



P.S.M.L.M.



Proceedings of the Society for Medieval Logic
and Metaphysics

Volume 1, 2001

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.

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 Society's web site (<http://www.fordham.edu/gsas/phil/klima/SMLM/>) 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 Gyula Klima (Philosophy, Fordham University) by e-mail at: klima@fordham.edu

Volume 2, forthcoming toward the end of 2002, is expected to contain papers to be presented at the philosophy sessions of the

Medieval Academy of America 2002 Annual Meeting in New York City, NY,

and SMLM-sponsored papers to be presented at

The International Congress on Medieval Studies in Kalamazoo, MI,

and at

The American Catholic Philosophical Association 2002 Annual Meeting, in Cincinnati, OH

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

TABLE OF CONTENTS

Jack Zupko: John Buridan on the Immateriality of the Intellect.....	4
Gyula Klima: Aquinas's Proofs of the Immateriality of the Intellect from the Universality of Human Thought	19
Robert Pasnau: Comments on Gyula Klima, "Aquinas's Proofs of the Immateriality of Intellect"	29
Gyula Klima: Reply to Bob Pasnau on Aquinas's Proofs for the Immateriality of the Intellect.....	37
Joshua P. Hochschild: Logic or Metaphysics in Cajetan's Theory of Analogy: Can Extrinsic Denomination be a Semantic Property?.....	45
Gyula Klima: On whether <i>id quo nihil maius cogitari potest</i> is in the understanding...	70

Jack Zupko:

John Buridan on the Immateriality of the Intellect

John Buridan (ca. 1295-1361) examines the question of the immateriality of the human soul in the sixth question of Book III of the third and final version of his *Quaestiones* on Aristotle's *De anima*.^{*} The lectures on which this commentary is based were given fairly late in Buridan's long career as an Arts Master at the University of Paris. If a reference in Book III, Question 11 to certain condemned propositions associated with John of Mirecourt is not a later addition,¹ it must have been composed after 1347, when Buridan was already an established figure at the University and had twice served as its Rector. The designation "third and final lecture" comes from the text itself. There are two earlier versions: a *prima* or first *lectura*, which has been edited by Benoît Patar,² and a second or middle version, which is unedited and exists in some 15 manuscripts. Like a number of other later medieval arts masters, Buridan also wrote a literal commentary or *expositio* on *De anima*, which has also been edited by Patar.³

The relationship between these different *Quaestiones* is generally in the direction of increasing length and sophistication over time. Thus, the third and final version contains more questions (e.g., 20 in Book III, as opposed to 15 in the first and second versions) treated in more detail than in Buridan's earlier efforts. The third version is also less literal in the sense that it spends less time explicating and inventorying arguments from Aristotle and other authorities. For example, in his first version discussion of whether the human intellect is everlasting, he is content to give careful accounts of the arguments on each side, without taking a position on the question himself. "Our aim in

^{*} *Ioannis Buridani Quaestiones in libros Aristotelis 'De anima' secundum tertiam sive ultimam lectionem*, lib. III, qu. 6. I have translated the entire text of this Question in the course of this essay. The edition was prepared from 6 of 19 known mss. of this work: *Oxford BodlL canon. auct. class. lat.* 278 ff. 2r-36r; *Oxford BodlL canon. class. misc.* 393 ff. 1r-75v; *Vaticana Vat. lat.* 2164 ff. 122r-234r; *Vaticana Vat. lat.* 11575 ff. 22r-87r; *Vaticana Reg. lat.* 1959 ff. 1r-69v; and *Wien NB 5454 ff.* 1r-59v. See my "John Buridan's Philosophy of Mind: An Edition and Translation of Book III of his 'Questions on Aristotle's *De anima*' (Third Redaction), with Commentary and Critical and Interpretative Essays," Ph. D. Dissertation, Cornell University, 1989 (UMI #9001313) (hereafter '*QDA*₃', by page and line number). For the manuscript tradition, see Bernd Michael, *Johannes Buridan: Studien zu seinem Leben, seinen Werken und zu Rezeption seiner Theorien im Europa des späten Mittelalters*, 2 Teile, Ph.D. Dissertation, University of Berlin, 1985: 693-731.

¹ *QDA*₃ III.11: 121-22, ll. 174-99.

² Benoît Patar, *Le Traité de l'âme de Jean Buridan [De prima lectura]*, Philosophes Médiévaux, Tome 29, Louvain-Longueuil (Québec):Éditions de l'Institut Supérieur de Philosophie-Éditions du Préambule, 1991.

³ See Patar 1991.

this Question,” he tells us, “is to provide some arguments and certain credible remarks [*persuasiones*] by which one can be persuaded that the intellect is everlasting. Then, in another question [*in alia quaestione*], we can study the diversity of opinion on this matter, viz., as regards the intellect being everlasting”.⁴ However, the “*alia quaestio*” is nowhere to be found in this text – unless, of course, it is a reference to a discussion in another, later work. If so, then the text I will be discussing here has an excellent claim to being that “*alia quaestio*”.

In this Question, which occurs as Question 6 of Book III in the third version of his commentary, Buridan asks “concerning the nature of the human intellect ... whether it is everlasting [*perpetuus*]”. The word ‘nature’ is important because in this context it indicates that Buridan is primarily interested in what is evident to us through experience. Like most medieval commentators on Aristotle, Buridan conceives of psychology as that branch of physics whose proper subject is mobile, animate being. As we shall see, this does not mean that Buridan refuses to consider any arguments based on theological or more straightforwardly metaphysical premises, only that such arguments are cited to define the logical space in which the natural scientist must operate when addressing the question of the immortality of the intellect.

*QDA*₃ III.3-6 together form a sub-treatise within Buridan’s commentary on the nature of the human intellect: Q.3 asks whether the human intellect is the substantial form of the human body; Q.4 whether this form is inherent in the human body; Q.5 whether it is one in number for all human beings; and Q.6 whether it is everlasting. *QDA*₃ III.3-6 differ from other Questions in Book III in several respects. First, only Q.6, the concluding Question of the group, is based on a lemma from Aristotle’s *De anima* (in this case, his well known remark about that part of the intellect which “alone is immortal and everlasting” at III.5.430a23). QQ.3-5 all stem from topics about which Aristotle says very little, but which are, on the other hand, given considerably more attention by authorities such as Alexander of Aphrodisias and Averroes. Second, *QDA*₃ III.3-6 revert to the expository format more typical of Buridan’s earlier commentaries on *De anima*. Buridan makes a remark not very far into Q.3 that could apply to any of the Questions in that group, a remark we will see echoed in Q. 6: “This Question has been raised in order to sort out the different opinions about the intellect itself, so that we might see how they agree and disagree and might inquire later into their differences”.⁵ These Questions wear their pedagogical aim on their sleeves, as it were. Finally, “truths of the faith” actually play a role in the determination of these questions, whereas they are hardly ever mentioned in the rest of the commentary. Where the nature of the intellect is concerned, however, “the opinion of the faith” gets equal billing with the opinions of Alexander and Averroes as possible metaphysical worldviews, inviting the assent of the natural philosopher.

⁴ Patar 1991: 434.

⁵ *QDA*₃ III.3: 22, ll. 53-54.

Question 6 begins with four negative arguments, which Buridan takes to represent the Alexandrian position.⁶ The first is as follows:

It is argued that it is not [N1], because it follows that human beings would be everlasting [*perpetuus*], which is false, since human beings are generated and will die. The consequence is obvious, because a composite substance is evidently only corrupted through the corruption of its substantial form, and the intellect is the substantial form of man; therefore, a man is corrupted only if his intellect is corrupted. This is highly confirmed if we assume only one substantial form in a man, viz., the intellectual soul, for then a man would be nothing but a substantial composite of intellect and prime matter, which is everlasting. Thus, all parts of a man would be everlasting, and the parts of a man are the man, so the man would be everlasting. Whence it is argued by a similar exposition that the intellect of this man is A and his matter is B. Then it is argued that this A and this B are everlasting, but this A and this B are this man, since the parts belong to the whole, so the man is everlasting.

This argument (which I have labeled ‘N1’) attempts to saddle those who contend that the human intellect is everlasting with the consequence that this would make human beings everlasting – which is false, since obviously, “human beings are generated and will die”. The argument invokes the Aristotelian principle that something is corrupted just in case its substantial form is corrupted, so that if the intellect is the substantial form of a human being (which was the main thesis of Q.3),⁷ and never corrupted (the second thesis of Q.3),⁸ no human being will ever be corrupted. This leads to a sub-argument which looks to be a rather obvious instance of the fallacy of composition: a human being is substantially or essentially composed of intellect and prime matter, both of which are everlasting; but since the essential parts of a human being are everlasting, and these parts belong to the whole, then the human being must also be everlasting. But this, of course, depends on the mistaken assumption that a substance is no more than the sum of its essential parts.⁹

The second and third negative arguments are standard *reductio* arguments against the hypothesis that human intellects are everlasting:

Again [N2], it follows that human intellects would then be actually infinite, which is absurd [*inconueniens*]. The consequence is obvious via Aristotle’s assumption that the world is eternal.¹⁰ There have been infinitely many human beings, each of which has

⁶ Buridan’s use of Alexander to represent the position of natural reason here led Konstanty Michalski in a 1928 article (“L’Influence d’Averroès et d’Alexandre d’Aphrodisias dans la psychologie du XIV^e siècle,” *Bulletin Internationale de l’Academie Polonaise des Sciences et Lettres, Classe de Philologie, Classe d’Histoire et de Philosophie*, pp. 14-16) to lump together Buridan and his followers at Paris as Alexandrists. But as Anneliese Maier pointed out in 1955: “one cannot really say that he [i.e., Buridan] decides in favor of the teaching of Alexander of Aphrodisias; throughout his arguments and conclusions, Buridan goes his own way, and then states only that his results agree with those of Alexander” (*Metaphysische Hintergründe*, Roma: Storia e Letteratura, 1955: 27). In the case of the immortality of the human intellect, however, Buridan is decidedly opposed to the position of Alexander, as we shall see.

⁷ *QDA*₃ III.3: 23, ll. 83-87.

⁸ *QDA*₃ III.3: 23-5, ll. 88-143; cf. *QDA*₃ III.4: 33-4, ll. 121-144.

⁹ See Arist., *Metaph.* VII-VIII

¹⁰ Arist. *Phys.* VIII.1; cf. *Metaph.* IX.8; XII.6; *De caelo* I.3

had its own proper intellect, since it was said above [i.e., in Q.5] that the intellectual soul is multiplied according to the number of human beings [*anima intellectiva multiplicatur ad multiplicationem hominum*]. Therefore, there have been infinitely many human intellects that still exist because they are supposed to be everlasting. Therefore, there are now actually infinitely many of them.

Again [N3], it follows that the intellect would be superfluous [*otiosus*] after death, which is absurd, because nothing superfluous should be assumed in nature. The consequence is obvious because it would <then> be without an operation, since, as Aristotle says, it understands nothing without phantasms.¹¹ And there are no phantasms after death, since they require corporeal organs.

According to N2, Aristotle's argument for the eternity of the world forces us to accept an actual infinity of human intellects, since (1) intellects are multiplied in keeping with the number of human beings,¹² (2) "there have been infinitely many human beings",¹³ and (3) the intellect is everlasting, so it can continue to exist even if the body in which it inheres is corrupted. Likewise, N3 attempts to show that an everlasting intellect would constitute an exception to universal teleology: since the intellect cannot operate without phantasms generated by a corporeal organ, it would be rendered inactive upon separation from the body, thereby fulfilling no purpose; but nature does not permit anything to exist without a purpose; therefore, the intellect cannot continue to exist once it is separated from the body. Buridan defends the principle of universal teleology later in Book III, at Q.19.

The fourth negative argument cites an authoritative remark apparently contrary to the hypothesis:

Again [N4], Aristotle says in *De anima* III that the passive intellect is corruptible,¹⁴ and this is the human intellect, since to understand is to be acted upon [*cum intelligere sit pati*]. Therefore, etc.

The point seems quite straightforward, though Buridan will tell us how to read it later in the Question.

Following the *oppositum*, Buridan balances the case with four affirmative arguments:

The opposite is argued by Aristotle when he says [A1] that the intellect is separated from other things just as the everlasting is from the corruptible,¹⁵ and [A2] that it is immortal, everlasting, and impassible [*immortalis et perpetuus et impassibilis*].¹⁶

Again [A3], if it remains after death, it must be concluded that it is everlasting. But it does remain after death because otherwise, Aristotle would ask pointlessly why we do not remember after death.¹⁷

¹¹ Arist. *De an.* III.7.431a16.

¹² A thesis argued for in *QDA*, III.5: 42-3, ll. 86-115.

¹³ This is, of course, a consequence of the assumption of a beginningless world, if human beings (1) are creatures of *essentially* infinite duration, and (2) have always been here.

¹⁴ Arist. *De an.* III.5.430a24-25.

¹⁵ Arist. *De an.* II.2.413b26-27.

¹⁶ Arist. *De an.* III.5.430a23.

Again [A4], according to Aristotle everything generated has matter from whose potentiality it is derived [*habet materiam de cuius potentia educitur*].¹⁸ But the intellect does not have matter in this way. Therefore, it is not generated, and everything ungenerated is incorruptible and consequently everlasting, as is obvious in *De caelo* I.¹⁹ Therefore, etc.

The strategy of A1-4 is to show that by his various remarks on the subject, Aristotle is committed to the immortality of the human soul. For example, A3 contends that Aristotle's claim in *De an.* III.5 that once separated, the active intellect does not "remember its former activity", makes no sense unless it is assumed that at least part of the intellect is everlasting. And Aristotle never does anything pointlessly, of course! A4 looks back to arguments presented in Q.3 against Alexander's opinion that "the human intellect is a generable and corruptible material form, derived from a material potentiality, and materially extended."²⁰ According to A4, the intellect has matter, but not in the way suggested by Alexander. But if it is not generated from matter in the way that material forms are, it must be incorruptible and hence everlasting. It is important to notice that the immateriality question is always connected to the immortality question for the natural philosopher. Death just means the corruption of the material essence of a thing, and so if a thing has no matter, it cannot die. Ironically, most medieval thinkers would probably agree with Epicurus's famous dictum, "Where death is, we are not", not because death is empirically beyond us, as Epicurus tried to argue, but because it is *metaphysically* alien to our nature. The necessity they would attach to this statement is accordingly much stronger.

Buridan opens his resolution of Q.6 by stating, incredibly, that:

The resolution [*veritas*] of this question is apparent from what has already been said <i.e., in QQ. 3-5>, but it has been raised here so that everything might be reviewed together [*sed mota est ut omnia recolligantur simul*].

So, are we already supposed to know what to say about the immortality of the human intellect? Perhaps. But that is not the purpose of the Question. Buridan's aim is rather to teach by determining the logical import of the different possible positions on the nature of the intellect. Which theses are consistent with each position? Which are not? To students faced with a variety of claims from conflicting authorities about what sort of thing the soul is, this is important information. Ultimately, it will govern how they talk about the intellect as well as defining the parameters within which they will determine the question of its immortality.

CN1-7 are an attempt to connect the various conclusions about the nature of the soul arrived at by natural reason in QQ.3-5.

¹⁷ Cf. Arist. *De an.* III.5.430a22-25.

¹⁸ Cf. Arist. *De caelo* I.11-12.

¹⁹ Arist. *De caelo* I.12.281b26-27.

²⁰ *QDA*₃ III.3: 22, ll. 58-62. For the contrary arguments, see *QDA*₃ III.3: 23-5, ll. 92-43.

First, I list the conclusions someone might reach if he used natural arguments alone without the catholic faith, via principles from species made evident by the nature of sense and intellect, without a special and supernatural revelation [*enumero primo conclusiones quas aliquis poneret si sine fide catholica solum rationibus naturalibus uteretur, per principia ex speciebus habentibus evidentiam per naturam sensus et intellectus, sine speciali et supernaturali revelatione*]. Some of these conclusions are categorical, others hypothetical.

It is the hypothetical conclusions that most interest Buridan, for their interrelationships can be logically determined. CN1, for example, mentions Aristotle's argument in *De caelo* that the property of always having existed entails the property of always existing in the future:²¹

The first [CN1] is that if the intellect were everlasting heretofore, it would be everlasting hereafter [*si intellectus esset perpetuus a parte ante, ipse esset perpetuus a parte post*], for Aristotle believed this to be proved in *De caelo* I.²²

According to CN2, denying that the intellect is everlasting either heretofore or hereafter gives us the position of Alexander.²³ Similarly, CN3 shows that by contraposition of CN2, we get Averroist arguments for the immortality of the intellect.²⁴ CN4 concludes from CN2-3 that the properties of being everlasting (as interpreted by Averroes) and being inherent in matter (as interpreted by Alexander) are incompatible. The reason is clear: if its inherence were Alexandrian, the intellect would always be present in the body in precisely the way that some dimension or other is always present in a body,²⁵ but no one would want to say that like dimension, the human intellect remains after death and inheres "in the matter of the corpse or the earth".

The relationship between the positions of Alexander and Averroes is further specified in CN5, according to which (1) the six properties definitive of the soul for Alexander are consequences of one another; (2) the six properties definitive of the soul for Averroes are consequences of one another; and (3) each property associated with one position has its contradictory associated with the other.²⁶ Buridan seems to be saying that from the standpoint of natural reason, there are two equally possible but diametrically opposed ways of understanding the human intellect, viz., the materialism of Alexander, or the immaterialism of Averroes. A third contender, the position of the faith, is repeatedly described as something "natural reason does not dictate [*ratio naturalis non dictaret*]":

The second [CN2] is that if the intellect were not everlasting heretofore and hereafter, it would be generated, corruptible, derived from a material potentiality, materially

²¹ Arist. *De caelo* I.12.281b26-31. Notice, however, that on the sense in which the intellect is everlasting that Buridan comes to accept in TF1 below, it is false that the intellect has always existed.

²² Arist. *De caelo* I.12.281b26-31.

²³ For which, see *QDA*₃ III.3: 22, ll. 58-62.

²⁴ Cf. *QDA*₃ III.5: 43, ll. 116-124.

²⁵ 'Extension' would work as well as 'dimension' here, of course, since as long as it exists, the body of Socrates is an extended thing.

²⁶ Cf. *QDA*₃ III.3: 22, ll. 58-73.

extended, and multiplied according to the number of human beings [*ipse esset genitus et corruptibilis et eductus de potentia materiae et extensus extensione materiae et multiplicatus multiplicatione hominum*]. For if the intellect is not everlasting, it was made, and natural reason does not dictate – without faith or supernatural revelation – that anything has been made in the mode of creation [*per modum creationis*], but rather, that everything made in time is made in the mode of natural generation from a presupposed subject from whose potentiality <its> form is derived by an agent. Aristotle tries to prove this in *Physics* I and *Metaphysics* VII,²⁷ and natural reason dictates that everything we have spoken of accords with this kind of generation.

The third conclusion [CN3] is inferred from the second by moving from the opposite of the consequent to the opposite of the antecedent: i.e., if the intellect is not derived from a material potentiality, it is everlasting; and likewise, if it is not extended, it is everlasting; and if it is not multiplied, it is everlasting.

The fourth conclusion [CN4] – that if it is not derived from a material potentiality, it does not inhere in matter – is proved because if it were not <so> derived, it would be everlasting heretofore and hereafter, as is obvious from the previous conclusions. And natural reason would never dictate that an everlasting form inheres in matter unless it always inheres in the same thing, as some have claimed about indeterminate dimensions [*sicut aliqui posuerunt de dimensionibus indeterminatis*]. And natural reason would never dictate this about the human intellect because if the human intellect inheres in matter, this is nothing but the matter of a man, which remains after death in the corpse or the earth, and no one, would say then that the human intellect would inhere in the matter of the corpse or the earth.

The fifth conclusion [CN5]: these six are consequences of each other: the intellect's being everlasting, not being generated or corruptible, not being derived from a material potentiality, not inhering in matter, not being materially extended, and not being multiplied [*intellectum esse perpetuum, non esse genitum nec corruptibilem, non esse eductum de potentia materiae, non inhaerere materiae, non esse extensum extensione materiae, et non esse multiplicatum*]. And likewise, there are six opposed to these which are consequences of each other: i.e., not being everlasting, being generated or corruptible, being derived from a material potentiality, inhering in matter, being extended, and being multiplied. This entire conclusion is inferred [*infertur*] from what has already been said <i.e., in QQ. 3-5>.

Again, his point seems to be that the positions of Alexander and Averroes are on equal footing as antinomies of human reason.

CN6 is the only conclusion of the lot that is strictly categorical in form, as Buridan tells us himself:

The sixth conclusion [CN6] is categorical: the human intellect inheres in the human body without matter. This was previously advanced and proved <i.e., in q. 4>.

But it is something of an overstatement to say that it was previously “advanced and proved” that the intellect inheres in the body without matter. In Q.3, Buridan conceded that there are no demonstrative arguments on behalf of the view that the human intellect is *not* a material form, even permitting Alexander a final response, without further

²⁷ Arist. *Phys.* I.9.192a25-33; *Metaph.* VII.7.1032a15 ff.

rejoinder, to the arguments raised against him.²⁸ And Alexander's position itself appears, non-assertively of course, as the seventh conclusion of Q.6:

A seventh conclusion [CN7] is inferred, which was the opinion of Alexander: the intellect is generable and corruptible, extended, derived, inherent, and multiplied.

To these seven conclusions based on natural reason [CN1-7], Buridan contrasts five representing the position of the faith [CF1-5], adding that the latter are not demonstrable from the natural order of things:

Nevertheless, we must firmly uphold that not all of these conclusions are true, since they are against the catholic faith [*quia sunt contra fidem catholicam*]. I believe, however, that the opposite conclusions are not demonstrable without a special and supernatural revelation.

This places the natural philosopher in something of a bind, since the position he must firmly uphold on the nature of the intellect cannot be demonstrated via the principles and conclusions of natural science. Accordingly:

The conclusions or propositions we must uphold in this matter according to the catholic faith must now be described without proofs [*narrandae sunt sine probationibus*], of which the first [CF1] is that the human intellect is not everlasting heretofore, although it is hereafter.

The second conclusion [CF2] is that the intellect is not strictly generated by natural generation, but it is created; nor is it strictly corruptible by natural corruption, but it is annihilable. And yet, it will not be annihilated [*Et tamen non annihilatur*].

The third conclusion [CF3] is that the intellect is not derived from a material potentiality, nor extended.

The fourth conclusion [CF4] is that it is multiplied according to the number of human beings.

The fifth [CF5] is that it is inherent in the human body or matter as long as a man is alive, and is separable from the body and will return to it again.

According to CF1-5, then, the intellect is (1) everlasting hereafter but not heretofore;²⁹ (2) created and yet annihilable;³⁰ (3) neither derived from a material potentiality nor extended; (4) numerically many, in keeping with the number of human beings; and (5) inherent in the human body, and yet separable from it. In spite of the indemonstrability of these propositions, however, Buridan insists that any authoritative remarks (implicitly those of Alexander and Averroes) opposed to them must be rejected:

And all the authorities opposed to these conclusions must always be denied, even though we cannot demonstrate their opposites.

²⁸ *QDA*₃ III.3: 26-7, ll. 152-183.

²⁹ In other words, the everlastingness of the human intellect is right-handed.

³⁰ The annihilability of the intellect is a consequence of divine omnipotence: God has the power to snuff even an immortal entity out of existence, although as Buridan recognizes in TF2, he does not in fact do so.

How are we not to regard this as an indefensible piece of dogma? What is the force of the “must” here?

Fortunately, Buridan does not leave us hanging. But it does take some interpreting of the text to see why this does not amount to the complete abrogation of human reason on a question traditionally thought to be susceptible to its pronouncements. Buridan himself tells us what we should focus on as natural philosophers:

The most important thing to see, then, is how we respond to the arguments made at the beginning of the question insofar as they are seen to strive against the faith [*laborare contra fidem*].

What he proceeds to give the reader are suggestions about how to parse claims about the nature of the human soul in a way that is both consistent with the faith and scientific, insofar as it applies the semantic doctrines of the *Summulae de dialectica*, his masterwork on logic. These remarks are, in turn, based upon his more general account of the epistemic status of claims about the human soul vis-à-vis other things we claim to know in the natural order, although the details are not discussed in Q.6.

