

ARTISTARIUM

A Series of Texts on Mediaeval Logic, Grammar & Semantics

EDITORS

L. M. de RIJK
&
E. P. BOS
Leiden

H. A. G. BRAAKHUIS
&
C. H. KNEEPKENS
Nijmegen

-
- Vol. 1: L. M. de Rijk, *Anonymi auctoris franciscani Logica „Ad rudium”* (edited from the MS Vat. lat. 946), Nijmegen 1981
Vol. 2: Ralph of Beauvais, *Glose super Donatum*, ed. C. H. Kneepkens, Nijmegen 1982
Vol. 3: L. M. de Rijk, *Some 14th Century Tracts on the Probationes terminorum* (Martin of Alnwick O.F.M., Richard Billingham, Edward Upton and others), Nijmegen 1982
Vol. 4: Johannes Buridanus, *Questiones longe super Librum Perihermeneias*, ed. Ria van der Lecq, Nijmegen 1983
Vol. 5: John of Holland, *Four Tracts on Logic* (Suppositiones, Fallacie, Obligationes, Insolubilia), ed. E. P. Bos, Nijmegen 1985
Vol. 6: Thomas Bricot, *Tractatus Insolubilium*, ed. E. J. Ashworth, Nijmegen 1986
Vol. 7: L. M. de Rijk, *Some Earlier Parisian Tracts on Distinctiones sophismatum*, Nijmegen 1988
Vol. 8: Ralph of Beauvais, *Liber Tytan*, ed. C. H. Kneepkens, Nijmegen 1991

SUPPLEMENTA to ARTISTARIUM:

- Vol. I: *English Logic and Semantics, from the End of the Twelfth Century to the Time of Ockham and Burleigh*, Nijmegen 1981
Vol. II: *Mediaeval Semantics and Metaphysics. Studies dedicated to L. M. de Rijk*, Nijmegen 1985
Vol. III: *Logos and Pragma. Essays on the Philosophy of Language in Honour of Professor Gabriel Nuchelmans*, Nijmegen 1987
Vol. IV: *Ockham and Ockhamists*, Nijmegen 1987
Vol. V: *Peter of Spain on Composition and Negation*, by Joke Spruyt, Nijmegen 1989
Vol. VI: *John Buridan's Tractatus de infinito*, ed. J.M.M.H. Thijssen, Nijmegen 1991
Vol. VII: *Marsilius of Inghen*, Nijmegen 1992

ARTISTARIUM

SUPPLEMENTA

VII

MARSILIUS OF INGHEN

**ACTS OF THE INTERNATIONAL
MARSILIUS OF INGHEN SYMPOSIUM
ORGANIZED BY THE
NIJMEGEN CENTRE FOR MEDIEVAL STUDIES (CMS)
NIJMEGEN, 18-20 DECEMBER 1986**

EDITED BY

H. A. G. BRAAKHUIS & M. J. F. M. HOENEN

**Nijmegen
Ingenium Publishers
1992**

ISBN 90 70419 29 0

Copyright 1992 by Ingenium Publishers, P.O. Box 1342, 6501 BH Nijmegen, The Netherlands.

All rights reserved. No part of this book may be reproduced or translated in any form, by print, photoprint, microfilm, microfiche or any other means without written permission from the publisher.

PRINTED by KRIPS REPRO MEPPEL, THE NETHERLANDS.



CONTENTS

PREFACE	VII
Marsilius of Inghen: A Dutch Philosopher and Theologian H.A.G. BRAAKHUIS and M.J.F.M. HOENEN	1
Marsilius als Rektor der Universität Heidelberg J. MIETHKE	13
Marsilius of Inghen as Theologian W.J. COURTENAY	39
Der Glaube bei Marsilius von Inghen CH. HEITMANN	59
Marsilius of Inghen on Theology as Science E.P. BOS	81
Marsilius of Inghen on the Principles of Natural Philosophy with an edition of <i>Quaestiones in De caelo</i> I, XIV E.P. BOS	97
The Eternity of the World according to Marsilius of Inghen with an edition of the <i>dubium</i> in <i>II Sent.</i> q. 1 a. 2 M.J.F.M. HOENEN	117
On the Notion of Constructio in Conceptualist Grammar: Quaestio XXXV of the <i>Doctrinale</i> -Commentary preserved in Erfurt, Amplon, Q 70A C.H. KNEEPKENS	143
Die handschriftliche Überlieferung der Werke des Marsilius von Inghen M. MARKOWSKI	173
BIBLIOGRAPHY	195
INDICES	207

4.2.6. Subalternation of theology

In Marsilius' Commentary on the *Sentences* we find a few remarks suggesting that theology is a subalternate science, viz. that it receives its principles from God's self-knowledge and the knowledge the blessed have of God⁸³. Theology receives its principles from a higher light, Marsilius says⁸⁴.

5. Conclusion

According to Marsilius theology is a science although in a large sense, because its principles are not evident.

83 *Quaestiones super quattuor libros Sententiarum* (ed. 1501), Book I, qu. II, art. 5, fol. 21ra.

84 In his *Abbreviationes super octo libros Physicorum* (ed. 1521), fol. 2ra, Marsilius notes that *natural* theology is subordinated to metaphysics.

MARSILIUS OF INGHEN ON THE PRINCIPLES OF NATURAL
PHILOSOPHY

with an edition of Marsilius of Inghen, *Quaestiones in De Caelo*, book I,
question XIV: *utrum, si essent plures mundi, terra alterius mundi
moveretur ad medium istius mundi*

E.P. BOS

In his *Abbreviated Commentary on the Eight Books of Aristotle's Physics* (*Abbreviationes super octo libros Physicorum Aristotelis*¹), Marsilius of Inghen presents what he calls a 'traditional' division of philosophy interpreted by him as 'universal science' (*scientia universalis*). The main sections are 'principal' (*principalis*) and 'subsidiary' (*administrativa*) philosophy. 'Principal philosophy' is subdivided into three parts:

1. wisdom, or metaphysics, or first philosophy;
2. philosophy of nature;
3. moral philosophy.

