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Logic as an Anti-platonic Antidote. A Case from Chwistek

In my presentation I will propose an interpretation of Leon Chwistek's late semantic system known as 'Rational Semantics' or 'Rational Metamathematics' (RS, in short), which was fully outlined in his Limits of Science (1935). My objective is to demonstrate that RS not only could, but also should be used as an anti-metaphysical device – in particular as an anti-Platonic 'antidote' (in the traditional formulation of mathematical Platonism). The sketch of the argument to support my claim can be formulated as follows:

1. RS represents a coherent, anplatonic project of metamathematics.

2. The adoption of mathematical Platonism in foundations of mathematics results in a difficulty in differentiation between scientific/rational propositions and metaphysical speculatn in this context.

    2.1 Mathematical Platonism – in modern formulation - amounts to the following claim: 'one should adopt certain metaphysical statements (such as: <<numbers exist>>), whenever this becomes necessary for our best deductive theories to function'.

    2.2 The metaphysical propositions mentioned in 2.1. are adopted ad hoc. There is no strong (ex. logical) criteria for their adoption, except for those of purely practical nature, namely: theoretical functionality.

    2.3 A distinction between a rationally-adopted and a non-rationally-adopted proposition does not, as a whole, hold in mathematical Platonism, at least in the above shape and form.

3. In order to assure the rationality of deductive systems, we must either redefine mathematical Platonism or abandon it altogether.

In the final part of my paper I will argue that, depending on the interpretation, RS can be used to achieve either the former, or the latter.

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