William of Ockham, Quodlibetal Questions

Volume 1

Quodlibets 1-4

Translated by Alfred J. Freddoso and Francis E. Kelley

Volume 2

Quodlibets 5-7

Translated by Alfred J. Freddoso

Francisco Suarez, S.J., On Efficient Causality

Metaphysical Disputations 17, 18, and 19

Translated by Alfred J. Freddoso

Thomas Aquinas, A Commentary on Aristotle's

De Anima

Translated by Robert Pasnau

Walter Burley, On the Purity of the Art of Logic

The Shorter and Longer Treatises

Translated by Paul Vincent Spade

John Buridan

Summulae de Dialectica

An annotated translation, with a philosophical introduction by Gyula Klima

YALE UNIVERSITY PRESS

New Haven & London



and from the foundation established in memory of Amasa Stone Mather Published with assistance from the Ernst Cassirer Publication Fund of the Class of 1907.

Copyright 2001 by Yale University All rights reserved.

107 and 108 of the U.S. Copyright Law and except by reviewers for the illustrations, in any form (beyond that copying permitted by Sections This book may not be reproduced, in whole or in part, including public press), without written permission from the publishers.

Printed in the United States of America.

Library of Congress Cataloging-in-Publication Data [Summulae de dialectica. English] Buridan, Jean, 1300-1358.

Summulae de dialectica / John Buridan; an annotated translation, with a philosophical introduction, by Gyula Klima. Includes bibliographical references (p.) and index p. cm. — (Yale library of medieval philosophy)

1. Logic, Medieval. I. Klima, Gyula. II. Title. III. Series в765.в843 s8513 2001 2001035346

ISBN 0-300-08425-0 (alk. paper)

A catalogue record for this book is available from the British Library.

The paper in this book meets the guidelines for permanence and durability of the Committee on Production Guidelines for Book Longevity of the Council on Library Resources

ö 9 00 V

Contents

Introduction xxvii

Acknowledgments

xxv

- 1. Treatise 1: On propositions 1 1:1. Chapter 1: Some preliminaries 4 1.1.1. On dialectic 4
- 1.1.3. On sound 4.1.2. The prerequisites of disputation 7
- 1.1.6. The division of conventionally significative utterances 10 -1.1.4. On utterances 9 1.1.5. The division of significative utterances 10
- 1.3. Chapter 3: On propositions 1.2. Chapter 2: On names, verbs, and expressions 14 1.2.3. On expressions 1.2.1. On names 14 1.2.2. On verbs 18
- 1.3.4. The division of categorical propositions with respect to 1.3.1. The description of proposition 21 1.3.3. On subject and predicate 25 1.3.2. The division of propositions into categorical and hypothetical
- 1.3.5. The division of categorical propositions with respect to quantity substance 29
- 1.3.7. The questions asking about the divisions of propositions 1.3.6. The division of propositions with respect to quality 34 33
- 1.4. Chapter 4: On the opposition of categorical propositions 36 1.4.1. On pairs of propositions that share some of their terms 36
- 1.4.3. On the matter of propositions 1.4.2. The square of opposition 37
- 1.4.4. The laws of oppositions 41
- 1.5. Chapter 5: On the equipollence of propositions 42
- 1.5.1. The description of equipollence 42 1.5.2. The first rule of equipollence 43
- 1.5.3. The second rule of equipollence 46
- 1.5.4. The third rule of equipollence 47
- 1.5.5. The fourth rule of equipollence 47

110

2. Treatise 2: On predicables 101 2.1. Chapter 1: On the predicables 103 1.8. Chapter 8: On modal propositions 67 1.7. Chapter 7: On hypothetical propositions 57 1.6. Chapter 6: On the conversions of propositions 2.1.1. Several senses of the term 'predicable' 103 1.8.8. On the conversions of modals 84 1.8.6. On the oppositions of modals 1.8.5. On the quantity of modals 75 1.8.2. The modes that render a proposition modal 67 1.8.1. The description of mode 67 1.7.4. On conjunctive propositions 62 1.7.3. On conditional propositions 61 2.1.2. The difference and agreement between 'predicable' and 1.8.10. On modals about contingency 97 1.8.9. On composite modals 88 1.8.7. On the equipollences of modals 82 1.8.4. On the quality of modals 1.8.3. On the subject, predicate, and copula of modals properly 1.7.8. On local propositions 66 1.7.7. On temporal propositions 65 1.7.6. On causal propositions 64 1.7.5. On disjunctive propositions 63 1.7.2. The species of hypothetical propositions 60 1.7.1. On hypothetical propositions in general 1.6.5. Two notable points 56 1.6.4. On contraposition 55 1.6.3. On accidental conversion 51 1.6.2. On simple conversion 50 1.6.1. Three kinds of conversion 48 so-called 70 1.8.9.2. On the equivocation of the subjects and predicates of 1.8.9.1. On composite modals in general 88 'universal' 1.8.9.4. On the conversions of composite modals 1.8.9.3. On the quality of composite modals 90 composite modals 89 105 95

