Princeton University Department of Anthropology

SCIENCE, CULTURE, AND POWER

ANT 415 Mondays, 1:30-4:30 PM, Aaron Burr Hall 106 Spring 2001

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Course Description

Science, technology and medicine are at the center of the social, cultural and political changes that are reshaping our world. This seminar explores 1) how technoscientific and medical developments inform institutional structures, strategies of governance, practices of citizenship, and consolidate new patterns of social inclusion and exclusion in a globalized world; 2) how these developments affect cultural practices, social relations, and biological experiences in local contexts; 3) the extent to which these processes engender transformations in our concepts of nature, life, death, ethics and personhood.

ANT 415 begins with a review of social theoretical positions and debates on science, religion, rational-technical power and the human condition. We will discuss texts by, among others, Max Weber, John Dewey, Hannah Arendt, Michel Foucault, Claude Lévi-Strauss, Michel de Certeau, Ian Hacking, and Giorgio Agamben. Examples will be drawn from the history of Western science and medicine (e.g., the demonic possession at Loudon, Boyle's air-pump and experimental fact-making, the emergence of public health in Europe, the 'pasteurization' of France, Nazi science and medicine, science and nation-building in India, and the scientific definition of overcoma and legalization of brain death).

This social theoretical and historical review will be combined with a close reading of contemporary ethnographic studies carried out in different technoscientific fields and societies. For example, we will discuss current developments in the life sciences and in the biotechology industry in the United States, England and France; environmental risk in Germany and India; the impact of the new reproductive technologies and of organ transplantation in rich and poor countries; HIV/AIDS science, testing and new pharmaceutical markets in the US and Brazil; technological inequalities and the emergence of multi-drug resistances in low-income countries; and how new medical diagnostics such as Alzheimer's and Post-Traumatic Stress Disorder impact the course of illness and treatment. We will elaborate on the ethical and political implications of these anthropological and sociological studies, and on the limits and possibilities of the methods and concepts they generate.

Requirements:

 You are expected to complete all required readings for each session and to integrate your theoretical concerns and research projects into the seminar's discussion. Write and turn in a summary of questions and comments (no more than a page long) that arise during your reading of the materials for six sessions (three before and three after the Spring recess). 2) You are expected to write a final research paper (about 20 double-spaced pages) in an article form, reviewing theoretical issues related to some substantive matter of interest or elaborating on your ongoing ethnographic research on technoscientific developments and transformations in governance, experience and subjectivity (due no later than May 15).

A Course-Pack of selected articles is available at Pequod (U-Store). The following books are on reserve at Firestone Library and are also available for purchase at U-Store:

Agamben, Giorgio. 1998. *Homo Sacer: Sovereignty and Bare Life*. Stanford: Stanford University Press.

Arendt, Hannah. 1958. The Human Condition. Chicago: The University of Chicago Press.

Beck, Ulrich. 1999. World Risk Society. London: Polity Press

Cohen, Lawrence. 1998. *No Aging in India: Alzheimer's, the Bad Family, and Other Modern Things*. Berkeley: University of California Press.

De Certeau, Michel. 2000. *The Possession at Loudon*. Chicago: The University of Chicago Press.

Foucault, Michel. 1990. *History of Sexuality: an Introduction, Volume I.* New York: Vintage Books.

Haraway, Donna J. 1997. *Modest-Witness@Second-Millenium*. *FemaleMan_Meets_OncoMouse: Feminism and Technoscience*. New York: Routledge.

Lewontin, Richard. 1992. *Biology as Ideology: The Doctrine of DNA*. New York: Harper Perennial.

Prakash, Gyan. 1999. *Another Reason: Science and the Imagination of Modern India*. Princeton: Princeton University Press.

Rabinow, Paul. 1996. *Making PCR: A Story of Biotechnology*. Chicago: The University of Chicago Press.

Rapp, Rayna. 1999. Testing Women, Testing the Fetus: The Social Impact of Amniocentesis in America. New York: Routledge.

Shapin, Steven and Simon Schaffer. 1985. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life*. Princeton: Princeton University Press.