'Subsidiary philosophy' covers the seven *artes liberales* ('arts worthy of a free man')²: grammar, rhetoric, logic (the so-called *trivium*) and arithmetics, music, geometry and astronomy (the so-called *quadrivium*). Marsilius has compiled works on all parts of 'principal' and 'subsidiary' philosophy mentioned above, though not on every single section of the *artes liberales*, as far as we know³. If one takes into consideration that Mar-

-
- 1 *Abbreviationes super octo libros Physicorum Aristotelis*, Bibliotheca Apostolica Vaticana, Riserva III, 15 (Venetiis 1521), fol. 2ra.
 - 2 Note that in documents of the University of Paris from 1255 onwards 'facultas artium' refers to all philosophical studies in contradistinction to revealed theology (see e.g. C.H. Lohr, *The Medieval Interpretation of Aristotle, The Cambridge History of Later Medieval Philosophy. From the Rediscovery of Aristotle to the Disintegration of Scholasticism, 1100-1600*. Ed. by N. Kretzmann, A. Kenny and J. Pinborg; associate ed. E. Stump (Cambridge etc. 1982), 87). Marsilius distinguishes between 'liberal arts' and naturally acquired philosophy.
 - 3 It is not certain whether the commentary on the second part of Alexander de Villa-Dei's *Doctrinale*, preserved in ms. Erfurt, *Amplon.* Q. 70a, fol. 95-173, can be attributed to Marsilius of Inghen: see the contribution of C.H. Kneepkens to the present volume.

silius has written several works on revealed theology as well (notably his *Commentary on the Four Books of the Sentences*⁴) he may be called a voluminous writer.

From the period of his teaching up to the second half of the seventeenth century Marsilius was famous as a logician and as a natural philosopher. His works originated a 'via Marsiliana'.

In the present contribution I aim to elucidate the principles according to which, in Marsilius' view, a *natural philosopher* operates. I shall discuss this problem in connection with a specific question in one of his works, viz. one of the questions of his commentary on Aristotle's *De caelo*: whether, if there were more worlds, the earth of another world would move to the centre of this world. This problem about the principles of natural philosophy arouses interest, I think, for at least the following reasons:

1. In the thirteenth century, Aristotle's works became widely known in the Latin West in translations, and, generally speaking, the philosophers who discussed problems of natural philosophy followed Aristotle's views. The fourteenth century presents a different picture, however. Aristotle was criticized in many ways: the medieval philosophers of that period came to hold different opinions than those of Aristotle, foremost, so they said, on the basis of their own sensory experience. The present contribution aims to explain Marsilius' position in this respect.

2. A natural philosopher could come across problems which could also be solved from the viewpoint of faith. Well-known problems of this kind concerned the eternity of matter and of movement, the eternity of the world and the immortality of the soul. In the Middle Ages philosophers came up with different solutions to these problems from the viewpoint of natural reason, in contradistinction to the viewpoint of faith. The Faculty

Treatises by Marsilius on arithmetics, music and geometry have not come down to us, it seems. For a survey of Marsilius' works, see G. Ritter, *Studien zur Spätscholastik*, I: *Marsilius von Inghen und die okkasmistische Schule in Deutschland*, Sitzungsberichte der Heidelberger Akademie der Wissenschaften, Philosophisch-historische Klasse 1921, 4 (Heidelberg 1921), 186-192; *Marsilius of Inghen, Treatises on the Properties of Terms. A First Critical Edition of the Suppositiones, Ampliationes, Appellationes, Restrictiones and Alienationes, with Introduction, Translation, Notes and Appendices* by E.P. Bos (Dordrecht/Boston 1983), 9-20.

4 Marsilius of Inghen, *Quaestiones super quattuor libros Sententiarum* (Strasbourg 1501, reprint Frankfurt am Main 1966).

of Arts in Paris asked the *magistri* to swear an oath to defend the orthodox views of the church in such cases⁵.

As has been said, I shall try to elucidate Marsilius' view on the principles of natural philosophy in connection with question XIV from his Commentary on Aristotle's *De caelo*. This commentary is preserved in manuscript Cuyk en St. Agatha (The Netherlands), Kruissherenklooster (Monastery of the Crutched Friars), C 12, ff. 123ra-171rb⁶. In the manuscript this commentary is ascribed to a *magister Mercilius (sic)*. This ascription to master Mercilius as well as other considerations have led me to suggest elsewhere⁷ that this commentary should be regarded as a genuine work by Marsilius. In a recent article Thijssen has confirmed this suggestion for the time being⁸.

Anneliese Maier has discussed the problem on the principles of natural philosophy in her stimulating paper 'Das Prinzip der doppelten Wahrheit'⁹. In this article she pays attention to John Buridan, Marsilius' master in many respects in natural science and logic, but devotes only three pages to Marsilius of Inghen on this score. In the present contribution I shall try to elaborate Marsilius' views on this point. The question which I shall use as example is edited in an appendix to this article¹⁰.

In his commentary on the *De caelo* Marsilius discusses various problems to which Aristotle's work gives rise. According to Marsilius, who bases his cosmology mainly on Aristotle, the universe consists of five principle elements, viz. earth, water, air and fire in the sublunary region, and ether (the quintessence, the fifth element) in the spheres and planets. The earth is at rest in the centre of the universe and is surrounded by ten spheres, seven for the seven planets then known (including the sun), one for the sphere of the fixed stars and two other spheres which help to explain the

5 See esp. A. Maier, *Metaphysische Hintergründe der Spätscholastischen Naturphilosophie* (Rome 1955), 3.

6 For a description, see L.M. de Rijk et O. Weijers, *Repertorium Commentariorum medii aevi in Aristotelem Latinorum, quae in bibliothecis publicis neerlandicis asservantur* (Amsterdam 1981), 7-17.

7 E.P. Bos, A Note on an Unknown Manuscript Bearing upon Marsilius of Inghen's Philosophy of Nature. MS Cuyk en St. Agatha (The Netherlands), Kruissherenklooster C 12, *Vivarium* 17 (1979), 61-68.

