

MARITAIN & THE EMERGENCE OF MODERN PHILOSOPHY  
DESCARTES, MALEBRANCHE, AND THE ANGELS

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Philosophers generally believe that modern philosophy created a sharp break with the scholastic tradition, but just what that break consisted of and when it occurred are matters of dispute. Maritain saw the break as arising out of the Cartesian response to science. In the process, he thought, the concept of human nature became truncated. Human beings attempted to reconstruct knowledge as though men were angels. "Angelism" is the essence of his charge against Descartes<sup>1</sup>. Harry Austryn Wolfson believed that the break came not with Descartes but with Spinoza, who represented the rupture of a tradition going back to Philo in which Scripture and continuous revelation were constantly mixed with natural knowledge<sup>2</sup>. Bertrand Russell saw the break as created by the rise of science and by a basic shift in which science itself became the paradigm of knowledge<sup>3</sup>. In this paper, I want to argue that what Maritain calls "angelism" was an inevitable element in the situation and that it is one which we still need to understand.

Maritain was literally right. One can not only show that Descartes drew heavily on ideas which come from Suarez's treatise on the angels, but that Malebranche, when he became worried by some aspects of Cartesianism, deliberately went back to read St. Thomas on the angels and used what he found there. Maritain speaks rather darkly of Malebranche and, apart from crediting him with an association with an Augustinian theology (which he admits to being -- at least potentially -- capable of an acceptable

understanding), he usually brackets him with Descartes<sup>4</sup>. But I shall argue that Malebranche needs to be heard.

Once one has restored a view of the original landscape, it turns out that a good deal of light can be thrown on the problems by going back to look at Tommaso Campanella, in search of the message which Campanella tried to deliver to Descartes, a message which took him as far as Holland in search of that distinguished angelologist.

The crisis in epistemology had many elements. One of them is crucial: The scholastic position on knowledge centred on the notion that the mind or intellect works through the senses to grasp genuine elements of reality and that it can establish a range of intelligible elements which, in another mode of being, are to be found in the things of the world themselves. St. Thomas, for instance, distinguished what goes on in the world and in the intellect in terms of distinct modes of activity, one immanent, appropriate to the components of knowledge, and the other transitive, concerned with objects in the world itself<sup>5</sup>. Maritain insists that failure to maintain this distinction is the most signal failure of Descartes<sup>6</sup>.

The main challenge occurred at what Maritain refers to as the first degree of abstraction, the confrontation of the world and the knowing being at the level of sensible being<sup>7</sup>. The objects referred to in the new science seemed increasingly distant from anything revealed in sensation.

The challenge presented by the new sciences was, however, inevitably complex. At least five elements in the complexity were to prove of continuing importance. First of all, the notion that some elements recognized by the mind and demanded by reason

portents of knowledge were not necessarily in the things cognized blurred the distinction between knowledge and useful opinion. The new sciences involved measurement. There was thus a constant risk of mistaking the properties of measuring rods for reality. Secondly, it quickly became clear that mathematical orders revealed through the things "known" were more important than confronted characteristics<sup>8</sup>.

It mattered far less that a thing was red than that it should occupy a certain position in the succession of things. Thirdly, the doctrine that things could be explained by their present and past states struck at the connection between facts and values by seemingly rendering final causes redundant. With it went a fourth element, the claim that things could not only be explained solely by reference to their present and past states but that their future states could effectively be inferred from the same combination. This suggested an independent nature from which God had abdicated. Fifthly, the last two elements relocated values and either made them the inventions and creations of the knowing subject or suggested the view that there are no values, that talk of values is a cover for something else -- human desires and tastes.

Philosophy only very slowly came to be a discipline distinct from the sciences, and it did so because of a need to relate what had become different kinds of claims to knowledge, an almost impossible task given that science had occupied all the acceptable territory.

The theory that scientific knowledge depends either (1) on finding the correct reading of ideas and ignoring the other possibilities or (2) on distinguishing those readings of ideas which belong to science and those which belong to some other legitimate

discipline, came to be dominant. It lasted at least until the arrival of the Humean interpretation which suggested a return to a kind of mitigated skepticism on the basis that the correct understanding of ideas shows that they cannot be used to overturn any of our natural beliefs. Richard Burthogge had approached the same conclusion but in a way which later became associated with Kant and which suggested that our ideas do support a kind of knowledge -- knowledge about how we are constrained to view the world on account of our natures<sup>9</sup>.

The pressure of science on epistemology was paralleled by the pressures created by religious ferment which was associated, as was the revolution in science, with a dependence on individual rather than institutional experience. It, too, threw thinkers back on themselves. The Augustinian notion of the "truth within" flourished and merged naturally with some of the strands of Cartesianism. Some of the problems about religion merged in unexpected ways with problems about science. Antoine Arnauld is remembered now for his part in the composition of the Port Royal Logic. But he first made his name with a book which attacked the practice of frequent communion. Frequent communion was a symbolic problem. The dispute over it did duty for a whole host of disputes over the question of whether or not there is some specifiable formula or set of practices which might enhance one's chances of salvation. The notion that there was a formula which favours salvation was connected with the notion that there are mechanical rules which govern the physical world. Blaise Pascal, another of the Port-Royalists -- though never officially one of the "solitaires" -- feared for his own soul as a result of his talent for mathematics and as a result of his own powerful reasoning capacities.

