Three Lines of Investigation at the Metaphysics Research Lab

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In this talk, I describe three lines of philosophical investigation actively being pursued in the Metaphysics Research Lab at Stanford University (http://mally.stanford.edu/). The general fields of the research are:

(1) theoretical applications of object theory,

(2) epistemology, and

(3) computational metaphysics.

I plan to spend 15-20 minutes describing a line of research in each field.

In connection with (1), I review object theory and point out some of its most important theorems concerning possible worlds, mathematical objects, Leibnizian concepts, etc.

In connection with (2), I sketch an epistemology for solving the problem concerning knowledge of abstract objects. In contrast to the way we know physical objects, the epistemology for abstract objects grounds our knowledge of abstract objects in an existence (comprehension) principle that systematizes our practices. This kind of epistemology helps to reconcile Platonism and the Wittgensteinian conception of the meaning of terms which denote abstracta (e.g., mathematical terms).

In connection with (3), I sketch how computational tools can be brought to bear on a metaphysical theory, so that an automated reasoning program can find proofs of fundamental theorems of metaphysics from antecedently specified principles. I sketch how this is done, and indicate where the research is heading.