



Volume 3, 2003

The Proceedings of the Society for Medieval Logic and Metaphysics (P.S.M.L.M.) is the publication of the Society for Medieval Logic and Metaphysics, collecting original materials presented at sessions sponsored by the Society. Publication in the Proceedings constitutes prepublication, leaving the authors' right to publish (a possibly modified version of) their materials elsewhere unaffected.

and Metaphysics

The Society for Medieval Logic and Metaphysics (S.M.L.M.) is a network of scholars founded with the aim of fostering collaboration and research based on the recognition that

- recovering the profound metaphysical insights of medieval thinkers for our own philosophical thought is highly desirable, and, despite the vast conceptual changes in the intervening period, is still possible; but
- this recovery is only possible if we carefully reflect on the logical framework in which those insights were articulated, given the paradigmatic differences between medieval and modern logical theories.

The <u>Society's web site</u> (<u>http://www.fordham.edu/gsas/phil/klima/SMLM/</u>) is designed to serve the purpose of keeping each other up-to-date on our current projects, sharing recent results, discussing scholarly questions, and organizing meetings.

If you are interested in joining, please contact <u>Gyula Klima</u> (Philosophy, Fordham University) by e-mail at: <u>klima@fordham.edu</u>

© Society for Medieval Logic and Metaphysics, 2003

Volume 4, forthcoming in April of 2005, is expected to contain papers on medieval theories of mental representation presented at the SMLM-sponsored sessions of

The 2004 Annual Meeting of the ACPA, Nov. 5-7, 2004, Miami, FL and

<u>The 3rd Annual Hawaii International Conference on Arts and Humanities, Jan. 13-16, 2005, Honolulu, HI</u>

For updates and further details see the S.M.L.M. web site.

TABLE OF CONTENTS

Alex Hall: Aquinas, <i>Scientia</i> and a Medieval Misconstruction of Aristotle's <i>Posterior</i> Analytics4
Henrik Lagerlund: Representations, Concepts and Words: Peter of Ailly on Semantics and Psychology
Catarina Dutilh Novaes: Ockham on supposition and equivocation in mental language
Walter Redmond: The Three-Stranded Cord: Calling a Truce in the War over God and Human Freedom51
Father Matías Blanco: The Three-Stranded Cord (tr. Walter Redmond)65

Alex Hall:

Aquinas, *Scientia* and a Medieval Misconstruction of Aristotle's *Posterior Analytics**

Aquinas's understanding of what it means for a proposition to be unqualifiedly true emerges from his interpretation of Aristotle's *Posterior Analytics*, which introduces the notion of scientific knowledge, termed 'scientia' by the medievals. Scientific knowledge results from a syllogism whose subject term signifies either some class or an individual considered solely in terms of what pertains to it insofar as it is a member of some class. Accordingly, scientific knowledge is universal rather than particular. The middle term of the scientific syllogism signifies an attribute essential to the class picked out by the subject term, and for this reason the predicate joined to the subject by means of this middle itself belongs essentially to the class or individual *qua* member of a class signified by the subject term. In short, the scientific syllogism demonstrates that its subject is the ontological ground of the predicate's inherence, and because the subject itself is this ground, the conclusion is necessary. Moreover, as scientific knowledge is of classes rather than mutable individuals, scientific knowledge is fixed and generalizable.

Treating its subject's nature as an ontological ground, the scientific syllogism expresses what belongs to the subject through itself or *per se* ($\kappa\alpha\theta$ ' $\nu\tau$). In I 4, Aristotle discusses various uses of the phrase '*per se*', two of which are relevant to scientific knowledge. However, his ambiguous phrasing can leave the reader uncertain about which two uses of the phrase he has in mind. Some, such as Sir David Ross and Hugh Tredennick, believe that Aristotle selects the first and second uses of the phrase '*per se*', ¹ others, notably Aquinas, believe that Aristotle intends the second and fourth. ² In this paper, I argue that Aristotle's phraseology is sufficiently vague as to allow either assignation, but that other considerations favor Ross's and Tredennick's thesis; and I

^{*} Save where noted, the Latin translations of the *Posterior Analytics* and Aquinas's commentary are taken from the Leonine edition, and I use the following English translations: For Aquinas's *Sententia super Posteriora analytica* [In PA], and the Latin Aristotle, I use *Commentary on the Posterior Analytics of Aristotle*, trans. by F. R. Larcher, with a preface by James A. Weisheipl (Albany, New York: Magi Books, 1970). This edition does not furnish all of Aristotle's text, when such translations are missing I provide my own. For Aristotle's *Posterior Analytics* [An.Post], I use Jonathan Barnes's translation in *The Complete Works of Aristotle*, ed. Jonathan Barnes (Princeton: Princeton University Press, 1984). On occasion, I modify these translations in the interest of preserving a technical vocabulary.

¹ See W. D. Ross, in Aristotle, *Aristotle's Prior and Posterior Analytics*, with intro. and commentary by W.D. Ross (Oxford: Clarendon, 1949), 521-522; and Hugh Tredennick, in Aristotle, *Posterior Analytics*, ed. and trans. by Hugh Tredennick (Cambridge: Harvard University Press, 1960), 44, n. d.

² In PA I.10, 144-146.

consider the extent to which Aquinas's reading of Aristotle may be influenced by a misconstruction of the Greek in the Latin translation with which Aquinas worked.

For the Greek, I use Ross's critical edition, which is compiled from the five oldest Greek manuscripts of the *Posterior Analytics*: Urbinas 35 (A) (9th-early 10thc.), Marcianus 201 (B) (955), Coislinianus 330 (C) (11thc.), Laurentianus 72.5 (d) (11thc.), and Ambrosianus 400 (olim L 93) (n) (9thc.). For the Latin, I rely on the 1989 Leonine edition, and Minio-Paluello's and Dod's critical editions of the thirteenth century's three Greek to Latin translations. The first and most widely read translation was produced sometime in the second quarter of the twelfth century by James of Venice (*Iacobus Veneticus*), of whom little is known.³ The second translation came out some time before 1159, when it is cited in John of Salisbury's Metalogicon, and is likely a recensio of James's. Less still is known of its translator, whose name may have been John (*Ioannes*). Finally, there is the translation of William of Moerbeke (*Guillelmum* de Moerbeka), which was produced around 1269, and adopted by Aguinas around 1271. Before getting a hold of Moerbeke's translation, Aquinas works with James's. Specifically, Aguinas comments on James's translation through to I 27 and then switches to Moerbeke's. 6 Comparing these translations with surviving editions of the Greek, Minio-Paluello concludes that at I 4 James's text is nearest to the Marcianus edition, while both John's and Moerbeke's Greek editions bear a close resemblance to the Coislinianus manuscript.⁷

Aristotle assigns the phrase 'per se' a technical sense, whereby it describes certain specific ways that one thing can belong to another. In addition, he uses the phrase 'per se' to describe what belongs in this way, thus, e.g., when we speak of per se attributes, this is shorthand for describing an attribute that belongs per se to a subject. At I 4, 73^b16-18, having surveyed various uses of the phrase 'per se', Aristotle selects two as relevant to scientific knowledge:

τ ρα λεγ μενα π τ ν π λ ς π ιστητ ν καθ' α τ ο τως ς νυπ ρχειν το ς κατηγορουμ νοις νυπ ρχεσθαι δι' α τ τ στι κα ξ ν γκης.

Therefore, in the case of what is absolutely scientifically knowable, the things called 'per se'—in the following manner, viz., as belonging to the predicates or as belonged to—are [per se] on account of themselves and by necessity (trans. mine).

³ See L. Minio-Paluello, in L. Minio-Paluello and Bernard G. Dod, eds., *Aristoteles Latinus*, (Bruges-Paris: Desclée de Brouwer), IV. 1-4, *Analytica posteriora*, preface, II.1; and Bernard G. Dod, "*Aristoteles Latinus*," in Norman Kretzmann, Anthony Kenny, and Jan Pinborg, eds., *The Cambridge History of Later Medieval Philosophy* (Cambridge: Cambridge University Press, 1982), 54-55.

⁴ See, Minio-Paluello, preface, III; and Dod, in Kretzmann, et al., 56-57.

⁵ Jean-Pierre Torrell, *Saint Thomas Aquinas* (Washington, D.C: The Catholic University of America Press, 1993), vol. 1, *The Person and His Work*, trans. Robert Royal, 226-227.

⁶ Ibid.

⁷ For James, John and Moerbeke, respectively, see Minio-Paluello, preface, XLIII, LI, and LXXXII.

The Leonine edition has the following translation of the Greek:

Que ergo dicuntur in simpliciter scibilibus per se sic sunt, sicut inesse predicantibus aut inesse propter ipsa. Que sunt ex necessitate. . . .

Therefore, in the case of what is absolutely scientifically knowable, the things called 'per se' are [per se] in this way, namely they belong to predicates or belong on account of themselves. These things are by necessity (trans. mine).

The Latin of the Leonine misconstrues the Greek and possibly James's translation. The editor is aware of this and other misconstructions, but incorporates them into the Latin insofar as the Leonine commission is not seeking to improve upon Minio-Paluello's critical edition but rather to reproduce the text with which Aquinas worked; and, at I.4 73^b16-18, Aquinas's commentary calls for the misconstruction. There are several differences between the Leonine text and Ross's critical edition of the Greek.

The first grows out of the ambiguity of 'κατηγορουμ νοις', a passive participle of 'κατηγορε v', meaning 'to speak against' or 'accuse'. 'κατηγορουμ νοις', literally 'the things accused', can refer either to the subjects of predication, which are accused of possessing certain predicates, or to the predicates themselves, which are accused of these subjects. Modern translations reflect this ambiguity. For example, Mure, Ross, and Tredennick choose 'subjects', while Barnes uses 'predicates'. For its part, the Latin 'predicantibus', an active participle of 'predicare' meaning 'to describe', is unambiguous; 'predicantibus' are 'the things that are describing', i.e., 'predicates'.

Second, the Latin is not faithful to Aristotle's ' $\tau\epsilon$... $\kappa\alpha\iota$ ' construction. ' $\tau\epsilon$ ' alone means 'and' or 'but'. However, ' $\tau\epsilon$ ' is more commonly used as a correlative in combination with ' $\kappa\alpha\iota$ ' ('and' or 'even') to unite similar and opposite complements. United, ' $\tau\epsilon$ ' and ' $\kappa\alpha\iota$ ' can be translated with 'both . . . and', or, colloquially, simply with an 'and' that functions to unite the complements. Respectively, ' $\tau\epsilon$ ' and ' $\kappa\alpha\iota$ ' follow and precede the terms that they modify. In addition, ' $\tau\epsilon$ ' is postpositive, meaning that it usually comes right after the first word in its sentence or clause.

In our passage, 'τε' modifies 'δι' α τ (on account of themselves)'. This phrase 'on account of themselves' complements what follows 'κα ', viz., ' ξ ν γκης (by necessity)'. Thus, the presence of Arisotle's 'τε . . . και' construction shows that 'on account of themselves' complements 'by necessity', and not ' νυπ ρχεσθαι (to be belonged to)'. Moreover, since 'τε' is postpositive, the phrase that it modifies forms a new clause, specifically, it picks up the main clause that is interrupted by Aristotle's parenthetical description of the two applications of the phrase 'per se' that are relevant to scientia. Yet, the Leonine edition does not reflect Aristotle's construction. Translating 'δι' α τ ' with 'propter ipsa (on account of themselves)', and the middle-passive infinitive ' νυπ ρχεσθαι (to be belonged to)' with the active infinitive 'inesse

6

⁸ See Ross, 522.

⁹ See Herbert Weir Smyth, *Greek Grammar*, rev. Gordon M. Messing (Harvard: Harvard University Press, 1956), 666-669.

¹⁰ Ibid.

(to belong)', the Latin links 'inesse' with 'propter ipsa'. As a consequence, Aristotle's parenthetical description is expanded at the expense of his main clause: the second use of 'per se' becomes one wherein things are not simply "belonged to" but rather one wherein they "belong on account of themselves," and the phrase 'on account of themselves' no longer modifies the subject of the main clause, viz., whatever a demonstrator terms 'per se', but rather, it now modifies only the second relevant use of the phrase.

In addition, the Latin introduces a verb that is not present in the Greek. Aristotle's sentence is governed by the verb 'στι'. Greek often uses this singular form of the verb 'to be' with a plural subject, accordingly the Latin translates it with 'sunt (they are)'. Yet, the Latin has 'sunt' twice. This is so not only in the Leonine, but in the critical reconstruction of James's edition as well, which reads:

Que ergo dicuntur in simpliciter scibilibus per se sic sunt, sicut inesse predicantibus aut inesse propter ipsaque sunt et ex necessitate.

Were we to remove the first 'sunt', this passage would capture the meaning of the Greek, reproducing as it does Aristotle's 'τε . . . και' construction by means of the Latin conjunctive, enclitic particle '-que' along with 'et'. Yet, in medieval Latin, 'que' is also used in place of 'quae (these things)', the neuter plural of the relative pronoun 'qui'. Following Aguinas's commentary, the Leonine edition draws on this second use of 'que' for its translation. Now, Minio-Paluello's apparatus does not give us any reason to take 'que' as a relative pronoun. It does, however, note that 'et' is missing in several manuscripts. This may provide a clue as to the reason that Aquinas's text misconstrues the Greek. The double presence of 'sunt' in James's translation represents Aristotle's one sentence as if it were two. Moreover, in the manuscripts where 'et' is missing, that omission leaves 'que' without a correlative. Faced with such a manuscript, the decision to look on James's 'que' as a relative pronoun serving as the subject of a new sentence rather than a correlative conjunction would make sense. As for the double 'sunt', though Ross's apparatus does not indicate a double 'στι', Minio-Paluello's shows no indication of a manuscript that has but one 'sunt', so it is difficult to determine the cause of this difference, though we may note in passing that neither John's nor Moerbeke's recensiones have the extra 'sunt'.

Commenting on this passage Aquinas notes:

Then when he says "Therefore, . . . the things called", etc, he indicates how the demonstrator uses the aforementioned modes. But first it should be noted that, since science bears on conclusions, and understanding bears on principles, the scientifically knowable are, properly speaking, the conclusions of a demonstration wherein proper attributes are predicated of their appropriate subjects. Now the appropriate subjects are not only placed in the definition of attributes, but they are also their causes. Hence the conclusions of demonstrations involve two modes of predicating *per se*, namely, the second and the fourth.

And this is what he means when he says that the predications "in the case of what is absolutely scientifically knowable," i.e., in the conclusions of demonstrations, "are *per* se in this way, namely they belong to predicates," i.e., in the way that subjects are contained in the definition of accidents which are predicated of the former; "or belong on

account of them," i.e., in the way that predicates are in a subject by reason of the subject itself, which is the cause of the predicate.

Then he shows that such scientifically knowable things are necessary, because it is impossible for a proper accident not to be predicated of its subject. But this can occur in two ways (In PA I.10, 136-158).¹¹

Aquinas believes that the passage under consideration has to do with the conclusions of scientific demonstrations, and that Aristotle asserts that such conclusions "involve two modes of predicating *per se*," i.e., assert two different types of *per se* belonging, viz., the second and the fourth. In later discussions of the scientific syllogism, Aquinas omits mention of the fourth mode in the conclusion, e.g.

It should be noted that, since in a demonstration a proper attribute is proved of a subject through a middle which is the definition, it is required that the first proposition (whose predicate is the proper attribute, and whose subject is the definition which contains the principles of the proper attribute) be *per se* in the fourth mode, and that the second proposition (whose subject is the subject itself and the predicate its definition) must be in the first mode. But the conclusion, in which the proper attribute is predicated of the subject, must be *per se* in the second mode (In PA I.13, 60-69). ¹²

The reason that Aquinas feels no need to repeat his assertion about the twofold mode of *per se* predication in the conclusion of scientific syllogisms is likely his belief that the fourth mode of *per se* belonging takes in the second, though the converse does not hold. Hence, an assertion of the latter is simultaneously an assertion of the former. Aquinas's own characterization of the modes of *per se* belonging is given in his commentary on I 4, $73^{a}34^{-b}16$, wherein Aristotle's discussion of *per se* belonging focuses on four applications of the phrase '*per se* ($\kappa\alpha\theta$ ' $\nu\tau$)', three of which Aquinas believes are relevant to scientific demonstration, viz., the first, second, and fourth.¹³

¹¹ "Deinde cum dicit: 'Que ergo dicuntur', etc., ostendit qualiter utatur predicatis modis demonstrator. Ubi notandum quod, cum sciencia proprie sit conclusionum, intellectus autem principiorum, proprie scibilia dicuntur conclusiones demonstrationis, in quibus passiones predicanur de propriis subiectis; propria autem subiecta non solum ponuntur in diffinitione accidentium, set etiam sunt cause eorum; unde conclusiones demonstrationum includunt duplicem modum dicendi per se, scilicet secundum et quartum. Et hoc est quod dicit quod illa 'que' predicantur 'in simpliciter scibilibus', hoc est in conclusionibus demonstrationum, 'sic sunt per se, sicut inesse predicantibus', scilicet sicut quando subiecta insunt in diffinitione accidentium que de eis predicantur, 'aut inesse propter ipsa', id est quando predicata insunt subiecto propter ipsum subiectum, quod est causa predicati. Et consequenter ostendit quod huiusmodi scibilia sunt necesaria, quia 'non contingit' quin proprium accidens predicetur de subiecto, set hoc est duobus modis. . . . "

¹² "Sciendum autem est quod, cum in demonstratione probetur passio de subiecto per medium quod est difinitio, oportet quod prima propositio, cuius predicatum est passio et subiectum diffinitio que continet principia passionis, sit per se in quarto modo; secunda autem, cuius subiectum est ipsum subiectum et predicatum ipsa diffinitio, [in] primo modo; conclusio vero, in qua predicatur passio de subiecto, est per se in secundo modo."

Aquinas dismisses the relevance to *scientia* of the third type of *per se* belonging—described by Aristotle as "what is not said of some other underlying subject (μ καθ' ποκει μ νου λ γεται $\lambda\lambda$ ου τιν ς)" (An.Post I 4, 73^b5-6)—on the grounds that "this mode is not a mode of predicating, but a mode of existing (*iste modus non est modus predicandi, set modus existendi*)" (In PA I.10, 118-119). Aquinas's comment seems correct. Aristotle is speaking of the manner in which a subject exists, viz., as not

Here are Aristotle's descriptions of these three modes, translated from the Leonine:

- (1) *Per se* attributes are such as belong to their subject as elements in its essential nature, as line is in triangle and point is in line. 14
- (2) $Per\ se$ attributes are those such that while they belong to certain subjects, the subjects to which they belong are contained in the attribute's own defining formula, . . . thus straight and curved belong to line $per\ se$. ¹⁵
- (4) Again, in another way, what is in anything on account of itelf is *per se*, while what is not in another on account of itself is an accident. . . . For example, if something dies, having been slaughtered, because of the slaughter (since it is on account of it it has been slaughtered, but not because it happens to perish when it is slaughtered) (trans. mine). ¹⁶

Aguinas identifies each of the types of per se belonging that are relevant to scientific knowledge with one or more of Aristotle's four causes. The first type of per se belonging is that wherein a definition belongs per se to its subject, and this type is labeled an instance of formal causality. The second type is an instance of material causality, "in the sense that that to which something is attributed is its proper matter and subject (prout scilicet id cui aliquid attribuitur est propria materia et proprium subjectum ipsius)" (In PA I.10. 53-54), and it is the type of per se belonging in which a proper or per se accident belongs to its subject whose definition does not include that accident. 17 Rather, the subject to which this accident belongs is a part of this accident's definition, 18 e.g., the definition of 'aquilinity' incorporates 'nose', as aquilinity is nothing other than a property of noses, though the definition of 'nose' need not mention 'aquilinity', as noses are not necessarily aquiline. The fourth type comprises all four Aristotelian causes and is that type of belonging in which a subject acts through its nature to cause properties to belong to itself, accordingly it should take in the first and second types. Aquinas uses Aristotle's example, "slaughtered, it died (interfectum interiit)," to illustrate this causality (In PA I.10, 132-133).

depending on another for its existence in a manner analogous to the way in which accidents themselves depend on subjects for theirs. Viewed in this light, subjects can be understood to exist through themselves or *per se*.

¹⁴ "Per se . . . sunt quecunque sunt in eo quod quid est, ut triangulo inest linea et punctum linee."

¹⁵ "Per se . . . sunt quecunque sunt in . . . quibuscunque eorum que insunt subiectis, ipsa in ratione insunt quid est demonstranti. . . . ut rectum inest linee et circulare."

¹⁶ "Item alio modo quod quidem propter ipsum inest unicuique per se, quod vero non propter ipsum accidens est. . . . Ut si aliquod interfectum interiit, secundum interfectionem, quoniam propter id quod interfectum est, set non quod accidat interfectum interire."

¹⁷ For its part, the subject can also be said to belong to its proper accident, insofar as the former belongs in the definition of the latter. As we shall see, Aquinas draws on this alternate understanding of the second type of *per se* belonging in his commentary on I 4, 73^b16-18.

¹⁸ "It is the second mode of saying *per se*, when the subject is mentioned in the definition of a predicate which is a proper accident of the subject (*secundus modus dicendi per se est quando subjectum ponitur in diffinitione predicati quod est proprium accidens eius*)" (In PA I.10.4, 64-72 = An.Post 73^a37-^b5).

Owing to the fact that the fourth type of *per se* belonging encompasses all four Aristotelian causes, assertions of the second type of *per se* belonging are also assertions of the fourth. As a consequence, Aquinas may feel that he need not mention the fourth every time that he mentions the second.

Let us now consider some various ways in which I 4 73^b16-18 may be read:

```
τ ρα λεγ μενα π τ ν πλ ς πιστητ ν καθ' α τ ο τως ς νυπ ρχειν το ς κατηγορουμ νοις νυπ ρχεσθαι δι' α τ τ στι κα ξ ν γκης.
```

Therefore, in the case of what is absolutely scientifically knowable the things called 'per se'—in the following manner, viz., as belonging to the predicates or as belonged to—are [per se] on account of themselves and by necessity.

Both Ross and Tredennick claim that this passage concerns the first and second types of *per se* belonging, and that the preceding discussion of four different types of *per se* belonging is intended only in order to give a complete accounting of the phrase's use. Crucial to their thesis is the idea that at I 4, 73^b16-18 Aristotle's discussion takes in the premises of scientific demonstrations. For, as we saw Aquinas himself acknowledge, assertions of the first type of *per se* belonging are present in the premises of scientific demonstrations.¹⁹ One clear role for such assertions is as formulations of first principles. First principles, described variously as 'axioms ($\xi \iota \mu \alpha \tau \alpha$)', 'common opinions (κοινα δ ξαι)', or 'common things ($\tau \kappa$ κοιν)', ²⁰ are the indemonstrable assertions upon which demonstration depends:

It is necessary for demonstrative scientific knowledge . . . to depend on things which are true and primitive and immediate and more familiar than and prior to and explanatory of the conclusion. . . . For there will be deduction even without these conditions, but there will not be demonstration; for it will not produce scientific knowledge (*An.Post* I 2, 71^b19-25). ²¹

Axioms are of two types, the rules governing inference, ²² and principles unique to one science. An example of the former is the principle of non-contradiction. The latter type of axioms, on the other hand, comprise assumptions of the existence of the science's subject matter along with definitions of the subject matter's manifestations. ²³ For example, geometry assumes the existence of magnitude along with the definitions of certain magnitudes such as triangle. These definitions, however, make no claims as to the existence of the definiendum. We may term such definitions 'axiomatic definitions',

²⁰ See, Sir Thomas Heath, in Euclid, *The Thirteen Books of Euclid's Elements*, trans., with introduction and commentary by Sir Thomas L. Heath, 2d ed., rev. (New York: Dover Publications, Inc., 1956), vol. 1, *Introduction and Books I. II.* 120.

¹⁹ In PA I.13, 60-69.

^{21 &}quot; ν γκη κα τ ν ποδεικτικ ν πιστ μην ξ ληθ ν τ' ε ναι κα πρ των κα μ σων κα γνωριμωτ ρων κα προτ ρων κα α τ ων ο συμπερ σματος. . . . συλλογισμ ς μ ν γ ρ σται κα νευ το των, π δειξις δ' ο κ σται ο γ ρ ποι σει πιστ μην."

