

Artificial Intelligence and Thomistic Angelology: a rejoinder.

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Abstract:

My paper analyses the analogy between Computers and the Thomistic separate substances, and argues that Aquinas' account of angels as cognitively intuitive and non-discursive makes the analogical gap between these impossible to bridge. From there, I point the direction away from computers as the way for *us* to move up the order of cognitive excellence. Instead, the *gifts of the Holy Spirit* are the way to go, since by them we participate in this intuitivity. I then lay out the ascetical presuppositions for the successful participation of these gifts, in particular the necessity for the *passive purgations*, according to the division of the ascetical life into three stages by Garrigou-Lagrange OP.

- End Abstract -

In a very interesting paper delivered at the 20th World Conference of Philosophy, Howard Kainz, Jr. made some very suggestive comments regarding what he thought were analogical points between Computers and St. Thomas' theory of separate substances. Amongst other interesting observations, he writes,

"[O]ne cannot help seeing an analogy between the various internal and external hardware caches and software caches, which help to increase computing speed by providing route for signals to avoid getting slowed down in hard-disk swap files or other storage operations. The separate substance, on the other hand, completely avoids such problems; it simply has no matter to slow it down. Thus, for all practical purposes, and from our corporeal vantage point, all angelic operations and comprehensions are instantaneous."¹

Kainz adds an intriguing remark, which we wish here to dwell on for a while. Expressing hope for closing the gap in this analogy, he says,

"It should be mentioned, however, that there was considerable disagreement among the medieval and patristic authors concerning the "immateriality" of angels. Augustine and Origen had speculated about the possibility of angelic bodies being composed of matter, albeit a more "subtle" matter. Duns Scotus gave lip service to the received doctrine of angelic incorporeality, but challenged his readers' imagination by theorizing that angels must have some kind of "incorporeal" matter; and, consistently with his theory, Duns Scotus thought that angels must reason discursively in some fashion. If there *were* any kind of matter in angels - subtle or "incorporeal" - the leap from completely immaterial beings to partly material beings would be less formidable, and the analogy between angelic spontaneous instantaneity and the linear, sequential operations would be even closer."²

He is here, of course, pointing to the Franciscan doctrine of universal hylomorphism. Now, the finitude of creatures is something no medieval theologian ever dared to question. In

order to preserve this finitude, each created substance had to be composed of potency in some way, so that that being would be distinct from the Perfect Infinitude, who alone is pure act. Therefore the theologians had to posit at least a principle of potency in angels, so that these would not be Pure Act.

St. Thomas, whose metaphysics of the primacy of *esse* posits the Pure Act, God, as the pure act of *Esse* (Being), does so by declaring essence or form as the principle of potentiality limiting the common *actus essendi* (act of being) in which all beings (*ens*) participate. St. Bonaventure does as much, distinguishing in angels “what is and its existence: *differentia entis et esse*”.³

Yet the question arises, whether there is a further potency of matter? Of course, they distinguished between corporeal matter and non-corporeal matter; and the latter, which may sound foolish to modern ears who are too ready to equate the receptive principle of actuality with what is bodily, is the term in point.

For St. Thomas this is not possible, since the intellectual creatures must be always cognitively in act, in which case the presence of matter will make impossible, since that implies some form of cognitive potency: “we see that forms are not intelligible in act except according as they are separated from matter and its conditions, nor are they made intelligible in act except by the power (*per virtutem*) of intelligent substance, inasmuch as they are received in it and inasmuch as they are actuated by virtue of it. Whence it is necessary that in any intelligible substance there must be entire immunity from matter in such wise that they neither have a material part to them nor yet exist as a form impressed in matter, as is the case respecting material forms.”⁴

Yet perhaps the impediment is due to the corporeality, so that non-corporeal matter would not be so faulted. St. Thomas replies in kind.⁵ If corporeal matter alone were an impediment, then corporeal forms, the reason for which corporeal matter is corporeal, would be an impediment to intelligibility. I.e., it is not matter *per se* that is unintelligible, but the corporeal form. But this is not so, since corporeal forms are intelligible if they are abstracted from matter, as all forms are. Hence, *modus tollens*, it is not the case that corporeal matter alone is an impediment to intelligibility. Therefore, angels are pure form, as he says in the *De ente et essentia*,

“According to the second mode essence is found in created intellectual substances in which the essence is other than their existence, although their essence is without matter. Whence their existence is not absolute but received and therefore according to the capacity of the receiving nature, but their nature or quiddity is absolute and not received in any matter. And therefore it is said in the book *De Causis* that intelligences are infinite from beneath and finite from above. For they are finite in respect to their existence which they receive from above, but are not finite from below, since their forms are not limited to the capacity of any receiving matter receiving them.”⁶

