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DESCARTES ON ANALOGY AND OTHER MINDS

There is a persistent tendency in the Cartesian tradition to impose analogy on Descartes as the method which he actually does, or at least ought to, follow in accounting for other minds. In what is perhaps the most recent study on the topic Donald F. Henze maintains that « Descartes' thinking about the existence of other finite, created, thinking, and unextended substances — in short, other human minds — takes the form, approximately, of argument by analogy » (1). And as far back as Malebranche we find expressed the opinion that, since analogy is a perfectly adequate method of dealing with the problem, it is the means which Descartes should have employed, although in fact he was not very explicit on the issue (2). Curiously enough, however, both of these position would force upon Descartes a method which he clearly and repeatedly repudiates. It would seem worthwhile, therefore, to provide a thorough discussion of the topic in order to establish (1) That Descartes does not employ analogy in arguing for other minds; (2) why the illusion persists that he does; and (3) precisely what method he does employ in this area. More specifically, I should like to maintain that Descartes does not use analogy because he cannot without violating his entire epistemological doctrine, and that (in spite of the fact that his statements sometimes convey the impression of analogy) he actually has a much more adequate form of argumentation at his disposal for dealing with the problem.

Several interesting studies have been done on Descartes' use of analogy, metaphore, and symbolism — sometimes with reference to his literary style, and sometimes in an attempt to clarify his use of these tools as part of a genuinely philosophical procedure. In « La puissance metaphorique de Descartes » (3), Th. Spoerri points out that the use of metaphore by Descartes is actually quite distinctive, and « more a matter of comparison than of metaphore » (p. 285). Thus what would seem at first to be merely a matter of literary

technique is actually better understood as an attempt to give an insight into the very nature of things by means of suggestive comparisons. This facet of Descartes' work is emphasized by Henri Gouhier in his «Le refus du symbolisme dans l'humanisme cartésien» (4). He notes that as a young man Descartes was firmly convinced that one could come to an understanding of purely intellectual or spiritual matters through a consideration of the symbolic aspects of the material order. In his notebook, for instance, we find:

« Just as the imagination employs figures in order to conceive bodies, so the intellect employs certain sensible bodies in order to give form to spiritual things.

Sensible things can help us to conceive those of Olympia: the wind signifies spirit; movement with time, life; light, consciousness; warmth, love; instantaneous activity, creation... » (5).

But as his philosophical position developed, and in particular as his metaphysical thought took shape, Descartes was forced to reject this symbolic interpretation of reality. For he came to understand that the physical and mental orders are completely distinct; that, in fact, it is precisely the task of reason to distingush clearly between the notions belonging to the respective orders and to attach each of them « only to the things to which it applies » (6). The symbolism of his youth was therefore discarded by Descartes, giving way to what Gouhier calls « signals » (p. 68). The change was essentially a shift from the use of what he had once understood to be natural, sensible signs in his elucidation of supersensible reality, to the use of signals which imply no genuine similitude between a purely intelligible issue and the sensory data employed in explaining it (7).

But if Descartes revised his conception of the proper role of such explanatory devices, he certainly did not feel constrained to avoid them. Gouhier comments (with a touch of hyperbole) that no philosophic style is more replete with images than that of Descartes - not only in the Discourse, where he was attempting to explain matters to the broad spectrum of the learned public, but even in his correspondence with respected intellectuals, and on the most abstract topics (p. 70). And when we turn to explicit matters of methodology in the Regulae, we find it repeated constantly that we must not begin with what is profound and difficult, but rather should discuss those disciplines which are easiest and simplest, and which display the most order. He suggests « the arts of the craftsmen who weave webs and tapestries, or of women who embroider or use in the same work threads with infinite modification of texture ». And he includes « all play with numbers and everything that belongs to Arithmetic, and the like » (8). His purpose in beginning with the simple is to develop a sense of order and method, but he also emphasizes that « none of the sciences, however abstruse, is to be deduced from lofty and obscure matters, but that they all proceed only from what is easy and more readily understood » (9). And to illustrate how this advise should be followed, he employs a variety of examples to show how he would use commonly experienced phenomena to get at problems which seem to involve obscurity or complexity.

Once one is reminded of this point, it is easy to call to mind a great number of examples and analogies in Descartes' work, and one is inclined to feel that perhaps analogy has been consciously chosen as an essential aspect of his literary or philosophic style. It is not surprising, therefore, that the illusion persists that Descartes employs some form of the argument from analogy in accounting for other minds. For not only does he constantly use what seem to be analogies throughout his work — he even applies them specifically to the mind-body union. After warning Princess Elizabeth that the main cause of our errors is that we commonly want to use sensory notions to explain matters to which they do not apply (10), he goes on to use just such an analogy in discussing the manner in which the soul moves the body. He suggests that the manner in which the soul moves the body can be understood in the same way that some philosophers have (mistakenly) held that heaviness moves a body toward the center of the earth (11). In his next letter to Elizabeth (12), and when he uses this same analogy in a letter to Arnauld some years later (13), he is careful to mention that the analogy is weak because heaviness is not even a real quality, much less a substance. But, he maintains, the fact that we misapply this conception in our attempt to comprehend gravity, should help us to realize that we do have such a primitive notion (an innate idea, as we shall see) to draw upon in order to understand how the mind, which is immaterial, can nonetheless move a material entity, the body (14).

While this analogy is not at all of the kind which one would use to establish the existence of other minds, it does tend to foster the impression that Descartes is unable to approach the mind-body relation except through the use of simile or analogy. If this is true, then it would seem clear that any attempt to establish the existence of other minds (the mental complements of the apparently human bodies which he encounters daily) would have to take the form of an argument by analogy. Moreover, the most commonly known clichés of Cartesian philosophy encourage the illusion that analogy would be the natural course for Descartes to follow:

« Animals are simply machines, and are only thought to have souls by a mistaken analogy with other sentient beings (men).

Even the human body is a purely mechanical entity, the actions of which follow rigorously the principles of physics.

Since the mind and body are distinct substances, the conception of the one does not involve the conception of the other (nor the existence of one, the existence of the other) ».

If God can make an animal-machine, why can he not also make human-machines? Must Descartes not simply accept the fact that he cannot get « inside » other men, and that (because the bodies around him act very much like his body, which he knows to be united to a soul or mind) he is free to assert the probability that there are minds united with them — but can never be absolutely sure? This is how the argument would seem to go, and some very respectable commentators have accepted it, in one form or another.

