

"It must be said that some relative terms are intended to signify in their very supposition or basis the *relations themselves* obtaining in what is spoken about, as for example 'master' and 'servant', 'father' and 'son', and such like; and these signifieds are what I call ontological relatives, *relativa secundum esse*. But other terms intend to signify, relative to the very things supposed, only those *subjective aspects or modes* upon which relations as such follow, as for example mover and moved, head and body, and the like; and these subjectivities signified are called transcendental relatives — that is to say, relatives according to the requirements of discourse, of being expressed or grasped in awareness, *relativa secundum dici*."

— Thomas Aquinas c.1266: *Summa theologiae*, Pars I, *Quaestio 13*, "De nominibus dei", *Articulus 7*, "Utrum nomina quae important relationem ad creaturas dicantur de deo ex tempore", *ad primum*

"Being toward' differs from 'being in' as a mode of mind-independent being in this, that all modalities of 'being in' require from their positive and defining character to belong exclusively to the subjective dimension of the mind-independent order, as quantity, for example, posits a mind-independent feature of subjectivity, and so on for all the other modes of 'being in', whether being in itself (substance as the subject of existence) or being in another (inherent accidents as the subjective characteristics of existing subjects). By contrast, 'being toward' from its positive nature as a type of being does not require that it posit something realizable only mind-independently; whence are found some instances of 'being toward' which, as relations, are nothing in the mind-independent realm but obtain in awareness only — an occurrence impossible for any mode of 'being in', for subjectivity."

— Thomas Aquinas i.1256/1266: *Quodlibet Nonum*, "Quaesitum est de primo de Christo capite. deinde de membris"; *Quaestio 2*, "De Christo quantum ad unionem humanae naturae cum divina"; *Articulus 3*, "Utrum in Christo sit una tantum filiatio", *corpus* (Busa ed. vol. 3. p. 489, co. 3)

"The fact that the relation must also be distinct from its foundation has not been accepted by many philosophers who feared these multitudes of little beings flying about. But it is evident that to say the relation is identified with its foundation is to deny real relation, since the foundation, by priority of nature at least, is not a relation and does not signify 'to another', but another predicament [another category], such as quantity, or action. Now if no real modification is had with the advent of the relation, this latter could only be a being of the mind. Consequently, either there are no real relations, or predicamental relations are really distinct from their foundation."

— Henri Renard 1946: *The Philosophy of Being*, Section 5. "The Predicaments", Chapter 5. "On Relations", p. 254

"Perfection and good existing in things independent of being known command attention not only as something inhering subjectively in things, but also as an order of one thing to another — for example, a good consists in the order exercised among parts: indeed, it is to this order of parts in wholes that the philosopher compares the order of the physical universe as a whole. There must be, therefore, in the realm itself of mind-independent being, over and above individual subjects existing and interacting, a certain order; and what this suprasubjective order consists in is what relation is."

— Thomas Aquinas c.1265/6: *Quaestio Disputata De Potentia*, *Quaestio 7*, "De divinae essentiae simplicitate", *Articulus 9*, "Utrum huiusmodi relationes, quae sunt inter creaturas et deum, sint realiter in ipsis creaturis", *corpus*

"What are relations *secundum dici* and *secundum esse* has been explained. So, in treating of sign, we must speak of relation *secundum esse*, not of predicamental relation obtaining only on the side of mind-independent being, because our discourse as concerning sign in general includes equally natural and socially constructed realities. ... Whence we see at once that sign in general *cannot* be identified with predicamental being nor reduced to predicamental relation, although it *can* be identified with ontological relation, relation *secundum esse* ... because an ontological relation, be it in the order of mind-independent or of purely objective being, is a relation purely and positively and does not introduce as such anything subjective."

— John Poinset 1632: *Tractatus de Signis*, Book I, "De Signo Secundum Se", Question 1, "Utrum Signum Sit in Genere Relationis", 117/25–118/18

"In order to get the point of postmodernity as a new epoch in philosophy's history as a whole, the single most important first step Aristotelians or anyone else talking about 'reality' has to take is to abandon the approach to the question of hardcore reality which begins by distinguishing between individuals and their characteristics, substance and accidents. For history amply demonstrates that most thinkers who have taken this starting point never reach an understanding of the positive uniqueness of relation, let alone its further singularity without which there could be no finite awareness of things."