²² See, Ross, 602; and *An. Post* 72^a17-18.

²³ See Ross, 531; and Heath, 119.

to indicate their role as indemonstrable first principles of demonstration. Now, the definition of triangle is an assertion of the first type of *per se* belonging, indeed, Aristotle employs this definition in order to illustrate such belonging.²⁴ Since, then, such axiomatic definitions function within the premises of scientific demonstrations, if Aristotle's comments in I 4, 73^b16-18 relate in part to the premises of scientific demonstrations, we would expect his discussion to take in the first type of *per se* belonging.

Introducing his discussion of the types of *per se* belonging relevant to *scientia*, Aristotle notes that he is speaking of things that we call *per se* in the sphere of what is absolutely scientifically knowable ($\pi \tau \nu \pi \lambda \varsigma \pi \iota \sigma \tau \tau \nu$)." Aristotle's ' $\pi \lambda \varsigma$ ', which I have rendered with 'absolutely', is a technical term that Aristotle uses to describe the scientific knowledge present in the conclusions of scientific demonstrations. Aristotle draws on the technical sense of ' $\pi \lambda \varsigma$ ' when he first defines scientific knowledge:

We think we understand a thing absolutely (and not in the sophistic fashion accidentally) whenever we think we are aware both that the explanation because of which the object is is its explanation, and that it is not possible for this to be otherwise $(An.Post \mid 2, 71^b 9-12)$.

Here, Aristotle is speaking of the conclusions of scientific demonstrations, as is indicated by his comments at I 2, 71b16-25. The Latin of I 4, 73b16-18 uses the standard technical rendering of ' $\pi\lambda$ ζ ', viz. 'simpliciter', thereby accurately reproducing Aristotle's comment that he is discussing the types of *per se* belonging that are relevant in the case of what is 'absolutely scientifically knowable'. Thus, Aquinas's belief that Aristotle is speaking of the conclusions of scientific demonstrations has a solid foundation. Still, even though 'simpliciter' is a technical term used to describe the 'scientia' in the conclusions of scientific demonstrations, Aristotle's comments at I 4, 73^b16-18 do not force us to conclude that he is speaking of the conclusions of scientific demonstrations. For, he does not say that he is discussing the types of per se belonging with which one formulates absolutely knowable scientific propositions, but rather the types of per se belonging that are relevant in the case of such knowledge (π τ ν $\pi\lambda$ ς πιστητ ν), i.e., when we are seeking or have acquired such knowledge. Thus we need not suppose that Aristotle is discussing the conclusions of scientific demonstrations. Indeed, on the grounds that Aristotle introduces I 4 with the comment that "we must . . . grasp on what things and what sort of things demonstrations depend (ληπτ ον . . . κτ νων κα πο ων α ποδειξεις ε σ v)," Ross maintains that the comments that follow at 73^b16-18 pertain solely to the premises of scientific demonstrations. Still, we need not accept Ross's assertion in order to allow that Aristotle's discussion at 73^b16-18 relates in part to the premises of scientific demonstrations, and thus should encompass the first type of per se belonging. In fact,

²⁴ An.Post I 4, 34-36.

 $^{^{25}}$ " π στσθαι δ ο μεθ' καστον πλως, λλ μ τ ν σοφιστικ ν τρ πον τ ν κατ συμβεβηκ ς, ταν τ ν τ' α τ αν ο μεθα γιν σκειν δι' ν τ πρ γμ στιν, τι κε να α τ α στ , κα μ νδ χεσθαι το τ' λλως χειν."

later in book one, Aristotle offers a discussion of *per se* belonging vis-à-vis *scientia* that clearly takes in the first use of the phrase '*per se*':

Demonstration is concerned with what belongs *per se* to the objects—*per se* in two ways: both what belongs in them, in the essence, and the things that belong to the subjects that belong to their essences [belong *per se*]. For example, odd belongs to number, while number itself is in definition of odd; and the other way around plurality or divisibility belongs in the definition of number (*An.Post* I 22, 84^a11-17) (trans. mine).²⁶

Aristotle's first example has to do with the definition of a proper accident, viz., 'odd', which is a proper accident of number. Such definitions are assertions of the second type of *per se* belonging. The second example, that of the way that plurality or divisibility belong to number, on the other hand, is an assertion of the first type of *per se* belonging, for it tells of elements that belong in the definition of a subject. For his part, Aquinas recognizes that this is a discussion of the first and second modes of *per se* belonging and comments that: "The other ways, which he mentioned previously, are reduced to these (*alii autem modi quos supra posuit reducuntur ad hos*)" (In PA I.35, 59-60), which comment the editor of the Leonine edition takes to be a reference back to Aristotle's initial discussion of the four uses of the phrase *per se*.

Now, if we accept that in I 4 Aristotle is speaking of demonstration in general, two alternatives emerge from our considerations. Either Aristotle first claims that it is the second and fourth senses of *per se* belonging that are relevant to scientific knowledge, but then proceeds by example and instruction to recommend the first and second, never again mentioning the fourth, or Aristotle's initial discussion pertains to the second and the first modes of *per se* belonging. Let us determine whether the Greek supports the latter thesis:

τ ρα λεγ μενα π τ ν πλ ς πιστητ ν καθ' α τ ο τως ς νυπ ρχειν το ς κατηγορουμ νοις νυπ ρχεσθαι δι' α τ τ στι κα ξ ν γκης.

If 'κατηγορουμ νοις' means 'predicates', then, when speaking of the premises and conclusions of scientific demonstrations, things are termed 'per se' when they belong or are belonged to by the predicates. By 'predicates', I understand the predicate terms of universal affirmative propositions, i.e., of the types of propositions that are used in the scientific syllogism. ²⁷ What (1) belongs to and (2) is belonged to by, i.e., possesses, these predicate terms are the subject terms of their propositions. This is possible because the assertions of scientific syllogisms are definitions, ²⁸ and Aristotle believes

^{26 &}quot; μνγρπ δειξς στι τν σα πρχει καθ' α τ το ς πρ γμασιν. καθ' α τ δ διττς σα τε γρ[ν] κε νοις νυπρχει ντ τ στι, κα ο ς α τ ντ τ στιν πρχουσιν α το ς ο ον τ ριθμ τ περιττν, πρχει μν ριθμ, νυπρχει δ' α τς ριθμς ντ λγα το, κα πλιν πλθος τ διαιρετν ντ λγτ το ριθμο νυπρχει." – "Demonstratio quidem enim est quecunque ipsa per se ipsa insunt rebus. Per se ipsa vero dupliciter: quecunque enim in illis insunt in eo quod quid est, et in quibus ipsa in eo quod quid est insunt ipsis. Ut in numero inpar, quod inest quidem numero: est autem ipse numerus in ratione ipsius."

²⁷ An.Post I 14.

²⁸ An. Post II 3, 90^b25; & II 10.

that the subject and predicate terms of definitions are coextensive, ²⁹ thus the subject term both belongs to and possesses the predicate term that is in its definition. In the former case, when we speak of something belonging to what is in its definition, we have an assertion of the second type of *per se* belonging, which speaks of proper accidents that belong to the subjects that are in their definitions. In the latter case, when we speak of what the subject term possesses, viz., its definition, we have an assertion of the first type of *per se* belonging. On the other hand, by 'κατηγορουμ νοις' Aristotle may mean 'subjects'. If this is the case, Ross has already shown how Aristotle's discussion can be read as outlining the first and second types of *per se* belonging. ³⁰

Either translation of 'κατηγορουμ νοις' allows us to read Aristotle as claiming that the first and second types of per se belonging are relevant to scientific knowledge; later, Aristotle himself makes this claim; moreover, Aristotle never explicitly links the fourth type of per se belonging to the scientific syllogism, not even in the passage under consideration. Why then does Aguinas, who claims that in An. Post I 22 "the other ways [of belonging per se], which he mentioned previously, are reduced to these [viz. the first and second]," believe that I 4, 73^b16-18 refers to the second and fourth types of per se belonging? One reason is likely Aquinas's conviction that Aristotle is discussing the conclusions of scientific demonstrations. A conclusion is a single statement, yet Aristotle speaks of two types of per se belonging. Given Aquinas's belief that the fourth type of *per se* belonging takes in the second, ³¹ and that the conclusion of a scientific demonstration must assert the second type of per se belonging, 32 Aquinas's selection of the second and fourth modes of per se belonging is a logical way of explaining how one statement can assert two types of per se belonging; for an assertion of the second type is simultaneously an assertion of the fourth. This is not, however, to suggest that other considerations do not motivate Aguinas. Understanding 'predicantibus' to mean not 'predicate terms' but rather the 'proper accidents', which are themselves predicated of subjects, Aquinas identifies cases wherein things belong to predicates as assertions of the second type of per se belonging, which describes the way that subjects belong to their proper accidents, viz., in their definitions. Next, owing to the Latin's misconstruction of Aristotle's correlative 'τε . . . και', Aguinas confronts a type of belonging wherein predicates belong "on acount of themselves." By 'themselves' Aguinas understands 'the subjects themselves', as is evident from his commentary, and the fourth mode of per se belonging is intended to formulate what belongs to subjects on account of themselves. In fact, in James's translation Aristotle's description of the fourth type of per se belonging is an almost exact match to Aristotle's later description of the second type of *per se* belonging that is relevant to *scientia*:

Item alio modo quod quidem propter ipsum inest unicuique per se . . . est.

²⁹An.Post II 13, 96^a32-34.

³⁰ Ross, 521-522.

³¹ In PA I.10, 122-125.

³² In PA I.13, 60-69.

Again, in another way, what is in anything on account of [the subject] itself is per se.

Que . . . dicuntur . . . per se sic sunt, sicut . . . inesse [predicantibus] propter ipsa.

The things called 'per se' are [per se] in this way, namely they belong to predicates . . . on account of [the subjects] themselves.

Accordingly, the misconstruction in Aristotle's text likely plays a role in Aquinas's belief that at 73^b16-18 Aristotle is discussing the second and fourth types of *per se* belonging.

I have argued for two theses. The first is that Aquinas's belief that at 73^b16-18 Aristotle is speaking of the conclusions of scientific demonstrations coupled with a misconstruction of this passage in the Latin lead Aquinas to conclude that 73^b16-18 discusses the second and fourth type of *per se* belonging, respectively. Second, since (1) Aristotle never explicitly mentions the fourth type of *per se* belonging in connection with scientific knowledge, (2) 73^b16-18 could pertain to both the premises and the conclusions of scientific demonstrations (or indeed even just the premises), and (3) 73^b16-18 can be read as an assertion that the first and second types of *per se* belonging are relevant to scientific demonstration, this passage likely pertains to the first and second types of *per se* belonging, both of which Aristotle does explicitly claim are relevant to scientific knowledge.

© Proceedings of the Society for Medieval Logic and Metaphysics, Volume 3, 2003 Henrik Lagerlund: Representations, Concepts and Words. Peter of Ailly on Semantics and Psychology, pp. 15-36.

Henrik Lagerlund:

Representations, Concepts and Words: Peter of Ailly on Semantics and Psychology

Introduction

Peter of Ailly (1350-1420) was a very influential person. He had a distinguished career both within the University of Paris and in the Catholic Church. In 1411, he was named Cardinal and this got him deeply involved in papal politics. But he was not only politically influential, he had a profound influence on fifteenth and sixteenth century thought as well. His philosophical and theological works were frequently cited by influential thinkers. He also wrote a wide variety of works including several on geography and astronomy. The *Imago mundi*, for example, was supposedly read by Christopher Columbus. His works were also published and reprinted several times in the sixteenth century and in many respects he seems to have served as a transmitter of scholastic thought into modern times. Despite these well known facts about him, he has been given little attention by contemporary scholars of medieval philosophy. In the present study, I attempt, in some small ways, to remedy this by giving a unified account of his views on the semantics and psychology of mental language.²

Historically, Peter can be said to belong to an eminent Paris tradition of teachers in the so called *via moderna*, which includes such predecessors as John Buridan, Albert of Saxony, Marsilius of Inghen and Nicholas Oresme. This tradition was greatly influenced by William Ockham and, particularly in Peter's case, Ockham's followers in Paris, Adam Wodeham and Gregory of Rimini. They all adhered to a nominalist metaphysics, although they disagreed on the details, and they all placed great emphasis on a language of thought in their reduced ontology and in founding language and logic. Peter is, however, one of the first in the nominalist tradition to devote a separate treatise to mental language, the famous *Conceptus*.

The philosophical treatise of foremost interest to us in the present study is, of course, the *Conceptus*, and it is exactly what its title suggests – a work on mental terms, that is, a work on mental language. It is believed to have been written in 1372, which would make it a very early work by Peter. It was published and reprinted several times in the

¹ See Okley (1964), and Spade (1980), p. 1, for more details of Peter's life.

² Peter's views on semantics and mental language have previously been treated in Spade (1980), Biard (1989), Spade (1996) and Bakker (1996).

late fifteenth and early sixteenth century – always together with his treatise on insolubles.³ Besides these two works, we will use the *Destructiones modorum significandi* and the *Tractatus exponibilium* as sources for Peter's treatment of the semantics of mental language. The psychological aspects of mental language are treated by Peter in the *Conceptus*, of course, but also in his commentary on Peter Lombard's *Sentences* and in the *Tractatus de anima*⁴.

The *Destructiones modorum significandi* seems to be the earliest of these works, followed closely by *Conceptus et insolubilia* and *Tractatus exponibilium*. They are, however, earlier than Peter's commentary on the *Sentences*, which was supposedly written between 1376 and 1377, and the *Tractatus de anima*, which was completed between 1377 and 1381. Since the *Tractatus de anima* is the latest of these works, I will assume that it represents Peter's most mature thoughts, but the *Conceptus* will otherwise be my main source.

I will argue that Peter develops a highly original theory of language and thought, which in details will differ from both William Ockham's and John Buridan's theories. It is, of course, true that he is deeply influenced by Ockham and Buridan, but he seems to develop their views in a new direction, particularly in light of some deep problems facing their theories.

I begin by considering the acquisition of concepts. To be able to put Peter's conception of the language of thought in its proper context, I first consider his view on sensory cognition and his use of the distinction between intuitive and abstractive cognition. This will lead me to what I claim to be the most notable part of his theory of concepts, namely, that they are metaphysically simple and indistinguishable entities. He seems to think that they are individuated by their content and he thus stresses the semantics of mental language. Having drawn this conclusion, I move on to consider the semantics, and I end by treating mental supposition and the truth of mental sentences.

Acquisition of concepts and the psychology of mental language

In the beginning of the Conceptus, Peter states that there are three kinds of terms, namely, mental, spoken and written terms. He writes:

A mental term is a concept, or an act of the intellective soul or the intellective power. A spoken term is an utterance (*vox*) signifying by convention (*ad placitum*). A written term is an inscription (*scriptura*) synonymous in signification with an utterance significative by convention.⁶

⁴ See Pluta (1987).

³ See Spade (1980).

⁵ See Chappius et al. (1986).

⁶ "Terminus mentalis est conceptus sive actus intelligendi animae vel potentiae intellectivae. Terminus vocalis est vox significans ad placitum. Terminus vero scriptus est scriptura sinonima in significando voci significativae ad placitum." (Peter of Ailly, *Conceptus et insolubilia*, fol. Ai^b.) See also Spade (1980), p.

A mental term is a concept, which is the same as an intellectual act (or an act of the mind). While spoken and written terms signify by convention and are subordinate to mental terms. Mental terms, on the other hand, signify by nature. He makes a distinction, however, between mental terms properly so called and improperly so called, that is, between mental terms with natural and conventional signification, respectively. I can, for example, have the word 'animal' in English in my mind without uttering it or writing it down – I am just thinking it. Although this is a mental term it is not a proper mental term, since it signifies by convention and is subordinate to a proper mental term that signifies by nature.

The division of terms discussed here is, of course, a division of language as well. In this sense there are three distinct levels of language, namely, a written, a spoken and a mental language. Furthermore, there is a proper and an improper mental language. The terms of the proper mental language are concepts with natural signification and the terms of the improper mental language are mental words with conventional signification. The difference can also be explained by saying that the terms of the improper mental language are in, what we would call, some natural language, like English or Swedish, but this is not the case with the proper mental language – its terms are not in any natural language; it is the language other languages are based on.

I have mentioned 'signification' several times. It is a key term. Peter writes the following about it in the *Conceptus*:

Next it must be noted that to 'signify' is the same as to be a sign of something. Nevertheless, a thing can be called a 'sign' of some thing in two senses. In one sense, because it leads to an act of knowing (*notitia*) the thing of which it is a sign. In another sense, because it is itself the act of knowing the thing. In the second sense, we say that a concept is a sign of a thing when such a concept is a natural likeness (*similitudo*) – not that it leads to an act of knowing that thing, but because it is the very act itself of knowing that thing, [an act that] naturally and properly represents that thing.

In the first sense of 'signify', terms signify in the improper mental, and in spoken or written languages, and we will get back to that sense later in the present article, but for now it is the second sense that interests us. A concept signifies by being a natural likeness of whatever it stands for or, rather, represents. Peter writes earlier in the *Conceptus* that to 'signify' is to "represent something, some things, or somehow, to a

^{16.} All translations in this paper are my own, but quotes from the *Conceptus et insolubilia* are based on P.V. Spade's excellent translation.

⁷ See Peter of Ailly, *Conceptus et insolubilia*, fol. Aiii^a, and, fol. Bii^b-Biii^a, and also Spade (1980), pp. 19-20, and, pp. 36-37.

⁸ See Peter of Ailly, *Conceptus et insolubilia*, fol. Bii^a, and Spade (1980), p. 36.

⁹ "Notandum est deinde quod significare est idem quod signum rei facere hoc esse signum alicuius rei et veruntamen dupliciter aliqua res potest dici signum alicuius rei. Uno modo ut ducit in noticiam illius rei cuius est signum. Alio modo quia est ipsamet noticia rei. Secundo modo dicimus conceptum esse signum rei cuius talis conceptus est naturalis similitudo non quod ducat in noticiam illius rei, sed quia est ipsamet noticia rei naturaliter proprie representans rem." (Peter of Ailly, *Conceptus et insolubilia*, fol. Aii^a.) See Spade (1980), p. 17.

cognitive power by vitally changing it." For a concept to signify something is for it to be the very act of knowing (*notitia*) that thing. Therefore, "a mental term, a concept or act of understanding (*actus intelligendi*), and an act of knowing (*notitia*) that apprehends a thing are the same." ¹¹

A concept when acquired changes the mind (or intellectual soul). Peter says a concept is a 'vital change' of the mind in two ways. First of all, it is caused by something acting on the mind with efficient causation, and, secondly, it inheres in the mind as an accident inheres in its subject. To get a clearer picture of this process we must look closer at Peter's psychological writings.

Peter is very much torn between Ockham and Buridan on matters of psychology. Unlike Ockham and in the footsteps of Buridan, he adheres to the species theory of perception, that is, perceptible objects cause changes in the sense organs and the qualities sensed are described as species, which are in some ways like the qualities as they are present in the objects themselves. Species are, however, dependent on their perceiver, and are not caused by the sensible objects if no perceivers are present.¹²

After the act of sensing (*actus sentendi*) there remain two qualities in the *phantasia*. One is the actual change of the material internal organ and the other is an act of the soul (*actus phantasiandi*). The act of the soul is created from the change in the matter by an act of imagination (*actus imaginandi*), and it has many names. Among others, Peter uses these to refer to it: similitude, image, simulacrum, idolum, idea, representation, intelligible species etc. ¹⁴ This representation is pre-conceptual and it is said to have objective being (*esse obiectivum*) in the soul. ¹⁵

¹⁰ "Significare autem est potentiae cognitivae eam vitaliter immutando aliquid vel aliqua vel aliqualiter representare." (Peter of Ailly, *Conceptus et insolubilia*, fol. Ai^b.) See Spade (1980), p. 16.

¹¹ "Notandum est viterius quam terminus mentalis, conceptus sive actus intellidendi et noticia rei apprehensiva idem sunt." (Peter of Ailly, *Conceptus et insolubilia*, fol. Aii^b.) See Spade (1980), p. 18.

¹² "Secundo dicendum est, quod naturaliter non possumus sensibilia non sensata intelligere in speciebus receptis a sensibilibus, quia nec in speciebus causatis ab eis, cum naturaliter a nulla re sensibili species causatur, nisi dum actualiter sensitur, nec in speciebus causatis ab aliis sensibilibus sensatis a nobis, cum naturaliter unum sensibile non possit causare speciem alterius sensibilis ut sonus speciem coloris, nec species unius sensibilis potest esse medium cognoscendi aliud sensibile ut species soni respectu coloris." (Pluta (1987), 12:3, p. 76.) See Lagerlund (forthcoming) for a similar reading of Buridan's view on sense perception.

¹³ "Sed alii dicunt sine speciebus haec omnia posse salvari. Unde, cum certum sit in sensu interiore aliquid remanare post actum sentendi, dicunt isti, quod in eo, puta in phantasia, remanet duplex qualitas: Una ab obiecto impressa in organo, et est ipsius confortativa vel debilitativa et quandoque corruptiva, sicut patet in amentibus et furiosis, et illa est alterius rationis ab obiecto, sicut supra dictum est de sensu exteriore. Sed alia est qualitas, quae est generata per actum imaginandi, quae non est subiective in organo, ut distinguitur contra potentiam, sed e contrario sicut et ipse actus phantasiandi." (Pluta (1987), 9:3, p. 55.)

¹⁴ "Ulterius dicunt, quod ista secunda qualitas non est obiectum alicuius actus, sed est habitus generatus per actum phantasiandi inclinans partialiter ad actus consimiles in absentia rei sensibilis ita, quod post primum actum etiam destructo sensibili potentia cum isto habitu potest elicere actum phantasiandi terminatum ad idem sensibile numero, quod prius est sentitum, sicut cognitione abstractiva intellectus

In a couple of extremely detailed and interesting passages of the *Tractatus de anima* on cognition of sensibles, he explains that humans perceive in several different ways. First of all, sensory cognition is either simple or complex. It is complex in the sense that the representation in the soul is extremely rich and in this sense also confused. If we humans did not have the ability to focus on or attend to individual things, we would never be able to tell what we perceive. Our intellectual soul has this ability – by putting individual things in our prospect the soul produces simple acts of cognition. In a simple act of cognition an object can be cognized directly – although it is cognized through the species. This cognition or act of knowing (*notitia*) is by no means evident. Peter says that with such an act of cognition, a thing "can be equally well not existing as existing."

Species or representations recalled from memory, on the other hand, can, according to Peter, be cognized in three different ways. First, such a recalled species can be cognized *secundum se*, that is, as a thing in itself. Instead of attending to particular things represented, the representation itself is attended to. An example would be, I think, to consider the species as a painting being cognized as a canvas with paint. Secondly, it can be cognized as an image. This second cognition is twofold. If the species is formally cognized as an image, then the cognition is complex (judging the species to be an image), and if it is virtually cognized as an image, it is simple. An image formally

terminatur ad idem singulare numero, quod prius intellectualiter est intuitive cognitum et non terminatur ad aliquam similitudinem vel imaginem vel simulacrum, sicut aliqui imaginantur, quia omnia illa, quae a philosophis et sanctis vocatur phantasmata, simulacra vel idola, sunt ipsamet sensibilia phantasiata, quae prius fuerunt sensata, et non species rerum sensibilium; eundem enim hominem, quem prius vidi, imaginor et non speciem eius. Et sic, quot sunt individua phantasiata, tot sunt phantasmata, sicut tot sunt ideae, quot sunt res cognitae, quia idea est ipsa res singularis cognita cognitione divina, licet hoc nomen 'idea' principaliter significando rem creatam connotet eam aeternitaliter a Deo fuisse cognitam, sicut hoc nomen 'phantasma' significat principaliter rem phantasiatam connotando actum phantasiandi." (Ibid., p. 55.) "Sed tamen tali specie intelligibili, id est phantasiata apprehensione manente non videtur istis possibile omnem actualem intellectionem cessare, quia, ut prius est argutum, illa manente omnia remanent requisita ad formationem primarum intellectionum; bene tamen cessante intellectione manet in memoria species sensatorum et sensationum." (Ibid., 10:4, p. 61.)

¹⁵ "Unde ulterius sequitur, quod ad hoc, quod aliquid existens in intellectu sit alicuius rei cognitio vel proprie dicta repraesentatio, non sufficit, quod sit illius similitudo vel imago sive quod exhibeat illam tamquam praesentem in esse obiectivo." (Ibid., p. 60.)

