EDCP 571
Bruno Latour and the Postsecular Turn in STS
Lecture Notes
S. Petrina (26 September 2013)
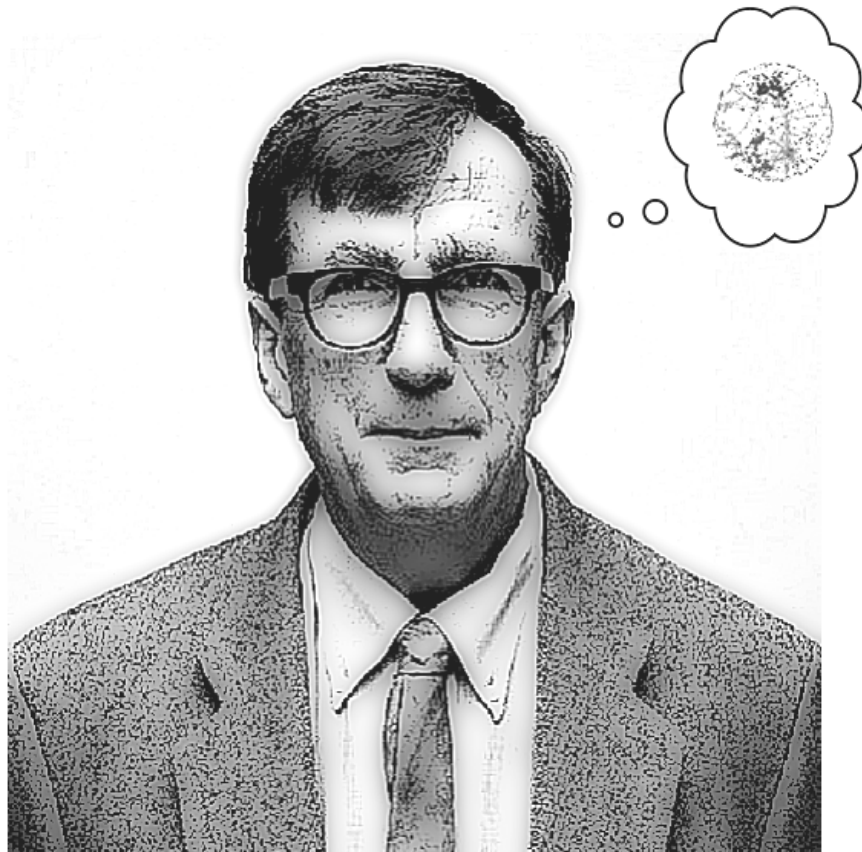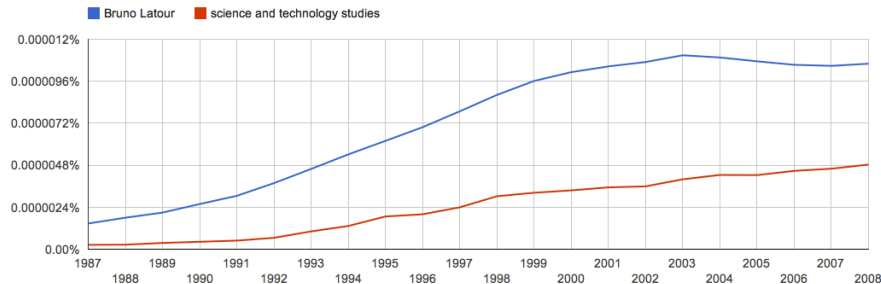
1. **Latour and STS**
   a. http://www.bruno-latour.fr + http://www.modesofexistence.org/index.php/site/index +
   b. *Prince of Networks* (Harman, 2009, pp. 5-6):
      i. This book is the first to consider Bruno Latour as a key figure in metaphysics— a title he has sought but rarely received. Latour has long been prominent in the fields of sociology and anthropology, yet the philosophical basis of his work remains little known. While his many admirers are seldom concerned with metaphysical questions, those hermits and outcasts who still pursue 'first philosophy' are

generally unfamiliar with Latour. My aim is to bring these two groups into contact by expressing Latourian insights in terms bearing on the basic structure of reality itself.