"The first step should not be one that hides or buries relation in the order of subjectivity upon which relation depends (which is what 'being in' amounts and reduces to), but one that puts in the foreground what is *different* about 'being toward' in contrast with *all* modes of 'being in' (including substance) — in short, we must note at the outset what is not noted in the traditional discussions, to wit: while all other accidents depend directly upon the being of substance, relation as such depends only indirectly *through* the other accidents, thus opening up the Way of Signs apart from which finite knowledge of being and nonbeing would never have become possible."

— John Deely 2010 spring: *Semiotic Animal*, paraphrased from Chapter 8, "Re-Evaluating the Relative", Section 8.3.1., "A new first step toward understanding hardcore reality", 66–67

"Among the modes of *ens reale*, mind-independent finite being, relation is singular in being the only such mode that is positively unaffected in its essential being by the circumstances which make it to be one time mind-independent and another time mind-dependent. It is also the only form of being in the material order that, even when it is mind-independent, has no direct accompaniment of secondary matter, whence *distance* makes no difference to a relation itself, in contrast to modes of being which have to be in proximity to interact."

— John Deely 2010 fall: *Medieval Philosophy Redefined*, 300

left this earthly scene. As we noted, not till the dawn of the 16th century was the *Summa* actually used in a classroom as Aquinas had planned, by Thomas de Vio Cajetan.

The Subject of Theology and the Existence of God; the "Metaphysics of Esse"

Now the very first question Aquinas poses as the starting point for theology is the question of what is its subject matter. And he answers God, and all else as related to God as beginning and end. The second question he asks is whether this subject matter is real or imaginary, that is to say, does God really exist? There is only one procedure of reasoning by which we can hope to arrive at an answer to this question, Aquinas says. This is the procedure of reasoning from what we experience to what must be the case for that experience to be as it is. But it will not do to tell "a likely story". The kind of reasoning which merely proposes hypotheses to "save the appearances" will not do here; for, as we saw, this kind of reasoning as such never proves anything but merely provides fruitful hypotheses as a basis for further research. The question here is one we want to answer with a "yes" or a "no", not with a "probably" somewhere between. But for any given effect there is always a proper cause — that is, given an effect, there is always a cause prior to it on which its immediate condition of being depends.⁴⁹

The question of whether God exists, therefore, so far as it is a reasonable question, comes down to this. Are there any phenomena in our experience which could not be as they are unless God exists?

Be careful to understand the question strictly. We are not asking here about amazing phenomena or alleged miracles, mystical experience or anything of the like. The question concerns ordinary phenomena, ones that we can thoroughly analyze to the point of seeing intellectually the variables involved, so that when we say "this could not be unless", we are expressing an *intelligible necessity* and not mere rhetorical ignorance, an ideological preference, or a determined wish.

"Intelligible necessity" is the operative qualification: we are looking for a situation that is intelligible *not just on an hypothesis*. We seek, rather, a situation, if such there be, that, viewed under the proper analysis, immediately and directly reveals *as its only alternative* the existence of God.

Quinque Viae: The Reasoning of the "Five Ways"

Aquinas considers that there are several features of our experience of the world which can so be analyzed as to reveal to us the intelligible necessity of affirming that God exists. He enumerates five such: the phenomena of motion, agency, possibility and necessity, grades of perfection, and cosmic order. It would not appear that Aquinas considers this an exhaustive list, but merely an illustrative one. From the items on this list, at least, he tells us, it is possible to construct an analysis which leads us from what we certainly experience to an intellectually certain affirmation of the existence of God as the basis for or necessarily involved in that experience. (However, as we will have to note, the fifth "way" he cites depends on the cosmological image of medieval times in exactly the way that it turns out to be false, carrying with it the validity of the "fifth way" as Aquinas in this *Summa* formulates it.) He calls this a demonstration *that* something is the case ("demonstratio quia"). From effects we reason to the cause. Other times we go from causes to effects ("demonstratio propter quid"). But for this procedure of *propter*

⁴⁹ For example, when an airliner crashes, the federal agency responsible for air traffic safety immediately launches an investigation. They do not try first to determine *whether* there was a cause for the crash, and if so, what; they proceed directly to try to find out *what* was the cause, full well knowing that there is always a cause for everything that occurs.

quid reasoning the cause has to be something that is on our own level of being, something finite, something bodily.