2.2. Chapter 2: On genus 107

2.1.3. The division of predicables 106

2.7.6. The comparison of accident with all other predicables taken

together 138

2.7.5. The comparison of property and accident 138

2.7.4. The comparison of genus and species taken together with

species 136

difference 137

2.7. Chapter 7: The common and proper features of predicables 134 2.6. Chapter 6: On accident 128 2.5. Chapter 5: On property 125 2.4 Chapter 4: On difference 121 2.3. Chapter 3: On species 116 2.5.1. The diverse senses of 'property' 2.5.2. The definition of property 126 24.5. A corollary 125 2.6.5. The elimination of a doubt 133 -2.3.5. The description of individual 2:7:3. The comparison of genus and difference taken together with 2.7.1. The comparison of all predicables among each other 134 2.6.1. The definition of accident 128 2.2.7. On the subaltern genus 115 2.6.4. The division of accident 132 2.6.3. The third definition of accident 132 2.6.2. Another definition of accident 2.4.4. A notable point 124 2.4.3. Another definition of difference 124 2.3.3. A corollary 117 2.7.2. The comparison of genus, species, and difference taken together 2.4.1. On the name 'difference' 121 2.3.4. An explanation of what has been said 23.2. The division of species and the clarification of the members of 2.3.1. The definition of species 116 2.2.6. On the most general genus 114 2.2.5. The division of genus 114 2.4.2. The definition of difference 123 2.2.4. Another definition of genus 113 2.2.3. On the phrase 'predicated in quid' 2,2.2. On the phrase 'different in species' 2.2.1. The definition of genus 107 with property and accident taken together the division 117 118 125 109 118

3. Treatise 3: On categories 141 3.1. Chapter 1: Some preliminaries 143 3.1.1. The definition of equivocals 143

3.1.2. The definition of univocals 145

3.1.3. The definition of denominatives 145

3.1.4. The division of utterances 148

3.1.5. The division of things that there are 148

3.1.6. A rule 150

3.1.7. Another rule 150

3.1.8. The division of incomplex terms into ten categories

3.1.9. A property of these ten categories 151

3.2. Chapter 2: On substance 152

3.2.1. The division of substance and the explanation of the members of the division 152

3.2.2. The difference between those that are in and that are said of a subject 155

3.2.3. The comparison of primary and secondary substances 156

3.2.4. First property: substances are not in a subject 157

3.2.5. Second property: secondary substances and differences are univocally predicated of primary substances 159

3.2.6. Third property: every primary substance signifies this something

3.2.7. Fourth property: substance has no contrary 160

3.2.8. Fifth property: no substance is susceptible of more or less

3.2.9. Sixth property: every substance is susceptible of contraries by its own change 162

3.3. Chapter 3: On quantity 164

3.3.1. The division of quantity into continuous and discrete 164

3.3.2. The species of discrete quantity 166

3.3.3. The species of continuous quantity 167

3.3.4. The division of quantity into quantity by itself and quantity by coincidence 168

3.3.5. First property: quantity has no contrary 170

3.3.6. Second property: no quantity is susceptible of more or less 171

3.3.7. Third property: it is with respect to quantity that things are said to be equal or unequal 171

3.4. Chapter 4: On relation [ad aliquid] 172

3.4.1. The definitions of relatives 172

3.4.2. The species of relatives 176

3.4.3. First property: relations have contraries 177

3.4.5. Third property: all relatives are predicated conversely with their 3.4.4. Second property: relatives admit of more or less 178 correlatives 178

3.4.6. Fourth property: relatives are naturally simultaneous 180

9.5. Chapter 5: On quality 182

3.5.1. The description of quality 182

3.5.2. First species: habit [habitus] and disposition [dispositio] 184

3:53. Second species: natural capacity or incapacity 185

3.5.4. Third species: passion [passio] or passible quality [passibilis qualitas] 186

3.5.5 Fourth species: form or fixed shape of something

3.5.6. The description of 'such-and-such' [qualis] 188

3.5.7. First property: qualities have contraries 190

3.5.8. Second property: quality admits of more or less

3.5.9. Third property: it is with respect to quality that things are called similar or dissimilar 191

3,5,10. A notable point 191

3.6. Chapter 6: On action and passion 193

3.6.1. The definition of action and passion 193

3.6.2. The species of action and passion 195

3,6,3. Four properties of action and passion 197

3.7. Chapter 7: On time, place, position, and habit 199

3.7.1. The category of time 199

3.7.2 The category of place 203

3.7.3. The category of position 203

3.8. Chapter 8: On the genera of opposition 206 3.7.4. The category of habit 204

3.8 II. The kinds of opposition 206

3.8.2. Relative opposition 207

3.8.3. Contrary opposition 208

3.8.4. Privative opposition 210

3.8.5. Contradictory opposition 212

3.9. Chapter 9: On motion 212

3.9.1. The species of motion or change

3.9.2. The contrariety of motion and rest 214

3:10. Chapter 10: On 'prior', 'together', and 'to have' 215 3.10.1. The ways in which something is said to be prior