    ii.   As often happens with the most significant thinkers, Latour is attacked simultaneously for opposite reasons. For mainstream defenders of science, he is just another soft French relativist who denies the reality of the external world. But for disciples of Bloor and Bourdieu, his commerce with non-humans makes him a sellout to fossilized classical realism. In Latour's own works, however, this tiresome strife between objective physical matter and subjective social force gives way to a more fascinating theme: objects, which he generally calls 'actors' or 'actants'. Unlike Heidegger and others, Latour takes apples, vaccines, subway trains, and radio towers seriously as topics of philosophy. Such actors are not mere images hovering before the human mind, not just crusty aggregates atop an objective stratum of real microparticles, and not sterile abstractions imposed on a pre-individual flux or becoming. Instead, actors are autonomous forces to reckon with, unleashed in the world like leprechauns and wolves.

  c. *Bruno Latour: Hybrid Thoughts in a Hybrid World* (2011):

    i.   The works of Bruno Latour have emerged as some of the most original, wide-ranging and provocative calls for a radical re-examination of the key issues of our times (p. vi)

  d. *Speculative Grace: Bruno Latour and Object-Oriented Theology* (2013):

    i.   In what in my mind are some of the finest pages ever written about Latour's thought, Miller then explores the being of objects, unfolding their nature, how they interact, and how they interrelate. (Bryant, 2013, xvi)

  e. Mialet (2012): "Where would STS be without Latour? What would be missing? Some would say nothing. I would argue a lot."

  f. Latour and Woolgar, *Laboratory Life* (1979)

    i.   Haraway (1980): Latour's field work as a participant-observer from 1975 to 1977 in Roger Guillemin's laboratory in the Salk Institute. Concretely, Latour and Woolgar examine the scientific constitution of a particular fact-TRF, or Thyrotropin Releasing Factor, an object with a well-defined molecular structure, which can now be purchased for use as a precise tool in research programs unrelated to those that gave TRF existence between 1962 and 1970 and earned a Nobel Prize in 1977 for the laboratory chiefs.

    ii.   Adopting the position of anthropologists describing the daily life of a strange tribe, the authors resist the temptation to accept as nonproblematic scientists' own explanations of their activity. The principal distinction valued by scientists and rejected by the authors is that between technical and social. The resulting ethnography of a laboratory insists on the ubiquity of particular objects and processes valued by their informants: documents, inscriptions, and operations on statements to produce expensive products, scientific papers. Scientific production seems more closely to resemble exegesis than discovery (p. 261). Examination of the spatial structure and division of labor in the laboratory shows that the arrangement of people and machines yields "written" traces which the scientists compare to establish differences, which then become the subject of complex negotiation that stabilizes facts over artefacts.

    iii.   Latour and Woolgar's achievement is an exquisitely detailed story, rather than another pronouncement of belief in social construction of facts.

    iv.   Laboratory Studies

  g. *Les Microbes: Guerre et Paix suivi de Irreductions* [*Microbes: War and Peace following Irreductions*] [*The Pasteurization of France*] (1984/1988)

     i.   Starr (1985): They [Pasteur and his associates] created a new set of actors—microbes—which were enrolled in their empire-building. "Create" is used pragmatically here; things perceived as real are real in their consequences, and until they become consequential they have no epistemological status.

     ii.   Latour is not satisfied to simply analyze Pasteurien political strategies. At the beginning of the book, he imposes three analytic criteria by which we are invited to evaluate the success of his argument. He says that he will have failed if:

        1.   He reduces his analysis of science to "social conditions" or "forces" without specifying their content;

        2.   He only looks at applications but not at the technical content of Pasteurism—the language and concerns of the people he's studying:

        3.   He "goes native" or, in his terms, takes recourse to the folkloric terms of the actors themselves.

     iii.   Non-human Actors

        1.   n. 13, p. 253: I use "actor," "agent," or "actant" without making any assumptions about who they may be and what properties they are endowed with. Much more general than "character" or "dramatis persona," they have the key feature of being autonomous figures. Apart from this, they can be anything-individual ("Peter") or collective ("the crowd"), figurative (anthropomorphic or zoomorphic) or nonfigurative ("fate").

