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METALOGIC AND EMPIRICAL THEORIES

Summary

Metalogic (as a part of metamathematics) deals with the properties of formalised mathematical theories. Its applicability to empirical theories is an object of debate. The paper defends the moderate view that although it is difficult to expect such spectacular results, as have been obtained on mathematical theories, nevertheless the metalogical analysis of the first two gives us some benefits. Empirical theories may be understood as axiomatised sets of propositions closed with the operation of logical consequence. Two questions illustrate the thesis of this paper, namely the question of the elimination of theoretical terms and the question of the so-called philosophical presuppositions of science. As regards the second problem, a negative thesis is defended here: science is not based on philosophical presuppositions as premises of scientific reasonings.

Translated by Jan Kłos

Słowa kluczowe: metamatematyka, metanauka, konsekwencja logiczna, aksjomatyzacja.

Key words: metamathematics, metascience, logical consequence, axiomatisation.

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