3.10.2. The ways in which things are said to be together 217

3.40.3. The ways in which something is said to have something 217

4. Treatise 4: On suppositions 219

- 4.1. Chapter 1: The difference between signification and supposition 221 4.1.1. The aim of the chapter 221
- 4.1.2. The difference between signification and supposition 222
- 4.1.3. The difference between verification and supposition 224
- 4.1.4. The difference between appellation and supposition 226
- 4.2. Chapter 2: Divisions of utterances signifying by convention 228 4.2.1. The division of utterances signifying by convention into complex and incomplex utterances 228
- 4.2.2. The division of incomplex utterances signifying by convention
- with respect to subjection and predication 229
- 4.2.3. The division of incomplex utterances signifying by convention into categorematic, syncategorematic, and mixed utterances 232
- 4.2.4. The division of incomplex utterances signifying by convention with respect to the incomplex or complex concepts corresponding
- 4.2.5. The division of complex utterances signifying by convention into complete and incomplete 236
- 4.2.6. The division of utterances into those that can and those that that cannot supposit 237 cannot be subjects and predicates, and into those that can and those
- 4.3. Chapter 3: The common modes and sorts of supposition 251
- 4.3.1. The aim of the chapter and the division of supposition into proper and improper 251
- 4.3.2. The division of supposition into material and personal 252
- 4.3.3. The division of personal supposition into common and discrete
- 4-3-4. The division of common personal supposition into natural and accidental
- 4.3.5. The division of common personal supposition into confused and determinate 262
- 4.3.6. The division of confused supposition into distributive and nondistributive 264
- 4-3-7. The causes of distributive supposition 265
- 4.3.7.1. The universal affirmative sign (immediately preceding the term) 265
- 4.3.7.2. Negating negation 269
- 4-3-7-3. Infinitizing negation 271
- 4.3.7.4. Comparison 271
- 4-3-7-5. Words implying negation 273

- 4.3.8. The causes of nondistributive supposition 273
- 4.3.8.1. The universal affirmative sign (not immediately preceding the term) 273
- 4.3.8.2. Two preceding distributive parts of speech 275
- 4.3.8.3. Certain special terms 278
- 4.3.8.4. The mode of confusion produced by verbs such as 'know' and 'understand' 279
- 4.4. Chapter 4: On the supposition and acceptation of relative terms 281 4.4.1. The aim of the chapter 281
- 4.4.2. The division of relative terms 282
- 4.4.3. A common rule concerning relative terms of identity 283
- 4.4.4 Another common rule concerning relative terms of identity 284
- 4.5. Personal pronouns and relative pronouns 285
- 4.4.6. Reflexive pronouns 286
- 4.4.7. Possessive pronouns 287
- .4.4.8. Relative pronouns of accidents 287
- 4.4.9. Relative terms of diversity 288
- 4.5. Chapter 5: On appellation 291
- 4.5.1. The aim of the chapter 291
- 4.5.2. The difference between appellation on the side of the subject and the side of the predicate 291
- 4.5.3. The appellation of concept [appellatio rationis] in intentional contexts 294
- 4.5.4. The appellation of some specific terms 297
- 4.6. Chapter 6: On ampliation and restriction 298
- 4.6.1. The definition of status 298
- 4.6.2. Ampliation beyond the status 299
- 4.6.3. Restriction within the status 300
- 4.6.4. The alienation of the status 301
- 4.6.5. The alienation of supposition and appellation 302
- 4.6.6. The total removal of supposition 302

5 Treatise 5: On syllogisms 303

- 5:1. Chapter 1: Some general preliminaries 305
- 5.1.1. The definition of a categorical proposition and of its terms 305
- 5.1.2. On dici de omni and dici de nullo 306
- 5.1.3. The definition of syllogism 308
- 5.1.4. The propositions of a syllogism 310
- 5.1.5. The syllogistic terms 310
- 5.1.6. On syllogistic figure 310