Maritain proposed to address the problem created by the development of sciences which diverged from sensory awareness in a number of ways. He was, indeed, prepared to admit that we must abandon all hope of trying to get a unifying theory which will actually justify the body of knowledge we usually call empirical science. Such a demand, he says, is contrary to nature<sup>10</sup>. In the Degrees of Knowledge (Les degrés du savoir) Maritain sought to overcome the same difficulties by making a distinction between empirical science and the philosophy of nature.

Its possibility depends, as Maritain emphasises in a later essay, on the belief that the intellect "sees", i.e., that the intellect can reach through to the reality now denied to the eyes, though it does so by an effort which still begins with the senses and is not to be thought of as angelic<sup>11</sup>. Maritain gives us some examples of the philosophical facts which occupy natural philosophy: Something exists; change and becoming are real; knowledge and thought exist; desire exists<sup>12</sup>. There are two difficulties about using these propositions in this way.

One is that, even if one gives up (as Maritain would have us do) inflated notions about the justification of skepticism, there is a problem about where one's questions should terminate. McTaggart, for instance, insisted that it is certain that something exists, for one who doubts that something exists has to accept that his doubt exists<sup>13</sup>. But C. D. Broad protested that this is only so in case nothing can appear to be a doubt unless it either really is a doubt or at least something else which exists<sup>14</sup>. This forces one to determine how such terms as "exists" are to be used. And there seem to be a great many conceptual alternatives. Faced with an F. H. Bradley who argues that God exists but is not

real<sup>15</sup>, we may throw up our hands in frustration. But Bradley was arguing, I think, that the mind, reflecting on sensation, will legitimately come to the conclusion that God exists, but that the mind will not, in the end, be able to form a wholly coherent idea of God. And there is an analogy -- though an imperfect one - between this claim and St. Thomas's claim that the intellect will give us good reasons to believe in the existence of God and yet will, necessarily, fall short of an Anselmian grasp of the divine essence.

And no one was more aware of these limitations than Maritain himself. Metaphysics underlies the philosophy of nature and deals with eternal verities, with the notion of intelligible being per se. It struggles through to the ultimate notions of trans-intelligible being. Yet it is both wonderful and useless. "It is very true that it is no use in the experimental sciences"<sup>16</sup>. Furthermore, all these claims about existence become involved with the use of kinds of variables in logical formulae and mathematical equations so that, in science, "to be is be the value of a bound variable" as Quine said<sup>17</sup>, and questions about change become involved with notions of physical space-time. Thus the two realms, experimental science and philosophy of nature, tend to run together, as Charles De Koninck argued, in a way which blurs themes<sup>18</sup>.

Maritain admits the need for a kind of rational mysticism to reunite what has been put asunder, but one must begin with the ordinary modes of human cognition. If one does not make a stab at reaching nature through the philosophy of nature, one may be cut off from it. In Trois réformateurs<sup>19</sup>, Maritain, as I said, accuses Descartes of "angelism". The essence of the matter is this: Descartes' version of the "way of ideas" leaves the human

animal in the predicament of the pure res cogitans. the thinking thing. If human beings are to know at all, then, they must know in the manner of the angels.

Maritain does not think that we ought to be proud of or content with the view that human beings know in the way that angels know. If we ignore our bodies and our senses or seek to by-pass them, we shall miss something important about ourselves and about the world.

Our reason, too, will be corrupted for it will have lost its natural object.

Whether or not the complaint holds against Descartes, one might think that it, certainly holds against Malebranche. Desmond Connell has explored this question at great length<sup>20</sup>. The difference between Descartes and Malebranche has much to do with the difference between Suarez's view of how angels know and St. Thomas's view of how angels know -- or at least Malebranche's reading of St. Thomas's view of how angels know.

The ideas which are the source of knowledge in the Cartesian system are mysterious, but they have certain dimensions of reality. Descartes uses the terms "objective" and "formal" reality. Of the various meanings for objective reality he chose one adapted (not wholly keeping its original sense) from Suarez, one of whose metaphysical treatises, he tells us, he carried with him across Europe<sup>21</sup>.

Timothy Cronin has written an extensive study directed specifically to the question. of objective being in Descartes and Suarez<sup>22</sup>. Briefly, the situation is this: Suarez had held that God has a direct knowledge of the objects which underlie the necessities of science (not merely the things which actually exist but all the things that God could have chosen), and of their necessary relation to the laws of science<sup>23</sup>. This notion is closer to certain

modern notions of possibility than to any of the notions of potentiality which characterise the Aristotelian and older scholastic traditions. It is very important to Descartes' case because it suggests the notion of a kind of knowledge which does not derive from sensation and thus enables us to pass, as it were, through the screen which sensation presents and which separates us from the outer world. Descartes' objective reality of ideas, therefore, becomes the transformation of Suarez's esse objectivum into the objective reality of ideas. That reality is the power of ideas to refer to possible things. Whether Descartes ever developed all the details or not, I think he hoped to connect the notion of clear and distinct ideas<sup>24</sup> with the notion of the necessity of scientific law, for one of the things we can tell, he thought, is that ideas which have objective being and which refer to the natural world are those whose clarity and distinctness involve the mathematicisable properties of extension. Necessity in the natural world belongs to mathematical physics, and so we know about the laws of the world even though we never know all the instances of them.

