated the breadth and depth of the impact of Harvard's STS Program on multiple worlds. Opening the Symposium was the premiere of **Machine Dreams**, a quintet by Chung Hon Michael Cheng, selected readings from the Future Humans Anthology of speculative fiction composed for the anniversary with Aishani Aatresh and Michael Evans as co-editors, and a keynote by the renowned

novelist **Arundhati Roy**. Friday's panels focused on multiple futures: of knowledge, life, policy, and cities, featuring luminaries from across Harvard, the US, and the world. A student-led initiative to write a Charter for Knowledge offered a future led by grassroots thinking in STS. Saturday's conversation turned to the future of the field of STS, with conversations on Making Sense of STS, Making Programs, Making People, Making Friends, and Making Progress. Over 300 people attended the Symposium in person, with another 500+ online. The full program, including videos of all sessions, is available on the <u>anniversary website</u>.

The Anniversary arrangements were a team effort, led by Senior Research Fellow Sam Weiss Evans and Program Manager Laura Flynn, with inspired design assistance by Hilton Simmet and Makoto Takahashi, and intellectual and organizational support from a team of additional students and Fellows including Aishani Aatresh, Alberto Aparicio, Nicole Bassoff, Lou Lennad, Conor McGlynn, Andy Murray, and Pariroo Rattan.

STS Circle

The STS Circle at Harvard returned to its familiar in-person format, but with a hybrid option, beginning in Fall 2022. We continued to engage with contemporary issues in science and technology, with support from the Graduate School of Arts and Sciences and the Weatherhead Center for International Affairs. The Fall Circle line-up included 11 junior scholars and senior faculty working in STS and related fields, including law, philosophy and history of economics. Circle speakers featured current and former Fellows, as well as STS Secondary Field candidates and distinguished guests from other universities. Ably hosted by STS Fulbright Fellow Makoto Takahashi, the resumption of in-person meetings reminded us how important it is to engage in collective conversations where speakers and discussants have the time and opportunity to build on chance convergences and emerging themes.





On March 14, 2022 in Oslo, Norway, The Holberg Prize Board announced Sheila Jasanoff as the 2022 laureate. The annual prize recognizes lasanoff for her pioneering career in the field of Science and Technology Studies known as STS — spanning over four decades, including the past 24 years at the Kennedy School. Jasanoff received her award in a ceremony on June 9, at the University of Bergen, Norway. "I am thrilled that Sheila has received this prestigious honor," said HKS Dean Doug Elmendorf. "And I am especially proud that the Kennedy School has been a home for her pathbreaking work that explores how policy, society, and law can play a role in scientific and technological decision-making. Sheila has been instrumental in defining and developing the science, technology, and society field." Read the full story here.

For a fuller account of her research, writing, and service, visit her website.

Science and Democracy Network

After a two-year hiatus, the Science and Democracy Network **SDN**²⁰₂² once again gathered in-person this summer for its 21st annual meeting, reconvening at the Harvard Kennedy School from July 27-30, 2022. The meeting benefited from collocation with the immediately preceding 2022 STS Summer School, with over a hundred members traveling to Cambridge to take part in seven paper sessions, working lunch sessions, and a roundtable discussion on environmental STS. Amidst the intellectual exchanges and connecting with colleagues old and new, the Network also took a moment to recognize its 20th anniversary. The whole program is publicly available on the <u>SDN website</u>. SDN members can also watch recordings of the sessions.





Sheila Jasanoff and the Crown Prince Haakon Magnus of Norway



Training and Curricular Activities

Twelfth Annual STS Undergraduate Essay Contest

The annual STS Undergraduate Essay Contest drew several dozen submissions from Harvard College students concentrating in subjects ranging across the humanities and natural and social sciences. The winner of the 2022 Contest was Annelisa Kingsbury- Lee (joint concentrator in Environmental Science & Public Policy and East Asian Studies) for her essay titled "Ultrasupercritical Coal as Viral Technology: The Chinese Case," which contrasts two visions of nation-building in the dissemination and use of ultrasupercritical coal (USC) technologies in China. Annelisa was the first Junior to win the STS Undergraduate Prize. Read the full essay here. Honorable mentions were awarded to Connor Chung, Emma Forbes and Lauren Fadiman.

Learn more about the prize and watch the winners speak about their work here.

