Actor-Network Theory (ANT) aka "*Sociology of Translation*" or "Sociology of Associations"

1. Actor-Network Theory (ANT) Criticisms of ANT : : Issues of ANT

a. Criticisms of ANT

i. For initial criticisms, see Pickering ("The Mangle of Practice: Agency and Emergence in the Sociology of Science," 1993)

ii. e.g., Lee & Brown ("Otherness and the Actor Network," 1994, p. 781): We suggest that the actor network approach finds itself in a similar position. Having converted the world into a play of forces, it has no way of circumventing the formulaic circle of expansion, domination, and collapse. ANT has achieved a metalinguistic formulation—inscribed as problematization, interessment, enrollment, mobilization, and dissidence (CalIon, 1986)—into which any sequence of human or nonhuman actions can be encoded. This amounts to a foreclosure on all alternative descriptions of the world through the assertion of total democracy and complete ontological monadism. When combined, these two strategies make for an analytic that is perfectly designed for making accounts of the production of power and actants. The difficulty is that ANT offers no critique and countenances neither alternative nor supplement. As Latour (1988a) puts it: "We will never do any better" (p. 256).

iii. ANT "opens discussion by problematizing the nonhuman and leaving the question of human agency itself unasked" (p. 772).

iv. e.g., Radder ("The Politics of STS," 1998, pp. 326-327): Now I agree that this is precisely the position to which a systematic employment of ANT will lead. Hence Singleton's analysis confirms my earlier assessment that this theory, if applied consistently, cannot help you in answering the political question of 'What to do?' - and not just in particular cases (such as the cervical smear test programme), but as a matter of principle. In order to grasp the far-reaching implications of this conclusion, imagine a situation in which everyone endorses the actor-network approach and generally adheres to its rules. Clearly, such a global acceptance of Singleton's stance would entail the impossibility of any deliberate, future-oriented policy. Because of this, the argument had better be reversed. Since human beings are (and will remain) 'political animals', the politics of STS should not be constrained by the paralyzing framework of ANT.

    b.   Law (1999, p. 7): "Actor-network is, has been, a semiotic machine for waging war on essential differences"

         i.   Agency v Structure, Actor v Network, Actor v Sector, Actor v Stage, Agent v Object, Subject v Object, Individual v Culture/Context/Field/Environment/Nature/Economy/Market, Individual v State, Process v Structure, Atom v Force, Progressive v Stationary, Dynamic/Fluid v Static, Micro v Macro, Internal v External, Content v Context, Content v Container, Figure v Ground, etc.

             1. Idealism v Realism v Materialism
             2. Mind v Experience v Nature
             3. Fact v Value, Fact v Fetish, Fact v Fiction
             4. Conflict v Consensus
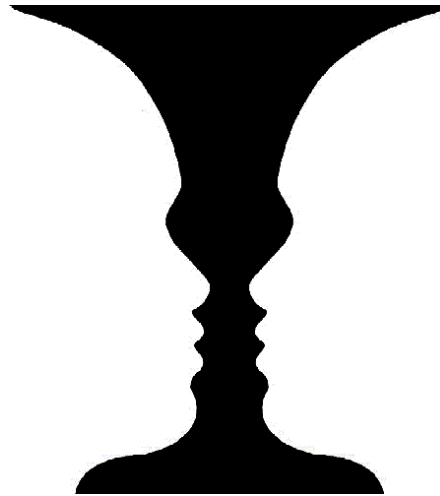
    c.   How do actors act and how do networks network? How do actors network and how do networks act? How do actor-networks actor-network?

         i.   réseau =

             1. grid grille, réseau, gâchette
             2. net filet, réseau, tulle, piège
             3. web toile, réseau, tissu, palmure, lacis, dossier
             4. connection raccordement, lien, relation, rapport, branchement, réseau
             5. mesh réseau, filets, engrenage, mailles de filet, rets
             6. connexion rapport, lien, relation, raccordement, raccord, réseau

         ii.

1. Structure

    a.   "Technology is Society Made Durable," (Latour, 1991):

         i.   Microstructures v Macrostructures composed of the same @ associations or interactions between actors (

    b.   Structure = "relational effect" (Law, 1992, p. 386).... residue of interaction.

    c.   ANT has little use of structure primarily due to a rejection of claims that "social structure" explains anything at all or let alone holds together without the glue of nonhumans. It is a complete rejection that an agency-structure binary can any longer offer anything generative as a dialectical engine or ontological tension. It is not so simple that ANT collapses structure into action. And its certainly not clear that after more or less dispensing with structure, and we might add doing quite well without, that ANT now needs structure, *a la* Giddens structuration theory.

    d.   On this point of structure, are ANT and structuration are irreconcilable or incommensurable paradigms in the Kuhnian sense? Does structuration need ANT?

        e.

