

STS Matter(s)



Program in Science,
Technology & Society
University of Michigan



The Nid d'Abeille Housing Project, Casablanca. © Daniel Williford

Welcome to one of Michigan's most dynamic interdisciplinary communities, the Program in Science, Technology, and Society!

In this edition of STS Matter(s), you will find us studying everything from Moroccan concrete to Japanese robots to the status of knowledge in the "post-truth" era of Donald Trump. STS scholarship has always broken down traditional ideas about knowledge and expertise and Shobita Parthasarathy's feature essay points out how our students and faculty can build toward a "more nuanced understanding" of facts and politics.

Our STS doctoral certificate program continues to thrive, bringing in students from Communication Studies, History, Anthropology, the School of Information, Social Work, Sociology, the Medical School and beyond. This issue profiles recent STS doctoral alums Dan Hirschman, now teaching sociology at Brown University, and Davide Orsini who teaches history at Mississippi State University. Our undergraduate minor also continues to draw students from all across the campus.

We welcomed new faculty to the STS program since our last newsletter, among them Scott Stonington (Anthropology) and Melissa Creary (Health Management and Policy). A number of STS faculty books have come out, including one on human-robot coexistence in Japan, the Cold War view of the vulnerable blue marble of Earth seen from space, and vaccine injury compensation arbitrated through a special U.S. court. Our popular and well-attended colloquium speaker series featured a wide array of scholars from our own campus and around the U.S.

None of this would be possible without our wonderful faculty, graduate student volunteers, and staff, who keep this community thriving. Please feel free to email Terre Fisher (telf@umich.edu) to be added to our email list so you can learn about all our exciting events.

Anna Kirkland, Director



New Faculty Spotlight



Melissa Creary is Assistant Professor in the Department of Health Management and Policy in the School of Public Health. Her research and teaching interests broadly include how science, culture, and policy intersect. She investigates how national policy for Sickle Cell Disease is influenced by race and other notions of belonging. Her research also interrogates how inclusion and knowledge production are at odds with structural barriers. In her most recent project, she analyzes how equity-based scientific and public health policies are incongruent to the very justice that they are trying to achieve.



The Role of STS in a Post-Truth Era

Doubling Down on the Politics of Knowledge

Shobita Parthasarathy, Ford School of Public Policy



The 2016 election has precipitated introspection among some science and technology studies (STS) scholars. Has the field's focus on the social construction of knowledge helped to legitimate fake news and usher in a post-truth era? What are the responsibilities of STS scholars, and should the field change its preoccupations in light of this crisis of facts and expertise?

I suggest that these concerns are misplaced. Rather, I argue that STS has unique insights that can help us navigate the knowledge politics of the 21st century, and we need to double-down on the field's founding principles and perspectives.

In particular, we must remember that our understandings of policy-relevant knowledge and expertise are historically, socially, and politically constructed. STS scholars have demonstrated, for example, how the United States has a long history of emphasizing quantitative knowledge and procedural objectivity in

bureaucratic decisionmaking (Ezrahi 1990; Jasanoff 1990; Porter 1996). This dramatically limits the kinds of knowledge and expertise considered by policymakers at all levels. In recent decades, civil society activists have challenged this narrow approach in a variety of domains—from environmental justice to the patent system—exposing how our approaches to relevant knowledge and expertise invariably privilege a handful of elite perspectives (Parthasarathy 2010; 2017).

When placed in the context of this history, current discussions about “truth decay”—as a recent RAND report playfully put it—should appear suspect. What assumptions about truth and objectivity, relevant knowledge and expertise, and values are embedded in the current truth panic? Which interests are at risk, and which may have a newfound voice? Why hasn't the historical exclusion of lay knowledge, especially from marginalized communities, provoked such a truth panic previously?

STS scholars are particularly well-positioned to answer these questions, by bringing our theoretical frameworks together with careful empirical research on the current politics of science and technology policymaking. By incorporating this kind of knowledge into the public discussion, perhaps we can engender a more nuanced understanding of the relationships between facts, values, and politics for a post-post truth era.

STeMS Speaker Series

We had an exciting round of talks this year, thanks to the efforts of Katie Berringer, Vicki Koski-Karell, Shobita Parthasarathy and Kentaro Toyama.

2017-2018 Schedule

October 2: "Representations as Material Forms: Developing a Materialist Perspective on Digital Information." Paul Dourish, UC Irvine.

November 13: "Satisfied Callers: Police and Corporate Customer Service Technology in India." Matthew Hull, U-M Anthropology.

December 11: "Dissonant Infrastructures: Tensions between Science and Public Health Embedded in Sickle Cell Disease in Salvador, Bahia, Brazil." Melissa Creary, U-M School of Public Health.