As Kainz admits, the distance between the analogy between Angels and computers is stretched owing to the mode of “knowing”, if I may put it this way, between one and the other. Angels know *intuitively*, whereas computers, no matter how fast they operate, do so by sequential, linear “syllogisms”, if you may permit me this word. As one Thomist explains,

"the angelic idea, not being drawn from external sense objects, is a natural endowment of the angelic intellect, infused into it by God at the moment of creation. Hence the angelic idea is at once universal and concrete. The angel's infused idea of the lion, say, represents not only the nature of the lion, but all individual lions that either actually exist or have in the past been objects of the angel's intellect. Angelic ideas are thus participations in God's own creative ideas. Infused ideas, then, which Plato and Descartes falsely ascribed to men, are, on the contrary, an angelic characteristic...The nature of [the angel's] ideas, at once universal and concrete, make an angel's knowledge intuitive, not in any way successive and discursive. He sees at a glance the particular in the universal, the conclusion in the principle, the means in the end. For the same reason his act of judging does not proceed by comparing and separating different ideas. By his purely intuitive apprehension of the essence of a thing, he sees at once all the characteristic of that essence, for example, he simultaneously sees all man's human and created characteristics, for instance, that man's essence is not man's existence, than man's existence is necessarily given and preserved by divine causality."⁷

While computers are a technological blessing, it must be admitted that for a Thomist no matter how good a computer is, it will forever pale far in comparison to the separate substance, simply because it lacks intuitivity. These are two orders of excellence. In saying so I believe St. Thomas to be on my side. It is clear that he thinks quite 'nobly' of intuitivity, and the lack of the same as a sign of a lesser nature, as is discernable in *qu. 16 art.1* of the *De Veritate*.

"As Dionysius says, divine wisdom "joins the ends of nobler things with the beginnings of lesser things." For natures which are ordained to one another are related to each other as contiguous bodies, the upper limit of the lower body being in contact with the lower limit of the higher one. Hence at its highest point a lower nature attains to something which is proper to the higher nature and shares in it imperfectly. Now, the nature of the human soul is lower than the angelic nature, if we consider the natural manner in which each knows. For the natural and proper manner of knowing for an angelic nature is to know truth without investigation or movement of reason. But it is proper to human nature to reach the knowledge of truth by investigating and moving from one thing to another."⁸

While of course, from what is said in the first part, we would expect St. Thomas to say that *we* also participate in some kind of intuitivity, although imperfectly, and so he does, saying: "Hence the human soul, according to that which is highest in it, attains to that which is proper to angelic nature, so that it knows some things at once and without investigation, although it is lower than angels in this, that it can know the truth in these things only by receiving something from sense."⁹ These are, of course, the first principles of the speculative and practical intellect.

For those content with the nobility of "*something cannot be and not be at the same time and in the same respect*" or "*good ought to be done and evil ought to be avoided*", perhaps the quest for ascending the hierarchy of being ends there. For those intent on improving the human race and its evolutionary trail, it would seem today that hope is in the chips. I think the day for *Terminator* is not too far off. Or *Johnny Pneumonic*. Or perhaps like in the *Matrix*, where I could

learn every skill just by loading a programme: only that this occurs in the realm of *real being*, and not in *intentional being*, or in the mind, as the moderns say. Of course, what would be a treat would be to load up the *Summa* and rattle on in scholastic distinctions over a cocktail party. Perhaps as Thomists, this will be our hope as we peer into the new millenium. Still, while it must be admitted that perhaps one day the man implanted with micro-computers will think faster short of the speed of light and last longer than *Energizer*, for reasons given above, it will never leap across into the angelic order of cognitive excellence. It will simply be a better type of sequential processing. Better, faster, but ultimately sequential, and hence less excellent.