2. **Description v Explanation**
   a. Is it enough to describe? See Fuller's criticism of case studies, regarding the normative and axiological dimension of research.
   b. "Society is Technology Made Durable," Latour (1991, pp. 129-130): Society and technology are not two ontologically distinct entities but more like phases of the same essential action. By replacing those two arbitrary divisions with syntagm and paradigm, we may draw a few more methodological conclusions. The description of socio-technical networks is often opposed to their explanation, which is supposed to come afterwards. ... If we display a socio-technical network — defining trajectories by actants' association and substitution, defining actants by all the trajectories in which they enter, by following translations and, finally, by varying the observer's point of view — we have no need to look for any additional causes. The explanation emerges once the description is saturated. ... Explanation, as the name indicates, is to deploy, to explicate. There is no need to go searching for mysterious or global causes outside networks. If something is missing, it is because something is missing. Period."
   c. "Politics of an Explanation," Latour (1988, p. 159): In other words, why should we want to explain anything? In what sort of peculiar situation is an explanation necessary and when is a powerful explanation seen as inherently better than a weak one?

3. **Relations and Signs : : From Networks to Networld**
   a. In spite of its principle of irreduction, does ANT risk reducing to—translating and transforming, or composing— a universe and world "exclusively of signs?"
   b. This is not a question of the "symbolic world," the world of representation. Indeed, here Latour (2013, p. 249) assures us that we do *not* "live in a 'symbolic world'," that is somehow different or other than a real world, or the world.
   c. The argument and problem are explicitly described by Ward (1995, pp. 119, 120): All reality is shaped and must pass through language and representation. There is no context in which a text may be situated to reveal its truth either because "beyond the text there are only more texts and traces of texts" (Baynes, Bohman, and McCarthy 1987:122). Simply put, we never have reality, only texts or chains of signs about reality. In making this claim that all knowledge is textuat postmodernists reverse scientific realism's causal arrows between objects and representations (see Sismondi 1993). They see objects as determined by culturally and historically contingent textual representations. They attempt to make their domain, culture, the source of all knowing. From their view, it is textual representations which do the "causing," not reality.
   d. As Serres (1987, p. 111) puts it, "language wants the world to stem from language alone ... at least this is what it says."
   e. The question has more to do with relationality than representation. Surely, a sign is a network, whether that sign is in the form of Peirce, Saussure, or Greimas.
   f. As Peircean scholar David Savan ("Questions Concerning Certain Classifications Claimed for Signs," 1977, p. 187) clarifies: a sign is a relation in which the order of the three relata is of the greatest importance. This is sometimes obscured by the fact that Peirce tends to use the language of relatives rather than of relations. To repeat, a relative is a term defined by a relation. . . . Peirce frequently speaks as if a sign were a relative, the first relate or subject in a three place relation. But it is clear that what Peirce intends is that a sign is neither any one relate . . . nor . . . the relation apart from the relata. A sign is a trio of relata as they are ordered within a genuine triadic relation.
   g. And what is a network?