Geneviève Lewis, in her L'Individualité selon Descartes (Paris, 1950), follows a line of thought very similar to that sketched above, and concludes: « The souls which judgment permits one to attribute to others are therefore analogous to that of which I take immediate consciousness in the Cogito, i.e., essentially free and reasonable » (p. 114). But they are merely analogous (analogues) (15). And Henze, while expressing « a reservation about assigning a full-blown argument from analogy to Descartes » (p. 54), makes it clear that he considers a version of the analogy argument to be what Descartes is about, and the only course which is actually open to him (pp. 53-54). There can be no doubt, therefore, that this interpretation of Descartes' thought has some currency among contemporary writers — and because there is some basis for the illusion, it is clear that only the strongest reasons can be expected to give it the lie. In such cases, it would seem best to let Descartes speak for himself.

While Descartes promises in the Regulae to give an explicit discussion of analogy (Rule VIII), there is none to be found in his works. L. J. Beck suggests that « it would probably have been part of the third section of the Regulae » (16). But it is not difficult to piece together a very clear position on the topic. One need only consider the precise nature of argument by analogy, i.e., The process of asserting an identity of kind between two entities — one fully, the other partially known — on the basis of those characteristics which are observed to be common to both. In effect, this means an attempt to establish the complete nature of an entity on the basis of those of its characteristics which are open to observation, and the comparison of this evidence with the characteristics of another entity already known. Because the entity under investigation is never fully known by means of observable attributes, the assertion consequent upon such evidence can never carry more than a high degree of probability. And this should immediately demand our attention. No one has ever seriously maintained that Descartes was uncertain of the existence of other minds, or that he held the matter to be merely probable. (Although some writers have held that his certitude was not well-founded). From the standpoint of the knowledge which Descartes claims, therefore, it would seem difficult to assert that he was merely arguing by analogy.

Moreover, analogy is in one sense quite at variance with Descartes' conception of method, for it emphasizes similarities rather than distinctions between entities. And as Descartes has pointed out in the letter to Hyperaspistes, « the real faculty of the mind is its ability to conceive two things apart; and it is the lack of this faculty which makes it apprehend two things in a confused manner as a single thing » (17). It would appear, therefore, that any use of similes would tend to hamper the proper use of the mind in drawing distinctions, rather than enhance this function.

Furthermore, Descartes recognizes the difficulty in principle of arguing from separately conceived substances to the notion of their conjunction in a single thing. He says that he does not believe the human mind capable of conceiving at the same time both the distinction between soul and body and their union, « because for this it is necessary to conceive them as a single thing and at the same time to conceive them as two things; and this is absurd » (18). The notion by which this union is to be properly conceived, he says, is among those primary notions that should not be sought for outside the soul, « which has them all in itself by its very nature » (19). Thus, again, argument by analogy would seem to be inappropriate for this kind of problem.

But there is no need to search about for hints as to Descartes' position on this issue. He expresses himself very clearly on several occasions. For example, we find him saying in the Discourse, part iv: « neither our imagination nor our senses can ever assure us of anything whatsoever, except insofar as our understanding intervenes » (20). And the degree of intervention is by no means minor. One need only recall the examination of the piece of wax in Meditation II. He begins by discussing the various sensations had in observing the wax — first as it is brought fresh from the hive, then as it is placed close to the fire. He notes that all the sensory aspects of the wax change, and yet he is able to recognize a certain identity underlying these changes. After careful consideration he concludes that neither the senses nor the imagination could provide the awareness which he has of the wax, and he finally determines that it is his mind alone (Latin: solâ mente; French: entendment seul) which perceives it (21). He then asks what this piece of wax is which can only be grasped by the mind. And he determines that it is the same as that perceived by the senses, and the same as he had always believed it to be from the beginning.

« But what must particularly be observed is that its perception is neither an act of vision, nor of touch, nor of imagination, and has never been such although it may formerly have appeared to be so, but only an intuition of the mind » (22).

Thus Descartes concludes that while our knowledge of a substantial entity begins in sense awareness, and is ultimately determined

to be of the same object as that observed by the senses, it is nonetheless achieved *independently* and *solely* by an act of the mind. Sensory awareness, then, may be a necessary condition for the acquisition of such knowledge, but it cannot be a sufficient condition. And no compounding of necessary conditions (such as sensory data, or observable characteristics) will ever provide for Descartes the sufficient condition (intellectual intuition) which alone provides knowledge. In fact, one of the most important aspects of the discussion of wax in Meditation II seems clearly to be that we achieve an awareness of substance not *because* of sensory data, but actually in spite of it. And if this is true with respect to physical substance, it would be no less the case in our knowledge of spiritual substance.

In short, therefore, it would make no sense for Descartes to argue to the existence of other minds by analogy. For without intellectual intuition analogy simply could not provide anything which would be acceptable as knowledge. And if intellectual intuition is brought into play, then analogy becomes truly absurd — for its distinctive role is to provide an argument precisely in those contexts where intuition is impossible.

But in case there could still be further doubt in the matter, we should consider one final passage from Meditation VI. There Descartes takes up an argument which proceeds by analogy and indicates its limitations. He points out that one must be cautions about drawing conclusions concerning the nature of fire from the sensations of heat and pain it produces in us. And similarly, one must not conclude that spaces are empty simply because nothing is found in them which excites the senses. For the perceptions of sense have been placed in man by nature simply for the purpose of indicating to the mind what things are beneficial or harmful to the combined whole of which it forms a part. And for this purpose they are sufficiently clear and distinct. But I would be a perverting the order of nature », says Descartes, if I were to use these perceptions « as though they were absolute rules by which I might immediately determine the essence of the bodies which are outside me, as to which, in fact, they can teach me nothing but what is most obscure and confused » (23).

Surely this is as clear a statement as one might require — for the argument from analogy is precisely an attempt to « determine the essence of the bodies which are outside me », by means of « the perceptions of sense ». Such an attempt is a violation of the order of nature, and it is precisely this kind of misuse of the senses which accounts for why « most men in life perceive nothing but in a confused way » (24). While Descartes admits to having been guilty of such misuse before he began to philosophize, there can be no doubt that such a procedure is explicitly excluded from his mature philosophy.

But at this point have we not established too much, and disclosed what appears to be a glaring inconsistency on the part of Descartes? We have seen that his works are full of imaginative examples — of metaphore, simile and analogy — and that, while some of these examples may simply be considered useful tools for exposition, others seem clearly to be intended to serve a genuine role in his philosophic, rather than merely literary, methodology. Yet what we have just concluded would seem also very clearly to exclude this possibility. Something in our considerations seems seriously out of joint.

