

Table of Contents

Introduction9

I. Arithmetization of Metamathematics
 ($\text{PRR} \Rightarrow P \Leftrightarrow \text{meta-}P' \Leftrightarrow \text{meta-}P \rightarrow P_{\text{fp}} \Leftrightarrow P$)..... 17

 PM’s Formal System P 18

 The PRR 22

 Definition $\text{PRR} \Rightarrow P$ 24

 Building PRFs and PRRs..... 28

 Correspondence 30

 Capture..... 35

 Ancillary PRRs 36

 What does $\text{isVar}(x)$ say?..... 37

 Syntax PRRs 40

 Diagonal Composition 41

 Fixed-Point..... 43

 Incompleteness 45

 Deduction PRRs..... 45

II. Indirect Self-Reference 49

 What does g not say? 56

III. An Odious Turn 63

 Königsberg, 1930 65

 Princeton, 1962..... 75

 Warsaw, 1935..... 80

 Ohio, 1998 89

 Lisbon & Pisa, 2014..... 96

IV. Wittgenstein's Perspective	103
Toronto, 1988	106
Toronto, 1999	116
Cambridge, 2011	119
New Haven, 1958	122
Gödel the Mathematician.....	125
References.....	133