8 J.M.M.H. Thijssen, The Short Redaction of John Buridan's Questions on the Physics and their Relation to the Questions on the Physics Attributed to Marsilius of Inghen, *Archives d'Histoire Doctrinale et Littéraire du Moyen Age* LII (1985), 262.

9 Maier, *Metaphysische Hintergründe*, 3-44.

10 Below, pp. 108-116.

various movements of the stars and the planets¹¹. Marsilius explicitly denies that there are more spheres connected with one single planet; moreover, he adopts epicycles in his system. So in these latter two respects, he seems to have followed Ptolemy rather than Aristotle.

We can learn from Marsilius' commentary on the *De caelo* that, according to the Aristotelian laws of movement, the elements strive to obtain their natural places. The element earth tends towards the centre of the universe, fire to the upper part of the sublunary region, water and air take their natural places between earth and fire. These four elements move in straight lines. The ether, however, moves in a circular movement. The world is full, there is no empty space: the Aristotelian *horror vacui*.

In the chapters VIII and IX of the first book of his *De caelo* Aristotle discusses the problem whether there can be more than one world. This is an important problem to him, because earlier philosophers, e.g. Anaximander, Empedocles and the Atomists, accepted the existence of more worlds in some way or another: Aristotle criticizes their theories which allow the existence or more worlds, presenting several arguments of which I mention only few¹²: if there existed more worlds, they all would consist of the same elements; these elements would have the same natural motions. This means that all earth must move naturally towards the same centre, and all fire to the same circumference. The difference in distance to the centre is not relevant. Furthermore, if there were more worlds, this could only be by force; the inclination to the natural places would not have been taken away from the elements. Neither could there be a different end for numerically different parts of one element: otherwise, parts of some element in our world would also move in different directions, which is not the case. So much for the arguments I have selected from Aristotle.

Marsilius discusses this problem in questions XIV and XV of his commentary. The title of question XIV is: 'If there would be more worlds, would the earth of another world move towards the centre of this world?'¹³ (*utrum, si essent plures mundi, terra alterius mundi moveretur ad medium istius mundi*). The title of question XV is: 'Are there, or can there be more worlds?' (*utrum sint, vel possint esse plures mundi*)¹⁴. Marsilius

11 Marsilius of Inghen, *Questiones libri De caelo et mundo* preserved in the manuscript indicated in the text (henceforth abbreviated as: 'In DCM'): Book II, qu. XIII, fol. 159va.

12 Aristotle, *De caelo*, I, viii, 276 a 18 - 277 a 12.

13 In DCM, f. 138ra; see the edition in the appendix, p. 108, lines 21-22.

14 In DCM, f. 139ra.

discusses these problems, as well as Aristotle's solutions, in the period after the condemnations of 1277 by Bishop Etienne Tempier of Paris¹⁵. Some of the condemned theses explicitly deal with the possibility of more worlds. In the 34th proposition¹⁶ bishop Tempier condemns the error that the first cause (God) could not make more than one world; in the 44th proposition¹⁷ the opinion is criticized that one first agent can not bring about a multiplicity of effects. The background of these condemnations is the doctrine of God's omnipotence; as the first cause God is not determined by anything whatever, let alone to produce one effect only (in immediate causation, is probably meant) which is the case in natural agents which act from necessity and not freely.

In this contribution I shall concentrate on Marsilius' question XIV¹⁸. As has been said, the problem is whether, if there were more worlds, the earth of another world would move to the centre of this world¹⁹.

First: in his question XV Marsilius says that Aristotle is right from his point of view that there cannot be more worlds separate from each other. He goes on to explain²⁰ that more worlds can not exist alongside each other, neither with the same centre, nor eccentrically. A natural philosopher is right, Marsilius says, according to the rules of human understanding²¹. Nevertheless, speaking absolutely, there can be more worlds. Then the problem is solved from the point of view of faith: God can create more worlds. He is absolutely free and not bound by the regularities of our world.

Now back to question XIV: even if there were more worlds, Aristotle's conclusion does not follow (viz. that the earth of another world would move to the centre of our world). The main reason, according to Marsilius, is that the heavens of a world cannot be penetrated by other elements²².

15 In *Chartularium Universitatis Parisiensis I, ab anno MCC usque ad annum MCCLXXXV*, édité par H. Denifle et A. Châtelain (Paris 1889), pp. 543-555. Cf. P. Mandonnet, *Siger de Brabant et l'averroïsme latin au XIII^e siècle*, Les philosophes Belges, VI (Louvain 1908), 175-191.

16 = Mandonnet, *Siger de Brabant*, nr. 27.

17 = Mandonnet, *Siger de Brabant*, nr. 28.

18 I have discussed question XV elsewhere, see E.P. Bos, Marsilius van Inghen en mogelijke werelden, *Algemeen Nederlands Tijdschrift voor Wijsbegeerte*, 75 (1983), 4-12.

19 Marsilius says: *iste* ('that'); did he point to a drawing?

20 In *DCM*, fol. 140ra.

21 See note 20.

22 In *DCM*, fol. 139rb; see the edition in the appendix, p. 115, lines 4-7.

It should be noted here that some contemporaries of Marsilius, viz. John Buridan (ca. 1300-shortly after 1358), Nicole Oresme (ca. 1320-1382) and Albert of Saxony (ca. 1330-1390) solve the problem which is discussed here, in more or less the same way as Marsilius does²³ (I cannot enter into details here). All these masters received their education at the University of Paris and, at least during some period of their careers, were active as masters at this University.

One could distinguish two kinds of criticism on Aristotle in Marsilius' text, I think:

1. Criticism from the viewpoint of natural philosophy, though this criticism is often based on principles taken from Aristotle himself. Aristotle and natural philosophy are no longer the same in this period.
2. Criticism from the viewpoint of faith. God's omnipotence is contrasted with the regularities of nature; because God is a free cause, it must be assumed that God can do more than the necessities of natural things imply. The way the natural intellect considers things does not transcend the data of the senses, what is known in virtue of itself (what we would call necessary truths) and what can be deduced from these data. A theologian takes his starting-point from revelation (the Bible) which he accepts on the basis of faith and without what Marsilius calls 'experience', that is: on a natural basis²⁴.

