

INSTITUTE FOR THE SOCIAL SCIENCES WORKSHOP

KNOWLEDGE IN CONTENTION:

SOCIAL MOVEMENTS & THE POLITICS OF SCIENCE

October 4-6, 2007

423 ILR Conference Center, Cornell University, Ithaca, NY

ABSTRACTS & BIOGRAPHIES

Friday, October 5, 2007 (423 & 429 ILR Conference Center)

9:00 – 10:30 Session 2: Scientists and Movements

Chair: [Ken Roberts](#) (Government, Cornell)

“Risk Communication in Software Engineering: From ‘Activism’ to ‘Professional Responsibility,’”
[Rebecca Slayton](#) (Science, Technology & Society, Stanford)

How does a technical field assess and communicate objectively about risks associated with its work? What distinguishes “professional responsibility,” traditionally an attempt to *establish* expert authority and credibility, from *counter-establishment* notions of “activism”? This talk examines these questions by showing how the contentious field of “software engineering” historically emerged and evolved in response to public concerns about software risks. I argue that software experts’ perceptions of risk have been strongly shaped by ideological commitments to technical progress, and that this has led them to minimize risks of catastrophic software failures. However, software experts have become more willing to communicate about the limits of technical progress as they have gained a sense of professional establishment. More broadly, these findings suggest that while risk communication is strongly shaped by professional vocation and a selective historical memory, socio-political crises may prompt experts to push beyond established boundaries of professional risk and responsibility, and re-evaluate the risks associated with their work.

Rebecca Slayton is a lecturer and researcher in Science, Technology, and Society at Stanford University. She earned her doctorate in chemistry at Harvard in 2002, before retooling as a postdoctoral fellow in MIT’s Science, Technology, and Society Program. Her research focuses upon public constructions of science, technology, and international security. She is writing a book about how science and engineering disciplines have shaped expert advising and debate on missile defense in the United States.

“Where Did All the Trans Fats Come From? The Unintended Consequences of Science-based Social Movements,” [David Schleifer](#) (Sociology, New York University)

This presentation will examine how a changing state of knowledge creates the risk of unintended consequences for social movements that justify their goals based on scientific facts. My research indicates that the Center for Science in the Public Interest (CSPI) was among the organizations that pressured the food industry to eliminate saturated fats in the late 1980s and early 1990s. Trans fats were already useful to the food industry because they offered certain functional advantages to manufacturers, but CSPI was among the organizations that made trans fats even more useful to industry by helping to frame them as a healthy solution to the perceived problem of saturated fat. A few researchers had long suspected trans fats of posing certain health risks, but a high-profile study in 1994 indicated that trans fats could be even riskier than saturated fats.

CSPI subsequently petitioned FDA to mandate federal labeling of trans fats. As Diane Vaughan writes, decisions made under conditions of uncertainty may result in retrospective designations of irrationality. Science, particularly nutritional science, may be an especially shaky ground on which to base organizational agendas because anomalies, refinements, revision and dissent are normal parts of how scientific communities make knowledge. What might be the implications of this story for other science-

based social movements if campaigns undertaken under conditions of uncertainty can create ripple effects resulting in the amplification of risks rather than their attenuation?

David Schleifer is a Ph.D. Candidate in Sociology at New York University. By examining how industries coordinated their response to trans fat regulation, his dissertation sheds light on the social life of risk, corporate science, and the American food system.

**“Treatment Activism in South Africa: Contestations Over Liberal Rights, Drugs, and Babies,”
Manjari Mahajan (Science & Technology Studies, Cornell)**

This paper will discuss a non-governmental organization called the Treatment Action Campaign (TAC). The TAC is the most prominent civil society group working on AIDS in South Africa. The organization’s goal is to increase access to AIDS treatment for South African people living with HIV. This paper will examine the intimate relationship between the TAC’s political demands and its epistemic commitments. It will argue that the group’s rights-agenda carries with it explicit and implicit visions of what is science, what should be its boundaries, who should qualify as scientific experts, and what the role of scientific experts should be in democratic decision-making. The paper will further argue that TAC’s activism, with its tight coupling of epistemic and political commitments, is undergirding the emergence of new norms for authorizing public knowledge in post-apartheid South Africa.