Among the arguments identified with Alexander made at the beginning of the question [N1-4], the most worrisome is N1, which Buridan sees as an argument about the proper signification of names. The threat here involves the very possibility of scientific discourse. If we cannot secure some proper or literal sense in which it is true to say that the human intellect is immortal, then there will be no way to connect the traditional discourse of psychology with what is true about the soul and hence, no science of psychology. The problem is that the proposition ‘Man is everlasting’ is false if the term ‘man’ refers to a composite of body plus intellect, since that term ceases to refer at death, the moment at which the composite ceases to exist. Buridan describes three different strategies for dealing with this problem [R1-3 ad N1].

First [R1 ad N1], if the terms ‘man’ or ‘Socrates’ are taken to refer only to a soul *and* a body, and to connote this soul and body as “wholly constituted”, then a given human being will always exist, but he will not always be a human being:

The first argument [ad N1] is on behalf of Alexander’s position, but it difficult for us to resolve it. And so we say that the death of a horse is simply the corruption of the horse, but the death of a man is not simply the corruption of the man, but only the separation of one part of him from another. Therefore [R1 ad N1], some concede that this man, viz., Socrates, is everlasting hereafter in such a way that he will always be. But he will not always be a man or Socrates, because although the names ‘man’ and ‘Socrates’ supposit only for soul and body, they connote those parts as wholly constituted, i.e., as inherent in him. But they will not always be constituted in this way, and so although the man will always be, he will not always be a man [*quamvis ille homo semper erit, tamen non semper erit homo*]. Likewise, Socrates will always be, but he will not always be Socrates [*Sortes semper erit, sed non semper erit Sortes*]. In the same way, we say this of a horse or a stone, for God can separate the form of a horse or a stone from its matter, and conserve it separately [*separatim conservare*]. And so the stone or the horse would continue to be, but it would not be a horse or a stone.

We can express this difference by placing the subject term of the proposition either inside or outside the scope of the modal term ‘*semper* [always]’, so *Socrates* will always exist, but it is not the case that *he* (i.e., the individual referred to by the subject

term of the previous proposition) will always be Socrates. The connotation fails after his disembodiment at death and before his re-embodiment at the Last Judgment. This is likened to God's ability to separate form from matter, and to conserve one without the other, in which case "the stone or horse would continue to be, but it would not be a horse or stone".

In Q.4, Buridan reminds us that "the way in which the intellect inheres in the human body is not natural but supernatural. And it is certain that God could supernaturally not only form something not derived from a material potentiality, but also separate what has been so derived from its matter, conserve it separately, and place it in some other matter. Why, then, would this not be possible as regards the human intellect?".³¹ For him, the non-commensurable inherence of the human intellect in its body is not a natural state of affairs, meaning that it cannot be explained by appealing to the same principles that govern the inherence of material forms. The immortality of the human intellect is understood in a similar fashion. Although the principles that make it true are not demonstrably evident to our intellects, they are consistent and they do at least stand in demonstrable relationships. Thus, in Q.3 he speaks of:³²

the truth of our faith, which we must firmly believe: viz., that the human intellect is the substantial form of a body inhering in the human body, but not derived from a material potentiality nor materially extended, and so not naturally produced or corrupted; and yet it is not absolutely everlasting, since it was created in time. Nevertheless, it is sempiternal hereafter [*sempiterna a parte post*] in such a way that it will never be corrupted or annihilated, although God could annihilate it by God's absolute power.

As an Arts Master lecturing on Aristotle's natural philosophy, Buridan saw himself as committed to naturalistic explanation, which for him involves the construction of demonstrative or at least persuasive arguments based on evident premises. Where such arguments are lacking, he is inclined to indicate their absence and leave it at that, rather than to engage in *a priori* metaphysical speculation. He takes a similar approach to the question of the human soul's status as an immaterial form in Q.3:³³

Although this thesis [viz., that the human intellect is not a material form] is absolutely true, and must be firmly maintained by faith, and even though the arguments adduced for it are readily believable [*probabiles*], nevertheless, it is not apparent to me that they are demonstrative, [i.e., drawn] from principles having evidentness (leaving faith aside), unless God with a grace that is special and outside the usual course of nature could make it evident to us, just as he could make evident to anyone the article of the Trinity or Incarnation.

Buridan's point here is that since the immateriality of the human intellect is not evident to us, or apparent to our senses, he is in no position to construct arguments about it. Of

³¹ *QDA*₃ III.4: 37, ll. 201-7.

³² *QDA*₃ III.3: 22-3, ll. 74-82.

³³ *QDA*₃ III.3: 25-6, ll. 144-51.

course, God could make such truths evident to us directly, but in then our grasp of them would not be natural, but revealed.³⁴

The second strategy *contra Alexandrum* is based on the idea that “the substantial form is the much more principal part of a composite substance”:

However [R2 ad N1], others say that the substantial form is the much more principal part of a composite substance [*forma substantialis est valde principalior pars substantiae compositae*]. Therefore, the name of the substance – e.g., ‘man’, ‘animal’, ‘Socrates’, etc. – is imposed to signify a composite substance. But it would be principally by reason of the form that the name is naturally suited to supposit [1] for the composite of that matter and form, for the time during which this form is in that unique matter, and [2] for the form alone, when this form is not in any unique matter (which is why we say, ‘Saint Peter, pray for us’, even though he is not composed of matter and form). And so it is conceded not only that Socrates or this man will always be, but also that he will always be Socrates and this man.

Things are denominated by their more principal parts. According to this reply, the substance-terms ‘human being’, ‘animal’, ‘Socrates’, etc., follow the substantial form such that they designate (1) the composite of matter and form when the form is embodied, and (2) the form alone when the form is not embodied. Thus, because the terms ‘Socrates’ or ‘human being’ continue to refer even after disembodiment, the propositions ‘This is Socrates’ or ‘This is a human being’ never cease to be true.³⁵ And Saint Peter could not justifiably turn a deaf ear to our prayers because we have used the wrong name in summoning his intercession.

The third response [R3 ad 1] combines the two previous strategies [R1-2 ad 1]:

Still others say [R3 ad N1] that although a name is first and foremost imposed to signify a composite substance <R1>, nevertheless it is transferred to signify the form and to supposit for it on account of form’s great pre-eminence over matter [*propter eius magnam principalitatem super materiam*]<R2>. That is why Aristotle seems to uphold this expressly in *Metaphysics* VIII, for he raises <precisely> such a doubt: “one must not fail to notice, however, that sometimes it is obscure whether a name signifies the composite substance, or the actuality or form”.³⁶ And he replies, saying “but ‘animal’ will be [applied to] both [the composite and the actuality or form], not as something said by a single formula.”³⁷ In that case, then, insofar as the name ‘man’ signifies the composite, this man will always will be, but he will not always be a man due to the connotation, as was stated. But insofar as it signifies the form, so [1] a man will always be; and [2] he will always be a man; and [3] he will never be corrupted.

³⁴ Buridan elsewhere allows that there are theological arguments concerning the nature of the soul – e.g., that Christ “assumed a complete and entire humanity [*assumpsit sibi totam humanitatem et integram*]”, including a sensitive soul – but says that these produce a “great faith [*magnam fidem*]” in him, not knowledge (*QDA*₃ III.17: 192, ll. 82-9).

³⁵ For further discussion, see Chapter 10 of my *John Buridan: Portrait of a 14th-Century Arts Master*, forthcoming from University of Notre Dame Press.

³⁶ Arist. *Metaph.* VIII.3.1043a29-30.

³⁷ Arist. *Metaph.* VIII.3.1043a36.

Thus, (1) insofar as the term 'human being' is imposed to signify a composite of soul and body, the particular human so designated will always exist, but not always as a human being; and (2) insofar as 'human being' signifies the substantial form, the particular human so designated will always exist as a human being.

Although Buridan's application of the semantic notions of connotation and denomination by the more principal part enable us to speak of the human soul as such in a way that does not reduce to mere metaphor, he does not attempt here to refute Alexander's argument. But he does suggest where one might find the appropriate discussion, i.e., in theological treatises, especially in replies to the question of whether Christ was a human being between his death and resurrection.

Finally, let us say [R4 ad N1] that the determination of this doubt pertains to metaphysics or to the Faculty of Sacred Theology. Accordingly, several theologians have raised the following quodlibetal [question]: Whether Christ was a human being during the three days [*Utrum Christus in triduo erat homo*], i.e., when his body was in the sepulcher without a soul, and his soul was among the dead without a body.

As a career Arts Master, Buridan never wrote any theological works, and there is no discussion of whether the human intellect is everlasting in his influential commentary on Aristotle's *Metaphysics*. I believe this is for good reason. Since the truth of the proposition that the intellect is immortal is simply not evident to us by itself or demonstrable from evidently true premises, there is strictly speaking no *scientia* or knowledge about human immortality in this life – although theologians can speak about this from propositions whose truth we firmly accept on the basis of their revelation in scripture or Church teaching. In his *Metaphysics* commentary, Buridan glosses this distinction between metaphysics and theology as follows:³⁸

It should also be noted that [when we ask whether metaphysics is the same as wisdom,] we are not comparing metaphysics to theology, which proceeds from beliefs that are not known, because although these beliefs are not known *per se* and most evident, we hold without doubt that theology is the more principal discipline and that it is wisdom most properly speaking. In this question, however, we are merely asking about intellectual habits based on human reason, [i.e.,] those discovered by the process of reasoning, which are deduced from what is evident to us. For it is in this sense that Aristotle calls metaphysics 'theology' and 'the divine science'. Accordingly, metaphysics differs from theology in the fact that although each considers God and those things that pertain to divinity, metaphysics only considers them as regards what can be proved and implied, or inductively inferred, by demonstrative reason. But theology has for its

³⁸ *QM I.2: 4ra-rb: "Notandum est quod hic non comparamus metaphysicam ad theologiam, quae procedit ex ignotis creditis quamvis non per se notis nec evidentissimus, quia sine dubio illam theologiam tenemus principaliorem et maxime proprie dictam sapientiam. Sed non in proposito non quaerimus nisi de habitibus intellectualis ex humana ratione et processu ratiocinativo inventis et ex nobis evidentibus deductis. Sic enim Aristoteles metaphysicam vocat 'theologiam' et 'scientiam divinam'. Unde in hoc differt metaphysica a theologia, quod cum utraque consideret de deo et de divinis, metaphysica non consideret de deo et de divinis nisi ea quae possunt probari et ratione demonstrativa concludi seu induci. Theologia vero habet pro principiis articulos creditos absque evidentia et considerat ultra quamcumque ex huiusmodi articulis possunt deduci".*

principles articles [of faith], which are believed quite apart from their evidentness, and further, considers whatever can be deduced from articles of this kind.

Using more recent terminology, we would say that Buridan thinks we can firmly believe that the human intellect is immortal and perhaps even be certain of it. But we could never *know* it.

After noting the convergence of his and Alexander's views on the finitude of human intellects:

To the other argument [ad N2], Alexander would deny that intellects are everlasting, and by faith, we would deny that the world is everlasting heretofore and hereafter, and so in neither case does an infinity of intellects follow.

Buridan replies to the third negative argument at the beginning of Q.6. But his reply essentially concedes the point: true, the intellect is superfluous after death as far as the operation of cognition is concerned, since it would no longer have access to phantasms produced by the imagination. But, he argues, the disembodied intellect will not in fact be inactive, since it can understand without phantasms by divine intervention:

To the other [ad N3], we say that after death, the human intellect understands without phantasms, which it can do by God's power and arrangement.

Likewise, Buridan indicates in his reply to N4 that he does not take the Aristotelian principle that the intellect understands nothing without phantasms to apply to disembodied thinking:

To the final <negative> argument [ad N4], we say that by 'passive intellect', Aristotle means the imaginative or cogitative power, which is not absolutely corrupted because it is the same as the intellective soul. But it is corrupted in this sense: the corporeal dispositions by means of which it was naturally suited to exist as an act of cognizing or imagining are corrupted. Therefore, it can no longer exist as the sort of act without which Aristotle thought that the human intellect could not understand³⁹ – which we do not hold.

Although this is one of the very few claims Buridan makes about disembodied existence, it is not pursued here or elsewhere in *QDA*₃. Indeed, in Q.15 he says that the question of "how we sense, understand, or remember after death and without a body is not considered [something that] this Faculty [i.e. the Faculty of Arts] decides upon".⁴⁰ I suspect he thought that no one else decides upon it either – or at least no one else in at the University, including professors in the Faculty of Theology.

Q.6 ends with the suggestion that a sufficiently motivated student should be able to see from these replies how to respond to the seven naturalistic conclusions about the nature of the intellect [CN1-7], described after the *oppositum*:

The <negative> arguments after the statement of the opposing position [CN1-7] are resolved or denied in keeping with the constraints of what has been said above, etc.

³⁹ Arist. *De an.* III.7.431a14-16; III.8.432a6-8

⁴⁰ *QDA*₃ III.15: 173, ll. 327-329.

This is very much in keeping with Buridan's idea that he is teaching his students the art of dialectical inquiry.

What is going on in Q.6? In my view, Buridan treats propositions about the metaphysical nature of the human intellect as boundary propositions. They are true, but their demonstration assumes that we assent to principles whose truth is simply not evident to us as empirical creatures.⁴¹ Hence, they constitute a limit of inquiry in philosophical psychology, beyond which we cease to do philosophy and instead engage in pointless and all too often presumptuous speculation. Is this what the theologians are engaged in? Not at all. If we are clear that we are no longer doing philosophy when we reason about the ultimate nature of the soul, as opposed, say, to specifying its powers and activities, there will be no danger of this.

Buridan acknowledges the evidential shortcomings of his account, but is quick to point out that his Alexandrian and Averroist competitors are no better off in that respect. What little evidence we do have is insufficient to establish *philosophically* any truths about how human souls are related to human bodies. His own convictions are hardly agnostic, of course. As he states in the *Summulae*: "on the basis of our faith we posit some special forms to be separable from their subjects without their corruption, as in the case of the intellective human soul, which is not educed from the potentiality of its matter, or its subject".⁴² But he is not about to let the strength of his convictions confuse him about what he knows to be true on other grounds.

Buridan's other writings reveal a confidence both in our natural ability to assent to what is true and in our cognitive powers as reliable producers of evident appearances.⁴³ This means that more often than not, if there is a problem in natural philosophy, it is because something has been spoken about in the wrong way. Buridan's famous remark in the debate over the nature of scientific knowledge – "I believe that such great controversy has arisen among the disputants because of a lack of logic [*ex defectu logicae*]"⁴⁴ – follows directly from this conception of the task of philosophy. The philosopher cannot answer all of the questions we might have about nature and the place of human beings

⁴¹ Interestingly enough, the human intellect shares many properties with demonstration in the strict sense: "it is common to every demonstration in the strict sense that it has a conclusion that is necessary, cannot be otherwise, is ingenerable, is incorruptible, is perpetual and is per se, and that it is from premises of this sort, or made up of common terms: (*Summulae* 8.11.2 in Gyula Klima (tr.), *John Buridan: 'Summulae de dialectica'* (New Haven: Yale University Press, 2001): 792). Could this be because both play limiting or criteriological roles in their respective spheres of metaphysics and logic?

⁴² *Summulae* 6.4.12 in Klima (tr.): 446

⁴³ See, e.g., *In Metaphysicen Aristotelis Questiones argutissimae*, Paris: 1588 (actually 1518); rpr. 1964 as *Kommentar zur Aristotelischen Metaphysik*, Frankfurt a. M., Minerva, I.5: 6ra and VI.17: 52va; *Subtilissimae Quaestiones super octo Physicorum libros Aristotelis*, Paris: 1509; rpr. 1964 as *Kommentar zur Aristotelischen Physik*, Frankfurt a. M., Minerva, I.15: 18vb-19ra; and Ria van der Lecq (ed.), *Johannes Buridanus, Questiones longe super librum Perihermeneias* (Nijmegen: Ingenium, 1983), II.11: 100.

⁴⁴ Johannes Buridanus, *Quaestiones super decem libros Ethicorum Aristotelis ad Nicomachum*, Paris: 1513; rpr. 1968, as *Super decem libros Ethicorum*, Frankfurt a. M., Minerva, VI.6: 122vb.

in it. Some, such as, ‘Is the number of the stars even?’, have answers that are simply not evident or such as to produce in us a proposition that looks good enough to command our assent. Others, such as, ‘How do we sense, understand, or remember after death and without a body?’, have evident arguments that can be marshaled on their behalf, but also appearances to the contrary, which, when taken together, prevent the conscientious philosopher from giving a definitive answer. Some of the questions generating mixed judgments can be resolved with the aid of another method of inquiry, e.g., by invoking articles of faith. But again, Buridan is very clear that when we do this we are no longer doing philosophy. Theology works from principles accepted because they are part of the doctrine of the faith and not because they are evident.

Of the remaining questions, many require only a perspicuous representation in our intellect. This is much harder than it appears, however, because our speaking and thinking are structured by language, and the expressive power of human conventional language will always fall short of its object, created being, which is the language spoken by God. Medieval thinkers understood this distinction as having a scriptural basis. Had Buridan turned his hand to theology, he would have surely admired the gloss on the apocryphal book of Ecclesiasticus with which Duns Scotus begins his *Quodlibetal Questions*: “‘All things are difficult,’ says Solomon, and immediately adds the reason why he thinks they are difficult: ‘Because man’s language is inadequate to explain them’ [Eccl. 1:8]”.⁴⁵

⁴⁵ See Felix Alluntis and Allan B. Wolter (tr.), *John Duns Scotus, God and Creatures: The Quodlibetal Questions* (Princeton, NJ-London Princeton University Press, 1975), Prologue: 3.

Gyula Klima:

Aquinas's Proofs of the Immateriality of the Intellect from the Universality of Human Thought

In his Commentary on the *Sentences* of Peter Lombard, Aquinas summarizes a proof of the immateriality of the intellect he attributes to Aristotle in the following way:

“Aristotle [...] shows that the intellect has an act of being separate [from matter], not dependent on the body; and for this reason it is not said to be an act of the body; and Avicenna calls it a form not submersed in matter, and in the *Liber de Causis* it is called a form not brought down on the body. And the middle term for demonstrating this is taken from its operation. For, since nothing can operate except a thing that exists per se, it is necessary for a thing that has a separate operation per se also to have a separate act of being. But the operation of the intellect belongs to it separately, so that it does not communicate in this operation with a bodily organ. And this is clear for three reasons. First, because this operation covers all corporeal forms as its objects; therefore, it is necessary that the principle of this operation be free from all material forms. Second, because understanding concerns universals, whereas in a corporeal organ only individuated intentions can be received. Third, because the intellect understands itself; but this does not occur in a power whose operation is performed by means of a corporeal organ.”¹

The main argument can be put in an explicit syllogistic form as follows:

1. Whatever has an operation not dependent on matter has an act of being not dependent on matter
2. The intellect has an operation not dependent on matter
3. Therefore, the intellect has an act of being not dependent on matter

The three auxiliary arguments Aquinas is briefly alluding to in the text are meant to prove the minor premise. In this paper, I am only going to deal with the first two of these arguments, which both concern the universality of the operation of the intellect, although in different respects. The first concerns the universality of the *scope* of this

¹ 2SN, d. 19, q. 1. a. 1-co Hanc autem opinionem Aristoteles, sufficienter infringit, ostendens intellectum habere esse absolutum, non dependens a corpore; propter quod dicitur non esse actus corporis; et ab avicenna dicitur non esse forma submersa in materia; et in libro de causis dicitur non esse super corpus delata. Hujus autem probationis medium sumitur ex parte operationis ejus. Cum enim operatio non possit esse nisi rei per se existentis, oportet illud quod per se habet operationem absolutam, etiam esse absolutum per se habere. Operatio autem intellectus est ipsius absolute, sine hoc quod in hac operatione aliquod organum corporale communicet; quod patet praecipue ex tribus. Primo, quia haec operatio est omnium formarum corporalium sicut objectorum; unde oportet illud principium cujus est haec operatio, ab omni forma corporali absolutum esse. Secundo, quia intelligere est universalium; in organo autem corporali recipi non possunt nisi intentiones individuatae. Tertio, quia intellectus intelligit se; quod non contingit in aliqua virtute cujus operatio sit per organum corporale.

operation, insofar as it claims that this operation covers all material natures as its objects.² The second concerns the universality of the *immediate objects* of this operation, insofar as this operation targets these material natures in their universality, by means of *universal concepts* that abstract from their individuating conditions.³

Obviously, both of these arguments presuppose a great deal from Aquinas's metaphysics and epistemology, and even with these presuppositions it may not be quite clear how they are supposed to work, if at all. In what follows, I am going to spell out these presuppositions in the framework of a reconstruction of these two arguments in a way that I think provides the best chances for these arguments "to work", that is, to prove their intended conclusions.

The argument from the *universality of scope* of human thought

The gist of the idea of the auxiliary argument from the universality of scope of human thought is Aristotle's analogy in his *On the Soul*, meant to provide a reason why the intellect has to be free from all material natures. In this analogy, Aristotle compares the intellect to the pupil of the eye, which, in order to be receptive of all colors, has to be colorless, so, by the same token, the intellect, in order to be receptive of all material natures, has to be immaterial.

This analogy is meant to provide the rationale for a universal principle, serving as the main premise of this argument, which claims that a cognitive faculty that is universally receptive of a range of forms must itself be free from those forms.

But the principle stated in this form is doubtful for at least two reasons.

² *In De Anima* lb. 3, lc. 7, n.10. Quod quidem tali ratione apparet. Omne enim, quod est in potentia ad aliquid et receptivum eius, caret eo ad quod est in potentia, et cuius est receptivum; sicut pupilla, quae est in potentia ad colores, et est receptiva ipsorum, est carens omni colore: sed intellectus noster sic intelligit intelligibilia, quod est in potentia ad ea et susceptivus eorum, sicut sensus sensibilibus: ergo caret omnibus illis rebus quas natus est intelligere. Cum igitur intellectus noster natus sit intelligere omnes res sensibiles et corporales, necesse est quod careat omni natura corporali, sicut sensus visus caret omni colore, propter hoc quod est cognoscitivus coloris. Si enim haberet aliquem colorem, ille color prohiberet videre alios colores. Sicut lingua febricitantis, quae habet aliquem humorem amarum, non potest recipere dulcem saporem. Sic etiam intellectus si haberet aliquam naturam determinatam, illa natura connaturalis sibi prohiberet eum a cognitione aliarum naturarum. Et hoc est quod dicit: intus apparens enim prohibebit cognoscere extraneum et obstruet, idest impedit intellectum, et quodammodo velabit et concludet ab inspectione aliorum. Et appellat intus apparens aliquid intrinsecum connaturale intellectui, quod dum ei apparet, semper impeditur intellectus ab intelligendo alia: sicut si diceremus quod humor amarus esset intus apparens linguae febricitantis.

³ *Qu. Disp. De Anima*, a.2, obj. 20 Praeterea, si anima unitur materiae corporali, oportet quod recipiatur in ea. Sed quidquid recipitur ab eo quod est esse a materia receptum, est in materia receptum. Ergo si anima est unita materiae, quidquid recipitur in anima recipitur in materia. Sed formae intellectus non possunt recipi a materia prima; quinimmo per abstractionem a materia intelligibiles fiunt. Ergo anima quae est unita materiae corporali non est receptiva formarum intelligibilium; et ita intellectus, qui est receptivus formarum intelligibilium, non erit unitus materiae corporali.

In the first place, it would seem to entail that no cognitive faculty could ever operate. For a cognitive faculty that is receptive of a range of forms actually has to receive those forms *when it is operating*. However, the principle states that it cannot have any of those forms; therefore, it cannot receive those forms. But then, since its operation would consist precisely in receiving these forms, it cannot operate; and this is obviously false, indeed, seems to go directly against the notion of a faculty as a principle of operation.

Second, it simply does not seem to be generally true that something that has some form in a range of forms could not receive another form belonging to the same range. Indeed, accepting this would amount to denying the possibility of change in general; but this denial is obviously false.

To address these concerns, we first have to distinguish the specific way in which a cognitive faculty as such receives the forms it is receptive of from the way in which any subject receives a form in general. Second, we have to see the exact reason why, and how, a cognitive faculty as such cannot have those forms that it is receptive of in this specific way of receptivity.