        2.   n. 22, p. 262: As noted by M. Callon (1986), there should be a complete symmetry between the terms used to describe human and nonhuman actors. The first choice of term does not matter, but once we have chosen one for human actors, we shall stick to it when we address the nonhuman actors. If we "negotiate" with the microbes, then use the word for the hygienists or the ministry. If we "discover" bacilli, then "discover" the physicians or their colleagues. When this rule of method is applied, we soon realize that the distinction between science and society is an artifact caused by an assymmetrical treatment of human and nonhuman actors. The marvelous study of S. Shapin and S. Schaffer (1985) provides the genealogy of this distinction.

     iv.   **Irreductions**

        1.   I knew nothing, then, of what I am writing now but simply repeated to myself: "Nothing can be reduced to anything else, nothing can be deduced from anything else, everything may be allied to everything else." This was like an exorcism that defeated demons one by one. It was a wintry sky, and a very blue. I no longer needed to prop it up with a cosmology, put it in a picture, render it in writing, measure it in a meteorological article, or place it on a Titan to prevent it falling on my head.

        2.   Nothing is, by itself, either reducible or irreducible to anything else.

            a.   • I will call this the "principle of irreducibility", but it is a prince that does not govern since that would be a self-contradiction (2.6.1).

        3.   If we choose the principle of irreduction, we discover intertwined networks which sometimes join together but may interweave with each other without touching for centuries. There is enough room. There is empty space. Lots of empty space. There is no longer an above and a below. Nothing can be placed in a hierarchy. The activity of those who rank is made transparent and occupies little space. There is no more filling in between networks, and the work of those who do this padding takes up little room. There is no more totality, so nothing is left over. It seems to me that life is better this way.

        4.   Sociologics & Anthropologics

a. 3.5.3 The "modern world" is the label on the button that unites extreme potency and extreme impotence (3.4.1). The heterogeneous and local application of weaknesses becomes a system of powers with prestigious names such as nature, economy, law, and technology.

b. • Like its zealots, those who abhor the modern world have invented more terms to describe it than the devout have found to celebrate the name of God. They say either "Vade retro, satanas" or "hear my prayer" to each of these invocations:
   i. the modern world
   ii. secularization
   iii. rationalization
   iv. anonymity
   v. disenchantment
   vi. mercantilism
   vii. optimization
   viii. dehumanization
   ix. mechanization
   x. westernization
   xi. capitalism
   xii. industrialization
   xiii. postindustrialization
   xiv. technicalization
   xv. intellectualization
   xvi. sterilization
   xvii. objectivization
   xviii. Americanization
   xix. scientization
   xx. consumer society
   xxi. one-dimensional society
   xxii. soulless society
   xxiii. modern madness
   xxiv. modern times
   xxv. progress
   xxvi. [Pasteurization]

c. "Hear my prayer." "Vade retro, Santanas." Each of these words conceals the work done by forces and makes an anthropology of the here and now impossible. Yet it is really very simple: there is no modern world, or if there is one, it is simply a style, as when we say "modern style. "

5. Irreductions of "the Sciences"
   a. 4.1.6 What we call "science" is made up of a large array of elements whose power we prefer to attribute to a few.
      i. • "Science" exists no more than "language" (2.4.3) or "the modern world" · (3.5.2).
   b. 4.1.7 what we call "science" is chosen in a rather random manner from a motley crowd of actants. Though it represents the others, it denies this fact (3.4.6).
      i. • Those who call themselves "scientists" always put the cart before the horse when they talk, though in practice they get things the right way round. They claim that laboratories, libraries, meetings, field notes, instruments, and texts are

only ways and means of bringing the truth to light. But they never stop building laboratories, libraries, and instruments in order to create a focal point for the potency of truth. Rationalists know very well that if this subordinate material life were suppressed, they would be forced into silence. A purely scientific science would rid us of scientists. For this reason they are careful not to kill the goose that lays the golden eggs.