This kind of knowledge is both like and unlike the kind which Maritain associates with the second degree of abstraction. It is like it in that it involves separating what is amenable to mathematicisation from what is merely a set of set of sensible properties, but unlike it in that it is not an abstraction from what is given to the senses, but taps a kind of natural knowledge which Suarez had thought appropriate to and necessary to God. This idea, I believe, lies behind Descartes' belief that he can demonstrate the existence of God by recourse to a set of essentially mathematical properties. Descartes' idea of God, like Leibniz's, is ultimately the notion of that being who possesses the largest

compossible set of positive predicates<sup>25</sup> and who therefore must exist (i.e., stand out amongst all the possible beings) just because the idea of him entails the idea of existence. Descartes speaks of perfection. Leibniz works out the further details, but Descartes' idea of perfection is simply that of lacking nothing of a positive sort.

Critics of Descartes' version of the ontological argument have not noticed, I think, that it takes on another sense if we take seriously his devotion to crucial elements of the Suarezian notion of objective being. If we can know that there is such a realm as that of objective being, then we can know that something possesses the largest compossible set of positive predicates, namely the realm of objective being. In Descartes' view, we do know that there is such a realm, for what we know of scientific laws and of mathematics is that they apply to indefinitely many things. In the Principles<sup>26</sup> Descartes specifically notices that the infinite is not something, however, which we can grasp and that it is properly only associated with God. This seems curious, perhaps, unless we remember that what we know is simply that indefinitely many possibilities are opened by our scientific laws. But indefinitely many properties could only be opened by a being with the powers of God. Nothing is possible unless it can be actualized by some force or being, and only God will do.

The notion of objective being is necessary to Suarez's system simply to account for the knowledge which Suarez believed that God must have. But if one looks at mathematics and science in Descartes' way, the argument is obvious: These possibilities are possibilities if and only if God exists and could actualize them. For they are outside nature. They are not potentialities of anything existing in nature. Suarez would have agreed that possibility

requires a prior actuality. Descartes wrote to Mersenne and Mesland to insist that even logic depends on God because he believed that even the truths of mathematics must have their being in some actuality<sup>27</sup>.

We have to start with a great deal of implicit knowledge to achieve such an argument. This means, really, that we, like the angels must have an intuitive innate grasp of some of the structure of objective being. Now this is the kind of knowledge which Suarez insists that angels have. Furthermore, angels know things through universal ideas since they have no direct contact with the particular things of the physical world, and it has been suggested, therefore, that there is a logical problem about how angels can know particulars at all. The solution which Suarez produces involves his notion of universals. Desmond Connell summarizes it this way:

For Suarez the universal is little more than a collection of individuals that can be, but need not necessarily be encompassed in a single act. In fact, it seems to have more in common with the bundle of particulars to which nominalism reduces the universal concept than with the Thomistic angelic universal<sup>28</sup>.

It is not difficult to see how this relates to the notion of objective being as a set of eternal possibilities and thence to Descartes' notion of the dimension of objective reality in ideas. Maritain is right. Descartes thinks human beings know after the manner of angels - at any rate Suarezian angels. Thomistic angels are different.

What difficulties does Suarezian angelism pose? First of all it separates out and locates in the realm of real knowledge only what amounts to a set of mathematicisable properties, for it turns out that the way in which we get ideas with objective reality in

this sense is to get ideas which mark out distinct possibilities. In the scholastic tradition, matter played a part in the individuation of things, and sensory qualities which depended on matter played a role in our knowledge of them. Without matter, how are Descartes's clear and distinct ideas to be achieved? One way was to rely on the distinctness of mathematical and arithmetical notions, so that science developed along with the technology of measurement, and individual human perceptions were replaced by the findings of instruments. Our reports of feeling hot and cold, for instance, could be rendered "objective" in this special Cartesian sense by replacing them by the measurements of thermometers. It was not, perhaps, until Russell developed his theory of definite descriptions that the full implications of this were grasped. We then came to see that a definite description, a description which marked out one and only one thing in the universe of post-Cartesian science would, in general, have a mathematical component: Oldest mouse in the universe, fattest man in Ottawa, and so on are descriptions which established the uniqueness of some entity. They are logical notions, like "greatest" and "only". There remain, of course frustrations even for those engaged in these processes. Despite Sir Fred Hoyle's claims that there is no present in physics<sup>29</sup>, it remains important to know which experiment one is doing now and who is doing it, and these facts are rather difficult to accommodate to the kind of the theories which admit angelic knowledge of this Suarezian sort.

This knowledge of the Suarezian angels, to put it bluntly, is quite adequate for the aspects of things which emerge from our study of scientific laws. But some crucial element of the human situation is, as Maritain would insist, lost in this process. One can

imagine what is lost if one thinks of the difference between knowing one's wife as a bundle of chemicals or a collection of atoms and knowing her as a person in the ordinary human sense.

These problems were confronted by Malebranche. Malebranche agreed that we could not have the kind of direct knowledge of nature which traditional theories had proposed but, though the fact may tend to be repressed on account of the particular kinds of interest which the philosophy of Malebranche has aroused - concern with his alleged occasionalism, for instance -- he, in fact, wanted to propose (1) that we can still claim a kind of direct knowledge and (2) that despite the arguments of Bishop Berkeley (which may well have literally shocked him out of this world<sup>30</sup>) we do have knowledge which does justice to the complexity of the human being.