Office hours will be held on Wednesdays 1:30-3:30 PM at 205, Aaron Burr Hall. Meetings can also be arranged by appointment at jbiehl@princeton.edu or at 238 6327.

February 5

Introduction and Initial Discussion

"Enlightenment is man's release from his self-incurred tutelage. Sapere aude! Have courage to use your own reason!" -- that is the motto of enlightenment. [...] But only one who is himself enlightened, is not afraid of shadows, and has a numerous and well-disciplined army to assure public peace, can say: 'Argue as much you will, and about what you will, only obey!" [...] As nature has uncovered from this hard shell the seed for which she most tenderly cares -- the propensity and vocation for free thinking -- this gradually works back upon the character of the people, who thereby gradually become capable of managing freedom; finally it affects the principles of government, which finds it to its advantages to treat men, who are now more than machines, in accordance with their dignity."

Immanuel Kant 1997: 7, 18, 19

"We must see clearly how great is the 'plastic power' of a man or a community or a culture; I mean the power of specifically growing out of one's self, of making the past and the strange one body with the near and the present, of healing wounds, replacing what is lost, repairing broken molds."

Friedrich Nietzsche 1957: 7

February 12

Technical Life and the Cultural Demands of the Individual: What is Critique?

"What is the meaning of science as a vocation, now after these former illusions, the 'way to true being,' the 'way to true art,' the 'way to true nature,' the 'way to true God,' the 'way to true happiness,' have been dispelled? Tolstoi has given the simplest answer, with the words: 'Science is meaningless because it gives no answer to the only question important for us: "What shall we do and how shall we live?" That science does not give an answer to this is indisputable. The only question that remains is the sense in which science gives 'no' answer, and whether or not science might yet be of some use to the one who puts the question correctly."

Max Weber 1946: 143

Weber, Max. 1946. "Science as a Vocation." In Gerth H. H. and C. Wright Mills (eds.). *From Max Weber: Essays in Sociology*. New York: Oxford University Press, pp.129-156.

Dewey, John. 1999. "Individuality in Our Day." In *Individualism Old and New*. Amherst, NY: Prometheus Books, pp.71-83.

Freud, Sigmund and Albert Einstein. "Why War?" [correspondence 1932/1933]. In *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, vol. 22. London: The Hogarth Press.

Foucault, Michel. 1997. "What is Critique?" In *The Politics of Truth*. New York: Semiotext(e), pp. 23-61.

Fischer, Michael. 1999. "Emergent Forms of Life: Anthropologies of Late or Postmodernities." In *Annual Review of Anthropology* 28:455-478.

Suggested readings:

Kant, Immanuel. 1997. "Was ist Aufklärung" ["What is Enlightenment?"]. In Michel Foucault. *The Politics of Truth*. New York: Semiotext(e), pp.7-20.

Nietzche, Friedrich. 1957. The Use and Abuse of History. New York: Bobbs-Merrill.

Haraway, Donna. 1999. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." In Mario Biagioli (ed.). *The Science Studies Reader*. New York: Routledge, pp.172-188.

Hess, David. 1997. Science Studies: An Advanced Introduction. New York: New York University Press, pp.112-147.

Franklyn, Sarah. 1995. "Science as Culture, Cultures of Science." Annual Review of Anthropology, 24:163-184.

February 19

Belief and the Science of the Concrete

"There still exists among ourselves an activity which on the technical plane gives us quite a good understanding of what a science we prefer to call 'prior' rather than 'primitive', could have been on the plane of speculation. This is what is commonly called 'bricolage' in French. In its old sense the verb 'bricoler' applied to ball games and billiards, to hunting, shooting and riding. It was however always used with reference to some extraneous movements: a ball rebounding, a dog straying or a horse swerving from its direct course to avoid an obstacle. And in our own time the 'bricoleur' is still someone who works with his hands and uses devious means compared to those of a craftsman."

Claude Lévi-Strauss 1966:16

De Certeau, Michel. 2000. *The Possession at Loudon*. Chicago: The University of Chicago Press. (Excerpts).

Freud, Sigmund. 1989. "The Question of a Weltanschauung." In Peter Gay (ed.). *The Freud Reader*. New York: W.W. Norton, pp. 783-796.