¹⁶ "Ideo alii dicunt, quod aliquam rem singulariter percipere est sive requirit ipsam percipere per modum existentis in prospectu cognoscentis. Cum autem aliqua res a sensu sic percipitur, hoc non est nisi per repraesentationem confusam simul repraesentantem cum substantia rei eius accidentia, scilicet magnitudinem, situm et alia, secundum quam apparet in prospectu cognoscentis. Sensus autem non potest distinguere seu abstrahere huiusmodi confusionem, sed bene intellectus. Quare intellectus potest universaliter cognoscere et non sensus." (Ibid., 12:2, p. 74.)

¹⁷ "Non posset etiam nobis virtute talis sensationis fieri naturalis evidentia de existentia rei sensibilis, cum illa posset aequaliter esse non existentis sicut existentis." (Ibid., p. 68.)

¹⁸ "Unde patet, quod de tali specie possumus habere duplicem notitiam, unam qua ipsa cognoscitur secundum se, ut est quaedam res, aliam qua cognoscitur ut imago alterius, quem duplicem modum notitiae etiam invenimus respectu signorum ad placitum sicut vocem et scripturarum." (Ibid., 11:5, p. 69.)

cognized as such would be, for example, the cognition of a painting (species) as a painting representing van Gogh (judging it to be a painting representing van Gogh). Such an act of cognition includes a habitual knowledge of van Gogh and the recognition of the image as such, and, since it involves a judgment, it is a complex cognition or act of knowing (*notitia*). An image virtually cognized as an image is a simple cognition of van Gogh-in-the-picture. Whether these three also, in some ways, apply to actual perception of a present object is not said by Peter, but one can easily imagine such an extension of the theory.

Unlike Buridan,²⁰ but in the footsteps of Ockham and Gregory of Rimini, Peter distinguishes between two simple acts of knowing (or of cognition), namely, intuitive and abstractive. He describes them as follows:

An act of knowing is not called abstractive because it abstracts from the existence of a thing or from the singular conditions, as if the existence or singularity of a thing could not be cognized abstractively, but [an act of knowing is called abstractive] because in a way it abstracts from the objective presence of a thing insofar as the thing itself is cognized in a representative medium as absent, but in intuitive acts of knowing the thing itself is presented to the cognizer [cognoscenti obicitur] in itself, as immediately present.²¹

In an intuitive act of cognition, the thing cognized is cognized as present, while this is not the case in an abstractive cognition. The difference between these two acts is easily seen if we consider an example. When I see some object, for example, the coffee mug in front of me, I do this through an intuitive cognition of the mug, but when I think of the coffee mug, although it is no longer presently in front of me, I do this through an abstractive cognition. I do, therefore, not abstract from the existence or from the singularity of the mug in the abstractive cognition – it is simply not objectively present to me. ²² To clarify the relation between intuitive and abstractive cognition he writes:

_

¹⁹ "Sed duplex est notitia, qua imago cognoscitur esse imago, una, qua formaliter iudicatur esse imago, et illa est complexa, alia, qua virtualiter cognoscitur esse imago, et haec est incomplexa, sed virtute ipsius potest haberi praedicta notitia complexa." (Ibid., p. 69.)

²⁰ Buridan mentions the distinction between intuitive and abstractive cognition at one place in his works, in connection with his conception of the cognition of singulars, but the distinction as such does not play a significant theoretical role in his considerations: "Et sic finaliter videtur mihi esse dicendum quod nullus est conceptus singularis nisi sit conceptus rei per modum existentis in praesentia et in prospectu cognoscentis, tanquam illa res appareat cognoscenti sicut demonstratione signata. Et istum modum cognoscendi vocant aliqui intuitivum." (John Buridan, *Quaestiones in Metaphysicen Aristotelis*, VII.20, f. 54va.)

²¹ "Ulterius patet, quod notitia non dicitur abstractiva, quia abstrahat ab existentia rei vel a condicionibus singularibus, quasi existentia vel singularitas rei non possit abstractive cognosci, sed quia aliquo modo abstrahit a praesentialitate obiectiva rei, inquantum ipsa res quasi absens in ali<qu>o medio repraesentativo cognoscitur, sed in notitia intuitiva res ipsa quasi praesens immediate in se ipsa cognoscenti obicitur." (Pluta (1987), p. 70.)

²² Calvin G. Normore has claimed that there are at least interesting similarities between Ockham's theory of intuitive and abstractive cognition, and Russell's theory of knowledge by acquaintance and knowledge by description. See Normore (1990), p. 69.

It follows that every abstractive act of knowing is intuitive, but the converse does not [follow], because every abstractive act of knowing about something is intuitive with respect to its representation in which it is cognized, /.../ but whenever some thing is in it self immediately apprehended, and is then intuitively cognized, some other thing is still not apprehended through this act of knowing.²³

Every abstractive cognition is also intuitive, since if I think of a mug with coffee abstractively, I intuit the representation of the object in the soul at the same time, but this is not the case if I immediately cognize the mug as present – then I intuit the mug in the external world instead of my representation of it in the soul. Peter then goes on to write:

It also follows that these terms 'intuitive act of knowing' and 'abstractive [act of knowing]' are not incompossible absolutely speaking, but are verifiable of the same act of knowing, not with respect to the same reality, however; for when some species is cognized as an image, this cognition is intuitive and abstractive, not with respect to the same, but intuitive with respect to the species and abstractive with respect to the thing. But when the species is cognized *secundum se* and not as an image, the cognition is precisely intuitive and cannot be abstractive, such as the first [cognition] cannot be precisely intuitive.²⁴

If we recall the division above between different acts of cognition, we see that the simple act is an intuitive cognition of an object as present; however, not evident. An intuitive cognition of an individual thing occurs when the intellect focuses in on things or puts things in its prospect. But when an image is recalled from memory it is, as explained in the quote, intuitive with respect to the species (or image) and abstractive with respect to the thing, since the thing itself is not present.

In humans, sensory cognition and intellectual cognition are hard to distinguish. One might think that thought has nothing to do with our senses, but for Peter thinking is always done in a language and the terms of the language of thought are derived from sensory cognition. These terms or concepts are passively acquired through the intellect's ability to put things in its prospect. The notion of the intellect having the ability to put things in its prospect is taken from Buridan and it is used by Peter in exactly the same way as Buridan uses this notion.

On any theory of sense cognition that uses the notion of an image there is a problem as to how intellectual cognition can be singular when the representation in the soul seems

-

²³ "Unde sequitur, quod omnis notitia abstractiva est intuitiva et non e contra, quia omnis notitia abstractiva alicuius est intuitiva sui repraesentativi, in quo illud cognoscitur, ut dictum est, sed quandoque aliqua res in se immediate apprehenditur, et sic intuitive cognoscitur, et tamen per illam notitiam non apprehenditur aliqua alia res in ea, ut etiam dictum est." (Pluta (1987), p. 71.)

²⁴ "Ulterius sequitur, quod isti termini 'notitia intuitiva' et 'abstractiva' non sunt incompossibiles simpliciter, sed sunt verificabiles de eadem notitia, non tamen respectu eiusdem realiter; nam quando aliqua species cognoscitur ut imago, illa cognitio est intuitiva et abstractiva, non autem respectu eiusdem, sed intuitiva respectu illius speciei et abstractiva respectu rei. Sed quando illa species cognoscitur secundum se et non imago, illa cognitio est praecise intuitiva, et non potest fieri abstractiva, sicut nec prima potest fieri praecise intuitiva." (Ibid., p. 71.)

²⁵ Cf. Buridan. See Lagerlund (forthcoming).

to be as general as an image. Both Buridan and Peter propose to solve this by invoking the notion of putting things in the prospect or focusing in (attending to) individual things. The notion of the intellect putting things in its prospect is, it seems to me, a very common sense notion. How am I aware of the world surrounding me? I am aware of it through a rich representation which contains information of sounds, touch, smell, taste and sight, but this is an all too rich 'picture' of the external world for it to make any sense. I am, therefore, always focused on something in this representation. As soon as I focus on something, be it a taste, a sound or an object seen, I have an intuitive cognition of that thing as present and this in turn results in a vital change of the soul, that is, in a concept. This works, of course, in the same way if there is no object present, that is, if I have an abstractive cognition of some thing or some things.

The question one has to raise, particularly in view of the fact that concepts are supposed to be 'natural likenesses' of things in the world, is: What are the concepts that are first acquired like? These concepts are, first of all, singular, but there are two types of singular concepts, namely, determinate and vague singular concepts. Determinate singular concepts are, for example, 'Socrates' or 'Plato', that is, typically those corresponding to proper names. Most singular concepts are, however, so called 'vague' concepts, for example, 'this human', 'this animal', 'this book', etc.²⁶ They are vague because they apply to several things along with different acts of pointing and they are individual instances of universal concepts, for example, 'human', 'animal', 'book', etc., which in turn are acquired by abstracting from singular concepts.²⁷

Since these concepts are acquired through simple acts of cognition, they are themselves simple, that is, they are simple metaphysically, but obviously not semantically, since they are expressed using, for example, the complex term 'this animal'. Note, therefore, that on Peter's view, complex demonstratives like 'this animal' seem to be acquired directly without mediation of semantically simple concepts. Such singular concepts are either abstracted to universal concepts or combined with other concepts into more complex concepts. I will return to this in more detail later in this article.

The distinction drawn here between concepts taken either metaphysically or semantically is important for understanding Peter's views on mental language,

quantum ad singulare vagum." (Pluta (1987), p. 75.)

²⁶ "Circa quod tamen est advertendum, quod duplex est conceptus singularis; nam quidam est, qui vocatur singulare vagum, ut 'hic homo', 'hoc animal', et tale est proprie singulare, licet ad placitum vocetur vagum, quia vox ei correspondens convenit pluribus secundum diversas demonstrationes. Alius est conceptus singularis, qui vocatur singulare determinatum, ut 'Socrates', 'Plato' et huiusmodi, et quantum ad tale singulare videtur, quod non oportet prius intelligere singulariter quam universaliter, sed bene

²⁷ "Oportet autem talem conceptum a conceptu singulari abstrahere modo supra dicto; quare oportet, antequam intellectus universaliter intelligat, conceptum singularem praeexistere in ipso." (Ibid., p. 75.)

²⁸ Buridan, for example, does not think that there are any simple singular concepts. See Lagerlund (forthcoming).

particularly when we ask the question in what sense these concepts acquired make up mental sentences.²⁹ In the *Insolubilia* he writes:

Is a mental sentence essentially put together out of several partial acts of knowing, one of which is the subject, another the predicate and another the copula? In general, it seems to everyone to be so, because of the fact that every sentence is an expression, /.../ and every expression – [or] at least [every] complete one – seems to be put together in this way. First, because every expression is complex, which does not seem to be the case unless it is put together in the way described. Second, because it belongs to the [very] notion of an expression that every expression has parts each one of which, when separated, signifies something of what is signified by the whole.³⁰

On the view Peter is here presenting, which was held by Ockham³¹, for example, there is an obvious problem as to what holds together the acts a mental sentence is supposed to be made up of. It seems that there needs to be some kind of mental 'glue' that connects the subject with the copula and the copula with the predicate in a basic categorical sentence. If the subject, predicate and the copula are mental acts (concepts), and what holds them together are other mental acts, then we seem to need some further acts to hold those together and so on. There will, thus, be an infinite regress of mental acts. Peter will, therefore, try to avoid this problem by claiming that mental sentences are structureless, simple, mental acts, which cannot be further analyzed into parts. He writes:

No categorical mental sentence is essentially put together out of several partial acts of knowing, one of which is the subject, another the predicate and another the copula. 32

There is, on the other hand, something commonsensical about the notion that mental sentences are complex structures made up of concepts. Peter agrees and writes (this is why he uses the word 'essentially' in the above quote):

An affirmation or negation in the understanding, or [indeed] any mental expression, should be called a 'complex' act of knowing because it is equivalent in signification to several specifically distinct acts of knowing.³³

²⁹ See G. Klima's introduction to his translation of Buridan's *Summulae de Dialectica* for a discussion of this kind of distinction in relation to Buridan's mental language. See John Buridan, *Summulae de Dialectica*, pp. xxxvii-xli. See also Zheng (1998) for a discussion of this distinction in relation to Ockham.

³⁰ "His premissis oritur dubitatio fortissima circa predicta videlicet, utrum illa propositio mentalis sit essentialiter composita ex pluribus noticiis partialibus, quarum una sit subiectum, alia vero predicatum, et alia copula. Videtur enim communiter omnibus quod sic propter hoc quod omnis propositio est oratio, ut dictum est, et omnis oratio videtur sic composita esse, saltem perfecta. Tum primo quia omnis oratio est complexa, quod non videtur esse nisi sit predicto modo composita. Tum secundo quia de ratione orationis est quod omnis oratio habeat partes quarum quelibet separata significat aliquid alius quod per totum significatur." (Peter of Ailly, *Conceptus et insolubilia*, fol. Biii^a.) See Spade (1980), pp. 37-38.

³¹ See William Ockham, Summa Logicae, I.3.

^{...}

³² "Secunda conclusio: nulla propositio mentalis cathegorica est essentialiter composita ex pluribus partialibus noticiis, quarum una sit subiectum et alia predicatum et alia copula." (Peter of Ailly, *Conceptus et insolubilia*, fol. Biv^b.) See Spade (1980), p. 41.

Mental sentences properly so called are simple acts of knowing, but they can nevertheless be called complex in the sense that they bear a relation to other acts of knowing, that is, concepts, which have the same signification. The sentence 'Socrates is white' is a metaphysically simple act, but it is equivalent in signification to the three acts 'Socrates', 'white', and 'is' put together.

To explore this further, let us consider the question: How are sentences made? On the traditional view, which Peter is refuting, concepts or mental terms are combined to form mental sentences. There is something very appealing about this view, since this is exactly what we seem to be doing when we speak or write. We can, however, see that there is no problem with such a view for the spoken or the written languages, since words are either coming in sequences of sounds in a physical medium or after each other on, for example, a piece of paper – there is, thus, no problem about what holds them together, but this is a problem for mental sentences, since they are mental acts, i.e., qualities of the mind. But if mental sentences are not put together from parts, then what are they? Well, they are simple mental acts, according to Peter. Such a view, however, seems to me to leave a gap between terms acquired through sense cognition and mental sentences in the language of thought. What is the connection between mental terms and mental sentences? Or, how does compositionality work in Mentalese? Peter does not satisfactorily address this question. The only thing he says, as seen above, is that there is some sort of equivalence relation between a sentence and the terms. We will return to this problem when dealing with Peter's theory of signification later in this article. Note, however, that although mental sentences are simple metaphysically, they are complex semantically.³⁴

The question just discussed can also be put slightly differently, namely: What individuates mental sentences? There are two likely candidates, I think; either they are individuated by their syntax or by their content, that is, semantics. We see immediately that the first candidate is ruled out by Peter. This is exactly the view he is opposing. Mental sentences are simple unstructured acts, that is, they do not have syntax, that is, they can only be individuated by their content. This means that the picture Peter is painting for us is a picture where there are simple acts of the mind, which have different contents and this content is what makes the act to be a simple or complex term, or a

³³ "Sexta conclusio: affirmatio vel negatio in intellectu debet dici noticia complexa, quia pluribus noticiis specifice distinctis equivalet in significando." (Peter of Ailly, *Conceptus et insolubilia*, fol. Bvi^a.) See Spade (1980), p. 44, which includes an addition from another edition.

³⁴ In the *Insolubles*, Peter argues that hypothetical sentences are put together out of at least two parts, that is, out of several acts of the mind, and that the same thing is true of arguments or syllogisms. (See Peter of Ailly, *Conceptus et insolubilia*, fol. Biv^{a-b}, and Spade (1980), pp. 40-42.) The argument Peter gives against the view that a whole syllogism can be conceived in a single act – a view put forward once by Ockham (see William Ockham, *Ordinatio*, prol., q. 8, pp. 218-9) – is that one of the premises can be assented to and not the other and from this it follows, he claims, that they must be separate acts. On the face of it this looks like a really bad argument, since if the content of the supposedly simple act of the mind is complex one wonders why assent to one of the premises and not to the other is a problem; unless, of course, Peter thinks assent is not to the content but to the act itself. This is a view hard to make sense of, however.

sentence.³⁵ Such a view leaves room for a serious doubt, however, since it becomes very uncertain in what sense the proper mental language is a language at all. If it is a language, it is a very strange language indeed. What is certain is that semantics will play a crucial part on Peter's view. Let us, therefore, turn to the semantics of mental language.

The semantics of mental language

To get a grip on Peter's semantics for mental language there are several basic distinctions we need to keep in mind. First of all, there is, of course, the distinction between categorematic and syncategorematic terms. This distinction applies to all levels of languages. Both categorematic and syncategorematic terms can be taken either significatively or functionally. The distinction between a term's signification and its function is, however, a distinction between logic/semantics and grammar, and, since we are here interested in semantics, I will, therefore, concentrate on the signification of terms. A categorematic mental term is a concept that naturally signifies, represents, something or some things, and a syncategorematic mental term is a concept that does not signify something or some things, but signifies somehow, that is, a syncategorematic term affects the way, the *how*, or the mode of the signification of a categorematic term. Examples of such terms are 'every', 'some', 'and', 'or', that is, quantifiers, connectives etc.³⁶

Another important distinction, which applies to categorematic terms is the one between absolute and connotative terms. The definition of an absolute categorematic term is:

In so far as ideas are considered simply as modes of thought, there is no recognizable inequality among them: they all appear to come from within me in the same fashion. But in so far as different ideas are considered as images which represent different things, it is clear that they differ widely. (AT VII, 40-1; CSM II, 27-8.)

As this quote shows an idea has two sides to it, which correspond to what I have called the metaphysical and the semantical in Peter's case – the act and the content or, to use Descartes' terminology, the mode and the image – and the mode is said to have formal reality while the image has objective reality. Formal reality and objective reality require separate causes on Descartes' view and in that sense every idea has two causes. See also Normore (1986) for a more careful discussion of the medieval background to Descartes' notion of an idea.

³⁵ If the analogy from sense representations is applied on concepts or mental terms, we see that also a concept will require two 'causes' in order to be properly explained, namely, an efficient cause creating it, or the act in the mind, and another 'cause' of the content of the act (concept). A sense representation is said to be similar in some way to the object(s) it represents and in the same way the concept can be said to be similar to whatever it represents, that is, the content of a concept – simple or complex – is similar to whatever it is of. I think it would be fair to say that this is the formal cause of the concept and in that sense a concept needs two causes. Note the similarity between this view of concepts and Descartes' ideas. In the *Third Meditation*, Descartes writes:

³⁶ See Peter of Ailly, *Conceptus et insolubilia*, fol. Aii^b-Aiii^a, and Spade (1980), pp. 18-19.

A term is absolute if, and only if, it only directly signifies something or some things. 37

A common explanation of absolute terms is that they direct the mind to whatever they signify and to nothing else; for example, 'human' directs the mind to think about humans and to nothing else. It is also common in the contemporary commentary literature to conflate absolute terms with so called natural kind terms.

A categorematic connotative term is defined in the following way:

A term is connotative if, and only if besides whatever it directly signifies, it also connotes some thing. 38

Besides directing the mind to whatever it signifies, a connotative term also directs the mind to other things; for example, 'father' not only directs the mind to the man that it signifies, but also to the things having this father, that is, his children. Peter writes the following about the connotative term 'white':

For instance, the concept to which the spoken term 'white' is subordinated in signifying signifies and supposits for a white thing and connotes positively that the thing or quality that is a whiteness inheres in the white thing.³⁹

Peter is here following Ockham; although he is using a slightly different terminology. ⁴⁰ According to Ockham, absolute terms only have primary signification, while connotative term also have secondary signification. Peter talks about connotation instead of secondary signification and, therefore, drops the distinction between primary and secondary signification. ⁴¹

³⁷ "Terminus mentalis absolutus est qui preter illud pro quo naturaliter supponit nihil connotat nec intrinsecum nec extrinsecum, positive nec privative, ut conceptus ille qui absolute significat homines cui subordinatur in significando iste terminus vocalis homo." (Peter of Ailly, *Conceptus et insolubilia*, fol. Av^a.)

³⁸ "Terminus mentalis cognotativus est qui preter illud pro quod supponit naturaliter aliquod intrinsece vel <extrinsece> [reads: intrinsece], positive vel privative cognotat et iste est duplex, quidam est cognotativus intrinsece qui scilicet ultra illud pro quo supponit naturaliter cognotat partem essentialem et intrinsecam rei pro qua supponit sicut terminus mentalis qui est differentia essentialis dicitur terminus cognotativus." (Ibid.)

³⁹ "[U]t conceptus ille cui subordinatur in significando ille terminus vocalis albus significat et supponit pro re alba et cognotat positive illam rem qui est albedo sive illam qualitatem inherere rei albe." (Ibid., fol. Av^b.) See Spade (1980), p. 24.

⁴⁰ See William Ockham, *Summa Logicae*, I.10, for the distinction expressed in Ockham's terminology. For Ockham, as well as for Peter, the theory of connotation is very important and makes it possible for them to explain the richness of ordinary language without committing themselves to strange entities, which would destroy their austere ontology. They can, for example, easily solve Frege's puzzle of identity, that is, how can 'the Morning Star' and 'the Evening Star' not be synonymous although they denote the same thing. They would simply say that they signify the same thing, but are connotative terms with different connotata. See also Pannaccio (1990).

⁴¹ Buridan uses yet another terminology – instead of connotation he talks about appellation. It amounts to the same thing, however. It should also be mentioned that Peter makes a distinction between formal and material signification. The connotative term 'white' materially signifies whatever is white and it formally signifies the whiteness. See Peter of Ailly, *Conceptus et insolubilia*, fol. Av^b-Avi^a, and Spade (1980), p. 25. The terminology is also present in Buridan. See ibid., pp. 109-110, note 188.

Connotative terms have nominal definitions, according to Peter. For example 'white' is defined in terms of 'some thing(s) having whiteness' and 'father' in terms of 'a certain animal that generates from its substance another animal which is a child'. Absolute terms cannot be defined in this way. They are in a sense basic. In the *Sentence*-commentary, Peter writes:

Every connotative concept presupposes some absolute concept as its attribution; such as 'white' is attributed to something absolute. Something is that which is said to be white, namely, a stone or a piece of wood. And this is evident from its nominal definition. 43

Connotative terms presuppose absolute terms, such as white presupposes a substance term and a quality term, which is evident from the nominal definition as Peter says. Does this mean that connotative terms are based on absolute terms? Peter certainly suggests such a view. Let us, however, first have a look at the following quotation in which Peter summarizes his discussion about the distinction between absolute and connotative terms in the *Conceptus*:

It follows also from what has been said that one kind of mental term naturally signifies absolutely, and another kind naturally signifies connotatively or relatively. And so one kind of concept is naturally absolute in signification and another is naturally connotative or relative, even though a concept is a single absolute entity, since it is a quality. So too, one kind of concept is naturally common in its signification, suppositing and predicating, even though every concept existing in the soul is a singular entity in its being. 44

Several things are suggested in the last quote. First of all, like mental sentences, mental terms, or concepts, are simple acts of the soul (mind). Furthermore, it is suggested that connotative terms are complex and since they are not complex metaphysically they are, obviously, complex semantically. The same result is already implicit in the fact that all connotative terms can be reduced to their nominal definitions. This in turn suggests that they ultimately can be reduced to absolute categorematic terms and syncategorematic terms.

⁴³ "Omnis autem conceptus connotativus aliquam conceptum absolutum presupponit cui attribuitur; sicut album attribuitur alicui absoluto. Aliquid enim est quod dicitur album, scilicet, lapis aut lignum. Et istud patet ex diffinitione quid nominis etc." (Peter of Ailly, *Questiones magistri Petri de Aylliaco cardinalis cameracensis super libros sententiarum*, I, q. 3, fol. gviii^{rb}.) This applies to all connotative terms except 'God'.

⁴² "Unde modus cognotandi conveniens cuilibet termino cognotanti satis apparet per diffinitionem talis termini quid nominis si recte detur. Si enim diffinitatur iste terminus pater difinitione explicante quid nominis dicetur pater est quidam animal quod ex sua substantia generat aliud animal eiusdem speciei cum eo quod est filius." (Peter of Ailly, *Conceptus et insolubilia*, fol. Av^b.) See Spade (1980), p. 25.