Ad 1: Marsilius does not agree²⁵ with Aristotle that, if there were more worlds, there would be a natural movement of the earth of another world towards the centre of this one. Marsilius opines that there is no reason to assume that the earth of that other world has that inclination, because that other world is supposed to be of the same species as any other world. Moreover, the heaven rules everything: it moves a heavy element downwards, and a light one upwards. The *caelum* can not be penetrated by the other elements if they were to move towards the centre of another world. In Buridan's Commentary we find the same argument²⁶. Buridan concludes that Aristotle did not prove what he said.

23 John Buridan, *Quaestiones super libris quattuor De caelo et mundo*, edited by E.A. Moody (Cambridge, Mass. 1942, reprint New York 1970), Book I, qu. XVII, p. 83; Nicole Oresme, *The Quaestiones super De celo of Nicole Oresme*, edited by C. Kren, 2 parts, (Michigan, University Microfilms 1965), Book I, qu. XVII, p. 243; Albert of Saxony, *Quaestiones subtilissime Alberti de Saxonia in libros De celo et mundo* (Venetiis 1520), Book I, qu. XII, fol. C 2ra.

24 In DCM, f. 139ra; see the edition in the appendix, p. 112, lines 22-27.

25 In DCM, f. 139rb; see the edition in the appendix, p. 114, line 36, p. 115, lines 1-3.

26 *Quaestiones super libris quattuor De caelo et mundo*, Book I, qu. XVIII, ed. 1942: p. 86, lines 27-32.

In Marsilius' question XIV, Aristotle's theory is refined by way of what might be called 'experiments', if one take 'experiment' in the sense that it does not teach a scientist something new but only confirms his theory. Aristotle, for instance, says, according to Marsilius, that a larger piece of earth moves downwards more quickly (in its natural inclination) than a smaller one; so, the larger quantity will move more slowly, too, when thrown upwards, than a smaller quantity. There is an objection in Marsilius' text²⁷ (which can also be found in Oresme's corresponding question²⁸) that, when a small piece of lead is thrown away, a larger piece (e.g. a spear) can be thrown further. Marsilius says that Aristotle's thesis is correct when one takes into consideration that this small piece of lead is so small that it does not possess a receiving virtue (*virtus receptiva*)²⁹ which can not accept the *impetus* given by the thrower.

Another refinement concerns Aristotle's statement that a violent movement is slower at the end than at the beginning. An objection is that iron moves more quickly towards a magnet at the end than at the beginning³⁰. Marsilius' answer is that Aristotle's statement is correct. A magnet attracts by way of *tractus* (it gives 'attractions'); it does not move something else by way of *pulsus* ('impulses')³¹.

Ad 2: From the viewpoint of natural philosophy, there cannot be more worlds separate from each other in the senses indicated above. Absolutely speaking, or from the point of view of faith, viz. in relation to God's omnipotence, there can be more worlds. God's causality is free, because it is not identical with natural causality. God's freedom is to do what He wishes³² (elsewhere³³, Marsilius calls this the *libertas complacentiae*); God can even break through the order of the present creation by doing miracles (Marsilius calls this the *libertas oppositionis*)³⁴. God's acts are only limited by the principle of contradiction, for He can not create something which at the same time and in the same respect is not that

27 In DCM, f. 139rb; see the edition in the appendix, p. 113, lines 32-35.

28 *Questiones super De celo*, ed. 1965: p. 245, lines 30-35.

29 In DCM, f. 139ra; see the edition in the appendix, p. 114, lines 6-10. Nicole Oresme, *Questiones super De celo*, ed. 1965: p. 247, lines 36-45.

30 In DCM, f. 139rb; see the edition in the appendix, p. 114, lines 1-2. Nicole Oresme, ed. 1965: p. 247, lines 52-54.

31 In DCM, f. 139rb; see the edition in the appendix, p. 114, lines 11-16. Nicole Oresme, ed. 1965: p. 247, line 55-p. 249, line 57.

32 In DCM, f. 139rb; see the edition in the appendix, p. 114, lines 22-24.

33 E.g. in the *Questiones super quattuor libros Sententiarum*, ed. 1501, Book I, qu. X, art. 3, f. 52ra; cf. Ritter, *Marsilius*, 160ff.

34 See reference in note 33.

thing. God can create more worlds, of which the kinds (*species*) might differ from the kinds in our world. This implies different places and different kinds of movement for the elements, Marsilius says. So the doctrine of God's omnipotence leads to a thought experiment³⁵.

Other than the three Parisian philosophers mentioned above, Marsilius explicitly discusses in article II of question XV³⁶ the principles of natural philosophy. The title of this article is: a natural philosopher should not concede that there are more worlds. Marsilius gives four notes and one conclusion:

The notes:

1. A natural philosopher takes as his principles what is taught by sensory experience (which is the starting point of induction), and what is known in itself (definitions, analytical truths, the principle of contradiction etc.). Of course, he also accepts the conclusions drawn from these principles.
2. The thesis of note 1 is now applied to the problem of question XV: a natural philosopher does not possess experience of more worlds separate from each other, nor is this known in itself, nor can this be deduced from natural principles.
3. The metaphysician teaches that there is only one God, he does not prove it. Marsilius apparently suggests that God is a free cause. The metaphysician can only conceive of God as a necessary agent.
4. In the same kind of causation one single agent can only cause one single effect immediately.

The conclusion from notes 1-4 is: a natural philosopher, who proceeds in the light of natural reason, and a metaphysician, who proceeds in a what Marsilius calls a 'metaphysical' light, should hold that there is just one world.