5.1.7. On syllogistic mode 311 5.1.8. Some general rules

5.2. Chapter 2: The modes of the three figures 319 5.2.1. The number of modes in each figure 319

5.2.2. A mnemonic verse 320

5.2.3. Explanation of the verse insofar as it indicates the formation of syllogisms 321

5.2.4. Explanation of the verse insofar as it indicates the reduction of imperfect to perfect syllogisms 321

5.3. Chapter 3: About the first figure 324

5.3.1. Two general rules of the first figure 324

5.3.2. The first four modes of the first figure (Barbara, Celarent, Darii,

5.3.3. About Baralipton, Celantes, and Dabitis 328

5.3.4. About Fapesmo and Frisesomorum 328

5.4. Chapter 4: About the second figure 329

5.4.1. Three general rules of the second figure 329

5.4.2. The first three modes of the second figure (Cesare, Camestres, and Festino) 330

5.4.3. The fourth mode (Baroco) 333

5.5. Chapter 5: About the third figure 332

5.5.1. Two general rules of the third figure 332

5.5.2. The first four modes 333

5.5.3. The two remaining modes 334

5.6. Chapter 6: About non-mixed modal syllogisms 335 5.6.1. Recapitulation of some points about modal propositions 335

5.6.2. Syllogisms consisting of composite modals 337

5.6.3. Some assumptions concerning divided modals 339

5.6.5. Syllogisms with both premises about necessity 343 5.6.4. Syllogisms with both premises about possibility 340

5.6.6. Syllogisms consisting of propositions about contingency 344

5.6.7. Syllogisms consisting of propositions about truth and falsity

5.6.8. Syllogisms consisting of some other modal propositions 347

5.7. Chapter 7: On mixed modal syllogisms 350

5.7.1. Six rules concerning mixed modal syllogisms 350

5:7.2. Mixing the assertoric with the possible premises 352

5.7.3. Mixing the assertoric with the necessary premises 355

5.7.5. Mixing the possible with the necessary 361 5.7.4. Mixing the assertoric with the contingent premises 359

5.7.6. Mixing the possible with the contingent premises 363

> 5,8. Chapter 8: On syllogisms with oblique terms and on reduplicative syllogisms 365 5.7.7. Mixing the necessary with the contingent premises 364

5.8.1. The verb 'belongs' [inest] as a copula 365

5.8.2. Syllogisms with oblique terms that are similar to the first figure

 ${}_{5}$ 5.8.3. Syllogisms with oblique terms that are similar to the second figure 368

5.8.4. Syllogisms with oblique terms that are similar to the third figure

5.8.5. About reduplicative syllogisms 370

3.9. Chapter 9: About syllogisms with infinite terms 5.9.1. A division of syllogisms using infinite terms 372

5.9.2. A rule 373

5.9.3. Another rule 375

5:10. Chapter 10: On the powers of syllogisms 376

5.10.1. The aim of this chapter 376

5.10.2. The syllogism concluding to several conclusions 377

5.10.3. The syllogism concluding to truth from falsehoods 379

5.10.4. The circular syllogism 380

5.10.5. The conversive syllogism 382

5.10.6. The syllogism per impossibile 384

5.10.7. The syllogism from opposites 386

6. Treatise 6: On dialectical loci 389

6.1. Chapter 1: Some general preliminaries 391

6.1.1. The aim of the treatise 391

6.1.2. The definition of argument and argumentation 392

6.1.3. The description of proposition, question, and conclusion 393

6.1.4. The division of argumentation into its species 393

6.1.5. The reduction of other species of argumentation to syllogism

6.2. Chapter 2: Description of *locus* and some classifications of loci 400

5.2.1. The description of locus 400

6.2.2. The division of locus into the maxim [locus maxima] and the difference of the maxim [locus differentia maximae]

6.2.4. The division of intrinsic locus into the locus from substance and 6.2.3. The division of the difference of the maxim into intrinsic, extrinsic, and intermediate 402

6.3. Chapter 3: On loci from substance 407 the locus from the concomitants of substance 406

6.3.3. The loci from description and from what is described 413 6.3.2. The loci from definition and from what is defined 6.3.1. The division of loci from substance and the descriptions of its

6.3.4. The loci from interpretation and from what is interpreted

6.4. Chapter 4: On loci from the concomitants of substance 419 6.3.5. Some loci reducible to the above 415 6.4.1. The description and the division of the locus from the concomitants of substance 419

6.4.2. The description and division of loci from whole and part

6.4.4. The loci from the integral whole and its part 426 6.4.3. The loci from the universal whole and its part 421 421

6.4.6. The loci from the whole-in-mode and its parts 436 6.4.5. The loci from the whole-in-quantity and its part or parts 434

6.4.7. The loci from the whole-in-place and its part 438

6.4.9. The description and division of loci from cause and effect 440 6.4.8. The loci from the whole-in-time and its part 439 6.4.10. The loci from the efficient cause and its effect 441

