The dissertation of Theo Janssen was defended in April 1983 (UvA). In 1986 it was republished by the former Mathematical Centre (now CWI) in two volumes, the CWI tracts 19 and 28, respectively.

The first volume presents the background of the approach and its application to programming languages. It consists of chapters 1-3 and 10, and appendix 1 of the original dissertation. The second volume presents the consequences of the framework for natural language semantics. It consists of chapters 4-9 and appendices 2 and 3. All the text from the original dissertation is incorporated, only typing errors have been corrected and a small update has been added in chapter IV of vol 1. What we make available here, with permission of the CWI, is the republication of 1986.

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Foundations and applications of Montague grammar
Part 1: Philosophy, framework, computer science

T.M.V. Janssen
PREFACE

The present volume is one of the two tracts which are based on my dissertation 'Foundations and applications of Montague grammar'. Volume 1 consists of the chapters 1, 2, 3 and 10 of that dissertation, and volume 2 of the chapters 4-9. Only minor corrections are made in the text. I would like to thank here again everyone who I acknowledged in my dissertation, in particular my promotor P. van Emde Boas, co-promotor R. Bartsch, and coreferent J. van Benthem. For attending me on several (printing-)errors in my dissertation I thank Martin van de Berg, Cor Baayen, Biep Durieux, Joe Goguen, Fred Landman and Michael Moortgat, but in particular Herman Hendriks, who suggested hundreds of corrections. The illustrations are made by Tobias Baanders.

The two volumes present an interdisciplinary study between mathematics, philosophy, computer science, logic and linguistics. No knowledge of specific results in these fields is presupposed, although occasionally terminology or results from them are mentioned. Throughout the text it is assumed that the reader is acquainted with fundamental principles of logic, in particular of model theory, and that he is used to a mathematical kind of argumentation. The contents of the volumes have a linear structure: first the approach is motivated, next the theory is developed, and finally it is applied. Volume 1 contains an application to programming languages, whereas volume 2 is devoted completely to the consequences of the approach for natural languages.

The volumes deal with many facets of syntax and semantics, discussing rather different kinds of subjects from this interdisciplinary field. They range from abstract universal algebra to linguistic observations, from the history of philosophy to formal language theory, and from idealized computers to human psychology. Hence not all readers might be interested to read everything. Readers only interested in applications to computer science might restrict themselves to volume 1, but then they will miss many arguments in volume 2 which are taken from computer science. Readers only interested in applications to natural language might read chapters 1-3 of volume 1, and all of volume 2, but they will miss several remarks about the connection between the study of the semantics of programming languages and of the semantics of natural languages. Readers familiar with Montague grammar, and mainly interested in practical consequences of the approach, might read chapters 1 and 2 in volume 1 and chapters 6-10 in volume 2, but they will
miss new arguments and results concerning many aspects of Montague grammar.

Each chapter starts with an abstract. Units like theorems etc. are numbered (eg 2.3 Theorem). Such a unit ends where the next numbered unit starts, or where the end of the unit is announced (2.3 end). References to collected works are made by naming the first editor. Page numbers given in the text refer to the reprint last mentioned in the list of references, except in case of some of Frege's publications (when the reprint gives the original numbering).
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