Let us look at one aspect of the Thomistic account of angels, first of all, and then see how Malebranche makes use of it. Again, it is useful to draw on Connell's account. The problem is really about knowledge of particular material things.

Connell notes that St. Thomas examines four possible explanations of such knowledge in angels<sup>31</sup>: An angel may know things through its essence; through species that it receives from things in themselves; by conforming its essence to things; or through species which it receives from God. The first two St. Thomas rejects. The third he regards as imperfect though he does not, I think, wholly reject it (as Connell seems to imply), for it is a kind of knowledge by empathy, and intellecting creatures have the capacity to deal with many forms other than their own in this way. But this third way of angelic knowing

is, in a sense, question begging, since it must be by virtue of some forms they possess already that intellecting creatures can achieve this end<sup>32</sup>.

The fourth way remains. Angels know by means of universals shared, in a sense, with God. But not absolutely. To understand this, one must grasp two senses of universal. In one sense the universal is what, eventually, Hegel would call the "abstract universal". But in another sense, the universal in God is a plenitude. For the universal is capable of being expressed in indefinitely many discrete beings without losing its universality. An angel therefore does not know all that God knows or, indeed, all that other angels know, but shares in various ways in what one might call the determination of this universal<sup>33</sup>. This Thomistic universal is not a mere bundle of particulars which leads to Cartesian ideas, but something which has a natural unity which can be shared in varying degrees.

It is this doctrine, I believe, to which Malebranche turns for an answer to his problems. The story is that God, in creating particular material things, informs them with the divine exemplars. At the same time, he shares ideas with us, ideas of the world which we form, not, literally, from our physical sensory apparatus but from the ideas of sensation. The ideas are in things in one way and in us in another.

The correspondence, he says, is due to God, and this has given rise to the notorious debate about Malebranchiste occasionalism. But, in fact, if this is simply understood in terms of the Thomistic distinction between the transitive and the immanent activity of the properties of things, it is quite comprehensible. God shares his ideas with us in the form of knowledge and with things themselves in respect of the forms which they express. He deals with each appropriately. What is appropriate to us is knowledge of the world as

it appears through the categories of sensation, but what we really know are the ideas in God. Scientific principles show us underlying patterns in these Ideas.

There is no doubt that this is still angelism of a sort. Malebranche in fact is quite clear that he is talking about pure intelligences whose essence consists in thought<sup>34</sup>. But it is also true that he insists that he is talking about a mode of knowledge which he thinks St. Thomas would, in any case, admit. He specifically refers to St. Thomas in connection with the doctrine that in some sense all things pre-exist in God, and the divine essence is the source of God's knowledge of creatures because it is by participation in it that creatures come to be<sup>35</sup>. It is through our participation in ideas which form part of this essence that we come to be, and so we know ourselves and others through those determinations of the divine ideas which enable them to be. Indeed, it seems both fair and natural to read the cited passage in St. Thomas as suggesting that all knowledge does proceed by grasping ideas which are already in God and as subscribing to some form of the Malebranchiste "Vision in God".

We can well imagine that St. Thomas would, as Connell suggests, worry lest Malebranche inflate human pretensions by urging that our essence is in thought, and he would be unsatisfied with the retreat from direct sensory knowledge of the world<sup>36</sup>. But Connell, for all his care and caution, may not have wholly understood Malebranche. If, as I said, all that is going on here is that ideas in our minds have one sort of ontological status and relate to God's exemplary ideas in one particular way, while the ideas which inform things are related to the divine archetypes in another, the doctrine of the nature of knowledge is essentially like that of St. Thomas. This seems a reasonable reading of the

passage which follows the citation of St. Thomas and of the following chapter in which, first of all, he distinguishes the way that ideas effect causal results in our minds from the way that things are causally connected. Malebranche then returns to the doctrine "seeing all things in God" in a way precisely related to these distinctions. He expressly denies that what he means is that we grasp the "essence of God", and insists only that we grasp ideas which must be associated with the divine archetypes.

But, while Malebranche, therefore, would seem to hold a theory about the nature of knowledge which is not unlike that of St. Thomas, the issue may be one of the origin of knowledge. St. Thomas held that knowledge of nature derives from sensation and Malebranche held that it derives directly from God. But this may be very largely a verbal issue. Both of them would agree that the divine ideas inform particular things and that it is because of this informing activity that the world is capable of being known. Ideas come from God in any case. Is the issue about an intermediary stopping place in things?

Not quite. The issue simply seems to be this: What Malebranche believes is that sensation as such -- considered only as sensation and not as part of a larger thought process -- does not yield knowledge, for science shows us that the world is very different from sensed objects. But we do have ideas and from these ideas we can infer general principles which are scientific truths and which approximate in certain respects therefore to the divine ideas. We can see, moreover, that, for these to be intelligible, they must be expressed through particular things. Therefore we know that there are particular things and we can infer certain properties about them. In contemporary particle physics we can see that the vapour trail in the bubble chamber is best explained by the passage through

it of a particle which the human eye will never see. Given a principle we infer certain properties of the particular thing itself. What we do not get "knowledge" of is the visible vapour trail itself -- the line in the fog which is what the eye sees as opposed to the molecules of liquid which form it - for this is not part of the scientific story. There is no knowledge because it is, precisely, an appearance.