⁴⁴ "Sequitur etiam ex dictis quod aliquis terminus mentalis naturaliter significat absolute, et aliquis naturaliter significat cognotative sive respective, et sic aliquis conceptus naturaliter est absolutus in significando, et aliquis naturaliter est cognotativus sive respectivus, quamvis aliquis conceptus sit una entitas absoluta, quia est aliqua qualitas. Sic etiam aliquis conceptus naturaliter est communis in significando et supponendo et predicando, et ens conceptus naturaliter singularis in significando, supponendo et predicando quamquam omnis conceptus in anima existens sit entitas singularis in essendo." (Peter of Ailly, *Conceptus et insolubilia*, fol. Avi^a.) See Spade (1980), p. 25.

The same problem seems to appear here as did for mental sentences, that is: How can already simple acts be made up of other simple acts? One can only guess that the same answer will apply, namely, the semantically complex concepts are somehow equivalent to several simple, but nevertheless not made up of them. Semantically, however, the picture so far is quite appealing, namely, there are some simple terms at the bottom out of which all other are constructed.

Let me pause here for a while and make a detour. For centuries philosophers have dreamt of either creating an ideal language or discovering one within the deep structure of our natural languages. The most notable attempt in the twentieth century is Bertrand Russell's, so called, logical atomism. In the debate about Ockham's language of thought, which started with Peter Geach's misinterpretation of it, ⁴⁵ John Trentman, in an article in *Mind* 1970, corrected some of Geach's misreadings, but also argued that Ockham viewed mental language as an ideal language on which logic and all our natural languages were based. Specifically, he made three claims: (1) the mental language is ideal and contains only those grammatical features that affect the truth conditions of mental sentences; (2) there are no synonyms in the mental language; (3) there is no equivocation in the mental language. Trentman was supported in his conclusions by Ockham scholars like Paul V. Spade, Marilyn M. Adams and Calvin G. Normore. The picture they painted has, however, been challenged foremost by Claude Panaccio. Panaccio's is by no means an unproblematic interpretation, but it remains the most plausible interpretation of Ockham's theory.

Suppose the picture of Peter's language of thought we have arrived at is correct; then there are at the most basic level some (simple) absolute categorematic terms and some syncategorematic terms. These will then constitute the atomic structure of other complex, or connotative, categorematic terms, and from all these taken together mental sentences are formed. On the basic, atomic, level, there will be no synonymy and no equivocation. Superficially this may look very similar to the received view of Ockham, but upon closer inspection it is not. It is very clear form the *Conceptus* that Peter thinks connotative terms are part of the mental language, and, hence, mental language is not an ideal language which only contains the most basic grammatical features, that is, (1) on Trentman's list of properties does not hold. If the nominal definitions are part of mental as well, then (2) does not hold either, since a connotative

=

⁴⁵ See Geach (1957), pp. 101-106.

⁴⁶ See Spade (1975), Adams (1987), pp. 287-298 and pp. 319-327, and Normore (1990).

⁴⁷ See Panaccio (1990).

⁴⁸ In the *Conceptus*, Peter distinguishes between two notions of signifying naturally, namely, a proper and a general sense. The proper sense is the one we have been dealing with so far and which pertains only to mental terms. In the latter sense, something is a natural sign of something not by itself but by means of something else, and since everything is apt to cause a concept of itself in a soul, everything is a natural sign in the general sense. See Peter of Ailly, *Conceptus et insolubilia*, fol. Aiv^b, and Spade (1980), pp. 22-23. A consequence of this is that one could say that a concept, even an absolute concept, is equivocal, since it signifies naturally both in a proper and in a general sense, that is, (3) in Trentman's list will not hold. Although Peter himself never drew this conclusion others did. See Bakker (1996).

term is synonymous with its nominal definition. Based on textual evidence alone it is, however, impossible to tell whether Peter thinks the nominal definitions are part of the proper mental language itself. If he wants to be consistent, however, he cannot hold that the nominal definitions are part of mental, since then two terms with the same content would be in mental and hence he cannot hold, as I have argued he does, that mental terms are individuated by their content. There are even more clouds on the horizon, namely, the vague singular concepts we mentioned earlier. According to our definition of absolute concepts, an absolute concept can be a vague concept, but examples of such concepts are 'this animal' or 'this human', which seem to be semantically complex. Let us, therefore, have a closer look at these concepts.

The paradigm example used by Peter and a tradition of Buridan students to characterize the vague singular concepts is Socrates approaching from afar. ⁵⁰ Peter writes in the *Tractatus de anima*:

If Socrates is approaching from afar, I first cognize him to be an animal before [I would cognize him to be] a human, and I finally cognize him to be Socrates. But I cognize him to be this animal singularly before [I cognize him to be] an animal universally.⁵¹

Later in the same treatise he writes:

Therefore, every universal has its [corresponding] vague singular, such as 'body'/'this body', 'animal'/'this animal', 'human'/'this human'. But when the senses cognize singularly, by means of a vague singular and not a determinate singular, it has a vague singular of a more general universal earlier than that of a less general universal, namely, this body before this animal and this animal before this human; therefore, the intellect in the corresponding process of abstraction earlier has the cognition of a more general universal. ⁵²

The example Peter is considering seems to go something like this: I perceive something approaching in the far distance and cannot exactly tell what it is, but it is some kind of moving thing or body. As it gets closer I see that it is an animal, but I am unable to tell what kind. Even closer, I see that it is walking and that it is a human being, and close up I recognize Socrates. According to Peter, I respectively then acquire the concepts to which the written terms 'this thing' or 'this body', 'this animal', 'this human' and 'Socrates' are subordinate. Somehow we first acquire these complex demonstratives

_

⁴⁹ There seems to have been an almost univocal agreement in later writers, that is, writers from the fifteenth and sixteenth centuries, that both the exponible sentences and the conjunction of their exponents are part of the proper mental language. See Ashworth (1973).

⁵⁰ See Lagerlund (forthcoming).

⁵¹ "Nam, si Socrates a longe veniat, prius cognosco ipsum esse animal quam hominem et ultimo cognosco ipsum esse Socratem, sed prius cognosco ipsum esse hoc animal singulariter quam animal universaliter." (Pluta (1987), p. 75.)

⁵² "Unde quodlibet universale habet suum singulare vagum, ut 'corpus' 'hoc corpus', 'animal' 'hoc animal', homo' 'hic homo'; modo sensus cognoscens singulariter singulari vago et non singulari determinato prius habet singulare vagum magis universalis quam minus universalis, scilicet huius corporis quam huius animalis et huius animalis quam huius hominis; ideo intellectus abstrahendo correspondenter prius cognoscit magis universaliter." (Ibid.)

and then from them abstract universals. Abstraction is then really only a matter of getting rid of the demonstrative 'this'. Although these complex singulars are primary in acquisition it seems that they are not primary in signification, since no matter how one sees it they have parts which must be considered to be semantically prior, namely, 'this' and, for example, 'animal', that is, their parts are a syncategorematic term and an absolute categorematic term.

It is not easy to see how this is supposed to work. It seems to rest on a tension between perceiving in the first instance either universally or particularly. For Peter, as well as for Ockham and Buridan, there are no universals in nature — universals exist only in language — and, hence, we cannot perceive them, they must be somehow abstracted from particulars. On the other hand, it is intuitive to think that we perceive animals and humans, but always as particular individuals. It is this that is reflected in Peter's example, and it makes the picture of the mental language rather complicated.

Mental supposition and the truth of mental sentences

Similar to any conventional language, that is, what we would call natural language, like English, Swedish or Latin, the mental language has nouns, verbs, adverbs, prepositions, and so on, and, furthermore, its sentences have subjects, predicates and copulas. Peter writes:

Note further that, just as the mental terms properly so called [that are] categorematic in signification naturally signify something or some things, so too mental terms [that are] syncategorematic in signification naturally signify no thing or things. Again, some mental terms properly so called naturally signify nominally, and they are natural names. Others naturally signify verbally, and they are natural verbs. And so on for other parts of speech. Therefore, mental terms are not said to be properly of this or that part of speech because of some superadded 'modes of signifying'. ⁵³ Rather they are in themselves, of their own nature, of this or that part of speech. Again, one kind of term properly so called naturally signifies adjectivally, and so it is a natural adjective. Another kind naturally signifies substantively, and so it is a natural substantive. Again, one kind of mental term is naturally in the nominative case, another kind is naturally in the genitive, and so on for the other cases. Again, one kind of concept or act of understanding is naturally in the first person, another kind is in the second person, and yet another kind is in the third person. And so on for the other accidental features of the parts of speech, although not for all [such features]. On this see Ockham.

⁵³ Peter was very critical towards the so called modist theory about modes of signifying. See Peter of Ailly, *Destructiones modorum significandi*.

⁵⁴ "Notandum est ulterius quod sicut termini mentales proprie dicti cathegoreumatici significatione naturaliter significant aliquid vel aliqua, sic etiam termini mentales sincathegoreumatici non significant omne naturaliter significant aliquid vel aliqua. Item terminorum mentalium proprie dictorum aliqui naturaliter significant nominaliter et tales naturaliter sunt nomina; aliqui naturaliter significant verbaliter et tales sunt naturaliter verba; et sic de aliis partibus orationis, non ergo termini mentales proprie dicti sunt huius vel illius partis orationis per aliquos modus significandi superadditos sed seipsis ex natura sua sunt istius vel illius partis orationis. Item aliquis terminus mentalis proprie dictus naturaliter significat adiective et sic naturaliter est adiectivus et aliquis naturaliter significat substantive et sic naturaliter est substantivus. Item aliquis terminus mentalis naturaliter est

On this view concepts will be acquired as nouns, verbs etc., but all features of conventional languages will not be part of the mental language. What will be part of the proper mental language? According to Ockham, or according to the standard interpretation of him, the only features or terms that are in mental language are the features or terms that genuinely affect the truth of sentences. Something that would be excluded is, for example, grammatical gender, declinations and conjugations. Peter does not bother to give us the criterion for determining what is in mental language, he only refers to Ockham. But as we have seen Peter seems to allow more than Ockham into the mental language, and it, therefore, remains a bit unclear exactly what Peter thinks are the basic parts of the mental language.

When a categorematic term, either absolute or connotative, is placed as subject or predicate of a categorical sentence it gets a new semantic property called 'supposition'. A term's supposition is determined by its referential function in the context of a sentence. The theory of supposition grew up and was developed into a theory in the thirteenth century and logicians in the fourteenth in a sense inherited a fixed theory – although the nominalists interpreted it somewhat differently.

According to the standard division there are three kinds of supposition, namely, personal, material and simple. Personal supposition is the most basic and it subdivides in several ways. It corresponds to the normal use of a term in a sentence, for example, in the sentence 'Some donkey is running' the term 'donkey' has personal supposition since it stands for donkeys, that is, it supposits for whatever it signifies. In the sentence 'donkey is a two-syllabic word', the term 'donkey' has material supposition, because it stands for itself as a word. Simple supposition will, for a nominalist, be when a term stands for a natural mental sign, for example, 'donkey' in 'donkey is a concept'. In both material and simple supposition terms do not stand for the thing they signify.

The question is: Can proper mental terms have personal, material or simple supposition? Ockham answers: 'yes',⁵⁵ but Peter answers: 'no'. According to him mental terms only have personal supposition. He writes:

[S]ince a mental term properly so called in a mental sentence is always taken naturally for the thing that it ultimately signifies naturally [and] properly, therefore it always supposits for its ultimate significate – it always supposits personally and never materially. 56

nominativi casus alter genitivi et sic de aliis. Item aliquis actus intelligendi sive conceptus naturaliter est prime persone, aliter secunde et aliter tertie et sic de aliis accidentibus partium orationis." (Peter of Ailly, *Conceptus et insolubilia*, fol. Aiv^b-Av^a.) See Spade (1980), p. 23. The last part of the quotation from Spade's translation is not in the edition of Peter's text I have had access to.

⁵⁵ See Panaccio (1999) on Ockham's view on mental supposition.

⁵⁶ "Infertur etiam quod quia terminus mentalis proprie dictus in propositione mentali semper naturaliter accipitur pro re quam ultimate sgnificat naturaliter proprie ideo semper supponit pro suo significato ultimato quia semper personaliter supponit et numquam materialiter." (Peter of Ailly, *Conceptus et insolubilia*, fol. Aviii^a.) See Spade (1980), p. 29.

The reason Peter gives for claiming that mental terms only have personal supposition is that concepts in a mental sentence will always stand for whatever they signify. Concepts naturally signify things in the world and can thus only stand for those things. It simply does not make sense according to him to take a concept materially, particularly, since on his own view mental language does not have a syntax.

If we keep in mind that mental sentences have no structure, they are simple, there is an obvious problem with mental supposition in general, since supposition is supposed to express a term's referential function *in* a sentence, but if there is no structure how can a term be *in* a sentence at all? Peter will have to tell a story using his notion of 'equivalence', which we have mentioned in a couple of places, and argue that since a mental sentence is equivalent to several concepts put together, we can somehow still talk about the supposition of terms *in* a sentence.⁵⁷

The notion of supposition brings us naturally to the notion of truth, and I would like to conclude this article with a note on the signification and truth-conditions of mental sentences. By dealing with the truth-conditions for mental sentences we have sufficiently dealt with the truth-conditions for all sentences, since the truth or falsity of a spoken or written sentence depends on the truth or falsity of the mental sentence to which it is subordinate. Having said this, Peter straightforwardly claims, contrary to Ockham, for example, that supposition has nothing to do with the truth or falsity of sentences; ⁵⁹ instead, it has to do with its signification. Peter writes:

Any affirmative mental sentence properly so called that is simply categorical and assertoric, if it is true, is true because howsoever [the case] is signified to be, [or] to have been, or is going to be, by [that sentence] according to its total signification, so it is, [or] was, or will be [the case]. And any such [sentence], if it is false, is false on account of the opposite cause, namely, because somehow, according to [the sentence's] total signification, [the case] is signified to be, [or] to have been, or to be going to be, in a way that is not, [and] was not, and will not be [the case]. On the other hand, any negative [mental] sentence [properly so called that is simply categorical and assertoric], if it is true, is true because howsoever [the case] is signified not to have been, [and] not to be, and not to be going to be, by [that sentence] according to its total signification, so it is not [and] was not, and will not be [the case]. And any such [sentence], if it is false, is false on account of the opposite cause, namely, because somehow, according to [the sentence's] total signification, [the case] is signified by it not to be, [and] not to have been, [and] not to be going to be, as is, [or] was, or will be [the case].

⁵⁷ The same problem is noted in Spade (1980), p. 112, note 217, p. 146, note 761, and, pp. 152-153, note 820.

⁵⁸ "Tertia conclusio quaelibet propositio significans ad placitum, ideo precise est vera aut falsa, quia sibi correspondet mentalis proprie dicta vera et falsa." (Peter of Ailly, *Conceptus et insolubilia*, fol. Bvii^a.) See also Spade (1980), p. 46.

⁵⁹ "Secunda conclusio propositio non est vera vel falsa, ideo quia eius subiectum et predicatum supponant pro eodem, vel quia non supponunt pro eodem sive sit affirmativa sive sit negative." (Peter of Ailly, *Conceptus et insolubilia*, fol. Bvi^b.) See also Spade (1980), p. 45.

⁶⁰ "Quinta conclusio erit ista quod quaelibet propositio mentalis proprie dicta simpliciter cathegorica et de inesse affirmative si sit vera, ideo est vera quia qualitercumque per eam secundum significationem eius

On the view which Peter opposes and which I have claimed to be Ockham's, where mental sentences are made up of parts, it is natural to think that the signification of a sentence is determined by the principle that a sentence signifies whatever its categorematic parts signify. However, on such a view signification alone is not enough to express the truth-conditions of a sentence, since 'the mug is on the table' and 'the mug is not on the table' are equivalent in signification. This is why Ockham, for example, uses supposition theory to express the truth-conditions. As is clear from the quote above, this is not Peter's view.

Peter's theory of the signification of mental sentences has been called 'the adverbial-theory' by Paul V. Spade. According to this theory, the sentence "the mug is on the table" signifies *that* the mug is on the table', and the 'that'-clause is supposed to be taken adverbially and not nominally. There will, therefore, be no object or entity which the 'that'-clause stands for or of which it is true 'that the mug is on the table' – it is rather a modifier of some kind, that is, a modifier of 'signifies'. An interesting question, which I will not deliberate upon, is that since they are modifiers they seem to have to be treated as a whole without parts or as semantically simple. There is, therefore, an interesting asymmetry between them and the mental sentences that are complex semantically but simple metaphysically.

As seen from the quote above, 'the mug is on the table' signifies that the mug is on the table, and the sentence is true, if whatever it signifies is the case, namely:

If a sentence S signifies that s, then S is true if, and only if, s.

It is a rather straightforward criterion of truth, and since the theory of signification is metaphysically neutral, so is this criterion of truth. ⁶¹

Conclusions

By the time Peter writes on psychology and semantics there is an established – primarily nominalist – tradition in which a language of thought hypothesis is explicitly used to account for human thinking. Peter's philosophical works should be seen in light of this tradition and as contributions to an ongoing debate about the status and structure of the language of thought. As a part of this tradition he shows philosophical sensitivity to serious and important problems for any theory of thinking in terms of language. He is also definitely original in his attempts to solve these problems, although his solutions in

totalem significatur esse, fuisse vel fore taliter est, fuit vel erit, et quaelibet talis si sit falsa propter causam oppositam est falsa scilicet quia aliqualiter secundum significationem eius totalem significatur esse, fuisse aut fore qualiter non est, non fuit nec erit. Sed quaelibet talis negativa, si est vera, ideo est vera, quia qualitercumqe per eam secundum significationem eius totalem significatur non fuisse, non esse, nec fore taliter non est, non fuit, nec erit, et qualibet talis, si est falsa propter causam oppositam, scilicet quia aliqualiter per eam secundum significationem eius totalem significatur non esse, non fuisse, non fore, qualiter est, fuit vel erit." (Peter of Ailly, *Conceptus et insolubilia*, fol. Bviii^a.) See Spade (1980), pp. 48-49.

⁶¹ See Spade (1996), pp. 178-185.

the end may give rise to even more serious problems than the ones they purport to solve.

The most salient characteristic of Peter's approach is his view of concepts as metaphysically simple mental entities which are indistinguishable from each other and which can only be individuated by their content. Even mental sentences are viewed as simple entities of the mind. A consequence of this view is that mental language seems not to have a syntax and it thus becomes uncertain in what sense it is a language. Although this seems to be an unnecessary radical conclusion of his attempt to solve some specific problems with the compositionality of mental sentences, it is historically interesting to note, however, that Peter's concepts look very much like Descartes ideas.

Since Peter stresses the content side of concepts, he makes the semantics of the language of thought absolutely crucial. The *Conceptus et insolubilia* is, therefore, really a work in semantics. On the surface, Peter's views look rather standard, but a closer glance quickly reveals a number of differences from both Ockham and Buridan. Peter does not view mental language as a formal language containing only the most basic features, since there are for instance simple connotative terms in mental. Furthermore, he complicates its structure radically by following Buridan in allowing for so called 'vague' concepts, and seems, therefore, to make a distinction between the priority of acquisition and the priority of signification of concepts. On top of this, he stresses that concepts only have personal supposition, that supposition theory does not have anything to do with the truth of mental sentences, and that a mental sentence's truth or falsity is determined by its signification. Taken together, these points show Peter as a genuinely *original* thinker working *within a tradition*, trying to come to terms with some serious problems the traditional theory of human thinking has come up against. ⁶²

_

⁶² This paper was written during my visit to the philosophy department at UCLA. I would like to thank the Fulbright Commission and the Swedish Institute for making that visit financially possible. It was originally read to the occasional history seminar at the philosophy department and I would like to thank the participants for their comments, particularly Calvin G. Normore, John Carriero and Joseph Almog. The paper has also been read by Gyula Klima and his thought provoking comments helped me improve the paper for this publication.

Bibliography

- Adams, M.M. (1987) William Ockham, 2 vol., Notre Dame: University of Notre Dame Press.
- Ashworth, J.E. (1973) 'The Doctrine of Exponibilia in the Fifteenth and Sixteenth Centuries', *Vivarium* 11, 137-167.
- Bakker, P. (1996) 'Syncatégorèmes, concepts, équivocité: Deux questions anonymes, conservées dans le ms. Paris, B.N., lat. 16.401, liées à la semantique de Pierre d'Ailly (c. 1350-1420)', *Vivarium* 34, 1: 76-131.
- Biard, J. (1989) Logique et théorie du signe au XIV^e siècle, Paris: J. Vrin.
- John Buridan, *Quaestiones in Metaphysicen Aristotelis*, Paris 1518. Reprinted by Minerva G.M.B.H. as Johannes Buridanus: *Kommentar zür Aristotelischen Metaphysik*, Frankfurt-am-Main 1964.
- John Buridan, *Summulae de Dialectica*, an annoted translation with a philosophical introduction by G. Klima, New Haven: Yale University Press 2001.
- Chappuis, M., Kaczmarke, L., Pluta, O. (1986) 'Die philosophischen Schriften des Peter von Ailly: Authentizität und Chronologie', *Freiburger Zeitschriften für Philosophie und Theologie* 33: 593-615.
- René Descartes, 'Meditations on First Philosophy', in *The Philosophical Writings of Descartes vol. II*, (transl.) J. Cottingham, R. Stoothoff and D. Murdoch (CSM), Cambridge: Cambridge University Press 1984.
- Geach, P. (1957) *Mental Acts: Their Content and Their Objects*, London: Routledge and Kegan Paul.
- Lagerlund, H. (forthcoming) 'Making Aristotle Modern John Buridan on Mental Representation and Mental Language', in P. Bakker & H. Thijssen (eds.), *Mind, Perception, and Cognition: The commentary Tradition on Aristotle's* De anima, Aldershot Barlington: Ashgate.
- Normore, C.G. (1986) 'Meaning and Objective Being: Descartes and His Sources', in A. Oksenberg Rorty (ed.) *Essays on Descartes Meditations*, Berkeley: California University Press.
- Normore, C.G. (1990) 'Ockham on Mental Language', in J-C. Smith (ed.) *Historical Foundations of Cognitive Science*, Dordrecht: Kluwer.
- Okley, F. (1964) *The Political Thought of Pierre d'Ailly: The Voluntaris Tradition*, New Haven: Yale University Press.
- Panaccio, C. (1990) 'Connotative Terms in Ockham's Mental Language', *Cahiers d'épistémologie*, No. 9016, Montréal: Université du Québec à Montréal.

- Panaccio, C. (1999) 'Semantics and Mental Language', in P.V. Spade (ed.) *The Cambridge Companion to Ockham*, Cambridge: Cambridge University Press.
- Peter of Ailly, Tractatus exponibilium, Paris 1495.
- Peter of Ailly, Conceptus et insolubilia, Paris 1500.
- Peter of Ailly, Questiones magistri Petri de Aylliaco cardinalis cameracensis super libros sententiarum, Paris 1500.
- Peter of Ailly, *Destructiones modorum significandi*, ed. L. Kaczmarek, Amsterdam: B.R. Grüner 1994.
- Pluta, O. (1987) *Die philosophische Psyschologie des Peter von Ailly*, Amsterdam: B.R. Grüner.
- Spade, P.V. (1975) 'Ockham's Distinctions between Absolute and Connotative Terms', *Vivarium* 13, 55-76.
- Spade, P.V. (1980) Peter of Ailly: Concepts and Insolubles, Dordrecht: Reidel.
- Spade, P.V. (1996) *Thoughts, Words and Things: An Introduction to Late Medieval Logic and Semantic Theory*, published on Internet. See http://pvspade.com/Logic/.
- Trentman, J. (1970) 'Ockham on Mental', Mind 79: 586-590.
- William Ockham, *Summa Logicae*, ed. Ph. Boehner, G. Gál and S. Brown (OP 1), St. Bonaventure: Franciscan Institute of St. Bonaventure University 1974.
- William Ockham, *Scriptum in librum primum Sententiarum. Ordinatio, prologus et distinctio prima*, ed. G. Gál and S. Brown (OT 1), St. Bonaventure: Franciscan Institute of St. Bonaventure University 1967.
- Zheng, Y. (1998) 'Metaphysical Simplicity and Semantical Complexity of Connotative Terms in Ockham's Mental Language', *Modern Schoolman* 75: 235-264.