Fortunately, the answer to this enigma is provided by Victor Goldschmidt in his article « Le paradigme platonicien et les 'Regulae' de Descartes » (25). He points out that the method of analogy as employed by Plato is actually a method of paradigms which has a double aspect: It proposes an exercise in following a method; and it proceeds by means of discovering resemblances between the subject of the exercise and a « great subject » (i.e., between the fisherman and the Sophist) (p. 200). The subjects of such exercises are chosen from among sensible things which are common and easy to understand. At first view, he notes, the process of reasoning by paradigm seems to be that of reasoning by analogy or resemblance. But there are significant differences: The verification of the hypothesis constitutes an intrinsic part of reasoning by paradigm; the reasoning is completed only with the rigorous definition of the « major subject »; and finally, the foundation of the paradigm rests on the cosmic order — the principle of geometric equality established, between the sensibles and the forms, of secret correspondences that the reasoning by paradigm must decipher (p. 201).

In turning to Descartes, Goldschimdt points out the tendency to begin with common and easily understood matters of experience which we have noted above. He then goes on to show just how strong a case can be made for a striking resemblance between the elements of method employed by Plato, and those of Descartes. This is done by pointing out the manner in which Descartes uses carefully chosen comparisons to isolate what Plato would call the «element» or «form» which is common to both the ordinary subject of the exercise and the «great subject» which is under investigation (p. 204). This element, which may be a particular nature or relation, is shared by the two subjects of comparison, and we are given at the same time both an insight into the subject of inquiry, and a genuine aspect of the order of reality.

It would be inappropriate for us here to provide a defense of Goldschmidt's interpretation of Plato (26), or even to dwell at length on the similarities between the methods of Plato and Descartes. But it should be clear that the point raised does constitute an essential contribution to our discussion. For Descartes does say that « in every

train of reasoning it is by comparison that we attain to a precise knowledge of the truth » (27). And that « all knowledge whatsoever, other than that which consists in the simple and naked intuition of single independent objects, is a matter of comparison of two things or more with each other » (28). Such comparisons are pursued « by means of an idea which is one and the same in the various subject matters ». And « this common idea is transferred from one subject to another, merely by means of the simple comparison by which we affirm that the object sought for is in this or that respect like, or identical with, or equal to a particular datum » (29). All of which gives the impression that we are dealing with a straightforward process of analogy.

But Descartes also says that his method is intended to reveal a innumerable orderly systems, all different from each other, but nonetheless conforming to rule, in the proper observance of which systems of order consists the whole of human sagacity » (30). It is one of the tasks of enumeration to discover these systems of relations, and to distinguish properly the roles of elements which are either relative or absolute. The conjunction of absolute elements, or simple natures, exclusively by necessary connections, is an adequate protection against error and provides complete certitude (31). Finally, a the whole of human knowledge consists in a distinct perception of the way in which those simple natures combine in order to build up other objects » (32).

Thus what seems to be a contradiction between theory and practice in Descartes' use of analogy is easily resolved. What begins as a simple comparison or analogy becomes for Descartes, as for Plato, the revelation of essential, ontological structures (or schèmes to use the term of Brehier and Laporte) (33) which no longer involves mere probability, but rather absolute knowledge. Analogy may therefore be seen as either a necessary, or merely a convenient, propaedeutic for philosophic investigation on Descartes' view (34). But it could never constitute the limit of his method in searching for truth — either with respect to other minds, or any other « scientific » problem of the natural order. And with this conclusion, we may now turn to the question of what method he does use to get at other minds.

In order to accomplish this portion of our task, it will be necessary to provide a more systematic treatment of Descartes' thought, and at least a brief consideration of the Cartesian tradition — where we shall once more encounter analogy. As one might expect, there is a significant body of literature on the topic which should not be ignored. In fact, there has been so much discussion on the topic that one is inclined to maintain that the essential issues have

been dealt with as thoroughly as one could hope for — without resurrecting the seigneur du Perron himself as jurist.

Because the matter is central to any epistemological theory, and because it involves the traditional mind-body problem — a crucial issue for the Cartesian philosophy — the question of other minds was explicitly dealt with by many of the followers of the new thought. Some, like Malebranche, saw the problem as solved, and found analogy to be a perfectly adequate basis for its solution (35). But then this would be a natural course for him, in view of the fact that he did not believe that we can give a rigorous demonstration even for the existence of bodies (36). Or, more precisely, one cannot give such a demonstration unless faith is presupposed (37). For there is no direct commerce between mind and body for Malebranche. « All creatures are united only to God with an immediate union. They depend essentially and directly only on him » (38). Therefore, in order to argue for the existence of bodies, or the existence of other men, one must first understand the general laws of the union of the soul and body which God has established, and which he must follow (39). These laws flow from the will of God and are arbitrary (40). By them God has willed that the modalities of the soul and body be reciprocal, and consequently « there is the union and natural dependence of the two parts of which we are composed » (41). These decrees « by their efficacy communicate to me the power which I have on my body, and through it on others »; and « by their immutability unite me to my body, and by it to my friends, to my goods and to all that which surrounds me » (42). Thus, in virtue of these laws I can demonstrate the existence of my body, of other bodies, and of other men. But because these laws are arbitrary, I can know them only by revelation or faith (43). Nonetheless, Malebranche is satisfied that this « demonstration provided by faith » delivers us from speculative doubt, and that he has a real knowledge of, and genuine communication with other men (44).

Other Cartesians realized more clearly the difficulties entailed by analogy in this context. These would include Cordemoy and Arnauld. Cordemoy noted what seemed to him to be a distinct lacuna in Descartes' work, and wrote what amounts to a « seventh Meditation » to establish the existence of other minds. In his Le Discernement du corps et de l'âme en six discours (Paris, 1666), he had already completed his treatment of other areas of knowledge, such as our awareness of the external world. But the problem of other minds, he felt, could only be dealt with through a careful analysis of language. This he undertook in Discours physique de la parole (Paris, 1668), which is apparently the first overt and explicit treatment of other minds in the history of philosophy (45).

As the first French « Occasionalist » (46), he naturally found

the relationship between mind and body (and therefore the assertion that other bodies are complemented by other minds) very difficult to deal with. He begins by pointing out that his inclinations all favor the acceptance of a simple analogy with his own body-mind union. However, having formed a firm resolution « to admit to belief only what appears to me evident when I have sufficiently considered it to no longer fear that I am mistaken », he determines « to reflect on all those things which serve language, since it is the most certain means that I have for knowing whether all the bodies which so perfectly resemble mine are in fact men like me » (47).