The act of receiving a form in a cognitive faculty as such (that is to say, in its capacity of a cognitive faculty) constitutes an act of cognition we can call the *intentional reception* of a form. This *intentional reception* is not the same sort of act as an act of *natural reception* that constitutes an act of natural change, though these two sorts of acts may coincide. In general, the *natural reception* of a form *f* in a subject *s* constitutes the subject's becoming informed by *f* in *esse naturale* or *reale*, that is to say, if *f* is signified by the predicate *P*, then by receiving *f*, *s* becomes *P*. For example, a piece of cookie dough by receiving the shape of a star-shaped cookie cutter *in esse reale* also becomes star-shaped. On the other hand, the intentional reception of a form *f'* in a cognitive subject *s* as such, given that *f'* is signified by the predicate *P'*, is not the subject's becoming *P'*, but it is the subject's becoming cognizant of something as *P'*. For example, if I open my eyes and I see a red apple, then by receiving the visible forms of the red apple I become cognizant of the apple as having these visible forms, namely its color and shape, but I will not be informed by these visible forms in *esse reale*; rather, by becoming cognizant of these forms I will be informed by them in *esse intentionale*.

To be sure, by introducing the terminology of *esse intentionale* we do not have to commit ourselves to a mysterious realm of being, the dwelling place of all sorts of "weird entities", defying the laws of physics. In fact, forms in *esse intentionale* are nothing but ordinary bits of information, encoded mostly by very ordinary physical entities, such as the tiny pits on the surface of your music CD. The tiny pits informing the surface of the CD as such, that is, insofar as they are physical modifications of its surface, constitute a physical form of the CD in *esse reale*, brought into actuality by an ordinary physical process, the "burning" of your CD. But this physical process is at the same time the process of encoding the sounds of your favorite music: the physical process of burning the CD is also the process of the intentional reception of sounds, which in fact may have physically existed years earlier in a recording studio.

The intentional reception of forms in the cognitive faculties of cognitive subjects is exactly the same kind of process: it is nothing but the process of encoding information about the objects of these faculties, and this, in turn, is nothing but the intentional reception of the forms these objects have *in esse reale*, in the cognitive faculties in *esse intentionale*. The question Aquinas's and Aristotle's argument raises is whether the particular kind of encoding process/intentional reception that is characteristic of intellectual cognition can take place in a material medium, in the way the encoding of music on a music CD takes place in a material medium. The argument tries to establish the negative answer to this question by claiming that since the encoding medium cannot have in *esse reale* the forms it encodes, and the intellect encodes *all material natures*; therefore, the intellect cannot have any material nature in *esse reale*, that is to say, it is immaterial.

But even though this distinction between the two kinds of reception and the corresponding modes of being of forms may answer the first objection raised above, which claimed that this principle would entail that no cognitive faculty could ever operate, it seems to strengthen the second. For now it is clear that the principle that a cognitive faculty must lack the forms it is receptive of is to be understood in the sense that the cognitive faculty must lack the forms in *esse reale* it is receptive of in *esse intentionale*. Therefore, the requirement that it should lack these forms *in esse reale* does not go against its ability to receive them *in esse intentionale*, and so, it may be perfectly operative, as far as this principle is concerned. But this interpretation renders the original claim even more doubtful: for why would it have to be the case that a cognitive faculty receiving a range of forms in *esse intentionale* must lack those forms in *esse reale*?

Now, since a system of encoding is just a mapping from one set of things (the represented things), to another set of things (the representing things), and just any set of objects can be mapped onto any other, it might seem that just any set of objects can represent any other set of objects. And this is indeed the situation in *artificial* systems of encoding, where what does the mapping, i.e., the relating of one set of objects to another, is the human mind, establishing these connections at will. This is how letters represent sounds, and sounds represent things, differently in different languages. But in the case of *natural representation*, when what establishes a system of encoding is the natural causal relations between one set of objects and another, then, since it is not true that just anything can cause anything, the range of possible systems of encoding is limited by the nature of things, both on the side of the represented objects, and on the side of their representations.

In a natural causal relation, the effect may simply receive [a "copy" of] the form of the cause in *esse naturale*, as when something hot makes another thing hot. In this case, the heat of the effect carries information about the heat of the cause, as when the heat of the soup carries information about the heat of the gas burner, or the electric plate, to which it was exposed. But sometimes the causal relations of things establish a systematic connection between their features that yields a natural encoding of a range of features of the represented thing by means of a different range of features of the representing thing. For example, when photosensitive black-and-white film is exposed to light reflected

from the surface of bodies, then the resulting negative picture on the film encodes information about the lightness and darkness of the colors of these bodies, representing light with dark, and dark with light. Again, if the same bodies are exposed to film that is sensitive to infrared radiation, then the discoloration of the film will carry information about the different temperatures of those bodies. In this latter case it is especially clear that the representing features of the representing thing, namely, the discolorations of the film, are not the same kind as the represented features *in esse naturale*, yet, the representing features encode information about the represented features, and so these representing features, namely the discolorations, are nothing but the represented features, namely, the temperatures of those bodies, *in esse intentionale*. But then it should also be clear that if any of the representing features of the representing thing belonged irremovably to the nature of the thing, then it would be incapable of representing any other feature of the represented thing. For instance, if the film is unchangeably discolored (say because it has already been overexposed), then it is no longer capable of representing the different temperatures it otherwise would be able to represent. So, the representing thing that represents a range of forms by means of another range of forms it has in *esse reale*, certainly cannot have any of these latter forms *in esse reale inseparably by nature*, for otherwise it would have only one such form, capable of representing only one of all the forms it is supposed to represent, preventing the representation of all others.

However, this still does not justify the principle claiming that the representing thing receptive of a whole range of forms *in esse intentionale* must lack those forms in *esse reale*. For the example of the thermo-sensitive film only shows that the film must not have inseparably any of the colors that represent temperatures, but it does not show that it must not have any temperature – on the contrary, it certainly does have its own temperature. On the other hand, the example does show another important point: the film can have its own temperature *in esse reale* precisely because this temperature falls *outside of the range of the film's representing forms*, namely, its discolorations. That is to say, the film cannot have any one of those forms *in esse reale* inseparably by nature which are the same as the represented forms it has *in esse intentionale*, but it *can* have some of the represented forms in *esse reale* precisely because that represented form falls outside of the range of representing forms the subject has in *esse reale*.

This much, however, seems to be sufficient for Aquinas's and Aristotle's argument. For if the intellect can represent *all material natures*, then the representing forms that encode those material forms in the intellect informing it in *esse reale* are either within the range of all material natures or not. They cannot be within the range of all material natures, because if the intellect has any of these natures *in esse reale*, that is to say, if the intellect is material, then it cannot have any other of these natures, and so it cannot represent all material natures, but the one encoded by this material nature of the intellect, contrary to the assumption that it can represent all material natures; therefore, the intellect has to be immaterial. On the other hand, if the intellect's representing forms that encode all material natures informing the intellect *in esse reale* are outside of the range of all material natures, then the intellect has to have some immaterial forms in *esse reale*. But then, these forms informing the intellect in *esse reale* exist without

informing matter; so their subject is not material. Therefore, the intellect, again, has to be immaterial.

After these preliminary clarifications, meant to provide the gist of the idea of this argument, let me present here a somewhat stricter reconstruction of the argument along these lines. After this reconstruction, I will turn directly to Aquinas's other argument, leaving the discussion of the reconstruction to my opponent.

Reconstruction of the argument from the universality of scope of human thought

Definitions

1. A form f in *esse reale* in a subject s is something that is signified by a predicate P in s , on account of which the subject s is *actually* P .
2. A form f' of an object o in *esse intentionale* in a subject s is some form f of s in *esse reale* (signified in s by some predicate P) on account of which s is *actually representing* o as a P' .
3. A subject s is *actually representing* an object o as a P' iff s has some form f (signified in s by some predicate P) in *esse reale* which is an encoding of some form f' of o under some natural or artificial system of encoding.
4. A form f of a subject s is a *representing form* iff f is a form of s in *esse reale* and it is also a form f' of an object o in *esse intentionale* in s .

Sketch of Proof

1. If R' is a range of mutually incompatible forms f' that an object o can have in *esse reale*, and R is a range of mutually incompatible representing forms f by which a representing subject s can represent any f' of R' under some natural system of encoding, then s cannot have any f in *esse reale* by its nature. [Because if s had some f by its nature in *esse reale*, then it would always have the same f' , namely, the one which is identical with f , in *esse intentionale*; that is, it could not have any other f'' from R' in *esse intentionale*, so s could not represent just any f' of R' , contrary to the assumption that it can represent any f' of R' under some natural system of encoding.]
2. All material natures f' belong to an incompatibility range R' . [by the doctrine of the *Categories*]
3. So, any representing subject s that can represent all forms f' belonging to the range of material natures R' is such that s cannot have any f belonging to R , the range of forms representing members of R' , by its nature in *esse reale*. [from 1 and 2]
4. The intellect is a subject that can represent all forms f' belonging to R' .

5. So the intellect cannot have any f belonging to R by its nature in *esse reale*. [from 3 and 4]
6. If $R=R'$, then the intellect cannot have any f' belonging to R' by its nature in *esse reale*. [from 5 by SI]
7. Therefore, since R' is the range of all material natures, if $R=R'$, the soul cannot have any material nature, so it is immaterial.
8. If, however, $R \neq R'$, then the intellect can have some f which is not within R' , and since R' is the range of all material natures, f is some non-material nature, which again entails that the intellect is immaterial.

The argument from the universality of concepts

The main claim of the argument from the universality of concepts is that the universal concepts of the understanding cannot be received in a material medium, because their universality is achieved precisely by their being abstracted from matter.

To be sure, the universal, abstract mode of representation of the concepts of the intellect alone cannot guarantee their immateriality – after all, we are all familiar with material, universal signs, such as the words we utter or write. However, these universal symbols can have their universal representative function only because they correspond to the primarily universal concepts of the understanding. So, their derivative, conventional universality need not entail any ontological constraints upon their nature. Such a constraint may, however, be entailed by the representative function of the concepts of the understanding, which are formed as a result of the natural causality of sensible objects on the senses.

The question then is why the primarily universal mode of representation of the concepts of the understanding formed as a result of the causality of sensible objects should entail the immateriality of these concepts, in the sense that the subject in which they are received, the intellect, cannot be material.

The main idea is the following. The senses represent singulars in their singularity because they necessarily represent the sensible features of material objects together with the material individuating conditions of these features, namely, the spatio-temporal dimensions determining the designated matter of these objects.⁴ The reason why this is

⁴ *In De Anima* lb. 2, lc. 12, n.-5. Circa ea vero quae hic dicuntur, considerandum est, quare sensus sit singularium, scientia vero universalium; et quomodo universalia sint in anima. Sciendum est igitur circa primum, quod sensus est virtus in organo corporali; intellectus vero est virtus immaterialis, quae non est actus alicuius organi corporalis. Unumquodque autem recipitur in aliquo per modum sui. Cognitio autem omnis fit per hoc, quod cognitum est aliquo modo in cognoscente, scilicet secundum similitudinem. Nam cognoscens in actu, est ipsum cognitum in actu. Oportet igitur quod sensus corporaliter et materialiter recipiat similitudinem rei quae sentitur. Intellectus autem recipit similitudinem eius quod intelligitur, incorporaliter et immaterialiter. Individuatio autem naturae communis in rebus corporalibus et materialibus, est ex materia corporali, sub determinatis dimensionibus contenta: universale autem est per abstractionem ab huiusmodi materia, et materialibus conditionibus individuantibus. Manifestum est igitur, quod similitudo rei recepta in sensu repraesentat rem secundum quod est singularis; recepta autem in

necessary is that the causally active sensible features of sensible objects necessarily exercise their causality on the senses under these determinate dimensions, and so these sensible features are necessarily encoded by the senses *as determined by these dimensions*.⁵ Now what encodes these spatio-temporal features in the senses is precisely some corresponding spatio-temporal features of the sense organs. For example, the spatial arrangement of distinct patches of color in my visual field is encoded by the spatial pattern of neurons firing in the retina of my eyes. However, in the process of abstraction, the agent intellect forming the universal concepts of understanding in the potential intellect has to “cut out” precisely this part of the code, preserved in the phantasms. So it has to form the concepts encoding the universal information contained in a huge number of different phantasms in a medium that will not encode the information about the singularity of singulars represented by the phantasms. But then, since what encodes this information in the phantasms is precisely the spatio-temporal features of the organs in which they are received, the medium in which the universal concepts are formed must be something that does not have such spatio-temporal features, i.e., something that does not have its own dimensions, which can only be a thing that is immaterial; therefore, the potential intellect receiving these concepts has to be immaterial.

As can be seen, the most important idea in this argument is that the singularity of representation is necessarily tied to the materiality of representations. Sensory representation is necessarily singular because it is material, and *vice versa*, since the singularity of the information in sensory representation is encoded precisely by the material features of sensory representations, namely, the spatio-temporal features of the sense organs (including relevant parts of the brain) that are modified according to the spatio-temporal features of sensory objects, which determine their singularity. But if this much is acceptable, then the argument can indeed establish its desired conclusion.

In any case, after these preliminaries, let us see the reconstructed argument itself.

intellectu, repraesentat rem secundum rationem universalis naturae: et inde est, quod sensus cognoscit singularia, intellectus vero universalia, et horum sunt scientiae.

⁵ *In De Anima* lb. 2, lc. 13, n. 12. Differentiam autem circa immutationem sensus potest aliquid facere dupliciter. Uno modo quantum ad ipsam speciem agentem; et sic faciunt differentiam circa immutationem sensus sensibilia per se, secundum quod hoc est color, illud autem est sonus, hoc autem est album, illud vero nigrum. Ipsae enim species activorum in sensu, actu sunt sensibilia propria, ad quae habet naturalem aptitudinem potentia sensitiva; et propter hoc secundum aliquam differentiam horum sensibilium diversificantur sensus. Quaedam vero alia faciunt differentiam in transmutatione sensuum, non quantum ad speciem agentis, sed quantum ad modum actionis. Qualitates enim sensibiles movent sensum corporaliter et situatiter. Unde aliter movent secundum quod sunt in maiori vel minori corpore, et secundum quod sunt in diverso situ, scilicet vel propinquo, vel remoto, vel eodem, vel diverso. Et hoc modo faciunt circa immutationem sensuum differentiam sensibilia communia. Manifestum est enim quod secundum omnia haec quinque diversificatur magnitudo vel situs. Et quia non habent habitudinem ad sensum, ut species activorum, ideo secundum ea non diversificantur potentiae sensitivae, sed remanent communia pluribus sensibus.

Reconstruction of the argument from the universality of the concepts of human thought

Sketch of Proof:

1. A cognitive faculty represents individuals qua individuals as a result of the natural causality of these individuals iff it represents their principle of individuation [self-evident]
2. The principle of individuation is designated matter [from Aquinas's De Ente et Essentia, c.3. & passim]
3. Therefore, a cognitive faculty represents individuals qua individuals as a result of the natural causality of these individuals iff it represents their designated matter [from 1 & 2]
4. Designated matter is matter contained under particular dimensions, here and now [from Aquinas's De Ente et Essentia, c. 3. & passim]
5. Therefore, a cognitive faculty represents individuals qua individuals as a result of the natural causality of these individuals iff it represents their matter contained under their particular dimensions, here and now [from 3 & 4]
6. Dimensions here and now are common, *per se sensibilia*.⁶
7. Common, *per se sensibilia* can be represented as a result of the natural causality of the things having them only by the corresponding spatio-temporal properties of what represents them. [from Aquinas's commentary on the De Anima bk. 2, lc. 12 and 13.]
8. Therefore, a cognitive faculty represents individuals qua individuals as a result of the natural causality of these individuals iff it represents their matter contained under their particular dimensions, here and now, by its own corresponding spatio-temporal properties [from 5 & 6 & 7]
9. Any cognitive faculty that has its own spatio-temporal properties is material [self-evident]
10. Therefore, any cognitive faculty represents individuals qua individuals iff it is material [from 8 & 9]

⁶ *Per se sensibilia* are sensible qualities which, as such, can directly affect one or more senses. *Per accidens sensibilia* are other sensible qualities, which are joined in the object to its *per se* sensible qualities. (Sugar cube: white, sweet, cubical, sugar.) *Proper sensibilia* are *per se sensibilia* which, as such, can directly affect only one of the senses. *Common sensibilia* are *per se sensibilia* which directly affect any and all of the senses. This is because *common sensibilia* are the necessary spatio-temporal determinations of all proper sensibilia. These determinations can only be represented by the corresponding determinations of the *representing act*; thus it also has to be material.

11. Any sense is a cognitive faculty that represents individuals qua individuals [self-evident]
12. Therefore, any sense is material [from 10 & 11]
13. The human intellect is a cognitive faculty that does not represent individuals qua individuals, but represents individuals in a universal manner [from Aquinas's explanations of the theory of abstraction, e.g., in ST1 q.85, a. 1.]
14. Therefore, the human intellect is immaterial [from 13 & 10]

To be sure, in this argument, it may not seem logically necessary that the spatio-temporal features of sensible objects be encoded in the senses by means of some corresponding spatio-temporal features of the sense organs (including relevant parts of the brain), but this may still be a natural necessity, which is, at any rate, not entirely implausible to assume concerning sensory information processing in general.

Again, it may not be logically necessary that the concepts of the understanding, just by virtue of not representing particular dimensions of sensible objects, would have to be encodings of universal information about these objects such that they (in their real existence) cannot be received in a material medium. However, it may seem an altogether plausible assumption that it is a natural necessity that any encodings generated in this natural process of receiving, storing, and further manipulating sensory information, as long as they have their own spatio-temporal features, will thereby encode information about the individuality of their objects, and so, in order to extract their purely universal content, the agent intellect has to strip them precisely of these material conditions;⁷ but this is all the argument assumes.⁸

Indeed, the argument might be attacked from a variety of further metaphysical positions; targeting for instance Aquinas's conception of individuation, or his very idea of the intentional reception of forms in the sense-organs, etc. But instead of going on with this discussion, I hereby leave the pleasure of dissecting this reconstruction to my opponent.

⁷ Cf. *ScG* lb. 1, c. 65. Forma igitur rei sensibilis, cum sit per suam materialitatem individuata, suae singularitatis similitudinem perducere non potest in hoc quod sit omnino immaterialis, sed solum usque ad vires quae organis materialibus utuntur; ad intellectum autem perducitur per virtutem intellectus agentis, inquantum omnino a conditionibus materiae exiit; et sic similitudo singularitatis formae sensibilis non potest pervenire usque ad intellectum humanum.

⁸ Indeed, it seems this is all that is needed to address Bob Pasnau's concerns about Aquinas' apparent conflating of two radically different senses in which we can say that the agent intellect operates on phantasms. See Pasnau, R.: "Aquinas and the Content Fallacy", *The Modern Schoolman*, 75(1998), pp. 293-314, esp. pp. 313-314.

Robert Pasnau:

Comments on Gyula Klima, "Aquinas's Proofs of the Immateriality of Intellect"

I have been invited here to disagree with Professor Klima's reconstruction of Aquinas's proofs of the intellect's immateriality, and I will do that shortly. But I would like to begin by stressing some points of agreement. First, I find the passage Klima focuses on, from the *Sentences* Commentary, to be a particularly apt one for his purposes. I have in the past wondered at the way Aquinas uses the three arguments listed at the end of the passage, and wondered about their relationship. They seem to be closely connected – especially the first and the second – and yet to be largely independent. This particular text – which before now I had never closely considered – usefully ties these arguments together, showing them to be, in effect, three arguments for the minor premise of a larger argument for the soul's immateriality and hence immortality.

It is important, in the broader scheme of things, to distinguish between these two conclusions: that the soul is immaterial (or not dependent on matter), and that the soul is immortal (or incorruptible). This passage comes from an article concerned with the soul's incorruptibility. Its immateriality is a preliminary conclusion that Aquinas needs in order to establish its immortality. But, as many critics have noted, immateriality is not sufficient for that further conclusion. For even if Aquinas establishes that the soul is not dependent on matter for its operation, in the sense of 'dependent' intended here, he will still not have shown that the soul can continue its rational operations after separation from the body. This is because there is another sense in which Aquinas thinks that the intellect *is* dependent on the body: it is dependent on phantasms, even for thinking about things it already knows (e.g., *ST* 1a 84.7). Now, as is well known, Aquinas thinks that the separated soul will take up a new mode of cognition after death, one not dependent on phantasms (e.g., *ST* 1a Q89). That may be so. But the point (which has often been made) is that a proof of the soul's incorruptibility requires Aquinas to *prove* that the intellect will take up this new mode of cognition. And it is not at all clear how Aquinas could do that.

Happily, Klima's paper sets that issue aside entirely, and focuses on the argument only as it is a proof for the soul's immateriality. His focus is the first two of three arguments, which he usefully describes as (1) the argument from the universality of the *scope* of human thought; and (2) the argument from the universality of the *objects* of human thought. I don't think that either argument works. But let me comment on them in turn.

1. Universality of scope

Up to a point, I find Professor Klima's presentation of this argument quite congenial. First, it is useful to keep in mind that the argument comes from Aristotle's *De anima* (III 4, 429a18-27). (If the argument is a failure, we can at least point our fingers at someone else.) Second, it is absolutely crucial to distinguish between *intentional reception* and *natural reception*, and it seems to me that Klima's presentation gets this distinction exactly right. Third, it also seems to me exactly right to stress that *intentional* reception and existence (*esse intentionale*) is not mysterious and unnatural, because it is the product of some sort of natural reception and real existence. A CD contains music in *esse intentionale* because it contains on its surface tiny pits in *esse reale*. The same holds for our cognitive faculties, sensory and intellectual. They have forms in *esse intentionale* in virtue of having forms in *esse reale*.

The central puzzle of this argument concerns how Aquinas manages to make the jump from claims about *esse intentionale* to a conclusion about *esse reale*. It is perfectly clear that the argument (as it is developed in more detail elsewhere in Aquinas) begins with a claim about what the intellect can have in *esse intentionale*: It can have the natures of all corporeal objects. One might, presumably, take issue with this unargued premise, but that would surely be the skeptic's last refuge. The problem that seems more pressing is to determine how the argument manages to turn that claim about *esse intentionale* into a conclusion about what the intellect has in *esse reale*: that it lacks all material forms. I don't think there is an argument here, and I fear that Aquinas was seduced by the fallacy of confusing the content of a thought with the intrinsic nature of what constitutes the thought. (For instance, if I say that we think in pictures, does this mean that we think via thoughts *of pictures*, or does it mean that our thoughts in some sense *are pictures*?)¹ But Professor Klima has proposed a formulation of the argument that he thinks is valid, and so we should take a look at it.

I will focus on Klima's "sketch of a proof." Here we are invited to consider two ranges of forms, R and R'. Within each range, each form is incompatible with the others – that is, a subject that has one form within the range cannot at the same time have any of the others. (I find it helpful to have a picture of this: see the handout.) We are to think of R' as the range of all material natures f', and we are to think of R as the range of all representing forms f. These latter forms, it is crucial to remember, would be possessed in *esse reale* within intellect. It is in virtue of possessing one (and only one) of these forms that the intellect represents one and only one of the forms f' from the range R'. That is to say: having f within s in *esse reale* just is to have f' within s in *esse intentionale*.

Following Aquinas's lead, Klima claims that the intellect is capable of representing any form f' belonging to R' (Premise 4). This tells us something about the range R possessed by the intellect: since we have stipulated that R extends to all and only the forms that the intellect would need to represent all the forms in range R', and since the

¹ See my "Aquinas and the Content Fallacy," *Modern Schoolman* 75 (1998) 293-314.

intellect in fact is capable of representing all the forms in range R', it follows that the intellect must be capable of taking on each of the forms in range R. But since these forms are mutually incompatible, it follows that the intellect cannot have any one of these forms as a matter of its intrinsic nature: if so, it would be incapable of having any of the others. The intellect would be like a jaundiced eye that sees everything as yellow.

So far, this all seems right. At this point, then, the entire question comes down to the following: what is this range R that cannot enter into the intellect's intrinsic nature? Klima asks whether or not it is identical to R'. If so, then the intellect cannot have *any* material nature as its intrinsic nature (Premises 6-7). If not, then the representing forms of intellect are not material natures at all (Premise 8). Either way, the intellect is immaterial.