Catarina Dutilh Novaes:

Ockham on supposition and equivocation in mental language

Introduction

It is widely acknowledged that later medieval philosophy, and in particular later medieval logic, is a remarkable combination of the Aristotelian philosophical framework with the conceptual world of Christianity. The way medieval philosophers were able to reinterpret Aristotelianism so as to reconcile it with the Christian faith is one of the most interesting features of medieval intellectual life, while this process also yielded a refinement of Christian doctrine that remained influential for many centuries (in particular under the influence of Thomism).

Here, I propose to analyze one specific development that is a typical product of the later medieval combination of Aristotelianism with Christianity, namely theories of supposition. I say that theories of supposition are a hybrid between Aristotelianism and Christianity for the following reason: it seems that the historical starting point of theories of supposition were the so-called theories of fallacies, whose main source was Aristotle's *De Sophisticis Elenchis* (cf. De Rijk 1967), but they were developed in view of the conceptual framework of commentary and interpretation of authoritative and sacred texts, which constituted the core of intellectual activity in the Christian world.¹

In this paper, I will analyze Ockham's theory of supposition, focusing on the notions of mental language and equivocation. My main contention is that Ockham's supposition theory as it is formulated implies that there is equivocation in mental language, and that this fact has problematic consequences for his supposition theory itself and for his notion of mental language. But besides outlining the internal tensions in Ockham's system, this discussion will bring some positive results as well; it is to be hoped that it will shed light on the nature of written and spoken language, on the concept of mental language and its role for logical investigations, and on the general purpose of theories of supposition.

For the present discussion, I am indebted to Paul Vincent Spade's work on equivocation in mental language, in particular to his 1980 article 'Synonymy and Equivocation in Ockham's Mental Language'. I borrow some of his arguments, but I add some of my own, and the conclusions that I draw from the discussion take a different path. I am also

¹ Indeed, the rarified considerations concerning the Holy Trinity in medieval theology are simply not understandable without the logical distinctions between the supposita and significata, and different modes of supposition and signification of Trinitarian terms.

inspired by Calvin Normore's 1997 article 'Material Supposition and the Mental Language of Ockham's *Summa Logicae*', where many of the problems that I discuss here were, to my knowledge, raised for the first time.

Fundamental concepts

Equivocation

Equivocation is one of the six kinds of language-dependent fallacies defined by Aristotle in *Sophistical Refutations* (henceforth, SE).² First, a few words must be said about sophistical refutations in general: they are arguments (refutations) that seem sound but are not, in virtue of a fallacy. The original aim of this text is to enable the participant of an oral disputation to identify fallacious arguments put forward by the opponent. However, from a broader perspective, some of the main topics of SE are the irregularities and ambiguities of spoken and written language, and how to cope with them.

Generally defined, equivocation is a property of terms that have more than one meaning. A typical example would be the English word 'bank', which means a financial institution and the piece of land alongside a river. Equivocation refers to this kind of phenomenon occurring with respect to single terms, whereas amphiboly refers to the same phenomenon occurring with respect to complex expressions, including propositions.³

Of both equivocation and amphiboly, there are three kinds: (1) expressions that have two independent meanings, such as 'bank'; (2) expressions that, by analogy, mean more than one thing, such as the cases in which the word 'man', for example, derivatively refers to the statue of a man; (3) expressions that, taken in isolation, are not ambiguous, but which can have more than one meaning when taken in combination with other words. In what follows, we shall be dealing primarily with the third mode of equivocation.

Ockham follows Aristotle and the tradition in their definition of equivocation, but he gives it a more precise formulation, in terms of subordination to mental terms.

An equivocal utterance, signifying several [things], is a sign that is not subordinated to one concept, but it is a sign subordinated to several concepts or intentions of the soul.⁵

³ Properly speaking, for Aristotle only syntactical ambiguity provokes amphiboly, but a quick look at Ockham's discussion of amphiboly in *Summa* III-4, cap. 5-7 seems to indicate that Ockham's notion of amphiboly is broader than Aristotle's.

² These are: equivocation, amphiboly, composition, division, accent, figure of speech. 165^b25.

⁴ Spade 1980, 15; SE 166^a15-25. "Secundo sciendum est quod sicut aequivocationis sunt tres modi, ita amphiboliae sunt tres modi." *Summa* III-4, cap. 5 (8-9).

⁵ "Est autem vox illa aequivoca quae significans plura non est signum subordinatum uni conceptui, sed est signum unum pluribus conceptibus seu intentionibus animae subordinatum." *Summa* I, cap. 13 (13-15)

An equivocal term is thus for Ockham a term that is subordinated to more than one mental term. It is worth noting that synonymy is explained by Ockham in similar terms: two terms are synonymous when they are subordinated to the same mental term.

As it stands, the definition of equivocation applies only to the first and second modes of equivocation, since a term that is equivocal only in virtue of the context is not subordinated to different mental terms, according to Ockham. Thus, the definition of the third mode of equivocation must be formulated in terms of the supposition of a term:⁶ a term in a proposition is equivocal according to the third mode of equivocation if it can 'supposit there for diverse things in such a way that it supposits for the one and not the other' at the same time (see Spade 1980, 14).⁷

So it is clear already that mental language plays an essential role in Ockham's semantics and that it ought to be an ideal and well-behaved language in order to serve as a fixed point and to account for all semantic phenomena and irregularities of spoken and written language. Moreover, mental language is for Ockham a system of natural signs, the result of cognitive processes caused by external things; spoken and written languages are by contrast conventional languages, whose terms have meaning only insofar as they are subordinated to mental terms. From these considerations alone one can already infer that the existence of equivocation in mental language is problematic, to say the least.

Supposition

Supposition is a crucial concept in later medieval semantics. It is often compared to the modern concept of reference, but the resulting assimilation of the former to the latter can be more harmful than helpful. In any case, broadly phrased, supposition can be said to be the relation between a word in a proposition and the thing(s) it stands for, for which it goes proxy. Ockham does not provide a very clear definition of the concept of supposition. Here is what he says:

Supposition is said to be a sort of positing for another, such as when a term in a proposition stands for something [...] it supposits for that [thing]. At least this is true when the suppositing term is taken significatively.⁸

His theory of supposition, however, is expounded at length. Basically, it consists of a set of rules that defines what thing(s) a term can supposit (stand) for in each propositional context and, hence, how the proposition should be interpreted. The three main kinds of supposition according to Ockham are: personal, simple and material

⁶ In fact, there seems to be circularity with respect to the third mode of equivocation and the different kinds of supposition, since they are both defined in terms of one another.

⁷ "Sciendum tamen quod 'stare pro diversis' non facit aequivocatinem, sed 'stare pro diversis, ita quod pro uno et non pro alio' facit aequivocationem." *Summa* III-4, 2 (30-32)

⁸ "Dicitur autem suppositio quasi pro alio positio, ita quod quando terminus in propositione stat pro aliquo, ita quod utimur illo termino pro alliquo de quo, sive de pronomine demonstrante ipsum, ille terminus vel rectus illius termini si sit obliquus verificatur, supponit pro illo. Et hoc saltem verum est quando terminus supponens significative accipitur." *Summa* I, cap. 63 (11-15).

supposition. Personal supposition is the 'default' supposition, the supposition of a term for (some of the) things it signifies. In some cases, however, a term may supposit for something that it normally does not signify. The most intuitive of such cases, at least from a modern point of view, is the case of words standing for themselves, a phenomenon that is now usually indicated by the use of quotation marks. For example, if I say that Houston has seven letters, I obviously do not mean that the city of Houston has seven letters, but rather that the word 'Houston' does. When a term supposits for itself or for another term that it otherwise does not signify, then this term has material supposition, according to Ockham.

For Ockham, the theory of supposition is particularly useful to interpret some authoritative statements which otherwise would not fit into his parsimonious, nominalistic ontology. Thus, in a proposition such as 'Man is a species', if 'man' supposits for what it normally signifies, that is, individual men, then the proposition is plainly false, since no individual man is a species. But terms can also supposit for the mental concept to which they are subordinated, in which case they have simple supposition. Thus, according to Ockham, in 'Man is a species', if 'man' has simple supposition – that is, it supposits for the mental concept <man> -, then the proposition is true, since the mental concept <man> is indeed a species.

What is crucial for Ockham's theory of supposition is that the rules of supposition do not always guarantee that there is only one kind of supposition for each term in each proposition. The rules of supposition state that all terms, in all propositions, can have personal supposition, whereas in some propositions a term can also have either simple or material supposition (or both). That is, in some propositions (case 1), their terms can only have personal supposition; in other propositions (case 2), a term can have personal or material supposition, yet in other propositions (case 3), a term can have personal or simple supposition, and in some rare cases (case 4) it can have any of the three kinds. Cases 2, 3, 4 are cases of ambiguous propositions, that is, propositions that can be interpreted in more than one manner. It is also worth noting that the different interpretations of a proposition may have different truth-values, but nonetheless the false reading of a proposition is equally legitimate. What defines the legitimacy of a certain reading for a certain proposition is only its compliance with the rules of supposition.

Besides the cases of ambiguities generated by the third mode of equivocation, Ockham uses the concept of supposition also to account for the ambiguity that he considers inherent in all temporal⁹ and some modal propositions.¹⁰ However, these cases shall not be treated here.

Propositions that may receive more than one reading must be distinguished, according to Ockham - propositio est distinguenda. This expression, propositio est distinguenda,

¹⁰ The ambiguity of modal propositions *cum dicto* also concerns the fallacies of division and composition. *Summa* III-4, 5 (67-93).

⁹ See Spade 1980, 16. *Summa* III-4, 4 (87-90) for temporal propositions. For Aristotle, this is a case of homonymy.

seems to me to embody the essence of Ockham's supposition theory (but this opinion is not uncontroversial).

I have mentioned at the beginning that the historical development of supposition theories seems to have gone hand in hand with developments in the theory of fallacies. In fact, one passage makes the connection between these theories sufficiently clear for the present purposes:

But in the proposition 'man is a species', since 'species' signifies a concept of the soul, [the term 'man'] can also have simple supposition. And this proposition is to be distinguished according to the third mode of equivocation, since the subject can have simple or personal supposition.¹¹

In this passage, the relation between the theory of fallacies, in particular the concept of equivocation, the need to distinguish propositions and supposition theory is patent. As the ground for the distinction of the two readings of 'homo est species', Ockham appeals to the third mode of equivocation, that is, the contextual mode of equivocation. Hence, it is clear that, whenever there is room for different kinds of supposition, (the third mode of) equivocation occurs, and the proposition in question must be distinguished.

Problem: supposition in mental language

So far, I have tacitly assumed that only spoken and written language are prone to different kinds of supposition. But Ockham explicitly rejects this assumption. He conceives the mental realm of concepts as structurally isomorphic to conventional language. How similar mental language is to spoken and written languages, in particular to Latin, has been the topic of scholarly debate, but I shall not get into the details of this discussion. I will focus on one specific property of mental language, that of being susceptible to different kinds of supposition.

Ockham explicitly says that all the rules and principles of supposition theory stated by him hold equally for mental language:

It must be also noted that such a diversity of [kinds of] supposition can pertain to spoken and written terms, but also to mental terms, since a concept can supposit for that which it signifies, for itself, for a spoken term and for a written term. ¹²

At first sight, this claim does not seem particularly problematic, if mental language really is to be (to a certain degree) isomorphic to spoken and written language. But attributing different kinds of supposition to mental terms provokes a series of tensions with other elements of Ockham's system.

_

¹¹ "Sed in ista propositione 'homo est species', quia 'species' significat intentionem animae ideo potest habere suppositionem simplicem. Et est propositio distinguenda penes tertium modum aequivocationis, eo quod subjectum potest habere suppositionem simplicem vel personalem." *Summa* I, cap. 65 (13-17)

¹² "Sicut autem talis diversitas suppositionis potest competere termino vocali et scripto, ita etiam potest competere termino mentali, quia intentio potest supponere pro illo quod significat et pro se ipsa et pro voce et pro scripto." *Summa* I, cap. 64 (56-59).

Textual problem

The first problem we encounter as a result of the attribution of different kinds of supposition to terms in mental propositions is what we could call a 'textual problem'. Ockham clearly says that only spoken or written terms can be said to be equivocal, not mental terms.

Firstly, it must be known that only an utterance or a sign instituted by convention is equivocal or univocal, so similarly an intention of the soul or a concept is not equivocal or univocal, properly speaking.¹³

But, in this passage, this restriction applies only to the first and second modes of equivocation. Since, as we have just seen, the possibility of different kinds of supposition is related to the third mode of equivocation, this claim in itself does not contradict the existence of different kinds of supposition in mental language. Elsewhere in the *Summa*, Ockham explicitly says that the third mode of equivocation can occur in mental language (*Summa* III-4, 4 (113-118)).

Properly speaking, only simple terms are equivocal. In the case of complex expressions such as propositions which are ambiguous, the correct term is amphiboly, and, whereas the first and second modes of equivocation in mental language are explicitly ruled out by Ockham, the same does not hold for amphiboly. Now, in the case of a mental proposition such as 'man is a noun', its terms are individually not ambiguous, but the whole expression is, since it either asserts that a man is a noun (if the mental term 'man' has personal supposition), or it asserts that the term 'man' is a noun (if the same mental term has material supposition). Hence, properly speaking, such mental propositions present cases of amphiboly, due to one of their terms being equivocal according to the third mode.

But if we assume that the difference between equivocation and amphiboly lies only in whether the expression in question is simple or complex ¹⁴, then the definition of equivocal terms should hold, *mutatis mutandis*, of amphibolous expressions. Mental propositions that must be distinguished are thus amphibolous expressions, but not according to the third mode: their ambiguity is not context dependent. Amphibolous mental propositions are therefore amphibolous according to either the first or, more probably, the second mode of amphiboly. ¹⁵ But, if all the principles concerning equivocation also hold of amphiboly, then the first and second modes of amphiboly

Summa I, cap. 13 (10-12).

14 "Post fallaciam aequivocationis sequitur fallacia amphiboliae. Circa quam primo sciendum est quod sicut fallacia aequivocationis accidit ex hoc quod aliqua dictio potest diversimode accipi, ita fallacia amphiboliae accidit ex hoc aliqua oratio potest diversimode accipi, absque hoc quod aliqua dictio primo diversimode accipiatur; ita quod sicut dictio est multiplex, ita tota oratio est multiplex." Summa III-4, 5 (2-7).

¹³ "Est autem primo sciendum quod sola vox vel aliud signum ad placitum institutum est aequivocum vel univocum, et ideo intentio animae vel conceptus non est aequivocus nec univocus proprie loquendo."

¹⁵ In effect, of virtually all the examples of amphiboly of the first and second kinds, Ockham says of these propositions that they are to be distinguished. *Summa* III-4, cap. 5-6.

should not occur in mental language either. Ockham does not state it explicitly, but if the difference between equivocation and amphiboly is only the number of words involved, then this should be a natural consequence of the symmetry between these two concepts.

Hence, the possibility of different kinds of supposition for terms in mental propositions seems to introduce amphiboly of the first or (more likely) the second mode in mental language. However, having explicitly excluded equivocation of the first and second mode from mental language, there is no reason why Ockham would accept amphiboly of the first or second mode in mental language. Indeed, since the definition of equivocation in the first two modes cannot meaningfully apply to mental terms, the analogous definition of amphiboly in the first two modes could not apply to mental propositions either. Therefore, since Ockham could not admit amphiboly in the first two modes in mental language, but he is committed to it by his admittance of equivocation in the third mode concerning mental terms, his theory is inconsistent. ¹⁷

Epistemic problem

There are two epistemic problems concerning the occurrence of material and simple supposition in mental language. One relates to the non-significative, indirect nature of these kinds of supposition, and the other to the status of ambiguities in mental language. The latter, but not the former, affects temporal and modal propositions that must be distinguished as well.

The very idea of a term in the mental realm suppositing for something other than what it usually signifies seems rather counter-intuitive. With a bit of anachronism, one reasonably accurate way of viewing material and simple supposition is as 'semantic shifts' along the lines of Frege's notion of indirect (*ungerade*) contexts provoked by the presence of specific expressions. Thus, supposition other than personal supposition would be some sort of indirect supposition, insofar as it is non-significative.

But how can a term have indirect supposition in the mental realm? Unlike in spoken and written contexts, in the mental realm one is expected to have immediate access to the content of one's thoughts. In spoken and written (conventional) language, it is

¹⁶ It seems to me that propositions that must be distinguished are amphibolous according to the second mode. But in Ockham's discussion of amphiboly (*Summa* III-4, 5-7), none of the examples he gives concerns the different kinds of suppositions of a term.

¹⁷ Perhaps Ockham could defend himself by saying that propositions that must be distinguished are in fact a case of the third mode of amphiboly, which could be accepted within mental language. But that seems to threaten the very definitions of the three kinds of equivocation/amphiboly: the third kind is attributed to an expression that is ambiguous within a broader context. The broader context of a simple term (with respect to which it can be said to be equivocal) is a proposition, and the broader context of a proposition (with respect to which it can be said amphibolous) is a chain of propositions (discourse). So it is clear that a proposition that must be distinguished according to the third mode of *equivocation* can by no means be said to be *amphibolous* according to the third kind, since no broader context is involved here.

intersubjective communication that is at stake.¹⁸ It is for conventional language that interpretational devices such as those offered by a theory of supposition come in handy. In the mental realm, there is no actual interpretational process, but rather (presumably) immediate access to content. And immediate access seems to be given only by significative supposition, that is, personal supposition.

Moreover, the idea of ambiguous propositions in the mental realm is also problematic. When I think a thought, a mental proposition, I usually know what I am thinking. It seems absurd that a thought would be ambiguous, and therefore that it would have to be distinguished. Indeed, in the case of conventional language, the interpreter of an ambiguous proposition first defines its possible readings, and then opts for the reading that seems more plausible under the circumstances. He thereby assigns one of the possible suppositions to the equivocal term, namely the one that yields the intended reading. But in the mental realm, what would this 'assignment' of one given kind of supposition to a term correspond to? To what mental act?²⁰

Logical problem

According to the definition, a term is equivocal according to the first or second mode if it is subordinated to more than one mental term. Similarly, an expression – a proposition – is amphibolous according to the first or second mode, if it is subordinated²¹ to more than one mental expression/proposition.

Now, the propositions whose subject term can have more than one kind of supposition must be distinguished, since they give rise to more than one reading. I conjectured that they are amphibolous according to the second mode. How are we to understand the 'distinction' of a (spoken/written) proposition? Clearly, a proposition that is to be distinguished (because its subject term can have more than one kind of supposition) potentially asserts at least two statements: 1- that the *suppositum m* of the subject having supposition M is identical to the *suppositum* of the predicate, and 2- that the *suppositum n* of the subject having supposition N is identical to the *suppositum* of the predicate. It seems that the most reasonable way to view these two potential statements is simply to consider them as two distinct mental propositions. In sum, the distinction of

¹⁸ Mental language also serves for communication according to Ockham, namely communication between angels. But again, communication between angels ought to be a kind of perfect communication, with direct access to the content of one's thoughts (telepathy).

¹⁹ See Spade 1980, 21.

²⁰ See Spade 1980, 20; Normore 1997, 32; Panaccio 1991, 100.

²¹ It may be incorrect to use the term 'subordination' for the relation between complex terms and the (complex) mental terms to which they correspond, since subordination is related to the imposition of signification to a given sound, whereas the meaning of complex expressions is dependent on the meaning of its parts, and not of some imposition *ad placitum*. (I owe this remark to Elizabeth Karger). For those who object the use of the term 'subordination' in the case of complex expressions, the arguments presented here also hold if the relation between complex expressions and complex mental expressions is merely of correspondence.

a spoken or written proposition by means of the rules of supposition would amount to mapping the proposition to the two or more mental propositions to which it corresponds. Again applying the framework of simple terms to complex expressions, one can say that a proposition that must be distinguished is subordinated to more than one mental proposition, and therefore that it is amphibolous.

But what about *mental* propositions that must be distinguished? Their existence is tacitly assumed by Ockham when he claims that there are mental propositions whose term(s) can have more than one kind of supposition. How are they to be distinguished? Spoken and written propositions are distinguished by the establishment of a mapping between them and each mental proposition to which they are subordinated. The same cannot happen with respect to mental propositions, since there is no super-mental level to which super-mental propositions would belong, namely those super-mental propositions to which mental propositions would be subordinated.

Hence, in the same way that a simple mental term cannot be equivocal – insofar as there are no super-mental terms to which it would be subordinated, in fact to more than one of them -, a complex mental expression cannot be amphibolous, since there is no supramental realm to account for the ambiguity. If Ockham is to keep his definition of equivocation/amphiboly as the subordination to more than one mental term/expression (and there is good reason to believe that this is a fine definition), then he cannot accept equivocation and amphiboly in mental language. There is no higher level he could turn to in order to explain equivocation and amphiboly as the subordination to more than one entity of higher order. ²²

In sum, the claim that a term in a mental proposition can have more than one kind of supposition opens the door for amphiboly (of the first and second kinds) in mental language, and that is not acceptable, as I just argued. Therefore, if he were to be consistent throughout his system, Ockham would have had to exclude, from his concept of mental language, the possibility of mental propositions that must be distinguished, in particular by excluding the possibility of a term in a mental proposition potentially having more than one kind of supposition.

Possible solutions

It seems thus evident that Ockham's definition of equivocation/amphiboly in terms of subordination and his claim that there are different kinds of supposition in mental

²² This does not mean that there are no different orders within mental language. In fact, as much as conventional language, mental language is structured in terms of the order of the intentions (concepts): concepts of things are concepts of first intention, whereas concepts of concepts (for example, <concept>) are concepts of second intention, and so forth. But this does not offer any solution to the problem, since the relations connecting concepts are relations of *signification*, whereas Ockham's definition of equivocation is based on *subordination*. Subordination is a relation between linguisitic entities of different realms (written terms are subordinated to spoken terms, and these are subordinated to mental terms), so the application of the notion of subordination to mental terms would imply the existence of a super-mental level anyway, which is absurd.

language are inconsistent. Something must be changed to maintain the consistency of his system. Here are some possibilities.

There is no equivocation in mental language, but there is indirect supposition: 'Sherwood's solution'

One solution would be to exclude the possibility of a term in a mental proposition having more than one supposition. The possibility of different suppositions for a term in the same proposition (personal and material and/or simple) is characteristic of Ockham's supposition theory, but there are other theories of supposition in which the kind of supposition that a term has is *uniquely* determined by the context. William of Sherwood, for example, has as a motto:

The subject, on the other hand [in opposition to the predicate], sometimes supposits for its absolute form, sometimes not, and this according to the demands of the predicate according to this [rule]: The subjects are such as the predicates allow.²³

This implies that the supposition of the subject must follow the predicate. In other words, in the case of a proposition such as 'homo est species', only simple supposition would be allowed, given the fact that 'species' is a term of second intention. According to this rule, each proposition (presumably) allows for only one reading; hence, none of them has to be distinguished, which means that there are no amphibolous propositions.

One way of (seemingly) avoiding equivocation in mental language would be thus to adopt a rule which would guarantee that there is always only one kind of supposition for each term in mental propositions. In other words, Ockham's usual rules of supposition would be kept for conventional language, and a different set of rules would be defined for supposition in mental language. Sherwood's rule seems at first sight a good candidate for the job. The epistemic problem of indirect supposition previously mentioned would remain unsolved, but the problems related to equivocation in mental language would be solved by the adoption of Sherwood's rule.

Or perhaps not... Take the proposition 'noun has four letters'. Intuitively, it is clear that this proposition can be interpreted in two ways: (1) a noun has four letters; (2) the noun 'noun' has four letters. By the way, it happens to be so that both readings are true, but the same readings are allowed for the proposition 'noun has three letters', for example. According to Sherwood's rule, it would seem that only material supposition is possible, yielding only reading (2). But this seems wrong, since reading (1) is intuitively just as legitimate.

One of the strengths of Ockham's theory of supposition, compared to other theories of supposition, is exactly that it gives a good account of such cases, namely, in which the possible readings of a proposition have the same truth-value. Now, it would seem arbitrary to modify Ockham's theory for the worse in the case of mental language. In

.

