



Program on Science, Technology & Society

HARVARD KENNEDY SCHOOL

HARVARD UNIVERSITY

PROGRAM ON SCIENCE, TECHNOLOGY & SOCIETY

Fall 2011

Welcome from the Director

Dear Friends of STS,

One year after our first newsletter, I am happy to update you on further developments in the STS Program. This has been a year of many connections. Within Harvard, we continued our collaboration with the School of Engineering and Applied Sciences by appointing a new postdoctoral fellow working across both units. The Harvard University Center for the Environment and the Graduate School of Design supported two splendid events in our Science and Democracy lecture series, featuring David Brooks and Errol Morris. STS has developed new connections to Harvard Law School through the Institute for Global Law and Policy. We are experimenting with new approaches to building STS into international law teaching and research.

Internationally, our connections with colleagues in Heidelberg, Paris, Vienna, and the Netherlands, among others, continue to thrive through varied programs of exchange and collaboration. In August, we joined forces with the European Molecular Biology Laboratory and the European Center for Molecular Medicine to hold another extremely well received summer school for students in the life sciences and science studies. Next summer's annual meeting of the Science and Democracy Network will be held in Paris, testifying to growing ties between the Harvard STS Program and the center for excellence in innovation studies in Paris.

Most important, our research and training endeavors have prospered, with the first products of the Graduate Secondary Field in STS emerging from the system. In addition, I am pleased to report on new research grants, new publications, and exciting new career developments for former STS fellows. I invite you to read more about all of these developments below.

With best wishes for the new year and thanks for your continued interest and support,

Upcoming Events

April 17, 2012

Science and Democracy Lecture:
Anne Wojcicki, 23andMe.com

June 25-27, 2012

11th Annual Science and
Democracy Network Meeting,
Paris, France

Find out more online:

<http://sts.hks.harvard.edu>



STS 20+20

Why choose STS as a field of study? What makes it interesting, distinctive, coherent, relevant, and deserving of stronger institutionalization? From April 7-9th over 200 people gathered at Harvard University to discuss the past 20 years of STS and the 20 years ahead. The meeting brought together the accomplishments, hopes, aspirations, and, occasionally, frustrations of scholars from around the world who have committed their careers to studying the role of science and technology in our social, political, and moral lives. The meeting was in part a stock-taking. After two decades of increased public funding for research and training in STS, what can the STS community say about its achievements as a "thought collective"? The three-day meeting addressed STS and the disciplines, STS and its theories, and STS's institutional challenges and opportunities.

In part, too, the meeting was a provocation: an invitation to reflect on the conditions needed for STS to thrive and grow—in keeping with the importance of its mission. One outcome was a set of "Provocations from within the Field," discussed at the event and subsequently at a panel during the 2011 4S meeting. The provocations document is now the first conversation in a new online forum called Perspectives, part of the re-launched STSNext20.org website. Perspectives is a space for discussing significant issues related to STS as a field of teaching and training, as well as the interactions of STS with the wider world. It is mirrored by a blog, also on STSNext20.org, that takes a weekly look at news stories of interest to the STS community, written by Harvard STS fellows and members of the Science and Democracy Network. The website is also home to an STSWorld map, showing the locations and offering descriptions of all graduate and undergraduate STS programs in the world. Finally, the site provides an archive of the conference.

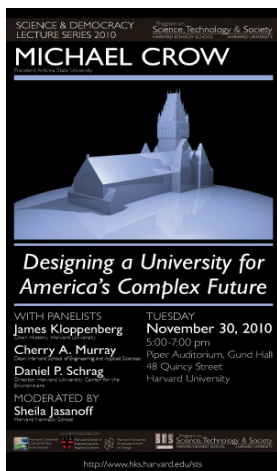


Douglas Kyser & Sheila Jasanoff

Visit STSnext20.org

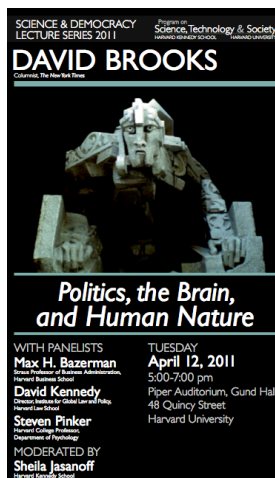
Workshops & Events

Science and Democracy Lectures



Michael M. Crow, president of Arizona State University (ASU) since 2002, sparked a lively debate with his lecture on *Designing a University for America's Complex Future*. Although he opened with a blistering critique of the modern elite research university—addressing issues of exclusivity and lack of accountability—Crow expressed hope that universities can play an important role in redirecting the future of the United States. This, however, would require drastic changes to

the structure and ideals that uphold America's institutions of higher education. Crow cited recent measures taken to revamp ASU, from eliminating underperforming departments to redesigning admissions policies. Crow argues that universities will have to learn how to scale up in order to meet the rising global demand for higher education. Panelists James Kloppenberg (FAS, History), Cherry A. Murray (Dean, HSEAS), and Daniel P. Schrag (Director, Harvard University Center for the Environment), praised Crow on his efforts while expressing reservations about the generalizability of Crow's vision.