As has been said, the problem whether the element earth of another world would move to the centre of this world depends on the question

35 In DCM, f. 139rb; see the edition in the appendix, p. 114, lines 22-24.

I shall not omit Buridan's fascinating description of a thought experiment: when Buridan tries to demonstrate that the movement of the elements of other worlds to one centre outside that world is not possible, he refers to the order in this world. If this order is changed, the natural movement with which we are acquainted is changed. Suppose, Buridan says, that in His omnipotence God would annihilate the ether and the other elements except for the air in a certain house, and one piece of the earth would rest in the air, this piece would move neither upwards, nor downwards, because there would be no 'up' and 'down'. See John Buridan, *Quaestiones super libros quattuor De caelo et mundo*, Book 1, qu. XVII, ed. 1942: p. 86, line 33-p. 87, line 8.

36 In DCM, f. 140ra-rb.

whether there are or can be more worlds. In question XV of his Commentary on the *De caelo* Marsilius discusses this problem and solves it in the way I have indicated. Marsilius says that, from the viewpoint of a natural philosopher, there can only be more worlds successively, while the principle element of the present world, viz. the heaven, remains the same, such that there is essentially no difference between the world which exists now and that of a thousand years ago. Succession in time marks no essential difference, according to Marsilius.

His *De caelo*-commentary is not the only place where he discusses the problem, however: in his theological Commentary on the *Sentences* Marsilius says³⁷ that God could have created better or worse worlds, both *intensive* (that is with respect to the content: the *species* could have been better or worse than the *species* of our world) and *extensive* (with respect to the number of inhabitants of our world, which could be other than the number of the inhabitants of the present world).

The background of Marsilius' Commentary on Aristotle's *De caelo* is the doctrine of God's omnipotence, a prominent doctrine in fourteenth century thought. According to this doctrine the creation is a contingent, not a necessary result of a free agent, viz. God. This doctrine is opposed to what the Medievals themselves interpreted as Ancient necessitarianism, according to which the present world is a necessary product from a first agent. A natural philosopher cannot transcend the limits of natural reason, while a Christian acknowledges the contingency of creation.

This is best understood if one compares Marsilius' words with e.g. Thomas Aquinas', who in his Commentary (*expositio*) on Aristotle's *De caelo*³⁸ cannot accept the possibility of the existence of more worlds. The present world is unique. For if there were more worlds, and we use the term 'world' univocally and not equivocally or ambiguously, the elements of other worlds would have the same nature and movements as the elements of our world. Therefore, the elements of another world would move towards the same centre as the elements of our world. This would imply that the element earth of another world would go upwards towards what is the centre for all elements, which is impossible. So Thomas concludes that there is just one world. Other than Marsilius he

37 *Quaestiones super quattuor libros Sententiarum* (ed. 1501), Book I, qu. 43, art. II, f. 183rb ff.

38 Thomas Aquinas, *In Aristotelis Libros De caelo et mundo, De generatione et corruptione, Meteorologicorum expositio...*, ed. Raymundus M. Spiazzi O.P. (Taurini/Romae 1952), Book I, xvi, p. 79-80 (nrs. 160-162).

cannot conceive of worlds with elements of different natures and he does not bring forward God's omnipotence in virtue of which there could be more worlds. In the fourteenth century, the radical contingency of our world which is a consequence of God's omnipotence, is underlined.

I conclude:

1. A natural philosopher proceeds from principles acquired by sensory experience which is the starting point of induction, and from principles which are known in themselves. Induction, Marsilius says³⁹, starts with knowledge of individuals and obtains, together with the activity of the human intellect which is inclined towards truth, evident knowledge of the principles of natural philosophy⁴⁰.
2. As a natural philosopher, Marsilius adopts the principles of Aristotle's philosophy. He is by no means a slavish follower, but criticizes Aristotle on the basis of Aristotle's own principles and on the basis of sensory experience.
3. Some problems discussed by a natural philosopher can also be solved from the viewpoint of faith. Marsilius distinguishes between 'speaking absolutely (or simpliciter)', i.e. from the viewpoint of faith, and 'speaking from the viewpoint of natural reason', i.e. relative to the regularities of the present world. The latter proceeds from empirical, the former from logical possibilities.

In discussing problems handed down by e.g. Aristotle, a natural philosopher should always be aware, that a problem can be differently solved, viz. from the viewpoint of faith, which teaches God's omnipotence. It would go too far to speak, with Anneliese Maier, of a theory of double truth: as has been explained, Marsilius wishes to emphasize the radical dependency of creation on God's will, and, therefore, the hypothetical character of natural philosophy. As has been said, Thomas Aquinas, like other thirteenth century thinkers, did not accept the possible existence of more worlds: this world is good, at least as good as a created world can be, and therefore one. For Thomas Aquinas the best order is the logically best order, for Marsilius (as for other fourteenth century philosophers, such as

39 *Questiones super libris Priorum Analyticorum* (Venetiis 1516, reprint Frankfurt am Main 1968), Book I, qu. 20, fol. 36ra.

40 Marsilius' view on natural philosophy is more positive than that of Buridan's, who does not consider the principles and conclusions as absolutely evident (cf. Maier, *Metaphysische Hintergründe*, 385).

Duns Scotus and William of Ockham), the natural order is just a possible one, which could be otherwise⁴¹.

41 Cf. L.M. de Rijk, *La philosophie au moyen âge* (Leiden 1985) (originally in Dutch: *Middeleeuwse wijsbegeerte, Traditie en vernieuwing*, Assen 1977, 21981), 144.

APPENDIX

5

Edition of Marsilius of Inghen, *Quaestiones libri De caelo et mundo*, Liber I, qu. XIV, from ms Cuyk en St. Agatha (The Netherlands), Kruisherenklooster (Monastery of the Crutched Friars), C 12, f. 138va - 139va.

10

I have used the orthography of classical Latin. Square brackets ([...]) indicate the insertion of section-titles by the present editor. The numbers in superscript refer to the *apparatus criticus*, the letters in superscript refer to the *apparatus fontium*.