Aquinas proceeds to fashion his famous "five ways" (the *quinque viae*) of showing that God exists. These are the most famous of the "cosmological arguments" for the existence of God, and Aquinas thinks that, in contrast to any possible form of the "ontological argument",⁵⁰ they have the advantage of actually proving what they claim to prove.

Since the procedure of successfully reasoning to the affirmation that "God exists" as a true conclusion must be in every case the same, perhaps it will be enough, for present purposes, to follow this reasoning along what Aquinas describes as the *prima et manifestior via*, "the first and more manifest way". The more manifest way will be to begin a thematic reflection from whatever phenomenon of experience and observation so pervades our consciousness that we know of no exception to it. We want to begin with a phenomenon that extends as far as our awareness of the sensible universe extends.⁵¹ The phenomenon in our experience that best fits this requirement is the experience of motion, of objects in motion. And motion, as the most obvious example of change in general, remember, was first defined by Aristotle in the definition that Aquinas accepts:⁵² motion is the act of a being in potency insofar as it is in potency, technically; or, somewhat more simply (but not over-simply), motion is a transition from a state of potentiality to an actual condition, from a potential to an actual situation.

The phenomenon of movement in space is one phenomenon in our awareness of the universe, one "transition from potency to act", that is all-pervasive. Comparatively speaking, the other items on the list of possible points of departure for the discursive development of probative arguments presuppose some structure in our experience, presuppose an Umwelt already formed (or, in the case of the fifth way, a view of celestial matter differing from terrestrial matter in involving no final causality proper to itself, hence requiring "separated intelligences" to push them, as an archer guides the arrow he shoots). But motion (terrestrial or celestial) we experience from the first as that through which an Umwelt is formable in the first place. It provides the materials out of which an Umwelt is fashioned, and not merely a phenomenon that we experience from within a determinate Umwelt, which is the case with each of the other four items on our fivefold list of prospective points of departure.

There would have been in the mind of Aquinas another consideration for seeing the primacy of motion in constructing a *quia* reasoning to the existence of God: motion transcends the distinction between celestial and terrestrial matter.⁵³ The heavens and the earth are alike in manifesting local motions. Thus, throughout the entire universe, it can be said that whatever part of a thing changes is made to change by some other agency, either by another part of itself or by something external to itself. For one and the same thing in one and the same respect cannot be at one and the same time agent and patient.

⁵⁰ Recall our remarks on the historical origins of this terminology (Chapter 5, pp. 121 & 128, esp. note 26), and on the singular ineptness of the designation "ontological argument": but one has to choose one's fights, and on this one, principally but not exclusively verbal, I here pass. The interested reader may find in Collins (1954: 501ff.) a cogent discussion of the objectionableness of the terminology from Kant that has nonetheless become part of the heritage of modern philosophy.

⁵¹ This was the case in Aquinas' day with the celestial movements; but it is far from the case in our day! Hence the invalidity of his fifth formulation, which takes away nothing at all from the "more manifest way" of a proof from motion in the sense that experience testifies in our day no less than in the days of Latin philosophizing.

⁵² See Chapter 7 above, p. 139.

⁵³ See Chapter 7, p. 174.

A “moved mover” is the first term that needs to be taken along the way. We need to understand what is meant by a “moved mover”. A moved mover is a subject of motion which, while causing motion in something else, requires yet something else again to explain its own motion; a moved mover is an actual cause which, in causing something else to undergo a transition from potency to act, itself undergoes such a transition in its own being. Aquinas is then able to point out that when you explain the motion of one moved mover by another, as is normally the case in natural explanations *propter quid* (as when you explain the dent in the car by the rock that hit it), the further question can always be raised: yes, the car was dented when the rock struck it; but who or what caused the rock to fly in this direction? And so on.

