

**The Internal Structure of
Predicates and Names
with an
Analysis of Reasoning about Process**

The Semantic Foundations of Logic

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The Semantic Foundations of Logic

Contents of other Volumes

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- I The Basic Assumptions of Propositional Logic
- II Classical Propositional Logic
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- IV A General Framework for Semantics for Propositional Logics
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- VII Intuitionism
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- XVIII One-Dimensional Geometry
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- XX Translations within Classical Predicate Logic
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Logics of Sense and Reference (projected)

Classical Logic

Dependence Logic

Relatedness Logic

Predicate Logics with Non-Referring Names

A General Framework

The Modal Logic S5

The Many-Valued Logic L_3

Intuitionism

Translations Between Logics

Preface

This is the first complete draft of this book. I very much hope that you will send me your comments and especially your criticisms so I can improve it.

The last appendix as well as the indices are not completed, and the few remarks I make here are only a sketch for a preface.

Works cited in the text or in footnotes without attribution are my own writings.

As in early geometry studies, I'll often give one example rather than a fully general analysis and then conclude the generality from that, at least when it seems to me that the single example includes all the points that would need to be covered in general.

One way to analyze reasoning is by abstracting and creating formal models. By paying attention to the process of abstracting we gain insight into why we consider some reasoning to be good and some reasoning bad, and insight also into the deeper assumptions we make about the world on which our judgments rely.

Logic as the art of reasoning well is a part of philosophy, the love of wisdom. There is only one wisdom: how to live our lives well. A philosopher is a searcher, searching for a way to a good life for all of us. All else is a crying after need.

Others use logic as a bulwark against the mysteries. They build a wall within which reason reigns and live within the cities built of logic. I use logic as a way into the mysteries, using reason where I can to lead me to the boundary beyond which reason has no sway if we are to enter. Logic is the path, not the end.

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CLASSICAL PREDICATE LOGIC