The History of Mathematical Proof in Ancient Traditions

Edited by KARINE CHEMLA

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The History of Mathematical Proof in Ancient Traditions

This radical, profoundly scholarly book explores the purposes and nature of proof in a range of historical settings. It overturns the view that the first mathematical proofs were in Greek geometry and rested on the logical insights of Aristotle by showing how much of that view is an artefact of nineteenth-century historical scholarship. It documents the existence of proofs in ancient mathematical writings about numbers, and shows that practitioners of mathematics in Mesopotamian, Chinese and Indian cultures knew how to prove the correctness of algorithms, which are much more prominent outside the limited range of surviving classical Greek texts that historians have taken as the paradigm of ancient mathematics. It opens the way to providing the first comprehensive, textually based history of proof.

Jeremy Gray, Professor of the History of Mathematics, Open University

'Each of the papers in this volume, starting with the amazing "Prologue" by the editor, Karine Chemla, contributes to nothing less than a revolution in the way we need to think about both the substance and the historiography of ancient non-Western mathematics, as well as a reconception of the problems that need to be addressed if we are to get beyond myth-eaten ideas of "unique Western rationality" and "the Greek miracle". I found reading this volume a thrilling intellectual adventure. It deserves a very wide audience.'

Hilary Putnam, Cogan University Professor Emeritus, Harvard University

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Contents

List of figures [ix] List of contributors [xii] Note on references [xiv] Acknowledgements [xv]

Prologue Historiography and history of mathematical proof: a research programme [1] KARINE CHEMLA

```
PART I VIEWS ON THE HISTORIOGRAPHY
OF MATHEMATICAL PROOF
```

Shaping ancient Greek mathematics: the critical editions of Greek texts in the nineteenth century

- The Euclidean ideal of proof in *The Elements* and philological uncertainties of Heiberg's edition of the text [69] BERNARD VITRAC
- 2 Diagrams and arguments in ancient Greek mathematics: lessons drawn from comparisons of the manuscript diagrams with those in modern critical editions [135] KEN SAITO AND NATHAN SIDOLI
- 3 The texture of Archimedes' writings: through Heiberg's veil [163] REVIEL NETZ

Shaping ancient Greek mathematics: the philosophers' contribution

4 John Philoponus and the conformity of mathematical proofs to Aristotelian demonstrations [206] ORNA HARARI

Forming views on the 'Others' on the basis of mathematical proof

 5 Contextualizing Playfair and Colebrooke on proof and demonstration in the Indian mathematical tradition (1780–1820) [228]
 DHRUV RAINA

- 6 Overlooking mathematical justifications in the Sanskrit tradition: the nuanced case of G. F. W. Thibaut [260] AGATHE KELLER
- 7 The logical Greek *versus* the imaginative Oriental: on the historiography of 'non-Western' mathematics during the period 1820–1920 [274]
 FRANÇOIS CHARETTE

```
PART II HISTORY OF MATHEMATICAL PROOF IN
ANCIENT TRADITIONS: THE OTHER EVIDENCE
```

Critical approaches to Greek practices of proof

8 The pluralism of Greek 'mathematics' [294] G. E. R. LLOYD

Proving with numbers: in Greece

- 9 Generalizing about polygonal numbers in ancient Greek mathematics [311]
 IAN MUELLER
- 10 Reasoning and symbolism in Diophantus: preliminary observations [327]REVIEL NETZ

Proving with numbers: establishing the correctness of algorithms

- Mathematical justification as non-conceptualized practice: the Babylonian example [362] JENS HØYRUP
- 12 Interpretation of reverse algorithms in several Mesopotamian texts [384]
 CHRISTINE PROUST
- 13 Reading proofs in Chinese commentaries: algebraic proofs in an algorithmic context [423]KARINE CHEMLA
- 14 Dispelling mathematical doubts: assessing mathematical correctness of algorithms in Bhāskara's commentary on the mathematical chapter of the *Āryabhaţīya* [487]
 AGATHE KELLER

The later persistence of traditions of proving in Asia: late evidence of traditions of proof

15 Argumentation for state examinations: demonstration in traditional Chinese and Vietnamese mathematics [509] ALEXEI VOLKOV

The later persistence of traditions of proving in Asia: interactions of various traditions

 16 A formal system of the *Gougu* method: a study on Li Rui's Detailed Outline of Mathematical Procedures for the Right-Angled Triangle [552]
 TIAN MIAO

Index [574]