Manjari Mahajan is a Ph.D. candidate in Cornell University’s Department of Science and Technology Studies. Her dissertation, titled “The Globalization of Disease: Science, Nationalism and Global Norms in the AIDS Epidemics of South Africa and India,” focuses on the politics of AIDS in South Africa and India. The dissertation examines the relationship between scientific knowledge and democratic politics, under conditions of humanitarian emergency. Ms. Mahajan has a Masters in Science Policy from SPRU, Sussex University and a Bachelors degree from Harvard University.

Discussant: [Stephen Hilgartner](#) (Science & Technology Studies, Cornell)

11:00 – 12:15 Session 3: Claiming and Contesting Expertise

Chair: [Janice Thies](#) (Crop and Soil Sciences, Cornell)

**“Think Tanks in America: Four Avenues of Theory and their Connections,” [Tom Medvetz](#)
(Institute for the Social Sciences, Cornell)**

This brief paper outlines a dissertation-length study of the history and present-day effects of American public policy research centers, or “think tanks.” I delineate four “faces” of the think tank as a way of explicating the study’s distinct but overlapping themes. They are: (1) the think tank as a barometer of the political role of American intellectuals; (2) the think tank as a window onto the U.S. field of power; (3) the think tank as a spotlight on recent American political history; and, (4) the think tank as paradoxical soil of American anti-intellectualism. I argue that the study of think tanks simultaneously revives and advances the paralyzed debate about the status of the public intellectual in the U.S.; it points to the emergence of a new social actor, the “policy expert”; it offers an empirical entryway into the complex relations among American elites; it suggests a reinterpretation of the rise of the right in American politics since the 1960s; and it helps to regionalize and ground the otherwise diffuse study of American anti-intellectualism. In an effort to distill the study’s major contributions, I close by examining the points of connection and difference among these themes.

Tom Medvetz studies political sociology and the sociology of knowledge and intellectuals. He obtained his Ph.D. from the University of California, Berkeley in 2007. Currently he is a postdoctoral associate at the Institute for the Social Sciences at Cornell University. Beginning in Fall 2008, Medvetz will be an Assistant Professor in the Department of Sociology at the University of California, San Diego.

“Citizen Science and Environmental Quality: Community Empowerment through Information,”
[Brian Mayer](#) (Sociology, University of Florida)

Industrial polluters in the United States release enough hazardous pollution into the air as a by-product from manufacturing processes to place 90 million Americans in “non-attainment” areas, or areas where levels of pollution are higher than the Clean Air Act. Lack of site-specific information hampers individuals’ and community organizations’ ability to understand the risks they face from industrial activity. This asymmetry in information between firms and communities decreases the likelihood of social mobilization and limits communities’ ability to motivate stricter enforcement. Social movement theory has paid insufficient attention to the important role of information generated through citizen science and the effect that information asymmetry has on social movements’ framing of environmental problems, the mobilization of resources, and the development of critical movement alliances. This research project examines when and how citizen-based air monitoring and information diffusion campaigns are successful in influencing corporate and state actors to reduce hazardous levels of air pollution.

Dr. Brian Mayer is an Assistant Professor of Sociology at the University of Florida. In addition to his research and teaching in environmental sociology, Dr. Mayer is also an affiliate professor of Environmental Health at the School of Public Health and Health Professions and at the School of Natural Resources and Environment. His research interests include the political and scientific contestations over possible environmental causes of disease and industry’s approach to safety and security post-9/11.

Discussant: [Park Doing](#) (Bovay Program in Engineering Ethics, Cornell)

1:30 – 3:30 Session 4: Knowledge, Identity, and the Politics of Representation

Chair: [Becky Givan](#) (Collective Bargaining, Cornell)

“Politics of Elicitation: Contention and Public Deliberation in Techoscientific Disputes,” [Javier Lezaun](#) (Law and Science, Amherst College)

Governments regularly incorporate stakeholders and publics into the policy-making process in an attempt to preempt contentious opposition to science and technology. In some cases, deliberation and public consultations overlap with the complete trajectory of novel science and technology, from the inception of research agendas to the assessment of new technologies and the evaluation of regulatory frameworks. This often shifts the locus of contention to the very settings where government-sponsored public participation takes place. The “politics of elicitation” – the creation and contestation of authoritative knowledge about the public on the basis of the opinions extracted from it in official deliberation exercises– occupy then center stage. The paper reviews several examples from contemporary techoscientific disputes – consultations with critics of mobile telephones, GM crops and nanotechnology in Europe; the role of patients and research subjects in human gene therapy trials in the United States – and interprets the “technical” and “managerial” problems typically encountered by the sponsors and organizers of these exercises as veiled expression of their contentious politics.

