Frege Explained: From Arithmetic to Analytic Philosophy By Joan Weiner Open Court, 2004. xv + 179pp.

Given the number of existing introductions to Frege, one might initially be inclined to doubt that we could need this new one. Such doubt would be doubly misplaced. For a start, this book is a revised edition of Weiner's <u>Frege</u> (Oxford University Press, 1999), and so does not add to the existing literature, but replaces one of its current number. More importantly, to its proper audience this book offers a uniquely accessible and illuminating way into Frege.

What, then, is the book's proper audience? In my opinion the book is not suitable as a text for a standard second or third year undergraduate course on the history or origins of analytic philosophy. When I first read it, I was in the midst of teaching such a course, and I found the book frustrating—essentially because it has no footnotes. Its predecessor was published in the Past Masters series, which allows no footnotes—and this feature has been retained in the new edition. There is a short list of further reading at the end of the book, but this is a very blunt tool. After finishing the book, the reader is left with no way of following up on *specific* points of interest, and can only embark on Frege's corpus, or on one of various recommended secondary works.

However upon re-reading the book once the above-mentioned course was over, I realised that I had been looking to it for something it was not designed to give, while ignoring its manifest virtues. It struck me that reading this book is like going to Professor Weiner's office and asking 'Tell me about this Frege chap—what was he on about?'—and having her oblige! We are given a tour through the main themes of Frege's work which is chatty and relaxed, with clear lines of thought that are easy to follow. What more could one hope for in such a situation?! The best way into a new subject is to have someone who knows it well sit down and tell one about it. Unfortunately most people do not have access to the relevant experts, and most experts do not have time to explain their fields to novices—but here, in the case of Frege at least, we have a solution to this problem. This, then, is the perfect book not for philosophy students studying Frege, but for non-philosophers—and for philosophers working in other areas—who want to get an idea of what Frege did, and of why he is such an important figure.

Apart from Weiner's clear conversational style, easy knowledge of the material, and a knack for pitching the issues at the right level of difficulty, the main thing that makes this book so good as a way into Frege is that it is structured not by the chronological order of Frege's writings, nor as a disconnected tour of his central contributions, but rather around what Weiner sees as Frege's central project, to which "nearly his entire career was devoted", namely "to determine the nature of our knowledge of the truths of arithmetic" (p. xiii). All the standard material—Frege's criticisms of empiricist and Kantian views of arithmetic, his new logic, his own programme in foundations of arithmetic, modifications of his framework such as the distinction between sense and reference, and the contradiction unearthed by Russell which brought Frege's logicist programme to a halt—comes out along the way, but it is fitted around a central theme. This manner of presentation is extremely useful in a first introduction: it makes the book much more intellectually exciting for readers, and also makes it more likely that they will remember the material.

The main apparent changes from the earlier edition are new chapters 'The Foundations of Geometry' and 'Logical Investigations', an updated chapter 'Frege's Influence on Recent Philosophy' (which takes account of some criticisms of the original edition, for example concerning its silence on neologicism), and a list of some of Weiner's own writings on Frege. The first of these new chapters, in particular, is outstanding: without

being at all technical, it manages to give an excellent feel for the disagreement between Frege and Hilbert over the foundations of geometry.

Given that one is approaching this book as a way into Frege for the general reader, rather than as an undergraduate text (let alone a work for graduate students or professionals), it would be beside the point to quibble over small details (a contentious claim here, a weak argument there), as long as the general picture conveyed to the reader is correct. However there was one point (and only one) at which I thought a wrong general impression might well be given. In discussing Frege's strategy for defining the numbers, Weiner writes that "the introduction of the notion of extension of a concept leads to disaster—an inconsistency in his logic" (p. 63). This is misleading: it is the assumption that *every* concept has an extension, rather than the mere introduction of the very notion of extension, that leads to disaster for Frege.

University of Sydney

Nicholas J.J. Smith