ABSTRACT. My goal is to illustrate Descartes' reliance on two quite different and competing interpretations of objective reality by explaining how each is used in defending his causal axioms. The initial criticism comes from Caterus (and is later taken up by Gassendi) who charges that Descartes makes it appear as if the thought in its objective aspect (the intentional entity) is really distinct from the thought qua modification of the mind (i.e., the thought in its formal aspect). This implies that the object-of-the-thought is actually distinct from the thought-of-the-object in which case, (a) Descartes cannot account for the purported relation between the two, and (b) the intentional entity must exemplify properties which belong neither "immaterially" to mental substance nor concretely to physical substance. Descartes rejects Caterus' assessment of his position: he has not introduced a fourth kind of real entity into the causal order distinct from the mind, its modifications, and the physical object thought of. However, in responding to Caterus, Descartes implicitly appeals to a Suarezian theory of intentionality in which reference to the ostensibly separate reality of the objective entity is reducible to the formal concept: the thought-of-the-object is not really distinct from the object-of-thought. Clearly, Descartes cannot explicitly use the Suarezian theory because it relies on a system of causal explanation (the doctrine of the species "fitting through the air") which Descartes rejects on scientific grounds. I shall argue that Descartes is committed to a notion of the "form" of the mind, viz., a modification of mind, which should allow for a non-relational modeling of the thought qua modification of the mind and its intentional object, but that he cannot consistently attribute to mental acts enough structure to support his theory.

1.1 THE PROBLEM

We know from Descartes' definition that ideas are something in which there is an entity or being. Ideas are not identical to the objective reality in them. Any conceiving as a thought and hence as a modification of the mind is not of the same character as that thing it is about: the thought of a triangle is not shaped like a material triangle
except by way of representation. When I conceive of a triangle, the
thought or idea by which I conceive the triangle is not shaped like a
triangle, but "contains" the shape objectively. What is conceived can be
said to be triangle-like inasmuch as it is "objectively" a triangle, that
is, triangularity is only in thought "objectively". One is naturally led to
distinguish three aspects of ideas:

- Ideas are all equally "modifications of the mind";
- Ideas are (in their formal aspect) modifications (i.e., forms) by
  which we represent this or that;
- Ideas (in the objective sense) are representing what they repre-
  sent.

How is the idea taken in its objective aspect related to the idea taken
in its formal aspect? Caterus accuses Descartes of embracing an inter-
pretation of objective reality according to which for example, in the
cognition of a shape, the figure has only objective existence in the con-
ceiving. Since Descartes characterizes "being objectively in the mind" as
being an object thought which exists in the way that objects do when
they are thought, objective reality is treated as if it were in the idea
but distinct from it. It is therefore, literally reified. Accordingly,
Caterus finds four ingredients in Descartes' explanation of the thought
of something:

1. The object thought of in re (the physical triangle).
2. The intellect which does the thinking (Descartes).
3. The form of the object in the understanding (i.e., the
   form of thought or idea itself).
4. The objective entity (the mental triangle).

The objective entity (in (4)) is an item somehow "like" the real object
thought of and is (as we shall shortly see) in the causal order in a
manner normally reserved for the real object and the real form of the
mind. In short, Caterus insists that Descartes grants ontological status
to the contents of mental acts.

If the objective entity does have a reality peculiar to it (as Ca-
terus avers), we are naturally led to desire a contrast between the two
real entities: a material triangle and an objective triangle. Yet what is it
to contrast a material triangle with an item which is only a triangle in-
asmuch as it is "contained" in a thought "in" which it has "objective
existence?" This item or objective entity is regarded as distinct from
the form of the thought (they are, respectively, ingredients 4 and 3
above): the objective entity has a reality or being peculiar to an object-
of-thought (i.e., an entity) which is distinct from the reality or being
peculiar to a thought-of-an-object. Not only does the conception of a
triangle involve the form triangularity in a way that doesn't involve
physical triangularity, but it is also true that

(a) The objective entity is triangular (though only objec-
tively)
and

(b) The form of the thought of triangle is not triangular.

As a result, Caterus' Descartes introduces a mode of being for an entity (the reality of a triangular object-of-thought) with no intrinsic connection to the thought of which it is a content. This difference between modes of being violates the presupposition that only the thought qua modification (i.e., insofar as it has the esse of the esse objectivum) can exemplify any properties at all. Therefore, if Descartes holds that the objective entity is triangular, it must exemplify triangularity in a way other than that which is available to a thought qua modification (since he separates the objective entity from the form). But the concept of an occurrent property that is neither a property of a mental substance nor physical substance is unintelligible.