²³ "Subiectum autem quandoque supponit formam absolute, quandoque autem non, et hoc secundum exigentiam praedicati secundum illud: Talia sunt subiecta, qualia permiserint praedicata." (Sherwood 1995, 144) (167-170)

the mental proposition 'noun has four letters', if 'noun' can have simple supposition, there is no reason why it cannot have personal supposition as well.

So this way of solving the problem of equivocation in mental language won't do.

Buridan's solution

It seems thus that the only approach to supposition theory with respect to mental language that eliminates the problem of equivocation in mental language is the view that there are no different kinds of supposition in mental language, that is to say, that there is only one kind. It is obvious that the single kind of supposition in mental language should be personal supposition, as it is the direct, significative kind of supposition. This position was explicitly held by John Buridan (among others).

We should know, therefore, that (as it seems to me) material supposition occurs only where significative utterances are concerned. For no mental term in a mental proposition supposits materially, but rather always personally, for we do not use mental terms by convention [ad placitum] as we do with utterances and written marks. This is because the same mental expression never has diverse significations, or acceptations; for the affections of the soul [passiones animae] are the same for all, just like the things of which they are the likenesses, as is said in bk. 1. of *On Interpretation*. Therefore, I say that the mental proposition corresponding to the proposition 'Man is a species', insofar as it is true, is not a proposition in which the specific concept of men is the subject, but rather it is a proposition in which the subject is the concept by which the specific concept of men is conceived; but it supposits not for itself, but rather for the specific concept of men. ²⁵ (Buridan 2001, 7.3.4, p. 522)

This passage by Buridan is extremely rich, and I will outline only some of its interesting aspects. The most important claim being made is that there is only personal supposition in mental language. He then gives an example, once more the proposition <man is a species>. What is worth noting concerning this example is the contention that the mental term <man> does not supposit for itself in this mental proposition, insofar as it is true. Insofar as it is true, the subject of this mental proposition is the concept of the concept <man>, and it supposits for the concept <man>. Remember that, for Ockham, as much as the conventional term 'man' supposits materially for itself in the conventional proposition 'man is a noun', it would seem reasonable that the mental term

.

²⁴ Aristotle, *On Interpretation*, 1, 16a6-8.

²⁵ "Sciendum est ergo, ut mihi videtur, quod suppositio materialis non est nisi ratione vocis significativae; nullus enim terminus in propositione mentali supponit materialiter, sed semper personaliter, quia non utimur terminis mentalibus ad placitum, sicut vocibus et scripturis, numquam enim eadem oratio mentalis diversas significationes vel acceptiones habet; eadem enim omnibus passiones animae sunt et etiam res quarum ipsae sunt similitudines, ut habetur primo Peri Hermenenias. Unde ego dico quod propositio mentalis correspondens huic propositioni prout est vera 'homo est species'non est propositio in qua subicitur conceptus specificus hominum, sed est propositio in qua subicitur conceptus quo concipitur conceptus specificus hominum, et ille iam supponit non pro se, sed pro conceptu specifico hominum; ex quo satis patet quod praedicti paralogismi secundum talem mutationem suppositionum pertinent ad fallacias in dictione." In Ebbesen 1976, 165.

<man> would supposit simply for itself in the mental proposition <man is a species>. Buridan shows here that this is incorrect.

What does a mental language with only personal supposition look like? It seems to me that, in such a mental language, disambiguating devices should exist, along the lines of our current use of quotation marks and of indexes. Hence, a mental proposition like <man is a species> is simply false, since it asserts that some individual man is a species. The corresponding true mental proposition would be <the concept of man is a species>. Similarly, <man is a noun> is simply false, but <the word man is a noun> is true. If the convention of quotation marks exists in mental language, this proposition could also be formulated as <'man' is a noun> (where <'man'> clearly supposits personally for the term 'man'). As Buridan says, 'the same mental expression never has diverse significations or ways of being taken'. In the mental realm, all terms are taken literally, and the possibility of semantic shifts does not exist, since they are naturally produced by the soul's perception of things. There is no equivocation or amphiboly, and hence no need for different kinds of supposition to account for such phenomena. Viewed from this angle, mental language is in fact very different from conventional language.

Insights to be gained from this discussion

The first natural conclusion of this discussion is that, if mental language is to fulfill the tasks that Ockham seems to assign to it, it must be very different from conventional language. Ockham is aware of the 'imperfect' character of conventional language insofar as it often does not (unambiguously) display the actual logical structure of a proposition. Thus, it seems that mental language should be the language in which those logical structures (especially with respect to truth conditions) are properly represented. If this is so, then a typical phenomenon of conventional language such as equivocation cannot exist in mental language.

But of course, this is not the picture of mental language that emerges from Ockham's writings, it is rather what mental language ought to be in order to fulfill the task that Ockham wants it to fulfill. I can only offer a conjecture as to why he let equivocation, synonymy and other 'imperfections' of conventional language slip into his conception of mental language: I think he wanted to insist on the linguistic character of mental language, and therefore projected many of the characteristics of conventional language into its mental counterpart.²⁷

_

²⁶ 'The result will be that all supposition in the mental language is personal supposition. This result is achieved by adding new terms to the mental language.' (Normore 1997, 32).

²⁷ C. Panaccio offers a more charitable hypothesis to explain this tension in Ockham's system:

^{&#}x27;Il apparaît au terme de notre première ronde de confrontation avec Fodor que la possibilité de ces deux lectures divergentes vient justement de *la propre confusion d'Occam entre logique et psychologie*. Pour reconstituer la grammaire de l'*oratio mentalis*, il part toujours du discours extérieur qui lui est familier et il extrapole en s'efforçant de respecter en même temps deux contraintes difficilement compatibles: une contrainte d'economie maximale qu'il explicite volontiers et une autre, inavouée, que j'appellerai la 'contrainte de familiarité', au nom de laquelle, en pratique sinon en théorie, il assimile le plus qu'il peut

Moreover, we have seen that mental language cannot accommodate, and in fact does not require, the distinction of different kinds of supposition.²⁸ In other words, for mental language, supposition theory (at least with respect to the division of modes of supposition) seems to be inappropriate and superfluous. Supposition theory would be a theory specifically tailored to deal with certain aspects of conventional, spoken and written language.

What is then the office of supposition theory? Given the ambiguous and convoluted character of conventional language, and the ideal, logical status of mental language, it seems to me that the obvious purpose of supposition theory is to allow for a semantic analysis of conventional language such that the real logical structures of propositions would emerge. That is, supposition theory defines a procedure for mapping propositions of conventional language into the mental propositions to which they are subordinated. In anachronistic terms, it would be like mapping the surface structure of propositions into their deep structure.

It may seem by now that I am turning medieval logicians into Russellians *avant la lettre*. I grant the possibility. But to my mind, this is the best way to make sense of supposition theory, and the discussion on equivocation in mental language seems to offer significant support to my interpretation of theories of supposition.

In any case, whether or not this sweeping claim about supposition theory is correct, the fact remains that Ockham was simply wrong in attributing different kinds of supposition to terms in mental propositions, and that in this particular aspect Buridan had a better theory.

References

- S. Ebbesen, 1976, 'The Summulae, Tractatus VII De fallaciis', in J. Pinborg (ed), *The Logic of John Buridan*. Copenhagen, Museum Tusculanum.
- John Buridan, 2001, *Summulae de Dialectica*. Transl. G. Klima. New Haven, Yale University Press.
- C. Normore, 1997, 'Material Supposition and the Mental Language of Ockham's *Summa Logicae*', *Topoi* **16** (27-33).
- C. Panaccio, 1991, Les Mots, les Concepts et les Choses. Paris, Vrin.

la structure du mentalais à celle du langage oral. Ces deux contraintes relèvant en principe de projets différents." (Panaccio 1991, 98-9) (My emphasis).

[&]quot;Bref, l'aporie de Spade dépend en dernière analyse, tout comme les précédentes, d'une insuffisante distinction chez Occam entre la psychologie et la logique, entre le langage mental et le langage idéal." (Panaccio 1991, 101)

The presence of simple and material supposition in Ockham's mental language threatens the very isomorphism between its syntactic and semantic structure which so suits it to undergird spoken languages in the first place." (Normore 1997, 33).

- L. M. de Rijk, 1962/1967, *Logica Modernorum*, vol. 1 & 2. Assen, Koninklijke Van Gorcum & Company.
- P.V. Spade, 1980, 'Synonymy and Equivocation in Ockham's Mental Language', Journal of the History of Philosophy 18 (9-22).
- William of Ockham, 1974, *Opera Philosophica* I: *Summa Logicae*. St. Bonaventure, Fransciscan Institute.
- William of Sherwood, 1995 Introductiones in Logicam, Felix Meiner, Hamburg.

© Proceedings of the Society for Medieval Logic and Metaphysics, Volume 3, 2003 Walter Redmond: The Three-Stranded Cord: Calling a Truce in the War over God and Human Freedom, pp. 51-81.

Walter Redmond:

The Three-Stranded Cord: Calling a Truce in the War over God and Human Freedom

This lifted me toward Thy light, that I knew as well I had a will as that I had a life

St. Augustine¹

Some of the most interesting philosophy the scholastics did they did in theology. I wish to give an example by describing how a Mexican Jesuit, Matías Blanco (c1660-1734) used a nicety of logic to tackle a theological puzzle typical of the Ibero-American "Golden Age": how can human freedom be reconciled with God's causality and knowledge? How can we act freely if God causes us to act? And how can we act freely if God knows how we shall act? Three solutions were in play. The *Jesuits* championed "middle knowledge", the "*Thomists*" (Dominicans mostly) "premotion," and the *Scotists* (Franciscans) "attendant decision." Blanco, in his *The Three-Stranded Cord*, offered his own solution, hoping it would be acceptable to all three parties.²

The "battle fronts," as Blanco says, between the Jesuits (Luis de Molina and Francisco Suárez) and Dominicans (Domingo Báñez) were drawn in the 16th century, but the war, went back a thousand years to St. Augustine. At the end of the 16th century Pope Clement VIII set up the "De auxiliis" commission in Rome to settle the often acrimonious debates. But his successor Paul V closed it after a decade of bickering,

_

¹ "Sublevabat enim me in lucem tuam, quod tam sciebam me habere voluntatem quam me vivere", *Confessiones*, 7:3.

² Tractatus de libertate creata sub divina scientia, voluntate et omnipotentia/ Funiculus triplex, Divi Thomae praemotione, Scotico comitante decreto, et scientia media contextus, Mexico City, Viuda de José Bernardo de Hogal, 1746. Title page, prefaces (39 pp.), errata (1 p.), table of contents (2 pp.), author's prologue (7 pp.), text (359 pp.), index (15 pp.). See appendix A for translation of prologue and first section. "B" followed by a Roman numeral refer to paragraphs in the prologue (pp. 1-7) and, followed by an Arabic numeral, to paragraphs in the first section (pp. 8-25). A contemporary Mexican Jesuit, Antonio Peralta (1668-1736) contributed to the controversy with Dissertationes scholasticae de divina scientia media (Mexico City, 1725 and Antwerp, 1734) and Dissertationes scholasticae de divinis decretis (Mexico City, 1727 and Antwerp, 1734).

decreeing only that the Dominicans must not call the Jesuits "Pelagians" and the Jesuits must not call the Dominicans "Calvinists."

But the controversy raged on, and Blanco, professor in the College of Saint Peter and Saint Paul in Mexico City, called it "bloodless warfare" (Bi) and saw himself as a "peace envoy." He wanted the warriors to declare a truce and take the time to consider his own theory. We do not know if his efforts had any effect at all; at any rate the war over human freedom goes on today in both philosophy and theology.³ Blanco's ideas are not irrelevant to current discussions; indeed, his use of logic to formulate his theory seems quite contemporary.

I shall describe Blanco's peace plan, explain his theory as he summarized it in the prologue and first chapter of his *Cord*, and then offer a modest commentary – modest because much of the historical background is unresearched and the material itself is extremely complex.⁴ A translation of the relevant sections is found in appendix A and a list of symbols in appendix B.

The Truce

For three decades, Blanco fought the war, studying the problem for twelve years and teaching it for seventeen (Bi). He used two metaphors to describe his role: peace envoy (caduceator) and flute player (tibicen). In ancient times, the caduceator was an emissary who proposed peace conditions during a truce, and the tibicen accompanied theater performances. Blanco stressed that he was not an arbiter: "remember that I am not playing the role of a judge here but that of an ambassador whose office it is not to hand down decisions but to propose the conditions of peace" (B16). Nor did he see himself as a player in the intellectual drama, but as a musician providing background music. He asked his readers to hold their criticisms, which "are already occurring to them," until they finish his book; then, when "war breaks out again," they may "brand

³ In philosophy libertarians (who reconcile freedom with physical law) clash with determinists (who deny free will in the strict sense). Some recent works in theology: W. Norris Clarke, S.J., "A New Look at the Immutability of God", chapter 9, *Explorations in Metaphysics* (Notre Dame University, 1994), William Hasker, *God, Time, and Knowledge*, (Cornell University, 1998), William J. Hill, O.P., "Does the World Make a Difference to God?" *The Thomist*, Jan., 1974 and "Does God Know the Future?/ Aquinas and Some Moderns", *Theological Studies*, 36 (1975), 3-18, Brian Shanley, O.P., "Eternal Knowledge of the Temporal in Aquinas", *American Catholic Philosophical Quarterly*, 71 (1997), 197-224 (with bibliography) and "Divine Causation and Human Freedom in Aquinas", *American Catholic Philosophical Quarterly*, 72 (1998), 99-122; John Wright, S.J., "Divine Foreknowledge and Human Freedom", *Theological Studies*, 38 (1977), 1450-77.

⁴ It involves philosophical issues like modality (necessary and contingent propositions), tense logic, conditionals ("if...then" propositions), and counterfactuals (what could, but will not, obtain), as well as theological doctrines like grace, predestination, and the origin of evil.

⁵ The *caduceator* carried a herald's staff or *caduceus* (*kerykeion* in Greek from *keryx*, "herald") which originally was an olive branch wrapped with bands as a sign of supplication and later with serpents (as the staff of Hermes or Mercury). The *tibicen* played the flute-like *tibia* (Greek *aulos*) and also performed at funerals and on other occasions.

[him] as they please" (B16). Still, he is carrying a spear as well as a *caduceus*, for he has his own solution that he hopes all sides will accept (Bi).

Blanco (Bii) knows his readers will wonder if he is sending himself out as a peacemaker or if he is representing one of the "camps." He does indeed assure us that each camp is sending him to the others, and for this he claims precedent, naming the authors who have shared his hope for reconciliation (Biii, vi, vii, B14).

First, his fellow Jesuits have sent him to the Thomist camp (Biii-Biv). For not only teachers like Sebastian Izquierdo and Adam Tanner but even the Jesuit Superior General, Tirso González, have used such key Thomistic terms as "predetermination" and "predefinition." He had used them himself in his treatise on human acts two years before in Puebla, he said (Bvi),⁶ and his approach was later confirmed in a book by an anonymous Jesuit which he chanced upon in Mexico City (Bv). And he was sent into the Scotist camp by Jesuit Gerolamo Fasolo, who had reconciled the Scotistic position with Jesuit "middle knowledge" (Bvi).

Several Scotists, said Blanco (Bvii), sent him into the Jesuit camp, among whom the Chilean Alfonso Briceño, who accepted Jesuit "middle knowledge". And Thomists have sent him back into his own Jesuit camp, and into the Scotist camp as well (Bviii).

Finally, pope Clement VIII sent him long ago when he urged the Jesuits and Dominicans to settle their differences according to the mind of St. Thomas and St. Augustine. Blanco believes (Bix) that since all sides are on the same road now is the time for them to "stretch forth their hands and arms to embrace each other."

Blanco thinks (Bix) the big obstacle to reconciliation is semantics: "the disparity and incompatibility of our words." He sees common meaning behind the confusing language used by the parties in the discussion, and he appeals (Bix) to St. Augustine to show that meaning is more important than words. In the interests of peace the Jesuits should be willing to borrow the language of their opponents. He illustrates his point (Bx, B9) with a an incident from Virgil's *Aeneid*. After Troy fell to the Greeks, Aeneas, wandering with fellow Trojans in the flaming ruins of the city, defeated a band of Greek soldiers under Androgeos. Blanco quotes the words of one of the Trojans urging his companions to don the armor of the enemy and use their weapons in order safely to flee the city – this is precisely what the Jesuits should do. And he wonders why his confrères, who wear the attire of the many peoples among whom they work throughout the world, refuse to put on the intellectual garb of the Scotists and Thomists to state a truth they would all accept. The Jesuit, he hopes,

this said, puts on the plumed helmet of Androgeos and the fair emblem of his shield, to his side straps the Argive sword.

⁶ This work, *Tractatus de actibus humanis*, is not mentioned in C. Sommervogel, *Bibliotèque de la Compagnie de Jésus* (1960), which besides *Funiculus triplex*, lists two manuscripts by Blanco (*Pláticas doctrinales* and *De Deo et attributis tractatus*) as well as two short printed works.

The strands of "cord" are the three theories Blanco wishes to reconcile: Thomistic premotion, Scotistic attendant decision and Jesuit middle knowledge (title page and B20). To distinguish between what he considers St. Thomas's true position and the false interpretation of Dominican Báñez, he uses (B14) the word "Thomistic" of the latter but coins the word "Thomasian (*Thomasianus*)" for the former. The strands also refer to the three roads that his "disagreement in agreement" will take (title page and B20).

Love or hate

Blanco's theory is an "axiom system" consisting of six assumptions, which he asks us to accept at least for the sake of argument (B2), and eleven conclusions or theses which, he claims, follow from his suppositions (B3-B7). He lays his plan in the prologue and first chapter and defends it in the subsequent thirteen chapters (B3). In my exposition of his theory I combine his own formulas and symbols with current logical expressions which seem to capture his intent.

The key to Blanco's solution is the *disjunction* which forms part of the object of the divine decision. But he does not claim to be completely original here. He points out that his fellow Jesuit Sebastian Izquierdo has reconciled a "disjunctive predetermination" with the Jesuit position (Biv) and that many Jesuits hold for "a similar disjunctive decision" (B12).

The assumptions

Blanco's first assumption (B1), the basis of his "disjunctive" theory, is a statement of God's intent:

I will the help A for Peter and, by Peter, the love B or the hate C.8

The symbols "A", "B" and "C" are Blanco's, and we may think of them as states of affairs or propositions. "Peter" here is a stand-in for some individual man, rational and free, who chooses or decides on a certain act or course of action (Blanco also refers to the agent as a "created cause," a "created will," or "created freedom"). "A" means that God helps Peter to carry out his choice. The "help" here refers especially to *grace*, but on the philosophical level the scholastics assumed the need for God to account for any act, free or determined. I shall suppose that "A" includes reference to the content of the disjunction: Peter's love or hate (B13). I shall use the symbol "Wp" to indicate that God wills that p (the sense of "Wp" will be defined below).

⁷ In his *Scholastica commentaria in I partem Angelici Doctoris D. Thomae* (two parts, Salamanca, 1584 and 1588), Domingo Báñez (1528-1604) opposed doctrines in the *Concordia liberi arbitrii cum gratiae donis, divina praescientia, providentia, praedestinatione et reprobatione* (Lisbon, 1588; *Appendix ad concordiam*, Lisbon 1589) by Jesuit Luis Molina (1536-1600). Blanco indeed seems to be more interested in reconciling the Jesuits with the Scotists than with the "Báñezians."

⁸ Volo Petro auxilium A, et vel amorem B vel odium C ipsius Petri.

⁹ "De auxiliis," the title of Clement viii's congregation, means "concerning helps."

"B" and "C" represent the pair of alternatives facing Peter. "Love" and "hate" are of course examples of any objects of human choice. The important word here is the "or" that joins B and C in a disjunction. There are several types of logical disjunctions, but "B or C" here has the sense "either love or hate but not both," that is, they exclude one another. I shall use the symbol "‡" to express such an exclusive disjunction:

What God wills is the conjunction of "the help A" and "the love or the hate," that is, God wills both "A" and the disjunction "either B or C." The object willed by God can then be represented in the formula (where "&" indicates conjunction):

W[A&[B‡C]]

"God wills A and (either B or C)." Later (B12-13) Blanco's example of B and C will be "Judas repents" and "Judas does not repent." Here B and ~B ("not B," here taking the place of C) is a contradiction.¹¹

Blanco's second assumption expands the notion of the divine willing. God's decision is identical to His "action that produces the object that He wills" – the object being A&[B‡C]. "W" thus supposes an identity of God's willing, His deciding, and His bringing about or actualizing ("the exercise of His omnipotence"). "W[A&[B‡C]]" then means "God wills-decides-actualizes His act of helping Peter and either Peter's loving or his hating." In his third supposition Blanco clarifies that God's action is not identical to Peter's.

The fourth assumption makes the key point that God's "indifference" to Peter's choice, which is necessary to make Peter's freedom possible, is just this disjunctivity. The divine decision W, which must be applied indifferently to free causes, is a *disjunction*:

This is the *disjunctive principle* at the heart of Blanco's solution that he hopes the warring parties will accept.

The fifth presupposition restricts the use of W. The divine decision W determines the help A (WA) and the disjunction B‡C (W[B‡C]), but without determining either B or C. Therefore the states of affairs WB (God wills Peter's love) and WC (God wills Peter's hate) are not forthcoming; that is, these propositions are false. Blanco lays great stress on this point: God predetermines Peter, to either of the two acts. God does so (B8)

not by a predetermination of this [act] of the disjunction instead of the other [act], but by a predetermination of this [disjunction] rather than of another disjunction, seeing that God, by determining [him] to this disjunction rather than to another disjunction, does not

 $^{^{10}}$ "B‡C" implies that the disjunction is false in case B and C are both true or both false. Exclusive disjunction is "nonequivalence," "B‡C" being an abbreviation of \sim [B \equiv C] ("not: B if and only if C"). Blanco considers the case of "freedom of contradiction" where B and C are both false.

¹¹ The logic of the pairs B and C and B and ~B is of course different (B‡~B is a truth of logic).

predetermine [him] to this act of the disjunction rather than to the contrary act of the same disjunction. 12

In his sixth and final assumption Blanco stresses that it is *Peter* who decides for B or for C. Hence either B or C may be true, but if B is true it cannot entail WB, nor can C, if true, entail WC.

Another way to put this last point is to suppose that if an argument is constructed in this context, B or C may be asserted as true in a step in the proof (depending on whether Peter chooses love or hate), but WB and WC can never be asserted as true. We can capture an essential part of Blanco's thought by adding two rules to ordinary elementary logic. The extralogical symbol "W" will range over any proposition or corresponding state of affairs p involving free human decision; "Wp" then expresses that God wills that p and brings it about that p.

The first is "W-elimination":

1 | Wp hypothesis
therefore:
2 | p 1, W-elimination

That is, "if Wp then p"; if God decides for (hence brings about) a state of affairs, then the state of affairs obtains. We shall see an instantiation of this procedure in the fourth thesis below. It is important to notice that the opposite implication is *invalid*:

1 | Btherefore:2 | WB INVALID

As the fifth assumption suggests, WB cannot be derived from B nor WC from C. The fact that Peter decides for love does not entail that God wills or actualizes Peter's decision by itself.

¹² "...hoc decreto et actione praemovet Deus Petrum ad utrumlibet actum, praedeterminat ad utrumlibet, praedeterminatione non hujus prae alio disjuncti sed predeterminatione hujus prae alio disjuncto, quatenus Deus praedeterminans ad hoc disjunctum prae alio disjuncto, non praedeterminat ad hunc actum disjuncti prae contrario actu ipsius disjuncti." Blanco is deliberately using "Thomasian" words here.

¹³ The lower functional calculus. The W operator functions here in the same way as the necessity operator in the modal system T. For sequents see W. Redmond, *Lógica simbólica para todos* (Xalapa, Mexico, University of Veracruz, 1999), pp. 17, 53, 174ff.

The second rule, "W-introduction," presupposes use of a special subordinate sequent (a line to the right of the main sequent or line of the proof) marked with a "W." There is a restriction on what may be inserted into this W sequent: only formulas governed by the operator W (such as "WA," "WB," "W[B‡C]) may be iterated and when iterated must shed the operator W. Also, W prefixed to any formula taken out of the sequent (the W may of course be dropped by W-elimination). The rule:

1	Wp	hypothesis
there	fore:	
2	W p	1, iteration
n	q	(if provable)
n+1	Wq	2-n, W-introduction.

If God wills that p and q follows from p, then God also wills q. But since p alone may not be iterated, it does not follow that if p then God wills p; that is, if Peter chooses to hate (C), it does not follow that God wills that he hate (WC).