Real knowledge is of real ideas, but ideas are universals which can be expressed through infinitely many particulars and these can be grasped indirectly through the principle which is in them.

One might argue that this is the reverse of the Thomistic view that in knowing nature we reach the universal through our knowledge of the sensed particulars, but this argument, too, may be only superficial. Both positions accept that the divine archetype or exemplar is logically and really prior. Both make the principles in things the source of the intelligibility in things. Both accept that the principles as universals must be expressed through particulars and that the particulars play a role in the attainment of knowledge. Neither Malebranche nor St. Thomas believes that the object in the mind is identical with the object in nature. Both insist indeed on a very different mode of action between the two.

Malebranche's De la recherche de la vérité is a sort of theodicy: He supposes that God has created the world and us in it. We have, he says<sup>37</sup>, a natural inclination toward the good. But we are free. Our freedom consists in our ability to choose between different particulars which we think will lead us to the good.

God has created the world, therefore, as a kind of moral arena. There really are particular things and there really are particular consequences to our choices. God, however, has naturally created the world with underlying principles -- ultimately with the good in mind - and has therefore created us as knowing beings in a situation in which we will search for principles. We might have been simply part of nature, as animals are in Malebranche's view, i.e., acting on natural principles which are embodied in things. But we are distinct and must therefore know things in a different way -- the things in the world by their ideas (if we knew simply by sensation, our knowledge he thinks would be direct in the way that an animal's intuitive grasp of the scent of another is direct), one's own soul by one's sentiments (one's predilection toward the good), and other spirits by conjecture. (Conjecture here is not a wild guess. It is simply that we sense that others are on the same course we are)<sup>38</sup>. Again, Malebranche denies that we know the divine essence but he insists that the whole system only makes sense through God.

And this may be the rub. How do we get this notion of intelligibility? What if, like the Chinese philosopher with whom Malebranche has an imaginary conversation, we never rise beyond Li, reason in itself?<sup>39</sup> There are arguments for the existence of God but, of course, if the system is intelligible only in and through God, the arguments merely go from the kind of intelligibility the system has to the notion that God must be part of any such intelligibility.

Is it not true that for St. Thomas, too, the arguments for the existence of God suppose that the world has a certain kind and measure of intelligibility? Maritain, himself, has to find a place for this underlying structure which shapes the way in which we do

and should look at things. In his article on Maritain's epistemology in the Encyclopedia of Philosophy, Joseph W. Evans stresses the existence of intuitive knowledge, intuitive reason, which lies beyond conscious knowledge<sup>40</sup>. And he speaks of Maritain as making use of Bergsonian notions of things on the edge of unconsciousness. These include natural or "prephilosophical knowledge of moral values". Maritain in these respects seems to be in much the same position as Malebranche.

Something can be learned about these difficulties if one returns to the moment when the problem began to seem acute. The man who deserves to be regarded as the first actor in the philosophical drama which accompanied the creation of modern philosophy was Tommaso Campanella who was born in Calabria in 1568 and died in Paris in 1639 -- two years after Descartes published his Discours de la Methode. Campanella foresaw many of the difficulties which have concerned us here and his vision played some part in his tumultuous life. He died peacefully amongst his Dominican colleagues in Paris, but much of his life was spent in jail, chiefly at the instigation of the Spanish inquisition which feared the political implications of his philosophy.

His colleagues in the Dominican Order in Italy rescued him more than once, and frequently advised (even ordered) him to go back to Calabria and read St. Thomas more carefully. He would not go back to Calabria, but he did read St. Thomas repeatedly and with great care, though with some imagination. Eventually, he escaped from Italy into France where, curiously, he was welcomed by Cardinal Richelieu. He searched in vain in France and Holland for Descartes.

What was Campanella's message? He insisted that sensation played a primary and indispensable role in knowledge<sup>41</sup> -- reminding us that even Augustine had gone astray when he left sensation and denied the existence of the antipodes. He excepts only the knowledge which comes through the Scripture. For that, he has a reason.

But Campanella admits there are problems. He was involved in the defence of Galileo, after all. He says it is not literally the objects of sensation or the sensations themselves which are the foundation of knowledge, but what he calls the spirit of sensation. A moment's thought will make the point less obscure. There is a difference between the red patch focused in the retina of the eye -- or the neural signal transmitted by the optic nerve, or the electronic registration of its receipt in the cerebral cortex or whatever you want to mention - and the awareness that a red patch is present. It is the awareness which conveys the knowledge. So, says Campanella, either we should say that there are not five senses but as many senses as there are bodily organs, or we should say that there is only one sense<sup>42</sup>.

What follows is more surprising. It is Campanella's contention that the fact that the red patch may or may not be part of the actual surface of the object is not evidence that we are not aware through the senses of the surface of the object. The awareness is not of the red patch but of the object through the red patch.

Sensation thus shades into reason. But this is not, after all, so very surprising if one thinks of the matter. I look through my binoculars and spot the enemy's periscope. There is perhaps only a thin grey line which, to the untutored, may be anything. So the doctor looking through his microscope at the tissue sample from one organ or another may spot

at once the unmistakable signs of the ravages of some tropical fever, though you and I might see only a reddish mess. What counts is the character of the awareness, not the details of the sense data or whatever one wishes to call them.