January 29: "The Matter of Black Lives: Hauntology, Infrastructure, and the Necropolitics of History in the American South." Erica James, MIT.

February 12: "Translating the Cell Biology of Aging? On the Importance of Choreographic Knowledge." Tiago Moreira, Durham University, UK.

February 19: "Indigenous Climate Change Studies and Justice: Indigenizing Futures, Decolonizing the Anthropocene." Kyle Whyte, Michigan State University.

March 12: "Postcolonial Bodies: Tales from an "Other" Enlightenment." Banu Subramaniam, University of Massachusetts, Amherst.

March 26: "Bureaucratic epistemes and regulatory disputes: Genetically Modified crops between science and legal-administration. Aniket Aga, U-M School for Environment and Sustainability.

April 9: "Credibility Struggles in Times of Tectonic Upheaval: Rethinking Civic Epistemologies around Indian Nuclear Power Politics." Monamie Bhadra, Ohio State University.



Graduate Studies

Fourteen Months in Morocco Daniel Williford



© Daniel Williford

I recently returned from fieldwork in Morocco and France where I carried out dissertation research on the politics and materiality of housing under the French Protectorate and in post-independence Morocco.

For months, I was in and out of state ministries—trying to piece together a fragmentary archive for thinking about colonial urban materialities, the forms of expertise deployed to manage them, and their afterlives in the decades following Morocco’s independence in 1956.

Outside the archive, I followed cement plant workers, architectural preservationists, geologists, and

former officials. These different communities of practitioners have their own distinct ways of relating to the urban environment. Their engagements with the pipes, paints, stones and concrete slabs of the colonial past reflect differing investments in contemporary political life in Morocco.

While completing the archival and oral portions of my research, I engaged with a handful of urban associations in Casablanca, where residents enlist historical memory and mobilize scholarly work to articulate their own claims to knowledge and ownership of the city.

Spotlight: New Faculty



Scott Stonington is Assistant Professor of Anthropology, International Studies and Internal Medicine. His research addresses the globalization of medical technology and expertise. His first project explored the “spirit ambulance” in Thailand: a rush to get elders to hospitals to pay back “debts of life,” followed by a rush to orchestrate final breaths at home. His second project addresses the fraught ethics of pain management in Thailand, from drug wars to pain as a spiritual path to global ambivalence about opioids. Dr. Stonington is also a practicing hospital and primary care physician, who studies how health practitioners decide what constitutes true and/or useful knowledge.

Thinking with Things

This reverse osmosis technology is used to produce safe drinking water at a small-scale water purification business in Mirebalais, Haiti. Also visible on the wall is an ultraviolet light apparatus. In the background, women bag 125 mL drinking-water pouches to sell to secondary vendors.

Vicky Koski-Karell, MD/PhD
Student, Anthropology & STS



© Victoria Koski-Karell

Recommendations From the Graduate Student Bookshelf Padma Chirumamilla

The STS Rackham Interdisciplinary Workshop hosted several reading groups to discuss new books of interest. This year, the focus was on works that tackled history and technology outside the United States and Western Europe.

In the fall semester, we read Tiago Saraiva’s *Fascist Pigs: Technoscientific Organisms and the History of Fascism* and Allison Truitt’s *Dreaming of Money in Ho Chi Minh City*. Continuing the focus on non-Anglo American and European history and

technology, the workshop additionally read works that engage with Indigenous studies, including Karin Amimoto Ingersoll’s *Waves of Knowing: A Seascape Epistemology*, Benjamin Peters’ *How Not to Network a Nation: The Uneasy History of the Soviet Internet*, Andrew J. Jolivet’s *Indian Blood: HIV and Colonial Trauma in San Francisco’s Two-Spirit Community*, and Alex Nading’s *Mosquito Trails: Ecology, Health and the Politics of Entanglement*.



Undergraduate Studies

A Philosopher's take on STS: Myka Yamasaki



Myka is a junior majoring in Philosophy and minoring in STS. STS courses have reinforced her understanding that nothing about science and technology is

unrelated to cultural, social, and political processes. From teaching her about issues, such as how racial biases can affect patient outcomes to how public infrastructure can intentionally or unintentionally exclude certain groups of people, STS has illuminated the world as a site for critical engagement.

This application of critical analysis onto the real world has not only enhanced her philosophical skills but has encouraged her to look beyond what meets the eye. She hopes to attend law school after graduation and aspires to pursue an interdisciplinary career related to medicine and healthcare policy.