There follows a thorough consideration of the way we employ language, which leaves him completely convinced. He distinguishes the natural aspect of language by which we express passion from the conventional signs by which we express our most abstract conceptions; and he distinguishes that aspect of language which is properly the role of the body (facial expression, voice tone, eyes) from that which is the role of the mind. He notes that the external signs alone do not constitute an infallible argument for other minds. Nor would it be wise to accept as signs of thought those movements of the body, even vocal responses, which could simply be excited by objects capable of benefiting or harming it.

« But, in the final analysis, when I see that these bodies make signs which have no relation to the state in which they find themselves, nor to their preservation: when I see that these signs conform to those that I would have used to express my thoughts; when I see that they give me ideas which I did not previously have and which relate appropriately to the thing I already have in mind; and finally, when I see a great order between their signs and mine, I would not be reasonable if I did not believe that they are like me » (p. 208).

We find in Cordemoy, therefore, the detailed development of the suggestion offered by Descartes that genuine speech (i.e., words or signs which indicate « something pertaining to pure thought and not to natural impulse ») « is the only certain sign of thought hidden in a body » (48). And like Descartes, Cordemoy seems to find in such speech not merely the basis for an analogy, but grounds for a genuine conviction of the existence of other minds.

It was Arnauld, however, who in 1683 responded specifically to the « conjectures » of Malebranche. And while at times his arguments reflect those of Cordemoy, he adds his own particular emphasis to improve them. He points out that conjecture simply won't do here — unless the term is used generally to include everything that is opposed to simple vision, i.e., to all that one can know by reasoning and even the most certain demonstrations; and unless one agrees, as well, that it is possible to have a clear idea of that which is known by reasoning (49). But, of course, he is well aware that Malebranche would not accept these qualifications.

The distinctive twist that Arnauld gives to this argument is that

it is at least as easy to know the souls of other men as it is to know material bodies. For, as he points out, we don't really know the essential nature of a material body, such as the sun, by simple vision; but rather make a judgment concerning it, based on information provided by the senses. In similar fashion, I judge on the basis of sensory data that bodies similar to mine conduct themselves very much as I do, and that leads me to believe that they are human bodies. « But », he continues,

« when I speak to them and they respond to me, and I see them perform a great many actions which are infallible marks of mind and of reason, I conclude from this much more evidently that these bodies similar to mine are animated by souls similar to mine (i.e., by intelligent substances really distinct from these bodies) than I conclude that there is a sun, and what the sun is. And therefore I know this with at least as much certainty as all that I know of the sun, or by the observations of astronomers or by the speculations of M. Descartes » (p. 225).

Arnauld is so convinced that this position is sound that he provides six arguments for other minds (primarily involving the use of language) as a basis for his two arguments for the existence of material bodies (without employing faith). He first advances the principle that one must accept as true whatever could not be false without forcing us to admit in God things quite contrary to the divine nature — such as being a deceiver, or having some other imperfection. Since this principle is the very foundation of faith, it cannot be said to presuppose faith. But from this principle one can argue that God would be a deceiver if those who use language: who understand one language but not another, who write books on various topics, who advance false theses and even impieties, were not genuinely other men like myself. In similar fashion, God would be a deceiver if the sentiments and sensations which I experience actually served no purpose for the preservation of my body and its use among other bodies (pp. 254-259). Interestingly enough, Malebranche responds to the arguments for physical bodies in a general way (pointing out that bodies are actually useless, since God can act directly on the soul) (50), but he neglects to take up the discussion of other minds.

There were other Cartesians who gave even more forceful arguments against the use of analogy — such as Geulincx (at the beginning of his Questiones quodlibeticae, 1652) (51) and the Abbé de Lanion (52). The latter analyzed Descartes' Sixth Meditation very carefully and raised objections similar to those still being offered today. His perspective and language were essentially those of Malebranche, but his arguments were quite distinctive. Being rigorously loyal to the principle of methodic doubt, he refused to permit any aspect of experience or common sense to play a role in his reformulation of Cartesian thought. And he concludes that, since it is possible that God is the direct source of all our experience —

both of purely physical objects and of those bodies which we believe to be associated with minds (i.e., our experience of persons) — then, strictly speaking, we cannot conclude that such entities have a separate existence (53).

The problem centers in the fact that Descartes maintains both: a) that we do not know substance directly, but only through its attributes; and b) that we know the attributes of substance on the basis of information provided by the senses. If the information received through the senses could be provided directly by God, rather than through the intermediary of a separately existing substance (i.e., if Berkeley's position were essentially correct) (54), then by Descartes' own rules of argumentation it would be illegitimate to conclude even to the existence of external objects, much less to the existence of other minds. The question, then, is whether God actually could provide this sensory information directly.

Now one may be inclined to agree that Descartes was not sufficiently clear about his precise position on a proof for other minds. As we have seen, his followers certainly felt it necessary to elaborate upon the point. But it would be unreasonable to maintain that he was not clear in his argument for physical substance. It hinges, and quite legitimately in Descartes' system, on the fact that a supremely perfect entity (God) could not deliberately or willfully deceive. Thus God could not, like the whimsical artist, include a flaw in his work by way of jest, or to assert his absolute dominion over the creative process. Nor could he, in more calculated fashion, deliberately insert a flaw for a higher purpose (55), like the Persian weaver who skillfully works a flaw into his rug, in order that its perfection might not attract the evil eye. Descartes' God is absolutely self-contained and perfect, and his creation is rigorously ordered to consistent operation: Extension governed by the laws of motion; thought governeed by the laws of logic. Reality could have been different. But it is what it is, and cannot change without a (causally antecedent) change in the immutable will of God. Descartes' comments on the point are very clear (56).

But commentators have often been troubled by this use of God's veracity. To some it has seemed technically sound, but overburdened by the weight it must carry in Descartes' system. To others it seems merely an irrelevant mechanism employed by Descartes to bridge the perhaps unfathomable chasm between physics and metaphysics— a clever device which his clerical oponents could neither reject, nor successfully oppose. But it cannot be too strongly emphasized that Descartes was absolutely serious and sincere in this matter. He felt that he had sound philosophical evidence for a God who is creator, providential sustainer, and absolute master of every particle of matter and every element of thought. Without him there would

be neither a world to investigate, nor any basis for systematic thought about its possibility. It is absolutely essential to realize that, within his system, Descartes is entirely justified in the statement that without the knowledge that God exists, and that he is not a deceiver, he (Descartes) would have no basis for claiming to know anything. Without God as the consistent preserver of the meaning of elements of thought, it would be impossible even to formulate a single proposition. The cogito itself would be subject to this difficulty, since the elements of thought involved (existence, thought, doubt, etc.) are asserted by Descartes to be innate, i.e., structured into the mind by God, with only the significance and stability given in and through this creative and providential act. But even if this point were not granted, it must at least be agreed that no system of knowledge such as Descartes envisioned could be developed without a stable context in which physical objects and processes were consistently and coherently related to mental objects and processes. Only a God such as Descartes envisions him to be could provide this kind of absolute stability and harmony. But such a God could — and for Descartes does. Without him Descartes' system is absurd.

