Aquinas and the Principle of Epistemic Disparity

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Abstract: The Principle of Epistemic Disparity has it that a mind of lesser power cannot adequately comprehend the ways of a more powerful intellect. The paper considers the role of this principle in the thought of St. Thomas and also offers some commentary on its wider implications.

1. The Principle of Epistemic Disparity

Nothing in the sphere of intellectual endeavor leaves the scene for good: it appears that one cannot drive a stake through the heart of an idea: seemingly dead, it will unexpectedly spring to life again. Now at present we are witnessing a resurgence of mathematical Neo-Platonism. The suggestive ideas of Pythagoras and of Plato's *Timaeus* did not run their course with al-Kindi and Kepler, but are once more astir in contemporary speculative physics, where mathematical theology is making quite a splash. The shelves of bookstores like Borders and Barnes & Noble feature such informative and well-researched books as Paul Davies's *The Cosmic Blueprint* and Ivar Ekeland's *The Best of All Possible Worlds: Mathematics and Destiny*. And along such lines various physicists are once again claiming that they have it all figured out, and are putting into print books with such titles as Paul Davies's *God and The New Physics* and his *The Mind of God: The Scientific Basis for a Rational World*. The ideas of Pythagoras and Plato that mathematics paves a high road into the mind of God and that by travelling along such a route we can elucidate the deepest secrets of nature has a strong appeal to the Faustian aspirations at the heart of many a scientist.

Yet one cannot but wonder. And it is instructive to consider this circumstance in a theological light.

The world we live in is a dazzlingly complex manifold that is not of our making but of Reality's—of God's if you will. It is quite definitively not our human agency and contrivance that is at issue here, and the principles at work test the limits of our comprehension. The Old Testament is already strikingly explicit on these matters. For what is now at issue might be called *Isaiah's Principle* on the basis of the verse:

 Proceedings of the ACPA, Vol. 81

> For My thoughts are not your thoughts, neither are your ways My way, says the Lord. For as the heavens are higher than the Earth, so are My ways higher than your ways, and My thoughts than your thoughts. (*Isaiah* 55: 8–9)

And again:

> Who has measured the waters . . . and comprehended the dust of the earth in a measure . . . Who has directed the mind of the Lord or, being his counselor, has taught him? (*Isaiah* 40: 12–13)

Christian theologians have often proceeded along the same line of thought, as is clear in the teachings of St. Thomas Aquinas. He writes:

> The knowledge that is natural to us has its source in our senses and therefore extends just as far as it can be led by sensible things. But our understanding cannot reach beyond these matters to an apprehension of God's essence. (*ST.*, *Questions on God*, Q. 12, § 12)

The fact of it is that fundamental law of epistemology is at work here, namely what might be called the Principle of Epistemic Disparity. Its thesis is that *a mind of lesser power is for this very reason unable to understand adequately the workings of a mind of greater power*. An intellect that can only just manage to play tic-tac-toe cannot possibly comprehend the ways of one that is expert at chess.

The knowledge of limited knowers is inevitably restricted in matters of detail. To the lesser mind the performances of a more powerful one are bound to seem like magic.

Consider in this light the less dramatic illustration of the vast disparity of computational power between a mathematical tyro, like most of us, and a mathematical prodigy like the great Indian mathematician Ramanujan. Not only cannot our tyro manage to answer the number-theoretic questions that such a genius resolves in the blink of an eye, but the tyro cannot even begin to understand the processes and procedures that the Indian genius employs. As far as the tyro is concerned, it is all sheer wizardry. No doubt once an answer is given he can check its correctness. But actually finding the answer is something which that lesser intellect cannot manage—the how of the business lies beyond its grasp. And, for much the same sort of reason, a mind of lesser power cannot discover what the question-resolving limits of a mind of greater power are. It can never say with warranted assurance where the limits of question-resolving power lie. (In some instances it may be able to say what's in and what's out, but it can never map the dividing boundary.) And it is not simply that a more powerful mind will know quantitatively more facts than a less powerful one, but that its conceptual machinery is ampler in encompassing ideas and issues that are quantitatively inaccessible in lying altogether outside the conceptual horizon of its less powerful compeers.