The mistake, it seems to me, comes in these final steps. My answer to the question of whether $R = R'$ is that they cannot possibly be identical. R', Klima tells us, is the range of material natures: the nature of being a cow, or a stone, or an electron. This seems appropriate, given that the objects of the human intellect are the natures of material things (see, e.g., *ST* 1a Q84). But R cannot be this, because – *remember* – the forms in range R exist in *esse reale* within intellect. And we know, of course, that it is not the stone itself that exists in intellect, but the species of the stone. This is to say, for one thing, that the stone exists in intellect in *esse intentionale*, not *esse reale*. But the further implication of this famous saying is that what gives rise to the stone's having *esse intentionale* is something else, we know not what, existing within intellect in *esse reale*. So $R \neq R'$.

But to say that $R \neq R'$ does not entail that range R, consisting in f_{1-6} , is composed of immaterial natures. For it may simply be that f_{1-6} are material *accidents*, rather than material natures. So the inference in Premise 8 does not hold. A form within R can be outside R' and yet not be immaterial. How exactly might this go? Here I find Klima's example from photography to be extremely helpful. Let us imagine a mind that works on something like the principle of black and white film. This mind represents range R' (the natures of material things) through shades of gray, organized into elaborate patterns. Our R, in this case, would be the virtually infinite number of formal patterns of shades of gray. For any f' within R', we could draw a line connecting it to some f within R. Patterns of gray, in other words, would map onto the natures of material objects. It is of course doubtful in the extreme whether any mind works that way, but neither Aquinas nor Klima have given us any reason to believe that a mind *could not* work that way. And this is what the argument would have to show.

2. Universality of objects

My objections to Professor Klima's second argument concern soundness rather than validity.² I am, in fact, inclined to doubt many of the eight unargued premises found in this argument. The first thing to notice about the argument, however, is that it is based not on the intellect's ability to grasp the universal, but on the intellect's *inability* to grasp individuals qua individuals (see premises 10, 13, 14). This is definitely not the argument suggested in the passage quoted from the *Sentences* Commentary, which makes no mention whatsoever of the intellect's inability to grasp individuals. Now I have no great difficulty with this initially puzzling doctrine that the intellect is incapable of grasping individuals (strictly speaking, material individuals). Though it seems like an incredible view, at first glance, I think it can be made sense of if one has a proper understanding of the cooperative nature of cognition: if one understands, that is, that it is the whole human being who thinks and reasons, using intellect and the senses together. Still, it seems to me that Klima's argument reverses the direction of proof that we find in Aquinas. When Aquinas argues for the intellect's inability to grasp material singulars, he does so *on the basis* of the intellect's immateriality, and he relies on other arguments to establish that the intellect is indeed immaterial. I wonder, therefore, how Professor Klima would go about defending premise 13, where he asserts the intellect's inability to grasp the individual. Every passage in Aquinas I have found defending this thesis does so on the basis of the intellect's immateriality. But that is one premise that Klima cannot appeal to, since it is the conclusion he desires. Still, let me move on.

As Professor Klima notes, the argument rests on some large metaphysical assumptions, particularly concerning the principle of individuation. What individuates material substances, we are told, is designated matter [premise 2], which is "matter contained under particular dimensions, here and now" [premise 4]. It is not that I doubt the truth of this claim – I'm not sure I understand it well enough to assess it – but that I doubt it is Aquinas's view. Although the point is rarely, if ever, noticed, Aquinas does not say that matter is the principle of individuation for material substances. When he calls matter the principle of individuation – which he often does – he is consistently clear that it is the principle of individuation *for the form*. (The handout quotes just a few of the many passages that make this point.) Once this is noticed, it seems to me fairly clear that Aquinas thinks the substantial form, and not matter, is what individuates a substance.³ Now perhaps the present argument could be reformulated to take account of this point, or perhaps my point itself can be shown to be wrong. In any case, let me move on to other concerns.

² I should note, however, that premise 10 does not seem to follow from premises 8 and 9, because the right hand side of 8 differs significantly from the left hand side of 9. This has serious implications, I think, for the validity of the argument. But this is not a point I will stress.

³ I argue for this point in *Thomas Aquinas on Human Nature* (Cambridge, UK: Cambridge University Press, 2002), ch. 12.

It does not at all strike me as self-evident, as premise 1 claims, that “a cognitive faculty represents individuals *qua* individuals ... if and only if it represents their principle of individuation.” Perhaps part of the problem is that I am unclear about the left hand side of this biconditional. But premise 1 should be read in light of premise 11, also said to be self-evident. It tells us that representing “individuals *qua* individuals” is what the senses do. But it strikes me as very doubtful that the senses represent the principle of individuation. If that principle is the substantial form, as I have claimed, then we can surely agree that the senses do not do that. If Klima is right, and the principle of individuation is designated matter, then the situation is less clear. But if we consider a paradigm case of sensation – such as my seeing a book on a table – it seems hard to believe that I am seeing what individuates the book. For you could set up an exactly similar book on an exactly similar table, and put me in front of that table, and the contents of my sensations would be the same. Whatever it is that makes those two books different, I would not be seeing it. And if this is true for sight, it is true all the more for the other senses. How does the sense of smell, for instance, represent the individuating conditions of odors? I conclude, then, that either premise 1 or premise 11 should be rejected.

I am also inclined to doubt premise 7, for reasons that Klima suggests in his closing remarks. The question here is whether something immaterial could represent common, *per se sensibilia*. I am not sure that even Aquinas would give a negative answer to this question, inasmuch as he surely thinks that the intellect can have a *universal* conception of the various sensible qualities. But I suppose the claim intended in premise 7 is that something immaterial can represent such qualities only in the universal, not as individuals. This is a view that Aquinas may have held. Yet why should we believe it? It may be that we need the senses to acquire our initial information about size, shape, and motion. (Some have even argued that God needs something like sensation to acquire this kind of information about material individuals.)⁴ But Klima needs the further result that something immaterial cannot *represent* such information, even once the senses have acquired it. This strikes me as implausible. At any rate, it is a point that needs to be argued for.

Lest I leave the reader with the impression that I have absolutely nothing good to say about Aquinas’s thought in this area, I want to note in conclusion that I think Aquinas does suggest two promising arguments for the intellect’s immateriality. The first is based on the intellect’s capacity for universal concepts (this, of course, is the second of the arguments suggested in the *Sentences Commentary* passage).⁵ Though I have never seen an entirely persuasive formulation of this argument, I’ve often felt that one is lurking just beyond my grasp. The second is based on the intellect’s capacity to understand itself – that is, to have genuinely reflexive cognition – something Aquinas

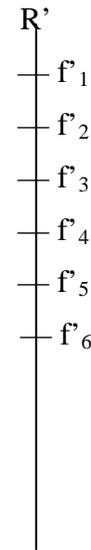
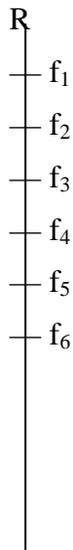
⁴ See Eleonore Stump and Norman Kretzmann, “God’s Knowledge and Its Causal Efficacy,” in T. D. Senor (ed.) *The Rationality of Belief and the Plurality of Faith* (Ithaca, NY: Cornell University Press, 1995) pp.94-124.

⁵ See also *ST* 1a 75.5, 76.2 ad 3, and *InDA* II.12.71-94.

thinks no material cognitive power is capable of. This, of course, is the third of the arguments suggested by the *Sentences Commentary* passage, and in fact that passage goes on to give an argument for this conclusion. I don't think that argument is successful, or even particularly worth quoting (here I agree with Klima, evidently, since he cuts the text off before this point). But in his commentary on the *Liber de causis* (prop. 7), Aquinas describes another argument from self-knowledge, which strikes me as well worth quoting. Here is how the argument goes in the original formulation of Proclus, which Aquinas quotes:

No body is naturally suited to turn toward itself. For if that which turns toward something is in contact with that toward which it turns, then it is clear that all the parts of the body that turns toward itself will be in contact with all [the rest of its parts]. This is not possible for anything that has parts, because of the separation of the parts, each of which lies in a different place (*Elements of Theology* XV).

This strikes me as a brilliant argument: reflexive knowledge requires that the whole capacity somehow grasp the state of the whole capacity, something that is not possible for a body extended in space. Indeed, in the face of this argument it seems to me that the most natural reaction is to deny, in effect, the major premise, and argue that not even the intellect is capable of reflexive self-knowledge. If this is the best reply that can be made, the argument is a good one indeed. Now this is not Aquinas's argument, but it is an argument he recognized at the very end of his life, in commenting on the *Liber de causis*. And I like to think that if he had recognized the force of this argument earlier in his career, he would have dumped some of those bad Aristotelian arguments he so often rehearsed, and replaced them with this good argument from Proclus.



R' = range of all material natures f' [see Premise 3, 7]

R = range of all representing forms f, possessing *esse reale* within intellect [see Def. 4]

Could R = R'? [see Premises 6-8] No way [I say], because the representing forms within intellect will not be natures, but accidents. So [following Premise 8] the intellect *can* have some f [a representing form in *esse reale*] that is not within R'. But it does not follow that f will be a non-material nature. It could be a material accident, such as color, wavelength, shape, polarity, etc.

Matter, as it stands under signate dimensions, is the principle of individuation *of the form* (*InMet* 5.8.876).

If a form is naturally suited to be ... the act of some matter, then *that form* can be individuated and multiplied by its relationship to the matter (*De unitate* 5.75-78 [§249]).

Distinct individuals have distinct *forms* made distinct by their matter (*ST* 1a 85.7 ad 3).

Matter is the principle of individuation ... when considered in the singular, which is signate matter existing under determinate dimensions. For *a form* is individuated by this (*QDV* 10.5c).

Two more promising lines of argument for the intellect's immateriality:

Its capacity for universal concepts: see *ST* 1a 75.5 & 76.2 ad 3; *InDA* II.12.71-94.

Its capacity to understand itself:

No body is naturally suited to turn toward itself. For if that which turns toward something is in contact with that toward which it turns, then it is clear that all the parts of the body that turns toward itself will be in contact with all [the rest of its parts]. This is not possible for anything that has parts, because of the separation of the parts, each of which lies in a different place (*Elements of Theology* XV; cf. Aquinas, *In de causis* 7).

Gyula Klima:

Reply to Bob Pasnau on Aquinas's Proofs for the Immateriality of the Intellect

First of all, I have to thank my opponent for the ingenuity of his objections, which point precisely to those steps of Aquinas's arguments in my reconstruction that definitely require further scrutiny. Given my role in the process of approaching the truth of the matter through a dialectical disputation, I will try to advance our understanding of the issue by trying to undermine Bob's objections to the best of my abilities. I do not expect, though, that my replies will clinch the matter once and for all. On the contrary, I rather hope they will set the stage for further useful discussion.

Reply to the objections to the first argument

The main objection to the *first argument* concerns its last step. Obviously, the validity of this move of the argument will turn on whether from the non-identity of the range of representing forms and the range of represented forms, coupled with the claim that the range of represented forms is the range of all material forms, we can conclude that the range of representing forms has to contain at least one non-material form. If so, then, since an inherent non-material form is non-material precisely because it inheres not in a material subject, we can claim that the subject of this form has to be immaterial.

But the suggestion is that all material natures can be represented by a range of material accidents, so the range of representing forms does not have to contain any non-material forms, since they may all be material accidents. So, the range of representing forms is not the range of represented forms, yet the range of representing forms does not have to "go beyond" the range of all material forms.

In reply to this, we first have to note that the phrase "range of all material natures" refers to a range of forms that comprehends also all material accidents (since, clearly, we can have intellectual understanding of the natures of material accidents as well). Therefore, if the range of representing forms is a set of material accidents, they would also have to be part of the range of represented forms, since that range comprehends all material natures, that is, all material forms, including any material accidental forms.

Now clearly, if the range of representing forms is finite (which is not a wild assumption in the case of a finite material mind, that is, the brain, which would have to have a finite number of discrete brain-states over a finite lifetime), then we either have to deny that the mind is capable of representing all material natures, or we have to allow that at least some representing forms are immaterial forms.

The reason why a finite range of material representing forms would not be capable of representing all material forms is that all these representing forms, being material forms,

would have to be represented as well. Therefore, since for each representing form we would have to have one representing form representing it, which in the case of a finite range would consume all representing forms, we would not have further representing forms within the range of material representing forms to represent forms that are material, but not representing forms. (Obviously, here, and in what follows, I assume Aquinas's doctrine of formal unity, according to which for each specifically different represented form there would have to be at least one, specifically the same, representing form.) So in this case we would definitely need at least some immaterial representing forms, in order to be able to represent both the representing and the non-representing material forms.

But even besides this consideration, it is plausible to assume that the range of material forms in general is infinite, so for their representation we would need infinitely many representing forms in the mind.

So, we would have to say, as Bob in fact indicated, that the range of representing material forms is infinite. But that is an at least questionable assumption in the case of a finite material mind. Nevertheless, I will not pursue the matter whether a finite material mind can possibly have an infinity of discrete states, i.e., an infinity of discretely representing material accidental forms. The point here simply is that Bob's suggestion can *only* be maintained if he assumes that the range of representing material forms of the material mind is infinite, and so the burden of proof concerning the possibility of this assumption presses his shoulders.

It is certain, however, that if the range of representing forms is part of the range of represented forms (which has to be the case if the soul represents all material natures and the representing forms are also material natures), then of all representing forms it will at least be sensible to ask whether they represent themselves or not.

Let us call the representing forms that represent themselves, self-representing concepts, and the ones that do not, non-self-representing concepts. Now, we can clearly form the concept of all and only non-self-representing concepts, that is, the concept that represents all and only non-self-representing concepts. The Russellian question then is whether this concept is self-representing or not. If it is self-representing, then it represents itself, which means that it is not the concept of only the non-self-representing concepts, for by representing itself it also represents a self-representing concept. If it is not self-representing, then it does not represent itself, but then it does not represent all non-self-representing concepts, yet it is supposed to be the concept of all and only non-self-representing concepts, so it would have to represent itself.

Clearly, what generates this Russell-type paradox is the assumption that the form which is the concept of all and only non-self-representing concepts is supposed to fall within the same range of forms as the forms it is supposed to represent, for this why it can be sensibly asked whether it is self-representing or not. So, to resolve the paradox, we either have to deny the existence of such a concept, which would be absurd, since we just managed to form it in our minds, or we have to conclude that it cannot fall within the same range. But that range is the range of all material forms, so it has to be outside

that range, which means it has to be non-material, and so its subject has to be immaterial, **q.e.d.**

To be sure, this is not Aquinas's argument, but it may just validate the last, intuitive move of his reconstructed argument, which is apparently based on the intuition that if the range of the forms represented by the soul is the range of all material forms then the representing forms in the soul, that is, the soul's concepts, cannot fall within the same range. Now if the previous Russellian argument is sound, then it shows that we cannot assume that the concepts of the soul fall within the range of all material forms without contradiction, and so, the last intuitive step of the original argument is valid.

Finally, there is an *ad hominem* argument I can offer in defense of this last step, given Bob's expressed admiration for Aquinas's third argument, from the reflexivity of thought. For if the third argument does in fact work, then Aquinas by that argument has managed to show that reflexive thought is not possible by means of material acts of thought. But then, if Bob is willing to accept this argument, he cannot plausibly assume that the representing forms of the soul are all material accidents. For given that the soul represents all material natures, it also has to represent its own acts of thought if those acts of thought are all material; but acts of thought representing acts of thought, i.e., reflexive acts of thought cannot be material, according to Aquinas's argument accepted by Bob; therefore, Bob cannot hold what he offers as a refutation of the last step of my reconstruction, namely, that the mind can possibly represent all material natures, including its own acts, by means of an infinite range of accidental, material forms.

Summary of the reply to the objections of the first argument

All in all, I can summarize my defense of the last step of the first argument as follows.

1. Bob, in order to show the invalidity of the last step, had to provide a refuting interpretation of the consequence involved, namely, a possible interpretation that renders the antecedent true and the consequent false. His suggestion was that in the possible situation in which all representing forms of the soul are material accidents, the antecedent is true, for the range of represented forms (namely, all material forms) is not the same as the range of representing forms (namely a range of material accidents), yet, the consequent is false, because it is not true that at least one of the representing forms has to be immaterial, since all of them are material accidents.
2. In response I first pointed out that Bob's refuting interpretation renders the range of representing forms a subset of the range of represented forms.
3. From this I first argued that if the range of representing forms is finite, then this would go against the first premise claiming that the representing forms represent all material natures, especially, if the range of all material natures is infinite (but we do not even have to make this assumption). So, in this case, when we assume that the range of representing forms is finite, we either have to deny this premise, which Bob did not challenge, or we have to accept the conclusion that

at least some representing forms are immaterial, which is the conclusion to be proved.

4. However, since an infinite set can be mapped onto one of its infinite subsets, this problem can be avoided by assuming that the range of representing forms is infinite. But then it is a further issue whether a finite material mind can have a potential infinity of discrete states, which is a question I left open. In any case, I want to stress that in view of the previous point, the *only* way Bob could maintain his refuting interpretation would be by proving this possibility.
5. Finally, I argued that regardless of the possible infinity of the range of representing forms, the assumption involved in Bob's intended refuting interpretation, namely, that the range of representing forms is a subset of the range of represented forms, entails a Russell-type paradox, and so it cannot be regarded as a possible interpretation. Indeed, since the only possible ways in which the range of representing forms is not identical with the range of representing forms are the cases in which either one has an element that the other does not or *vice versa*, if I eliminate Bob's interpretation as impossible on account of the Russell-type paradox it entails, what remains is that the set of representing forms has some elements not contained in the set of represented forms. But then, since the set of represented forms is the set of all material forms, the set of representing forms has to contain at least one immaterial form, **q.e.d.**

Reply to the objections to the second argument

The objections to the *second argument* are somewhat more diverse in character. Some of them are philological, some philosophical. Since this is not the right occasion to deal with philological issues, I will simply present what I take to be an at least in principle justifiable interpretation of Aquinas's doctrine, to the extent that it is needed to establish a philosophical point. I will not attempt, however, to present the relevant philological arguments to actually justify this interpretation.

Accordingly, I simply contend here that Aquinas would accept the following equivalences:

1. The mode of representation of any act of representation is singular iff it is not universal
2. The mode of representation of any act of representation is singular iff the act of representation is material

But these two equivalences, coupled with the observation that the mode of representation of *some* act of representation of the intellect is universal, clearly yield the conclusion that *some* act of representation of the intellect is not material, whence the intellect, having these acts, is not material.

The question, then, is rather the *philosophical* issue whether Aquinas is able to establish the validity of these equivalences, in particular, the second one.

In my reconstruction I have argued that the singularity of representation is necessarily tied to its materiality according to Aquinas because the singularity of representation has to involve the representation of the material principle of individuation, which according to his theory of sensory cognition has to be represented by something material, and, correspondingly, universal intellectual cognition has to be immaterial because it has to eliminate precisely that part of the information it receives from the senses that encodes singularity, namely, the material features of sensory representations.

As I have noted in my presentation, this argument presupposes a great deal from Aquinas's metaphysics, so no wonder Bob's objections concern the metaphysical principles the argument relies on. However, concerning principles we cannot provide strict demonstrations, but rather clarifications. So this is what I'm going to try to provide here in defense of the principles Bob's objections have targeted.

But before dealing with the discussion of the principles, I have to take brief note of one objection to the validity of the argument that Bob relegated to a footnote. There he correctly notices that the move from 8 and 9 to 10 is not formally valid. In fact, it was meant to be a shortcut, simply to save space. What validates the move is the fact that the claim that a cognitive faculty represents something by means of its spatio-temporal features is equivalent to the claim that the cognitive faculty as such has its own spatio-temporal features, since, clearly, if it represents something by means of its own spatio-temporal features, then it has to have its own spatio-temporal features, and if it has spatio-temporal features insofar as it is a cognitive faculty, then, as such, it represents whatever it represents by means of its spatio-temporal features. So, we simply have to add the further equivalence that a cognitive faculty represents something by means of its own spatio-temporal features if and only if it has its own spatio-temporal features. Accepting this further, implicit, but to my mind quite obvious equivalence, the move in question is clearly valid.

But then, the main question is rather the acceptability of those equivalences that Bob directly challenges in his objections. So let me now turn to those.

Bob first challenges premise 13. The objection assumes that this premise would have to be established on the basis of the intellect's immateriality. But this is simply not the case. Aquinas's claim that the intellect is incapable of representing individuals in their individuality is indeed resting on his claim of the immateriality of the intellect. But my premise does not claim, and does not have to claim, that the intellect is totally incapable of individual representation of individuals. It only claims that it is capable of universal representation of individuals, and that in that universal representation it does not represent their individuality. This is all that is needed to deny that the intellect represents individuals *qua* individuals absolutely speaking (which is true for the senses absolutely speaking), namely, with respect to *all* representative acts, for at least in *some* of its acts the intellect represents individuals universally, and in those universal representative acts it does not represent the singulars in their singularity. But it is only this denial that is expressed by premise 13. So, from this denial, if we accept the equivalence expressed by premise 10, which Bob did not challenge, we can conclude the immateriality of the intellect. To be sure, once the immateriality of the intellect is

established on the basis of the universality of its characteristic mode of representation, this can serve as a premise for Aquinas's further conclusion that the intellect cannot represent singulars in their singularity at all, but the argument I reconstructed here does not concern itself with that issue.

In his next objection, Bob very lightly touches on a very heavy issue: what is the principle of individuation, and what does designated matter individuate? These questions then are related to a disjunctive rejection of premise 1 or 11, both claimed to be self-evident in the argument.

Bob takes issue with these premises on the grounds that he does not see how the senses could represent the principle of individuation, even granting that it is designated matter, let alone if it is the substantial form, as he is also inclined to contend.

To address this second concern very briefly, I would say that even if designated matter primarily individuates the substantial form of a singular substance, and then the singular substance can exist in its singularity on account of the actuality of this individualized form, this does not render the form the principle of individuation. For the principle of individuation is supposed to be that on account of which two individuals of the same species are *primarily* distinct, meaning that they could not be distinct if they were not distinct *at least* in that principle in the first place. But then, if there cannot be two distinct forms constituting two distinct individuals of the same species unless they are received in different chunks of designated matter (which is a claim Aquinas makes in innumerable places), then the *primary* principle of the distinctness of these two individuals is their designated matter individuating their forms, so what *primarily* distinguishes these individuals, i.e., their principle of individuation, still has to be their designated matter.

In any case, what is more directly relevant to the argument itself is the question whether the senses are supposed to represent singularly because they represent the designated matter of sensible singulars. Bob doubts this, referring to the possibility of my being presented with exactly similar copies of the same book, without being able to tell them apart, given that – I quote – “the contents of my sensations would be the same. Whatever it is that makes those two books different, I would not be seeing it.”

This intended counterexample simply disregards the characterization of designated matter as “matter contained under particular dimensions, *here* and *now*”. If I am presented both books at the same time, then, barring a miracle, they have to occupy different positions, so “the contents of my sensations” of the two books would *not* be the same. If they are presented to me successively, then of course I may mistake one for the other, but then it is not only a matter of direct perception, but recognition involving perception and memory, which is an entirely different business.

In fact, this example is very well suited to explain why we have to accept the premise Bob is challenging here. For the reason why I see *this* book as distinct from *the other*, despite all their qualitative similarities is that I see the visible qualities of *this one* as informing *this matter here*, while I see the similar qualities of *the other one* as informing *that matter there*. So I see them in their singularity precisely because I see

what makes them singular despite all their qualitative similarities, so I see their principle of individuation. (To be sure, I see matter *per accidens*, on account of seeing its dimensions which “designate” it, just as I see a substance *per accidens*, on account of seeing its visible features. This is why Aristotle says that I see Socrates *per accidens*.)

Furthermore, when it is not by sight, but by means of some other sense that I perceive sensible singulars, then it is again the same principle that provides the singularity of my perception. To take Bob’s example, if I am able to feel the smell of the books at all (for which I will obviously have to get pretty close to them), I am able to tell that now I feel the smell of *this one here*, and not the smell of *the other one over there*, and *vice versa*, even if they may smell exactly alike, precisely because the smell of *this one* is coming from the matter of *this one here*, and not from *that one there*, and *vice versa*. So, I conclude that Bob has provided no sufficient reasons to doubt either premise 1 or 11.

