Logic, Reduction and Number in the Tractatus

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Wittgenstein's philosophy of mathematics in the Tractatus has usually been interpreted as involving a rejection of logicism. Frascolla has recently challenged this view and argued that, despite differing in important ways from the logicism of Frege and Russell, the Tractatus contains an analysis of the concept of number which is correctly classified as logicist (Frascolla (1994), (1997)). I have argued, on the basis of the text of the Tractatus and, especially, of Wittgenstein's annotations to the Tractatus concerning the concept of number, made in the course of discussions with Ramsey (cf. Lewy (1967)), that Frascolla's interpretation is incorrect (Wrigley (1998)). In the present paper I reply to Frascolla's criticisms (Frascolla (1998)) of my interpretation of the Tractatus, and specifically of the "Ramsey" propositions. I argue that although Frascolla is quite correct in emphasizing that the Tractatus proposes a reductive definition of the concept of number in terms of the concept of operation, and the concept of operation is a logical concept this is still not sufficient to justify classifying the Tractatus account of number as a new form of logicism, since the notion of operation is a logical concept only in a broader sense which is still compatible with a radical distinction between mathematical and logical (pseudo)-propositions, an idea which is incompatible with the fundamental thesis of logicism.

References

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