- h.   If a Sign is a Relation, are relations signs?
    - i.   Peirce ("Basis of Pragmaticism," in *Collected Papers V*, 1906): It seems a strange thing, when one comes to ponder over it, that a sign should leave its interpreter to supply a part of its meaning; but the explanation of the phenomenon lies in the fact that the entire universe — not merely the universe of existents, but all that wider universe, embracing the universe of existents as a part, the universe which we are all accustomed to refer to as "the truth" — that all this universe is perfused with signs, if it is not composed exclusively of signs.
- i.   If a Word is a Network, is a network a word?
    - i.   Walpole (1937, p. 401): "each word is a network of interlinked definitions."
    - ii.   See *Word Economy* and *The Loom of Language*
- j.   If a Text is a Network, is not a network a text?
    - i.   Michel Serres and Carl Lovitt ("India (The Black and the Archipelago) on Fire," 1973, p. 57) once proclaimed of something specific, yet also perhaps something more general: "The text is a network of figures, a constellation of words. That which physicists since Maxwell, after listing, called a complex."
    - ii.   Derrida @ world as Text
    - iii.   Barthes @ from semiology to mythology
        1.   "in the field of the text (better, of which the text is the field."
        2.   Seamless web of inter-textuality
- k.   Is a world of signs a world of networks? Is not a world of networks a world of signs?
- l.   What is "the networked world"?
    - i.   Geodesic Globe @ Bucky Fuller
    - ii.   Internetworking the world
- iii.   From Networks to Networld: "Human communication has become the major use of computer networks and has transformed them into a social space where people connect with one another. Computer networks are not merely tools whereby we network; they have come to be experienced as places where we network: a networld." Harasim, Linda M. "Networlds: Networks as Social Space," in *Global Networks: Computers and International Communication*, Ed. Linda M. Harasim (Cambridge: MIT, 1993).
        1.   Latour, *Reassembling* (2005, pp. 132-133): Yet even those limits have their advantage since the very poverty of graphical representation allows the inquirer not to confuse his or her infra-language with the rich objects that are being depicted: the map is not the territory. At least there is no risk of believing that the world itself is made of points and lines.
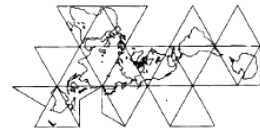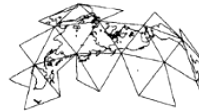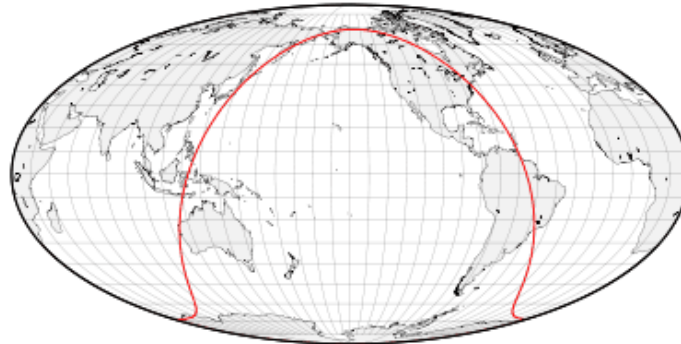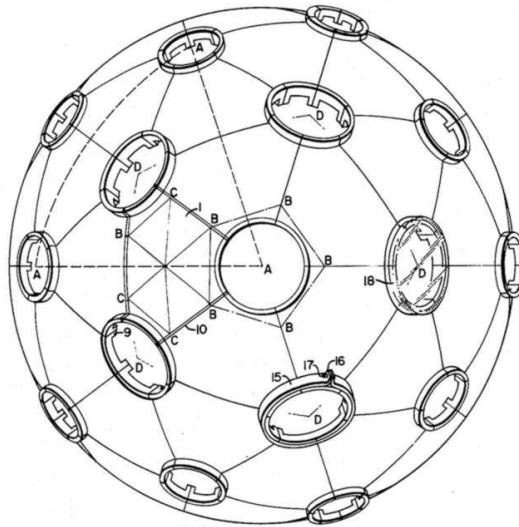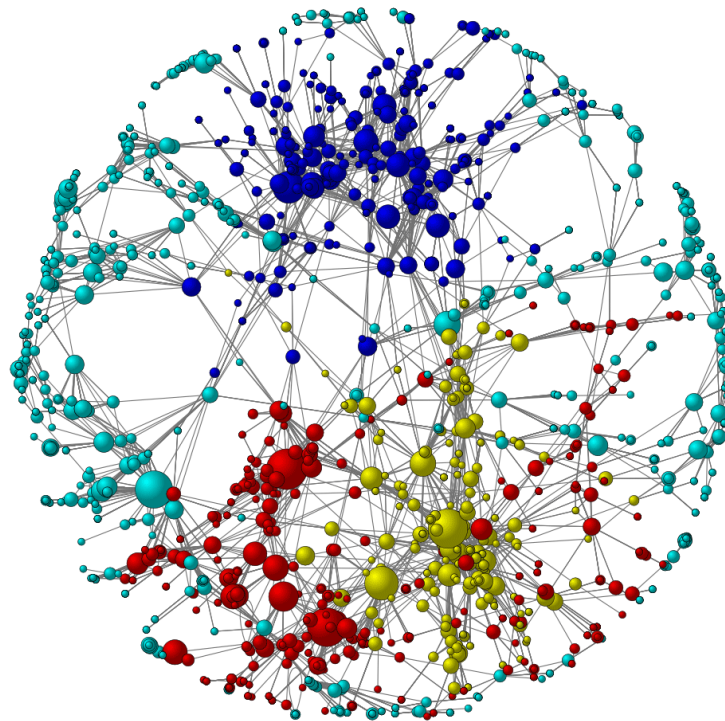
Fig. 3

