

The Logic of (the) Scientific Realism (Debate)

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To be a scientific realist or indeed a scientific anti-realist is to make certain commitments. These commitments possess various characteristics. Chief among them is logical structure. More precisely, the commitments impose a web of (partly) inter-connected logical constraints on what can and cannot be legitimately asserted in their name. Alas, such constraints are not always heeded by the advocates of those commitments. There is thus a need to throw light on this web of logical constraints. In this talk, I attempt to do just that by identifying various parts of the logical structure of commitments in the debate over scientific realism. I focus on those that are broadly shared by scientific realists and even by soft anti-realists - e.g. the constructive empiricists. To give a few examples of the kinds of commitments I discuss, they include the following: that there is a mind-independent world, that scientific claims have truth values, that our best scientific theories have some success, that success can be measured in terms of truth content, that our best scientific theories are not true simpliciter and that to guarantee an increase in truth content, success must be preserved across theory change. I hope to show that, with only classical logic (supplemented with relevance constraints) as our guide, all sorts of interesting consequences emerge from these and other commitments.

Bio:

Ioannis Votsis holds degrees from the University of California, Berkeley (BA 1998) and the London School of Economics (PhD 2004). He is currently Senior Lecturer in Philosophy and Co-Director of the Diploma at the New College of the Humanities and a Fellow at the London School of Economics. His main research area is the philosophy of science but in addition he has active interests in metaphilosophy, the philosophy of artificial intelligence, the philosophy of logic and political philosophy. He has co-edited a number of special issues on themes like the underdetermination of theories by evidence, the role and value of novel predictions, the nature of unification and the extent to which observation is theory-laden as well as the *European Philosophy of Science Association 2013 Conference Proceedings* volume (the latter with U. Mäki and S. Ruphy and G. Schurz). His work has been published in several journals including *Philosophical Studies*, *Philosophy of Science*, *Studies in History and Philosophy of Science* and *Synthese*. At present, he is working on several unrelated topics including a conception of physical computation, the relationship between voting rights and responsibilities and the question whether fundamental physics necessitates the existence of intrinsic properties.