STS Undergraduate Fellowship

For the first time, the STS Program began running a year-long fellowship for Harvard undergraduates, bringing students together from multiple departments to learn the foundations of STS. The Fellows, selected from over 100 applicants, met biweekly in the fall semester. Each session focused on a core STS concept introduced by the graduate STS Fellows as guest presenters on topics ranging from gene editing, renewable energy, and the future of the city to AI and misinformation and digital economies. Organized by undergraduates in the STS Program, with the support of graduate students and STS director Sheila **Jasanoff**, the fellowship aimed both to add to existing STS offerings for undergraduates and to address the lack of infrastructure and increasing demand for STS at the College. Students were able to engage with the social and political nature of some of the most salient issues involving science and technology of the present and future. In 2023, the Undergraduate Fellows will continue to build their STS analytic lexicons through instructional sessions while working on a collective project to put their new skills into action beyond the classroom. This joint activity will not only build a foundation for Fellows' own research but also sharpen their critical sensibilities for functioning as citizens of the 21st century.

The STS Undergraduate Fellowship is generously supported by the Weatherhead Center for International Affairs.

Undergraduate Fellows:

Abraham Atwood, Salma Douieb, Ellie Fithian, Alejandro Gaytan, Julie Heng, Kevin Huang, Hiro Kondo, Emil Massad, Heba Mohammed, Fiona Pollack, Kavya Shah, Andy Wang, Tomas Winegar, Justin Wong and Peggy Yin. Co-chaired by Aishani Aatresh and Michael Evans.

Research News

Global Observatory for Genome Editing



The Global Observatory for GLOBAL OBSERVATORY Genome Editing continued for Genome Editing to advance its vision of broadening deliberation on the dignity and integrity of human life in the face of advances in genome editing and related biotechnologies. In May, the Observatory convened a workshop, In Search of Limits in the Age of Genome Editing, gathering key actors to explore different ways of thinking about limits on biomedical research and innovation and limits on the scope of deliberation, forms of reasoning, expertise, and governance tools to make informed and democratic decisions. As part of the Harvard STS Program, the Observatory also sponsored a session at the STS Summer School and organized the panel "The Future of Life" at the Program's 20th Anniversary. This panel brought together experts and leaders in the life sciences, legal scholarship, and bioethics to reflect on debates at the frontiers of biotechnology-how they are reshaping the human condition, and the challenges of putting moral reasoning at the core of their further development. Building on these efforts, the Observatory has several activities planned for 2023, including a follow-on workshop on limits and contributions to the Third International Summit on Human Genome Editing in London.

Follow @GenomeObserv for updates, and sign up to our mailing list.

Governance of Sociotechnical **Transformations (GoST)**

The GoST project applied a comparative approach to identify the diverse institutional and cultural 10 3 contexts within which imaginaries of transformations to sustainability originate, as well as to understand context-specific variations of framings of acceptable risks and democratic governance. It has long been observed that societies do not respond in the same ways to the same scientific findings of risk, safety or feasibility in making environmental policy. These differences cannot be explained by the quality of knowledge or its means of production alone. The GoST project illuminated why framings of risks and governance diverge by exploring how they are produced by, and in turn reinforce and reproduce, cultural values and social orders in each country involved in the study. From this theoretical perspective, the project showed how divergent traditions and styles of producing and evaluating knowledge are constitutive of political cultures and account for sometimes radical discrepancies in the reception and uptake of the same scientific findings by different national publics and policy-makers.





CURRENT FELLOWS

Alberto Aparicio

Postdoctoral Research Fellow Global Observatory for Genome Editing

Nicole West Bassoff

Ph.D. Candidate in Public Policy Harvard Kennedy School

Regula Valérie Burri

Professor Hafen City University, Hamburg

Sarah Delvaux

Doctoral researcher at the Spiral Research Center in the **Department of Political Science** of the University of Liège

Elizabeth Dietz

Ph.D. Candidate in the Center for Biology and Society at Arizona State University

Gabriel Dorthe

Postdoctoral Researcher Harvard STS & IASS, Potsdam

Spencer Doyle

Ph.D. candidate in physics, National Science Foundation Graduate

Karl Dudman

Ph.D. Candidate University of Oxford's Institute for Science, Innovation and Society

Sam Weiss Evans

Research Associate, John A. Paulson School of Engineering and Applied Sciences

Research News

Comparative COVID-19 Response (CompCoRe)