Lévi-Strauss, Claude. 1966. "The Science of the Concrete." In *The Savage Mind*. Chicago: The University of Chicago Press, pp. 1-33.

Foucault, Michel. 1975. *The Birth of the Clinic: An Archaelogy of Medical Perception*. New York: vintage Books, pp. ix-xix, 195-199.

Good, Byron. 1994. "Medical Anthropology and the Problem of Belief." In *Medicine, Rationality and Experience*. Cambridge: Cambridge University Press, pp. 1-24.

Suggested readings:

Descartes, René. 1998. *Discourse on Method and Meditations on First Philosophy*. Indianapolis/Cambridge: Hackett Publishing Company, pp.31-44.

Malinowski, Bronislaw. 1955. *Magic, Science and Religion, and Other Essays*. New York: Doubleday Anchor Books, pp.85-92.

Lévi-Strauss, Claude. 1963. "The Sorcerer and His Magic." In *Structural Anthropology*. New York: Basic Books, pp. 167-185.

Tambiah, Stanley. 1990. *Magic, Science, Religion and the Scope of Rationality*. Cambridge: Cambridge University Press, pp.16-32.

February 26

Truth and Representation

"The training of the scientific mind is not only a reform of ordinary knowledge, but also a *conversion* of interests."

Gaston Bachelard

Shapin, Steven and Simon Schaffer. 1985. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life*. Princeton: Princeton University Press, pp. 22-79, 332-344.

Latour, Bruno. 1990. "Drawing Things Together." In Michael Lynch and Steve Woolgar (eds). *Representation in Scientific Practice*. Cambridge: The MIT Press, pp.19-68.

Merton, Robert King. 1968. "Science and Democratic Social Structure." In *Social Theory and Social Structure*. New York: Free Press, pp.604-615.

Bourdieu, Pierre. "The Specificity of the Scientific Field and the Social Conditions of the Progress of Reason." In Mario Biagioli (ed.). *The Science Studies Reader*. New York: Routledge, pp. 31-50.

Foucault, Michel. 1972. "Science and Knowledge." In *The Archaeology of Knowledge and the Discourse on Language*. New York: Harper and Row, pp.178-195.

Lewontin, Richard. 1992. "A Reasonable Skepticism." In *Biology as Ideology: The Doctrine of DNA*. New York: Harper Perennial, pp.3-16.

Haraway, Donna J. 1997. *Modest-Witness@Second-Millenium. FemaleMan_Meets_OncoMouse: Feminism and Technoscience*. New York: Routledge, pp.23-45.

Suggested readings:

Hobbes, Thomas. Leviathan. Indianapolis/Cambridge: Hackett Publishing Company. (Excerpts)

Bachelard, Gaston. 1984. The New Scientific Spirit. Boston: Beacon Press.

Kuhn, Thomas. 1996. *The Structure of Scientific Revolutions*. Chicago: The University of Chicago Press, pp.1-9, 174-210.

Foucault, Michel. 1979. "Panopticism." In Discipline and Punish. New York: Vintage, pp.195-228.

Shapin, Steven. 1994. A Social History of Truth. Chicago: University of Chicago Press, pp.65-86.

Latour, Bruno. 1993. "Constitution." In We Have Never Been Modern. Cambridge: Harvard University Press, pp.13-48.

Keller, Evelyn Fox. "The Gender/Science System: or, Is Sex to Gender as Nature Is to Science?" In Mario Biagioli (ed.). *The Science Studies Reader*. New York: Routledge, pp. 234-242.

Harding, Sandra. 1991. "Strong Objectivity' and Socially Situated Knowledge." In *Whose Science? Whose Knowledge?* Ithaca, NY: Cornell University Press, pp.138-163.

Visvanathan, S. "On the Annals of the Laboratory State." In *A Carnival for Science*. Delhi: Oxford University Press, pp.15-47.

March 5

Bio-power

"The process which, as we saw, invaded the natural sciences through the experiment, through the attempt to imitate under artificial conditions the process of 'making' by which a natural thing came into existence, serves as well or even better as the principle for doing in the realm of human affairs."