However, we must determine precisely what significance this point can carry. Even if one accepts the role thus given to God, what kind of solution is open to Descartes when he is confronted with the question of other minds? Since analogy is eliminated on epistemological grounds, it would seem that there are only two possibilities left open — the self-evident intuition and necessary deduction mentioned in Regulae, XII. An examination of these means should indicate how he can best answer his critics.

The first point that must be recognized is that Descartes often formulates what seem to be (and what, at times, he himself calls) arguments, proofs, or demonstrations — when in fact they are only explanations (57). With respect to the issue at hand, both Descartes and his followers provide a discussion of other minds which includes all the elements appropriate to an argument by analogy. But it is not necessary to conclude that they intend to provide a proof by this means (58). In fact we find that Descartes often provides an explanation or elucidation for an insight, e.g., the cogito, which is not (and even could not be) attained by means of a proof. It is precisely the Cartesian project at times to invite the reader to follow a line of reasoning in order that the unbiased individual might eliminate his own doubts, and attain his own vision of the truth --not as compelled by a proof or demonstration imposed from without. We even find Descartes maintaining, in accordance with scholastic tradition, that the will cannot be compelled from without. He asserts that the will is capable of withholding assent from a truth clearly perceived — if its essential intent in the judgment is the asserting of its own freedom, rather than the apprehension of truth (59). There are, therefore, many things (such as the simple natures and their connections of *Regulae*, XII) which one can only be invited to perceive, and in relation to which « proof », or « demonstration » can mean grounds for neither *scientia* nor *persuasio*, but only an explanation.

But does Descartes intend us to accept knowledge of other minds as simply an experiencial « given » which is not subject to proof? Some have asserted that he does. We must remember that Descartes maintains the union of soul and body to be a primitive notion (60) — and if he means this to apply not only to our awareness of ourselves, but also to our awareness of others, then it would change entirely the kind of answer that he will give to his critics. Maxime Chastaing, in « L'abbé de Lanion et le problème de la connaissance d'autrui » (cited above), takes precisely this perspective, and asserts that Descartes has already met his critics' objections (61).

Using the position of Claude Buffier (« héritier de Descartes et père des Écossais ») for support, he asserts that it is naturally evident, and therefore logically indemonstrable, that there exist other beings, and in particular other men than myself (p. 248). Buffier provides a strong basis for this position. He defines carefully his notion of 'evidence' (62) and 'first truth' (63), and points out that, of course, everything cannot be proved. The evidence of demonstration presupposes the evidence of first truths (p. 89). « But with respect to the point at issue, there cannot be admitted any first truth, since the proposition in question: 'There exist other beings than myself'. is itself a first truth » (p. 89). It simply cannot be demonstrated. And one should not be troubled by the fact that he knows his own mind with greater evidence than he knows the mind of others.

« For when I look at an object in full daylight, and in the bright sun, I see it with a greater and more luminous clarity than when the sun has not yet risen; but I do not see the object more truly. Hence it is impossible on one side or the other to judge that I do not see it. It is very much the same with respect to the evidence of my own existence and the existence of others; the one strikes me in a more lively fashion, but the other does not strike me with less certainty » (pp. 86-87).

Against such an argument one may well be reduced to comparing basic intuitions. And, of course, one is embarrassed to admit that he lacks a self-evident « first truth ».

But more to the point, one must ask whether Buffier is to be allowed to speak for Descartes. For Buffier is remarkably influenced by experience and common sense (64), and it is highly unlikely that Descartes would follow Chastaing in permitting the philosophy of «bon sens» to lead to that of «sens commun» (p. 248). On the other hand, taking note of a bad spokesman should not prompt

us to reject his conclusions with his premises. For Descartes himself has given us much to think about.

To the evidence provided by Chastaing must be added the following: In the Regulae, Descartes asserts that among the simple natures which are known by the intellect immediately and absolutely are such things as existence and unity — common to both corporeal and spiritual entities. He adds to the list also those « common notions which are, as it were, bonds for connecting together the other simple natures... ». And then he concludes with the assertion: « As a matter of fact, these common notions can be discerned by the understanding either unaided or when it is aware of the images of material things » (65). Surely we have here the basis for asserting the immediate apprehension of the mind-body unity in others.

If this is Descartes' position, then of course he does not need to provide a proof, and it is simply a matter of misconception on the part of his commentators which prompts them to request the impossible. Of course, again, it may be objected that, while the union of mind and body is evident in experience, it is nonetheless « possible » (strictly speaking) that this evidence is false — i.e., that God is, in the absolute sense, capable of being the sole cause of our perceptions, both of rocks and of persons (as Lanion objected). But in effect this amounts to asking whether clear and distinct ideas are really true. And to this objection Descartes has already given sufficient answer. For when one asks whether clear and distinct ideas are really true, only two issues can be in question: Whether one is justified in asserting that clear and distinct ideas are innate, and thus beyond question; or, more radically, whether in fact innate ideas are beyond question, as the product of the creative act of a veracious God. But in either case Descartes' answer will follow the same lines.

The criteria of truth, like the criteria of action, must be within our control and wholly determinable. That we are responsible for correct judgments in both cases is clear (66). But we could make rational decisions in neither case unless careful use of the intellect and will, combined with an awareness of correct criteria, could produce (i.e., were known to produce) sound judgments. That the human mind is limited is granted. It cannot attain perfect knowledge on all topics. But where it can achieve clarity and distinctness, the results are absolute and indubitable.

If it is suggested that we cannot be certain that we have absolute knowledge — since this belongs only to God, and we cannot have access to the divine mind — Descartes will agree. But he will also point out that, while there are issues which are beyond the powers of the human mind, these matters can never provide the basis for real deception. For, as Descartes asserts, we have a genuine faculty

for recognizing truth, and distinguishing it from falsehood (67); but we can also know with perfect clarity when the issue at hand involves an aspect which *cannot* be reduced to clear and distinct ideas (68), and such a matter would be one on which we must remain in doubt. As Rules VII and VIII mention several times, this too is a kind of knowledge. Therefore, one may say that we cannot be deceived with respect to anything which we conceive clearly and distinctly.