But this awareness is an inner state, and so this move involves us in claims about self-knowledge and the knowledge of being. Here even Campanella's faithful twentieth century expositor Bernardino Bonansea accuses him of coming to "unwarranted conclusions"<sup>43</sup>.

Campanella draws from Augustine the doctrine which Descartes also proclaims: I know my own existence better than I know anything else. But he insists that it is my existence that I know about. Furthermore, what I know is existence as a possibility. I perceive it as a kind of activity and I grasp this activity from within. This act of being is something directly available to me<sup>44</sup>. What is more I am directly aware of my love of being and of my desire to exist.

Campanella emphasises that what we know is the possibility of being and from this it follows that what we know is the being of possible beings. It is not being in itself that we grasp through our own nature, but only the being of contingent creatures. Still, that is what nature consists of. What follows from my own perception is the fact that the being of possible entities is an intelligible activity. It has a rationale and so rules, and this opens the way for reason.

We can follow the notion of the love of being and the intelligibility of being -- even of the possibility of being -- into an argument for the existence of God. Indeed it is Campanella's claim that the notion of the ideal cause arises naturally out of the situation

which we perceive: We are aware of our own existence as having a natural direction and we find the rest of the world intelligible in the same way<sup>45</sup>. Campanella's notion of the ideal cause, a cause which is not a final cause, but the idea which sustains all causes, is fascinating and important in the history of philosophy. But for our purposes what has to be noticed is that it is, after all, the source of intelligibility, and it is the intelligibility of the world which he recognizes to be crucial.

Malebranche's solution depends on using what he takes to be the Thomistic notion of angels to develop a theory of ideas through which we can share the divine archetypes and the ideas of particular things in a special way. But it depends on Malebranche's theodicy and it, too, depends on the intelligibility of the world. Campanella comes closest to restoring the old vision, but he does so by changing our notion of sensory knowledge in a way which, in its turn, brings us face to face to with our claims about the ultimate intelligibility of the world.

When Campanella excepted scriptural knowledge from his claim that all knowledge had its roots in sensation, he was not, like Blaise Pascal, contrasting the God of the philosophers with the God of Abraham and Isaac. But he realized that we need some way of sustaining our belief in the ultimate intelligibility of things, in the final grounding of reason.

Cardinal Newman liked to talk about the "act or process of Faith" as "an exercise of Reason"<sup>46</sup>. But what is wanted is not merely reasonableness, but something which will incline us toward taking seriously the universe in which Malebranche's theodicy holds or in which the governing force is Campanella's ideal cause.

If we lose our sense of the intelligible, we end like James Joyce's Irish bartender. Finnegan's Wake is evidently an account of what is likely to happen to those of us who do not find a Scripture: A Scripture will find us. But a Scripture, here is, is just a fundamental way of looking at things which shapes our way of thinking and talking -- a structure which shapes, that is, our conceptualizings.

In Finnegan's dreams, Finnegan or H. C. Earwicker or Here Comes Everybody does not know who he is<sup>47</sup>. Vico dominates the form of the story and it is Vico's mind which imposes itself on poor Finnegan<sup>48</sup>, but Freud and Jung figure, too. The wonderful sentence which begins "old Sykos who have done our unsmiling bit on 'slices, when they were yung and easily freudened"<sup>49</sup> does them both in and takes a swing at Lewis Carroll too, though the text also hints at Freud's disciple Ernest Jones. Nor is this all. Historicists and depth psychologists are the chief authors of the scripture which has caught Finnegan, but Einstein appears along with Bergson as an author of the temporal disorientation which has separated man from nature<sup>50</sup>. The old order has not been wholly abolished. St. Thomas (now called Tunni belly) makes a first appearance along with "Harrystotalies"<sup>51</sup>, but much later he appears again as a mastiff - one of the dogs of God as the Dominicans were once called. He is clearly displeased, but not wholly displaced by the new order of things.

Perhaps Finnegan, like all of us, can never escape some of the shaping structures, which we use to make the world intelligible or to allow it to dissolve into unintelligibility. The central question is, indeed: Should we struggle to render the world intelligible or allow it to fall into unintelligibility?

Given that the universe is intelligible and that we can accept its intelligibility, then Maritain, Malebranche, and Campanella can each provide us with a way out of the maze. One needs to ask under what conditions we can accept that the world is intelligible, but one should be careful of this notion.

I am not concerned here to re-open the old debate about whether or not there is or must be an element of faith which precedes reason. Newman thinks they go together, and his notion of faith in reason is interesting. But we can understand him, here, simply as underlining the point that, somewhere, there is a choice to be made. For all enquiry - - though not all intuition -- takes place within some conceptual framework. Part, of the problem is to choose a conceptual framework within which, in the end, all of the data can be rendered intelligible. In his Development of Christian Doctrines<sup>52</sup>, for instance, Newman takes the view that a certain view of Christianity provides us with ideas which are capable of development so as to provide such a framework and that, in an important sense, the line to take in defending Christian doctrine is that a tradition capable of this development is superior to one which is not so capable. But a priori one can choose any set of concepts and in the process, for instance, choose a set of concepts which are insufficient to enable us to render human life meaningful. James Joyce notices that the dominating ideas of our time produce his protagonist's nightmares. And his protagonist, remember, is everyman, sometimes called Here Comes Everybody. When we choose these modern ideas, we may well think ourselves free of arbitrarily imposed values, but the nightmare of Finnegan is not a species of freedom.