Not to be a wet blanket. I have not come to bring despair. Instead, let me quote a selection from John of St. Thomas to give you a hint of what I'm getting at:

“The gift of understanding does not judge analytically, nor does it reason about supernatural truths through their causes. From an interior impulse of the Holy Ghost and from an affection toward spiritual things, it discerns spiritual realities from corporeal, and separates the things to be believed from those which are not to be believed, or errors. The evidence of a reasoning process is not required for this type of judgement.”¹⁰

“The gift of wisdom does not judge from any knowledge derived from study or reasoning about causes or even by a light which manifests them in themselves. It judges from a connaturality and union with the supreme cause which is possessed as it were through experience.”¹¹

“The assertion that the gift of knowledge, and by the same token the gift of wisdom, is not discursive because it is a participation in divine knowledge is readily answered by the text of St. Thomas. “Divine knowledge is not discursive or rational but simple and absolute. The knowledge which is called the gift of the Holy Ghost is similar to this, since it is a participated similitude of it.”(II-II, q. 9, a. 1, ad 1).”¹²

You have guessed rightly. The gifts of the Holy Spirit: seven in all, three of which, pertaining to the speculative intellect, are listed above. Without giving up on technological advancements, if we are thinking about improving mankind, the gifts of the Holy Spirit are, I think, the way to go.

How then do we partake of this wonderful installation, as it were? It is not sufficient to be simply in a state of grace. According to spiritual writers, the many impediments in the ascetical life make the fulfillment of the gift an impossibility. In particular, unless one were to pass through certain stages in the spiritual life, one will not be properly disposed to fully partake of these gifts. Until that occurs, then although the gifts “of their nature they could elevate the mind to understand without formal deduction, but on the part of the one knowing they can use deduction, because of the fact that the subject is not properly disposed and only imperfectly participates its light.”¹³

And so in as much as a computer requires upgrading before more sophisticated programmes may be installed on it, so also we must be “upgraded”. In this respect the Thomist theologian Reginald Garrigou-Lagrange writes,

No one questions that St. Thomas' mystical theology is found especially in his teaching about the gifts of the Holy Ghost, their relation to charity and to infused contemplation. But some persons merely read rather hastily the *Summa* (Ia IIae, q. 68) the articles devoted to the gifts of the Holy Ghost in general, and (IIa IIae, q. 8, 9, 45) the articles that relate the gifts of understanding, knowledge, and wisdom, without considering sufficiently their connection with what is said (IIa IIae, q. 24, a. 9) about the three degrees of charity in beginners, the proficient, and the perfect, and without recalling what St. Thomas teaches (Ia IIae, q. 111, a.2) about operating grace, to which he attaches the special inspiration of the Holy Ghost.¹⁴

All the gifts are related to charity, and as infused *habitus* they grow with charity, which ought always increase until death. Consequently, as we distinguish three degrees of charity (that of beginners, of proficients, and of the perfect), we make the same distinction in regard the gifts of the Holy Ghost.¹⁵

The relatedness of the Gifts of the Holy Spirit to *charity* are such as to impede or assist their operation in the person. So in as much as one has progressed in charity, so likewise one is more properly disposed to the operation of the Gifts. *Vice versa*, in as much as there is in the agent such qualities as are incompatible with charity, so also the Gifts are impeded of their full operation. In the eradication of these obstacles so to fully run this marvellous spiritual technology, this “*Gifts.exe*”, as it were, we propose that the passive purgations are necessary. As Garrigou-Lagrange explains in the *Notes* at the end of *The Three Ways*,

“*Are the passive purgations, according to St. John of the Cross, not necessary for the profound purity of the will?* Are they not necessary in order to exclude the more or less egoism, and those indirectly voluntary faults which are incompatible also with the full perfection of charity, incompatible also with the full perfection of the infused virtues and gifts, which develop together with charity like so many functions of the same spiritual organism? The answer to this extremely important question, for our part, is not for a moment in doubt. It suffices to read in the *Dark Night* the description of those faults of beginners which render the purgation of the senses necessary. Here are, not faults opposed to the *sort of psychological purity* of which our author speaks, but faults which are contrary to the *moral purity of the sensibility and of the will*. They are, in fact, as St. John of the Cross tells us, the seven capital sins translated into the order of the spiritual life, such as spiritual greed, spiritual sloth, spiritual pride. The same remark may be made of the faults of proficients which render necessary the passive purgation of the spirit; they are ‘stains of the old man which still remain in the spirit, like a rust which will disappear only under the action of an intense fire’ (*Dark Night*, Book II, ch. i. and ch. ii.) These proficients, says St. John of the Cross, are really subject to natural affections; they have moments of roughness, of impatience; there is still in them a secret spiritual pride, and an egoism which causes some of them to make use of spiritual goods in a manner not sufficiently detached, and so they are led into the path of illusions. In a word, the *depth of soul* is lacking, not only in psychological

purity, but in the moral purity that is required...Hence it is our opinion that the passive purgations are necessary for this profound moral purity.”¹⁶

