REVIEWS

Nils-Eric Sahlin, *The Philosophy of F.P. Ramsey,* Cambridge University Press, Cambridge, 1990.

Reviewed by

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There is a continued interest in the work of Frank Plumpton Ramsey (1903–1930). Although that interest is perhaps magnified by the romantic allure of a career cut short at the age of 26, Ramsey's contributions to probability, the theory of truth, combinatorics, and the philosophy of mathematics were substantial. This book is written by an admirer of Ramsey and is intended to 'convey a feeling of the remarkable originality and depth of Ramsey's thought' (p. 10). The author's failure in this respect can be traced partly to a lack of context for Ramsey's work and partly to incessant verbal infelicities that interfere with the discussion. This note reviews only the chapter devoted to logic and mathematics (pp. 159–180), but the same criticisms can be levelled against other parts of the text as well.

As Sahlin notes, Ramsey's reputation as a contributor to formal logic rests on his criticisms of *Principia Mathematica*[1] and Wittgenstein's *Tractatus,*[2] the title given by Braithwaite to the posthumous collection of Ramsey's papers (*The Foundations of Mathematics*) and the strength of his work in that area. Sahlin's chapter discusses briefly the paradoxes and the theory of types (ramified and otherwise) and Ramsey's attitude toward axioms and mathematical propositions. It is characteristic of Sahlin's style that it is frequently hard to tell when he is trying to paraphrase Ramsey and when he is trying to supply commentary. The critical apparatus for the chapter is limited in size and ignores almost all historical work on logic. For convenience of reference, Sahlin gives page

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[1] *The foundations of mathematics*, Proceedings of the London Mathematical Society (2) 25 (1926), 338–384. Reprinted in F.P. Ramsey, *The Foundations of Mathematics and Other Logical Essays*, R.B. Braithwaite (editor), (London, Routledge & Kegan Paul/New York, Harcourt, Brace, 1931), 1–61.

[2] *Critical notice of L. Wittgenstein's 'Tractatus Logico-philosophicus'*, Mind 32 (1923), 465–478. Reprinted in F.P. Ramsey, *The Foundations of Mathematics and Other Logical Essays*, R.B. Braithwaite (editor), (London, Routledge & Kegan Paul/New York, Harcourt, Brace, 1931), 270–286.

references to all three editions of Ramsey's papers,[3] which seems almost too generous in the absence of textual problems.

Sahlin's discussion of the paradoxes smacks of rational reconstruction rather than history, thanks partly to the absence of references. The following is a fair example of Sahlin's style on the reception of the paradoxes: 'One or other of the bearing walls of logic has to be replaced or strengthened, if we are not to be buried under the rubble of falling theorems' (p. 162). The vividness of the present tense is not in keeping with the narrative style of the rest of the discussion. Some of the verbal unclarity results from not having considered carefully enough the English translation from Sahlin's Swedish original (a task for which the author himself was to some extent responsible). Although D.H. Mellor is thanked for having read and commented on the text, he could have made suggestions for improving the English version.

In treating of the vicious-circle principle, Sahlin refers to the work of S. Halldén, his thesis advisor, rather than to the volume of Chihara, *Ontology and the Vicious Circle Principle*.[4] Sahlin describes Ramsey's version of the theory of types as a 'sweeping recast of the philosophical foundations of *Principia Mathematica*" (p. 165). It is safe to say that Ramsey's picture of the hierarchies of types was different from that originally given by Russell in his essay on type theory.[5] Whether it is a sweeping 'recast' of the philosophical foundations of Whitehead and Russell's book depends on what a 'recast' is. These stylistic vagaries leave the reader uncertain about what the author is trying to say and how the line of thought runs. Later in the same section one finds: 'As we have seen, a paradox can be solved by showing that its premises, the arguments by [sic] which it is derived, are incorrect. One way is thus to prevent a function being one of its own arguments' (p. 166). Ramsey's own exposition is clearer.

Sahlin describes Ramsey's version of the theory of types, ponderously noting that the term 'Ramseyfied' is applied 'humorously' (p. 170). He observes that Ramsey is following a line of thought from the *Tractatus*, as Ramsey himself observes. Again, however, the author's language is liable to obscure rather than to reveal his point. 'The niceties of this procedure are that...we can never create non-predicative functions' (p. 172). Sentence fragments and the misuse of words like 'differ' and 'prototype' sow further confusion (pp. 172–173). Sahlin describes Ramsey's philosophical motivation with the following image: 'If the tree of logicism, which has run wild, is to be able to withstand the rough winds of formalism and intuitionism it has to be considerably pruned and more firmly rooted in the

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[3]In addition to Braithwaite's 1931 edition, there is Braithwaite's 1960 edition, published by Littlefield, Adams (Patterson, N.J.), and D.H. Mellor's edition, *Foundations – Essays in philosophy, logic, and economics*, London/Henley, Routledge & Kegan Paul, 1979.

[4]Charles S. Chihara, *Ontology and the Vicious Circle Principle*, Ithaca, Cornell University Press, 1973.

[5]Bertrand Russell, *Mathematical logic based on the theory of types*, American Journal of Mathematics 30 (1908), 222–262.

philosophical mould' (p. 173). It would take more than the 'rough winds' borrowed from Shakespeare's sonnet to blow insight for the reader into that image.

The discussion of the axioms of infinity and choice that follows suffers from the same flaws. He describes Ramsey as having cast 'a covetous eye' in the direction of these axioms (p. 175). It would be as helpful to claim that he cast 'a cold eye' on axioms, certainly among the most difficult things to covet. In the same way, Sahlin notes that 'it is odd that the founders of logicism wouldn't budge an inch when it came to this ontological assumption [the axiom of infinity]' (p. 176). Somehow the axiom of 'infinity ± an inch' seems hard to motivate.

While some of Sahlin's comments are legitimate reconstructions of Ramsey's arguments, there are other observations which mislead beyond anything that Ramsey said. For example, Sahlin writes, 'Actually, it is interesting to note that one can see with some precision how Ramsey gradually departs from logicism by giving up its axioms one at a time' (p. 177). Logicism is not a view that can be abandoned in this piecemeal fashion, although uncertainty about axioms (like choice) could lead to a rejection of the whole logicist programme. (One may see a reflection of this movement in French intuitionists like Borel and Baire.) Sahlin's picture strikes one as little more plausible than the idea of giving up an axiom one symbol at a time.

Sahlin's exposition of Ramsey's views is the victim of the absence of critical support, an abundance of overblown metaphors, and simple misuses of language. This is not to say that his discussion fails of its purpose, to send the reader back to Ramsey. It is likely that the reader will hurry back to Ramsey to find out what he could have said to produce Sahlin's prose. The comments that Sahlin makes about the structure and development of Ramsey's ideas lose their effectiveness in such surroundings.

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