One moved mover well explains another as far as a specific effect or phenomenon is concerned. But no matter how far we pursue explanations within such a series, there is always another “Yes, but ...” to be raised. Suppose the series infinite. Yet for exactly the same reason and in exactly the same way, what is true of each finite segment or part of the series is true also for the series as a whole, be that whole finite or unlimited in time. *Any explanation made in terms of a moved mover always requires completion by yet another moved mover.* It is not that an infinite series of moved movers is impossible. If the universe is eternal, then the series of moved movers which make up the universe is infinite practically speaking — that is to say, in its temporal extent backwards or forwards — but *intrinsically incapable of fully explaining itself* nonetheless. Whether eternal or finite in time, Aquinas points out, the universe is created in this sense of being dependent in its being through every “here and now” moment past, present, or to come.⁵⁴

Be the series of moved movers infinite or be it finite, there is only one possible way to complete it as a *fully intelligible* series of moved movers, and that is by postulating that *outside the series*, and *simultaneous with the whole of the series*, there exists a cause of motion which is not itself moved. This is how Aquinas defines an “unmoved mover”: an actual cause which, in causing something else to undergo a transition from potency to act, itself undergoes no such transition. So the *whole order* of “moved movers”, that is to say, the entire universe of interacting finite beings, the combined orders of transcendental and ontological relatives, as we might also say, is set in contrast to the singularity and uniqueness of an “Unmoved Mover”, one in being and essence, a cause of “motion” which, being purely actual, itself in imparting existence or *esse* (“creating”) under finite modes (that is to say, in enabling there to be changing being of whatever mode and type insofar as it is actual), undergoes no transition from potency to act.

An “Unmoved Mover”, in short, proves to be a Source of Actuality which precludes intrinsic limitation by potency; a Source of actuality which admits no transition from potentiality, a Subsistent Act of Existence independent of any intrinsic correlation with a specifying limit. Purely actual, the Unmoved Mover which the intelligibility of change here and now requires us to posit as a simultaneously concurring cause in any case whatever of movement or change anywhere in the universe, regardless of whatever other reasons for the change are *also* involved, knows no diversity within itself, at least not the kind that bespeaks potentiality for change as a transition from potency to act. The consequence of this condition of supreme actuality unconditioned from within Aquinas calls “the divine simplicity”, to which we yet must assign further names in order to appreciate the reality of the Creative Source of all being, a Source beyond being and nonbeing as falls within our understanding.

⁵⁴ See further discussion of “creationism” in Deely 2001: 506–509.

The next forty-one Questions of the First Part (or “Part I”) of the *Summa* are spent exploring the meaning of such a conception, after which, at Question 44, he begins to treat of God’s creation, the cause of evil, and the various levels of physical creation, from angels down to earthly creatures. In Part II he treats of human beings as made in God’s image, first in general (I–II), and then as regards the virtues in particular, both theological and philosophical, so to speak (II–II). Part III treats of the Redemption, or the return of the universe to God through the salvation of humankind.

The Deficiency of the “Fifth Way”, and the Matter of Alternative Further “Ways”

In the few brief lines Thomas devotes to “the fifth way” in the *Summa*,⁵⁵ the argument from “the governance of things” or (as is said today) from “the design argument”, Aquinas begins by noting that there are natural bodies which lack cognition or awareness of the surroundings, and that these bodies yet exhibit final causality, i.e., definite developmental tendencies. But, he says quickly, bodies without cognition do not have final causality unless and insofar as they are directed by some other agent which does have intelligent awareness: non-cognitive bodies are like arrows which get a direction only from an archer.⁵⁶

There is little doubt that he has in mind primarily the movements of the heavenly bodies; for although he speaks here of “*corpora naturalia*” without qualification, anyone who has read Aristotle’s *Physics* or the *Commentary* of Aquinas thereon, together with the astronomy of Aristotle (*De caelo et mundo*) and commentary of Aquinas, well knows that the only visible “natural bodies” which lack intrinsic finality as part of their existence (since they are not subject to generation or corruption)⁵⁷ — and hence only “*ex intentione [extrinseca] perveniunt ad finem*” — are the heavenly bodies, which require separated intelligences to make them move and then by their movements govern all generations and corruptions in the “sphere below the moon”. And “heavenly bodies” in this sense, we know now, are pure fictions. And so is the fifth version of the proofs for the existence of God, at least as stated in the *Summa* of 1266, Part I, Question 2, Article 3 *in finem*!

It is a deficiency in Aquinas’ proofs, and needs to be recognized as such.⁵⁸ Indeed, if one has a look at the *Secunda Secundae* of the *Summa theologiae*, where Aquinas discusses so-called “final causality” in its full scope (as including teleonomy⁵⁹), one get the distinct impression that the “fifth way” of 1266 *presupposes* rather than *demonstrates* the dependency of finite being on God as “pure actuality”! Yet, be that as it may, this deficiency

⁵⁵ In the Busa text, pp. 187–188, the “5th way” occupies 12 lines of text; the 2nd and the 4th occupy 17 lines; the 3rd 22 lines; and the 1st 29 lines.

