

Kurt Gödel

# COLLECTED WORKS

*Volume III*  
*Unpublished essays and lectures*

EDITED BY  
Solomon Feferman  
(Editor-in-Chief)

John W. Dawson, Jr.  
Warren Goldfarb  
Charles Parsons  
Robert M. Solovay

*Prepared under the auspices of the  
Association for Symbolic Logic*

**OXFORD**  
UNIVERSITY PRESS

# Contents

## Volume III

List of illustrations . . . . .	xvii
The <i>Nachlass</i> of Kurt Gödel: an overview, by John W. Dawson, Jr . .	1
Gödel's Gabelsberger shorthand, by Cheryl A. Dawson . . . . .	7
Gödel *1930c: Introductory note to *1930c, by Warren Goldfarb . .	13
Vortrag über Vollständigkeit des Funktionenkalküls . . . . .	16
Lecture on completeness of the functional calculus . . . . .	17
Gödel *1931?: Introductory note to *1931?, by Stephen C. Kleene .	30
[Über unentscheidbare Sätze] . . . . .	30
[On undecidable sentences] . . . . .	31
Gödel *1933o: Introductory note to *1933o, by Solomon Feferman .	36
The present situation in the foundations of mathematics . . . .	45
Gödel *1933?: Introductory note to *1933?, by Israel Halperin . .	54
Vereinfachter Beweis eines Steinitzschen Satzes . . . . .	56
Simplified proof of a theorem of Steinitz . . . . .	57
Gödel *1938a: Introductory note to *1938a, by Wilfried Sieg and Charles Parsons . . . . .	62
Vortrag bei Zilsel . . . . .	86
Lecture at Zilsel's . . . . .	87
Gödel *1939b: Introductory note to *1939b and *1940a, by Robert M. Solovay . . . . .	114
Vortrag Göttingen . . . . .	126
Lecture at Göttingen . . . . .	127
Gödel *193?: Introductory note to *193?, by Martin Davis . . . .	156
[Undecidable diophantine propositions] . . . . .	164
Gödel *1940a: (See introductory note under Gödel *1939b.)	
Lecture [on the] consistency [of the] continuum hypothesis (Brown University) . . . . .	175
Gödel *1941: Introductory note to *1941, by A. S. Troelstra . . .	186
In what sense is intuitionistic logic constructive? . . . . .	189

<i>Gödel *1946/9: Introductory note to *1946/9, by Howard Stein . . . . .</i>	202
Some observations about the relationship between theory of relativity and Kantian philosophy	
– [Version B2] . . . . .	230
– [Version C1] . . . . .	247
<i>Gödel *1949b: Introductory note to *1949b, by David B. Malament . . . . .</i>	261
Lecture on rotating universes . . . . .	269
<i>Gödel *1951: Introductory note to *1951, by George Boolos . . . . .</i>	290
Some basic theorems on the foundations of mathematics and their implications . . . . .	304
<i>Gödel *1953/9: Introductory note to *1953/9, by Warren Goldfarb . . . . .</i>	324
Is mathematics syntax of language?	
– Version III . . . . .	334
– Version V . . . . .	356
<i>Gödel *1961/9: Introductory note to *1961/9, by Dagfinn Føllesdal . . . . .</i>	364
The modern development of the foundations of mathematics in the light of philosophy [German transcript] . . . . .	374
The modern development of the foundations of mathematics in the light of philosophy [English translation] . . . . .	375
<i>Gödel *1970: Introductory note to *1970, by Robert M. Adams . . . . .</i>	388
Ontological proof . . . . .	403
<i>Gödel *1970a: Introductory note to *1970a, *1970b and *1970c,     by Robert M. Solovay . . . . .</i>	405
Some considerations leading to the probable conclusion that the true power of the continuum is $\aleph_2$ . . . . .	420
<i>Gödel *1970b: (See introductory note under Gödel *1970a.)</i>	
A proof of Cantor's continuum hypothesis from a highly plausible axiom about orders of growth . . . . .	422
<i>Gödel *1970c: (See introductory note under Gödel *1970a.)</i>	
[Unsent letter to Alfred Tarski] . . . . .	424
Appendix A: Excerpt from *1946/9-A . . . . .	426
Appendix B: Texts relating to the ontological proof . . . . .	429
Textual notes . . . . .	439
References . . . . .	479
Addenda and corrigenda to Volumes I and II . . . . .	517
Addendum to this volume . . . . .	520
Index . . . . .	521