Javier Lezaun is visiting assistant professor in the Department of Law, Jurisprudence and Social Thought, Amherst College, and a research associate at the Centre for Analysis of Risk and Regulation, London School of Economics. He obtained a PhD from Cornell University (Science and Technology Studies) with a dissertation on the opposition to genetically modified foods in Europe. This presentation draws on two recent publications: “A Market of Opinions: The Political Epistemology of Focus Groups,” in Michel Callon, Muniesa, Millo (eds.) *Market Devices* (Blackwell’s Sociological Monographs Series, 2007), and (with Linda Soneryd) “Consulting citizens: technologies of elicitation and the mobility of publics,” in *Public Understanding of Science*, Vol. 16, No. 3, 2007.

“AIDS and Postcolonial Politics: Acting Up on Science and Immigration in France,” [Michael Bosia](#) (Political Science, Saint Michael's College)

Outrage and shock have been characteristic tactics of the AIDS movement. Focusing on the dispute over two research trials – among sex workers in Cameroon and Cambodia, and among people with HIV in Uganda – I will situate the competing claims over “science” and “politics” within a domestic politics reaching out globally, focusing on the accusation that Act Up Paris practices pseudoscience. To suggest the contours of these tensions, I turn to another intervention Act Up Paris has made in global politics: the response to a policy of automatic expulsion of undocumented immigrants carried out by French governments of the left and the right, including the distribution of a poster equating then Interior Minister (now President) Nicolas Sarkozy with the National Front. How does an association founded and dominated by gay men, organized to combat HIV/AIDS, at the same moment join in campaigns about the right of residence for the poor and get attacked as pseudoscientists by globally situated activists? Act Up Paris has been a key member of an emerging coalition on the left in France combining the rights of immigrants with the fight against neoliberal globalization as part of a universalist agenda imbedded in French politics. I argue that global activists situate themselves simultaneously in “macroclimates” of power represented by a global regime that fuses the state, market capitalism, and some activists, and in “microclimates” of national events and local experience where they respond to the very real and present forms of power – through which the neocolonial regime acts directly on the marginalized.

Michael Bosia, assistant professor of comparative politics at Saint Michael's College, first addressed AIDS working for the California State Senate in the 1980s. A Fulbright and Yarrington fellow, he earned his Ph.D. from Northwestern in 2005, focusing attention on how Act Up Paris as a domestic and global actor contests power through politics, criminal law, and science. Bosia's work has been published in two edited volumes and *French Politics, New Political Science*, and *Perspectives on Politics*.

“‘Innocent Citizens,’ ‘Spokespersons,’ and ‘Lay-experts’: Constructing Publics and Their Knowledges in Public Engagement Exercises,” [Ulrike Felt](#) (Social Studies of Science, University of Vienna)

Over the past years, public participation in issues of science and technology has become a much discussed issue. In this presentation I will draw on the data from a recent project in the framework of which we brought together a group of genome researchers and lay-participants from a broad variety of backgrounds in order to discuss the implications of their research on the social and ethical level. Concretely they met seven full days over a period of nine months in order to identify major issues at stake and elaborate their respective perspectives. In this presentation I will reflect on the processes of interaction between scientists and lay-people. In particular I will elaborate on the one hand on the diverse roles and functions imagined by/attribution to the participants. On the other hand roles and functions were generally linked to specific forms of knowledge which certain actors (are supposed to) hold. Therefore I will identify the knowledges engaged and their articulations towards each other in the effort of making sense of the biomedical developments at stake.

Ulrike Felt is Professor of Social Studies of Science and head of the STS department, University of Vienna. Trained as a physicist, she moved into STS in the early 1980s. Her research interests and publications cover science communication, public engagement and governance, ELSA issues and topics in knowledge politics. She has held numerous visiting professorships, has been a member of diverse policy advisory boards of the European Union, and was editor of *Science, Technology, & Human Values* (2002-2007).

