

## The Pre-History of Mathematical Structuralism

Erich Reck & Georg Schiemer, eds., Oxford University Press

- 1) Erich Reck & Georg Schiemer: “The Prehistory of Mathematical Structuralism: Introduction and Overview”

### PART I: MATHEMATICAL DEVELOPMENTS

- 2) Paola Cantù: “Grassmann’s Concept Structuralism”
- 3) José Ferreirós & Erich Reck: “Dedekind’s Mathematical Structuralism: From Galois Theory to Numbers, Sets, and Functions”
- 4) Dirk Schlimm: “Pasch’s Empiricism as Methodological Structuralism”
- 5) Georg Schiemer: “Transfer Principles, Klein’s Erlangen Program, and Methodological Structuralism”
- 6) Wilfried Sieg: “The Ways of Hilbert’s Axiomatics: Structural and Formal”
- 7) Audrey Yap: “Noether as Mathematical Structuralist”
- 8) Gerhard Heinzmann & Jean Petitot: “The Functional Role of Structures in Bourbaki”
- 9) Colin McLarty: “Saunders Mac Lane: From *Principia Mathematica* through Göttingen to the Working Theory of Structures”

### PART II: LOGICAL AND PHILOSOPHICAL REFLECTIONS

- 10) Jessica Carter: “Logic of Relations and Diagrammatic Reasoning: Structuralist Elements in the Work of Charles Sanders Peirce”
- 11) Janet Folina: “Poincaré and the Pre-History of Mathematical Structuralism”
- 12) Jeremy Heis: “‘If Numbers Are To Be Anything At All, They Must Be Intrinsically Something’: Bertrand Russell and Mathematical Structuralism”

- 13) Erich Reck: “Cassirer’s Reception of Dedekind and the Structuralist Transformation of Mathematics”
- 14) Wilfried Sieg: “Methodological Frames: Paul Bernays, Mathematical Structuralism, and Proof Theory”
- 15) Georg Schiemer: “Carnap’s Structuralist Thesis”
- 16) Sean Morris: “Explication as Elimination: W.V. Quine and Mathematical Structuralism”