Hannah Arendt, 1958:299

Arendt, Hannah. 1958. *The Human Condition*. Chicago: The University of Chicago Press. (Excerpts)

Foucault, Michel. 1991. "Governmentality." In G. Burchell et al (eds.). *The Foucault Effect: Studies in Governmentality*. Chicago: The University of Chicago Press, pp. 87-104.

Foucault, Michel. 1980. "The Politics of Health in the Eighteenth Century." In Colin Gordon (ed.). *Power/Knowledge*. New York: Pantheon Books, pp. 166-182.

Foucault, Michel. 1997. "Security, Territory, and Population" and "The Birth of Biopolitics." In Paul Rabinow (ed.). *Ethics: Subjectivity and Truth*. New York: The New Press, pp.67-79.

Foucault, Michel. 1990. "Right of Death and Power over Life." In *History of Sexuality: an Introduction, Volume I.* New York: Vintage Books, pp. 133-159.

Hacking, Ian. 1999. "Making Up People." In Mario Biagioli (ed.). *The Science Studies Reader*. New York: Routledge, pp. 160-175.

Suggested readings:

Canguilhem, Georges. 1991. "Introduction," and "A Critical Examination of Certain Concepts: The Normal, Anomaly and Disease; the Normal and the Experimental." In *The Normal and the Pathological*. New York: Zone Books, pp. 33-35, 125-149.

Foucault, Michel. 1991. "Introduction by Michel Foucault." In Georges Canguilhem. *The Normal and the Pathological*. New York: Zone Books, pp.7-24.

Deleuze, Gilles. 1992. "What is a dispositif?" In Michel Foucault, Philosopher. New York: Routledge, pp.159-168.

Desrosières, A. 1991. "How to Make Things Which Hold Together: Social Science, Statistics and the State." In P. Wagner, B. Wittrock, and R. Whitley (eds.). *Discourses on Society: The Shaping of the Social Science Disciplines*. Dordrecht: Kluwer, pp. 195-218.

Jasanoff, Sheila. 1987. "Contested Boundaries in Policy-Relevant Science." In Social Studies of Science 17 (2):195-230.

March 12

Scientific Practices

"In the course of time, the character of the concept [of syphilis] has changed from the mystical, through the empirical and generally pathogenetical, to the mainly etiological. [...] As the concept of syphilis changed, however, new problems arose and new fields of knowledge were established, so that nothing here was really completed."

Ludwig Fleck 1979: 18

Fleck, Ludwik. 1979. "How the Modern Concept of Syphilis Originated?" In *Genesis and Development of a Scientific Fact*. Chicago: The University of Chicago Press, pp.1-19.

Daston, Lorraine and Galison, Peter. 1992. "The Image of Objectivity." In *Representations* 40:81-128.

Latour, Bruno. 1999. "Give me a laboratory and I will raise the world." In Mario Biagioli (ed.). *The Science Studies Reader*. New York: Routledge, pp.258-275.

Fox Keller, Evelyn. 1992. Secrets of Life, Secrets of Death: Essays on Language, Gender and Science. New York and London: Routledge, pp. 39-55.

Fox, Renée C. 1974. *Experiment Perilous: Physicians and Patients Facing the Unknown*. Philadelphia: University of Pennsylvania Press, pp.13-24, 237-254.

Rabinow, Paul. 1996. *Making PCR: A Story of Biotechnology*. Chicago: The University of Chicago Press. (Excerpts)

Rheinberger, Hans-Jörg. 1997. *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube*. Stanford: Stanford University Press, pp.11-37, 223-229.

Suggested readings:

Latour, Bruno. 1988. The Pasteurization of France. Cambridge: Harvard University Press.

Latour, Bruno. 1988. "Strong Microbes and Weak Hygienists." In *The Pasteurization of France*. Cambridge, MA; Harvard University Press, pp.13-58.

Traweek, Sharon. "Pilgrim's Progress: Male Tales Told during a Life in Physics." In Mario Biagioli (ed.). *The Science Studies Reader*. New York: Routledge, pp. 525-542.

Martin, Emily. 1994. Flexible Bodies: The Role of Immunity in American Culture from the Days of Polio to the Age of AIDS. Boston: Beacon Press, pp.1-19.