Finally, to address what appears to be Bob’s last concern, let us take a look again at premise 7. This premise is simply meant to summarize the two passages from Aquinas’s commentary on the *De Anima* I quoted in previous footnotes. The point of the premise is that according to Aquinas’s theory of sensory perception, the common sensibilia of sensible objects, which are precisely those dimensions here and now that determine or designate the sensible object’s principle of individuation, have to be represented by corresponding spatio-temporal features of whatever represents them as the result of the natural causality of these objects. As I have noted, this claim is far from being self-evident, and is definitely worth further exploration. Just what is it in the causality of these objects that necessitates according to Aquinas that their singularity will have to be represented by the corresponding material features of what represents them?

However, in defense of the argument as it stands, I can simply note that Bob’s critical remark, namely, that my argument would need the further result that something immaterial cannot represent such individual information is not justified. As I have already pointed out, the argument as reconstructed does not rely on the intellect’s inability of representing singularity, but on its ability of representing universality. What this part of the argument is meant to establish is simply that whatever represents the singularity of singular material objects does so by representing their material conditions, and that, according to Aquinas, in the process of the natural causality of these objects, these material conditions have to be encoded by corresponding material features of what represent them in their singularity. Therefore, whatever represents them in their singularity has to be material. From this it does indeed follow by contraposition that whatever is immaterial cannot represent their singularity. But the argument does not rest on and does not exploit this further implication. What the argument does exploit is the further move that the intellect, which represents universally, does not represent the singularity of these objects in its universal representation; indeed, in this universal representation it cannot have anything that encodes that singular information, because that would prevent the universality of representation. Therefore, in that universal representation it cannot have those features that were proven in the first part of the argument to encode the singularity of sensible objects. But since those features were seen to be the material features of the representing acts themselves, it follows that the

universally representing acts of the intellect cannot have those material features. Therefore, these acts must be immaterial, and so the intellect itself, to which these acts belong, must also be immaterial.

Summary of the reply to the main objection of the second argument

To address Bob's concern about exactly how Aquinas's argument for the immateriality of the intellect relies on the universality of its mode of representation, and not on the presumption that it cannot represent singulars in their singularity, I can spell out the relevant steps as follows:

1. Any act of representation is singular in its mode of representation iff it is not universal in its mode of representation
2. Any act of representation is singular in its mode of representation iff the act of representation is material in its mode of being
3. *Some* representing act of the intellect is universal in its mode of representation
4. Therefore, *some* representing act of the intellect is not material in its mode of being (that to say, the intellect is a power that has *some* act that is immaterial in its mode of being) [1, 2, 3]
5. Any power that has *some* act that is not material in its mode of being is immaterial
6. Therefore, the intellect is immaterial [4,5]

Clearly, this piece of reasoning does not rely on the claim that since the intellect is immaterial, it cannot represent singulars. But, of course, if we take (6) and add that an immaterial power can have no material acts, then from this it follows with (2) that the intellect cannot have any act of representation that is singular in its mode of representation, i.e., that the intellect cannot represent singulars in their singularity. Aquinas is indeed very consistent in drawing this further conclusion, but this is the further conclusion of another argument, and not a premise of the original.

Joshua P. Hochschild:

Logic or Metaphysics in Cajetan's Theory of Analogy: Can Extrinsic Denomination be a Semantic Property?

I. Introduction

John Poinsoot (a.k.a. John of St. Thomas, 1589-1644) said that Cajetan's treatise *De Nominum Analogia* ("On the analogy of names") handled the difficulties of analogy so subtly and thoroughly that there was left nothing else to consider on the matter.¹ But even in Poinsoot's ringing endorsement there is the seed of confusion. The endorsement prefaces a summary of Cajetan's theory of analogy in the *Ars Logica* of Poinsoot's *Cursus Philosophicus Thomisticus*, in the section which treats Aristotle's *Categories*. But the endorsement speaks of the difficulties of analogy, "which are largely metaphysical" (*quae satis metaphysicae sunt*). Does Poinsoot think that Cajetan's treatment of analogy is largely metaphysical, or does he think that the treatment is logical, with consequences for metaphysics?² Or does he think that analogy raises metaphysical problems with logical solutions?³

The roles and relation of logic and metaphysics in Cajetan's *De Nominum Analogia* remain contested. It seems clear from the title and content of the text that Cajetan's intention was to present a logical, or semantic, analysis of analogical

The following abbreviations are used for the works of Cajetan: DNA = *De Nominum Analogia* (1498); IDEE = *Commentaria in De Ente et Essentia* (1495); IPA = *Commentaria in Praedicamenta Aristotelis* (1498); IPI = *Commentaria in Porphyrii Isagogen ad Praedicamenta Aristotelis* (1497); IST = *Commentaria in Summam Theologiae St Thomae* (1507-1522). Page and section numbers are from editions specified in the bibliography, and all translations are my own.

¹"Difficultates de analogia, quae satis metaphysicae sunt, ita copiose et subtiliter a Caietano disputatae sunt in opusc. de Analogia nominum, ut nobis locum non reliquerit quidquam aliud excogitandi." *Ars Logica*, p. 2, q. 13, a. 2 (481b30-35).

²It could be argued that Cajetan himself contributes to the confusion when he says at the outset that he is motivated to treat analogy because "without it, it is not possible that anyone learn about metaphysics" (*ut sine illa non possit metaphysicam quispiam discere*), DNA §1.

³The question of whether Cajetan's treatment of analogy should be classified as logical or metaphysical can be understood as one manifestation of a continuing debate about whether, in general, the issue of analogy is primarily the provenance of the logic of metaphysics. Some of the disparate recent positions in this more general debate are represented by: Anderson (1949); Anderson (1967); McInerny (1961); McInerny (1996); Theron (1995): 147; Theron (1997): 616; Dewan (1999b).

signification.⁴ However, Ralph McInerny sees evidence that this intention is not fulfilled. According to McInerny's influential interpretation,⁵ Cajetan's distinction between different kinds (*modi*) of analogy is based on a confusion of the logical and metaphysical orders.⁶ Specifically, McInerny has charged that Cajetan smuggled in metaphysical considerations which are irrelevant to a properly logical consideration of analogical signification; since he judges Cajetan's distinction between analogy of attribution and analogy of proportionality to depend on these metaphysical considerations, he rejects the distinction.⁷

McInerny's criticism depends in part on the claim that Cajetan's distinction between attribution and proportionality is based on the distinction between extrinsic and intrinsic denomination. As we will see in the course of this paper, this claim needs some qualification. But the more serious claim underlying McInerny's criticism is that extrinsic and intrinsic denomination is a metaphysical matter, and that consideration of it is therefore unjustified in a strictly logical analysis of analogical signification. In this paper I intend to argue that extrinsic denomination can be a properly logical property, and that it is legitimately included in Cajetan's analysis of analogical signification.⁸ In fact, as I will show, there is a clear semantic basis for Cajetan's distinction between modes of analogy, prior to any mention of intrinsic and extrinsic denomination, and from which it follows that one mode of analogy, "analogy of attribution," always involves extrinsic denomination.

The plan of the paper is as follows. In the first half I provide some of the background to Cajetan's theory of analogy by way of a sketch of some of Cajetan's semantic principles. Here I will discuss not only signification and predication, but denomination, and I will show that whether a term denominates extrinsically or intrinsically can be understood as a properly semantic property. In the second half of the paper I will explain the actual basis for Cajetan's distinction between different modes of analogy, and show how Cajetan's claims about extrinsic denomination in analogy of attribution

⁴Among the minority who dissent from this view and take it for granted that Cajetan's treatise is a "metaphysical" treatment of "the analogy of being" are McCanles (1968) and Kuntz (1982).

⁵Among those who follow McInerny are Burrell (1999), 253; Deely (1999); and Tracy (1981): 413. E.J. Ashworth has criticized McInerny's interpretation of Thomistic analogy, but she follows him in judging that Cajetan "focus[ed] on ontology" in his division of analogous terms. Ashworth (1992b): 128.

⁶Meagher (1970) is apparently influenced by McInerny's interpretation but in his hands it takes on a completely distorted form. Meagher thus says, what McInerny does not claim, that according to Cajetan "the analogy of names is a metaphysical doctrine" (p. 240); and again, "The analogy of names is a logical rather than a metaphysical question, a point which Cajetan missed altogether" (p. 241).

⁷McInerny (1961): 32-36, 90-125; 165; McInerny (1968): 105-107; McInerny (1996): 3-29.

⁸My strategy thus differs from that of two previous major critics of McInerny's position on the role of extrinsic and intrinsic denomination in discussions of analogy. James F. Ross agreed with McInerny that analogy is a matter of logic, but countered that "[s]emantics... is not as metaphysically pure" as McInerny would have it. Ross (1962): 640. John Beach (1965) argued that it is legitimate to base a distinction between kinds of analogous names on the distinction between intrinsic and extrinsic denomination. McInerny responds to Beach in McInerny (1968): 105-111.

follow from properly logical concerns. Along the way, I will also briefly discuss another of Cajetan's modes of analogy, "analogy of inequality," for two reasons: first, because the semantic principles sketched in the first half of the paper allow us to clear up some common confusion about this mode of analogy; and second, because Cajetan's treatment of this mode of analogy further confirms that, in *De Nominum Analogia*, Cajetan is consistent in excluding properly metaphysical considerations from a strict logical analysis of analogy.

II. Some Semantic Preliminaries

A. Signification

Cajetan's notion of signification can be introduced by turning to his description of the subject matter of Aristotle's *Categories*. Briefly, Cajetan explains that while the metaphysician considers things as they are, the logician considers things as they are understood and signified. As Cajetan describes it, in the part of logic that regulates the most basic intellectual act, simple apprehension,

incomplex things are not united and distinguished with the conditions that they have in the nature of things, but as they are received by the intellect, that is, as they stand under the simple apprehension of the intellect, that is, as objects of simple apprehension of the intellect, and things so received are nothing other than things said by interior words, or (which is the same) things conceived by simple concepts; and things of this sort are nothing other than things signified by incomplex words (since words are signs of concepts and concepts [are signs] of things)....⁹

This passage is illuminating in several ways. At the end, as an aside, Cajetan introduces what has come to be called the "semantic triangle": word, concept, and thing. However the discussion leading up to this helps us to understand how the terms of this semantic triangle should be understood. The concept is equated with an act of intellect, which is just that by which the intellect is made aware of something in some way. So in saying that "words are signs of concepts and concepts are signs of things," we see that Cajetan means that a word signifies immediately an intellectual act or "concept" which necessarily mediates understanding, and ultimately signifies what is understood by the mediation of that concept, that which the concept makes one understand.

So a word immediately signifies a concept and ultimately signifies some "thing". However, the things signified and understood are not concrete individuals, but what

⁹*IPA* 3: "...res incomplexae non adunantur et distinguuntur cum conditionibus, quas habent in rerum natura, sed ut sic acceptae per intellectum, id est ut stant sub simplici apprehensione intellectus, id est ut obiectae simplici apprehensioni intellectus, et res sic acceptae nihil aliud sunt quam res dictae verbis interioribus, vel (quod idem est) quam res conceptae conceptibus simplicibus, et res huiusmodi nihil aliud sint quam res significatae vocibus incomplexis, quondo voces sunt signa conceptuum et conceptus rerum...."

Cajetan will speak of as their “forms” or “natures.”¹⁰ It is important to note that in a strictly semantic context, such terms are not to be taken in their full, metaphysical, sense, but in an extended sense to cover whatever can be understood or signified *as if after the manner of a form*. So Cajetan will say that the “nature” is simply “that which is signified by the definition,” to be contrasted with the “supposit” or referent of the term, which has that nature.¹¹ Again, in such contexts, “by the name ‘form’ we understand anything by which something is said to be such and such, whether it is really an accident, or substance, or matter, or form.”¹² So the difference between a “nature” or “form” in its strict, metaphysical sense, and its broader logical or semantic sense, is that in the former sense it is some real quiddity of a thing, while in the latter case it is whatever a word can signify. Cajetan explains this difference at some length:

...note that just as the *what of the thing* [*quid rei*] is the quiddity of the thing, so the *what of the name* [*quid nominis*] is the quiddity of the name. However the name, since it is essentially a sign of those passions which are objectively in the soul according to *Perihermenias* 1, does not have another quiddity except this, that it is the sign of something understood or thought: a sign, however, as such, is relative to what is signified. Whence to know the *what of the name* is nothing other than to know to what such a name has a relation as sign to signified. Such knowledge however can be acquired through accidents of that signified thing, through common characteristics, through essential characteristics, through nods, and whatever other ways, as by asking a Greek the *what of the name* “anthropos,” if by a finger he indicated a man, then we perceive the *what of the name*; and similarly of others. But in asking the *what of the thing*, it would be necessary to assign that which belongs to the thing signified in the first mode of adequate perseity. And this is the essential difference between the *what of the name* and the *what of the thing*, namely that the *what of the name* is the relation of the name to the signified, while the *what of the thing* is the essence of the thing related or signified. And from this difference there follow all others which are usually said, such as that the *what of the name* may be of complex non-beings, by accidental, common, or extraneous characteristics; while the *what of the thing* is of an incomplex being known properly and essentially. For the relation of the word can terminate in what is not a being in the nature of things, and in what is complex,

¹⁰In this and other respects Cajetan stands firmly in the *via antiqua* “realist” tradition, on which see Klima (2000).

¹¹IDEE §84: “...est notandum, quod cum nomine naturae intelligatur id quod per diffinitionem significatur, nomen autem suppositi individuum habens illam quidditatem.”

¹²IPA 18: “...scito quod formae nomine in hac materia intelligimus omne id quo aliquid dicitur tale, sive illud sit secundum rem accidens, sive substantia, sive materia, sive forma.” *IST* I.37.2, n. iv: “Omne denominans, ut sic, habet rationem formalis.” Cf. Aquinas, *ST* I.37.2.c: “...sciendum est quod, cum res communiter denominentur a suis formis, sicut album ab albedine, et homo ab humanitate, omne illud a quo aliquid denominatur, quantum ad hoc habet habitudinem formae. Ut dicam, iste est indutus vestimento, iste ablativus construitur in habitudine causae formalis, quamvis non sit forma.” Cf. Aquinas, *QDP* 7.10, ad. 8: “Dicendum est quod illud a quo aliquid denominatur non oportet quod sit semper forma secundum rei naturam, sed sufficit quod significetur per modum formae, grammatice loquendo. Denominatur enim homo ab actione et ab indumento, et ab aliis huiusmodi, quae realiter non sunt formae.”

and can be declared through accidents, and suchlike; while the essence of the thing is not had except through the essential properties of incomplex entities.¹³

In light of contemporary philosophical concerns, and familiar criticisms of scholastic logic, two things are worth emphasizing. First, by speaking of a “concept” Cajetan is not introducing some controversial psychological or epistemological entity, but simply giving a name to a necessary element of the activities of thought and speech. Wittgensteinian and other criticisms of “concepts” in philosophy of mind and philosophy of language notwithstanding, Cajetan’s “concepts,” understood in the sense that he intended them as the intellectual acts which mediate conception and signification, are just not the kind of things whose existence could be contested. Someone who denied that there were such concepts, or that he had any such concepts, would be denying that he understood anything, or that he uttered significant speech.¹⁴

Similarly, the claim that what words signify are “forms” or “natures” should be seen as more universally acceptable than it otherwise might. For as we have seen, reference to “forms” or “natures” in the context of logic is reference not to metaphysical forms *in rerum natura* but to whatever can be understood by simple acts of apprehension, or signified by simple terms. That these are *not* forms in the metaphysician’s sense is perhaps most easily seen from the fact that we can think about and refer to non-existent things, to privations, to beings of reason, none of which would, on a standard Aristotelian hylomorphist account, be real forms or real natures. Indeed, it is worth pointing out that in principle such “forms” or “natures” need not even imply an Aristotelian hylomorphist metaphysics or philosophy of nature¹⁵ (though of course both are present in Cajetan). Furthermore, we see in this clarification the material for an answer to the famous nominalist charge that realists multiplied entities for every

¹³*IDEE* §8: “...nota quod sicut quid rei est quidditas rei, ita quid nominis est quidditas nominis. Nomen autem cum essentialiter sit nota earum quae sunt objective in anima passionum ex I Perihermenias, non habet aliam quidditatem nisi hanc quod est signum alicujus rei intellectae seu cogitatae: signum autem, ut sic, relativum est ad signatum. Unde cognoscere quid nominis nihil est aliud quam cognoscere ad quod tale nomen habet relationem ut signum ad signatum. Talis autem cognitio potest acquiri per accidentalia illius signati, per communia, per essentialia, per nutus et quibusvis aliis modis, sicut a Graeco quaeretibus nobis quid nominis anthropos si digito ostendatur homo, jam percipimus quid nominis; et similiter de aliis. Interrogantibus ver quid rei, oportet assignare id quod convenit rei significatae in primo modo perseitatis adaequatae. Et haec est essentialis differnetia inter quid nominis et quid rei, scilicet quod quid nominis est relatio nominis ad signatum; quid rei vero est rei relatae seu significatae essentia. Et ex hac differentia sequuntur omnes aliae quae dici solent, puta quod quid nominis sit non entium complexorum, per accidentalia, per communia, per extranea; quid rei vero est entium incomplexorum per propria et essentialia: relatio enim vocis potest terminari ad non entia in rerum natura, et complexa, et declarari per accidentalia, et hujusmodi ; essentia autem rei non nisi per propria essentialia habetur de entibus incomplexis.”

¹⁴To be sure, considered as elements of Cajetan’s particular philosophical psychology, which in turn depends on a certain metaphysical framework, one could take issue with Cajetanian “concepts.” The only point here is that, considered in their general semantic and epistemological function, “concepts” are just what make possible signification and understanding.

¹⁵Cf. Klima (1996): 106-107, 114-115.

significant term.¹⁶ But of course, Cajetan and other semantic “realists” did not distinguish logical from metaphysical “forms” or “natures” merely as an *ad hoc* strategy of ontological reduction; the distinction quite naturally follows from the nature of logic, and the observation with which we began this discussion, that the business of logic is to consider things, not as they are in reality, but as they are understood and signified by the mediation of human concepts.

It is necessary, however, to clarify further Cajetan’s use of the term “concept.” Cajetan adopted the later scholastic distinction between the “formal concept” (*conceptus formalis*, also sometimes the *conceptus mentis* or *conceptus mentalis*, “mental concept”) and the “objective concept.”¹⁷ As Cajetan explains the distinction:

...note that there are two sorts of concepts: formal and objective. The formal concept is some likeness that the possible intellect forms in itself, and which is objectively representative of the thing understood; this by the philosophers is called the intention or the concept, by the theologians the word. The objective concept is the thing represented by the formal concept, terminating the act of understanding; for example, the formal concept of a lion is that image which the possible intellect forms of leonine quiddity, when it wants to understand it; but the objective concept of the same is the leonine nature itself, represented and understood. Nor should it be thought when it is said that a name signifies a concept that it signifies only one of these; for the name “lion” signifies both, albeit in different ways; it is the sign of the formal concept as of the means, or *that by which* [it signifies], and it is the sign of the objective concept as of the end, or *that which* [it signifies].¹⁸

So what Cajetan here calls the “formal concept” is what was introduced above as simply the concept, that which mediates thought and signification. What Cajetan here calls the “objective concept” sounds like what has already been introduced as the terminus of an act of thought and signification, the “nature” which is understood or signified. This is why, in other contexts, Cajetan will assimilate the “objective concept” to the “*res*” or “*res extra anima*” of the semantic triangle.¹⁹ Indeed, it is fair to think of the objective concept and the signified nature as the same thing, with this qualification: considered as

¹⁶Cf. Klima (1991).

¹⁷The distinction is usually traced back to the fourteenth century, though Aquinas seems to express, albeit without these technical names, the same distinction and it has therefore easily become a part of the Thomistic tradition; cf. Maritain (1959): 387-417.

¹⁸*IDEE* §14: “...nota quod conceptus est duplex: formalis et objectalis. Conceptus formalis est idolum quoddam quod intellectus possibilis format in seipso repraesentativum objectaliter rei intellectae: quod a philosophis vocatur intentio seu conceptus, a theologis vero verbum. Conceptus autem objectalis est res per conceptum formalem repraesentata in illo terminans actum intelligendi, verbi gratia: conceptus formalis leonis est imago illa quam intellectus possibilis format de quidditate leonina, cum vult ipsam intelligere; conceptus vero objectalis ejusdem est natura ipsa leonina repraesentata et intellecta. Nec putandum est cum dicitur nomen significare conceptum quod significet alterum tantum: significat enim leonis nomen conceptum utrumque, licet diversimode, est namque signum conceptus formalis ut medii, seu quo, et est signum conceptus objectalis, ut ultimi seu quod.” In fact, Cajetan will in some contexts make even further distinctions about how the formal and objective concepts can be considered (cf. *IDEE* §48).

¹⁹E.g. *DNA* §31.

the *nature*, it is the object of understanding and signification *considered just in itself*, while considered as the *objective concept*, it is this object considered as terminating an act of thought or signification, that is, *considered as an object of conception*. So the objective concept, even though it is in some sense what is “outside” of the soul (*res extra anima*), is also “in” the soul—not in it as in a subject, as the formal concept is in the soul, but in the soul as the intellect’s object.²⁰

Another and related term which plays a role in Cajetan’s understanding of signification is “*ratio*” The word is notoriously difficult to translate. Among the main English renderings which have been employed are “content,”²¹ “analysis,”²² and “formality.”²³ In clarifying the use of “*ratio*” in a passage from Aristotle’s *Categories* (a passage which will prove relevant to our discussion of analogy), Cajetan says that the *ratio* is the definition, when there is a definition, and otherwise it is what is “directly signified by the name.” In either case, Cajetan suggests translating “*ratio*” as “*conceptus*.” It would seem from this context that Cajetan does not intend the *formal concept* or mediating act of intellect, but what this formal concept represents to the intellect as terminating its act, that is, the *objective concept*.²⁴ However, in another context, Cajetan will clarify that “*ratio*” can be taken in either way, as indicating the definition, or as indicating the formal concept.²⁵

It should not be surprising, then, that the *ratio* can be said both to be in things, and to be in the intellect. Indeed, the *ratio* appears to be even more versatile than the objective concept, which as we have just seen is in the intellect objectively, and outside of the intellect as what is understood. The *ratio* can be understood (1) as in things, as their own intelligible structure, prior to our thought and signification; (2) as the significate of

²⁰*IDEE* §66: “Esse in intellectu contingit dupliciter, subjective et objective. Esse in intellectu subjective est inhaerere ipsi, sicut accidens suo subjecto, ut albedo superficiei. Esse in intellectu objective est terminare actum intellectus.”

²¹Bochenski (1948).

²²Ashworth (1991): 51, 53.

²³Bushinsk (1953). One of the flaws of Bushinski’s translation of *DNA* is its inconsistent translation of the term “*ratio*,” which is also rendered variously as “character,” “notion,” “nature,” “definition” and “mode.”

²⁴*IPA*, 9: “Ly «ratio», licet multipliciter sumi possit, hic sumitur non pro diffinitione, quoniam res generalissimae aequivoca dici non possent, eo quod diffinitione carent, sed sumitur pro conceptu significato per nomen, qui in habentibus diffinitionem est diffinitio ipsa, in non habentibus vero diffinitionem ratio quam significat nomen vocatur, et nihil aliud est quam id quod directe significatur per nomen.”

²⁵*IST* I.13.4, n. 3: “[ratio sumi potest pro] conceptionem et definitionem, sed diversimode. Conceptio enim mentalis ratio nominis dicitur, quia est id quo refertur nomen in significatum extra animam: definitio autem, quia est id quo explicatur nominis significatum.” Cf. *ST* I.5.2. Cajetan is clarifying the sense of Aquinas’s claim, “Ratio enim quam significat nomen, est conceptio intellectus de re significata per nomen.” It is worth noting that in the context of this article Cajetan recommends taking “*ratio*” as the mental concept, not as the definition, and so his interpretation would apparently differ from that of Ashworth, who would translate “*ratio*” with “analysis.” Ashworth(1991): 51, 53.

a term, the intelligible structure abstracted from things and terminating acts of understanding and signification; and (3) as the act of understanding by which that intelligible structure is understood, the accident inhering in the intellect which mediates thought and signification.