If, from another perspective, it is objected that the factor which transcends the human intellect may not be directly involved with the elements of the matter clearly and distinctly conceived, but may instead be an aspect of the « motivation » of God in virtue of which he permits us to deceive ourselves, Descartes would again have an answer. If the power which God has given us to know the truth does not work — even when it is correctly employed — then God is either an inadequate creator, or an intentional deceiver. But neither of these « possibilities » is really possible. And this is the essential element in resolving the matter of absolute truth. When the hypothetical falsity of clear and distinct ideas is raised in abstraction, it seems possible. But when we stop to realize that we have absolutely no basis for asserting this as an actuality (69), and moreover, that such falsity would constitute a genuine contradiction in relation to all that we do know - both of God, and of created reality — then we recognize that it is not really possible, i.e., that it is necessarily not the case. As the product of an absolutely simple and perfect being, the system which constitutes reality must be absolutely consistent and coherent: within the order of thought as such; within the order of extension as such; and in the relations which they bear to each other.

Thus God's motivation becomes irrelevant — a matter for theologians to quibble over. Truth is a matter of existence (70), and the relation of ideas to existent entities (71). In this order, Descartes cannot be deceived without inconsistency and contradiction entering in. But within the system which he has formulated this would be absurd, and truly impossible.

Within his system, therefore, Descartes is entirely justified in asserting that that which is evident in experience — when the experience is clearly and distinctly conceived — is true. But there is good reason, nonetheless, to question whether what is evident in experience is to be understood as self-evident in the sense of simple natures and primitive notions; or whether it is evident rather in the sense that the experience in which it is contained constitutes a demonstration or proof when the experience is reduced to a clear and distinct conception. It is precisely this latter position which must be developed as our final perspective.

If, as we have maintained above, the veracity of God is required by Descartes not only for experience, but even for the validity of intuition itself (72); once this guarantee is achieved, its significance is very extensive. For with this framework as a « hidden premise », Descartes can eliminate the distinction between mere empirical observation and necessary deduction. And with respect to the issue at hand, the point becomes obvious: While he cannot argue for the existence of other minds on analogical grounds; and while it is by no means clear that he wishes to propose self-evidence as the solution to this problem; there is absolutely nothing in his system to prevent Descartes from advancing a straight-forward deductive argument. For in Descartes' extraordinarily neat epistemological system, when one encounters an entity which acts in all respects like a human being, it is because it is a human being — and it could be nothing else. Perhaps it will clarify matters to add that what in the contemporary context would seem to take the form of an argument by analogy, in the system of Descartes (because of his carefully structured ontologicalepistemological framework) becomes a purely deductive argument.

If asked to formulate such an argument, Descartes would undoubtedly provide something like the following: Only God could make a «human» body which upon examination was found to function like, and in all respects appeared to be, a truly human body (i.e., a body substantially united with a soul) — but which nonetheless lacked a soul. However, the word 'could' is here used in a very deceptive sense. For while it is true that in an abstract and general sense it would have been possible for God to create such an entity, given the order that actually exists (i.e., the context of reality as Descartes has come to know it in his philosophic system), it would be impossible even for God to thrust such an entity into the world. For this would constitute a deception — i.e., God would have created a context in which no amount of caution on our part could prevent us from falling into error. And since God would thus be responsible for putting us out of our depth, he would have to assume responsibility for our error. Therefore, since it is impossible for God to deceive, what appears to be a human being must be one.

Moreover, this epistemological guarantee is backed up by an ontological assurance. For there is a second impossibility which a mindless « human » would involve. Because of his perfection and simplicity, God cannot choose to create disorder, nor can he violate the given order once he has « decided » what it will be. It must be absolutely consistent and coherent; order is the first principle of reality. Therefore, again, we may safely assert that an entity which in all respects appears to be human is human. Such would be Descartes' argument.

However, in our present state of technological advancement one

is inclined to throw caution to the winds and suggest that the proposed argument has a false premise: It is entirely possible that at some time in the future it will not be true that *only* God could create such a human machine. But Descartes would be undaunted. He has maintained not only that the mind and body together constitute a substantial unity, but further that:

« Since the body has all the dispositions required for receiving a soul, dispositions without which it is not properly a human body, it could not happen without a miracle that the soul should not be united to it » (73).

Thus, if a master mechanic should present Descartes with such a splendid machine (presuming that it is perfect in every respect, and passes all tests with flying colors), he would undoubtedly congratulate the « father », and baptize the new acquaintance. And then, just how would the mechanic establish that God had *not* provided a soul for his splendid creation?

But at this point, one who has subscribed to the analogy argument would surely accuse Descartes of begging the question. For what he would like to know is not simply whether one body has a mind (i.e., submits to the general order, having a mind just as all other human bodies do); but rather, whether any body (besides his own) is conjoined with a mind. It is at this point that Descartes falls back upon language as his final criterion — but it is not the weak crutch that some would suppose (74). Instead, because of Descartes' rigorous system of absolute truth, one can readily determine whether language is being used in a univocal manner, and whether there are ideas similar to his own behind its use. Beginning with mathematical truths and common notions, one could determine without employing language that certain ideas and principles were held in common. These in turn could be used to build a system of univocal terms, etc. But the precise procedure is not important — the point is that the very meaning of the doctrine of innate ideas is here at stake. The soul or mind has all these ideas in itself by its very nature. Not to have them would, in effect, be equivalent to not being a human mind. It is not really language, therefore, which Descartes employs as a sufficient condition for recognizing human beings, but the ideas which are shared through language. And since there is an absolute correspondence between the order of innate ideas and the order of objective reality, there can be no private language problem for Descartes.

Nor is it appropriate to request that Descartes provide a separate meditation to deal with the question of other minds — as Cordemoy does, in effect. For, of course, Descartes treats separately only problems which require separate treatment, and the lack of such a meditation carries its own implications. It would be wiser, therefore, to consider the possibility that he did not regard this matter really

distinct from what he did deal with. In fact, this becomes the only possible answer when it is realized that the conclusions drawn in the Sixth Meditation (i.e., the independent existence of physical objects, and the substantial union of the two distinct substances. mind and body, in the person of the philosopher) are based precisely on the proof that the objects of experience — when clearly and distinctly conceived — are what they are conceived to be. The fact that we experience other men is sufficient (demonstrative) evidence that they exist.