Rabinow, Paul. 2000. "Epochs, Presents, Events." In Margaret Lock, Allan Young, and Alberto Cambrosio (eds.). *Living and working with the new medical technologies: intersections of inquiry*. Cambridge: Cambridge University Press, pp. 31-46.

March 26

Machine/Animal/Human/Moralist

"What I want to show is that the construction of machines can indeed be understood by virtue of certain truly biological principles, without having at the same time to examine how technology relates to science."

Georges Canguilhem 1992: 44-69

Canguilhem, Georges. 1992. "Machine and Organism." In *Incorporations*. New York: Zone Books, pp. 44-69.

Haraway, Donna. 1991. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge, pp.149-201.

Hacking, Ian. "Canguilhem amid the Cyborgs." In Economy and Society 27 (2/3): 202-216.

Haraway, Donna J. 1997. *Modest-Witness@Second-Millenium. FemaleMan_Meets_OncoMouse: Feminism and Technoscience*. New York: Routledge, pp.49-118, 267-271.

April 2

Biosociality

"If sociobiology is culture constructed on the basis of a metaphor of nature, then in biosociality nature will be modeled on culture understood as practice. Nature will be known and remade through technique and will finally become artificial, just as culture becomes natural."

Paul Rabinow 1996: 99

Lewontin, Richard. 1992. *Biology as Ideology: The Doctrine of DNA*. New York: Harper Perennial, pp.85-123.

Deleuze, Gilles. 1995. "Postscript on Control Societies." In *Negotiations*. New York: Columbia University Press, pp.177-182.

Rheinberger, Hans-Jörg. "Beyond nature and culture: modes of reasoning in the age of molecular biology and medicine." In Margaret Lock, Allan Young, Alberto Cambrosio (eds). *Living and working with the new medical technologies*. Cambridge: Cambridge University Press, pp.19-30.

Paul Rabinow. 1996. Artificiality and Enlightenment: From Sociobiology to Biosociality." In *Essays on the Anthropology of Reason*. Princeton: Princeton University Press, pp. 91-111.

Pálsson, Gísli and Paul Rabinow. 1999. "Iceland: The Case of a National Human Genome Project." In *Anthropology Today* 15(2): 14-18.

Fortun, Mike. http://www.mannvernd.is/english/articles/mfortun.html

Rapp, Rayna. 1999. Testing Women, Testing the Fetus: The Social Impact of Amniocentesis in America. New York: Routledge. (Excerpts)

Suggested readings:

Martin, Emily. 1994. Flexible Bodies: The Role of Immunity in American Culture from the Days of Polio to the Age of AIDS. Boston: Beacon Press, pp.227-250.

Strathern, Marilyn. 1992. "Artificial Life," and "Kinship Assisted." In *Reproducing the Future: Anthropology, Kinship, and the New Reproductive Technologies*. New York: Routledge, pp. 1-30.

Franklin, Sarah. 1995. "Postmodern Procreation: A Cultural Account of Assisted Conception." In *Conceiving the New World Order*. Berkeley: University of California Press, pp. 323-345.

Gottweis, H. 1995. "German Politics of Genetic Engineering." In Social Studies of Science 25:195-235.

Keller, Evelyn Fox. 2000. The Century of the Gene. Cambridge: Harvard University Press.

Paul Rabinow. 1999. French DNA: Trouble in Purgatory. Chicago: The University of Chicago Press, pp.1-6, 71-110.

National Bioethics Commission. Cloning Human Beings. Washington, DC: NBAC, 1997.

April 9

Risk Society and Clinical Trials

"We are... concerned no longer exclusively with making nature useful, or with releasing mankind from traditional constraints, but also and essentially with problems resulting from techno-economic development itself. Modernization is becoming reflexive; it is becoming its own theme."

Ulrich Beck 1992:19

Beck, Ulrich. 1999. World Risk Society. London: Polity Press. (Excerpts)

Castel, Robert. 1991. "From Dangerousness to Risk." In G. Burchell et al (eds.). *The Foucault Effect: Studies in Governmentality*. Chicago: The University of Chicago Press, pp. 281-298.