6.4.13. The loci from the final cause and its effect 446 6.4.12. The loci from the formal cause and its effect 445 6.4.11. The loci from the material cause and its effect 444

6.4.15. The locus from corruption 450 6.4.14. The locus from generation 449

6.4.16. The loci from uses 453

6.4.17. The loci from concurrent accidents 454

6.4.18. Some loci from the concomitants of substance other than the ones mentioned 456

6.5. Chapter 5: On extrinsic loci 459 6.5.1. Some divisions of extrinsic loci

6.5.2. The locus from relatives 460

459

6.5.3. The locus from contraries 463

6.5.4. The locus from privative opposites 466

6.5.6. The loci from greater and lesser 6.5.5. The locus from contradictories 467

6.5.7. The locus from similarity 475

6.5.8. The locus from proportion 475

6.5.10. The locus from authority 480 6.5.9. The loci from transumption 478

6.6. Chapter 6: On intermediate loci 485 6.6.1. The aim of the chapter 485 6.5.11. Some other loci, which are not listed by the author 482

> 6.6.3. The locus from cases 4886.6.4. The locus from division 489 6.6.2. The locus from conjugates 486

7. Treatise 7: On fallacies 493

414

7.1. Chapter 1: General remarks 495 7.1.2. The art of sophistry 496 7.1.1. The description of real elenchus and sophistic elenchus 495

7.1.3. The description of disputation 498

7.1.4. The genera of disputation 499 7.1.5. The description of tactical goal [meta] 501

7.1.7. The description of fallacy 504 7.1.6. The number of metas 502

7.2. Chapter 2: On the division of fallacies 506

7.2.1. The division of fallacies into those 'of words' [in dictione] and those 'apart from words' [extra dictionem] 506

7.2.2. The general basis for distinguishing fallacies of words [in dictione] 509

7.2.3. The three kinds of ambiguity [multiplicitas] of words 510 7.2.4. A sixfold subdivision of the members of the previous division yielding the six fallacies of words 511

7.2.5. The distinction of seven fallacies apart from words 512

7.3. Chapter 3: On fallacies of words 515

 $\sqrt{2.3.1}$. The aim of the chapter 515

7.3.2. The fallacy of equivocation 516

7.3.3. The fallacy of amphiboly 516

7.3.4. The modes of the previous two fallacies 517

7.3.5. The ways in which the fallacies of composition and division resemble each other 524

73.6. The differences between the fallacies of composition and division

7.3.7. The modes of the fallacies of composition and division 526

7.3.8. The fallacy of accent 532

7-3-9. The fallacy of figure of words 534

7.3.10. The modes of the fallacy of figure of words 535

7.4. Chapter 4: On fallacies apart from words 548

7.4.1. The fallacy of accident 548

7.4.2. The fallacy secundum quid et simpliciter 554

7.4.3. The fallacy of ignorantia elenchi 563 7.4.4. The fallacy of petitio principii 570

2.4.5. The fallacy of the consequent 573

CONTENTS

xvii

7.4.8. The number of fallacies 595 7.4.7. The fallacy of many questions as one 584 7.4.6. The fallacy of non-cause as cause 579

7.5. Chapter 5: On how the fallacies are naturally capable of leading to the metas 596

7.5.1. The common features of all fallacies 596

7.5.2. Which fallacy appears to lead most properly to refutation 597

7.5.3. Which fallacy appears to lead most properly to falsity or impossibility 598

7.5.4. Which fallacy appears to lead most properly to implausibility

7.5.5. Which fallacy appears to lead most properly to solecism 599

7.5.6. Which fallacy appears to lead most properly to redundancy

7.6. Chapter 6: On the solution of paralogisms 602

7.6.1. On the perfect solution of a sophistic argument 602

7.6.3. The solution of the fallacies of composition and division 605 7.6.2. The solution of the fallacies of equivocation and amphiboly 603

7.6.4. The solution of the fallacy of figure of words

7.6.5. The solution of the fallacy of accident 607

7.6.6. The solution of the fallacy secundum quid et simpliciter 607

7.6.8. The solution of petitio principii 609 7.6.7. The solution of ignorantia elenchi 608

7.6.9. The solution of the fallacy of the consequent 609

7.6.10. The solution of the fallacy of non-cause as cause 610

7.6.11. The solution of the fallacy of many questions as one 610

8. Treatise 8: On demonstrations 613

First subject matter: On divisions 615

8.1.1. On the art of division 615

8.1.2. On division and composition in general 616

8.1.3. How parts are said to be divided 616

8.1.4. On the two kinds of wholes and parts 617

8.1.5. On the various divisions of wholes 619

8.1.6. On predicable wholes and their parts 620

8.1.7. On complete and incomplete divisions 623

Second subject matter: On definitions 631 8.1.8. On divisions in a less proper sense 628