15

[LIBRI PRIMI
QUAESTIO QUARTA DECIMA]

20

(F. 138va) UTRUM, SI ESSENT PLURES MUNDI, TERRA ALTERIUS MUNDI MOVERETUR AD MEDIUM ISTIUS MUNDI

[Rationes ante oppositum]

25

(1) Arguitur primo quod non. Si essent plures mundi, terra alterius mundi non posset ascendere in proprio mundo¹; igitur terra alterius mundi non moveretur ad <medium istius mundi; igitur> etcetera. Consequentia tenet: quia non posset moveri ad medium istius mundi nisi ascenderet in proprio mundo². Antecedens patet: quia, si sic, non posset ascendere a suo medio.

30

Confirmatur ad imaginationem: nam est possibile quod sint plures mundi. Immo, de facto possibile est per potentiam Dei. Et tamen propter hoc non oporteret quod medium alterius moveretur ad istum mundum.

35

(2) Secundo: si essent plures mundi, terra istius mundi quiesceret in medio sicut nunc; igitur terra alterius etiam quiesceret in medio sicut nunc; igitur terra alterius etiam quiesceret in medio. Consequentia tenet:

1 proprio mundo] proprium mundi ms.

2 proprio mundo] proprium mundi ms.

quia similis ratio est utrobique. Antecedens probatur: quia, quicquid moveret eam, esset³ eiusdem naturae sicut nunc.

(3) Tertio: si essent plures mundi et terra sic moveretur, vel ergo moveretur illic naturaliter, vel violente; sed nullum istorum potest dici; igitur etcetera. Maior patet sufficienti divisione. Minor declaratur: non naturaliter, quia tunc terra in proprio mundo moveretur a medio, quod repugnat naturae terrae; non violente, quia si sic, tunc veniens ad istum mundum etiam moveretur violente, quod non est dicendum.

(4) Quarto: si essent plures mundi, terra istius quiesceret necessario in suo medio; igitur etcetera. Consequentia tenet. Antecedens probatur: quia si essent plures mundi, caelum inclinaret terram eius ibi sicut terram hic ad quietem. Consequentia tenet: quia essent eiusdem naturae. Antecedens pro secunda parte patet: quia nihil potest eam totam movere a medio, et hoc est per conservationem caeli.

(5) Quinto: si essent plures mundi, ignis istius non moveretur in concavum <orbis> lunae istius; igitur etcetera. Antecedens probatur: quia, si essent plures, ignis <istius> ita bene quiesceret ibi in concavo orbis lunae sicut istius. Nec posset dividere <caelum> istius nec istius; igitur etcetera.

(6) Sexto: si sic, vel inter eas imaginaretur medium aliquod, vel nihil; sed nullo modo terra istius moveretur ad terram istius, igitur etcetera. Maior patet sufficienti divisione. Minor demonstratur: non dicitur quod aliquod mediat: quia sic esset aliquod corporeum quod esset nec pars istius, nec istius. Si nihil, tunc⁴ inter eas esset vacuum.

[Oppositum]

Oppositum est de intentione *Philosophi*^a et *Commentatoris*^b in isto primo, capitulo tertio.

3 esset] et esset *ms.*

4 tunc] *iter. ms.*

a Aristoteles, *De Caelo*, I, viii, 276 a 18 - 277 b 26 (Nicole Oresme, too, refers to this text by 'tractatu tertio', see ed. Kren, 1965, p. 245, line 18, and p. 969 ad 18).

b Averroes, *In de caelo*, I, c. 76-98, ed. Iuntina, tomus V (Venetiis 1562, Frankfurt am Main 1962), f. 51r D-66v l.

[Solutio quaestionis]

[Divisio articulorum]

- 5 Hic erunt tres articuli: in primo videbitur positio *Aristotelis*; in secundo ostenditur quod philosophus naturalis non habet concedere plures esse mundos; in tertio videbitur quando rationes *Aristotelis* concludant, vel non.

10 [Articulus primus]

Quantum (f.138vb) ad primum videtur quod positio *Aristotelis* posset reduci ad quinque conclusiones.

15 [Conclusiones]

[Conclusio prima]

20 Prima est quod terra in isto mundo naturaliter movetur ad locum medium et ignis a medio.

Istam *Philosophus* probat primo sic: (a) quia, si non naturaliter, sed violente moveretur, sequeretur quod parva terra vel parva pars terrae velocius moveretur quam magna. Consequens falsum. Et probatur consequentia: quia maior terra plus posset resistere violentanti quam minor.

(b) Secunda probatio *Philosophi* est: si terra violente moveretur ad medium, sequeretur quod in fine tardius moveretur quam in principio. Consequens falsum, ad experientiam. Et patet consequentia: quia motus violentus tardior est in fine quam in principio.

30 (c) Tertio: nisi sic, sequeretur quod motus contrarius esset ei naturalis, puta a medio. Falsitas patet: quia iste debetur levitati. Et patet consequentia: quia, cui unus motus rectus est violentus, alter est sibi naturalis.

35 [Conclusio secunda]

Secunda conclusio: si esset alter mundus, corpora simplicia essent eiusdem speciei specialissimae cum corporibus simplicibus istius.

(1) Quod probo sic: quia si non, sequeretur quod li 'terra' non diceretur de eis univoce. Patet consequentia: quia species specialissimae non dicuntur univoce de rebus diversarum specierum. Et tunc ultra: <si> ibi non esset vera terra nec verus ignis; igitur nec verus mundus.

- 5 (2) Secundo: istas oportet⁵ esse eiusdem speciei specialissimae quibus idem motus et eadem operationes conveniunt; sed oportet⁶ corpora simplicia et motus simplices <esse> ibi sicut hic; igitur etcetera. Maior patet: quia operationes et motus diversificant speciem. Sed sic est de istis. Minor patet: quia ibi essent corpora mobilia et ista non possent moveri nisi circa
10 medium vel per rectam lineam.

[Conclusio tertia]

15 Tertia conclusio *Philosophi* est quod omne corpus quod naturaliter inclinatur ad aliquem locum, inclinatur ad eum a quacumque distantia. Patet per experientiam: (1) quia, ubicumque ponitur terra, naturaliter tendit deorsum et ignis sursum.

