

***Science, Ideology and Knowledge: A Reply to "Social Epistemology Revisted"***  
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This reply offers a general analysis, along with several probes and tangents for further possible exploration, of the video interview with Professor Steve Fuller, revisiting 25 years of the journal *Social Epistemology*, conducted by Dr. Elisabeth Simbürger. In particular, I will focus on the topic of 'science' as a multi-disciplinary knowledge category in the contemporary Academy as discussed therein.

When Elisabeth asked "What else would you add or do differently?" to the project of 'social epistemology' 25 years later, Steve replied by starting with the notion of academic disciplines. The so-called 'artificiality' of disciplinary boundaries and borders had by the late 1980s led to studies of 'interdisciplinarity.' According to Professor Fuller, this was then "politically high-jacked" by some people as a way of "not simply showing gaps" between disciplines, "but of deconstructing academic knowledge, for purposes of opening up the university to become a tool for larger social interests." Fuller refers to this as a "disturbing feature of neo-liberalism," thus identifying an economic-political context in which the notion of 'interdisciplinarity,' and also 'social epistemology' is sometimes framed.

Though the political context will be raised again below, I'd like to first suggest the importance of identifying a vision or 'map' of knowledge, without which it becomes difficult to see just where 'social epistemology' can be suitably identified and elaborated. Whether one accepts the tripartite division of the Academy into 'natural sciences,' 'social sciences' and 'humanities' (Anglo-American model) or a bipartite division into 'human-social sciences' and 'natural-physical sciences' (German-Russian-Chinese – GRC model, cf. *naturwissenschaften & kulturwissenschaften* or *geisteswissenschaften*, *естественные науки & общественные науки*), with philosophy and/or theology serving as mediator or overseer, makes a significant difference to how a person will view the meanings of 'science,' 'knowledge' and 'society.'

In the interview, Fuller sticks mainly with the Anglo-American view that 'science' refers to 'natural-physical' fields or disciplines. Thus, 'science' does not include those who study history, literature or the arts, like it does when viewed in the alternative GRC 'map of knowledge.' Instead, professionals in the latter model are 'scholars' or 'public intellectuals,' figures operating in the humanitarian and liberal arts traditions. In either model, however, the social epistemologist is viewed as an 'interdisciplinary mediator' (Fuller 1988) who can bridge some of the gaps between natural-physical scientists, human-social scientists, ideological humanists, philosophers and theologians.

The preceding paragraphs set the stage for Fuller's unique approach to 'social epistemology' – which he calls recognizing "the social conditions of knowledge production" – and the insightful project he has prepared in the late 20th and early 21st century. "My version of social epistemology has always been very much concerned with

regard to science as a universal form of knowledge," says Fuller in the interview. He then asks the following crucial question: "What does it take to make it [i.e. science] universal?" This is a question worthy of thinking long and hard about and I am pleased to take time here at SERRC for a reply.

Drawing on my previous work in sociology of science (SoS) and science studies (*науковедение*) in Russia, let me suggest this: It takes 'ideology' to make knowledge (aspire to be) universal. Without ideology, there can be no recognition of science as 'universalistic,' even in aspiration. The notion that natural-physical sciences aspire to universal knowledge, but that human-social sciences are 'softer' or less rigorous and therefore do not similarly aspire, is itself an ideological position. Thus, to say that natural science is a form of globalising knowledge is as much a hermeneutical as it is an epistemological statement.

Ideology in this sense means the ordering of ideas, making sense of and giving meaning to ideas, organising one's 'map of knowledge' and enabling common social values. It does not refer to assessing the material or empirical 'facts of nature' that one deals with, in perhaps a crude, basic or pre-theoretical sense while doing science. Without ideology there can be no coherent scientific theorising, methodologies or experimentation. This makes ideology in many ways the driver and deliverer of science, under whose guise scientific and non-scientific knowledge of the modern variety is produced and consumed.

Every scientist and scholar in every field or discipline is in some way ideologically-oriented; even mathematicians carry ideological presuppositions into their work. To suggest otherwise is to commit some form of unrealistic objectivism or positivism, which are of course them-selves also ideologies. Trying to avoid ideology altogether in the patently reflexive field of social epistemology, rather than facing it and insisting on exposing it for the benefit of readers, listeners or observers, would be a recipe for failure.

In other words, as I understand it, Fuller's project of social epistemology attempts to show both the power and the limitations of (natural) science as a type of common (social) knowledge, particularly in relation to ideology, worldview and religion. This explains why he constantly refers to theology and philosophy as appropriate and necessary counter-weights to the ideology of scientism (read: that exalts science out of proportion to reality), the latter which has gained prominence particularly in scientifically (over-) developed countries (especially of the global north). Without recognizing the impact of ideology on the discourse of science (and technology) studies and its heir social epistemology, the result will likely be a one-way slide into 'science everywhere and always knows best,' even if it lacks predictive power, necessary human understanding and ethics in manifold ways.