It would seem clear, therefore, that the whole attempt to impose analogy on Descartes' treatment of other minds is misguided. And, of course, it can provide a puzzle only insofar as it is kept in isolation from the full system of his thought. Obviously, this is the kind of problem that Descartes had in mind when he admonished his correspondents and readers to dwell upon the integrity of his system. For elements taken separately may indeed seem inadequate; but when all of the parts are understood in relation to each other, the system constitutes an impressive whole. And one must conclude that, if Descartes' physical theories have long since been discarded, it is by no means clear that his metaphysical thought can be so easily dismissed.

^{(1) «} Descartes on Other Minds », in Studies in the Philosophy of Mind, APQ Monograph Series, No. 6 (Oxford, 1972), p. 43.

⁽²⁾ This, of course, is an oversimplification of Malebranche's position, but the details of his thought will be discussed later.

⁽³⁾ Descartes, Cahiers de Royaumont, II (Paris, 1957), pp. 273-87.

⁽⁴⁾ Archivio di Filosofia (Roma), 1958, No. 2-3, pp. 65-74.

⁽⁵⁾ Œuvres de Descartes (AT), ed. C. Adam and P. Tannery (Paris, 1897 1910), 12 vols., vol. X, pp. 217-18.

⁽⁶⁾ Letter to Princess Elizabeth, 21 May 1643 (AT, III, p. 664; Descartes: Philosophical Letters, trans. and ed. Anthony Kenny (Oxford, 1970), p. 138).

⁽⁷⁾ Gouhier cites the distinction between the aesthetic apprehension of musical sounds and the air vibrations which produce them (p. 68).

⁽⁸⁾ Regulae, X (AT, X, p. 404; The Philosophical Works of Descartes (HR), trans. E. S. Haldane and G. R. T. Ross (New York: Dover Publications Inc., 1955), vol. I, p. 31).

⁽⁹⁾ Regulae, IX (AT, X, p. 402; HR, I, p. 29).

⁽¹⁰⁾ AT, III, p. 665; Kenny, p. 138). «For instance », says Descartes, « we try to use our imagination to conceive the nature of the soul, or to conceive the way in which the soul moves the body after the manner in which one body is moved by another ».

⁽¹¹⁾ AT, III, p. 667; Kenny, p. 139.

^{(12) 28} June 1643 (AT, III, p. 694; Kenny, p. 142).

^{(13) 29} July 1648 (AT, V, p. 222; Kenny, p. 235).

⁽¹⁴⁾ Another reference to the gravity-mind analogy occurs in Replies to Objections VI, sect. 10 (AT, VII, pp. 441-42; HR, II, pp. 254-55) where Descartes

explains how the incorrect application of such notions arises from the mistaken judgments of infancy.

- (15) In all fairness to Mme Rodis-Lewis it should be noted that this problem is not her primary concern in the work cited, and while she reports Descartes' position accurately, she makes no serious attempt to interpret his position. She provides a quotation to show that our certitude that men are not mere machines « remains moral » (i.e., not absolute). Then she goes on to say that « the power to bring conduct into conformity with all circumstances denotes an intentional finality and a universal adaption which reveals reason »; and that the consciousness which interprets this significant conduct « recognizes in it the mark of a reflection which discloses under the sensible signs the presence of a power capable of responding appropriately, by acts or by words, with a universalizable flexibility » (p. 113), i.e., a mind. Unfortunately, this terminology does not provide a firm position on the issue, and one is left with the feeling that she either supports analogy, or, at best, leaves the matter unresolved.
 - (16) The Method of Descartes (Oxford, 1952), p. 141.
 - (17) August, 1641 (AT, III, p. 434; Kenny, p. 120).
 - (18) Letter to Elizabeth, 28 June 1643 (AT, III, p. 693; Kenny, p. 142).
 - (19) Letter to Elizabeth, 21 May 1643 (AT, III, p. 666; Kenny, p. 139).
 - (20) AT, VI, p. 37; HR, I, 104.
 - (21) AT, VII, p. 31; HR, I, p. 155.
 - (22) Ibid.
- (23) AT, VII, p. 83; HR, I, p. 194. This same analogy had been rejected earlier in *Regulae*, XII, where Descartes says: « This is the result as often as we judge that we can deduce anything universal and necessary from a particular or contingent fact » (AT, X, p. 424; HR, I, p. 45).
 - (24) Principles, I, Ixxiii (AT, VIII, p. 37; HR, I, p. 251).
- (25) Revue Philosophique de la France et de l'Etranger, CXLI (1951), pp. 199-210.
- (26) His position is developed at length in Le paradigme dans la dialectique platonicienne (Paris, 1947).
 - (27) Regulae, XIV (AT, X, p. 439; HR, I, p. 55).
 - (28) Ibid.
 - (29) Ibid.
 - (30) Regulae, X (AT, X, p. 404; HR, I, p. 31).
- (31) Regulae, XII (AT, X, p. 425; HR, I, p. 45). When it is not possible to complete such a program of necessary connections, we are left with mere « conjecture ». Of this Descartes says: « nothing that we construct in this way really deceives us, if we merely judge it to be probable and never affirm it to be true; in fact it makes us better instructed » (*Ibid.*).
 - (32) AT, X, p. 427; HR, I, p. 46.
 - (33) Goldschmidt, op. cit., p. 205.
- (34) It is important, as Goldschmidt points out, to distinguish between those instances in which Descartes employs casual images, or those which simply serve his exposition, and those which flow from a genuine inventiveness on his part. These latter, he notes, « would be able to provide a precious contribution to our knowledge of Cartesian thought » (*Ibid.*, p. 207).
- (35) He employs here the term 'conjecture'. Recherches de la Verité, Book III, Part II, Ch. VII, sect. v (Œuvres Complètes de Malebranche, 21 vols. (Paris, 1958-70), vol. I, p. 454. The roots of this argument are very old, of course, and one can trace them back to a period long before Descartes. Gilson, for example, finds it outlined in the work of St. Augustine. Introduction à l'étude de saint Augustin (Paris, 1943), p. 65.
- (36) Entretiens sur la métaphysique et sur la religion, Entretien VI, sect. v (Œuvres, XII, p. 137).