The Comparative Covid Response (CompCoRe) project



led by Sheila Jasanoff together with co-Pl Stephen Hilgartner of Cornell University continued to monitor developments as the pandemic took unexpected turns in the 16 countries the project encompasses. While it will take time for definitive assessments of the successes

and failures of diverse national policies, it has become ever more clear that the pandemic tested not only each country's public health preparedness, but more profoundly the social compact that binds citizens, experts, and governments into more or less trusting relations, especially in moments of crisis and political stress. China's aboutface on its stringent zero Covid policy in Year 3 offered a clear lesson that, even under authoritarian rule, citizens demand forms of demonstration and proof that modern states must honor - or risk losing the buy-in needed to maintain any form of order and control.

Ethics in the Lab



The final year of the Ethics in the Lab project saw several advances in the project's goals. Sam Weiss Evans was appointed to the Engineering Biology Research Consortium's Council in recognition of his multifaceted work on synthetic biology: as a participant in debating governance structures for gene drives; a mentor for graduate students; a teacher of undergrads; an advisor on experiments in security governance; and

a critic of the limitations of contemporary understandings of science and security. Five papers published by Sam and his colleagues this year demonstrate the range of methods the project has employed to open up discussion on the broader aspects of research at its early stages. As an indicator of the success of the Ethics in the Lab project, Sam was appointed to a two-year position jointly with the School of Engineering and Applied Sciences and the STS Program to advance the integration of STS into the undergraduate engineering curriculum. The project is funded by Schmidt Futures.

FELLOWS

cont.

Péricles Gonçalves

Ph.D candidate in Regulatory Law at FGV Rio de Janeiro Law School

Wanheng Hu

Ph.D. candidate in Science and Technology Studies with an affiliation to the East Asia and a Program at Cornell University

Nicolas Huppenbauer

Ph.D candidate at the Center for Advanced Security, Strategic and Integration Studies (CASSIS) at the University of Bonn

Sophia Knopf

Ph.D candidate at the Department of Science, Technology and Society at the Technical University of Munich

Lou Lennad

Ph.D student at Harvard STS

Quentin Louis

Ph.D student at PSL University in Paris

Connor McGlynn

Ph.D student in Public Policy at the Harvard Kennedy School

Andrew Murray

Postdoctoral Researcher Global Observatory for Genome Editing

Onur Özgöde

Senior Research Fellow CompCoRe

Research News

Traveling Imaginaries of Innovation

This year saw the conclusion of our long-running research project on Traveling Imaginaries of Innovation, a multicity comparison of the way that the Silicon Valley has been taken up around the world. The study has contributed several insights into the dynamics of innovation. First, imagination must be anchored in concrete spaces and places in order to work its transformation. Second, imaginaries of Silicon Valley do not land without frictions and



Chinese packing crates included in the assemblage of sustainability as renewable energy in India.

resistances to the kind of life that they promise to bring. Third, the Silicon Valley imaginary is aimed not only at the shape of investments and transformations of cityscapes, but also at the hearts and minds of citizens. It presumes and cultivates a persona of risk-taking and interest in the pursuit of "the possible." It lives inside of people who direct their individual lives according to it and also build their collective realities in its image. This is a powerful way in which the imaginary "travels," as it gets absorbed into the skills and life choices of people who have internalized it.

Trust in Science



In collaboration with the Harvard Data Science Initiative, the STS Program continued to run the Trust in Science Project, co-led by Sheila Jasanoff and **Sam Weiss Evans**. To date, the Project has disbursed over \$800,000 to faculty across the University on a wide variety of projects, with the two most recent ones focusing on vaccine hesitancy. In September 2022,

"Five Principles of Transparency" lecture.

Transparency can distort. A slide from lasanoff's the Project hosted a workshop on **Vaccine Hesitancy: Between** Miracle and Mistrust. Melissa Leach. Director of the Institute for Development Studies at the University of Sussex, presented a keynote on the need to move from talking about "vaccine hesitancy" to "vaccine anxiety." She turned attention from a primary focus on getting shots into arms to the underlying reasons why different groups may have very different ideas about the roles that vaccines play in their or their children's lives. The second day of the workshop featured presentations on current research within the project, as well as related work by others

within and beyond Harvard.

FELLOWS cont.