(2) Confirmatur: parvitas et magnitudo corporis non variant <speciem essentialem rei> quando ad unum locum tendunt. Igitur nec parvitas nec
20 magnitudo distantiae. Consequentia tenet: quia magis videtur⁷ parvitas vel magnitudo <corporis> rei intrinseca <quam parvitas et magnitudo distantiae>. Antecedens patet: nam ubi servatur tota terra, illic parva glaeba.

(3) Tertio, parvitas vel magnitudo non variat speciem essentialem rei; sed
25 tendentia in (f. 139ra) locum naturalem semper sequitur speciem; igitur etcetera. Maior nota est. Minor patet per *Commentatorem*^c dicentem: 'Motus ad locum naturalem sequitur substantiam'.

[Conclusio quarta]

- 30 Quarta conclusio: corpora simplicia unius speciei specialissimae tendunt ad unum locum numero naturalem. Patet: (1) quia, ubi una terra, ibi quaelibet terra, et ubi unus ignis, ibi quilibet ignis.

5 oportet] oporteret *ms.*

6 oportet] oporteret *ms.*

7 videtur] propinqua *add. ms.*

c Averroes, *In de caelo*, IV, c. 24, ed. Iuntina, tomus V, f. 252r F (uncertain reference).

(2) Etiam probatur sic: locus naturalis sequitur speciem specialissimam rei; sed omnium istius speciei specialissimae est idem locus naturalis⁸; igitur etcetera. Maior patet: quia ideo dicitur locus naturalis.

5 [Conclusio quinta et responsalis]

Ex quo sequitur conclusio quinta <et> responsalis quod, si esset alius mundus, terra istius moveretur naturaliter ad medium istius. Probat: quia, si sic, tunc terra istius esset eiusdem speciei specialissimae cum ista, per secundam conclusionem. Ergo tenderet ad eundem locum naturalem cum ista, per conclusionem quartam. Sed terra istius mundi tendit naturaliter ad medium istius, per conclusionem primam; igitur etcetera. Istud⁹ nec potest distantia impedire, ut dicit conclusio tertia. Haec de primo.

15

[Articulus secundus]

[Notabilia]

20

[Notabile primum]

Quantum ad secundum nota quod consideratio naturalis philosophi non excedit sensum et experientiam sic quod philosophus naturalis non habet aliquid ponere nisi quod est per se notum vel experientia notum vel quod potest ex hiis deducere: quia philosophus naturalis dicitur 'cognoscens naturam rerum'. Patet etiam: quia, si philosophus vellet aliqua ponere sicut theologus, sine experientia, nullus crederet sibi.

25

[Notabile secundum]

Secundo nota quod philosophus naturalis nullam experientiam de hoc habet quod sint plures mundi: quia non <est> extra istum mundum, nec potest esse; ergo non habet hoc ponere. Etiam esse plures mundos non est per se notum. Item, ex nullis quae nos ponimus est deducibile plures esse mundos.

35

8 idem locus naturalis] eadem species *ms.*

9 istud] ista *ms.*

[Notabile tertium]

Tertio nota quod metaphysicus ad tantum ascendit quod solum ponit unum esse Deum. Patet duodecimo *Metaphysicae*^d.

5

[Notabile quartum]

Quarto nota quod secundum *Philosophum*, duodecimo *Metaphysicae*^e, ab eodem agente simplici in eadem specie causandi procedat immediate
10 solum unicus effectus: quia idem in quantum idem semper est aptum natum facere idem, secundo *De generatione*^f.

[Conclusio]

15 Ex quo sequitur conclusio quod <philosophus> naturalis in lumine naturali et metaphysicus in lumine metaphysico non ponit nisi unum mundum. Prima pars patet: quia nec est per se notum nec experientia nec probabiliter deducibile ex istis. Secunda pars patet ex tertio notabili: quia
20 solum ponit unicum Deum, et per quartum notabile: ab eodem agente solum procedit unicus (f. 139rb) effectus.

[Articulus tertius]

[Dubitationes contra aliquas conclusiones]

25

[Contra primam conclusionem]

Quantum ad tertium est prima dubitatio contra¹⁰ primam conclusionem.

30

[Instantiae]

(1) Videtur enim quod non sit verum: quia lapis posset esse ita parvus quod, cum aliquantulum violente proiceret, remotius (si esset maior) ad
35 maiorem distantiam proiceret pomum vel plumbum. Ergo prima <probatio> non videtur procedere.

d Aristoteles, *Metaphysica*, XII, viii, 1072 a 23-26.

e Aristoteles, *Metaphysica*, XII, viii, 1074 a 33-38 (uncertain reference).

f Aristoteles, *De generatione et corruptione*, II, x, 336 a 27-28.

10 contra] circa *ms.*

(2) Contra secundam probationem videtur esse quod ferrum movetur violente ad magnetem, et tamen velocius in fine quam in principio.

[Responsio ad instantias]

5

(Ad 1) Pro isto nota quod, quando violentans est minus, non potest tantum sicut maius. Et hoc est ex defectu virtutis receptivae, quia est tam parva quod non est receptiva impetus tanti. Et patet per hoc ad rationem primam: quia ratio *Philosophi* est bona, nam non diffinitur de potentia receptiva parvi¹¹.

10

(Ad 2) Pro secunda instantia adverte quod motus ferri ad magnetem fit per tractum sic quod magnes a tota specie habet quandam virtutem, a qua multiplicat circumquaque de se species quae sunt attractivae ferri. Et ergo in fine velocius trahit propter maiorem virtutem attractivam. Et hoc non impedit rationem *Philosophi*. Tamen conceditur quod ferrum sic movetur violente, sed tamen est motus tractus.

15

[Contra secundam conclusionem]

20 Contra secundam conclusionem et eius probationem ponitur haec conclusio: non oportet, si esset alter mundus, quod propter hoc corpora simplicia alterius essent eiusdem rationis cum corporibus simplicibus istius. Posset <Deus> enim facere alium mundum cuius corpora simplicia essent alterius speciei ab istis.

