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## **Scientism and antiscience: out of the shoal of modern ideologies**

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**Background:** It is wide opinion that our society is going through a mutation, towards a new social species different from any previous one, the so-called knowledge society. With such a term, however, we usually refer to a couple of distinct, though strongly linked together, processes: the building of a knowledge economy (e.g. Stehr) and the growth of a society of individuals (Elias). Moreover, we are presently confronted with the coming NBIC Convergence (e.g. Brainbridge & Roco, Grossman), the convergence among nano-sciences/technologies, bio-sciences/technologies, info-sciences/technologies and neurocognitive-sciences/technologies. Against such big challenges for both human intelligence and social governance, still we continue having in mind categories rooted in past long-range history, crystallized in modern ideologies as (in some sense) "Illuminism" and "Antilluminism"(Sternhell).

**Hypothesis:** I will consider a couple of antinomical intellectual positions: a negative pole (let's call it "antiscience") and a positiv(istic) pole ("scientism"). I will argue that the anthropological turning point we are currently facing calls in question fundamental categories of our modern thought. Old and outdated resources are assumed since so many centuries (and more), both in the formation of public opinion and in the education of scientist himself. Many times we heard about publics charged of antiscience (e.g. technophobia) and scientists charged of scientism (e.g. ideological reductionism in biology and informatics). Sometimes the charges are exchanged among scientists themselves (e.g. Lewontin, Dawkins). Maybe, we have to explore other roads for thought, out of some myth both pre-modern and proto-modern.

**Methods:** I will start from literature coming from the debate between antiscience and scientism. Merton and Wright Mills strongly raised the upcoming risk of the first tendency, Hayek the risk of the second one (the counter-revolution of science) and Lakoff and Johnson the risk of both currents (objectivism-subjectivism). I will also make use of the distinction between beliefs and ideas (Ortega y Gasset; J. Cohen; cfr. tacit knowledge in Polanyi) and the conceptual network made by field, habitus and ideas (Bourdieu). Indeed, we cannot reason without believing - presuming unconsciously - some beliefs, i.e. having in mind something like habits of mind (Margolis), with coherence or completeness largely out of control, also while doing science, policy making and actual rational choice. We also produce and discuss, accept and contest some ideas through voluntary reasoning (Hacking), building definitions, conceptual networks, theories more or less rigid, complete and coherent. However, scientific knowledge itself is grounded in our beliefs. One way to find out our beliefs is to discover some cluster of beliefs we can name myths, as soon as we elicit them, and sometimes archetypes (Jung) if we are deeply, emotionally involved in their believing. Similar beliefs are also active as the symbolic background in theory-building during scientific discovery. Public positions rooted in such beliefs are to be intended as one stand taken from one's stand inside a sociocognitive field (Bourdieu), absolutely careless of been just what they are. Results: Among the drivers of contemporary social change, we find three symbolic drivers, i.e. clusters of beliefs. Each of them can be put in the form of an ideal segment, the ends of which are the couple of antinomical poles as technophobia/antiscience and technofrenzy/scientism about epistemology (absolute relativism vs. utopian absolutism), ontology (bits vs. knowing, genes vs. organism, atoms vs. complexity, neurons vs. consciousness, individuals vs. social structure) and ethics (slippery slope vs. uchronic present).

**Conclusions:** There is still a big room for science communication both on the side of "lay" people and on the side of experts. Probably, the last one has the biggest part in bottleneaking both science further development and the development of a true democratic science-based society.

*Topic 001 Emerging issues in science and society*