The STS Minor

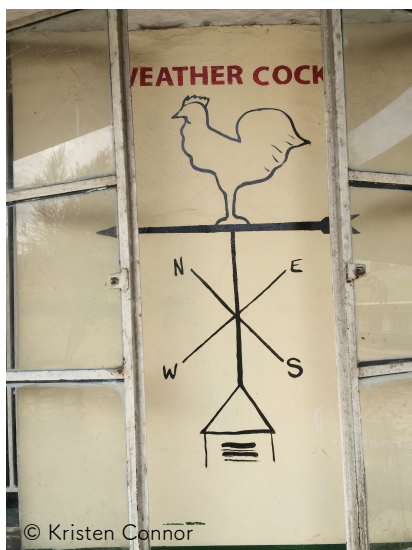
The STS minor is open to all University of Michigan undergraduates, regardless of prerequisites or major. Please email sts.minor.advisor@umich.edu or umsts@umich.edu for more information.



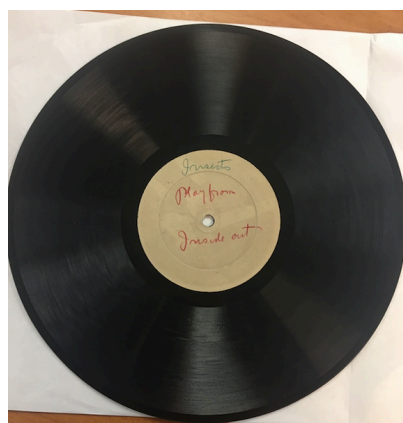
Perrin Selcer, Director of Undergraduate Studies

Object Lessons: Oh the joys of archival research!

A weathervane painted on a classroom wall in Fort Portal, Uganda. PhD and STS student **Kristen Connor** stumbled upon these murals while conducting research on the history and politics of meteorology and weather knowledge in Uganda.



© Kristen Connor



© Kathryn Wataha

While conducting research for her dissertation at the American Museum of Natural History in Washington, D.C., MD/PhD candidate and STS graduate student **Katie Wataha** came across shellac records of "insect sounds" in the papers of Frank E. Lutz, American entomologist.

Congratulations, Sivanthy!



Sivanthy Visanthan will graduate in Spring '18 with a degree in Sociology and History of Art. She pursued the STS minor ("Medicine & Society") track because of her passion for activism and health. During this time she took classes in medical history and sociology, and is now writing an honors thesis examining why the United Nations selectively labels instances of ethnic violence genocide. She will attend Columbia University in the Fall to study Sociomedical Sciences at the Mailman School of Public Health.



From PhDs to Professors: Alum Updates

Daive Orsini, Mississippi State University



Davide is currently revising his book manuscript titled *Life in the Nuclear Archipelago: Cold War Technopolitics and US Nuclear Submarines in Italy*.

He is also launching two new projects. The first is a comparative study of nuclear decommissioning in Europe and in the US. In addition he is co-organizing an international workshop on the post-industrial environmental history of the Mediterranean, which will take place in October 2018 in France.

Since August 2016 Davide has been working as an Assistant Professor in the History Department at Mississippi State University, where he teaches courses on STS, the history of technology, European history, and the global Cold War.

His most urgent scholarly interest is re-introducing the study of ideology within the STS tradition. Gramsci's "commons sense" and Peirce's semiotic theory suggest ways to analyze the tensions between science and democracy, and the question of climate change denial.

Dan Hirschman, Brown University



Dan Hirschman is now an Assistant Professor of Sociology at Brown University. He is writing a book on the political power of quantitative description that owes its origins to his STS training at Michigan.

Most research on the influence of social scientific expertise focuses on grand explanatory theories (like

Keynesianism or neoliberalism), while contemporary debates foreground social scientists' claims to identify causal estimates of policies or events (as in the rise of randomized control trials). What role do quantitative descriptions play in these debates?

Dan's book, tentatively titled *Unequal Knowledge: The Stylized Facts of Inequality*, focuses on the history of three measurements of inequality: the gender pay gap, the racial wealth gap, and the rise of the "1%". The book will trace how social scientists chose to study inequality in these particular ways, and how these measurements circulated, knitting together political conversations and academic research in unexpected ways.

Robyn d'Avignon New York University



Robyn d'Avignon is Assistant Professor of History at NYU where she teaches courses on African history, nature and technology, and the ties between NYC and West Africa. She is currently writing a book on the politics of exploration geology in colonial and post-colonial West Africa, titled *Shadow Geology: The Search for Subterranean Knowledge in West Africa*.

Anthropologists and geographers have historically theorized state and corporate territory in two-dimensions, on an aerial plane. But how is political control produced through mapping and modeling the underground? This question remains largely unexplored in Africa, where the state's capacity to conduct geological research has been limited and dependent on expatriate expertise. Yet, Africa is home to deep regional traditions of mineral prospecting and mining. Through an extended case study of gold prospecting in several West African states, Robyn argues that competing knowledge claims about the underground animate the politics of resource extraction in Africa.

