Cheryl Misak

Frank Ramsey: A Sheer Excess of Powers Oxford University Press, Oxford 2020, 500 pages

by Brent C. Odland

Few things raise as many interesting counterfactual questions as the premature death of a polymath like Frank Plumpton Ramsey. Ramsey, the subject of Chervl Misak's biography, is perhaps best known for his widespread achievements in economics and mathematics, where he pioneered important advancements in optimal savings and optimal taxation (Ramsey 1928), and decision theory in the former, and what has come to be known as Ramsey theory in the latter (Ramsey 2009). It seems though that these impressive achievements were merely side projects for him, and his true passion was for hard problems that occupy "the borderlands between philosophy, mathematics, and economics" (Misak 2020: 371). Misak's book follows his life and achievements from his birth in 1903 to his untimely death in January, 1930, just over a month before his 27th birthday. At the time of his death, he was at the center of the most important circle of the history of analytic philosophy, regularly discussing problems with Maynard Keynes, G. E. Moore, Bertrand Russell, and most significantly, Ludwig Wittgenstein. Ramsey seems to have had a profound influence on Wittgenstein, though the latter was loathe to admit it, pushing him to give up dubious points made in Tractatus Logico-Philosophicus and nudging him towards pragmatism.

Ramsey's interests in philosophy were far ranging. He took up issues in moral and political philosophy, as well as epistemology and logic. His interests in political philosophy seem to have been spurned by his mother, Agnes Ramsey, who was a social reformist and early advocate of feminism. During his boyhood, she took him to visit poor workhouses, and this inspired in him a lasting care for the working class and for women which also had an impact on his work in economics. His father, a mathematician, pushed him towards mathematics, leading him to develop an interest in mathematical logic and the foundations of mathematics. Misak paints a vivid picture of their family life that puts the development of Ramsey's thought in detailed context.

Ramsey's work on logic and foundations was influenced by Russell and Frege. Early on in his short career, he was an advocate of Frege and Russel's project

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to reduce all of mathematics to laws of logic. He set about trying to repair various aspects of Russell's *Principia Mathematica*, drawing on Wittgenstein's criticisms in the *Tractatus*. One significant achievement in these regards was his improvement on Russell's rammified theory of types. This was a controversial aspect of Russell's thought that was set up to avoid logical and semantic paradoxes. It was controversial in part because its introduction made it impossible to construct important theorems of classical mathematics without relying on the "Axiom of Reducibility," which, as Wittgenstein pointed out, was not itself a logical law. Ramsey simplified the theory of types and removed the need for the the axiom of reducibility by introducing the notion of a predicative function. This achievement sheltered logicism from the criticism of Wittgenstein and critiques from the intuitionist and formalist foundational schools.

Despite his improvements on logicism, Ramsey's commitment to the doctrine seems to have wavered in his final two years. Misak shows that in a couple of his last written papers, Ramsey expressed sympathy towards the form of intuitionism expressed by Herman Weyl (Weyl 1998). Since this wavering happened so near to his death, we are left to wonder how far his sympathies went. It is unclear whether he meant to abandon logicism altogether or if he simply was experimenting with the finitistic approach. Another possibility is that he meant to synthesize the two views in some way. Such an outcome would likely have shaped scholarship for decades. Misak shows how his turn towards intuitionism would have aligned with other aspects of his philosophy, specifically his attitudes towards truth. Intuitionism has sometimes been characterized as an anthropological approach to foundations, and this would have meshed well with Ramsey's notion that truth has to be defined within the confines of human experience. Sadly, in these regards we can only speculate.

Another cause for speculation is Ramsey's work on Hilbert's *Entscheidungsproblem*. In 1929, he wrote one paper on the subject in which he hit a wall before he could make any progress towards a solution (although he inadvertently founded a branch of mathematics along the way). The problem was famously proven to be unsolvable by the results of Kurt Gödel and later Allen Turing. Interestingly, Turing came to study at King's College in 1931, where Ramsey held a professorship until his death. Ramsey was delighted to teach a course on foundations of mathematics during his time at King's but because of his death, Turing attended the lectures of his replacement. Given their overlapping interests it seems likely that they would have developed a strong affinity, as Misak points out. It is almost frightening to think of what might have been accomplished by a duo of Ramsey and Turing.

A further interesting aspect of Ramsey's thought has to do with his influences outside of the Cambridge circle. He serves as a link between what are normally thought of as distinct schools: American Pragmatism and British Analytic Philosophy. Ramsey was one of the only members of the Cambridge circle willing to call themself a pragmatist. While he was not swayed by the type of pragmatism espoused by William James, which received a scathing reception at Cambridge, he was persuaded by the work of Charles S. Peirce, the doctrine's founder. Ramsey was most influenced by Peirce's dispositional account of belief, in which beliefs are to be understood as rules that guide our actions, and the resulting definition of truth. According to this definition a true belief is the one that would be held at the end of an inquiry carried out sufficiently far. For Peirce and Ramsey, truth is the limit of human inquiry. Peirce's epistemology informed Ramsey's account of partial belief, which factored into some of his work on economics.

Ramsey followed Peirce in other ways as well. The most striking of these is his identification of logic as one of three normative sciences along with ethics and aesthetics. Ramsey made this distinction in the book he was working on in the months preceding his death. The unfinished book was eventually published under the title of On Truth, though Ramsey's working title was Truth and Probability, a name that was shared by one of his previous papers (Ramsey 2016). In the book he was trying to give a general account of human inquiry. Peirce characterizes logic, ethics and aesthetics this way most clearly in his 1903 Harvard lecture series (Peirce 1997). The reason Ramsey's taking on of this idea is surprising is that it is unclear how he would have gotten his hands on it in print as the lectures were not published in his lifetime. Peirce's collected papers only began to be published a year after Ramsey's death. Ramsey was first introduced to Peirce by Charles Kay Ogden, and most of Ramsey's Peircean notions can be traced back to a series of articles Peirce wrote for *Pop*ular Science Monthly. However, Peirce's ideas about the normative sciences are not to be found in this collection. How Ramsey came upon them then seems a bit of a mystery. It would certainly be interesting to find out that he arrived at this classification independently of Peirce.

Ramsey's thought challenges the notion that analytic philosophy and pragmatism evolved as completely separate traditions. There are many similarities between the two schools and Ramsey was keen to spot them. He recognized a thread of pragmatism in Russell as well, a point which Russell does not seem to have disagreed with. Russell seems to have warmed to Peirce later in life and it is possible that this was Ramsey's doing. Ramsey also seems to be partially responsible for the pragmatic turn in the later Wittgenstein.

If Misak's book tells us anything it is that we needed more of Ramsey. It is difficult not to be awed by the incredibly achievements he made in such a short time on this earth. Had he lived even a few years longer there is no telling how different the face of analytic philosophy would be. Reading Ramsey's biography makes one feel the depth of this loss. This sadness, however, contrasts sharply with how enjoyable the book is to read. It truly is an impressive book. Much of Ramsey's work was quite technical but Misak does an excellent job of giving the reader exactly as much detail as needed to understand the context and significance of these results. Throughout, there are also short asides contributed by a wide variety of experts in the fields Ramsey contributed to that explain his work in more detail. Ramsey's biography is sure to become essential reading for those interested in the history of analytic philosophy, pragmatism, and the history of mathematical logic.

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