8.2. Introduction 631

8.2.1. The eight properties of the definitum and of the definition 631

8.2.2. On the four modes of definition 635

8.2.3. On nominal definition 635

8.2.4. On quidditative definition 638

8.2.5. On causal definition 655

8.2.6. On description 659

8.2.7. On composite definitions 662

Third subject matter: On demonstrations 664

8.3. Introduction 664

83.1. On this whole subject matter in general 664

8.3.2. On the four knowable questions 665

83.3. On the questions concerning the middle term

8.3.4. The constituents of a demonstration 673

83.6. What constitutes the unity of science 68183.5. On the things of which one should have precognition 675

8.3.7. Whether the premises are known temporally prior to the

conclusion 687

8.4: The comparison of demonstration and dialectical argument, and of knowledge and opinion 694

8.4.1. The agreements between demonstration and dialectical argument 695

8.4.2. Their differences 697

8.4.3. The agreements between knowledge and opinion 703

8.4.4. Their differences 706

8.5. On the first indemonstrable principles of demonstrations 711

8.5.1. That there are such principles 711

 $^{\circ}$ 8.5.3. On the necessity and evidentness of some principles $^{\circ}$ 717 8.5.2. Their number or multitude 712

8.5.4. How they are cognized 720

thing is] 724 8.6. On dici de omni [being predicated of everything], per se [by itself], and the universal, or secundum quod ipsum [with respect to what the

8.6.1. On dici de omni 725

8.6.2. On the three modes of perseity 726

8.6.3. On the first mode of perseity 730

8.6.4. On 'universal', or secundum quod ipsum 736

8.7. On the various distinctions of demonstrations 738

8.7.1. On demonstrations in general 739

8.7.2. On categorical and hypothetical demonstrations

8.7.3. On ostensive and indirect demonstrations 741

8.7.4. On affirmative and negative demonstrations 742

8.7.5. On the division of demonstrations with respect to quantity 743

8.7.8. Some other divisions [of demonstrations] 748

8.7.9. On enduring and doctrinal demonstrations 749

8.7.10. On propter quid and quia demonstrations 753

8.8. On propter quid demonstrations 754

8.8.1. What should be the cause in such a demonstration, and of what kind and in what way 754

8.8.2. Whether the definition of knowledge is a correct definition of knowledge *propter quid* 759

8.8.3. Some corollaries 760

8.8.4. Another definition of propter quid demonstration 762

8.8.5. Whether one can demonstrate the effect *propter quid* by all genera of causes 765

8.8.6. On mathematical demonstrations 766

8.9. On demonstrations quia 770

8.9.1. On the various modes of demonstrations *quia* 771

8.9.2. In what way knowledge *propter quid* and *quia* concerning the same thing pertains to the same science or to different sciences 772

8.9.3. On the circularity between propter quid and quia 777

8.9.4. On the circularity between several *propter quid* demonstrations 780

8.9.5. On the circularity between several quia demonstrations 781

8.10. On some other kinds of demonstration 783

8.10.1. The division of this chapter 78

8.10.2. On indirect demonstration 784

8.10.3. On negative demonstration 785

8.10.4. On immediate and indemonstrable propositions 780

8.10.5. On the demonstration of a contingent conclusion 787

8.10.6. On the demonstration concerning the past or the future 788

8.11. On the comparison of various demonstrations 790

8.11.1. Four common properties 791

8.11.2. The property [proprietas] of demonstration in the strict sense 792

8.11.3. On the comparison of propter quid demonstration to others 793

8.11.4. On the most powerful demonstrations 80

8.11.5. On the power of universal and particular demonstrations 802 8.11.6. On the power of affirmative and negative demonstrations 806

8.11.7. On the power of ostensive and indirect demonstrations 807

8.12. How knowable questions should be settled 807

8.12.1 That every question asks about a predicate of a subject 808
8.12.2 On the various species of knowable questions 810
8.12.3 On the question 'What is it?' 810
8.12.4 On settling the question 'What is it?' 813

Sophismata 821

8.125. On settling the question 'For what reason is it?' 816 8.126. On the questions 'How is it?' and 'Is it?' 818

Chapter 1: On the signification of terms and propositions 823
First sophism: Every spoken proposition is true 824
Second sophism: A horse is a donkey 824
Third sophism: God does not exist 825
Fourth sophism: The name 'chimera' signifies nothing 826
Fifth sophism: Complexly signifiables are chimeras 829
Sixth sophism: Nobody lies 831
First conclusion 831
Second conclusion 832

Third conclusion 833
Fourth conclusion 834
Fifth conclusion 834
Sixth conclusion 835
Seventh conclusion 836
Elighth conclusion 837
Tenth conclusion 838
Eleventh conclusion 838
Eleventh conclusion 838
Eleventh conclusion 838