25 Ad primam: transeat antecedens: et conceditur quod iste mundus sit alterius speciei, et hoc loquendo fideliter.

Ad secundam: conceditur totum assumptum. Sed negatur quod hoc oporteret de corporibus simplicibus istius et istius quod essent eiusdem speciei specialissimae: quia conceditur quod etiam ista loca et motus ad
30 ista sint alterius speciei vel rationis.

[Contra tertiam conclusionem]

35 Contra tertiam conclusionem ponitur secunda conclusio: si esset unus alius mundus sicut est iste, terra istius nullo modo vellet esse cum terra istius. Probatur: quia terra istius propter istum non appeteret esse ibi; ergo

11 parvi] passi *ms.*

nec ista hic. Consequentia tenet: quia supponitur esse eiusdem rationis. Antecedens probatur: quia quiescit hic ita naturaliter sicut ibi.

Item, frustra appeteret hoc: quia ibi non posset venire.

5 Etiam, si esset alter mundus, caelum istius non gubernaret mundum alterius, nec e converso. Tamen caelum omnia regit, scilicet inclinat grave deorsum et leve sursum. Et ergo ratio sua non valet quia¹² antecedens est impossibile.

[Contra quartam conclusionem]

10

Quarta conclusio est quod omnia (f. 139va) corpora simplicia unius speciei specialissimae tendunt naturaliter etcetera.

[Instantiae]

15

Contra quam sunt aliquae dubitationes:

(1) Diceret enim aliquis: 'Videtur enim quod corpora simplicia non debeant tendere ad unum locum eundem¹³ in numero, sed in alia loca in specie.

20

(2) Item, ignis qui est hic, servatur per unum actum ad sphaeram lunae, et ignis qui¹⁴ est Romae per alium actum.

(3) Tertio, si esset unus alter mundus, corpora simplicia istius non moverentur ad istum'.

25

[Responsio ad instantias]

(Ad 1) Ad primum dicitur quod conclusio est vera. Pro quo adverte quod corpora caelestia unius speciei, quando coniunguntur, faciunt unum. Secundo nota quod locus totalis istorum est unus in numero. Tunc dicitur
30 quod hoc non sufficit quod ferantur ad similem locum: quia iste locus totalis est unus¹⁵.

(Ad 2) Ad secundum dicitur quod verum <est> quod non feruntur ad eundem locum partialem, sed bene ad eundem locum totalem.

(Ad 3) Tertia soluta est.

35

Haec de tertio.

12 quia] nisi inquantum *ms.*

13 eundem] idem *ms.*

14 qui] quod *ms.*

15 unus] unum *ms.*

[Ad rationes ante oppositum]

Ad rationes ante oppositum.

- 5 (Ad 1) Ad primam: conceditur antecedens. Et conceditur quod non movetur: quia philosophus reputat antecedens <esse> impossibile. Et ergo ambas <consequentias> concederet.

Ad confirmationem dicitur quod ratio concludit apud catholicos.

- 10 (Ad 2) Ad secundam: concederet¹⁶ <philosophus> totum naturaliter loquendo quod inclinaretur ad medium istius quia reputaret antecedens impossibile.

(Ad 3) Ad tertiam: concederet philosophus quia reputat antecedens impossibile.

(Ad 4) Ad quartam: ista ratio concludit veritatem.

- 15 (Ad 5) Ad quintam: philosophus concederet, et cum hoc diceret quod moveret. Et diceret quod¹⁷ non posset dividere caelum quia reputat antecedens impossibile.

- (Ad 6) Ad sextam dicitur quod nihil. Ad probationem: negatur consequentia: quia, si vacuum esset, ipsum esset aliquid. Quia, si esset, ipsum esset
20 locus.

Haec de quaestione.

16 concederet] conceditur *ms.*

17 quod] posset dividere caelum et *add. ms.*

THE ETERNITY OF THE WORLD ACCORDING TO
MARSILIUS OF INGHEN
Study with an edition of the 'dubium' in II Sent. q. 1 a. 2

M.J.F.M. HOENEN

The issue of the eternity of the world has given rise to profound and widespread controversies, especially in medieval and ancient times. We may think here of the late thirteenth-century (1277) and early fourteenth-century discussions that have come down to us not only in the various commentaries on the *Sentences* and *Quaestiones disputatae*, but also in the so-called *Correctoria*.¹

We are well acquainted with the development of the discussion during the thirteenth and first part of the fourteenth century, as well as with the various views and arguments that contributed to it.² Less is known about the development of the controversy in the second half of the fourteenth century. To be sure, there are a large number of fourteenth-century commentaries on the *Sentences* in which the question is raised.³ By way of introduction, we shall briefly review those fourteenth-century

-
- 1 On the *Correctoria* - which are an interesting source of knowledge regarding the debates between Franciscan and Dominican theologians - see F. van Steenberghen, *La philosophie au XIII^e siècle*, Philosophes Médiévaux IX (Louvain-Paris 1966), 489-490; M.D. Jordan, *The Controversy of the Correctoria and the Limits of Metaphysics*, *Speculum* 57 (1982), 292-314, and M.J.F.M. Hoenen, *The Literary Reception of Thomas Aquinas' View on the Provability of the Eternity of the World in De La Mare's Correctorium (1278-9) and the Correctoria Corruptorii (1279-1286)*, *The Eternity of the World in the Thought of Thomas Aquinas and his Contemporaries*, ed. J.B.M. Wissink, *Studien und Texte zur Geistesgeschichte des Mittelalters* 27 (Leiden etc. 1990), 39-68.
 - 2 See, e.g., L. Bianchi, *L'errore di Aristotele. La polemica contro l'eternità del mondo nel XIII secolo*, Pubblicazioni della Facoltà di lettere e filosofia dell'Università di Milano 104 (Florence 1984) (with an extensive bibliography) and R.C. Dales, *Medieval Discussions of the Eternity of the World*, Brill's Studies in Intellectual History 18 (Leiden etc. 1990).
 - 3 This is already clear from the incipits in F. Stegmüller, *Repertorium commentariorum in Sententias Petri Lombardi*, 2 vols. (Würzburg 1947). See, e.g., Vol. I nn. 78; 175; 336; 407; 454; 536; 559; 951.