Notwithstanding such unintelligibility, Descartes is criticized (by Caterus and Gassendi) for maintaining just this point of view. We will see that when pressed by Caterus for an explanation of the origin of the objective entity (in (4)), he denies a separate reality to the object of thought and rejects Caterus' interpretation. In the context of causality, Descartes (rather cavalierly) denies the accusation that he has introduced a spurious entity into the mental order. Consider, for example, Caterus' response to Descartes' principle to the effect that there must be at least as much reality in the cause of an idea as is contained objectively in the idea:

'Nevertheless', says our great philosopher,--'because this idea contains this or that objective reality rather than another, this ought to be due to some cause.' On the contrary it needs none, for objective reality is a mere domination and is nothing actual. Moreover, a cause has some real and actual influxus; but the objective reality which is nothing in act cannot be influenced, and so cannot be passively affected by the actuality of a cause, nor indeed should it require it.

In his reply, Descartes agrees with Caterus' charge that the objective reality requires no cause but pulls the teeth of his argument: "I admit this, but it requires a cause that it be conceived, and the question concerns this cause alone". In other words, Descartes effectively denies that he must account for four objects in the analysis of thought. Asked if the objective reality were itself in the causal order, he would say "Of course not!" But Caterus, not without reason, assumes that Descartes' answer would be "Of course!"

Caterus grants that objective reality is somehow in the mind:

If 'nothing' means something imaginary, commonly called an ens rationis, it is not 'nothing' but something which is distinctly conceived. And though it is only conceived but is nothing actual, indeed it is conceived, but can by no means be caused.
The objection implicitly relies on the common view that objective reality is not the sort of thing that could be caused because it does not have a separate existence, to which Descartes responds:

For first he says that a thing existing in the intellect through an idea is not an actual entity, i.e., is not something outside the intellect; and this is true. Secondly, he says that it is nothing fictitious or an entity of reason, but really something which is distinctly conceived; by which words all that I assumed is admitted. 10

Descartes makes a subtle and surprising clarification in this passage when he says that he only assumes that there is "something which is distinctly conceived". Is Descartes only concerned with the reason for something's being occurrently conceived? Is he telling us that whether the entity only has a specious objective existence is beside the point? Unfortunately, no sooner has he denied that the objective entity has a cause, than he proceeds to maintain the opposite:

... For there the question is what is the cause why it is conceived? It will not suffice to say that the intellect itself is the cause, of course it is the cause of its own acts; this is not in doubt, the question [is, what is] the cause of the objective artifice which is in it. 11

Descartes' way of putting the matter certainly opens the door to Caterus' charge of introducing a fourth object. On the one hand, Descartes tells us the question is, "What is that which causes something to be conceived"? It appears from this that the question concerns the cause of a thought of X. But Descartes restates the question: "The question being the cause of the objective artifice which is in the idea". Here it appears that the question concerns the cause of the reality of X as conceived. Thus, he introduces the possibility of conflating the cause of the reality of being an object-of-thought with the cause of the reality of a thought-of-an-object. I would like to conclude (on presumption of consistency) that Descartes does not argue that there is a cause for the objective reality of X as such (i.e., (4) above) despite his taking back his denial. Objective realities as such are not in the causal order, so, as Descartes himself points out, he is not in disagreement with Caterus on this point.

At the very least, Caterus' problem forces Descartes to realize that he can be misinterpreted as holding that the objective entity (in (4) above) must have its own unique cause. I believe that if we place the disagreement between Caterus and Descartes in its historical context, we can better appreciate their dialectical strategies. To this end, I will pause to examine one of the prevailing theories of intentionality.

1.1.1 RENAISSANCE SCHOLASTICISM: SUAREZ

Descartes can avoid Caterus' problem by embracing a way out made available by Suarez' theory of intentionality. Since we have evidence to suppose that Suarez was extremely influential at the time, let us explore the possibility that Descartes relies upon general aspects of his theory and see if this helps. 12
1.1.1.1 AN OUTLINE OF THE SUAREZIAN THEORY

Since I wish to bring the views of the Renaissance Scholastics to those who might find them slightly arcane, I'll provide an orderly, provisional explanatory model for Suarez' theory before taking it on in more detail. A more comprehensive account of his position would be inappropriate here (our focus is Descartes) so I'll confine myself to drawing a few well-defined distinctions to guide us toward insight.13