Maritain, of course, insisted, as I said, that the intellect could "see" through to being, and his Bergsonian references to fundamental intuitions suggest a level which lies below conceptualization. But he himself makes the point that, though most great metaphysicians begin with a profound intuition, they end by conceptualizing it in a way which is unsatisfactory<sup>53</sup>. Indeed, he is able to pay homage to Bergson's most fundamental insights while insisting on a very different conceptualization. This is to concede, I think, that the choice of effective conceptualization is not part of the original intuition though it is to insist that the conceptualization must render the intuition intelligible. If so, Maritain's position is not different from Newman's or Campanella's on this question.

When all is said and done, perhaps Campanella comes closest to meeting all the conditions if we take them to include the need to sustain our scientific knowledge while making genuine sense of the complexity of the human condition and opening the way to a philosophy in which reason meets the least resistance; while Malebranche provides the solution which maximizes logical simplicity and permits the neatest theodicy. Maritain's solution, as he intended, minimizes the break with historical continuity and ties human beings most closely to the rest of nature, a matter which becomes more pressing every day. And Maritain surely posed exactly the right questions. Each of these philosophers seems to me to open the way to a serious philosophical investigation of the pressing issues about knowledge at a moment when our scientific knowledge is not enough.

## NOTES

1. See especially Trois réformateurs, Paris: Plon, 1925; tr. as Three Reformers, New York: Charles Scribner's Sons, 1940.
2. See, e.g., the preface to his Philo, Cambridge, Mass.: Harvard University Press, 1947.
3. History of Western Philosophy, London: George Allen and Unwin, 1946. For his account of science as the paradigm of knowledge see Human Knowledge Its Scope and Limit, New York: Simon and Schuster, 1948.
4. There are three mentions of Malebranche in Distinguer pour unir: les degrés du savoir, Paris: Desclée De Brouwer, eighth edition, 1963. On p.64 Malebranche is simply bracketed - curiously - with Descartes as a founder of the modern mechanistic view of the world and on p.447 Maritain associates Malebranche with Leibniz in a project aimed at creating a theodicy of which he clearly disapproves; but on p.596 though heretical ontologism is still suggested, he associates Malebranche with an Augustinian theology and natural philosophy which he admits to be in some sense possible. He suggests, though, that what one finds in Malebranche is only an undesirable "residue".
5. See Summa Theologica, Ia, q.14, a.2, 3 & 4; q.18 a.3, reply to objection 1; q.56, a.1. For a discussion of Aquinas's position in relation to the issues involved here see Desmond Connell, The Vision in God. Malebranche's Scholastic Sources, New York: Humanities Press, 1967, pp.60ff.
6. Jacques Maritain, Distinguer pour unir ou les degrés du savoir, Paris: Desclée De Brouwer, 1932 etc., eighth edition, 1963, p.250.
7. See the map in Maritain, op.cit., p.79.
8. The way in which this works out in Descartes has been well documented by Jean-Louis Allard in Le mathématisme de Descartes, Ottawa: University of Ottawa Press, 1963.
9. See The Philosophical Writings of Richard Burthogge, ed. Margaret W. Landes, Chicago: Open Court, 1921. Burthogge was born in 1638. The date of his death remains uncertain. He was a Kantian before Kant -- a fact which merely shows that such views were the logical outcome of the crisis of knowledge.
10. Maritain, op.cit. p. 120.

11. In a symposium on science, religion, and philosophy, 1941. Maritain's contribution is reprinted in Donald and Idella Gallagher, ed., A Maritain Reader, New York: Doubleday, 1966. Maritain also uses the words "Immaterial visibility" there, p. 70.
12. Maritain, Les degrés du savoir, p. 114.
13. John McTaggart Ellis McTaggart, The Nature of Existence, Cambridge: the University Press, 1921, Vol. 1, pp. 57-59.
14. Charlie Dunbar Broad, Examination of McTaggart's Philosophy, Cambridge: The University Press, Vol. 1, 1933, p. 22-23.
15. F. H. Bradley, Essays on Truth and Reality, Oxford: The Clarendon Press, 1914, p. 448.
16. Maritain, op.cit., p. 8.
17. Willard Van Orman Quine, "On What There Is" in From a Logical Point of View, New York: Harper, 1961, pp. 1ff.
18. There is a good account of the development of De Koninck's critique of Maritain on this question in Ralph M. McInerney, "Charles De Koninck: A Philosopher of Order," The New Scholasticism, October, 1965, pp. 491-516.
19. Three Reformers, pp. 53-89.
20. The Vision in God. Malebranche's Scholastic Sources, New York: Humanities Press, 1967.
21. He says it was the Disputations Metaphysicae, and some doubt if these 2,000 pages (see Suarez: Opera Omnia, Paris: Vivès, 1856, Vol. XXV and XXVI) could have been lugged about on Descartes' journeys, but he certainly had a copy to hand when he penned his response to Arnauld, the reply to the fourth of the First Objections to the Meditations. (AT, VII, 232).
22. Timothy J. Cronin, Objective Being in Descartes and in Suarez, Rome: Gregorian University Press, 1966.
23. Francisco Suarez, Disputations Metaphysicae, Disputatio 31, Sectio II, 10, Sectio III, 1, 2; Suarez. Opera Omnia, Paris: Vivès, Vol. XXVI, pp. 232-233.
24. His account of these ideas - most plainly set out in Principle Philosophiae, Amsterdam: Elzevier, 1644; tr. as Principes de la philosophie, Paris: Henri le Gras, 1647, I, 45 -- is surely not itself clear. For he defines a clear idea as one which the mind is immediately convinced about and a distinct one as one which cannot be confused with another. (Leibniz was to reverse part of this definition, making

