SCIENCE, POWER AND POLITICS
IGA-513, History of Science 285a (Fall 2016)

This is a one-semester graduate seminar on the major contributions of the field of science and technology studies (STS) to understanding the relationships of science, technology, and political power in democratic societies. The seminar is devoted to reading, analyzing, and critically integrating works by scholars in STS and related fields who have addressed such topics as the nature of scientific authority, science’s relations with the state, science and democracy, scientific and technical controversies, and the politics of technology.

In this seminar, we explore how the modern state’s capacity to produce and use scientific knowledge and technologies influences, and is influenced by, the production and maintenance of political order. What does it mean, in short, that states today are “states of knowledge”? Beginning with classical models of science and politics, such as the “republic of science,” the syllabus develops an alternate framework that sees these two spheres of action not as cognitively and culturally distinct but as engaged in a constant process of exchange and mutual stabilization—or coproduction. To this end, the course combines theoretical ideas and empirical examples from STS, both historical and contemporary, with approaches from social and political theory. Particular attention is paid to the cultural resources used in the simultaneous production of scientific and political authority. These include technologies of visual representation, quantitative analysis, standardization, material stabilization, persuasion, and dispute resolution, as well as associated ideas of objectivity, rationality, credibility, legality, accountability, and reliability. Viewing power as immanent, the course takes special note of the techniques and discourses through which modern polities frame and manage their perceptions of the world while defining new issues for political action.

Readings
Articles and book chapters are available in pdf format at the course iSite.

Requirements
Students in IGA-513 are expected to write weekly reading responses and to lead class discussion approximately twice during the semester. Leading discussion involves preparing written notes and questions for class use and, depending on class size, may be done in collaboration with others responsible for a given session. Credit students are expected to complete a final written exercise in a form to be negotiated with the instructor by mid-November. All writing is expected to be the student’s own individual work and not done in collaboration. Auditors may attend with the instructor’s permission only if they participate actively and regularly in weekly sessions throughout the semester, including leading discussion; they are excused from the final written exercise.
SYLLABUS

August 31: Introduction and Overview

What does the field of Science and Technology Studies (STS) bring to the study of power, politics, and policy? How do the organization and materials of the course reflect perspectives from STS, and how do these relate to work in other social science fields? What major themes does the course develop, and what is expected from students? We introduce the idea of public reason, which forms a backbone of the course. Also, in-class self-introductions, explanations of people’s interest in the course—and questions about it.

Suggested:
The Chomsky-Foucault Debate [excerpt, part 1/2], http://www.youtube.com/watch?v=W9S1CiGPX2Q
Chomsky Disagrees, http://www.youtube.com/watch?v=dAqVBlI2mSc&NR=1

September 7: STS Analytic Frameworks – Contingency and Interpretive Flexibility

What does STS add to the analysis of power and authority? What is at stake in questioning “realist” views of scientific knowledge or technological systems? How have other disciplines tackled the theme of contingency (or context-dependence), and how can we relate those writings to STS work? How can artifacts and ideas be socially constructed and yet be seen as if they are not social? Put differently, how should we problematize stable demarcations in ideas and things, and how do our answers bear on the study of politics and power?


Strongly recommended:
Suggested:

September 14: Autonomy and Self-Governance

*Is science a distinct organizational form, a culture, an interest group, or a model political system? How do we know? Using what criteria? Can science be self-governing? Does our characterization of science matter to our characterizations of politics?*


Strongly recommended:

Suggested:

September 21: Constitutions of Modernity -- The Co-Production of Science and Politics

*How does the constitution of knowledge relate to political constitution-making and the constitution of nation states? How do modern states constitute themselves as knowledgeable and capable of deploying knowledge for public purposes? How do knowledge and knowledge-based technologies function to advance or impede the expression of democratic values?*


Video, NSA Whistleblower Edward Snowden: “I don’t want to live in a society that does these sorts of things,” http://www.youtube.com/watch?v=5yB3n9fu-rM.