4:00 – 5:30 *Session 5: Discussion of Future Research Agendas (part 1)*

Chair: [Stephen Hilgartner](#) (Science & Technology Studies, Cornell)

Presenters: [Stephen Hilgartner](#), [Paul Robbins](#), [David Schleifer](#), [Brian Mayer](#), [Andrew Jamison](#), and [Javier Lezaun](#). Each presenter will be given 3 minutes to summarize his or her pre-circulated future-oriented statement. Open discussion will follow.

Saturday, October 6, 2007 (423 & 429 ILR Conference Center)

9:00 – 10:30 Session 6: Discussion of Future Research Agendas (part 2)

Chair: [Ron Herring](#) (Government, Cornell)

Presenters: [Ron Herring](#), [Rebecca Slayton](#), [Ulrike Felt](#), [Michael Bosia](#), [David Kneas](#), [Tom Medvetz](#), [Manjari Mahajan](#). *Each presenter will be given 3 minutes to summarize his or her pre-circulated future-oriented statement and to identify research opportunities. Open discussion will follow.*

11:00 – 12:00 Session 7: Local Knowledge, State Knowledge, and Development

Chair: [Steven Wolf](#) (Natural Resources, Cornell)

“Contingency, Legibility, Complexity: The Contradictions of Indian Wildlife Conservation,” [Paul Robbins](#) (Geography & Regional Development, University of Arizona)

This presentation reviews the problem of wildlife conservation policy in India as promulgated by the “central empowered committee” of the Indian Supreme Court. The paper reviews 1) the sources and mechanisms of renewed efforts at “fortress” conservation, 2) the necessary simplifications required to achieve legal hegemony, and 3) the resulting chaotic and contingent ecological results that ensue at a case study conservation site in the Aravalli Hills dedicated to preserving wolves and panthers. The results suggest that the simplifications required for uncontested environmental policy disguise both the contingency of pre-existing conditions and the complexity of its results. Specifically problematic is the political ease with which one form of inductive analytical simplification (pattern/process simplification) can be translated into another deductive form (legible simplification), which makes contingency both an unacknowledged driver and an overlooked product of state/science interactions. Indian state conservation of rare endemic wildlife will continue to promulgate only unintended, and often undesirable, consequences where state/science interactions are not more fully politicized.

Paul Robbins is Professor in the Department of Geography and Regional Development at the University of Arizona. He and his students examine human environmental practices and knowledges, the influence of non-humans on political behavior and organization, and the implications these hold for ecosystem health, local community, and social justice. Past projects have examined lawn chemical use in the US, elk management in Montana, mosquito management in the Southwest, and wolf conservation in India.

“The Post-Equilibrium Shift: Social Science Perspectives on the Practices and Theories of Ecology and Environmental Policy,” [David Kneas](#) (Forestry & Environmental Studies, Yale University)

Recent scholarship has highlighted a significant lag between ecological theory and environmental policy and politics. While ecological theory is now directed by notions of non-equilibrium (disturbance, variability, non-linear change) environmental policy and environmentalism as a whole remain largely wedded to principles of equilibrium (“balance of nature,” homeostasis, internal order). To understand the politics of this lag, why equilibrium ideas persist, this paper examines the policies and practices of Environmental Impact Assessments (EIAs). EIAs are a particularly helpful point of analysis as they are designed to be expert (i.e. scientific, rational, objective) pronouncements about the environmental impacts of development, and more broadly as mediators between society and environment. A ubiquitous feature of environmental policy around the world, EIAs are based on and help maintain notions of equilibrium – a case in which expertise is out of line with scientific theory. EIAs are also actively contested. In conflicts over resource extraction and industrial production they often take on central roles, their legitimacy questioned or praised. As this contestation rarely turns on the assumed notions of equilibrium – though I am interested in the contexts in which it might – analyzing the politics of EIAs is constructive in considering the dynamics of the lag between non-equilibrium ecology and equilibrium based environmentalism.

David Kneas is a 2nd year Ph.D. student at Yale University, in a combined program between the School of Forestry & Environmental Studies and the Department of Anthropology. Part of his research is studying the dynamics of a conflict around a proposed copper mine in northwestern Ecuador. He is also researching the history of geological mapping in Ecuador, the role it plays in state-formation, and the way geological maps recapitulate old myths in contemporary practices of mining investment.

Discussant: [Susan Spronk](#) (International and Comparative Labor & ISS, Cornell)

1:00 – 3:00 Session 8: Contending Approaches to Knowledge in the Genetic Engineering Debate

Chair: [Michael Lynch](#) (Science & Technology Studies, Cornell)

Film: [Bullshit](#) (first 37 min.)