In its broadest outline, Suarez holds a theory of representative mental acts. In general, such theories take the following line of thought with respect to this idea:

5. The act "has" the represented quality: it exhibits some unique mode of exemplification.

The motivation for (5) stems from the fact that they don't want to say that the cognitive acts literally exemplify triangularity—so they distinguish senses of exemplification. It is obvious that cognitive acts don't exemplify triangularity—is it because they don't exemplify triangularity, or is it because they don't exemplify triangularity. These two moves are often run together. In adopting (5), Scholastic philosophers came up with immaterial "having" whereby a state could in some way exemplify a property whereas items that literally (or really) exemplify the quality don't have it immaterially.14

We can summarize as follows: actualities constituting the representation (i.e., the mental act) exemplify (or enformulate) the natures by which they are isomorphic to what they are "of" or "about". Occurrent representations are intentional acts which constitute a state of consciousness or representative awareness "of" an X, not by virtue of being directed toward X but by virtue of being the very kind of state that they are.15

For example, in the cognition of a blue triangle, the actualities expressing the nature embody (in a unique manner) the nature Blue Triangle and account for the fact that the cognition is an "of-a-blue-triangle" awareness. The concept of "expression" being used here is hybrid. Intellective expressions are not like linguistic utterances which are meaningful because they signify thoughts, rather they are constitutive of "meanings" themselves and are the primary mode of meaningfulness. Part of the unclarity we feel about this concept concerns the difficult question of what it is for a nature (or meaning, for that matter) to be 'manifested' in a class of episodes which persons do. For the terms 'manifestation' and 'expression' carry with them the implication of 'making something manifest', or apparent to someone. But, it seems, nothing should require being 'manifest' less than an episode of thinking.

They are not, in the sense that concerns us, to be construed on the action model of "using something to express something". Rather, they are actions in the sense of actualizations which express our thoughts without being used to express them. The concept of a cognitive expression involves that of intentionality in the sense that to say of a cognitive episode that it is a thinking that-p, is to say of it that it expresses ("means") p.
I shall refer to the isomorphism brought about between the mental act and what it is "of" as "con specificity" in order to serve as a reminder that it is the enformulation by natures (forms, species, etc.) that grounds the isomorphism. A mental act (as in (5) above) can exemplify the same thing as another or it can exemplify an actual X. For example, suppose that I'm thinking of a blue triangle. Using the Scholastic metaphor of thought as the inner mental word, we can say that, in thinking of it, the thought itself is the cognitive expression blue-triangle. The order of signification is not differentiated from the order of representation. The expression signifies the object in the way the mental token of the blue-triangle "represents" the triangle.

In concept formation, the natures Blue and Triangle come to exist immaterially or intentionally in the cognitive faculties. Once they "inform" the cognitive faculty, the cognitive faculty comes to signify or represent a blue triangle by means of its expressed actuality. Suarez, for example, holds that since cognition in general is "inner expression", actualities of the senses (sensations) can be regarded as the sensitive counterpart of "intellective" expressions. For example, Blue and Triangle exist materially in an external object, but when we see the objects, the natures Blue and Triangle come to be immaterially in the organ of sight by the "expression" of the sensitive faculty of vision. The story of the transmission of the natures is told in terms of the "species of blueness" and the "species of the triangular". The natures expressed in sense (i.e., as the sensation), in turn, come to exist immaterially in the inner sense and so on, through successive stages of immateriality and decreasing levels of specificity.

Since the various cognitive expressions constitute the recognitional awareness of a blue triangle, we can think of them as unique manners of cognition. By counting the expressionings themselves as distinct manners of awareness, we capture Geach's insight that "being of an X" is not a relation in which the thought or sensation stands but is simply what the thought or sensation is. The metaphysical doctrine of natures (embraced by Suarez) guarantees the existence of different modes of exemplification (predication) in the same form in a manner which makes it intelligible that there are different manners of cognition at different levels of abstraction. Thus, the same form is exemplified in a sensory act and an intellective act.

Obviously, the theory does not need to differentiate between classificatory consciousness (knowledge that an object is a this-such i.e., subsuming particulars under universals) and a classification of consciousness. From the standpoint of intentionality, there is no difference between the cognising-of-X and an X-kind of cognizing. The expression blue triangle is in the faculty insomuch as the faculty is immaterially informed by the natures Blue and Triangle.