B. Predication

It is the second of these three ways of understanding the *ratio* that we can say that the *ratio* is predicated of something. Indeed, this is why, when there is a definition (*id quo explicatur nominis significatum*), it can replace the *ratio* without changing the sense of the predication. Cajetan subscribes to what has been called “the inherence theory” of predication, according to which to predicate a common term of something is to signify the inherence of the significate of the predicate in that thing.²⁶ So a predication is true if and only if the significate of the predicate actually inheres in that of which it is predicated. Here, we must distinguish between what is predicated, and what verifies the predication. The significate of the predicate is what is predicated, and its actuality in the subject is what verifies the predication. Put another way, what is predicated is the nature, absolutely considered, that is, the nature considered in itself without any of the conditions that accompany it as it exists in a particular thing. That is why, when I say “Socrates is a man,” I predicate of Socrates only what is included in the significate of “man,” namely humanity. But what verifies the predication is the actual humanity in Socrates, which is some individualized reality in Socrates—according to the Thomist tradition, Socrates’ soul, the substantial form by virtue of which he is a man and alive.²⁷

Of course, this is only an example, and in this example there happens to be a neat correspondence between the *ratio* of humanity as predicated and the real nature *humanity* which verifies the predication. This will not always be the case, for what it is for the significate to be actual or exist will be different with different kinds of significates. For instance, when the *ratio* is a privation, the actuality of that *ratio* will be the absence of the corresponding positive form. The typical example is “blindness,” which is actualized when someone lacks the real form, sight. Indeed, in this case, this is just what blindness is, which would presumably be spelled out in the definition of the *ratio* of blindness. But privations are not the only complicating cases, and in general we can say that what it is for a significate or *ratio* to be actual in something will vary with the kind of significate or *ratio* that it is. Indeed, although we can say in general that for Cajetan a predication is true if and only if the significate of the predicate *is* (or *exists* or *is actual*) in its subject, there will prove to be different senses of “being” (or “existing,”

²⁶On the inherence theory see de Rijk (1962): 37-38; Geach (1980): 289-301; Klima (1996).

²⁷Ashworth explains the difference between what is predicated and what verifies the predication as the difference between the significate (*significatum*) and the thing signified (*res significata*). Ashworth (1991): 50-53. Her explanation is coherent and valuable with respect to the 13th C. authors she considers, but I have yet to notice that Cajetan observes a strict technical difference between “*significatum*” and “*res significata*.”

or “being actual”), which are appropriate for different kinds of significates.²⁸ A fuller account of these different senses, and how they are systematically related, would be needed for any really thorough explanation of Cajetan’s semantic principles.²⁹ For our purposes, the essential point is only that different kinds of predicates will have different verification conditions, that is, different senses in which the significates of the predicates can be actual.

C. Denomination

Denomination seems to be closely allied to predication; a term denominates those things for which it can supposit, that is, those things of which it is truly predicable. However in the typical construction, a thing is denominated by a term *from* something. That *from* which something is denominated is the denominating *form* (again, a form in the semantic, rather than metaphysical, sense), which need not be the same as the form signified by the denominating term. It is true that in the discussion at the beginning of the *Categories*, Aristotle’s “paronyms” (*παρωνυμια*, 1a12) was translated as “denominatives” (*denominativa*), and in commenting on the passage Cajetan describes a strict sense of denomination in which the denominating form is just that which the denominating term signifies.³⁰ But this strict sense of denomination is not the most commonly employed. There are clearly other senses in which the denominating form is not the significate of the term.

²⁸In fact, this is the reason why in certain contexts Cajetan is reluctant to describe predication in terms of inherence, and instead describes what looks like the theory sometimes contrasted with the inherence theory of predication, the identity theory of predication. *IPA* 47: “Praedicari de aliquo cum nihil aliud importet quam inesse seu convenire illi de quo praedicatur, consequens est quod praedicari de aliquo secundum nomen nihil aliud sit quam nomen praedicati convenire subiecto, ita quod nomen praedicata sit etiam nomen subiecti; nec refert an tale nomen sit subiecti secundum substantiam aut secundum qualitatem, vel quodcumque aliud extraneum, Sufficit enim quod nomen illud eius aliquo modo nota sit essentialiter vel denominative intrinsece vel extrinsece; et similiter sequitur quod praedicari secundum rationem nihil aliud sit quam rationem praedicata convenire subiecto, ita quod ratio praedicati sit etiam ratio subiecti; nec refert an ratio praedicati sit tota ratio subiecti an sit pars rationis, dummodo sit pars intrinseca, quod dico propter ea quae cadunt in ratione ut addita, sicut subiectum est pars rationis accidentis et corpus animae.” *IDEE* §9: “...veritas propositionis, quae est entis secundo modo significati, nihil aliud est quam compositio facta in secund operatione intellectus objecto conformis, verbi gratia, Sortes est caecus, ly est non significat inhaerentiam caecitatis in Sorte, eo quod caecitas omni inhaerentia caret, cum inhaerere realium accidentium sit, sed significat compositionem factam ab intellectu adequante seipsum per illam objecto, Sorti, scilicet, carente virtute visiva, unde V Metaph. in alia littera, dicitur quod ens significans veritatem propositionis significat quoniam propositio est vera.” But cf. *IPI*, 20-21, “Imaginandum enim est, quod intellectus videns Sortem habere albedinem, prima sua attentione format hanc propositionem mentalem: Sortes est albus in qua propositione tot terminos poscit, quot videt extra animam res; tria siquidem ibi videt, scilicet Sortem, albedinem et inhaesionem albedinis in Sorte.”

²⁹Klima (1996) carries out this project with respect to Aquinas, with results substantially the same as those we would expect from a similar analysis of Cajetan.

³⁰*IPA* 16: “non debet denominativum differre a nomine formae denominatis in significatione.... Differentia autem in modo significandi inventa inter denominativum et denominans non excluditur....”

It seems that it was usually thought that the denominating form would have some connection to the etymology of a term. Thus denomination is closely allied with *imposition*. The denominating form can thus be understood as that from which a term is imposed. However it appears that where that from which a term is imposed to signify is *merely* an etymology unconnected with the terms' current signification, it is not the denominating form.³¹ So it seems to be that the denominating form needs to be somehow consigned by the term, in such a way that it would appear as a part of its *ratio*, that is, it would be included as part of the definition of that thing insofar as it is denominated by that term.

D. Extrinsic Denomination

Though it becomes commonly invoked by later scholastic philosophers, a technical distinction between intrinsic and extrinsic denomination has murky origins.³² Though there are passages in Aquinas which seem to describe and employ the distinction,³³ it does not appear to be referred to as such in a technical way. It is formulated in the *Summa Totius Logicae*, long spuriously attributed to Aquinas, as follows:

However something can be predicated denominatively, or can denominate that thing, in two ways. In one way such predication or denomination is made from something which is intrinsic to that of which such predication or denomination is made, which namely perfects that thing either by identity or inherence.... In the second way denomination is made from the extrinsic, namely from that which is not formally in the denominated thing, but is some extrinsic absolute, from which the denomination is made."³⁴

It is completely in accord with this that John Doyle has offered the following description of extrinsic denomination: "extrinsic denomination [is] a designation of something not from anything inherent in itself, but from some disposition, coordination, or relationship which it has toward something else."³⁵ Doyle's description serves to

³¹Othewise, e.g., "lapis" ("stone")—in the accusative "lapidem"—which was hypothesized to have been imposed from "laedens pedem" ("foot-huring"), would have *foot-hurting* as its denominating form, when in fact it denominates stones on account of their nature, which could be called "lapiditas." Cf. the discussions of imposition in Klima (1996): 110-111 and Ashworth (1991): 46-50.

³²In general, it is remarkable that there is so little explicit reflection and explanation of the notions of intrinsic or extrinsic denomination, both in modern scholarship and in the medieval authors. While the distinction has obvious precedents in Aquinas and before, it appears as a technical term only later, and the examples and applications quickly become familiar, but even in a systematic work of logic such as the *Ars Logica* of John Poincot's *Cursus Philosophicus* the notion of extrinsic denomination is taken for granted and neither fully defined nor explained.

³³E.g. Aquinas, *In Phys.* 3.5, §322; Aquinas, *ST I*.6.4.

³⁴*Summa Totius Logicae* (tr. 5, c. 6): "Dupliciter autem potest aliquid de alio praedicari denominative, sive illud denominare. Uno modo quod talis praedicatio seu denominatio fiat ab aliquo quod sit intrinsecum ei de quo fit talis praedicatio seu denominatio, quod videlicet ipsum perficiat sive per identitatem sive per inhaerentiam.... Secundo modo fit denominatio ab extrinseco, scilicet ab eo quod non est in denominato formali, sed est aliquod absolutum extrinsecum, a quo fit talis denominatio."

³⁵Doyle (1984): 122-123. Doyle is careful to offer this as a provisional description, not a definition of extrinsic denomination as that was understood by Suarez or other medieval philosophers.

explicate the obvious sense of the terms, that in extrinsic denomination something is *named from* something which is extrinsic to it, something which, by implication, is intrinsic to, or “inheres in,” something else. Indeed, Doyle’s mention of a “disposition, coordination, or relationship... toward something else” recalls a discussion in the *Summa Totius Logicae* in which the denominating form is described as the foundation to which the denominated thing is related:

It must be known that extrinsic denomination requires some essential relation between the extrinsic denominating [form] and what is denominated from it... and therefore it is necessary that that from which such denomination is made is the essential foundation of this relation.³⁶

Cajetan seems to think that this description does not entirely capture all cases of extrinsic denomination. Sometimes extrinsic denomination requires that the denominating form be an extrinsic foundation of a relation; other times it only needs to be a relation itself, which is extrinsic. Defining both of these in contrast with intrinsic denomination, Cajetan says:

Denomination is twofold, sometimes intrinsic, and sometimes extrinsic. It is called intrinsic denomination when the denominating form is in that which is denominated, as white, quantity, etc; while denomination is extrinsic when the denominating form is not in the denominated thing, as location, measure, and the like.... But there are two ways in which it occurs that something is said to be such from something extrinsic. In one way, so that the *ratio* of the denomination is that relation to something extrinsic, as urine is called “healthy” only by its relation as sign to health. In the other way, so that the *ratio* of the denomination is not the relation of similitude, or whatever else, but the form which is the foundation of the relation of similitude to something extrinsic: as air is said to be “bright” (*lucidus*) from the brightness of the sun (*luce solari*)....³⁷

So something can be denominated extrinsically either by an extrinsic relation, or an extrinsic foundation of a relation. But is extrinsic denomination invoked to make a semantic claim, or to make a metaphysical claim? When medieval authors said that a term denominates extrinsically, it is clear that they often meant to be making a metaphysical claim. Some of the typical examples of terms which were said to denominate extrinsically—in addition to the ones mentioned, common examples include “is seen” (*videtur*), or “is understood” (*intelligitur, cognoscitur*)—are often so

³⁶*Summa Totius Logicae*, tr. 5, c. 6: “Sciendum est autem, quod denominatio ab extrinseco requirit aliquem per se respectum inter extrinsecum denominans et denominatum ab eo; quia oportet quod per se et ex conditione rerum talis modus denominandi consequatur res; et ideo oportet quod illud a quo fit talis denominatio, sit fundamentum per se alicujus habitudinis.”

³⁷*IST* I.6.4, nn. 3, 8: “...denominatio est duplex, quaedam intrinseca, et quaedam extrinseca. Vocatur denominatio intrinseca, quando forma denominativi est in eo quod denominatur, ut album, quantum, etc.: denominatio vero extrinseca, quando forma denominativi non est in denominato, ut locatum, mensuratum, et similia.... Dupliciter enim contingit aliquid dici tale ab aliquo extrinseco. Uno modo, ita quod ratio denominationis sit ipsa relatio ad extrinsecum, ut urina dicitur sana, sola relatione signi signi ad sanitatem. Alio modo, ita quod ratio denominationis sit, non relatio similitudinis, aut quaevis alia, sed forma quae est fundamentum relationis similitudinis ad illud extrinsecum; ut aer dicitur lucidus luce solari, ea ratione qua participat eam per formam luminis.” It is not clear whether we can regard one of Cajetan’s two alternatives as reducible to the other, insofar as a *relation* is only called extrinsic because its *foundation* is extrinsic.

described in contexts that make it clear that the main point is metaphysical: that when an object becomes such, it is not because of some real change in it, but because something else has changed.³⁸ In such cases, it is safe to say that extrinsic denomination, while phrased as a property of terms, was intended to describe properties of things.³⁹

It is interesting, however, that the metaphysical claim was couched in semantic language. The claim seems to be the following:

A term P denominates some thing x extrinsically iff for the form signified by P to be actual in x is for some other form F, consigned by P, to be actual in something other than x.

According to this definition, determining whether a predicate denominates extrinsically would indeed require metaphysical consideration of what it is for a significate to be actual. But could it ever follow from the *semantics* of a term that for the significate to be actual in some thing is for some form to be actual in something *else*?

Apparently so in the case of the category of *relatives*, where reference to something else is built into the *ratio* of a relation.⁴⁰ As Aquinas put it, “Amongst those which are called relatives, something is denominated not only from that which is in it, but also from that which is extrinsic to it.”⁴¹ Indeed, both of Cajetan’s alternative occasions of extrinsic denomination described above require that there be a relation. While this may still look like a metaphysical claim, even if it is one that seems bound up with the semantics of terms, we must remember that in speaking of the categories, the medieval tradition took it that we were speaking not of things as they are in themselves, but of things as they are signified by our terms.

To see that this can be regarded as a semantic, rather than metaphysical, claim, we need to see whether there are ever cases in which extrinsic denomination is used to make a clearly semantic claim. So we can come up with a test case, in which we want to say that a term denominates extrinsically, as a semantic claim, but the corresponding metaphysical claim would be *false*. We can do this by altering a classic example of extrinsic denomination, when something is denominated as “seen” (*videtur*), so that what is seen is the very object which is doing the seeing. When I look at myself in the

³⁸Cf. e.g. Cajetan’s discussion of the objects of understanding being extrinsically denominated as intelligible or as actually understood, *IDEE* §67.

³⁹This often seems to be the case in late medieval discussions of whether the “six principles” (the last six of the accidental categories) were real beings or not; it was often suggested that they were not, and that they were denominated extrinsically. Cf. *Summa Totius Logica* tr. 5, c. 6. For discussion of these debates and references cf. McMahon (2000a) and McMahon (2000b).

⁴⁰This is at least the case with what were called relatives *secundum esse*, as opposed to relatives *secundum dici*; the former signify a relation, the latter only imply a relation insofar as they signify something which is the foundation of a relation.

⁴¹Aquinas, *ST I-II.7.2*, ad. 1: “In his autem quae ad aliquid dicuntur, denominatur aliquid non solum ab eo quod inest, sed etiam ab eo quod extrinsecus adjacet.”

mirror, we could say that my eye sees itself, and so my eye is seen by itself.⁴² From the metaphysical point of view, “seen” here does not seem to denominate the eye extrinsically; the sight by virtue of which it is seen inheres in it, because, *ex hypothesi*, it is that very thing which is seeing.

But from the point of view of the semantics, it is completely accidental that that which, because of its relation to sight, is denominated as “seen” happens to be the very thing in which the sight inheres. But then what stops us from saying that, from the point of view of the semantics, the eye is denominated as “seen” extrinsically? We could say that, *insofar as it is seen*, the actuality of the eye is distinct from the actuality of the sight, indeed, that the sight is *logically* extrinsic to the thing seen, even if in this case it is not *metaphysically* extrinsic. Is there grounds for saying this? I think so. The very distinction I am exploiting, between considering this relation from the metaphysical point of view and considering it from the semantic point of view, is expressed in Cajetan’s distinction between taking a relation materially or formally:

The term “to something [*ad aliquid*]” or “relative” can be taken in two ways, namely: *materially*, for that thing which is relative or is denominated *to something* [*ad aliquid*]; and *formally* for that relation or thing *as it has* [*ut habet*] the relation. For example, “lord” can be taken for that man, who is denominated lord; and it can be taken for [that man] *insofar as he has lordship* (*in quantum dominium habet*).⁴³

So we can modify our definition of extrinsic denomination above to make explicit that it is to be taken as making a semantic, as opposed to metaphysical claim:

A term P denominates some thing x extrinsically iff for the form signified by P to be actual in x is for some other form F, consigned by P, to be actual in something other than x *insofar as x is P*.

So even though, in our example, for being seen to be actual in the eye is for that very eye to have an act of sight inherent in it, we can still say that the denomination is extrinsic, because for the eye to be seen, insofar as it is seen, is not for that act of sight as such to be in that eye; because, of course, sight is in that eye insofar as the eye sees, and it is only by accident, from the semantic point of view, that in this case the eye that sees is the same eye that is seen.

⁴²There are some conditions, at least, in which would be willing to say that the eye sees itself, and not just that the eye sees only its reflection. Alternatively we could have considered the case in Socrates is thinking about something, and what he is thinking about is his own intellect.

⁴³*IPA* 124: “Ly vero «ad aliquid» sive «relativa» potest accipi dupliciter scilicet: materialiter pro re illa quae relativa vel ad aliquid denominatur, et formaliter pro ipsa relatione seu re ut habet relatione, verbi gratia: dominus potest accipi pro illo homine qui denominatur dominus, et potest accipi pro illo in quantum dominium habet.”

III. Cajetan's Three Modes of Analogy

A. The Semantic Question

With this background, we are prepared to see how we can understand Cajetan's claim that analogy of attribution always involves extrinsic denomination. But first, we must justify our reference to analogy of attribution as a particular kind or "mode" of analogy distinct from others. That the term "analogy of attribution" is Cajetan's, and is not found as such in Aquinas, is a criticism only if we assume that Cajetan's primary intent was to comment on or interpret Aquinas's own teaching on analogy. There is little to indicate that this is the case. The standard evidence offered, that Cajetan "based" his threefold classification of analogy on a particular passage in Aquinas (*I Sent.*, d. 19, q. 5, a. 2, ad 1), is overstated and misleading. In fact, *De Nominum Analogia* gives us every reason to believe that Cajetan thought the basis of his threefold distinction was philosophical rather than textual.⁴⁴

This can best be seen when we recall the traditional formulation that analogy is a mean between univocation and equivocation. Echoing the definitions of equivocation and univocation from Aristotle's *Categories*, Cajetan writes in his commentary on Aquinas's *De Ente et Essentia*:

They are univocals whose name is common, and the *ratio* according to that name is absolutely the same. They are pure equivocals whose name is common and the *ratio* according to that name is absolutely diverse.

Cajetan goes on immediately to define the mean between these two, analogy:

They are analogates whose name is common, and the *ratio* according to that name is somehow the same, and somehow different, or the same in some respect, and different in some respect.⁴⁵

As a characterization of analogy, this much is, in fact, entirely conventional. But it is within this conventional characterization that a further question arises: how can this mean between equivocation and univocation be specified more precisely? In what sense is the concept (or the concepts) in analogy "somehow the same" and "somehow different," "somehow one" and "somehow many"? There is a big question-mark in the

⁴⁴ Some of this claim will be supported by what follows, but cf. note 53 *infra*.

⁴⁵ *IDEE* §21: "Univocata sunt, quorum nomen est commune, et ratio secundum illud nomen est eadem simpliciter. Pura equivocata sunt, quorum nomen est commune, et ratio secundum illud nomen est diversa simpliciter. Analogata sunt quorum nomen est commune, et ratio secundum illud nomen est aliquo modo eadem, et aliquo modo diversa seu secundum quid eadem, et secundum quid diversa.... Unde analogum est medium inter purum equivocum et univocum, sicut inter idem simpliciter et diversum simpliciter cadit medium idem secundum quid et diversum secundum quid." It is worth remarking that, although he has replaced Aristotle's "dicuntur" with "sunt" in rephrasing the definitions of univocals and equivocals, Cajetan should not thereby be assumed to have ignored or failed to appreciate the import of Aristotle's wording. Cf. *IPA*, 9: "Signantur quoque dixit «dicuntur» et non dixit «sunt», quia rebus non convenit equivocari ut sunt in rerum natura, sed ut sunt in vocibus nostris. Aequivocari enim praesupponit vocari, quod rebus ex nobis accidit." Cf. also note 52 *infra*.

middle of this conventional description of analogy: “...secundum quid... secundum quid...” According to *what?* With respect to *what?*

So to say that analogy is a mean between univocation and equivocation, and that it therefore involves concepts somehow one and somehow many, only provides the framework within which a more detailed analysis of analogical signification can take place.⁴⁶ Cajetan’s threefold division of modes of analogy must be understood, at least in part, as an attempt to provide this more detailed analysis.⁴⁷ This is why Cajetan is concerned to clarify precisely the unity of the analogous concept(s).⁴⁸ The different kinds of analogy Cajetan distinguishes each represent different ways that the analogous concept can be *unum secundum quid* and *diversa secundum quid*. Indeed, turning to Cajetan’s text, the first thing to notice is that, despite the claims of many of Cajetan’s interpreters, Cajetan does *not* define analogy of attribution and analogy of proportionality in terms of extrinsic and intrinsic denomination.⁴⁹ That analogy of attribution involves extrinsic denomination, and that analogy of proportionality involves intrinsic denomination, are among the properties or “conditions” (*conditiones*) which *follow from* the definitions of these kinds of analogy.⁵⁰ So before we can understand what Cajetan means by these conditions or properties, we must first attend to the definitions of the various kinds of analogy.

Cajetan offers the following three definitions in *De Nominum Analogia*:

They are called analogous according to inequality whose name is common and the *ratio* according to that name is wholly the same, but unequally participated.

⁴⁶Cajetan’s concern was properly intensified by Scotistic arguments to the effect that there can be no mean between univocation and equivocation, precisely because there is no mean between unity and plurality. In light of this, it is easy to see why, in addressing analogy, Cajetan and others raised questions about what Ashworth has called “the arithmetic of concepts” and attempted to characterize the unity of the analogical concept(s). Ashworth (1992a): 403.

⁴⁷Indeed, the other question raised by characterizing analogy as a mean between univocation and equivocation, especially if analogy turns out to be a form of equivocation (*equivocatio a consilio*, as opposed to pure equivocation or *equivocatio a casu*), is how does analogy avoid fallacy of equivocation? Again, Scotus’s arguments that only univocal terms could preserve the validity of syllogisms intensify this question. It is as an answer to this question that we should understand Cajetan’s decision to privilege analogy of proportionality (cf. *DNA*, c. 10, “Qualiter de analogo sit scientia”), despite the fact that terms analogous by attribution, e.g. “healthy,” had become the tradition’s paradigm examples of analogous terms.

⁴⁸It is in this light that we must answer the critics of Cajetan’s attention to concepts, especially those who, following Gilson, have insisted that analogical signification is not a matter of “concepts” but of “judgment.” Cf. Gilson (1952): 101-102; Maurer (1955): 351; Maurer (1982): 143; Klubertanz (1960): 116; Burrell (1999): 259-260.

⁴⁹Among those who have inaccurately claimed that Cajetan’s distinction between modes of analogy is *based on* or *defined in terms of* the properties of extrinsic and intrinsic denomination are Ashworth (1992b): 126, and Beach (1965): 201.

⁵⁰*DNA* §10-11; Cf. *DNA* §29.

They are analogous according to attribution whose name is common and the *ratio* according to that name is the same with respect to a terminus, and different with respect to relations to that terminus.

They are called analogous according to proportionality whose name is common, and the *ratio* according to that name is proportionally the same.⁵¹

Note that these exactly parallel the definitions of equivocation and univocation from Aristotle's *Categories*. *They are called ... whose name is common, and the concept according to that name is*⁵² Indeed, each definition explains a different way in which the concept(s) or *ratio(nes)* can be *aliquo modo eadem, et aliquo modo diversa seu secundum quid eadem, et secundum quid diversa*.⁵³

So Cajetan is seen to be addressing a properly logical or semantic question, and he is seen to answer it with properly logical or semantic formulations. We will be interested in showing how, from the definition of analogy of attribution, it follows that the secondary analogates are denominated extrinsically. But first, let us briefly consider the controversial case of analogy of inequality.⁵⁴ Without much trouble, our previous

⁵¹*DNA* §4: “Analogia secundum inaequalitatem vocantur, quorum nomen est commune, et ratio secundum illud nomen est omnino eadem, inaequaliter tamen participata”; §8: “Analogia autem secundum attributionem sunt, quorum nomen commune est, ratio autem secundum illud nomen est eadem secundum terminum, et diversa secundum habitudines ad illum”; §23: “[A]nalogia secundum proportionalitatem dici, quorum nomen est commune, et ratio secundum illud nomen est proportionaliter eadem.” In fact, the definitions of analogy of attribution and analogy of proportionality are already present in *IDEE* (§21), written three years before *DNA*. As can be gathered from its the oft-neglected later chapters (4-11), *DNA* seems to have been written primarily in order to provide a more detailed account of this semantic specification of analogy of proportionality than was offered already in *IDEE*.