With the help of the W-introduction rule, we can derive the disjunctive principle W[B\C], which Blanco allows in his fourth assumption, from W[A&[B\C]]:

1	W[A&[B‡C]]	hypothesis
therefore:		
2	W A&[B‡C]	1, iteration
3	B‡C	2, conjunction elimination
4	W[B‡C]	2-3, W-introduction

If God wills both A and B or C, then He wills B or C. WA can also be derived from W[A&[B‡C]]; indeed we have the equivalence:

that is, God wills[A&[B‡C]] just in case He wills A and He wills W[B‡C].

The theses

In his first chapter Blanco states his conclusions or theses "in a simple way" (B3), promising to go into the details later on. His first thesis is that the divine decision continues to affect the disjunction (B‡C) while Peter chooses either of the alternatives

(B or C), since, he says, W[B‡C] is the only divine decision in the offing. This claim, following from the fifth assumption, accords with our rules, since WB cannot be derived from B nor WC from C. In the second thesis the divine decision is seen as anterior to Peter's act – a delicate point in the controversy, involving the prefix "pre-" in "Thomasian" words like "premotion" and "predetermination."

The third thesis is decisive, and, as Blanco admits (B21) and as we shall see (2.5), problematic: albeit the object of the divine decision is the disjunction B‡C, God also actualizes the disjunction. This claim follows from the second assumption since "W" includes not only willing and deciding but bringing about or "producing." So the fact that we cannot derive WB from B does not mean that God does not actualize B, since He does will and actualize the disjunction. The important ontological point here is that the actualization of the disjunction automatically "covers" one of the disjuncts.

The fourth conclusion involves "intentionality": "no action can exist without some term" (B4), that is, without having some object. God's decision must decide and actualize something, which in this case is Peter's act as *either* B *or* C. This conclusion suggests the implication (demonstrable by our rules):

$$W[B \ddagger C] \rightarrow [B \ddagger C],$$

that is, if God wills and hence actualizes B or C, then B or C obtains.

The fifth conclusion adds that the divine disjunctive decision W[B‡C] *enables* Peter to carry out either of the two acts, B or C.¹⁴ Furthermore, when Peter decides for B, he determines B (not C), and if he chooses C, he determines C (not B).¹⁵ It is well to mention that for Blanco, the intentional relation is not only logical but ontological; he sees (B6) a human action related "metaphysically or logically" to its object.

According to the sixth thesis, although Peter's act is distinct from the divine decision and although the object of the divine decision is a disjunction, God actualizes B or C *immediately*, not through Peter. The seventh conclusion widens these principles: neither what God does by Himself nor what Peter does by himself is enough for Peter to perform his act. Peter's choosing B or C needs the divine decision or "concourse," but the divine decision, since its object is a disjunction, does not suffice to determine Peter's act. This is the reason why Peter's act B (in case he chooses love) is attributed "not to God but to Peter." Blanco sees God's disjunctive actualization and Peter's act as one single adequate and total "influence" on Peter's act – but one which *Peter*, *not God*, *determines*. Again we see God's "disjunctive indifference" here.

The eighth conclusion is similar. The "influence" relation is asymmetrical: God's action influences Peter's action but Peter's action does not influence God's action. But again, the divine influence is disjunctive: if Peter decides for B, God "influences" the disjunction B‡C. The same divine decision is both "previous" to Peter's act (it comes

.

¹⁴ Constituatur... proxime potens ad utrumlibet (B4).

¹⁵ Peter also determines the disjunction B‡C in the sense that B‡C follows logically from B&~C or ∼B&C.

before Peter chooses actually, when he is only "in first act") and simultaneous (as Peter carries out his choice "in second act"), as Blanco pointed out more generally in the first two theses. Hence the divine decision, as theses nine and ten imply, is both "attendant" or "accompanying" and "antecedent" with respect to Peter's act. Blanco's eleventh thesis includes a rather unclear example: he compares the divine decision to the journey of two people who set out from Mexico City at different times. The one who leaves first precedes the other who accompanies him – but he insists that God's decision is from all eternity and, once again, that its object is a disjunction.

The key to reconciliation

Blanco insists (B11) on the key importance of understanding the Jesuit position on middle knowledge correctly, for not only "outsiders" but even some Jesuits misinterpret it. The theory of the Company, he says, does not completely rule out the Thomasian view on premotion, that God knows free futures (that is, future events dependent upon the free choice of creatures) in His decision. Izquierdo, for example, admits (B12) that although God knows free futures through "middle knowledge," He knows them in "some" of His decisions. "Coming at last to the point of this first section," Blanco recapitulates (B13) his claim, now in terms of the repentance of Judas ("J" here symbolizes "Judas repents"):

but adding another variable to the "help" A: "efficacious" or not. Blanco opts for "inefficacious help," as it seems he must, since the help is conjoined to a disjunction requiring Judas's action. ¹⁷ He uses the Jesuit doctrine to explain how God knows how Judas will react to the divine help: God knows through middle knowledge the truth of the entailment "if God granted the help A to Judas, then Judas would repent," where "A" includes whatever constitutes Judas's freedom. The Jesuits placed middle knowledge between the other types of divine knowledge: "simple understanding" and "seeing" (3.2). ¹⁸

Blanco then shows (B14) the "road" he will follow to reconcile middle knowledge with Thomasian premotion and with Scotistic attendant decision. The road is "the decision that we set forth at the beginning" (B15): God's disjunctive decision.

 $^{^{16}}$ W[[J‡~J]&A] \leftrightarrow W[A&[J‡~J] follows from our rules. W[J‡~J], W[J|~J], and W[Jv~J] are also provable, since here W governs logical truths; God's "indifference" here would be logical.

¹⁷ For Molina, "efficacious" grace, unlike (merely) "sufficient" grace, involves human consent; Francisco Suárez, S.J. (1548-617), preferred to speak of grace "congruous" with the circumstances that obtain human consent. Báñez believed that this claim implies that the divine decision depends on the human decision, but the Jesuits thought that Báñez's position suppresses human freedom.

¹⁸ Molina used middle knowledge to explain how God knows in any one case whether grace is efficacious (not merely sufficient), and Suárez used it to explain how God knows whether grace is congruous. Báñez rejected middle knowledge, believing that the two basic types of divine knowledge (seeing and simple understanding) suffice to explain all the objects of the divine knowledge.

Problems

"As the three fronts stand ready to do battle," Blanco foresees (B21) four difficulties that "seem to stand in the way and block the agreement" that he is hoping to achieve. He is following here the scholastic custom of stating "objections" at the beginning of the exposition to solve them later.

The first problem is that the person may simply fail to choose. Up until now Blanco has related God's disjunctive decision to human "freedom of specification": the choice between two alternatives such as loving or hating, repenting or not repenting. But Blanco knows his readers will wonder how God's decision is related to "freedom of contradiction," that is, the freedom to choose or not choose, to exercise freedom or not to exercise it.

The logical status of the two types of choice is indeed different. Let us use the expression "Dp" to indicate that a human being, say Peter or Judas, decides to perform an action or course of action (designated by "p"). The various relations of deciding can be expressed in a scholastic "square of opposition":

Peter

decides that p decides that not p does not decide that not p does not decide that p neither decides that not p nor decides that p.

The usual logical relations of the square apply here; for example, if Peter decides that not p then he does not decide that p ($D\sim p\rightarrow \sim Dp$), but the converse implication is not valid.

We have seen that the disjunction between love and hate is exclusive (B‡C), implying that it is false if neither love nor hate is chosen. This would apply only to freedom of specification: DB‡DC. But when we consider freedom of contradiction, that is, when Peter neither decides for love nor for hate (~DB&~DC), we need a different type of propositional relation where DB and DC would be false *only* if both are true. Such is the relation of non-conjunction, "not true together," often symbolized by the vertical stroke "|"; thus DB|DC would allow three cases where one or the other is true and both are

¹⁹ And we may restrict the universe of discourse to such actions.

false.²⁰ Both the logic and ontology of God's willing is different in freedom of specification (W[DB‡DC]) and contradiction (W[DB|DC).²¹

The second problem, I believe, is crucial. It touches the content of the divine decision. Decisions have definite objects; they are intentional. So a reader may well ask how the object of the divine decision can be a disjunction, which by very definition is *undetermined*. How can God actualize *either* love *or* hate, and, in the case of freedom of contradiction, *either* choosing *or* not choosing?

The third problem regards a possible discrepancy between the ordinary Jesuit position and Blanco's interpretation. For the Jesuits suppose that there is but a single act of God and man; but Blanco seems (contrary to his seventh thesis) to suppose two actions, one by God and the other by man. The fourth problem is a warning that the very "war cries" of the troops could preclude agreement.

A comment

In the passages we have summarized Blanco is more interested in God's omnipotence than His omniscience. However, any position on how human freedom is related to the divine actualization forms the basis of the position on how it is related to the divine knowledge. Let us consider both.

God's willing

The problem, as we have seen, is that God is not almighty if man is free and if God is almighty man is not free – or so it seems. Blanco's solution attempts to escape the dilemma in the following way.

- * WB is disallowed; that is, it is not true that God wills and actualizes Peter's love "exclusively" that is, not in disjunction with hate. If WB were true, Peter's love would follow automatically since what God actualizes comes about (cf. our rule: WB \rightarrow B). But in this case Peter's freedom would be threatened, since God's decision would be the sufficient condition for Peter's loving. Neither is the reverse implication true (nor does it follow by our rules), that if Peter loves, then God wills his love (invalid: B \rightarrow WB).
- * Peter's love does not even follow from God's willing the *disjunction* of Peter's love and hate (notices that our rules do not allow W[B * C] \rightarrow B). If it did follow, Peter would again seem not to be free, because God's disjunctive decision would be a sufficient condition for Peter's loving. However, Blanco would allow that Peter's love implies that God wills his, Peter's, love or hate (B \rightarrow W[B * C]), where God's disjunctive will is a necessary but not a sufficient condition of Peter's loving.

²⁰ DB&~DC, ~DB&DC, ~DC&~DC.

²¹ Other truths of logic in the square are $Dp|D\sim p$, $Dp\ddagger\sim Dp$, $Dp|D\sim p$, and so $W[Dp|D\sim p]$, etc.; God is "logically indifferent" here, but for Blanco He chooses the particular disjunction, not one of the disjuncts (see passage in B8 quoted above, 2.1). $Dp\ddagger Dq$ is not a truth of logic. We shall not discuss the problem of regress $(D\sim [DpvD\sim p], \sim D[\sim Dp\&\sim D\sim p])$.

- * Peter's love does not follow from his own decision to love (DB→B does not hold). If it did, Peter's decision would be the sufficient condition for his act and God's action would be superfluous. But Blanco would allow that Peter's love implies that he decides to love (B→DB), since his decision is a necessary if not the sufficient condition of his loving.
- * For Peter to love, both conditions are necessary, that God wills the disjunction of his love and hate and that he, Peter, decides to love. Indeed, it seems to be an essential part of Blanco's position that if Peter freely loves, then God wills (and actualizes) that Peter loves or hates and Peter decides to love:

$B \rightarrow [W[DB \ddagger DC] \& DB].$

Blanco insists that God actualizes Peter's act of love directly, not "through" Peter. For Peter does not "influence" God but God Peter, nor does God act only "while," but also "before," Peter acts. But what He actualizes is the *disjunction*: Peter's love or hate; God's actualization "covers" both Peter's loving and his hating. Peter's act is distinct from God's act, but there is a single *influence* on Peter's act, W[B‡C] and DB. The act is Peter's and not God's properly speaking, since Peter, not God, determines the truth of one disjunct, that there be love instead of hate; hence Peter's freedom is preserved and he is accountable for what he does.

Perhaps it is not too fanciful to imagine two positions in this controversy: one on the "left" and on the "right," parallel to those of the Jesuits and Dominicans.²² The left (supposedly in the spirit of the Renaissance) starts with man's freedom and must reconcile it with God's omnipotence and omniscience. The right (in a more old-fashioned spirit) starts from these divine attributes and must reconcile them with human freedom. A leftist position could be construed as B→[WB&DB]: if Peter loves, then God actualizes his loving and Peter chooses to love, and a rightist position as [WB&DB]→B, if God actualizes Peter's loving and Peter chooses to love, then Peter loves. Blanco would probably reject both, because he would be suspicious of WB in conjunction with DB, for the two decisions seem to collide ontologically. His above position (B→[W[DB‡DC]&DB]) is leftist, but he might also accept a rightist version ([W[DB‡DC]&DB]→B), combining them in an equivalence

$B \leftrightarrow [W[DB \ddagger DC] \& DB].$

That is, the conjunction of God actualizing the disjunction and Peter deciding to love is the necessary and sufficient condition of Peter's freely loving.

Blanco's way out, then, is his interpretation of the object of God's decision as a disjunction. But he must deal with his second objection: how can God actualize a disjunction? The choice of B‡C implies two sets of possible worlds, as we have seen,²³

.

²² I omit the Scotist position here.

²³ I assume here "transworld identity" (B‡C presupposes worlds wherein Peter exists). Blanco says (B11, pp.13-14) that it is not certain whether God is "connected" with "still possible" creatures. Molina used *ordines rerum et circumstantiarum earum* approximately as "possible worlds."

and the choice of DB|DC implies three sets. However, God may actualize the disjunction in the actual world.

God's knowing

Christian philosophers have recognized two kinds of objects in relation to God, called *ideatio* and *creatio*. God must "ideate" the "divine ideas" (identified in some way with the divine essence) through His mind. These objects are necessary and obtain across all possible worlds. They include the necessary *possibility* of the states of affairs that He could bring about in the actual world.²⁴ On the other hand, God freely, through His will, has chosen to create or bring about certain of these possible states of affairs of the actual word, the realm of contingent things, which exist without being bound to exist.

The scholastics admitted two related types of divine knowledge: simple understanding (simplex intelligentia) and seeing (visio). God "understands" what is true across all possible worlds and "sees" what obtains in the actual world. God "understands" necessarily, since the object of His understanding, which involves only His mind. is necessary. But what God "sees" must be related somehow to His will, since actual existence depends upon His will. Moreover, His "seeing" is contingent, since the object of His seeing is contingent.

How, then, does God know man's free decisions? It seems that God neither "understands" Peter's love (since his love, like all created things and events, is contingent), nor "sees" it (since Peter's love, unlike purely "natural" happenings, does not depend solely on God's will). The Jesuits therefore proposed a "middle knowledge" between God's understanding and seeing for such objects, but the Dominicans thought understanding and seeing were enough to explain the facts.

In regard to Blanco's example, we may first say that God "understands" necessarily that there are exactly three sets of possible worlds: where Peter chooses to love, where he chooses to hate, and where he chooses neither (God also "understands" that the conjunction B&C is impossible). But He does not "understand" in which set the real world is located because that depends upon His will: His disjunctive actualizing and His "helping" (A).

God does not "understand" Peter's love, assuming that such is Peter's choice, since Peter's love is not necessary. But how can God "see" Peter's love when He does not will or actualize it directly (WB is disallowed)? When God brings it about that Peter either decides to love or hate or neither (W[DB|DC]), He "sees" that Peter either loves or hates or neither. On the other hand, how can He "see" DB|DC when DB|DC is true in three sets of possible worlds, without knowing which contains the actual world? This, it seems, is where Peter's decision to love comes in, placing the actual world in the DB&~DC set, and God "sees" this state of affairs since it is "covered" by his disjunctive willing.

²⁴ In the modal system S5, often considered basic by philosophers, whatever is possible is necessarily possible.

But here is where the angels – and I – fear to tread. I hope that my brief introduction to the *Three-Stranded Cord* shows not only how theology wrestled with difficult philosophical problems but also the profundity of Father Blanco's solution. ²⁵

.

²⁵ Blanco's "disjunctive" solution is not unlike that recently offered by Norris Clarke, S.J., in *Explorations in Metaphysics: Being—God—Person*, Notre Dame: University of Notre Dame Press, 1994, p. 206.

APPENDIX A - TEXT

{Title page}
TREATISE
ON CREATED FREEDOM
UNDER DIVINE KNOWLEDGE, WILL, AND OMNIPOTENCE

The Three-Stranded Cord

PLAITED OF SAINT THOMAS'S PREMOTION, SCOTUS'S ATTENDANT DECISION AND MIDDLE KNOWLEDGE DISAGREEMENT IN AGREEMENT

By the peace envoy [caduceatore], most wise author, Father Matías Blanco, of the Society of Jesus, of Durango, Nueva Cantabria, renowned, primary professor of sacred theology in the Major College of the Holy Apostles Peter and Paul in Mexico City, then illustrious prefect of major studies and more recently of the Sodalitium of the purest Mother of God.

Published posthumously at care and cost of Miguel Buenaventura de Luna, honored with the royal robe of opposition in the Royal College of Saint Aloysius, Mexican doctor of Theology, confessor of Capuchin nuns, former canon of the Metropolitan Cathedral, now distinguished by the rank of choir director, and among the author's most sincerely devoted disciples.

Dedicated to the angelic youth, most holy Aloysius Gonzaga of the Society of Jesus, patron of the same Royal College and of the Pontifical and royal University of Mexico, newly²⁶ solemnly canonized, to be honored and promoted.

With the permission of superiors.

Mexico City, Widow of José Bernardo de Hogal.

In the year of Our Lord 1746

_

²⁶ [In 1726. Translator's notes in brackets.]

{p.1}

Λ

TREATISE ON CREATED FREEDOM UNDER DIVINE KNOWLEDGE, WILL AND OMNIPOTENCE

THE THREE-STRANDED CORD

PLAITED OF SAINT THOMAS'S PREMOTION, SCOTUS'S ATTENDANT DECISION AND MIDDLE KNOWLEDGE

PROLOGUE
IN DEFENSE OF THE WORK

[The truce]

{i} Here am I at last, after almost thirty years in this war – bloodless, to be sure, but no less noble or passionate for that – if to my seventeen long years of teaching theology you add the previous years {p.2} I devoted to learning and pondering it – actually after over a thousand years if you count those our forerunners spent fighting the war, here I am, I say, a peace-maker [caduceatorem], or if you prefer, a flute player [tibicinem].²⁷

For I am saddened when I survey the fierce battle fronts – there the Thomists and Scotists, here the Jesuits – ever opposed, ever fighting over how to reconcile created freedom with the divine decision and knowledge, a problem pondered throughout all these past centuries, a solution pursued by so many scholars with such effort, offering so many theories. What else should I do, unimportant as I am, but play the part of a peace envoy or flute player – albeit I also carry a spear with my peacemaker's staff?

[The commission]

{ii} Now, since I am setting out as an envoy to discuss peace conditions and endeavoring to get agreement among antagonists who are obviously are as opposed as they can be, I will be asked if I am taking this office upon myself or if I am being sent as an envoy by others. And if I am sent, one will wonder if I have accepted the staff from the defenders of middle knowledge – soldiers in the camp of our Society of Jesus – or from the Thomists advocating their famous premotion, or from the Scotists who profess their attendant [comitantis] decision. For I would at once be accused of rashness

.

²⁷ [See note 5.]

and arrogance if I tried to get these warring {p.3} parties of so many great scholars to agree, if I had not been sent by one of them or at least tacitly commissioned to represent them all.

[An envoy of the Jesuits]

{iii} My warrant to accept this ambassadorial office will emerge in the course of my treatise. However, so that heads may not be wanting at its very threshold wherewith to protect my own as I venture forth as peacemaker among the warriors, I claim first to have been called to seek agreement by Father Tanner, a master of our Society. He said:

many Thomists holding for the theory that places premotion in God's will do not disagree from the third, ²⁸

that its, from the Society's opinion, and

it may be rightly admitted in some sense that the second cause is moved, determined, and applied to act by the first cause, that is, by the action of the first cause.²⁹

He cited our *Doctor Eximius* ³⁰ as well as other Jesuits from among us along with St. Thomas³¹ and the holy fathers, who often use the words "predefinition" and "predetermination" for the same thing, and explain "pre-" in the sense of concourse [*concursu*] that is still "previous," a claim which the teachers of our Society do not deny when used in a proper sense.

{iv} Father Izquierdo, who served as Assistant [to the General] of the entire Society, sends me as legate.³² The word "predetermination" so little fazes him that he has no difficulty in reconciling the disjunctive predetermination, said either of the decision or of anything else, with {p.4} the Society's position. Our Father General himself, the Very Reverend Tirso González,³³ sends me, together with our Cardinal Sforza, who derives the "previous motion indifferent to both" from St. Thomas³⁴ – hence none of our own should find fault with a word they hear spoken in our school by the Father Assistant and the Father General of our entire Society.

²⁸ (a) Vol. 1, q. 11, *dubium* 1, n. 6. [Blanco uses letters to refer to his marginal notes. Adam Tanner, S.J., 1572-1632, Austrian. Blanco twice (here and B15) quotes the first volume *Universa theologia scholastica, speculativa, practica, ad methodum S. Thomae* (4 vols., 1626-7).].

²⁹ (b) N. 27.

³⁰ [Francisco Suárez, S.J.; he treated the question of free will in his *Opusculum de scientia Dei futurorum contingentium*.]

³¹ [St. Thomas Aquinas, O.P., 1225-1274. There was enough leeway in his treatment of these "de auxiliis" questions to give rise to different interpretations.]

³² (c) *De Deo*, vol. 2, tract. 10, disp. 30, q. 11, for four entire pages. [Sebastian Izquierdo, S.J., 1601-1681, Spanish, assistant to the General for Spain and the West Indies; *Opus... de Deo uno* (vol. 1, 1664, vol. 2, 1670). Blanco also mentions him in Bvii, 10, 11, 15.]

³³ (d) Vol. 1, disp. 27, sect. 7, n. 38. [Tirso González de Santalla, S.J., 1624-1705, Spaniard, 13th General of the Society of Jesus (1687). Blanco seems to refer to the first volume of his *Selectae disputationes ex universa theologia scholastica* (1680-86, 4 vols.).]

³⁴ [Sforza, S.J., †1667.]

{v} The doctors of our Society have indeed used the word "predetermination." So much so that after thinking about this matter a good deal and then accepting it two years ago in Puebla in my *Tractatus de actibus humanis*, a short time ago in Mexico City I chanced upon a little book by a certain anonymous author of our Society published in Augsburg and Dillingen under the title *Litterae ad R. P. Alexandrum*, *Dominicanum*, wherein the doctrine of the Thomists is compared to that of the theologians of the Society of Jesus, and the point of the tenth letter is to interpret physical premotion derived from St. Thomas in the sense found in the theory of the scholars of the Society, which we shall develop extensively in the *Cord*.

[As envoy of Thomists and Scotists]

{vi} Father Fasolo sends me from the camp of the Thomists and Scotists.³⁵ He is careful to cite their texts and explain the words of St. Thomas and Scotus in favor of {p.5} the view of our Society on middle knowledge and the consequences of such a view. The distinguished Scotist, Professor Mastrio, actually praises Fasolo's interpretation³⁶ of Scotus's theory in favor of the Society, so much so that he boasts³⁷ of finding the mind of Scotus accurately explained by Fasolo, as we shall pursue it carefully below, after leading the Scotists and Mastrio himself along with their Scotus into the camp of the Society.

{vii} We shall not, however, do anything new, but only what has been done before. For Fasolo as well as many of our own and Izquierdo himself³⁸ already mentioned that the Scotists Filippo Fabri, Hugh McCaughwell, Jerónimo Tammarit, Mauricius, Luís Caspensis, Alfonso Briceño, Félix Teodoro Smising, Angelo de Montepeloso,³⁹ support middle knowledge, besides more recent authors, even in our time, in many places who, as we see, are sending me from their camp into that of the Society. I will explain practically all their texts in the proper places if I have time, even reconciling a good part of the debates and controversies among the Scotists themselves.