I am providing the dominant characterization of the "of-ness" of thought. This non-relational characterization permeates Suarez' metaphysics. I cannot account for the fact that his view has been systemically misrepresented except to observe that he is often portrayed as having a post-Cartesian theory of intentionality. If I am correct, Descartes shared enough of Suarez' theory so that the standard account of objective reality is equally misguided.
In the mid-16th century the emphasis is on the fact that acts have contents in virtue of being certain species—not only are thoughts "of" something, but they have different characters as acts. Descartes takes this over. Opponents of the view I'm defending are quick to point out that at times, Descartes speaks as if the only important differences between acts of thought are contents. The other differences between acts are relatively generic—some are acts of believing, others acts of willing and so on—but no more specific than this. However, for Suarez, the idea of having \( f \)-ness as a content was simply one way of distinguishing modes of "having". He felt that there had to be some character in virtue of which a cognitive act had a certain content—something in the causal order—as contents have no causal powers.

Causes of ideas are causes of determinate forms in the mind—what Suarez, for example, calls formal concepts or expressions and what Descartes calls the formal reality of an idea. For example, in the consciousness of a blue triangle, when it comes to the ontology of cognition, the basic concept pertaining to consciousness is the concept of a blue-triangle experience: reference to the object of a cognition (a triangle) is no more than talk of a manner of inner experiencing, a variety of the act itself. An identification of this kind assimilates objective or intentional entities to the act: the cause in (4) is, then, identical to the cause in (3). To have a blue triangular experience would be to experience in a blue triangular manner. Thus the basic concept pertaining to intentionality is not the concept of something which is an object of experience, or an objective reality in experience, but of a kind of experience or manner of experiencing: a classificatory consciousness. In addition, all cognitive expressions are recognitional, that is, varieties of cognition are forms of recognition: to be cognitively aware of an \( F \)-item is to be aware of it as \( F \).

We can distill an explanatory schema from Suarez as follows. When we say "\( X \) looks blue and triangular to S", we can redescribe this as "\( S \) has a something-is-blue-and-triangular experience". The latter describes a kind of cognitive experience or a manner of cognitive experiencing as opposed to an entity which is related to the experience as act to object (i.e., an idea as form with the objective reality in it). The object is not eliminated (thoughts still have objects), just rendered ontologically innocuous. Suarez does not want an ontological renegade like the "objective reality in the idea" existing in the mind but not identical to the cognitive expression itself. This is the mistake that he finds in Cajetan and one which he is at pains to avoid.

1.1.1.2 SUAREZ ON INTENTIONALITY: FURTHER DETAILS

Although Suarez does not have the methodological resources we have utilized in our provisional explanation, we are now in a position to see how our idealized explanatory model contrasts with his own. My hope is that some insight is to be gained from the contrast.

Positions vary widely on the correct classification of Suarezian intentionality. Most commentators, in dividing the claims on universals into Nominalism, Conceptualism, Moderate and Extreme Realism, normally locate the Thomists, Suarezians and Scotists among the moderate realists. The dispute over the correct classification hinges on the exact nature of the objective concept: if the objective concept is the object itself known
under an aspect, Suarez is a realist. The source of the confusion is his reliance on Cajetan's definition of "concept" which includes, it seems, a paradoxical reference to an object both attended to and outside the knowing act: "the objective concept is that thing or ratio cognized or represented . . . immediately". The objective concept is the thing known of a res through the cognizing act (the medium quo, "formal concept", or instrument by which the res is known). "For example, when we conceive of man, that act which we effect in the mind for conceiving man is the formal concept; however, man cognized and represented in that act is the objective concept".

By Suarez' own account, his position differs from Cajetan's who regards the mental act (the formal concept) as a "mirror", "image", or "icon" in which to behold the prototype. What does the difference come to? I propose that we interpret Suarez' criticism of Cajetan as an argument against a real (or quasi-real) distinction between a cognition (i.e., cognitive experience) and its object. This doesn't imply that there is anything wrong with saying that thinking has a content. But, his sensitivity to distinctions leads him to provide a very subtle account of the "of-ness" of thought: 'cognitive experience' is to be taken in the sense of 'experiencing', 'concept' is to be taken in the sense of 'conceiving', so that to have a cognitive experience of a blue triangle is to experience or cognize in a blue-triangle manner. In Suarez' struggle to provide an alternative to the 'act-content' or 'act-object' model of intentionality, the emphasis shifts to kinds or manners of experiencing.