Pariroo Rattan

Ph.D. candidate in Public Policy Harvard Kennedy School

Tadeusz Rudek

Ph.D. candidate at lagiellonian University in Kraków - Poland

Hilton Simmet

Ph.D. candidate in Public Policy Harvard Kennedy School

Marlise Schneider

Ph.D. candidate in Science Technology Studies at the Technical University of Munich

Makoto Takahashi

Fulbright-Lloyd's Fellow and a Lecturer at the Munich Centre for Technology in Society, TU

Shira Zilberstein

Ph.D. candidate in sociology at Harvard University Munich

RESEARCH ASSOCIATES

Kyoko Sato

Associate Director Program on Science, Technology and Society at Stanford University and Senior Researcher on Harvard STS project "The Fukushima Disaseter and the Cultural Politics of Nuclear Power"

Stefan Schäfer

Research Group Leader Institute for Advanced Sustainability Studies, Potsdam

Fellow Milestones

Parting Shots

The STS Program is pleased to recognize the news and accomplishments of current and former fellows.

S. M. Amadae ('13,'14), University Lecturer of Politics, University of Helsinki completed an immanent critique of the game theoretic oversight of a model on systemic discrimination, and put forward such a model: <u>Click here</u> to view the model. Along with her research team, she developed the University of Helsinki Open University MOOC Sustainable Consumption with this introductory video, "Learning by Doing".

Vidya Subramanian ('21, '22), started a new position as Associate Professor at the Jindal Global Law School in Sonipat, India and published a new book titled 'Speeding Up Sport: Technology and the Indian Premier League' (Oxford University Press, 2022).

Justin Raycraft ('22), started a new position as a tenure-track Assistant Professor in the Department of Anthropology at the University of Lethbridge.

Regula Valérie Burri ('08, '22), Professor in Science and Technology Studies at HafenCity University Hamburg, Germany, was appointed as an Associated Investigator of the Cluster of Excellence "Matters of Activity – Image, Space, Material" at Humboldt University Berlin.

Sebastian Pfotenhauer ('10), Co-Director, The Munich Center for Technology in Society (MCTS), is pleased to announce that the MCTS at Technical University of Munich got upgraded to a full-fledged STS Department. We are grateful for the many forms of support we have received from friends and colleagues around the world to build critical mass and make a convincing case for a sustainable STS footprint in Munich!

Jacob Moses ('15), has been appointed an assistant professorship in the Department of Bioethics & Health Humanities at the University of Texas Medical Branch at Galveston Alberto Aparicio ('22, '23), published a paper entitled "The road ahead: narratives and imaginaries of the value of biodiversity in shaping bioeconomy policy in Colombia" in the journal Tapuya: Latin American Science, Technology and Society, which examines the stability of the widely held imaginary in Colombia that biodiversity is valuable and an engine of economic growth–and the bioeconomy–in light of the fact that claims about the value of biodiversity have not led to a thriving green economy. Additionally, Alberto and his wife welcomed their first child Matilde this fall.

Alex Wellerstein ('10, '11) and STS Design Coordinator, was awarded the Joseph H. Hazen Education prize at the History of Science Society's 2022 Annual meeting in Chicago this last November. This award recognizes outstanding teaching in the history of science and was presented in recognition of his achievements in bringing the history of science to a broad public audience.

Makoto Takahashi ('19, '22), was awarded the 2022 Ziman Award from EASST for his exhibition Picturing the Invisible. Curated by Makoto Takahashi and his students at TUM's new Department for STS, the exhibition has been held at the Royal Geographical Society (2021) and TUM (2022). It is now headed to the Heong Gallery, Cambridge (23 February - 27 April). You can take a virtual tour here.

Karen Huang ('19), is currently working on the following projects; Platform Governance and the Making of Data Relations, Moral Reasoning in Public Health Behavioral Science along with **Jacob Moses** and STS and Hermeneutics.

Austin Clyde ('21, '22), published the following articles in 2022: <u>Are Social Media Platforms a</u> <u>Legitimate Component of Democracy?</u> and <u>Al for science and global citizens.</u>

Luca Marelli ('13,'14)has accepted a tenure track position at the University of Milan's Faculty of Medicine.



This map resides in the Fellows Office and shows the global scope of the STS Program over the last 20 years. Are you a former fellow and don't see your pin? Email us at <u>sts@hks.harvard.</u> edu with the location you came from during your fellowship and we will add it!



2022 Fellowship

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PROGRAM ON SCIENCE, TECHNOLOGY & SOCIETY