{viii.} Besides the Thomists whom Tanner mentioned without naming them and those whom Fasolo cited, I shall refer in the *Cord* to many through whose names and views {p.6} I have been sent into the camp of the Scotists as well as into that of the Jesuits. Yet, were all lacking, the Angelic Doctor himself would be more than sufficient. I shall

³⁵ (e) Vol. 2 passim but especially q. 14, a. 13, *dubium* 17, n. 129 and n. 316. [Gerolamo Fasolo, S.J., 1583-1639, Italian. *In Primam Partem Summae S. Thomae Commentaria* (three vols., 1623, 1629, and 1636). See Bviii, 9, 16, 17.]

³⁶ (f) Op. cit. n. 316.

³⁷ (g) Vol. 1, disp. 3, q. 3, a. 5, n. 140. [Bartolomeo Mastrio, O.F.M., 1602-1673, Italian. Blanco quotes from his *Philosophiae ad mentem Scoti cursus integer* (1637ff). See 17, 19.]

³⁸ (h) *De Deo*, vol. 2, trac. 11, disp. 38, q. 3, n. 63.

³⁹ [Fabri, O.F.M., Filippo, 1564-1630, Italian (works 1601, 1637). McCaughwell (Cavellus), O.F.M., Hugh †1626, Irish; works Venice, 1625. Tamarit, O.F.M., Jerónimo, Spanish; *Flores theologiae in totum primum librum Magistri Sententiarum* (1622). Mauricius de Portu, Fildaeus O.F.M., †1514, Irish (works 1500-1520, 1603). Caspensis, Luis (vii), Spanish Capuchin; *Cursus theologicus* (1641, 2 vols). Briceño, O.F.M., Alfonso, †1667, Chilean (work 1638). Smising, O.F.M., Theodor 1580-1626, German; *De Deo uno* (1624, 1626, 2 vols.). Montepeloso, O.F.M., Angelo Vulpes de, Italian; *Summa sacrae theologiae Scoti* and *Commentaria* (1622-45, 9 vols.).]

be pleased to take all his passages as they are, and with their help reconfirm more extensively what I sought in my Tractatus de actibus humanis: to bring our own opinion and that of the Thomists to that accord which I eagerly desire all to reach and which I hope to achieve here.

[The Pope and St. Augustine]

{ix} Why further detain my reader? Lastly, I am sent as an envoy by the Supreme Pontiff himself, 40 who once bade us all to put an end to the controversy in accordance with the mind of saints Augustine and Thomas. And since we who follow the same path have all been given the same light and pillar to guide us, 41, is it not high time that we also stretch forth our hands and arms to embrace one other and work toward our common goal and accord?

There is but one obstacle to bringing this accord about: the disparity and incompatibility of our words. But since we have our great Father Augustine to encourage us, we quote his word and counsel. He is advising his disciple:

Call it what you will; words, when the reality is clear, ought not to be our concern.

And shortly afterwards:

I not only agree but also commend you to be pleased to care more for things than words.

This from St. Augustine, when speaking of the line. 42 {p.7}

[Borrowing weapons and the raiment of the mind]

{x} In regard to our own approach, let us even speak the tongue of our adversaries if necessary, use their own idiom, their own terms. And thus

Change we the shields of the Greeks and their devices bear.... They themselves will give us our arms.43

{xi} Now, if our Society everywhere wears all manner of dress to teach the full truth of the Gospel more easily and secure it against its adversaries, why are we holding so fast to our own words – the raiment of the mind as it were, when with the language and garb of the Scotists and Thomists, too, we could guard and defend well enough the truth that we agree upon in this matter – our own truth as theirs and their own as ours.

⁴⁰ [Clement XIII, who convoked the *De auxiliis* commission.]

⁴¹ [Exodus 13:21.]

⁴² (i) Liber unicus de animae quantitate, ch. 6. [Pericopes 10 and 11. Augustine's friend Evodius speaks the first quotation and Augustine the second.]

⁴³ [Aeneid, 2:389-390, 391; the quote is continued in B9, p.14. Aeneas is addressing Dido, queen of Carthage, who warmly received him and his companions after their escape from Troy.]

May He who clothed Himself with our flesh in the Virgin's purest chamber that He might clothe us with the unclothed truth in Himself, the truth that, reconciling us all, He publicly professed, as master at His podium, on the cross.

 $\{p.8\}$

SECTION I

Proposal of the way to reconcile middle knowledge with St. Thomas's promotion and Scotus's attendant decision

Account of the purpose of the entire treatise

[Procedure]

{1} I need neither many nor sundry arguments, since by summarizing the sections it will be easier to show my intent more quickly, clearly, and directly as well as to bring together more handily the claims that will achieve my purpose, borrowing them from various places. Come, then, and allow me briefly to explain once and for all and at the very threshold what I am about.

[Assumptions]

[Assumption 1]

{2} First, maintain and ponder often the range [tendentiam] of the divine decision [decreti]:

I will the help A for Peter and, by Peter, the love B or the hate C.

[Assumption 2]

Second, maintain that this decision is really identical to God's action which outwardly produces the object that He in fact [exercite] wills. In the present case the object is thus:

the aid A and the love or the hate.

[Assumption 3]

Third, maintain that the divine action and the action of a creature like Peter are really distinct.

[Assumption 4]

Fourth, maintain that the divine {p.9} omnipotence can be indifferently applied to free causes through such a disjunctive decision among these terms of the created will.

[Assumption 5]

Fifth, maintain that the aforesaid divine action, identical to the decision, is in itself determined in regard to the help A, but not in regard to a determined love or hate; it is rather disjunctively indifferent to either, as the decision is seen to be.

[Assumption 6]

Sixth and last, maintain that there are two actions by Peter: the one determinedly connected or identified with love and the other determinately connected or identified with hate.

{3}

[Theses]

Having thus baldly assumed for now these points that we are later to demonstrate, I shall draw the following inferences:

[Thesis 1]

First. Owing to the divine decision, the omnipotence continues to be indifferently applied to one or the other act by Peter, since there is no other, more relevant, decision indifferently applied by the omnipotence to the free causes.

We shall see this later when demonstrating these and the following inferences. For now we are merely introducing everything in a simple way in keeping with the intention that we proposed for this section and for the entire treatise.

[Thesis 2]

Second. This decision is understood to be prior to Peter's freedom, among other [things] constituting his created power which is indifferent to either [alternative].

[Thesis 3]

Third. The decision, albeit a disjunctive action, is a performance of the divine will and omnipotence. For by His decision {p.10} God not only wills either, but also produces either act of the creature in the way we shall explain and demonstrate below.

[Thesis 4]

{4} Fourth. Just as the disjunctive decision connected with either cannot occur [dari] without one or the other willed act, so the divine action, identical to the decision, cannot occur without Peter's love or hate. And [the principle that] no action can exist without some term is thus verified, as the effective divine decision cannot exist without the object that [God] wills and in the way He wills it.

[Thesis 5]

Fifth. Since by God's decision Peter is constituted as proximately able to [do] either, for this very reason he will be able to carry out either love or hate by calling forth either his action regarding love or his other action regarding hate. One of these actions of Peter is determinedly connected with love and the other with the contrary hate.

[Thesis 6]

Sixth. Neither of these actions of Peter exists without being immediately produced at the same time by God. For although either is really distinct from that disjunctive action of God, nevertheless by the same divine disjunctive action God produces immediately at the same time with Peter any one of Peter's actions that here and now issues from Peter, in such wise that God produces whichever [of Peter's actions] by His divine action, albeit God does not produce it by the creature's action but by His own divine action.

[Thesis 7]

{5} Seventh. The same decision, identical to the divine {p.11} action, is the divine concourse both in first act and in second act with respect to the creature. It is so in first act inasmuch as both the decision and the divine action in itself is disjunctively indifferent, undetermined, and as it were pending. It is so in second act as far as the divine action, when this action of the creature ensues instead of that one, is determined by this created action of Peter (for example, of love instead of hate).

And at the same time as Peter's action [the divine action] produces the love instead of the hate by a determination that should not be attributed to God but to Peter, because God, owing to His action considered in itself, does not produce the love instead of the hate, but either the love or the hate. But owing to his action connected determinately with love, Peter produces love instead of hate. For, having the power to call forth either of his actions, he here and now calls forth that connected with love and he does not call forth the one connected with hate, even though he produces his action at the same time as God. A single total adequate influence on the act, determined by Peter's, not God's, determination is made up of and results from this disjunctive act of God, inadequate for an influence in being and from Peter's inadequate act.

[Thesis 8]

{6} Eighth. Next, according to the foregoing claim and explanation, God's decision is the previous divine concourse indifferent in first act to Peter's freedom, and this very decision is the simultaneous {p.12} concourse determined in second act by Peter's action. Peter's action indeed does not influence God or the divine action, since it is rather God and God's action that influences Peter's action. But Peter's action influences his love at the same time as the divine action influences his love, and by His action God influences both Peter's love and his action, which is connected either metaphysically or logically with love rather than with hate. For God's action in itself, by not requiring love rather than hate, is no more connected with the love than with the hate, but with love or hate, since it is toward either act.

[Thesis 9]

{7} Ninth. For this very reason, such a decision and action by God is attendant, inasmuch as it accompanies the action of a creature, say, Peter, by producing Peter's act at the same time as Peter's action.

[Thesis 10]

Tenth. Nevertheless the divine decision and action is antecedent with respect to Peter's action, which God's action and decision precedes in some way and in some sign.

[Thesis 11]

Eleventh. Therefore such a decision, identical to the divine action, is antecedent and attendant; antecedent in one sign and attendant in another. It is like someone who sets out earlier from Mexico City and precedes his companion on the road who leaves later and catches up with him. However, the parallelism is not complete here, because God's decision not only precedes Peter's action eternally, but it also precedes Peter's {p.13} action as the divine action ranges over [tendente] either of Peter's acts which will be produced at instant A, inasmuch as it is indifferent at the previous sign of Peter's freedom. And God's decision, inasmuch as it is already determined by Peter's action, accompanies Peter's action, which as it were travels the philosophical road to its end, meaning, to love.

[Terminology]

{8} Now, why are we tarrying over words that are indifferent in themselves and apt by themselves to signify anything? Let us call the decision to help, and let us also call the help itself that is at least compatible with the decision, "premotion" or "predetermination," adding "indifferent," in accordance with our own doctors named in the prologue; or if you prefer, "disjunctive premotion" and "predetermination, either "physical" or "moral" or "mixed", in accordance with what we are to explain below.

What prevents us from calling them thus? For, besides the expressions of our own [scholars] and of others whom we shall see later, God, by this decision and action premoves Peter to either act, He predetermines him to either not by a predetermination of this [act] of the disjunction [disjuncti] instead of the other [act] but by a predetermination of this [disjunction] instead of another disjunction, seeing that God, by determining him to this disjunction rather than to another disjunction, does not predetermine him to this act of the disjunction rather than to the contrary act of the same disjunction.

Furthermore, besides the consistency {p.14} of the terms, there are other points that will be more conveniently presented later in regard to the decision as bestowing the helps, according to the way of speaking both of St. Thomas and the scholars of the Society, who do not refuse to call at least this sort of premotion "physical" because of its identity with God's physical decision and physical action, although we do not admit another sense of "physical" which we shall discuss later.

{9} So having settled on this term between ourselves and the very learned Thomists, what prevents us from also [+ item] calling the decision "attendant," the word used by our own Fasolo, who will be more fittingly introduced in its proper place? Whatever be the case with Father Rivadeneyra, whose opinion and understanding of "attendant decision" we totally reject as at odds with and foreign to the mind of our Society, as we shall see in its proper place.⁴⁴ But let us agree with the best teachers of our family, and, for now at least in name, with the Scotists.

⁴⁴ [Rivadeneira, S.J. – Antonio de, 1619-1663, Mexican, or Gaspar †1675?]

And what our goal is will soon be clear, both here and especially in the course of the entire treatise. The Jesuit now,

this said, puts on the plumed helmet of Androgeos and the fair emblem of his shield, to his side straps the Argive sword.⁴⁵ {p.15}

[A misunderstanding]

{10} However, before we come to blows – or rather before we come to mutual embraces–, we must completely remove a quite common mistake wherein not only outsiders but not a few of our own as well have been caught more than once. Content with the mere appearance of the words, they have not delved to the heart of our position. Hence whereas the teachers of the Society deny that God knows free futures, conditioned or not, in any decision, they always speak in such way as to exclude the antecedent decision connected in itself intrinsically and determinedly with the future love, say, of the creature rather than with his hate. However our own do not deny that God knows such futures in some way in His decision, or in His omnipotence, or in His essence, or in His Word, or in other attributes. Neither does Father Izquierdo, who is to be especially heeded here, nor others assert the contrary.⁴⁶

{11} He states, citing many of our own, that the knowledge of creatures, even future, and existent creatures, even free, as in God, does not depend on God's connection with them. For it is certain from the teaching of the holy Fathers and of theologians that God knows all creatures in Himself, although it is not certain that God is connected {p.16} with creatures still possible. And Izquierdo concludes that God's comprehensive knowledge knows futures in God's omnipotence and in some of God's decisions as in the object to which the futures somehow belong supposing that they are futures [will obtain]. Although futures in themselves are known in another way as the doctors of our Society hold from the teaching of St. Thomas, Scotus, and other holy Fathers and theologians.

{12} Indeed, whereas the whole Society of Jesus asserts that God knows by middle knowledge all free conditioned futures in themselves – for example, Judas's repentance – under the conditionally future help A, we do not say that such knowledge is completely independent of any divine decision yet to exist conditionally in God Himself. For although we do say that such knowledge does not depend on the divine decision existing now absolutely, subjectively, in God, we say nevertheless that middle knowledge itself depends on the decision about to exist when Judas's repentance under the help A would occur. For then, in that hypothesis that [the decision is] prior to Judas's freedom, the divine decision is conceived both as applying the omnipotence indifferently to Judas's repentance or non-repentance {p.17} and as bestowing the help A under which there would be repentance.

⁴⁵ [Blanco continues the passage from the *Aeneid* (here 2:391-393) that he began to quote in the prologue (Bx). The "Jesuit", then, is parallel to Coroebus, the Trojan leader.]

⁴⁶ (j) In the *De Deo*, vol. 2, disp. 25, q. 2, especially n. 17, and disp. 27, q. 8, nn. 113 and 114, as well as in other works.

And although we do say that the absolute existence of such decisions is subsequent to middle knowledge which is supposed by every absolute existence of any divine decision, as it supposes the knowledge of simple understanding, nevertheless according to all our own doctors, middle knowledge supposes objectively – of course on the part of the object in the conditioned sign – the decisions given on the part of the creature's free potency as at least obliquely constituting created freedom, which is also constituted by the omnipotence as indifferently applied by the indifferent decision of the type that is, according to many of our own, a similar disjunctive decision.

[Our claim]

{13} Now, coming at last to the point of this first section, we are saying – now with regard to Judas – that God did not have the following decision from eternity in its entire range

I will Judas's repentance or his non-repentance and the help A, which is efficacious, but [He did have] this other decision:

I will Judas's repentance or his non-repentance and the help A, 47 which is inefficacious.

We do, however, claim that God nevertheless has known from eternity by middle knowledge Judas's future repentance if instead of this second decision God had had, or in case he had, the first decision. And since we do in fact place in God this {p.18} middle knowledge:

Judas's repentance would be given if the help A would have been bestowed on him under the condition

if the help A would have been bestowed,

we include with the help A all the other [things] and only the [things] that constitute Judas's freedom, among which is doubtless found the decision applying the omnipotence and producing both the help and all the other [things] without which Judas's freedom could neither exist nor be conceived.

[The road to travel]

{14} Now, supposing all of this to be true, and since nothing else, according to what will be said below, persuades us to the contrary, here, then, is the road leading to the reconciliation of middle knowledge not only with premotion, meaning "indifferent" – duly inferred from texts of St. Thomas to be explained below (for brevity's sake I will call it "Thomasian" from now on to distinguish it from Bañezian or "Thomistic" premotion⁴⁸)–, but also with Scotistic attendant decision – as duly inferred from the

_

⁴⁷ [I read "A" here for "B".]

⁴⁸ [Blanco applies the adjective "Banetianus" or "Thomisticus" to the interpretation of the Báñez, which he rejects as unrepresentative of St. Thomas Aquinas ("Bañezianism" was used by Bañez' opponents to imply his views were his own, not St. Thomas's). Blanco reserves the word "Thomasianus" for what he considers St. Thomas true position.]

principles and words of Scotus himself, according to his texts that we shall present in their proper place, concerning which even many heads (I mean "doctors") of the Scotists who disagree among themselves will come to agreement.

{15} The road is that decision that we set forth at the beginning. For since many Thomists identify premotion with the divine decision or with the divine action, as we saw {p.19} in the prologue when citing Tanner and will again see further on, and moreover since the decision is in a certain way antecedent and in a certain way attendant, and also the concourse is previous in its own way and simultaneous in its own way (as that decision precedes objectively, conditionally on the part of the prior created freedom as one of the things constituting the created free potency when the conditioned existence of the help willed by such a decision is joined to it), by this very fact the middle knowledge of our Society results or issues in God's supreme cognitive power.

In our Jesuit opinion, God knows by middle knowledge the conditioned future in the future itself in such wise that (again, in our opinion cited in Izquierdo) He knows such a future while it is future. He knows it, I say, in His very decision; not as in one connected determinedly in itself with the future, as for example Peter's love, but in His decision as the object to which Peter's future love belongs, supposing that this love is future determinatively from Peter, when God co-produces the love at the same time, and in the words of Tanner, in some way "as it were co-determining" the love with Peter.

[A truce before the resumption of hostilities]

{16} When you hear "God as it were co-determining" – the phrase comes from the Scotists – remember that I am not playing the role of a judge here but that of an ambassador whose office it is not to hand down decisions but to propose the conditions of peace {p.20}. I do this during the time the truce has been declared, especially in this [first] section, and until, after studying the matter at greater length and more maturely in the course of the treatise, it will finally be clear what should be said after the war breaks out again and the many reasons for misgivings (that are already occurring to some mind when he reads or hears what I have said) come up again for scrutiny and discussion.

May you hold off your criticism, I beg you, while St. Thomas speaks, Scotus speaks, Fasolo and other doctors of the Society speak – practically with the same words, indeed with the attitude and in the meaning of the Scotists. And then let the critics brand me with any stigma they please.

[Middle knowledge]

{17} On the road of the decision we described, then, middle knowledge, Thomasian premotion and Scotistic attendant decision will travel together. For as middle knowledge precedes in an objective, conditioned manner the decision on the part of an indifferent potency, say, of Peter, which determines God and himself by his action (as I have just described it and shall explain further and demonstrate later), the supreme cognitive power of God requires nothing else in order to know at once the future love, say, of Peter, and indeed to know such love both in the love itself and in the divine

decision and determined action. God's action is not indeed determined previously in itself and by itself; but determined attendantly or consequently.

Our {p.21} Fasolo uses these two terms, which we are to present later within the Scotist camp, omitting for now other expressions that we shall save for a better place to defend our rapprochement, not without the surprise and joy of Mastrio himself, and adding the expression of our own and of St. Thomas himself, as well as those of the Thomists and Scotists.

[Thomasian premotion]

{18} Thomasian premotion or predetermination will also travel on the road of this decision. For the decision identified with the divine disjunctive action for love or hate and determined for the congruous help A is by this very fact understood to be the previous concourse by which God pre-moves Peter to either [act] and also predetermines him to either in such a way that God's predetermination continues to be further determinable in another way by the free creature.

"Determinable", I say, not because of any poverty or insufficiency of God considered in Himself, but rather because of the divine condescension that constitutes the second free cause by His decision which wills to determine Peter in one direction owing to His role as first cause and first free [being] by ceasing to be determined [se determinari] in the other direction by the free creature, in order to save Peter's freedom. God wills and constitutes Peter's freedom in fact by such a decision.

Now, by that very decision, where {p.22} God's will is terminated and determined as by its own immediate term seeing that it is in His own second act, there begins the first act of the created freedom about to issue into second act, ever attended by God's decision and concourse. His concourse is also simultaneous while in a posteriority of nature it is as it were drawn by the creature's action into love, say, rather than hate.

[Scotistic attendant decision]

{19} Finally, Scotistic attendant decision travels the same road. For according to Scotus himself God (in Mastrio's words)⁴⁹ by one and the same act decides from eternity and works in time:

since it is the selfsame act whereby He decides from eternity what things are going to be and through which He afterwards produces them in time,

according to Scotus⁵⁰ – and others say the same thing–:

God's external concourse, that is, the concourse that passes in time, is the same as His inner, immanent concourse whereby from eternity He decides to concur with us.

Mastrio states:51

⁴⁹ (k) Vol. 1, disp. 3, q. 3, a. 8, n. 171.

⁵⁰ (1) 2, dist. 37, v.

According to Scotus, God does not work at the working of the created will except when the latter determines itself in time to act. Nor has He decided for free created actions from eternity without the determination of the created will whose determination God's concourse attends without the simultaneity "wherein" (that is, the simultaneity of time), that is, of the same real instant, obstructing the priority "wherefrom."

This is seen in our decision by virtue of which God causes the creature's very determination wherewith in a certain way {p.23} He co-determines the love by a co-determination at least of co-producer, that is of concourse, or of co-efficacy. Later we shall also present the expressions, arguments and, ways of speaking commonly used by ourselves and by Scotistic scholars.

[The "Cord"]

{20} These and other points that we shall make below led me to name my treatise *The Three-Stranded Cord*. My first reason is that it happens to be like a rope, firmly plaited of the three strands of middle knowledge, Thomasian premotion, and attendant decision. The second is that it is distinguished by several sorts of adornment and, if you will, of three colors, that is, the three schools I am calling to accord: Thomists, Scotists, and Jesuits. My final reason is that the disagreement in full agreement travels this hidden, truly threefold, road. For it advances by the disjunctive decision as it were along a branching of three roads leading to love, hate, and help. God so to speak walks this road, the creatures walk it, and grace, too, walks it. Besides other lesser threesomes that each one will easily detect in my title, while we hasten to more important concerns.

[Problems]

{21} As the three fronts stand ready to do battle, several issues come up that seem to stand in the way and block the rapprochement we are proposing.

[Problem 1]

The first obstacle regards the possibility of a disjunctive decision between one or the other of the creature's acts, especially if what we call {p.24} "freedom of contradiction" is to be brought in.

[Problem 2]

The second is our identifying the action of the divine omnipotence with God's decision, in particular with a disjunctive decision, because such disjunctive and undetermined action appears beset with more difficulties since the concept of action entails that there be a determination of the cause to act.

⁵¹ (m) In the cited article.

[Problem 3]

The third problem is our distinguishing created action from God's action, since the common opinion of our own implies that the creature and God produce by the same action, lest either we fall in with Durandus⁵² or we attribute an action to an action.

[Problem 4]

The forth obstacle is the very war-cry of our own as well as of the Thomists and Scotists. We must pay careful attention to it lest no agreement be reached, if an agreement is asked of those who, after being invited reasonably, flatly reject it.

[Reconciliation]

{22} However, to examine these and many other points involved in our claims with suitable reflection, we have stretched out our cord into several sections, as it were, into several strands, or chapters. But we have not done so in such a way that in the end we claim to play the role of a judge. For by ever discharging the office of ambassador of peace, we shall in such wise display everything that after offering from each side the best conditions for the accord that we desire, each will embrace willingly what he deems most acceptable. For I am not campaigning {p.25} for [ambio] an agreement that any reasonable person would believe to be at odds with the truth, but one that so concords with the truth that no one will fail to embrace it out of an exaggerated bias toward his own. Let us see, then, what they have that would prevent the accord that we here have so simply described and proposed.

_

⁵² [Durandus de Saint-Pourçain, 1275-1332; although a Dominican bishop, he opposed teachings of St. Thomas. He did not recognize the universal causality of God's efficacious grace in human actions (God "is the cause of free actions only insofar as He creates and conserves free will," *In 2 Sent.* 37:1).]

APPENDIX B - SYMBOLS

- A (Blanco's symbol) (God) helps
- B (Blanco's symbol) (Peter) decides for love
- C (Blanco's symbol) (Peter) decides for hate
- J Judas repents
- p (any proposition)
- ~p not p
- q (any proposition)
- Dp (Peter, Judas...) decides that p
- Wp God wills (decides, actualizes) that p
- p∨q p or q
- p&q p and q
- $p \rightarrow q$ if p then q
- $p \leftrightarrow q$ p if and only if q
- $p\ddagger q$ ($\sim [p\leftrightarrow q]$) either p or q (not both)
- p|q (~[p&q]) not p and q