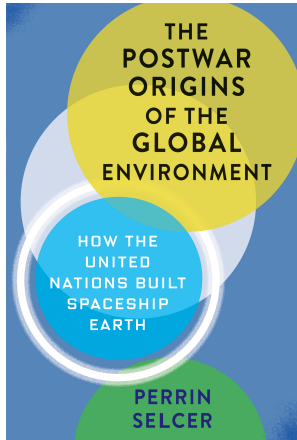
During the 2018-2019 academic year Robyn will be a fellow at the Hutchins Center for African and African American Studies at Harvard.



New Books from STS Faculty

The Launching of Spaceship Earth

Perrin Selcer



In the wake of the WWII internationalists identified science as the cause of and solution to world crisis. Unless civilization learned to control the unprecedented powers science had unleashed, global catastrophe would be imminent.

But hope could be found in world government. In *The Postwar Origins of the Global Environment: How the United Nations Built Spaceship Earth*, Perrin Selcer argues that the metaphor “Spaceship Earth”—the idea of the planet as a single interconnected system—exemplifies this moment.

Selcer tells how the United Nations built the international knowledge infrastructure that made the global-scale environment visible. Experts affiliated with UN agencies helped make “the global” as an object in need of governance.

Selcer traces how UN programs fell short of utopian ambitions to cultivate world citizens but did produce an international community of experts with influential connections to national governments.

He shows how events and personalities, cultures and ecologies, bureaucracies and ideologies, decolonization and the Cold War interacted to make global knowledge.

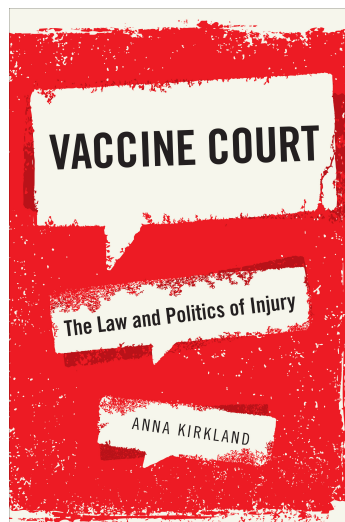
The Vexed Politics of Vaccines in the USA

Anna Kirkland

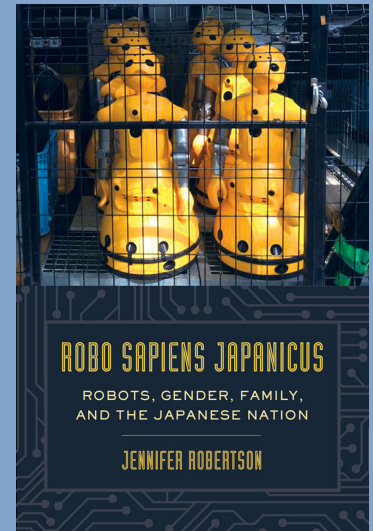
In *Vaccine Court*, Anna Kirkland examines the special court established under the United States Court of Federal Claims that handles claims of harm caused vaccines.

Drawing on court records, the book explores how legal institutions resolve complex scientific questions: What are vaccine injuries and how do we recognize them? What does it mean to transform these questions into a legal problem and funnel them through a national court, as we do in the U.S.? What does justice require for vaccine injury claims, and how can we deliver it? These are highly contested questions, and the terms in which they have been debated over the last forty years reveal deep fissures in our society over motherhood, community, health, harm, and trust in authority.

While many scholars have argued it is foolish to let judges and lawyers decide medical claims, Kirkland shows how well legal institutions can handle specialized scientific matters. *Vaccine Court* is an accessible and thorough account of what the court is, why we have it, and what it does.



Imagining Robots Jennifer Robertson



Japan is arguably the first post-industrial society to embrace the prospect of human-robot coexistence. Over the past decade, Japanese humanoid robots designed for use in homes, hospitals, offices, and schools have been celebrated in mass and social media throughout the world.

In *Robo sapiens japonicus: Robots, Gender, Family, and the Japanese Nation*, Jennifer Robertson casts a critical eye on press releases and public relations videos that misrepresent robots as being as versatile and agile as their science-fiction counterparts.

An ethnography and sociocultural history of governmental and academic discourse around human-robot relations in Japan, this book explores how actual robots—humanoids, androids, and animaloids—are “imagineered” in ways that reinforce the conventional sex/gender system and political-economic status quo. In addition, Robertson interrogates the notion of human exceptionalism as she considers whether “civil rights” should be granted to robots.