“Vandana Shiva: The Hybrid Imagination in Action,” [Andrew Jamison](#) (Development & Planning, Aalborg University)

Vandana Shiva, who won the Alternative Nobel Prize, or Right Livelihood award in 1993, is perhaps best known internationally for her opposition to genetically modified organisms, or GMOs. A Western educated physicist, Shiva became involved in the environmental movement in India in the late 1970s while doing research on the relations between science, technology and society. In the course of the 1980s, she left the academic world and began to take more active part in various environmental protest activities. Since the publication of her book, *Staying Alive: Women, Ecology and Development*, in 1988, she has become one of the leading intellectuals in the international environmental movement, and has, in recent years, become one of the most visible and active spokespersons for the emerging global justice movement. Using a conceptual framework that I have developed with Ron Eyerman, and, more recently, with Mikael Hård, the paper will discuss Vandana Shiva’s “cognitive praxis” and the ways in which she has put into practice a “hybrid imagination,” by combining perspectives from, among other places, feminism, environmentalism and Indian philosophy into her own form of advocacy research. As an influential example of an engaged scientist, the case of Vandana Shiva raises important questions about the relations between science and social movements, and in particular, the kinds of intellectual activities, or knowledge making that goes on in the contemporary world of environmental activism.

Andrew Jamison received a doctorate in theory of science from the University of Gothenburg in 1983. Since 1996, he has been professor of technology, environment and society at Aalborg University in Denmark. He is the author of *The Making of Green Knowledge* (2001); co-author, with Ron Eyerman, of *Social Movements. A Cognitive Approach* (1991), *Seeds of the Sixties* (1994) and *Music and Social Movements* (1998), and, most recently, with Mikael Hård, of *Hubris and Hybrids: A Cultural History of Technology and Science* (2005).

“Dead Sheep in Andhra: The Suicide-Seed Coalition, Brokers and Authenticity Rents,” [Ron Herring](#) (Government, Cornell)

The relationship between transgenic agricultural crops and poverty has created a global rift. Proponents and opponents of biotechnology both claim poverty effects, but with radically divergent conclusions. Some, but not all, questions in this debate should be amenable to empirical test; however, numbers from studies diverge in ways consistent with the interests of producers of numbers. Data then constitute social products, their relation to reality varying with the interests of producers and relations of production. Concretely, studies of India’s first transgenic crop -- Bt cotton -- come to diametrically opposed findings about yields, pesticide poisoning, profits and labor effects on poor farms. The official story—congruent with growing consensus in dominant international institutions -- is that transgenic seed technology is divisible, scale-neutral and thus profitable for farmers of all classes. The oppositional story portrays rural catastrophe – reaching

the characterization “genocidal” in one prominent critique characteristic of India’s suicide-seed coalition. Given lack of agreement on what science to trust, or how much science counts, one possible epistemological move is to indirect indicators: how do farmers behave? The methodological implication is to move beyond the numbers – of both state and civil society – through close investigation of mechanisms at the field level to assess plausibility of data claims and reasons for contradictory findings. Interpolating among indicators and field investigation, this essay concludes that there are both methodological and instrumental reasons for discrepancies in the numbers. As rapid farmer adoption of the technology became harder for social-movement opponents to explain, the characterization of threat added a new catastrophe: sheep poisoned by Bt cotton leaves. It is hypothesized that this escalation and transformation of the discourse reflects interests in authenticity rents available to local actors with the cultural capital to act as brokers in global social movements.

Ronald Herring is team co-leader for *Contentious Knowledge: Science, Social Science and Social Movements*, Cornell University’s Institute for the Social Sciences. Recently he has worked on interactions between economic development and ethnicity (*Carrots, Sticks and Ethnic Conflict: Rethinking Development Assistance* (University of Michigan Press, with Milton Esman); state property in nature; and politics of genetically engineered organisms [Editor, *Journal of Development Studies* Vol 43(1) 2007 and *Transgenics and the Poor: Biotechnology in Development Studies* (Oxford: Routledge)].

Discussant: [Kyoko Sato](#) (Institute for the Social Sciences, Cornell)

3:30 – 4:30 Session 9: Concluding Discussion

Chair: [Janice Thies](#) (Crop and Soil Sciences, Cornell)

“What have we learned? Next steps?”