Petryna, Adriana. 1995. "Sarcophagus: Chernobyl in Historical Light." In *Cultural Anthropology*, 10(2):196-220.

Fox, Renée C. and Judith P. Swazey. 1992. "Of Wonder Drugs, the Transplant 'Boom,' and Moratoria." In *Spare Parts: Organ Replacement in American Society*. New York/Oxford: Oxford University Press, pp.3-30.

Bach, Fritz. 1999. "Putting the public at risk." Bulletin of the WHO 77(1): 65-67.

Bach, Fritz. 1999. "Barriers to Xenotransplantation." *Transplantation Proceedings* 31(4):1819-1820.

Epstein, Steven. 1996. *Impure Science: AIDS, Activism and the Politics of Knowledge*. Berkeley: University of California Press, pp.1-41, 330-353.

Löwy, Ilana. Trustworthy knowledge and desperate patients: clinical tests for new drugs from cancer to AIDS." In Margaret Lock, Allan Young, Alberto Cambrosio (eds), op.cit., pp.49-81.

Lock, Margaret. 2000. "On Dying Twice: Culture, Technology and the Determination of Death." In Margaret Lock, Allan Young, Alberto Cambrosio (eds), op.cit., pp. 233-62.

Suggested readings:

Jasanoff, Sheila. "NGOs and the Environment: From Knowledge to Action." In Third World Quarterly 18 (3): 579-594.

Jasanoff, Sheila. 1991. "Acceptable Evidence in a Pluralistic Society." In R. Hollander and D.Mayo (eds.). *Acceptable Evidence: Science and Values in Hazard Management*. New York: Oxford University Press, 1991, pp. 29-47.

Petryna, Adriana. 1998. "A Technical Error: Measures of Life after Chernobyl." In Social Identities 4 (1): 73-92.

Escobar, Arturo. 1999. "After Nature: Steps to an Antiessentialist Political Ecology." In *Current Anthropology* 40 (1): 1-30.

Truog, Robert D. 1997. "Is it time to abandon brain death?" In Hastings Center Report 27, no.1, pp.29-37.

April 16

Science Faces Scarcity

"Navigating between the bank of the Vedas and the bank of modern science and technology, but holding neither one nor the other fixed, India appears simultaneously as something altogether new and unmistakably old, at once undoubtedly modern and irreducibly Indian. Therein lies Indian modernity's pervasive presence and precarious existence."

Gyan Prakash 1999:14

Prakash, Gyan. 1999. *Another Reason: Science and the Imagination of Modern India*. Princeton: Princeton University Press. (Excerpts)

Cohen, Lawrence. 1998. *No Aging in India: Alzheimer's, the Bad Family, and Other Modern Things*. Berkeley: University of California Press. (Excerpts)

Fortun, Kim. 1998. "Politics, Critique, Disaster: The Bhopal Case." In Science as Culture 7 (2).

Das. Veena. 1999. "Public Good, Ethics, and Everyday Life: Beyond the Boundaries of Bioethics." In *Daedalus* 128 (4): 99-133.

Suggested readings:

Povinelli, Elizabeth. Forthcoming. "The Vulva Thieves: Modal Ethics and the Colonial Archive." In *The Cunning of Recognition: Indigenous Alterity and the Making of Australian Multiculturalism.* Durham: Duke University Press.

Stepan, Nancy. 1976. *The Beginnings of Brazilian Science: Oswaldo Cruz, Medical Research and Policy, 1890-1920.* New York: Science History Publications, 1976 (Excerpts).

Levins, Richard and Richard Lewontin. 1993. "Applied Biology in the Third World: The Struggle for Revolutionary Science." In *The "Racial" Economy of Science: Toward a Democratic Future*. Bloomington and Indianapolis: Indiana University Press, pp.315-325.

Solingen, E. 1993. "Between Markets and the State: Scientists in Comparative Perspective." In *Comparative Politics* 26: 31-51.

Das, Veena. 1995. "Suffering, Legitimacy, and Healing: The Bhopal Case." In *Critical Events*. Oxford: Oxford University Press.