    c. 4.1.8 They are skeptical and unbelieving about witches and priests, but when it comes to science, they are credulous. They say without the slightest hesitation that its efficacy derives from its "method," "logic," "rigor," or "objectivity"(2.1 .0). However, they make the same mistake about "science" as the shaman does when he attributes potency to his incantations. Belief in the existence of "science" has its reformers, but it does not have its skeptics, even less its agnostics.

  h. *Science in Action* (1987)
    i. Shapin (1988, p. 533): Bruno Latour has been following scientists around for years. Now he wants us to follow him following them around. He offers students of science and technology a detailed map that will allow us to follow him easily. He defines the nature, scope and terms of the exercise; he even invents a name — 'technoscience' — for its object of study. In unmistakably French fashion he gives us 'rules of method' and 'principles', numbered and ordered. No one following Latour is meant to get lost or to stray off the line of march. Stragglers will have no excuses. There has never been a programme for research in the social studies of science that has been presented in such a systematic and integrated way. This is no mere supplement to our existing interpretative repertoires, no piecemeal compilation of case-studies. It is not meant to be slotted into the relativist or the 'social constructivist' agendas, whose research, in any case, is said to be fundamentally misconceived. This is offered as a new programme for empirical and theoretical work that has the capacity to keep us occupied into the foreseeable future.

    ii. Hacking (1992, p. 511): *Science in Action* is about networks, networks of endless sorts, but chiefly having to do with relations of power and control. It is a story of technoscience as interaction among actants. But the interactions come in many forms. For an example that contrasts with microbes, storms are among the actants over which forecasters have no power, not even the power of knowledge. Weather predictions are stunningly bad, as any statistician will tell you. But meteorologists fare well, not only on TV, but also in their ability to call on the vast technoscience of satellite photography and modeling in Cray computers. We seldom take a step in our lives, neither picnic nor plane trip, without ourselves or someone consulting the forecasters. The alliances are here forged with complete indifference to the actants, the storms, who proceed blissfully independent of the forecaster, just as the forecaster has a very good living independent of the storms. Latour is answering the question, "What is science?" in a reductive way. Technoscience is nothing more than a set of networks. He provides lots of examples and invites the reader to carry on. He wants to describe everything that happens, in a sense without trying to explain it, without trying to give the real causes. I do not know if Latour has noted it, but there is something strongly reminiscent of Wittgenstein's advice that in philosophy we should only describe, not explain.

    iii. **Rules of Method**

1. *Rule 1* We study science *in action* and not ready made science or technology; to do so, we either arrive before the facts and machines are blackboxed or we follow the controversies that reopen them.
2. *Rule 2* To determine the objectivity or subjectivity of a claim, the efficiency or perfection of a mechanism, we do not look for their *intrinsic* qualities but at all the transformations they undergo *later* in the hands of others.
3. *Rule 3* Since the settlement of a controversy is the *cause* of Nature's representation, not its consequence, we can never use this consequence, Nature, to explain how and why a controversy has been settled.
4. *Rule 4* Since the settlement of a controversy is the *cause* of Society's stability, we cannot use Society to explain how and why a controversy has been settled. We should consider symmetrically the efforts to enrol human and non-human resources.
5. *Rule 5* We have to be as *undecided* as the various actors we follow as to what technoscience is made of; every time and inside/outside divide is built, we should study the two sides simultaneously and make the list, no matter how long and heterogeneous, of those who do the work.
6. *Rule 6* Confronted with the accusation of irrationality, we look neither at what rule of logic has been broken, nor at what structure of society could explain the distortion, but to the angle and direction of the observer's *displacement*, and to the *length* of the network thus being built.
7. *Rule 7* Before attributing any special quality to the mind or to the method of people, let us examine first the many ways through which inscriptions are gathered, combined, and tied together and sent back. Only if there is something unexplained once the networks have been studied shall we start to speak of cognitive factors.