⁵⁶ Aquinas c.1266: *Summa* I. 2. 3 *in finem* (Busa 2 p. 187–188): “*ea autem quae non habent cognitionem, non tendunt in finem, nisi directa ab aliquo cognoscente et intelligente, sicut sagitta a sagittante. ergo est aliquid intelligens, a quo omnes res naturales ordinantur ad finem; et hoc dicimus deum.*”

⁵⁷ See the “Scheme of Causality Adequate to the Datum” in Chapter 7 above, p. 140ff., esp. the discussion of final cause; and recall (e.g., 66n29 above) the “background cosmological image” issue, always at work.

⁵⁸ Yet I have found, as have many others, that self-styled Thomists are often (too often) ideological more than philosophical in their discourse, and to talk of shortcomings in presentations of Aquinas is just plain not acceptable. Can the 5th way be salvaged? — for example, see Maritain 1954a: 56–63 on the point; also Wippel 2000: 480–485, or Martin 1997: Chap. 13, esp. 182–201. Practically speaking, nonetheless, my own opinion is that we will find no real advance on this argument of the “fifth way” until 1908, in what Peirce (1908a) terms a “neglected argument” for God’s reality.

⁵⁹ See the discussion in Chapter 7 above, esp. p. 141ff.

of formulation in I. 2. 3c in no way impacts upon the validity of the “first way” from motion; nor indeed from the early argument of c.1252/56 of his *De Ente et Essentia*⁶⁰ where Aquinas demonstrates the need to posit a source which has existence as its essence (and hence necessarily) in order to account for the existence of finite beings which have an essence that exists only contingently, as we will see in this Chapter below when discussing the distinction between essence and existence and the starting point of metaphysics as a (cenoscopic) science.

In short, the “five ways” enumerated by Aquinas are neither exhaustive of the possibilities for coming to realize intellectually the necessity of a source of finite being from outside the order of finite being which is unlimited by intrinsic potentiality; nor are all of the five indicated in the *Summa* text equally carefully formulated as attempts at demonstration.

Yet, however arrived at, by the first way or some other way,⁶¹ once the conclusion the proofs aim to provide is seen for what it is — an inescapable conclusion upon sufficient reflexion upon our experience of being as subject to passages from potentiality to act — there remains the fact that *what* has been proven proves also to be so far beyond what (anything that) we have experienced as to remain forever beyond our comprehension of its proper being so long as concepts remain our only means of interpretation.⁶² So how do we speak of such a “Source of all being”?

The Divine Names and “Negative Theology”:

“Of God We Can Know Only That He Is and What He Is Not”

The first “name of God” for Aquinas is that to which the proof from motion concludes: Pure Act, or *Ipsium Esse Subsistens*, an Unmoved Mover because he knows within himself nothing whatever of the potentiality which is presupposed to change and constitutive of it from within. Yet because we are able to know “in this life” only through the formation of concepts, and the formation of concepts is based on the experience of sensible changes, our knowledge of God proves to be of a rather paradoxical sort. We can know of God, by demonstration, *that* he exists, but, beyond that, insofar as our concepts are multiple and his being is simple, we know more *what he is not* than we do what he is. What he is, is pure act, self-subsistent existence. What he is not is mixed act, changeable, potential, diverse, transitional.

But the formula, “We know of God that he is and what he is not”, leads to astonishing abuses, sometimes circulated in the name of St. Thomas, when it is not adequately understood. Later on in the history of philosophy, Immanuel Kant will introduce his readers to a radical distinction between “what appears” and “what is in itself”. What appears is what we can know; what is in itself is what we cannot know and is intrinsically and forever unknowable. Any construal of the statement of Aquinas that we can know of God that he is and what he is not along the lines of the later Kantian distinction between knowable phenomena of experience and unknowable things-in-themselves would be worthy of contempt were it not for the intrinsic difficulty of the matter-at-issue.⁶³

⁶⁰ To which curiously many Neothomists deny the status of an argument.

⁶¹ See the related discussion in Deely 2001: 308–313, esp. notes 132 & 133.