Now the relation of a lesser towards a higher intelligence is replicated in analogical parallelism into the relation between an earlier state of science and a later state. It is not that Aristotle could not have comprehended quantum theory—he was a very smart fellow and could certainly have learned. But what he could not have done it to reformulate quantum theory within his own conceptual framework restating its claims within his own familiar terms of reference. The very ideas at issue lay outside of the conceptual horizon of Aristotle's science, and like present-day students he would have had to master them from the ground up. Just this sort of thing is at issue with the relation of a less powerful intelligence to a more powerful one. It has been said insightfully that from the vantage point of a less developed technology another, substantially advanced technology is indistinguishable from magic. And exactly the same holds for a more advanced *conceptual* (rather than *physical*) technology.

Consider in this light the hopeless difficulties encountered nowadays in the popularization of physics—of trying to characterize the implications of quantum theory or relativistic cosmology into the subscientific language of everyday life. A classic *obiter dictum* of Niels Bohr's is relevant: "We must be clear that, when it comes to atoms, language can be used only as in poetry." And so, alas, we have to recognize that in philosophy, too, we are in the final analysis in something of the same position. In the history of culture, Homo sapiens began his quest for knowledge in the realm of poetry. And in the end it seems that in basic respect we are destined to remain close to this starting point.

The principle at issue with the epistemic disparity between lesser and larger intellects is not something that St. Thomas articulated *expressis verbis*, in so many words. He was, however, perfectly clear regarding the limitations of finite minds in relation to God and perfectly aware of the crucial distinction between the *that* of things on the one hand and the *what* and *how* of things on the other. Citing the authority of Dionysius,[1] he agrees that "things of a higher order cannot be known through likenesses of a uniform order" (*ST*, 1a, Q. 12, § 3), so that "God's essence is unfathomable [to us], combining to a transcended degree whatever can be signified or understood by a created mind" (loc. cit.). All in all, then, the salient point of man/God disparity is one that Aquinas grasps with admissible precision and is—I think—prepared to apply to god's *mind* as readily as to his essence. And it is one of the prime implications of this disparity that we just cannot wrap our minds around the ultimate principles of things—that the extent and complexity of the real is of a magnitude that outruns our limited powers.

2. A Paradox and Its Resolution

A paradox seems to emerge in this connection. On the one hand we are told that we cannot fathom the mind of God. On the other hand we are given all sorts of information about it: that it is omniscient, that it knows truths by immediate insight, that it does not proceed discursively, etc. Indeed whole chapters of the *Summa* are dedicated to God's knowledge (viz. 1a, Q 14). How can this seeming conflict be resolved?

Let us ask St. Thomas himself. He tells us:

> Whoever sees God in his essence sees something that exists infinitely, and sees it to be infinitely intelligent, but without understanding it infinitely. It is as thought one might realize *that* a certain proposition can be proved without realizing *how* one can to this. (*ST*, 1a, Q. 12, § 7)

As is usual in philosophy—and was virtually universal in medieval philosophy—the problem was thus solved by means of distinctions. And with characteristic acumen, Aquinas puts his finger upon exactly the right distinction, namely that between *product* and *process*. For here too we know THAT God can do all sorts of things, while nevertheless lacking any and all information as to just HOW this is managed. (For instance we know *that* God is omniscient without having any clue as to *how* he goes about it.)

Aquinas constantly reminds us of the important difference between knowing the *that* of things (*scire an est*) and the more demanding matter of knowing their *what* (*scire quid est*). And this is important in the present context. For while the weaker mind can *doubtless* realize *that* the stronger can solve *problems* it itself cannot—and on occasion recognize that it has done so—nevertheless it cannot understand *how* it manages to do this.