- (37) Entretien VI, sect. viii (Œuvres, XII, p. 142).
- (38) Entretien VII, sect. xiii (Œuvres, XII, p. 165).
- (39) Entretien VI, sect. vii (Œuvres, XII, p. 141).
- (40) Entretien VI, sect. v (Œuvres, XII, p. 138).
- (41) Entretien VII, sect. xiii (Œuvres, XII, p. 166).
- (42) Ibid.
- (43) Entretien VI, sect. vii (Œuvres, XII, pp. 138-42).
- (44) Entretien VI, sect. viii (Œuvres, XII, p. 142).
- (45) Others also found in language an obvious indication of the existence of other minds, e.g., Louis Delaforge: Traité de l'âme humaine, de ses facultés et fonctions et de son union avec le corps, d'après les principes de Descartes (Paris, 1666); A. Le Grand: The Institution of Philosophy (London, 1694). But contemporary scholars would undoubtedly find Cordemoy's work especially interesting. For example, in an extensive work on other minds (L'Existence d'autrui, Paris, 1952) Chastaing finds the Discours physique de la parole to be quite in accord with the findings of modern psychology (which opposes « the traditional theory of reasoning by analogy »), and a preparation for such diverse perspectives as those of Royce and Price. Cf. Chastaing's, « Descartes, Faust de Riez et le problème de la connaissance d'autrui », in Rencontres, XXX (1949), p. 211, note 4.
- (46) Francisque Bouillier: Histoire de la Philosophie Cartésienne (third edition: Paris, 1868), vol. I, pp. 513-16.
- (47) G. de Cordemoy: Œuvres Philosophiques, ed. P. Clair and F. Girbal (Paris, 1968), p. 203.
- (48) Letter to More, 5 February 1649 (AT, V, p. 276; Kenny, p. 245). See also *Discourse*, part v (AT, VI, pp. 56-57; HR, I, p. 116); Letter to the Marquess of Newcastle, 23 November 1646 (AT, IV, p. 574; Kenny, pp. 206-207); and Letter to More, 15 April 1649 (AT, V, p. 345; Kenny, p. 251).
- (49) Des vraies et des fausses idées, Ch. XXV (Œuvres Philosophiques de Antoine Arnauld, ed. J. Simon (Paris, 1843), pp. 225-26).
 - (50) Œuvres Philosophiques de Antoine Arnauld, p. 445.
- (51) While Geulinex anticipated Malebranche's doctrine of occasionalism, he did not develop the laws of the union of mind and body, or the precise manner in which God presents the world to our minds. (Bouillier, op. cit., pp. 303-306). Thus he would have little basis for an argument by analogy.
- (52) Méditations sur la métaphysique (Paris, 1678) was published under the pseudonym 'Guillaume Wander'. For an excellent discussion of Lanion's reformulation of Cartesian arguments, see Chastaing's «L'abbé de Lanion et le problème de la connaissance d'autrui », in Revue Philosophique de la France et de l'etranger, Vol. 141 (1951), pp. 228-248. Chastain maintains that Berkeley was the first to formulate the analogical argument explicitly (« Descartes, Faust de Riez... », p. 201, note 3), but surely Cordemoy and Malebranche must be given appropriate credit.
- (53) Curiously enough, Lanion « proves » it absurd that there are real extended substancs (bodies) in the world and then accepts their existence as a matter of faith. He seems to have no better reason for accepting the existence of other minds.
- (54) When Descartes entertains this possibility in Meditation VI, he explicitly rejects it. AT, VII, pp. 79-80; HR, I, p. 191.
- (55) Just as Leibniz submits efficient causality to the higher ends of final causality.
- (56) See the letter to Mersenne, 15 April 1630 (AT, I, pp. 145-46; Kenny, pp. 11-12).
- (57) See Descartes' own comments on «demonstration» in his letters: to Mersenne, 17 May 1638 (AT, pp. 134f.; Kenn, pp. 55-56); and to Morin, 13 July 1638 (AT, II, pp. 196f.; Kenny, pp. 57f.). Also compare his claim to «proof» that animals do not have souls in Reply to Objections VI, part 3 (AT, VII, p. 426;

- HR, II, p. 244) with his acknowledgement that he lacks such a proof, in his letter to More, 5 February 1649 (AT, V, p. 277; Kenny, p. 244).
 - (58) As mentioned above, Malebranche does so intend.
 - (59) Letter to Mesland, 9 February 1645 (AT, IV, p. 218f.; Kenny, pp. 159f.).
 - (60) Letter to Elizabeth, 21 May 1643 (AT, III, p. 665; Kenny, p. 138).
- (61) Essentially the same position is advanced in « Descartes, Fauste de Riez et le problème de la connaissance d'autrui » (also cited above), pp. 210-211.
- (62) « That which is so impressed on the mind of all men that it is impossible for them to judge otherwise ». Eléments de Métaphisique (Paris, 1725), p. 87.
- (63) « That which is so clear that it would neither be proved nor attacked by any proposition more clear and more immediate to the natural light of the mind » (*Ibid.*, p. 90).
- (64) Appearing as No. III in the list of first truths which he finally compiles is: « That which is affirmed by the experience and the testimony of all men is incontestably true » (p. 120).
 - (65) Regulae, XII (AT, X, pp. 419-20; HR, I, pp. 41-42).
- (66) Descartes maintains that the freedom of the will is self-evident (*Principles*, I, XXXIX); that this independence suffices to make our action praiseworthy or blameworthy (Letter to Elizabeth, 3 November 1645: AT, IV, p. 333; Kenny, p. 185); and that the will is the only thing truly under our control (thus the only thing for which we are truly responsible). See letters to Elizabeth, 1 September 1645 (AT, IV, p. 282; Kenny, p. 168), and to Mersenne, 3 December 1640 (AT, III, p. 248; Kenny, p. 84).
 - (67) Reply to Objections II (AT, VII, p. 144; HR, II, p. 41).
 - (68) Regulae, VIII (AT, X, p. 393; HR, I, p. 23).
 - (69) Response to Second Objections, part 4 (AT, VII, p. 145; HR, II, p. 41).
 - (70) Letter to Clerselier, 23 April 1649 (AT, V, pp. 352ff.; Kenny, pp. 254-55).
 - (71) Letter to Mersenne, 30 April 1639 (AT, II, pp. 578ff.; Kenny, pp. 65-66).
- (72) This position has also been formulated by Émile Bréhier in «The Creation of the Eternal Truths in Descartes's System ». *Descartes*, ed. Willis Doney (New York: Doubleday, 1967), p. 201.
 - (73) Letter to Regius, December 1641 (AT, III, pp. 460-61; Kenny, p. 122).
- (74) Henze, for example, raises the private language issue in this context: op. cit., p. 55.