⁶² That is why Aquinas posits that the divine essence itself takes the place of concepts for the soul in its life after earthly life, enabling the human intellect to see all things that it can see now as they owe whatever they had or have of existence in and through the divine essence. See note 70, p. 194 below.

⁶³ See the discussion vis-à-vis Kant in Deely 2001: Chap. 13, p. 573 note 60.

Chapter 11

THE CRASH AND BURN OF SCHOLASTICISM, c.1600–1650

As we saw, the Latin Age of philosophy had its beginnings in a basic loss of contact with the original sources of philosophy in the Greek language. The Latins perforce had to begin anew, and the first thinker of genius to turn his hand to the task without the benefit of access to Greek was Augustine. Less than a century later, Boethius, the last Latin really to know the Greek language, himself passed away, having translated for the Latins little more than the logic of Aristotle — and even this little lay largely neglected after Boethius' death. Whence the “dark ages”, which first Charlemagne sought to counter, then shortly after the Latin civilization had regrouped enough to begin something really new: an institutional base for forming a community of inquirers, what has come down to us today as the university.

The universities needed a curriculum, and though they could not base their teaching on the Greek language, yet fortuitously, the civilization of Islam had over the 9th and 10th centuries created centers of learning of its own where Greek writings, mainly of Aristotle, were translated into Arabic and also Latin (albeit not by Islamic scholars, but by subordinated Christian and Jewish scholars in Baghdad and Seville); and by this indirect means, right about the time the university as an institution was coming into being, the vast range of the work of Aristotle also became available to the Latins. In effect, those writings became the basis of the university curriculum in the arts, and the “commentary tradition” with which the notion of Scholasticism is mainly identified was underway. Aquinas came almost at the very beginning of this commentary tradition. Indeed, his main teacher, Albert the Great, was the first to comment on the whole range of Aristotle's writings. Albert had the temperament of a modern scientist, but science in the modern sense did not yet then exist, so Albert's own basic orientation remained anomalous even in the then-new university world.

But of course the influence of Albert on Thomas Aquinas was profound, no more so than in Aquinas's own understanding of the animal origins of human knowledge and the importance for intellectual development of understanding the physical surroundings. Physics, not metaphysics, was the main philosophy focus in the university curriculum of the Latin Age. Indeed, independent treatises on metaphysics would not even be written until near the time of Francis Suarez. Thomas by temperament had as much of cenoscopic bent as did Albert ideoscopic,¹ but he fully appreciated that *even cenoscopy can reach its full maturity only as ideoscopy develops*:

¹ The medievals themselves had two terms, synonyms, for science: *doctrina* and *scientia*. Sebeok (1976: “Preface”) has suggested that we use the former term “doctrina” for cenoscopic knowledge, and reserve the latter term “scientia” for science in the modern, post-Galilean, sense; and this suggestion,

The aim of natural science is that which appears primarily in sense perception ... for the natural scientist does not seek to know the nature of a stone and of a horse except in order to know the reasons of those things which are perceived by sense. For it is clear that there cannot be a perfect judgment ... of natural science concerning natural things if sensible things are ignored.²

St Thomas — no doubt under Albert's influence, and even though Aquinas' own focal interests were not strongly ideoscopic at all — saw the investigation *in detail* of the causes at work in the natural world to be the proper maturation of philosophy of nature, and that in turn to be the preamble *sine qua non* for metaphysics.³ He would have regarded the work of Galileo and Newton, as would have Albert, in quite a different light than did the Scholastic authorities of the early 17th century, who foolishly and naively considered cenoscopic knowledge to be not merely presupposed to ideoscopy but superior to and adjudicative of properly ideoscopic results.⁴ The "physics" of Aristotle, or *philosophia naturalis*, was not only the main focus for understanding the natural world of *ens reale* but it was perforce in Latin times of a mainly cenoscopic character. Not until the experimental orientation of Galileo and the mathematization of the results of experimental observations — such as those Galileo used to prove that all bodies (contrary to "common sense") fall at the same rate, or that pressure upon an enclosed fluid transmits equally in all directions, or that the sun has spots and other planets besides earth have moons, etc. — began to be generally pursued (that is to say, not until the transition from cenoscopy to ideoscopy got well underway) could the crucial change in world-view between modern and premodern conceptions begin to develop. That crucial change lay in the discovery that, contrary to all common belief among Greeks and Latins, matter is the same in the heavens and on earth, and "coming to be" ("generation") and "passing away" ("corruption") pertains to the whole of the physical universe, and not just to individual substances on earth ("the sphere below the moon"). Cenoscopy not only matures in the development of ideoscopy, but without that development — a lesson still not learned by many in philosophy today — cenoscopy itself could remain in no more than an adolescent condition.