    d.   **Depiction and Visualization of Networks** (Data Visualization, Knowledge Mapping, Social Cartography, etc.) @ SciViz & NetViz
           i.   Latour, *Reassembling* (2005, pp. 132-133): The weakness of the notion derives partly from the dissemination of rather simple-minded visual representations. At first, the graph representation of networks, seen as star-like embranchments out of which lines leave to connect other points that have nothing but new connections, provided a rough but faithful equivalent to those associations. It had the advantage of defining specificity not by any substantial content, but by a list of associations: the more connected, the more individualized a point was. But those visual graphs have the drawback of not capturing movements and of being visually poor. Yet even those limits have their advantage since the very poverty of graphical representation allows the inquirer not to confuse his or her infra-language with the rich objects that are being depicted: the map is not the territory. At least there is no risk of believing that the world itself is made of points and lines.
          ii.   Images of Networks
              1.   See *Journal of Social Structure*
                  http://www.cmu.edu/joss/content/issues/vizsymposium.html
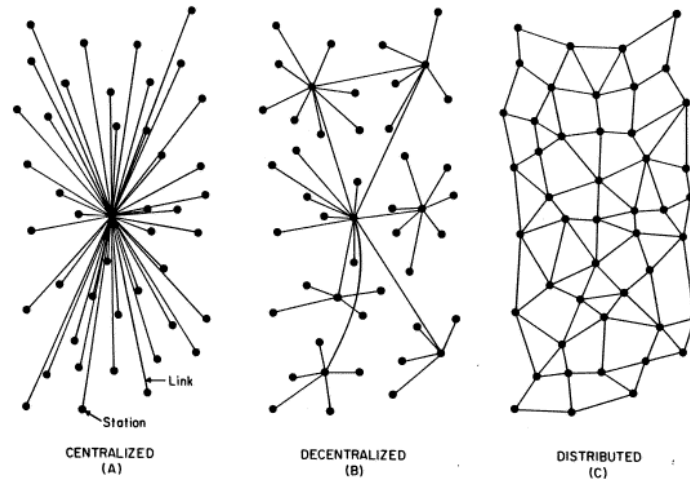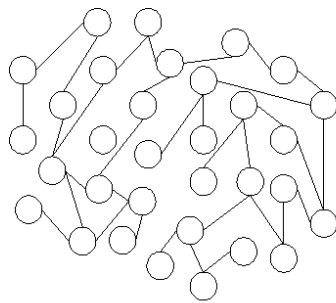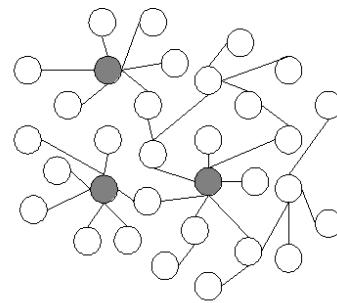   2.   See Question of Signs above

FIG. I — Centralized, Decentralized and Distributed Networks

(a) Random network   (b) Scale-free network

Level 0   Level 1   Level 2
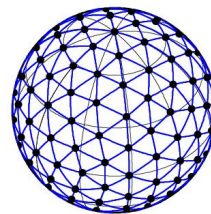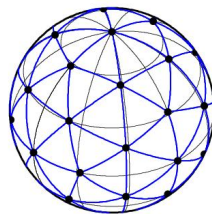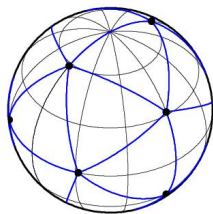
e.   Identification and Disidentification

f.   **Networks and counter-networks** (ANT v cANT) @ Conflict & Rival Networks : : Kritik
     ANT (KANT)

Note on Image:
.   Climategate http://www.theguardian.com/environment/hacked-climate-science-emails
•   Climategate Image by Profero (subsidiary Unsimplify) http://www.profero.com

- o http://rankexploits.com/musings/2010/proferounsimplify-clarifies-sort-of/
- Study commissioned by Oxfam http://www.oxfam.org
- Written by Stewart Conway of Trees, Water & People http://www.treeswaterpeople.org
  - o *"there are no progressive networks" – just hubs of activity here and there, lacking interconnection.*"
- Left Foot Forward response: http://www.leftfootforward.org/2010/03/combating-the-growing-influence-of-climate-sceptics/
- Analysis http://devconsultancygroup.blogspot.ca/2010/03/oxfam-study-network-analysis-of-climate.html

- g. **Power** (Resistance, Dissent, Dissensus, etc.)
    - i. Can a flat ontology—a network— account for power relations?

1. ANT has been adamant that the only answer to this question is that power is redefined *a la* Foucault— power is distributed, not held in potential.
2. ANT has been adamant that power is a network artifact
3. Power relations