Even as there is no proportion between the finite and the infinite, so there is no proportion between our finite minds and the mind of God. ("*Nulla est proportio intellectus creati ad deum*" [*ST* 1a, Q 12, § 1]). Of course proportion (*proportio*) is not *relation* (*relatio*). But even there there are problems. What we know of the workings of God's mind proceeds largely by the *via negative*: to say that God knows facts by immediate intuition is, in the end, little more than to say that his knowledge is *not* discursively inferential, it is not linearly sequential, it *not* seriously perceptual, is not this and is not that. For us, the operation of God's knowledge is shrouded in mystery: we know a good deal of its *that* but effectively nothing positive about its *how*.

As Father Wippel so clearly elucidates in his fine study on Aquinas's metaphysical thought,[2] the Angelic Doctor was convinced that our unaided reason cannot achieve positively detailed ("quidditative") knowledge of God.

And yet another crucial distinction also comes into it, namely that between positivity and negativity—as St. Thomas also clearly recognizes. All of those things we know about God's mind are actually negative in their bearing.

- God is omniscient: that is, there is no fact that he fails to know.
- God's knowledge is immediate: that is, it is nowise discursive or inferential.
- God's knowledge is exact: that is, it is nowise approximate or imprecise

In characterizing God we have little alternative but to travel the *via negativa* because the customary terminology at our disposal regarding matters of mundane applicability does not—cannot—extend to God. And Aquinas emphatically endorsed the thesis of Dionysius that the terminology of ordinary usage does not pertain to God because "what they [ordinary words] signify does not belong to God in the way that they signify it, but in a higher way." (*ST*, 1a, Q. 12, § 13).

The ontological chasm that separates the finite and the infinite means that the concepts devised to accommodate the cognitive needs of the former just cannot function successfully in relation to the latter.

3. Lessons

But are there any broader, nontheological lessons to be drawn from the theological doctrine of an epistemic disparity between men and God—lessons available to those philosophers who are not theologically engaged and are atheistic or agnostic or simply reluctant to invoke God in philosophical deliberations? I do believe that there are and they run somewhat as follows.

Observe, to begin with, that in characterizing the universe as designed intelligently we deal only with the product and not the means of its realization. To say that nature is so constituted *as though* a supreme intelligence had designed it is no more theistically committal than to say that a river's course proceeds as though a palsied cartographer had planned it. Both modes of expression in fact merely describe the nature of the product and actually remain silent on the means of its production. Yet nevertheless we can contemplate the *purely hypothetical* question: "If (even though perhaps contrary to your belief) this universe whose intelligent design you have conceded were to be the product of a creative designer, then would not this creator have to be of an intelligence vastly more powerful than that which we knowers can claim for ourselves—be it individually or collectively?" Laplace to the contrary notwithstanding, the intelligent designing of such a world sets the bar so high that we could not actually meet it. And so, given the almost inevitably affirmative answer to our purely hypothetical question, the Principle of Epistemic Disparity immediately comes into operation to indicate that in the final analysis we really cannot expect to achieve a fully and definitively adequate grasp on the modus operandi of nature.

After all, once something of the vastness and complexity of the world is viewed—even merely figuratively—as the product of an intelligent designer, it follows that we really cannot expect to understand it adequately. For at this stage we cannot escape the Principles of Epistemic Disparity. And on its basis we must expect that there will indeed be a limit to the extent to which we humans can realize the aspiration of achieving a final theory that comprehensively accounts for the endlessly vast tapestry of the phenomena of nature.

Accordingly, while there is no problem with the idea of *improving* our scientific understanding of the world, nevertheless the idea of *perfecting* it must be rejected as an unattainable pie in the sky. In science, as elsewhere, coming to the end of *our* road does not actually mean coming to the end of *the* road, and seeing far does not mean seeing all. "There are more things in heaven and earth, Horatio, than are dreamt of in your science."

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Notes

1. *The Devine Names* 4, IV, G. 3.588.

2. John. F. Wippel, *The Metaphysical Thought of Thomas Aquinas* (Washington, D.C.: Catholic University of America Press, 2000), see especially sect. 1 of chap. 13.