But the Latin Scholastics, as a group, like most adolescents, preferred their condition as it was, never mind some future maturity! The cenoscopic theologians of the 16th and 17th centuries defined "witches" theologically, and lit the skies with their burnings. The cenoscopic philosophers of the time teamed up with those theologians to light the skies with their burning of Giordano Bruno as the 17th century opened, and the theologians on their own gleefully added Antonio de Dominis⁵ to the pyre in 1624, just eight

which struck me as ingenious at the time (see Deely 1975a, 1976, 1977, 1978, 1982: Appendix I, 1986a), I now see in the same brilliant light but further enhanced by this cenoscopic/ideoscopic terminology as providing for a way at last to ditch the appeal to the thoroughly discredited notion of "common sense" in relation to the foundation of philosophy, as I have set out in Deely 2008.

² Thomas Aquinas, c.1266: *Summa theologiae* 1.84.8c: "ita naturalis scientiae finis est quod videtur principaliter secundum sensum ... naturalis non quaerit cognoscere naturam lapidis et equi, nisi ut sciat rationes eorum quae videntur secundum sensum. manifestum est autem quod non posset esse perfectum iudicium ... scientiae naturalis de rebus naturalibus, si sensibilia ignorentur."

³ See Deely 1984; Ashley 2006; and Deely 2009c (reviewing Ashley in the line of Deely 1984).

⁴ The literature is huge. Let Blackwell 1991 be but a beginning.

⁵ Even more gruesome if, after a fashion, less cruel than the burning alive of Bruno, was the "burning dead" of the Archbishop Marco Antonio de Dominis on 21 December 1624. (Having died and been buried in September of that year, his body was exhumed for display during the trial of his spirit

years after Cardinal Robert Bellarmine engineered the official and ignominious Vatican declaration that to teach that the earth moves relative to the sun is to engage in heresy of a magnitude warranting imprisonment or death.

Descartes, one of the most prescient of the early moderns in seeing the need for ideoscopy, especially in terms of the application of mathematics to our understanding of nature, as we earlier mentioned, warned (as part of his “Third Rule for the Direction of the Mind”⁶) against the Latin Scholastic authors that “there is a great danger lest in a too absorbed study of these works we should become infected with their errors, guard against them as we may.”

Thus the Latin Age of philosophy, just as it reached its highest cenoscopic achievement in Poinso’s establishment of the doctrine of signs, as also more generally in his synthesis of the best results of the Latin cenoscopic achievements in the five volumes of his *Cursus Philosophicus*, also brought upon itself ignominy in its immature adolescent attitude toward the requirements and necessity of ideoscopy (a lesson many self-styled “Thomistic” philosophers in particular have not learned to this day). With good reason did Descartes recoil in horror at the news of Galileo’s condemnation, rushing to block the publication of his own work on the heavens. Even Poinso suppressed his own cenoscopic assessment of the state of astronomy in the wake of this news.⁷

Latin Scholasticism, begun as a tradition of commentary upon the greatest of written works, Scripture and the Church Fathers in theology, Aristotle especially in philosophy, advanced over the centuries between Aquinas and Poinso into a series of highly technical and carefully focused “questions” of cenoscopic character.⁸ In the matters of common concern to cenoscopic doctrine and ideoscopic science in the area of “physics” (the general understanding of the natural world),⁹ as the Latin Age progressed, the actual texts of Aristotle receded more and more into the background. In the time of Albert and Aristotle’s entry upon the Latin scene, the Scholastic professors felt obliged to comment more or less on the whole Aristotelian corpus. But as more difficult points emerged as “disputed among the doctors”, these points of difficulty as “special questions” came more and more to occupy the whole stage.