First, let's look at a common but uninformed interpretation of Suarez. It is fairly standard among those who classify him as a realist, to find three features in the mental act: (1) the vitality of the act; (2) the representative aspect of the act and (3) the objective concept. The first feature pertains to the mental act from its subjective mind. The second feature pertains to it insofar as it is an occurrent form, image or similitude of the mind. The objective concept is the object immediately presented through the act. It is (a) just that part, or aspect, of the physical object which is known by means of the formal concept. Yet, (b) it exists outside the knowing act. The paradox encountered in Cajetan's definition re-emerges: how can the aspect known be outside the knowing act and be "in" a mental act at the same time?

A standard method of resolving this problem regards the mental act (formal concept) as the medium quo or the instrument by which the res is known while what is known of the res is the objective concept. In the standard illustrative example, a mental act is said to be like a telescope (an instrument as opposed to a Cajetanian 'mirror') "in" which the subject "sees" an aspect of the object (which "really is" some aspect of the physical object). I find the implied analogy unilluminating. The alternative I propose (see 1.1.1.1) is to allow that Suarez employs a reduction of the objective concept to the act of cognition because, as I mentioned above, he is emphasizing manners of cognition. We encounter something similar in the way a contemporary reductionists eliminates the object of sensation by reducing "sensation to a red cube" with a "red-cube sensing" (the latter is not an image "in" which the red cube is seen, it is the sensing itself). Other examples come to mind. For example, in the treatment of the internal accusatives in "waltz a waltz", "claimed a claim", and "stated a statement" (in which what is done is somehow intrinsically related to the doing), we try to avoid the claim that the waltz is not the waltzing, the statement is not the stating and so on. By
analogy, what is thought is intrinsically related to the thinking: "what is thought" is used in reference to a manner of thinking, not something separable from thinking anymore than a waltz from a waltzing.

Suarez avoids the problem of explaining how the object is related to the cognizing by emphasizing the fact that the formal concept (the representing) is, we would say, a manner or kind of consciousness.

Let us grant, first of all, that cognition is consciousness, the inner occurrent awareness giving form to the object. Mental acts are not "mirrors" or "portraits" in which a supervenient "mental eye" sees the prototype. Suarez takes the standard view of cognition as an immanent act to mean that the act of cognition and the formal concept are the same: *Videtur ergo quod per illum nihil producatur, quoniam est actus immanens non est productivus.* The mind does not "produce" anything in actual cognition, the acquisition, or assimilation of the object is the cognition: *Nam cognitio fit per assimilationem cognoscentis ad rem cognitam. Unde experimur quod si aliquid volumus perfecte cognoscere, conamus illius similitudinem, quantum possumus, inter nos formare; ipsa ergo actualis cognitio est actualis quaedam assimilation.* Cognition is not a process which issues in a product (whether a formal or objective concept); it is simply the positive assimilation of the object, the likeness of the knower and the known. Suarez eliminates ontologically separable "objects" by a reduction identifying the "immanent" product of cognizing with the mode of the cognizing.

Consciousness comes in a vast array of kinds—the formal concepts (in first-order thought) are those kinds. Cognition "unites because it brings about the presence of the thing thought . . . an actual and vital presence which consists in the fact that the thing is formed in the mind as it is in itself". The theory of representation in De Deo and De Inc., as I interpret it, requires a representation (i.e., objective) reality (a content) which cannot be distinguished from the vehicle doing the representing. I suggest that we best capture Suarez' insight here if we regard it as the very manner of representing.

I can only account for the fact that critics have convinced themselves that Suarez separates the intentional entity from the manner of experiencing by attributing to them the failure to grasp the subtlety of the following key themes.

If one assumes that we respond to our thoughts by paying attention to the object of cognition, he easily concludes that understanding consists in being able to work with these objects, figure things out, draw conclusions, make decisions and the like. Isn't this plausible? Am I not cognizer of the objects of thought and don't I grasp them more intimately than anyone? Well, no . . . according to Suarez, that can't possibly be right. If the objects of thoughts and understandings are cognized or attended to, then these second cognitions and attentions are not identical to my first thoughts and attendings. If the point of the theory of intentionality is to explain my thinking about things, it cannot, without circularity, do so in terms of cognizing or attending.