Fortun, Kim. 2001. Advocacy After Bhopal: Environmentalism, Disaster, New Global Orders. Chicago: The University of Chicago Press.

April 23

The Politics of Death:

Body Parts, Epistemic Murk, and Ethics Traffic

"Not simple natural life, but life exposed to death (bare life or sacred life) is the originary political element... We are not only, in Foucault's words, animals whose life as living beings is at issue in their politics, but also -- inversely -- citizens whose very politics is at issue in their natural body."

Giorgio Agamben 1998: 88, 188

Agamben, Giorgio. 1998. *Homo Sacer: Sovereignty and Bare Life*. Stanford: Stanford University Press, pp.1-12, 63-86, 119-188.

Agamben, Giorgio. 1999. *Remnants of Auschwitz: The Witness and the Archive*. New York: Zone Books, pp. 80-86, 155-171.

Heller, Agnes. 1996. "Has Biopolitics Changed the Concept of the Political? Some Further Thoughts About Biopolitics." In Agnes Heller and Sonja Puntscher Riekmann (eds.). *Biopolitics: The Politics of the Body, Race and Nature*. Aldershot: Avebury, pp.3-15.

Nancy Scheper-Hughes. 2000. "The Global Traffic in Human Organs." In *Current Anthropology* 41(2): 191-211.

Farmer, Paul. 1999. "The Persistent Plagues: Biological Expressions of Social Inequalities." In *Infections and Inequalities*. Berkeley: University of California Press, pp.262-282.

Biehl, João. "Biotechnology and the New Politics of Life and Death in Brazil." Unpublished Manuscript.

Suggested readings:

Canguilhem, Georges. 1998. "The Decline of the Idea of Progress." In Economy and Society 27(2, 3): 313-329.

Proctor, Robert. 1993. "Nazi Medicine and the Politics of Knowledge." In *The 'Racial' Economy of Science*. Bloomington and Indianapolis: Indiana University Press, pp. 344-358.

Bernauer, James W. "Beyond Life and Death: On Foucault's Post-Auschwitz Ethic." In *Michel Foucault, Philosopher*. New York: Routledge, pp. 260-279.

Bauman, Z. 1991. "The Scandal of Ambivalence." In *Modernity and Ambivalence*. Ithaca, NY: Cornell University Press, pp. 18-46.

Cohen, Lawrence. 1999. "Where It Hurts: Indian Material for an Ethics of Organ Transplantation." In *Daedalus* 128 (4): 135-65.

April 30

Technology versus Affect

"The fact is that science, if one looks at it closely, has no memory. Once constituted, it forgets the circuitous paths by which it came into being."

Jacques Lacan 1989: 17

Lacan, Jacques. 1989. "Science and Truth." In Newsletter of the Freudian Field, 3: 4-29.

Young, Allan. 2000. "Our Traumatic Neurosis and Its Brain." Unpublished Manuscript.

Dumit, Joseph. 1997. "A Digital Image of the Category of the Person: PET Scanning and Objective Self-Fashioning." In *Cyborgs and Citadels: Anthropological Interventions in Emerging Sciences and Technologies*. Santa Fe: School of American Research Press, pp. 83-102.

Biehl, João (with Denise Coutinho and Ana Luzia Outeiro). 2001. "Technology and Affect: HIV/AIDS Testing in Brazil." *Culture, Medicine, and Psychiatry* 25 (1).

Suggested readings:

Lacan , Jacques. 1988. The Ego in Freud's Theory and in the Technique of Psychoanalysis, 1954-1955. New York: W.W.Norton.

Foucault, Michel. 1998. "What is an Author?" In *Michel Foucault: Aesthetics, Method, and Epistemology*. Ed. James Faubion. New York: The New Press, pp.205-222.

Zizek, Slavoj. 1997. "How did Marx invent the symptom?" In Mapping Ideology. New York: Verso.

Hacking, Ian. 1995. Rewriting the Soul. Princeton: Princeton University Press.

Young, Allan. 1995. The Harmony of Illusions. Princeton: Princeton University Press.

Turkle, Sherry. 1997. Life on the Screen: Identity in the Age of the Internet. New York: Simon and Schuster.