To the first sophism [Every spoken proposition is true] 841

To the second sophism [A horse is a donkey] 841

To the third sophism [God does not exist] 841

To the fourth sophism [God does not exist] 843

To the fifth sophism [Complexly signifiables are chimeras] 843

To the sixth sophism [Nobody lies] 845

Chapter 2: On the causes of the truth and falsity of propositions 845

First sophism: Aristotle's horse does not exist 846

Second sophism: Aristotle's horse walked 846

Third sophism: A chimera is a chimera 847

Fourth sophism: A vacuum is a place not filled with body 847

Fifth sophism: A man is a donkey 847.
Sixth sophism: I say [something] false 848
First conclusion 849

YIY

((1111111)

Second conclusion 850
Third conclusion 850
Fourth conclusion 852
Fifth conclusion 853
Sixth conclusion 853
Seventh conclusion 853
Eighth conclusion 854
Ninth conclusion 854
Tenth conclusion 855
Eleventh conclusion 855
Twelfth conclusion 856
Twelfth conclusion 857
Thirteenth conclusion 858
Fourteenth conclusion 858

To the first sophism [Aristotle's horse does not exist] 860
To the second sophism [Aristotle's horse walked] 861
To the third sophism [A chimera is a chimera] 861
To the fourth sophism [A vacuum is a place not filled with body]
862

Replies to the sophisms 860

To the fifth sophism [A man is a donkey] 862
To the sixth sophism [I say (something) false] 862

Chapter 3: On supposition 863

First sophism: That God is unjust is to be denied by all the faithful 863

Second sophism: You are a donkey 863
Third sophism: [A] man is a species 864

Fourth sophism: [A] genus covers more than a most general genus 865

Fifth sophism: [A] name is trisyllabic 865 Replies to the sophisms 868

To the first sophism [That God is unjust is to be denied by all the faithful] 868

To the second sophism [You are a donkey] 869

To the third sophism [(A) man is a species] 869

To the fourth sophism [(A) genus covers more than a most general genus] 870

To the fifth sophism [(A) name is trisyllabic] 870 Sixth sophism: There always was some man 871 Seventh sophism: Some donkey every man sees 871 Eighth sophism: Every man is an animal 871 Ninth sophism: Every man an animal is not 872

Replies to the sophisms 874

To the sixth sophism [There was always some man] 874

To the seventh sophism [Some donkey every man sees] 874

To the eighth sophism [Every man is an animal] 875

To the ninth sophism [Every man an animal is not] 875

Chapter 4: On appellation 876

FIRST PART 876

First sophism: Socrates and a white [thing] are the same 876 Second sophism: Today you ate raw [meat] 877 Third sophism: Something white will be black 877 Fourth sophism: An old man will be a boy 878 Fifth sophism: Socrates will be running tomorrow 878 Sixth sophism: I saw Peter and Robert 879 On the appellation of terms 879 Replies to the sophisms 884

To the first sophism [Socrates and a white (thing) are the same]
884
To the second sophism [Today you ate raw (meat)] 886

To the second sophism [Today you ate raw (meat)] 886
To the third sophism [Something white will be black] 888
To the fourth sophism [An old man will be a boy] 888
To the fifth sophism [Socrates will be running tomorrow] 888
To the sixth sophism [I saw Peter and Robert] 889
[COND PART 889

Seventh sophism: This dog is your father 889

Eighth sophism: Socrates' whiteness is his similarity to Plato 890 On the appellation of appellative terms 890 Replies to the sophisms 891

To the seventh sophism [This dog is your father] 891
To the eighth sophism [Socrates' whiteness is his similarity to Plato]
891

THIRD PART 892

-Ninth sophism: You know the one approaching 892
Tenth sophism: You know that the coins in my purse are even in number 893

Eleventh sophism: You believe that you are a donkey 894
Twelfth sophism: Socrates appears to be other than what he is 894
On some special modes of appellation 895
Thirteenth sophism: Whoever knows that every triangle has three angles could be two right angles forced to be the control of the county to have

Angles equal to two right angles [every isosceles knows to have three angles equal to two right angles] 898

Fourteenth sophism: Socrates the astronomer knows some stars to be above our hemisphere 900

Replies to the sophisms 902

To the tenth sophism [You know that the coins in my purse are even To the ninth sophism [You know the one approaching] in number] 904

To the twelfth sophism [Socrates appears to be other than what To the eleventh sophism [You believe that you are a donkey] 904 he is] 905

Chapter 5: On ampliation and restriction 914 Fifteenth sophism: I owe you a horse 907

