PREFACE

No doubt there are as many reasons for writing books as there are people who write them. One function served by this particular work has been the edification of its author. Translations can sometimes create a sense of *explanation*, and this seemed to me particularly true of the alternative account of mathematical constructions being produced by category theory. Writing the book gave me a framework within which to confirm that impression and to work through its ramifications in some detail. At the end I knew a great deal more than when I began, so that the result is as much a recording as a reconstruction of the progress of my own understanding. And at the end it seemed to me that much that I had dwelt on had finally fallen into place.

As to the more public functions of the book – I hope that it provides others with the prospect of a similar experience. Less presumptiously, I have tried to write an exposition that will be accessible to the widest possible audience of logicians – the philosophically motivated as well as the mathematical. This, in part, accounts for the style that I have adopted. There is a tendency in much contemporary literature to present material in a highly systematised fashion, in which an abstract definition will typically come before the list of examples that reveals the original motivation for that definition. Paedogogically, a disadvantage of this approach is that the student is not actually *shown* the genesis of concepts – how and why they evolved – and is thereby taught nothing about the mechanisms of creative thinking. Apart from lending the topic an often illusory impression of completedness, the method also has the drawback of inflating prerequisites to understanding.

All of this seems to me particularly dangerous in the case of category theory, a discipline that has more than once been referred to as "abstract nonsense". In my experience, that reaction is the result of features that are not intrinsic to the subject itself, but are due merely to the style of some of its expositors. The approach I have taken here is to try to move always from the particular to the general, following through the steps of the abstraction process until the abstract concept emerges naturally. The starting points are elementary (in the "first principles" sense), and at the finish it would be quite appropriate for the reader to feel that (s)he had just arrived at the subject, rather than reached the end of the story.