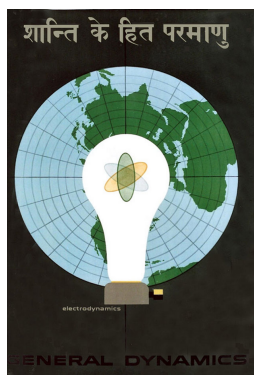
David Brooks, *New York Times* columnist and public intellectual, shared his perspective on Politics, the Brain, and Human Nature, based on his recently published book, *The Social Animal*. Brooks argued with humor and conviction that by designing policies based on a shallow view of human nature politicians may create policies not fit for "actual human beings." Brooks' exploration of the sciences of the mind, led him to identify three insights into human nature: the importance of unconscious thinking, the centrality of emotion to

reason, and the interconnectedness of individuals. Citing a wide variety of studies, Brooks argued for a redefinition of expertise—not as measurable traits, but as the abilities of socially aware individuals—such as sympathy, propriety and street-smarts. The panelists, Max H. Bazerman (HBS), David Kennedy (HLS), and Steven Pinker (FAS, Psychology), provided a challenging critique of Brooks' work, questioning both his interpretation of the social science data and his understanding of the relationship between human nature and public policy.

Research Ethics: A Question of Method?

On May 6, 2011, STS Fellow Diana Schmidt-Pfister organized a workshop that brought together renowned experts from STS, history of medicine, sociology, higher education studies, law and ethics for a lively discussion about the specific and synergetic values of various disciplinary approaches to research ethics. Research ethics tends to fall between lines of investigation. It is often addressed incidentally or tangentially by various strands of social analysis, but rarely studied in its own right as a topic of significant moral, social, and economic concern. Moreover, these lines of scholarship have been working in parallel, from different perspectives, with different methods, and on different framings of the overall picture. Cutting across the lines, the workshop was another fine example of the STS Program's power to catalyze cross-faculty exchanges and conversations within Harvard, as well as the appeal our events have for members of the Cambridge intellectual community writ large.

Science and Democracy Network



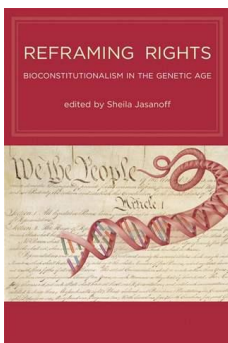
The Tenth Annual Meeting of the Science and Democracy Network (SDN) was held at Harvard University's John F. Kennedy School of Government from June 30–July 2, 2011. Presentations covered a broad range of topics, from stem cells to energy transitions, from peanut butter to patents, from the "problem" of European Integration to the politics of Uruguayan pulp mills. The conference included an ad hoc session, with presentations by Hideyuki Hirakawa and Hirokazu Koi, on the role of scientists and critical scholars of STS in addressing the tragedy of the Fukushima nuclear power plant, which, only a few months earlier, had been damaged by the Japanese earthquake and tsunami. On Friday evening, participants recognized Sheila Jasanoff for founding and sustaining SDN for ten years. They presented her with a vintage poster designed in 1955 for General Dynamics (a US defense contracting company) in the series "Atoms for Peace." With its caption in Hindi, this particular poster was intended for an Indian audience and its striking image of a light bulb displayed against a globe cleverly alluded to Sheila's writings on Earth images, environmental globalization, and sociotechnical imaginaries.

Greenwall Workshop

On November 10, 2011, the STS Program hosted the second meeting of a project funded by the Greenwall Foundation, entitled the *Constitutional Foundations of Bioethics*. STS scholars, legal experts, bioethicists, historians, and practicing scientists gathered to discuss four case studies that challenge conventional thinking about relations between law and science, most specifically the “law lag.” Ingrid Metzler (Vienna) presented a paper on the different regulatory cultures addressing IVF embryos in the UK, Germany, Italy, and the US. Amy Hinterberger (Oxford) discussed her research on how human-animal chimeras are disrupting the conceptual boundary between human and non-human. Maggie Cumutte (Harvard) traced the rules governing genetic testing for Alzheimer’s disease in Germany, the UK, and US, relating the governance of direct-to-consumer genetic testing to underlying notions of the state’s responsibility for safeguarding citizens’ health. Emma Frow (Harvard) discussed current debates within the field of synthetic biology with special emphasis on the construction of BioBricks as an instrument for engineering “life.” All four cases drew on the concept of bioconstitutionalism, the idea that changes in the way we understand what life is often necessitate the reframing of state-citizen relations.

Research News

The STS Program received an NSF Grant, *Life in the Gray Zone: Governance of New Biology in Europe and the United States*. The project is the first phase of a long-term study of the co-evolution of research priorities and directions in the biosciences and biotechnologies together with political and constitutional decisionmaking in advanced industrial nations. Using an innovative cross-national research design, focusing on the US, UK, and Germany, the project will follow legal, ethical and social responses to two biological constructs: animal-human chimeras and the synthetic organism, *Mycoplasma mycoides JCVI-syn1.0*.