The “passive purgations” refer to the passive purgation of the senses and of the spirit, which mark the transition from the beginner to the proficient and the transition from the proficient to the perfect, respectively. In the division of the spiritual life into these three stages: the beginner, the proficient and the unitive, Garrigou-Lagrange, *contra* the Jesuit Scaramelli, follows and defends Vallgornera OP, who in his *Mystica theologia divi Thomae* (1662) “considers this division to be the traditional one, and to be truly in harmony with the principles of the Fathers, with the principles of St. Thomas and the teaching of St. John of the Cross”¹⁷, after the Carmelite, Philip of the Trinity.¹⁸ Of these transitions effected by the passive purgations, I quote at length Garrigou-Lagrange who writes,

The transitions from one stage to another in the spiritual life, analogous to similar transitions in the bodily life, are marked by a crisis in the soul; and none has described these crisis so well as St. John of the Cross. He shows that they correspond to the nature of the human soul, and to the nature of the divine seed, which is sanctifying grace. In the *Dark Night*, after having spoken of the spiritual imperfections of the beginners, he writes: “The one night or purgation will be sensual, wherein the soul is purged according to sense, which is subdued to the spirit...*The night of sense is common, and comes to many; these are the beginners.*’ Then he adds: “When this house of sensuality was not at rest - that is, was mortified - its passions being quenched and its desires put to rest and lulled to sleep by means of this blessed night of the purgation of the sense, the soul went forth to set out upon the road and way of the spirit, which is that of *progressives* and *proficients*, and which by another name is called the way of *illumination* or of *infused contemplation*, wherein God Himself feeds and refreshes the soul, without mediation, or the soul’s actual help. Such, as we have said, is the night and purgation of the sense in the soul.” The words that we have italicized in this passage are very significant, and they reproduce the original Spanish originally. St. John of the Cross then proceeds to treat of the imperfections which are proper to progressives or proficients: natural roughness, outward clinging of the spirit, presumption, a remnant of spiritual pride - and he thus shows the need of the *passive purgation of the spirit*, another painful crisis, a third conversion necessary before the soul can enter full upon the *life of union* which belongs to the perfect, to those who, as St. Thomas says, wish above all things to cleave to God and to enjoy Him, and yearn ardently for eternal life, to be with Christ.”¹⁹

In sum, the effective operation of the Gifts, whereby we *really* approximate the separate substances *even in their own order of cognitive intuitivity*, have as its *sine qua non* the *passive purgations* which opens the way to the full blooming of *charity*, without which *in turn* the Gifts cannot be, since as we have said above, these last two grow together.

¹ Howard P. Kainz, Jr. "Artificial Intelligence and Angelology". Delivered at the 20th World Congress of Philosophy. See <http://www.bu.edu/wcp/Papers/Meta/MetaKain.htm>

² *Ibid.*

³ E. Gilson, *The Philosophy of St. Bonaventure*. Dom Illyd Trethowan; Frank J. Sheed (transl.). 1965: St. Anthony Guild Press. (USA), pg. 223

⁴ Thomas Aquinas, *De ente et essentia*, chapter 5. George G. Leckie (transl.) 1937: D. Appleton-Century Co. Inc, (USA). pg. 21

⁵ *Ibid.*, pp. 21-2.

⁶ *Ibid.*, pg. 29.

⁷ Reginald Garrigou-Lagrange OP, *Reality: A Synthesis of Thomistic Thought*. Patrick Cummins, OSB (transl.) 1950: Herder (USA). pp. 166-7

⁸ Thomas Aquinas, *Truth*, Vol. II, Q. 1-20. James V. McGlynn SJ (transl.) 1994: Hackett (USA). pp. 304-5

⁹ *Ibid.*, pg. 305

¹⁰ John of St. Thomas, *The Gifts of the Holy Ghost*, 1951: Sheed & Ward (UK), pg. 101

¹¹ *Ibid.*, pg. 126

¹² *Ibid.*, pg. 139

¹³ *Ibid.*, pg. 141

¹⁴ Reginald Garrigou-Lagrange OP, *Christian Perfection and Contemplation*, M Timothea Doyle OP (transl.) 7th Imp. 1946: Herder (USA). pg. 283

¹⁵ *Ibid.*, pg. 299

¹⁶ Reginald Garrigou-Lagrange OP, *The Three Ways of the Spiritual Life: A Brief Outline of the Main Principles of Ascetical and Mystical Theology*, Originally printed 1938. Reprint. 1977: TAN (USA). pp. 108-9

¹⁷ Reginald Garrigou-Lagrange, *The Three Ways*, *op. cit.*, pg. 68

¹⁸ see *Ibid.*, pp. 66-68

¹⁹ *Ibid.*, pp. 75-6