But it was not simply a question of “progress by deepening insight” in contrast to “progress by substitution”, as Maritain has suggested. It was more a question as Descartes pointed out¹⁰ of “progress by deepening insight” all-too-tainted by “the way of [Scholastic Latin] writers, whenever they have allowed themselves rashly and credulously

for “relapse into heresy”. Convicted *in absentia* (as it were), his body was tied to a stake and set aflame. Still, he must have suffered incomparably less than did Bruno in burning alive eight years before.

⁶ Descartes 1628, vol. I, p. 6, of the Haldane and Ross trans.

⁷ See the “Editorial Afterword” to the 1985 edition of Poinso 1632a for details (Deely 1985: EA 402–404, 439).

⁸ See the giant foldout diagram of the Scholastic “Curriculum of Arts” at the University of Alcalá in Poinso’s lifetime: in the 1985 edition of Poinso 1632a, pp. 371–376. This university, founded as a “studium generale” in May of 1293 (the original status of universities in the high middle ages, including Bologna and Paris), received its current name (Universitas Complutensis, in Latin) and full university status in 1499 from Pope Alexander VI, at the request of Cardinal Ximenes. In October of 1836 the university was moved to Madrid and its name twice changed but restored in the 1970s. As the 21st century opened, the “Complutense University” is the largest in Spain.

⁹ See Deely 1984 on how semiotics provides the “framework and direction” common to the cenoscopic and ideoscopic concerns in matters of “natural philosophy”. Also now Ashley 2006 and Deely 2009c.

¹⁰ Descartes 1628, vol. I, p. 6, of the Haldane and Ross trans.

to take up a position in any controverted matter, to try with the subtlest of arguments to compel us to go along with them”, not to mention surrounding their disputes “with ambiguities, fearing, it would seem, lest the simplicity of their explanation should make us respect their discovery less, or because they grudge us an open vision of the truth.”

So it came to pass that the transition from Latin to the national languages of modernity was not a smooth transition, expanding cenoscopy as and where appropriate into ideoscopy within the perspective of the doctrine of signs as the standpoint required equally for the understanding of both, but a harsh and revolutionary transition in which ideoscopic science had to make its own way unaided but rather impeded by philosophy's cenoscopic character. The modern philosophers, instead of developing semiotics, developed rather “critical philosophy” as “epistemology”, undermining semiotics and spreading skepticism concerning even the results of ideoscopic science with the Kantian teaching that things in themselves are in principle *forever unknowable*.

Modern philosophy was a revolution against Latin Scholasticism, all right, a revolution provoked and more than merited by the obtuse refusal of the Scholastics to see that beyond the “books of men” lay the “book of nature” as something to which the human intelligence is properly ordered to investigate *in detail* and not just in broad outlines — as not only Albert and Aquinas but also Roger Bacon and Francis Bacon and many others had pointed out along the way.¹¹ But the revolutionaries misunderstood their mission, not on the side of science, but on the side of philosophy, and delayed by well over two centuries the development of semiotics which should have and could have maintained the proper proportions between cenoscopy and ideoscopy as the latter came into its own.

So it happened, tragically, that the Latin Age of “medieval philosophy” came to an end, not in the blaze of glory that was the semiotic of John Poincaré, but in the blaze of inquisition burning Giordano Bruno alive in 1600 and Antonio de Dominis dead in 1624, in the crash and burn of colluded authorities civil and religious abusing their powerful role to stifle rather than promote the inquiry natural to the human intellect, which is to come to understand “that which appears primarily in sense perception”, as Aquinas said; for the human animal “does not seek to know the nature of a stone and of a horse except in order to know the reasons of those things which are perceived by sense”.

Indeed, the lesson that commentary upon texts, “sacred” or “secular”, is no substitute for natural investigation and inquiry has still to be learned by many today, even as we cross the threshold beyond modernity into the postmodern and global epoch of intellectual culture. Indeed is the human animal “discursive” rather than “comprehensive” in its intellectual life — that is to say, *slow to learn*. Not until Charles Sanders Peirce would a modern thinker reject Descartes' advice to not read the Latins carefully, with the happy result that Peirce rediscovered from the Latins their hard-earned by opening unto the Way of Signs, semiotics, upon which path the doctrine of signs places human inquiry as leading “everywhere in nature, including those domains where humans have never set foot.”¹²

¹¹ The recent work of Hannam 2009 is quite useful, if a little too defensive of the indefensible “authorities” of the late Latin “crash and burn”.

¹² Emmeche 1994: 126.