Suggested:

September 28: Networks, Materiality, and Power

*How does materiality affect the exercise of power, and vice versa? What makes technological systems take the forms they take? How do machines and nonhumans interact with social actors? How should we think about the exercise of epistemic and technological power across borders, especially when we consider the interpretive flexibility of knowledge and its material forms?*

Y. Ezrahi, Descent of Icarus, Ch. 6 (“Machines and Images of Order”), pp. 149-166.
C. Thompson, “Co-Producing CITES and the African Elephant,” in Jasanoff, States of Knowledge, Ch. 4, pp. 67-86.

Suggested:

October 5: Constitutive Visions

*How does seeing influence the making of a communal political space and the legitimation of the rules that bind polities together? How does the interpretive flexibility of seeing get disciplined to make points of view that we consider “objective”? How are particular “witness” positions authorized? In other words, whose sight matters in the public domain?*

Shapin and Schaffer, *Leviathan*, Ch. 2 (“Seeing and Believing”), pp. 22-79.


Suggested:


October 12: The Politics of Numbers – Statistics and Indicators

*Quantification and calculation are considered by many to be the most powerful technologies for producing objectivity, and we rely on (ac)counting to establish the legitimacy of many kinds of political decisions. But how political are numbers? How do they mediate politics?*


Strongly recommended:

Suggested:


October 19: Science, State, and Markets

How do theories of capital reflect our notions of structure and agency? Is it useful to think of knowledge as a form of capital? Markets depend on calculation, but are there forms of capital that elude calculation? How do people acquire the power or the right to calculate for others?


Suggested:

October 26: Objectivity – The Display of Public Reason

Reason in public life does not consist merely of justifying official decisions with reference to pre-existing principles in designated political fora. Rather, reason results from active performances, enactments, and embodiments of agreed-upon forms of rationality in varied cultural domains, not all of which are recognizably “political.” What are some of the most prominent strategies for displaying public reason in contemporary political systems? How do they integrate knowledge with power?


B. Anderson, Imagined Communities, Ch. 10 (“Census, Map, Museum”), pp. 163-185.

Y. Ezrahi, Descent of Icarus, Ch. 3 (“Science and the Visual Culture of Liberal-Democratic Politics”), pp. 67-96.

**Suggested:**

**November 2: The Politics of Normalization**

*Many social arrangements and political decisions hinge on determinations of what counts as normal: in identity, behavior, social relationships. How are these normalizing moves made in society, where do standards of normality come from, and how do they reflect the institutionalization and exercise of power? How do ideas of normality relate to judgments concerning sameness and difference?*


**Recommended:**

**Suggested:**

**November 9: Discourses of Reason**

*Politics in complex societies is the art of living with irresolvable conflicts and irreducible uncertainties – cognitive, moral, social. How do polities make judgments that most citizens are willing to accept as binding, if not legitimate? What is the role of institutions? How do technical discourses (not just science but also law and ethics) reduce uncertainty in the political realm? Why do they sometimes fail?*

SPP Syllabus – p. 7


http://www.genderandsecurity.org/Cohn_Nuclear_Language.pdf


Suggested:


November 16: Publics and Citizens in the Knowledge State

*Who is the “demos” or the “public” that democracy seeks to serve? How has the advent of science and technology affected the ways in which we conceptualize and represent publics and citizens? How do publics emerge, and who gets to orchestrate their emergence? What opportunities exist for active intervention by citizens in the knowledge-making practices of modern states? How does political culture matter in the production of knowledgeable citizens?*


Suggested:


*** THANKSGIVING BREAK: NO CLASS NOVEMBER 23 ***
November 30: Revisiting Democracy through STS

Does STS push us to redefine the concept of representative democracy, and if so how? How can the voice(s) of the demos be adequately represented? What is the role of experts in relation to non-experts? Must the idea of politics be expanded to sites other than the nation state and even to actors other than individual humans? Which ones, and with what implications and consequences?


**Suggested:**