First sophism: Some horse does not exist 914

Second sophism: No man is dead 916

Third sophism: Antichrist is 917

Fourth sophism: Every old horse will die

Fifth sophism: Something corrupted is to be generated 920

Sixth sophism: Young Socrates was going to argue 921

Seventh sophism: A non-being is understood 923

Eighth sophism: Everything that will be is 925

Ninth sophism: Man and risible are convertible 926

First conclusion 927

Second conclusion 927

Fourth conclusion 928 Third conclusion 928

Fifth conclusion 928

Tenth sophism: Socrates will die today

Chapter 6: On the fact that utterances signify by convention 929 First sophism: You will be a donkey 930

First conclusion 930

Second conclusion 931

Third conclusion 931

Fourth conclusion 931

Fifth conclusion 932

Sixth conclusion 933

Second sophism: Ba will be baptized 933

Third sophism: The utterance 'A' is a proposition 935

Fourth sophism: It is within our power that a man should be a donkey

Sixth sophism: This proposition can be true: 'A man is a non-man' Fifth sophism: You are a donkey or you are not a man 938

Seventh sophism: You do not know whether 'A man is a donkey' is

Chapter 7: On the measure according to which a proposition is true or

Second sophism: Nobody can contradict my proposition 942 First sophism: No spoken proposition is true 941

Third sophism: The proposition 'Socrates is sitting' is true at a time Throughout which Socrates is not sitting 943

Fourth sophism: This conjunction is true: 'Socrates is sitting and Socrates is not sitting' 944

Fifth sophism: This conjunction is true: 'Aristotle argues and Antichrist preaches' 946

Sixth sophism: At every time Socrates is running 947

Seventh sophism: The same spoken or written proposition is true and dalse for people of the same language and without a new imposition or obligation 948

Ninth sophism: No change is instantaneous 950 Eighth sophism: Whatever moves moved earlier 949

Chapter 8: On self-referential propositions 952

First sophism: Every proposition is affirmative; therefore, no proposition is negative

First conclusion 954

Second conclusion 954

Third conclusion 954

Fourth conclusion 955

Fifth conclusion 955

Second sophism: No proposition is negative; therefore, some proposition is negative 956

Third sophism: Every man runs; therefore, a donkey runs 958

Fourth sophism: I say that a man is a donkey 959

Fifth sophism: Whatever Socrates hears, that Plato utters 961

Sixth sophism: It is true to declare a man to be an animal 962

Seventh sophism: Every proposition is false 965

Highth sophism: Plato says something false 971

Ninth sophism: Socrates says something true 974

Eleventh sophism: I say something false 977 lenth sophism: There are as many true propositions as false ones Thirteenth sophism: Socrates knows the proposition written on the Welfth sophism: God exists and some conjunction is false 980 wall to be doubtful to him 981 976

Fourteenth sophism: Socrates sits or a disjunctive [proposition] written on the wall is doubtful to Plato 984
Fifteenth sophism: To someone is propounded a proposition doubtful to him 987

Seventeenth sophism: You will throw me in the water 993

Sixteenth sophism: You will respond negatively 991

Eighteenth sophism: Socrates wants to eat 994

Nineteenth sophism: Socrates curses Plato 995
Twentieth sophism: Socrates wishes Plato evil 996

Bibliography 999 Index 1017

Acknowledgments sition doubtful

My first words of gratitude are due to the editors of the Yale Library of Medieval Philosophy, especially Eleonore Stump and the late Norman Kretzmann, whose help and support made undertaking this project possible.

The project was immensely helped by a generous grant from the National Endowment for he Humanities (NEH-RL-22270-95), which is hereby gratefully acknowledged.

During the years of this work (1995–99), I received invaluable help from Desmond Henry, without whose magisterial contribution to the entire project, in the form of line-by-line comments and suggestions, personal consultation, and continuous encouragement, it would have never reached completion.

Several portions of the translation have been read and commented on by my students Joshua Hochschild, Daniel Moloney, and Christopher Mirus, who provided me with a number of useful suggestions. Suggestions by Christopher Mirus and Alexander Mebane were also very helpful in reconstructing Buridan's magnu figura of oppositions.

Jack Zupko's careful reading of the near-final version of the text rid it of a number of remaining infelicities. Jack Zupko and Kent Emery also made several useful suggestions concerning the introductory essay.

It is also my pleasant duty to thank the members of the Buridan Society, especially Egbert P. Bos, Ria van der Lecq, Fabienne Pironet, Lambert M. de Rijk, and Johannes Rustenburg, who provided me not only with their critical texts but also with invaluable advice concerning particularly problematic portions of the text. Fabienne Pironet was also instrumental in securing Hubert Hubien's kind permission to use his text for the purposes of the present volume.

lam also grateful to the anonymous referee of the Yale University Press for an extremely thoroughgoing and helpful report.

I dedicate this work to my wife, Judit, and my son, Greg, sine quibus non.