iv.   **Principles**
1. *First principle* The fate of facts and machines is in later users' hands; their qualities are thus a consequence, not a cause, of collective action.
2. *Second principle* Scientists and engineers speak in the name of new allies that they have shaped and enrolled; representatives among other representatives, they add these unexpected resources to tip the balance of force in their favour.
3. *Third principle* We are never confronted with science, technology and society, but with a gamut of weaker and stronger *associations*; thus understanding *what* facts and machines are is the same as understanding who the *people* are.
4. *Fourth principle* The more science and technology have an esoteric content the further they extend outside; thus 'science and technology' is only a subset of technoscience.
5. *Fifth principle* Irrationality is always an accusation made by someone building a network over someone else who stands in the way; thus, there is no Great Divide between minds, but only shorter and longer networks; harder facts are not the rule but the exception, since they are needed only in a very few cases to displace other on a large scale out of their usual ways.
6. *Sixth principle* History of technoscience is in a large part the history of the resources scattered along networks to accelerate the mobility, faithfulness, combination and cohesion of traces that make action at a distance possible.

i.   *We Have Never Been Modern* (1991/1993)
    i.   Elam "Living Dangerously with Bruno Latour in a Hybrid World," 1999):

The hypocrisy of modernity

society	culture	nature
not constructed (tho we think it is)—epistemological	*purification* keeps them distinct	constructed (tho we think it's not)—political
social contract	*mediation* brings them together	laboratory
subjects (i.e., citizens)	quasi-objects, i.e. hybrids	objects (i.e., things)
politics (Hobbes): power	representation	science (Boyle): mechanism

http://seansturm.wordpress.com/category/meme/

- j. *Aramis, or the Love of Technology* (1992, 1996)
- k. *Pandora's Hope* (1999)
- l. *Politics of Nature* (1999, 2004)
  - i. Restivo (2005, p. 112): Latour begins by claiming bluntly that political ecology has nothing to do with nature. "Political ecology" designates "the understanding of ecological crises that no longer uses nature to account for the tasks to be accomplished" (p. 246). Perhaps the reader now expects the book as a whole to demonstrate the basis and implications of this claim, and surely to some extent that expectation is realized. But Latour immediately raises a cautionary flag. Against this reasoned expectation of some sort of dialogue with the reader, he reveals that perhaps this is nothing more than Latour raising questions for himself and himself alone about nature, science, and politics, and what they have to do with each other.
  - ii. Latour is characteristically either sloppy or consciously inconsistent, depending on how charitable the reader wants to be. Within the space of two pages he says first that he has no definitive answer to the opening query ("What is to be done with political ecology?") and then that even though political ecology is already, practically speaking, doing what he claims it should be doing, it requires his intervention. This is part of the Latourian game—keep the reader on his or her toes, caution him or her (correctly, let us acknowledge) that there are difficulties and complexities everywhere. When he then tells us that he has provided a six-page "crib sheet" for "readers in a hurry" (perhaps you don't remember that he has already warned you that we need to proceed like the tortoise to beat the hare, or that he has promised you a meticulously organized argument), we are left to wonder why we shouldn't just read the crib sheet.
- m. *The Making of Law* (2002/2009)
- n. *Rejoicing or the Torments of Religious Speech* (2002/2013)
- o. *Iconoclash*
- p. *Making Things Public*
- q. *Reassembling the Social* (2005)
- r. *The Science of Passionate Interests: An Introduction to Gabriel Tarde's Economic Anthropology* (Latour & Lépinay, 2009)
- s. *On the Modern Cult of the Factish Gods* (2009/2010)
- t. *Cogitamus* (2010/2013?)
- u. *An Inquiry into Modes of Existence: An Ethnology of the Moderns* (2012/2013)