⁵²The one apparent exception to this parallel is that Aristotle was careful to emphasize that he was not defining things as they are, but as they are signified by our terms. Thus, it has often been noted that Aristotle wrote that equivocals and univocals “dicuntur...,” rather than “sunt...”. Cajetan only follows this inconsistently; he uses “sunt” for analogy of attribution, but since he uses “vocantur” for analogy of inequality and “dici” for analogy of proportionality, I think we can assume that the deviation is not significant. Cf. note 45, *supra*.

⁵³It has become common to find it asserted that Cajetan “based” his division on analogy from a particular text from Aquinas, as in Lyttkens (1952), 205; Harrison (1963): 182; Masiello (1958): 93, 105; McNerny (1996): 5, 11, 12, 17; Meagher (1970): 231; Wilks (1997): 40; Klubertanz (1960): 7; Montagnes (1963): 136. However this position is underdetermined by Cajetan’s text. Cajetan does not claim to base this threefold division of analogy on any text from Aquinas. He does believe that his three modes can be easily paired with an apparent threefold division of analogy, expressed in quite different language, in Aquinas’s *I Sent.* 19, 5, 1, ad. 1, but Cajetan only refers to this passage after explaining and defending his threefold division on other terms. And Cajetan also claimed that his theory was consonant with distinctions made by Aristotle and Averroes. Cajetan may have referred to the passage from Aquinas because several of his predecessors already referred to it in explaining their own classifications of analogous terms. On the prior tradition of divisions of analogy see Tavuzzi (1993), Ashworth (1992a) and Ashworth (1992b).

⁵⁴Cajetan’s “analogy of inequality” is sometimes taken as his own invention, but it is clear that this too has precedence in a long tradition. Ashworth (1992b) considers several authors. Ashworth points to a phrase from Aristotle, translated into Latin as “Aequivocationes latent in generibus” (“equivocations are hidden in genera,” *Physics* 249a22-25), and says, “virtually every late thirteenth-century author felt

discussion allows us to clear up some common confusion, and also to witness Cajetan exclude something from the scope of his treatise because it depends on metaphysical considerations which are irrelevant to his properly logical concerns.

B. Analogy of Inequality

In analogy of inequality, the *ratio* is “wholly the same” (*omnino eadem*), but it is “unequally participated” (*inaequaliter participata*). The example Cajetan uses is “body,” and, as he says, “the *ratio* of all bodies, insofar as they are bodies, is the same.” Nonetheless, that *ratio*, “corporeity,” is not “in” all bodies equally. This claim at first sounds odd, and has confused some commentators. But we can make sense of it if we remember the distinction between what is predicated and what verifies that predication.⁵⁵

Now consider why Cajetan would say that the same *ratio* can be in things unequally. When I predicate “body” of a stone and of a plant, I predicate exactly the same *ratio* or objective concept, the nature corporeity, in both cases. However, when I predicate “body” of stone, what verifies the predication is the particular corporeity of the stone, the individualized act of being by virtue of which the stone is a body. When I predicate “body” of a plant, what verifies the predication is the particular corporeity of the plant, the individualized act of being by virtue of which the plant is a body. But now, given the thesis of the unity of substantial forms, and the fact that “body” [*corpus*] is a substantial predicate, we know that the corporeity of the stone is identical with the substantial form of the stone, and the corporeity of the plant is identical with the substantial form of the plant. Again, of course *what* is predicated of stone and plant is exactly the same, namely, the nature corporeity absolutely considered. But the corporeities which *verify* the predications—the individualized natures actual in the stone and in the plant—are just the substantial forms of the stone and of the plant, which are not equal. Thus, Cajetan can say that “not only is the plant more noble than the stone, but the corporeity of the plant is more noble than the corporeity of the stone.”⁵⁶

obliged to fit this claim into the framework of equivocation and analogy, even if the consensus was that in the end the use of genus terms was univocal” (p. 107) .

⁵⁵The distinction also turns out to be the same as the distinction between the nature absolutely considered and the nature as it is in things. Cf. *IDEE* §55. This also helps us to make sense of why Cajetan can say that in analogy of inequality, “the analogates are the same in the *ratio* signified by that common name, but they are not the same in the being [*esse*] of that *ratio*” (*DNA* §6).

⁵⁶*DNA* §6: “Non solum enim planta est nobilior minera; sed corporeitas in planta est nobilior corporeitate in minera.” While this formulation might seem to depend entirely on a specific version of Aristotelian hylomorphist metaphysics, even someone who rejects that metaphysics can understand the intuitive point that Cajetan is trying to express: that stone and plant are equally bodies, though they are not equal bodies. Cf. Aquinas, preparing us to understand how not all sins are equal, *Quaestiones disputate de malo*, II.9, ad 16: “Dicendum quod omnia animalia sunt aequaliter animalia, sed unam animal est altero maius et perfectus...” In fact, while Cajetan’s and Aquinas’s language presupposes a *hierarchy* of species within a genus, all that matters for a genus term to signify by analogy of inequality is that there be a *diversity* of species.

Now we can see from this that in analogy of inequality, the ways in which the analogous terms differ really does depend on metaphysics, on the state of things *in rerum natura* which verifies various predications, and has nothing to do with the semantic properties of the term. For the term signifies exactly the same *ratio* in each case. But this is precisely why Cajetan says that this is only improperly called analogy, and is actually, from the logicians point of view, a case of univocation,⁵⁷ in truth “wholly foreign to analogy.”⁵⁸

That Cajetan dismisses analogy of inequality on these grounds, and does not treat it at all after the brief five paragraphs in the first chapter of *De Nominum Analogia*, should confirm that Cajetan is not interested in confusing his discussion of the *semantics* of analogous terms with *metaphysical* considerations of the things those terms name. To be sure, analogy of inequality counts as a kind of analogy at all only if we include metaphysical considerations; but this is why Cajetan quickly dismisses this kind of analogy, which is only analogy from the point of view of the natural philosopher, but not from the point of view of the logician. But note further that Cajetan’s original basis for distinguishing this particular mode of “analogy”—even if turns out not to be a kind of analogy after all—is indeed properly *semantic* and not *metaphysical*. That is to say, Cajetan distinguishes this kind of “analogy” from the others by a semantic condition, namely, that its “ratio” is wholly the same. Indeed, this is precisely why it turns out to be not a kind of analogy at all, but rather an instance of univocation. So in this case, Cajetan meets the standard of being interested in the semantics of analogical signification, and not in the real properties of the things which are referred to by analogous terms.⁵⁹

⁵⁷*DNA* §§5; 7.

⁵⁸*DNA* §3.

⁵⁹Among the further advantages of this interpretation is that it clears up some common confusion about analogy of inequality, and it makes it possible to see how Cajetan might be in accord with a long tradition, including Aquinas, on this matter. The historical precedents for Cajetan’s views on analogy of inequality have been mentioned in n. 54, *supra*. Among common confusions: Herbert Schwartz was unable to see how Cajetan could claim that every univocal genus term could be said to be in some things more than others. Schwartz (1954): 127-144. Schwartz’s analysis ignores the fact that, for both Aquinas and Cajetan, when predicated of a material substance, the significate of the term “body” [*corpus*] in that substance is the substance’s substantial form; and in general, when any genus term is predicated of one of its members, its significate in that member is that member’s specific form. Frank R. Harrison also fails to understand Cajetan’s comments on analogy of inequality because he fails to understand Cajetan’s semantic principles; a Wittgensteinian inclination prevents him from understanding the semantic function of the *ratio*. Harrison (1963), esp. pp. 185-186. Armand Maurer (1955) reads Cajetan as rejecting analogy of inequality (or what Maurer calls “analogy of genus”) because it is not “a *true metaphysical* analogy” (emphasis Maurer’s). He complains that Cajetan’s position is evidence of his “essentialism,” as compared with the “existential” approach of Aquinas. Maurer is apparently reading Cajetan through the somewhat distorting lense of Gilson (1953). As a result, Maurer’s criticism of Cajetan is rather strained; in fact, Cajetan’s position on analogy of inequality—accepting it from the point of view of the natural philosopher, rejecting it from the point of view of the logician—is just the one Maurer finds in Aquinas. For correctives to Gilson’s interpretation of Cajetan see Dewan (1999a) and Reilly (1971).

C. Analogy of Attribution

We have seen that analogy of attribution involves a common name, and “the *ratio* according to that name is the same with respect to a terminus, and different with respect to relations to that terminus.” Why would it follow from such a description that in analogy of attribution the secondary analogates are always denominated extrinsically? There is community with respect to some one form, the form from which all the analogates are denominated. But the form, as such, is the significate of the analogous term only when predicated of the primary analogate. As predicated of a secondary analogates, the significate of the analogous term is not that form, as such, but rather some relation to that form; that is to say, that form is the terminus of a relation, which relation is what is signified by the analogous term in the secondary analogates. So, Cajetan will say,

“healthy” is a name common to medicine, urine, and animal, and the *ratio* of all insofar as they are healthy, says different relations to one term (namely *health*). For if someone says, “What is *animal*, insofar as healthy?” one would say, “*subject of health*.” But [one would say that] urine, insofar as healthy, is a *sign of health*; and for medicine, insofar as healthy, is given *cause of health*.⁶⁰

Indeed, this is why elsewhere Cajetan will say that in analogy of attribution, the analogical term (as predicated of the secondary analogates) signifies a *relation* to the primary analogate.⁶¹ So it is clear that, as predicated of its secondary analogates, a term analogous by attribution is a relation.⁶²

But then it is built into the semantics of the term, and not dependent on extra-logical, metaphysical considerations, that a term analogous by attribution denominates its secondary analogates extrinsically. In analogy of attribution, when we denominate the secondary analogates, we know the denominating form is extrinsic, i.e. is an actuality of another, because *ex hypothesi* there is a difference between the primary analogate (which has the form) and the secondary analogate (which is denominated with reference to that form in the primary analogate). So it follows from the definition of analogy of attribution that, when denominating secondary analogates, it signifies a relation, from which it follows that it denominates those analogates extrinsically. The property of denominating extrinsically here would appear to express a semantic, as opposed to metaphysical, claim, as it follows from a strictly semantic specification of analogy of attribution.

⁶⁰*DNA* §8: “...*sanum* commune nomen est medicinae, urinæ et animali; et ratio omnium in quantum sana sunt, ad unum terminum (sanitatem scilicet), diversas dicit habitudines. Si quis enim assignet quid est animal in quantum sanum, subiectum dicet sanitatis; urinam vero in quantum sanam, signum sanitatis; medicinam autem in quantum sanam, causam sanitatis proferet.” Cf. *DNA* §52.

⁶¹*IST* I.13.6, n. 4: “Quaedam enim significant ipsos respectus ad primum analogatum, ut patet de sano. Quaedam vero significant fundamenta tantum illorum respectuum; ut communiter invenitur in omnibus vere analogis, proprie et formaliter salvatis in omnibus analogatis.”

⁶² More specifically, it is a relation *secundum esse*, not *secundum dici*; cf. note 40, *supra*.

It is precisely in order to insist on this very fact that Cajetan offers the clarification, often misunderstood, that this rule is to be taken formally, not materially⁶³:

it must be carefully pointed out, that this condition of this kind of analogy—namely that it is not according to a kind of formally inherent cause, but always according to something extrinsic—is to be understood formally and not materially. That is, it is not to be understood by this that every name which is analogous by attribution is common to its analogates such that it only agrees with the first formally, and with the rest by extrinsic denomination—as happens with “healthy” and “medical.” For universally this is false, as is clear from “being” [*ens*] and “good.” Nor can it be had from what was said, unless it was understood materially. Rather, it must be understood from this that every name analogous by attribution as *such*, or *insofar as so analogous*, is common to its analogates such that it agrees with the first formally and with the rest by extrinsic denomination.⁶⁴

On the basis of this rule, as Cajetan explains, we can account for the example of “being” and of “good,” which according to Cajetan are analogous both by attribution and by proportionality: an accident does have its own inherent being, but *insofar* as it is denominated a being by analogy of attribution, that is, *insofar* as it is denominated a being because it is related to the being of substance, it is denominated a being by extrinsic denomination.

Indeed, as we did in the context of relations and the example of the self-seeing eye, we could fabricate a test case in which, something normally taken to be metaphysically extrinsic would in fact be metaphysically intrinsic, and yet its denomination would still be extrinsic. Take “healthy” as predicated of skin.⁶⁵ Although “healthy” is Cajetan’s case of a term clearly analogous by attribution, there is no reason why within the parameters of Cajetan’s theory we couldn’t decide that in fact not only substantial organisms, but even, say, some parts of substantial organisms—e.g. animal organs—could have their own intrinsic health, proportionally analogous to the intrinsic health of substantial organism. But then “healthy” as said of an animal organ would be like “being” as said of accidents, analogous by both attribution and proportionality. In this case, we can say that there is an inherent health in the skin, and in fact this may be why we normally call skin healthy; indeed, it may be that the intrinsic health of the skin is inseparable from the health in the animal. Whatever the case, *insofar as it is conceived of as* a sign of health, skin is not denominated “healthy” because health is in it, but because it is somehow related to health—and it is a metaphysical accident that the

⁶³The rule has been misunderstood or ignored by many commentators. E.g. cf. Beach (1965): 204; Masiello (1958): 95-97; McNerny (1996): 19-20; McNerny (1961): 7-9.

⁶⁴*DNA* §11: “Sed diligenter advertendum est, quod hæc huiusmodi analogiæ conditio, scilicet quod non sit secundum genus causæ formalis inhaerentis, sed semper secundum aliquid extrinsecum, est formaliter intelligenda et non materialiter: idest non est intelligendum per hoc, quod omne nomen quod est analogum per attributionem, sit commune analogatis sic, quod primo tantum conveniat formaliter, cæteris autem extrinseca denominatione, ut de sano et medicinali accidit; ista enim universalis est falsa, ut patet de ente et bono; nec potest haberi ex dictis, nisi materialiter intellectis. Sed est ex hoc intelligendum, quod omne nomen analogum per attributionem ut sic, vel in quantum sic analogum, commune est analogatis sic, quod primo convenit formaliter, reliquis autem extrinseca denominatione.”

⁶⁵Harrison (1963) maintains that Cajetan’s theory couldn’t account for the case of healthy skin (p. 191).

health it is related to is inseparable from, even inherent in, it. It is in the spirit of Cajetan's clarification, that the condition of extrinsic denomination be taken formally and not materially, that we can say that even in this case the term "healthy" denominates extrinsically, and indeed, that it necessarily does, because it is a term analogous by attribution, denominating a secondary analogate insofar as it is a secondary analogate.

In fact, this interpretation seems to be the one taken by Cajetan's great fan, John Poincot, when he says that in analogy of attribution,

it is possible that there be presupposed in the secondary analogates some intrinsic respect, not by which they are denominated analogically and placed under the analogous form, but by which they are related to that primary analogate, so that as a consequence they are denominated extrinsically from that analogate.⁶⁶

IV. CONCLUSION

In this paper I have shown that we can understand extrinsic denomination as a semantic property, or as a property which allows us to make a semantic, as opposed to a metaphysical, claim. I have also shown that, on the basis of Cajetan's distinction between modes of analogy, namely the definitions he formulates of the conceptual unity and diversity exhibited in those different modes, it follows that a term analogous by attribution always exhibits extrinsic denomination when predicated of its secondary analogates; and I have shown that this is a semantic claim, which is indifferent to the actual metaphysical state of affairs in which it is made. Of course, I have not had a chance to pursue the claim that Cajetan thought was more important, that another mode of analogy, analogy of proportionality, always involves intrinsic denomination, even of its secondary analogates. On the basis of what I have said here, it should be clear that if Cajetan's claim is justified, it will only be because analogy of proportionality does not involve defining terms predicated of secondary analogates by some relation to the primary analogue. But how this is possible, and why Cajetan thinks it is so important, must be questions left for another occasion.

⁶⁶*Log.* p. 2, q. 13, a. 4 (487b25-32): "possunt tamen in illis analogatis minus principalibus praerequiri aliqui respectus intrinseci, non quibus denominentur analogice et sub forma analogica constituentur, sed quibus respiciant illud principale analogatum, ut deinde denominentur extrinsece ab illo analogice."

REFERENCES

Works by Cajetan:

De Nominum Analogia (1498), ed. N. Zammit, Rome, 1934; rev. H. Hering, Rome, 1951.

Commentaria in De Ente et Essentia (1495), ed. M.H. Laurent, Turin, 1934.

Commentaria in Praedicamenta Aristotelis (1498), ed. M.H. Laurent, Rome, 1939.

Commentaria in Porphyrii Isagogen ad Praedicamenta Aristotelis (1497), ed. I. Marega, Rome, 1934.

Commentaria in Summam Theologiae St Thomae (1507-1522), Leonine ed., Rome, 1906.

Other Works Cited:

Anderson, James F., *The Bond of Being: An Essay on Analogy and Existence* (St. Louis: Herder, 1949).

Anderson, James F., *Reflections on the Analogy of Being* (The Hague: Martinus Nijhoff, 1967).

Ashworth, E.J., "Analogical Concepts: The Fourteenth-Century Background to Cajetan," *Dialogue* 31 (1992a): 399-413.

Ashworth, E.J., "Analogy and Equivocation in Thirteenth-Century Logic: Aquinas in Context," *Mediaeval Studies* 54 (1992b): 94-135.

Ashworth, E.J., "Signification and Modes of Signifying in Thirteenth-Century Logic: A Preface to Aquinas on Analogy," *Medieval Philosophy and Theology* 1 (1991): 39-67.

Beach, John D. "Analogous Naming, Extrinsic Denomination, and the Real Order," *The Modern Schoolman* 42 (1965): 198-213.

Bochenski, I.M., "On Analogy," *The Thomist* (1948): 425-477 [reprinted with corrections in Albert Menne, ed., *Logico—Philosophical Studies* (Dordrecht: D. Reidel, 1962), and in James F. Ross, ed., *Inquiries into Medieval Philosophy: A Collection in Honor of Francis P. Clarke* (Westport, Connecticut: Greenwood Publishing Co., 1971): 99-122.]

Burrell, David, "From Analogy of 'Being' to the Analogy of Being," in *Recovering Nature: Essays in Natural Philosophy, Ethics, and Metaphysics in Honor of Ralph McInerney*, ed. Thomas Hibbs and John O'Callaghan (Notre Dame: University of Notre Dame Press, 1999): 253-266.

- Bushinski, Edward A. and Koren, Henry J., *The Analogy of Names and the Concept of Being* [a translation of Cajetan, *De Nominum Analogia* and *De Conceptu Entis*] (Pittsburgh: Duquesne University Press, 1953).
- Deely, John, "The Absence of Analogy" (1999, ms.).
- Dewan, Laurence, "Étienne Gilson and the *Actus Essendi*," *Maritain Studies/Études Maritainniennes* 15 (1999a): 70-96.
- Dewan, Laurence, "St. Thomas, Ralph McInerney, and Analogy," (May 1999b, ms.)
- Doyle, John P., "Prolegomena to a Study of Extrinsic Denomination in the Works of Francis Suarez, S.J.," *Vivarium* 22 (1984): 121-160.
- Geach, Peter T., *Logic Matters* (Berkeley: University of California Press, 1980).
- Gilson, Étienne, *Jean Duns Scot: Introduction à ses Positions Fondamentales* (Paris: Librairie Philosophique J. Vrin, 1952).
- Gilson, Étienne, "Cajétan et l'existence," in *Tijdschrift voor Philosophie* 15 (1953): 267-286.
- Harrison, Frank R., "The Cajetan Tradition of Analogy," *Franciscan Studies* 23 (1963): 179-204.
- Klima, Gyula, "The Medieval Problem of Universals," in *The Stanford Encyclopedia of Philosophy* (Fall 2000 Edition), ed. Edward N. Zalta (URL = <http://plato.stanford.edu/archives/fall2000/entries/universals-medieval/>)
- Klima, Gyula, "Ontological Alternatives vs. Alternative Semantics in Medieval Philosophy," in *Logical Semiotics, S - European Journal for Semiotic Studies* 3 (1991): 587-618.
- Klima, Gyula, "The Semantic Principles Underlying Saint Thomas Aquinas's Metaphysics of Being," *Medieval Philosophy and Theology* 5 (1996): 87-141.
- Klubertanz, George P., S.J., *St. Thomas Aquinas on Analogy: A Textual Analysis and Systematic Synthesis* (Chicago: Loyola University Press, 1960).
- Kuntz, Paul G., "The Analogy of Degrees of Being: A Critique of Cajetan's *Analogy of Names*," *The New Scholasticism* 56 (1982), pp. 51-79.
- Lyttkens, Hampus, *The Analogy Between God and the World: An Investigation of its Background and Interpretation of its Use by Thomas of Aquino* (Uppsala: Almqvist and Wiksells Boktryckeri AB, 1952).
- Maritain, Jacques, *Distinguish to Unite, or The Degrees of Knowledge*, trans. Gerald B. Phelan (New York: Charles Scribner's Sons, 1959).
- Masiello, Ralph J., "The Analogy of Proportion According to the Metaphysics of St. Thomas," *The Modern Schoolman* 35 (1958): 91-105.
- Maurer, Armand, *Medieval Philosophy*, 2nd ed. (Toronto: Pontifical Institute of Medieval Studies, 1982).

- Maurer, Armand, "St. Thomas and the Analogy of Genus," *The New Scholasticism* 29 (1955): 127-144.
- McCanles, Michael, "Univocalism in Cajetan's Doctrine of Analogy," *The New Scholasticism* 42 (1968), pp. 18-47.
- McInerny, Ralph, *Aquinas and Analogy* (Washington: The Catholic University of America Press, 1996).
- McInerny, Ralph, *The Logic of Analogy: An Interpretation of St. Thomas* (The Hague: Martinus Nijhoff, 1961).
- McInerny, Ralph, *Studies in Analogy* (The Hague: Martinus Nijhoff, 1968).
- McMahon, William E., "The Categories in Some Post-Medieval Spanish Philosophers," in *Medieval and Renaissance Logic in Spain*, ed. I. Angelelli and P. Pérez-Illarbe (Hildesheim: Georg Olms Verlag, 2000a): 355-370.
- McMahon, William E., "Some Non-Standard Views of the Categories" (unpublished ms., 2000b).
- Meagher, Robert, "Thomas Aquinas and Analogy: A Textual Analysis," *The Thomist* 34 (April 1970): 230-253.
- Montagnes, Bernard, O.P., *La Doctrine de l'Analogie de l'Être d'après Saint Thomas d'Aquin*, Philosophes Médiévaux, tome 6, Publications Universitaires, Louvain and Béatrice-Nauwelaerts, Paris, 1963.
- Poinsot, John (John of St. Thomas), *Ars Logica.*, ed. Reiser (Turin: Marietti, 1930).
- Reilly, John P., *Cajetan's Notion of Existence* (The Hague: Mouton, 1971).
- Rijk, L.M. de, *Logica Modernorum: A Contribution to the History of Early Terminist Logic*, vol. 1: On the Twelfth Century Theories of Fallacy (Assen: Van Gorcum and Company, 1962).
- Ross, James F., "Feature Book Review and Discussion," *International Philosophical Quarterly* II (1962): 633-642.
- Schwartz, Herbert, "Analogy in St. Thomas and Cajetan," in *The New Scholasticism* 28 (1954): 127-144.
- Summa Totius Logicae [De Totius Logicae Aristotelis Summa]*, in Thomas Aquinas, *Opera Omnia* (Parma: 1864), t. 17, pp. 32-117.
- Tavuzzi, Michael, O.P., "Some Renaissance Thomist Divisions of Analogy," *Angelicum* 70 (1993): 93-121.
- Theron, Stephen, *Africa, Philosophy and the Western Tradition: An Essay in Self-Understanding* (Frankfurt: Peter Lang, 1995).
- Theron, Stephen, "The Resistance of Thomism to Analytical and Other Patronage," *The Monist* 80 (October, 1997).

Tracy, David, *The Analogical Imagination: Christian Theology and the Culture of Pluralism* (New York: Crossroad, 1981).

Wilks, Ian, "Aquinas on Analogy: The Distinction of Many-to-One and One-to-Another," *The Modern Schoolman* 75 (1997): 35-53.