- distinct ideas those which are not capable of further analysis and clear ideas those which mark out only one thing.)
25. It has been suggested that this is a nonsense idea because it is not what Russell called a well-formed definite description. This is so because the expression "largest number" makes no sense when attached to the notion of predicate, since there seem to be infinitely many predicates. But predicates can be reduced to summation sets. ("Rainbow coloured" is the name of the summation set of all the colour predicates and it sums an infinity in a single predicate.)
26. I, 26, 27.
27. Letter to Father Marin Mersenne, 15 April, 1630, AT 1, 145. He also wrote to Father Denis Mesland to the same effect on 2 May, 1644, AT IV, 110.
28. Connell, op.cit. p. 143. The relevant discussion in Suarez is in Cap. XIII, Lib. II, De Angelorum Nature, Tom. II, Suarez, Opera Omnia, Paris: Vivès, 1856.
29. See his Man In the Universe, New York: Columbia University Press, 1966, p. 22. His point is that the laws of physics determine the past and the future as much as the present and there is in physics nothing which corresponds to the crucial presentness of consciousness. This, he says, is why he finds that consciousness is so puzzling. The point is very crucial to our discussion here since the presentness of consciousness colours all our observations.
30. Malebranche died in 1715 shortly after a visit from Berkeley.
31. Connell, op.cit. pp. 77-83. He draws on De Veritate, q. 8, a. 9 and Summa Theologica, Ia, q. 55.
32. See De Veritate, q. 8, a. 9.
33. See De Veritate, q. 8, a. 10, and Connell, op.cit. p. 85.
34. Nicolas Malebranche, De la recherche de la vérité, ed. Geneviève Rodis-Lewis, Paris: Vrin, 1965, Vol. 1, Bk. III, Part 1, Chapter 1, p. 214.
35. Malebranche, op.cit., Vol. 1, Book III, Part II, Chapter 5, p. 247. The passage he cites is Summa Theologica, Ia, q. 14, a. 6.
36. Connell, op.cit., p. 215.
37. Malebranche, op.cit., Vol. I, Book I, Chapter 1, p. 6ff.
38. op.cit., Book III, Part II, Chapter VII, pp. 255-259.

39. Entretien d'un philosophe chrétien et chinois, ed. A. Robinet, Paris: J. Vrin, 1958 (Oeuvres complètes, Vol. XV)
40. The Encyclopedia of Philosophy, ed. Paul Edwards, New York: Collier-Macmillan, 1967, Vol. 5., p. 161.
41. Tommaso Campanella, Epilogo magno, ed. Carmelo Ottaviano, Rome: Reale Accademia d'Italia, 1939, p. 490.
42. Tommaso Campanella, Metafisica, ed. Giovanni di Napoli, Bologna: Zanichelli, 1967, (3 vols.) Vol. I, Bk I, Ch. VI, article III.
43. Bernardino M. Bonansea, Tommaso Campanella, Washington: Catholic University of America Press, 1969. Though I shall argue with Bonansea over this issue, I am deeply indebted to his book.
44. Tommaso Campanella, Del senso delle cose e della magia, ed. Antonio Bruers, Bari: Laterza, 1925.
45. Tommaso Campanella, Metafisica, Vol. I, Bk. II, Ch. II, Article I; Vol. I, Bk. II, Ch. III, Article III.
46. The expression "an act or process of Faith is an exercise of Reason" appears in sermon XI (p.207) of Fifteen Sermons Preached Before the University of Oxford, third edition, London: Rivingtons, 1880. It is also found in the preface (p. xvi). There is a warning attached there that the sense of "Reason" is to be watched. It seems to mean balanced reasonableness, i.e., the process of finding what claim makes the situation most intelligible.
47. James Joyce, Finnegan's Wake, (with author's revisions) New York: The Viking Press, 1946. There are various editions, but all to date (since Joyce's final revisions) have the same page and line numbers so that standard references are normally just to the page, with a decimal point followed by the line number, e.g., 117.14 = p.117, line 14. I shall follow this practice.
48. Scholars seem pretty much convinced of the importance of Vico. Vico & Joyce, ed. Donald Phillip Verene, Albany: State University of New York Press, 1987, contains essays which investigate every aspect of the connection. See also William York Tindall, A Reader's Guide to Finnegan's Wake, London: Thames & Hudson, 1969, pp.8-10. Amongst many other connections (including the names given to the "hero" at various times), the form of Joyce's narrative follows Vico's stages of history.
49. 115. 21-23.
50. 149. 15-28.

51. 113. 36, 534-535.
52. John Henry Newman, The Development of Christian Doctrine, London: Longmans, Green, eighth edition, 1891.
53. Jacques Maritain, De Bergson à Thomas d'Aquin, New York: Éditions de la Maison Française, 1944; Paris: Paul Hartmann, 1947, pp.24-25.