Reframing Rights: Bio-Constitutionalism in the Genetic Age, edited by Sheila Jasanoff, and featuring contributions by several former STS fellows, was published by MIT Press. The book explores the evolving relationship of biology, biotechnology, and law through a series of national and cross-national case studies. Sheila maps out the conceptual territory in an editorial introduction, after which the contributors offer “snapshots” of developments at the frontiers of biotechnology and the law. Chapters examine such topics as national cloning and xenotransplant policies; the politics of stem cell research in Britain, Germany, and Italy; DNA profiling and DNA databases in criminal law; clinical trials in India and the United States; the GM crop controversy in Britain; and precautionary policymaking in the European Union.

Sociotechnical Imaginaries Research Platform

This fall, the STS Program pioneered an innovative online research resource: the research platform on sociotechnical imaginaries. The platform draws together existing STS work, related secondary literature from other fields, and important primary sources—both textual and visual—to guide interested researchers in using a new theoretical concept developed by researchers at Harvard. This and subsequent platforms will provide a rich, interactive learning environment for students and scholars wishing to explore and use STS ideas in their research and writing. Our first research platform sets out a model architecture for conveying an abstract concept to future scholars using the exciting potential of the web to connect ideas, images, texts, and authors—bypassing traditional barriers of time and space.



Available at: <http://sts.hks.harvard.edu/research/platforms/imaginaries/>

Training & Curricular Activities

Secondary Field

Wanda Liebermann



In 2010, Harvard's Graduate School of Arts and Sciences approved a Secondary Field in Science, Technology and Society. Administered by the STS Program, the Secondary Field offers doctoral candidates from across Harvard's graduate programs the opportunity to deepen their understanding of science and technology in relation to other social institutions and processes. During the past academic year, the Secondary Field welcomed attracted students from widely diverse backgrounds: in law, public policy, design, engineering and applied sciences, biomedical engineering, anthropology. In addition to their coursework, STS Secondary Field candidates present their research in the STS Circle. For more information on the Secondary Field, please visit: sts.harvard.edu/field.

STS Circle

The fifth year of the STS Circle at Harvard showcased a wide range of research that engages with Science and Technology Studies in the Cambridge community and beyond. Presenters included Christophe Bonneuil (Visiting Scholar from France), William Hurlbut (medical researcher and bioethics expert at Stanford), and Eddie Haam, the first student to complete the requirements of the new STS Secondary Field.

Milestones

Regula Valérie Burri was appointed Full Professor in STS at Hafen City University Hamburg in the fall of 2010. In spring 2011, she became the director of HCU's General Studies program.

Iris Eisenberger received the 2011 prize of the Viennese Chamber of Commerce (Wirtschaftskammerpreis 2011) for her work on regulatory issues concerning cyber-sit-ins, flashmobs and smartmobs, and negative campaigning in web 2.0.

STS Program Director, **Sheila Jasanoff**, was named the 2010-2011 Sarton Chair of History of Science at the University of Ghent, Belgium. As the first Harvard scholar to receive this honor, Professor Jasanoff delivered two lectures in Ghent on October 27-28, 2011.

Christopher Jones, 2009-2011 Ziff Environmental and STS fellow at Harvard, received the 2011 Joel A. Tarr Envirotech Article Prize for his article, "A Landscape of Energy Abundance: Anthracite Coal Canals and the Roots of American Fossil Fuel Dependence, 1820-1860" (*Environmental History*, 2010).

Brice Laurent defended his dissertation on democratic experiments with nanotechnology at the Center for the Sociology of Innovation, Ecole des Mines, Paris in December 2011. Brice will take up a new position as research director at CSI

Shobita Parthasarathy, Associate Professor of Public Policy, was promoted to tenure at the Gerald R. Ford School of Public Policy at the University of Michigan.

Fellows News

Margaret Curnutte

completed her dissertation at the European School for Molecular Medicine at the University of Milan and joined the STS Program as a postdoctoral fellow working on the NSF-funded project, *Life in the Gray Zone: Governance of New Biology in Europe and the United States*

Current STS and Whitehead Institute fellow, **Kris Saha**, and former STS postdoctoral fellow, **Ben Hurlbut**, published an article in *Nature* on "Research ethics: Treat donors as partners in biobank research."

New Fellows

Henri Boullier

Ph.D. candidate in Sociology, LATTS/Universite Paris-Est and IFRIS

Emma Frow

NSF Postdoctoral Fellow, *Life in the Gray Zone: Governance of New Biology in Europe and the United States*; and Lecturer, University of Edinburgh

Mads Dahl Gjefsen

Ph.D. candidate in STS, Centre for Technology, Innovation and Culture at the University of Oslo

Gouk Tae Kim

Ph.D. candidate in Science, Technology and Society, Virginia Tech

Michelle Olsgard Stewart

Ph.D. candidate in Geography, University of Colorado, Boulder

Lee Vinsel

Postdoctoral Fellow, Program on Science, Technology and Society, and the School of Engineering and Applied Sciences