Gyula Klima:

On whether *id quo nihil maius cogitari potest* is in the understanding

Introduction

Proofs for God's existence are supposed to be concerned with establishing that God *exists in reality*. In what follows I am going to argue that one of the most important lessons we can draw from Anselm's famous argument in the *Proslogion* is that these proofs should at least as much be concerned with making sure that God *exists in the understanding* of those to whom such proofs are addressed.

In order to make this point, in the next section I will present a very simple, intuitive reconstruction of Anselm's argument. Then, in the third section, I will show that since the argument thus reconstructed is obviously valid, and it would be foolish to challenge any other of its premises except the assumption that God does not exist in reality, it is a sound proof of God's existence. Nevertheless, in the fourth section, I will argue further that despite its soundness, this proof can rationally be rejected by anyone who refuses to think *seriously* of anything as that than which nothing greater can be thought, that is, by anyone who does not *really* have God in his mind. Obviously, this last claim, with the rather vague adverbs "seriously" and "really", is begging for clarification. Providing that clarification will be the task of the fifth, concluding section of the paper.

A Simple Reconstruction of Anselm's Proof in the Proslogion

The following is what I take to be a simple and intuitive reconstruction of the reasoning in c. 2 of the *Proslogion*. The letter 'd' in this reconstruction simply serves as an abbreviation of the description 'that than which nothing greater can be thought'.

1. God is d [nominal definition of 'God']
2. d is in the understanding (i.e., d can be thought) [self-evident, unless d is contradictory, which would be tough to swallow]
3. d is not in reality [assumption]
4. If something is in the understanding and not in reality, then something greater than it can be thought (namely, something that is in reality, or even the same thing thought to be in reality) [self-evident, based on the meaning of "greater"]
5. If d is in the understanding and d is not in reality, then something greater than d can be thought. [from 4, by universal instantiation]
6. Something greater than d can be thought [2, 3, 5 by *modus ponens*]

In fact, if we let our variables x and y range over anything that is thinkable, then we may reconstruct this argument using standard quantificational notation as follows:

1. $g=d$
2. $U(d)$
3. $\sim R(d)$
4. $\forall x(U(x) \ \& \ \sim R(x)) \rightarrow \exists y(G(y)(x))$
5. $(U(d) \ \& \ \sim R(d)) \rightarrow \exists y(G(y)(d))$ [4, UI]
6. $\exists y(G(y)(d))$ [2, 3, MP]

Here, ' $U()$ ' = df. ' $()$ is in the understanding'; ' $R()$ ' = df. ' $()$ is in reality'; ' $G()()$ ' = df. ' $()$ can be thought to be greater than $()$ '.

But 6, claiming that something greater can be thought than that than which nothing greater can be thought, is contradictory, so at least one of the premises from which it followed has to be false. But none of the self-evident premises can be false, so the false premise has to be the assumption, namely, 3. So, its denial, namely, that d is in reality is true; therefore, by 1, God is in reality, that is to say, God really exists.

That there really is a formal contradiction in the conclusion can easily be brought out by means of the following simple formalization: d =df. $\iota x.\sim\exists y(G(y)(x))$; ' $P()$ ' =df. ' $\exists y(G(y)(\))$ '; $\exists y(G(y)(\iota x.\sim\exists y(G(y)(x)))) \Leftrightarrow P(\iota x.\sim Px) \Leftrightarrow \exists z(\forall x(\sim Px \rightarrow x=z) \ \& \ \sim Pz \ \& \ Pz) \Rightarrow \exists z(\sim Pz \ \& \ Pz)$; where ' $\exists y(G(y)(\))$ ' =df. 'some y can be thought to be greater than $()$ ' =df. 'something greater can be thought than $()$ '

Foolish objections to a sound proof

The previous reconstruction contains only two *deductive* steps, a universal instantiation concluding 5, and a *modus ponens*, concluding 6, the validity of which is unquestionable. The conclusion, given that the letter ' d ' was introduced as a mere abbreviation of Anselm's description, is clearly self-contradictory. For that than which nothing greater can be thought is something (whether merely in the mind or in reality) than which nothing greater can be thought, and of this the conclusion states that something greater than it can be thought, so the conclusion entails that something is such that nothing greater than it can be thought and something greater than it can be thought, which is an explicit contradiction.

But then, the *reductive* step, claiming that *at least* one of the premises has to be false, is clearly valid. Therefore, if all the other premises are indeed unquestionably true, then the argument constitutes a sound proof of the denial of premise 3, which is the ultimately intended conclusion.

In view of these considerations, then, the only possible way to attack this proof is by challenging the acceptability of its other premises.

1. Attacking premise 1: what should we understand by the name 'God'?

Now it would clearly be foolish to challenge the first premise, which simply stipulates what we should understand by the name 'God', just as I stipulated that in the context of the argument we should understand the same by the letter 'd' as by the English phrase, translating Anselm's Latin phrase: *id quo nihil maius cogitari potest*. To be sure, it is questionable whether one *really* understands what is meant by this phrase itself, but this would still not undermine the validity of the stipulation, namely, that whatever one understands by this phrase, they should understand the same by the name 'God'. So the first premise has to be accepted simply on account of its being a stipulation of linguistic usage. Of course, this need not, and does not, mean that this is an *arbitrary* stipulation. In fact, this stipulation on Anselm's part is merely a succinct formulation of *established usage*, as is clear from the more detailed, and at the same time *authoritative*, explanation of this usage Anselm could gather from Saint Augustine.¹

To be sure, a more sophisticated opponent at this point might object that even if the first premise is meant to be stipulative, the stipulation cannot be accepted by anyone who does not believe in God's existence. For the premise in itself entails that there is something, indeed, one and the same thing, corresponding to the name 'God' and to Anselm's description, but this is precisely what is denied by those who deny the existence of God. Therefore, assuming the first premise renders the argument question-begging.

To this objection Anselm could immediately respond that his example of the painter who can be said to have a picture in his mind before actually painting it was designed to show that there being something corresponding to a name or a description, as long as it is *only* in the mind, does not entail that the object corresponding to the name or description actually exists in reality. However, those who deny God's existence only deny that there is an object *in reality* corresponding to the name 'God' and to Anselm's description. They certainly do not deny that believers have such an object *in their mind*. So, having an object in mind, corresponding to the name and the description, does not in itself entail that the object exists in reality, which can and should be realized even by those who do not accept that God exists in reality, whence the premise can be assumed without begging the question.

Of course, at this point, the mere mention of *objects in the mind*, or *objects of the mind*, apparently treated as constituting a distinct realm of entities over and above ordinary objects may give rise to a swarm of objections.

¹ Cf. "Nam cum ille unus cogitatur deorum deus, ab his etiam qui alios et suspicantur et vocant et colunt deos, sive in caelo sive in terra, ita cogitatur ut aliquid quo nihil sit melius atque sublimius illa cogitatio conetur attingere. ... Omnes tamen certatim pro excellentia dei dimicant, nec quisquam inveniri potest qui hoc deum credat esse quo est aliquid melius. Itaque omnes hoc deum esse consentiunt quod ceteris rebus omnibus anteponunt." Augustine: *De Doctrina Christiana*, (ed., tr. R. P. H. Green), I, 15 [VII, 7], Clarendon Press: Oxford, 1995, p. 18.

Nevertheless, without trying to list and address those objections one by one, while always risking that we miss the next person's favorite, we may show why it is ontologically as well as logically entirely harmless to talk about mere objects of the mind, without thereby committing ourselves to a distinct realm of mysterious entities, indeed, to any sort of entities over and above the ordinary ones, and without any logical inconsistency whatsoever.

In the first place, we should make clear that the phrase "x is an object of the mind" means nothing more nor less than the phrase "x is or can be thought of". But then, since we can think of ordinary objects of our environment, we certainly should not worry about those objects of our minds. What philosophers would rather worry about are alleged objects of the mind other than ordinary objects, which are supposedly indicated by the phrase "x is a *mere* object of the mind".

So, next we should make clear that the phrase "x is a *mere* object of the mind" is not to be construed as indicating a special sort of object, indeed, in the same way as the phrase "fake diamond" is not to be construed as indicating a special sort of diamond, or the phrase "fictitious detective" as a special kind of detective. Just as fake diamonds are not diamonds, and fictitious detectives are not detectives, so too, *mere* objects of the mind are not objects. But then, what are they?

Now questions of this kind can be understood in two ways. When we ask: "What is an X?", then we may either mean "I wonder what you mean by 'an X' when you are talking about an X?" or we may mean "I know what you mean by 'an X' when you are talking about an X, but I wonder what sort of thing such an X is". For example, the question "What is a fake diamond?" in the first sense can appropriately be answered by saying: "By 'a fake diamond' I mean something that looks exactly like a diamond but is not a diamond". In the second sense, however, it can be answered by saying "A fake diamond is a cubic zirconia crystal".

In the first sense, I have already answered the question of what an object of the mind or an object of thought is: an object of thought is whatever we can think of. Therefore, what we mean by "a *mere* object of thought" is whatever we can think of that is not a real object, a real entity. But from this it should be clear that whoever understands this intended meaning of the phrase cannot sensibly ask the question "What is a *mere* object of the mind?" in the sense of asking what sort of object or entity a *mere* object of thought is, indeed, not any more than someone who understands what we mean by the phrase "fake diamond" can sensibly ask what sort of diamond a fake diamond is. For given the intended meaning of the phrase, a mere object of thought is no more an object or an entity than a fake diamond is a diamond.

To be sure, at this point one may object that this intended meaning of the phrase itself cannot be coherent, and that is why it causes so much trouble. For, according to this understanding of the phrase, a mere object of thought would have to be something that is not any object, any entity at all, that is, something that is not any single thing, whence the phrase cannot possibly apply to anything; therefore, since only those claims can be true that are about something, no claims intended to be about *mere* objects of thought can be true, indeed, not even the claim that they are thought of, but do not exist.

In response to this objection we may point out in the first place that it is generally not true that only those claims can be true that are about something. For if an affirmation is true only if it is true about something, then the contradictory negation may be true precisely because the affirmation is not true about anything. For example, the affirmation “The present King of France is bald” fails to be true not because the present King of France lacks hair, but because France presently has no king. But then, the contradictory negation of the affirmative claim, interpreted with a wide-scope negation has to be true. That is to say, “The present King of France is not bald”, taken in the sense “It is not the case that the present King of France is bald” and not in the sense “The present King of France is a person who is non-bald”, has to be true. Therefore, by parity of reasoning, if the phrase “mere object of thought” in the sentence “A mere object of thought is not an object” cannot apply to anything, then the sentence taken in the sense “It is not the case that a mere object of thought is an object”, and not in the sense “A mere object of thought is something that is a non-object”, has to be true.

But, furthermore, it is simply not true that the phrase “a mere object of thought” cannot apply to anything in any context whatsoever. After all, we have just agreed that what we mean by the phrase “a mere object of thought” is whatever that can be thought of but is not a really existing object. But then in the context of the proposition “A mere object of thought is thought of but does not exist” the phrase clearly applies to something that is thought of but does not exist.

However, can anything be thought of that does not exist? For, apparently, the affirmative answer would entail the absurdity that there is something that is thought of and does not exist, that is, there exists something that is thought of and does not exist, that is to say, there exists something that does not exist, which is plain contradiction.

In response to this objection, it is easy to show that whoever would deny his ability to think of something that does not exist would thereby disqualify himself from intelligent discourse. For intelligent discourse requires the use of memory, namely, remembering the things previously uttered in the discourse. But whatever was previously uttered no longer exists; therefore, unless someone is able to think of something that no longer exists, he is simply unable to participate in intelligent discourse.

To be sure, if someone were to say that what was once uttered still exists, we should point out that in the way we (including Anselm) are using the verb ‘exists’ (or its equivalents), its tense is to be taken seriously. According to this usage, what once was present, but is no longer present does not exist. In the same way, what will be, could be, or merely imagined or thought to be present, but is not actually present does not exist. Of course, we grant our opponent’s right to use the word differently, but then he should also grant our right to use it this way; and since the opponent is attacking Anselm’s argument, which follows this usage, the opponent *has to* follow the same usage, unless he wants to talk past Anselm. Therefore, according to this usage, what was uttered, and is no longer uttered, no longer exists, yet, to maintain intelligent discourse it has to be thought of. Hence, intelligent discourse is possible only if something that does not exist can be thought of.

But then, since intelligent discourse *is* possible (let's hope!), thinking of something that does not exist should also be possible. Therefore, since thinking of something that does not exist is possible, something can be thought of that does not exist, and so, in the context of the proposition "A mere object of thought is thought of but does not exist" the phrase "a mere object of thought" can refer to something that is thought of but does not exist.

Furthermore, the claim that something is thought of but does not exist certainly does not entail the contradiction that there exists something that does not exist, unless the word "Something" in "Something is thought of that does not exist" is understood to be restricted to existents. But clearly, there is nothing to warrant that interpretation; indeed, as we have seen, assuming it would disqualify its upholders from intelligent discourse.²

All in all, Anselm's possible defense against the alleged question-begging resulting from accepting the first premise is clearly vindicated: since it is possible to think of things that do not exist, we can certainly think of that than which nothing greater can be thought without thereby committing ourselves to its existence in reality. So with this understanding of the premise, it should be acceptable even by atheists as merely specifying the intended meaning of the term 'God', without thereby assuming what needs to be proved, namely, that the name 'God' or the corresponding description refers to any really existing thing.

2. Attacking premise 2: is that than which nothing greater can be thought in the mind?

But then the second premise can only be attacked by saying that for some particular reason it is not possible for that than which nothing greater can be thought to be in the understanding, that is, for some particular reason it is not thinkable. Therefore, unless there is some objective reason why that than which nothing greater can be thought cannot be thought of, this object of thought has to be in the mind of those who can and do think of it, whereas only those would not have it in their minds who either on account of some personal inability *cannot* think of it, or because of some stubborn unwillingness *would not want to* think of it. But since the premise merely states that this object of thought is at least in some mind, in particular in the mind of those who wish to deny that it exists, the premise has to be accepted, unless it can be shown that that than

² Note that in view of this result, we need not bother much about the slogan that *existence is not a predicate*. For although on one possible reading this slogan is obviously true, on that reading it is irrelevant, whereas on the reading on which it is relevant, it is false. On the reading on which this slogan is obviously true, it says that the word 'exists' and its equivalents, according to the usage regulated by modern analytic philosophy inspired by Fregean logic, express a second-order Fregean concept. This is obviously true, but irrelevant because that Fregean (Kantian) concept is not the concept that Anselm is working with. On the other hand, the other, relevant reading of the slogan should express the claim that there cannot be a first order concept conveyed by the word 'exists', for that assumption would lead to the contradiction that something that exists does not exist. However, we could just see that this contradiction simply does not follow.

which nothing greater can be thought is objectively unthinkable. But this can only be the case if it can be shown that Anselm's description is inconsistent.

However, besides the fact that the description is certainly not explicitly, formally inconsistent, showing its implied inconsistency would probably be a rather difficult task. In any case, as long as one does not have such a proof at their disposal they may consistently think of something of which they (perhaps mistakenly) think that it is that than which nothing greater can be thought. So they would still have to accept premise 2.

3. Attacking premise 4: what is the meaning of "greater"?

Now, since anybody who would want to reject Anselm's conclusion would accept premise 3, we can move on to the last premise, namely, premise 4.

In connection with this premise one may immediately raise the question: why would it be self-evident that if something that is thought of does not exist in reality then something greater can be thought? After all, we always *can* think of things that do not exist but are greater than whatever we can find in reality. We may happen to find the biggest elephant in the world, but even then we certainly *can* think of one that is bigger. So, it seems that it is simply not true that just because the elephant in our thought does not exist, the real elephant is greater. On the contrary, it is the elephant in our thought that is greater.

Now the clue to the proper understanding of this premise, which, to be sure, is not spelled out in the *Proslogion*, can be found in the *Monologion*, where Anselm tells us how we should understand the term 'greater' in connection with the supreme being:

I do not mean great in terms of size, like some sort of body; but something which, the greater it is, the better or more valuable it is, like wisdom. And since only that which is supremely good can be supremely great, it is necessary that there is something that is best and greatest, -- i.e., of everything that exists, the supreme.³

However, being and goodness are convertible. As Anselm puts it:

Since the highest good is the highest being, it follows that every good is being and every being is good.⁴

Therefore, the greater a thing is in Anselm's sense, the better it is, and the better it is the more it is a being. But then, regardless of whether at this point one can make sense of the idea of several degrees of being, it is clear that what does not exist at all, is not good at all, and so it is not great at all. And so, if a thing does not exist, anything that exists is greater than it, and thus anything that is thought to exist is thought to be greater than it; therefore, when something does not exist, a greater certainly can be thought, namely something that is thought to exist.

But then, if anything that exists is greater than anything that is merely thought to exist, but does not, how can we think of something greater than what exists? Didn't we just

³ *Monologion*, c. 2. p. 13.

⁴ *On the Fall of the Devil*, c. 1, p. 196.

agree that we can think of an elephant that is greater than the biggest elephant in the world?

Now, when think of an elephant greater than the biggest elephant in the world, we think of something that *is thought to be* a greater elephant than the biggest elephant in the world, but it *is not* an elephant that *is* greater than the biggest elephant in the world. But then, clearly, what we think of *is not* greater, but is merely *thought to be* greater, just as it *is not* an elephant, but is merely *thought to be* an elephant.

4. Attacking the argument as a whole: Gaunilo's Lost Island

However, given these considerations it is quite understandable that Anselm's confrere, Gaunilo, thought there was still something wrong with this argument, even if perhaps we may not quite be able to pinpoint exactly what. After all, if we think not just of an elephant that is greater than any real elephant, but we think of some elephant than which no greater can be thought, or lest we should think of greatness only in terms of size, we think of an island so perfect that no more perfect than it can be thought, then it seems that by the force of Anselm's reasoning we would have to conclude that the elephant than which no greater can be thought, or the island than which no more perfect can be thought, exists. But this is absurd, for, apparently, in this way we should be able to prove, for all kinds of things, that there is a thing of that kind than which nothing greater can be thought, however, this is obviously false. Indeed, this is also impossible, for then we would have to have, despite Euclid's proof in the *Elements*, a prime number than which no greater is thinkable, but that is precisely what Euclid's proof showed to be impossible.

In response to this objection, it should be clear in the first place that Gaunilo's objection can work *only* if his analogy is correct, that is, Anselm's description of what we are supposed to understand by the name 'God' can indeed be replaced without further ado with the description of the lost island, or any other kind of thing than which no greater can be conceived.

However, obviously not any kind of thing can be conceived to be such that a greater than it cannot be conceived. This is precisely the case with the greatest prime number. Since Euclid's proof shows that for any given prime there is a greater; therefore, for any given prime a greater is thinkable. But then a prime number than which no greater is thinkable is not thinkable, since its concept is inconsistent. Therefore, as soon as we realize this, we cannot rationally think that we could think of something as the prime number than which no greater is thinkable, indeed, not any more than we would think that a round square is thinkable.

But then, if we realize that the concept of Gaunilo's Lost Island is also inconsistent (even though this may not be immediately obvious, just as it was not immediately obvious about the greatest prime), then we cannot consistently think that Gaunilo's Lost Island is thinkable. Therefore, in that case it cannot without further ado be substituted for Anselm's description in the argument (for then it would not satisfy the second premise) and so Gaunilo's analogy, and hence his objection, would fail.

However, it is easy to show that the concept of Gaunilo's Lost Island, at least on one reading of its description, is inconsistent. For whatever is conceived to be an island is conceived to be a being of some limited perfection. But for any being of some limited perfection it holds that a being of greater perfection is thinkable. Therefore, since for any island thinkable a greater being is thinkable, an island than which no greater being is thinkable is not thinkable. So the island than which no greater is thinkable cannot be in the understanding, whence this description fails to satisfy the second premise of Anselm's argument.

To be sure, on the other possible reading of the description "the island than which no more perfect is thinkable", it should indicate the island than which no greater *island* is thinkable. And then, of course, even if there may be a more perfect *being* than the most perfect island thinkable, one certainly cannot think of an *island* that would be more perfect than that than which no more perfect *island* is thinkable.

But this move cannot save Gaunilo's objection either, for replacing Anselm's description by *this* description in Anselm's argument would only yield the conclusion that something greater than the island than which no greater island is thinkable can be thought, which is not contradictory, so the final, *reductive* step of the argument would have to fail.

In fact, the failure of Gaunilo's Lost Island can be generalized to any determinate kind of thing, the concept of which necessarily entails some limitation of perfection. For, in general, if N is any nature limited in perfection, then for any thing x of nature N it holds that a being greater than x is thinkable; therefore, a thing of nature N than which no greater being is thinkable is not thinkable.

Therefore, it holds *only* for that than which nothing greater can be thought that *absolutely speaking* no greater being than it can be thought. But then no Lost Island type objection can be raised against the argument, and so anyone who forms in their mind just this concept, the concept of that than which nothing greater can be thought, will thereby be committed to the claim that there is something in reality corresponding to this concept.

A not-so-foolish rejection

Yet, this last remark should already highlight why, despite the soundness of Anselm's proof, one may rationally reject its conclusion. For although it is true that whoever forms in their mind the concept of that than which nothing greater can be thought is thereby committed to thinking that it exists, there is nothing in Anselm's argument that would force anyone to think of anything as that than which nothing greater can be thought in the first place.

For the second premise of the argument, stating that that than which nothing greater can be thought is in the understanding, is true either because that than which nothing greater can be thought is in *some* understanding, or because it is in *every* understanding. But, then, even if the argument is sound, for the second premise is true when it is verified only for *some* understanding, it will not be compelling for anyone who does not have

this object in their understanding. Therefore, unless it can be shown that this object *has to be* in every understanding, it will not be a *universally compelling* proof.

To be sure, Anselm intended to establish that whoever understands his description has to have the object it describes in their understanding. However, the mere linguistic understanding of a description simply never entails commitment to thinking of something as that to which the description applies, whether in reality, or at least in *one's own* mind. We can always accept other people's descriptions of objects they think of with the tacit proviso that whatever they think of as such may not in fact be such, for they may be mistaken, or deliberately misleading, or just simply making something up for entertainment, without the intent to be "taken seriously", that is, without the intent to have us believe that their descriptions applied to anything.

In fact, this is precisely how we understand fiction: we understand that the author's descriptions are meant to describe some characters the author had in mind, but we need not believe that those descriptions in fact apply to some characters (concerning which the author's descriptions might even possibly be false); indeed, we need not even think that the author himself ever believed his descriptions applied to anything at all.

On the other hand, when we know that we are not dealing with a piece of fiction, then we may still perfectly understand the author's descriptions as ones which the author believes to apply to the characters he is describing (assuming we do not think the author is deliberately deceptive in his description), yet we need not think that those descriptions truly apply to the characters the author intended to describe.

Conclusion: the need to have God "seriously" in one's mind

Therefore, if someone has this type of understanding of Anselm's description, namely, understanding that when believers think of God, then they think of what they truly believe is something than which nothing greater can be thought, then this person can have a genuine understanding of the believer's description, but without any commitment to thinking that this description applies to anything *in his own mind*. On the contrary, the non-believer, when he thinks of what believers think of as that than which nothing greater can be thought, does not think of it as that than which nothing greater can be thought. He *does* think of the same object of thought alright, but he does not think of it as being greater than anything at all, for he thinks it is just a mere figment of the believers' mind.

But then it should be obvious why Anselm's argument cannot be persuasive for those who for some reason are unable or unwilling to entertain "seriously" the idea of God as that than which nothing greater can be thought. For a person who thinks of God as possibly just a figment of the believer's mind will certainly not think of that figment as that than which nothing greater can be thought, and even though he understands that whoever thinks of God in the way the believer does is thereby committed to the real existence of that figment, still, he will not be forced into the same commitment by Anselm's argument, for he does not think of God in the same way in the first place.

Therefore, it should be clear that the persuasive force of Anselm's argument — to be sure, not its soundness — hinges on whether the person considering the argument is both willing and able to entertain *seriously* the idea of God, that is, not as possibly a mere figment of the believer's mind, but as representing the real source of all perfection, all goodness, and all being, and which therefore cannot possibly lack being. But it is precisely this consideration that cannot be replaced by a “snappy” description, which itself is but the summary of a long, and complex meditative process that simply nobody can “skip”, if they *really* want to see what it takes to have *id quo nihil maius cogitari potest* in the mind.