

# Contents

## Introduction — 1

### Chapter 1

#### Philoponus and the Finite-Power Argument — 8

- 1.1 Introduction — 8
- 1.2 The Finite Power Argument in the *Contra Proclum* — 10
  - 1.2.1 The Structure of *Contra Proclum* VI — 10
  - 1.2.2 Philoponus' Attribution of the Finite-Power Premise to Plato — 12
  - 1.2.3 Philoponus' Use of the Finite-Power Premise — 14
  - 1.2.4 Aristotle as source for the implication "Perishable→Generated" — 18
  - 1.2.5 "Perishable→Generated": Credible in itself? — 21
  - 1.2.6 Conclusions — 22
- 1.3 Philoponus' Stand-Alone Arguments for the Perishability of the World — 25
  - 1.3.1 Philoponus' First Argument — 28
  - 1.3.2 Philoponus' Second Argument — 32
  - 1.3.3 Philoponus' Third Argument — 36
  - 1.3.4 Philoponus' Fourth Argument — 38
  - 1.3.5 Conclusions — 39
- 1.4 The Arabic 'Summary' of Philoponus' Arguments — 41

### Chapter 2

#### Ibn Suwār on the Coming-To-Be of the World — 46

- 2.1 Introduction — 46
  - 2.1.1 Ibn Suwār — 48
- 2.2 Translation — 49
- 2.3 The Structure of the Treatise — 55
- 2.4 Dialectic and Demonstration in Natural Science — 58
  - 2.4.1 The Kalām Argument: Historical Precedent — 58
  - 2.4.2 al-Fārābī's Reconstruction of the Kalām Argument — 60
  - 2.4.3 Objections to the Kalām Argument: Yahyā b. 'Adī and Ibn Suwār — 61
  - 2.4.4 *Per Se* Predication and Demonstration — 63
  - 2.4.5 The Shift to Demonstration — 65
- 2.5 Ibn Suwār and the Philoponus Argument — 68
  - 2.5.1 Defining *sarmadī* — 69
  - 2.5.2 Ibn Suwār's Finite-Power Argument: Part of a Tradition — 75
  - 2.5.3 Conclusion — 79
- 2.6 Ibn Suwār's Position Statement — 81
  - 2.6.1 The Senses of *muḥḍaṭ* — 81

- 2.6.2 Instantaneous Creation — 85
- 2.6.3 Proclus on the Senses of Everlasting — 90
- 2.7 Conclusions — 92

### Chapter 3

#### Abū I-Ḥasan al-ʿĀmirī and Philoponus on Nature — 95

- 3.1 Introduction — 95
- 3.1.1 al-ʿĀmirī: The Complete Philosopher — 96
- 3.1.2 Al-ʿĀmirī's Cosmology and the Place of Nature — 99
- 3.2 The *Determination* — 106
- 3.2.1 The Necessary, the Possible, and the Impossible — 108
- 3.2.2 Necessity and its Divisions — 110
- 3.2.3 Possibility and its Divisions — 111
- 3.2.4 The Dual Aspects of Predestination — 111
- 3.2.5 Natural, Fickle and Rare Possibility — 117
- 3.2.6 The Impossible: A Sophism Resolved — 126
- 3.3 Natural Teleology and Divine Providence in the *Determination* — 131
- 3.3.1 The Aporia in Aristotle and Philoponus — 132
- 3.3.2 The Aporia in al-ʿĀmirī — 133
- 3.3.3 The Counterarguments in Aristotle and Philoponus — 135
- 3.3.4 The Counterarguments in al-ʿĀmirī — 138
- 3.4 Generation, Perishing, and the Power of Nature in the *Determination* — 144
- 3.4.1 Historical Theology and Natural Generation — 145
- 3.4.2 The Finite Power of Nature — 151
- 3.4.3 The Role of Matter — 155
- 3.4.4 Final Responsa — 156
- 3.5 Conclusions — 158

### Chapter 4

#### Abū Sahl al-Masīhī: The Science of Nature and the Nature of Science — 161

- 4.1 Introduction — 161
- 4.2 Abū Sahl al-Masīhī and the *De caelo* — 165
- 4.2.1 The *De caelo* in Abū Sahl's *Classification of the Philosophical Sciences* — 166
- 4.2.2 The *Concise Summary of the De caelo* — 175
- 4.2.3 The *Pillars of the World* — 180
- 4.2.4 Conclusions — 187
- 4.3 Abū Sahl al-Masīhī's Cliffhanger Cosmology — 189
- 4.3.1 *The Principles of Natural Beings* — 190
- 4.3.2 The Body as Microcosm: *The Principles of the Science of the Pulse* — 200
- 4.4 Conclusions — 210

## Chapter 5

### Avicenna and his Influences — 213

- 5.1 Introduction — 213
- 5.2 Narrow Influence? The Finite-Power Principle in Avicenna — 215
  - 5.2.1 Avicenna on the Contingency of the World — 216
  - 5.2.2 Avicenna and al-ʿĀmirī on Monstrosity — 220
- 5.3 Broad Influence — 221
  - 5.3.1 The Domain of Natural Science: Avicenna's *On the Heavenly Bodies* — 223
  - 5.3.2 The Modal Shift — 236
- 5.4 Conclusions — 259

## Chapter 6

### Conclusions — 261

## Appendix

### Abu Sahl al-Masīhī's *Principles of the Science of the Pulse* — 267

### Bibliography — 270

- Primary Sources — 270
- Secondary Sources — 273

### Index — 278