As Fuller says, "When I say that science is universal knowledge, I'm not saying that science is already universal knowledge, but rather that's the project of science." If the question were instead: "how to make science universal?" then personally, I view this task

as next to impossible. Science is not and will never be 'universal.' Yet, we can nevertheless strive to produce valuable scientific knowledge for humanity on a local or global scale, within the changing landscapes and environments in which various fields of research and teaching are moving.

This leads to an excellent short phrase made during the interview, one that carries the punch of a provocative public intellectual, and which for me encapsulates Fuller's 'social epistemology' project: "To understand the social character of knowledge is to understand the context in which knowledge is produced and consumed...precisely what public intellectuals are good at."

Here Fuller puts forward knowledge gained by SoS in recent decades, revealing that the old view of 'objective science' (cf. Monod 1970), where science happens in a vacuum, done by human-robots, seeking complete neutrality, can no longer be maintained. Instead, the more appropriate new way to view science, knowledge production and consumption is within the social, cultural, ethnic, gendered, linguistic, religious, political and ideological contexts in which it is practiced. In such surroundings, we are able more clearly to assess the 'value' of science in the 'post-modern' world-era and thus to "think things out before we put them out," in Marshall McLuhan's prescient phrase about new media and technologies.

"The [first] question for social epistemologists," suggests Fuller on his homepage, "is whether science's actual conduct is worthy of its exalted social status."

This 'exalted social status' of science is indeed a controversial topic; science is widely practiced in some parts of the world, while almost absent in others. Indeed, in societies of the global south where science or scientific thought is much less developed and diffused, the lack of contact by 'regular people' with scientists makes them susceptible to veneration or suspicion, if not wild attraction or condemnation. The knowledge of the world that natural-physical sciences attain has nevertheless in some cases provided an elevation of worth to scientists beyond that of any other (competing or cooperating) knowledge producers. Thus, following the work of Robert Boyle, one might argue that if nature is a temple, then natural-physical scientists today act as priests; while if society is the temple then sociologists would be its leaders, prophets and guides.

As it is, I'm not so sure that natural-physical scientists do indeed possess such a high social status, if one makes a comparison with, for example, actors and actresses, singers, artists and athletes of the highest level. In the scientifically developed nation of the U.S., it is surely plausible to conclude that no living scientist has the level of status of film stars or professional sports players. Indeed, natural science could be said to actually have a low status if only for the lack of familiarity most people have with those who 'do natural science' as their profession. In part, because we who are reading, writing and replying at this site are mainly academics, it is in our realm of awareness to know and perhaps even

to elevate top-level natural scientists to a certain status. But that does not mean society values academic scientists to the same degree.

Fuller continues, in answer to his own question about (natural) science's status: "Those who say 'yes' assume that science is on the right track and offer guidance on whom people should believe from among competing experts, whereas those who say 'no' address the more fundamental issue of determining the sort of knowledge that people need and the conditions under which it ought to be produced and distributed."

In investigating what sort of knowledge people need, Fuller falls into the 'no' category; natural science's status is over-exalted compared with its conduct. The rewards of scientists have over-reached their actual worth to humanity in light of the very real dangers that some natural sciences pose. Our willingness to look more closely at the costs, or at least to take a sober (cost-benefit) look at other types of (non-scientific or extra-scientific) knowledge that currently have perhaps a lower status than natural sciences, but which contain greater human meaning and importance, is long overdue. At least this may be true in the hyper-scientific 'western world,' if not globally.

According to Fuller, sociology of science (SoS) and science and technology studies (STS) "provide(s) an empirical understanding of how that process [of science becoming a global currency] takes place." One could add that there are additionally comparative, historical, and also theoretical understandings, which are made into 'currency' by philosophers of science. The reason for making this point is to guard against the idea that 'empiricism' can or should be the sole ideological indicator of 'scientific understanding,' a point with which Fuller would likely agree (i.e. as he has stated elsewhere). As scholars and scientists we seek empirical understanding along with other types of social knowledge.

"Once science becomes a kind of global knowledge that everyone can appropriate," claims Fuller, "it also then becomes a standard against which you judge the sort of knowledge that is indigenous to where you happen to live."

Here I interpret Fuller as welcoming a revaluation of 'indigenous knowledges' in light of core-periphery dynamics. Knowledge that is indigenous and that cannot necessarily be deemed as propaganda, even if it disagrees with conventional modern, western (natural) scientific (MWS) approaches, becomes openly accessible and noticeable to many people living in our inter-connected electronic-information age. One need only think about the trees on *Avatar's* Pandora, to tune in to the power of indigenous social epistemological self-understanding.

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## References

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