Suarez resists the temptation to reify the *esse objectivum* in a way which implies a distinction between the intellectual action and its object. This is considerably more difficult for him to do than it may seem at first glance. He doesn't have the concept of consciousness or of
mind to fall back upon: these are the very concepts he is in the process of articulating. He must rely on other, more inflexible tools and adapt them to his purposes. The heart of his approach revolves around the claim that the phrases "objective reality" and "thing known" have a twofold reference: they refer (a) to the objective presence of an object for the first-order (first intentional) cognition (the esse objectivum as such) or (b) the esse of being-an-object-of-thought (the esse of the esse objectivum).31 In the latter usage, this esse is the object of apperceptive thought, and hence, an objective esse arising when the thought is directed towards the first-order formal concept qua representing what it represents. Thus, in reflexive cognition (second intentional thought) we look upon the first-order formal concept (i.e., we take our own thoughts as objects) and the reflexive cognition itself constitutes an awareness of the object "in" it. With this two-level approach to objective being, Suarez can consistently claim that not only must objective reality be in the mind formally (in order to preserve the indirect realism32) but, it must also be capable of being represented by an immediate reflexive (i.e., introspective) cognition—in which case it would be in the mind objectively.

1.1.2 SUMMARY OF SUAREZIAN INTENTIONALITY

If we take Suarez' position on second intentions seriously, the objective reality (construed as the esse of the esse objectivum) must be the object of a second-order formal concept (that is to say, a conceiving). I suggest that we see objective reality as an individual (of some sort), identical to the aspect of the first-order cognition which brings a directly perceived entity before the mind. In Suarezian apperception (e.g., DM 54.2.16), such an individual is actually a condition in the mode of entity taken to exist in the first-order cognizing. The "in-ness" of this individual in cognition should not mislead us into thinking it is a separate entity. True, as an aspect of first-order cognition it actually exists in the subject but it is considered as object (to use a Kantian turn of phrase) only in being apperceived.33

I can understand Suarez' temptation to take this general approach because I see him as an opponent of Cajetan (and probably others around him like Vazquez). His concept of a cognitive expression (species expressa) makes it plausible to think that the representing exemplifies (as a manner) an absolute nature (e.g., man) which bears a real relation (being apperceived) to the apperception. The actualities which token the cognitive expression (the first-order formal concept) are conspecific (in some sense) with the "physical" characteristics concretely embodying the real nature (e.g., man) although they do it in the spiritual way ('immaterially' or 'intentionally').

This conception of a cognitive expression coupled with a preoccupation for kinds of cognitive experience provide the grounds for the claim that we can become aware of a cognitive expression, e.g., man, i.e., a representing, as a non-represented representing of the nature of man. We do so through the second-order formal concept. The representing "man" is a represented representing but we need not be aware of it as such. The apperception through which we become aware of it as such is a cognitive expression (the second-order formal concept) which "stands for" the represented non-representing of the first-order cognition, i.e., the objective reality as such. The actualities which token such a cogni-
tive expression (viz. the second-order formal concept) are, thereby, conspecific with the characteristics embodying the objective esse. Accordingly, the primary concept of objective reality is actually the concept of a second-objective intention and not the concept of a first intention. Thus, we see that "objective reality" refers either to the subjective presence constituted by the manner of experiencing (i.e., the first objective intention) or the formal features of the cognitive experiencing as such taken as an object of immediate introspective thought (the second objective intention). The latter second-order object can, in turn, be construed as a subjective presence in introspective (second-intentional) thought and so on. Descartes tries to cut through all the scholastic jargon by using an ostensibly simple reference to our awareness of the objective reality in the idea. But such an idea of an idea is what we have just seen in Suarez (with less economy and greater precision).

Suarez does not like rogue ontological objects—especially the kind that appear in relational interpretations of cognition in which one finds the thinker, the thinking, and the thinkee. He prefers to speak as if there were varieties of cognition, i.e., varieties of consciousness. Since objective reality or intention is identified with a kind of consciousness, there is no real difference between being an object-of-thought and being a thought-of-an-object. Therefore, there are no literal causes of contents of ideas. This technique allows us to form varieties of "cognizings" which constitute the "somehow" conscious presence of an object without need of an inner mental eye staring upon a separable object of cognition. Thus, an of-a-blue-triangle cognizing (or consciousness) is distinguished from an of-a-red-triangle consciousness. The object of cognition is eliminated in favor of kinds (varieties) of cognizing. The power of the view stems from the fact that the intention or objective reality of a cognitive act is interpreted merely as a kind of cognizing, recognition or consciousness. To what extent does Descartes avail himself of it?

1.2 EXPLORING THE WAY OUT

It is tempting to suppose that Descartes embraces something like the Suarezian picture. I want to clarify how Descartes might invoke an interpretation of objective reality relying on features of the Suarezian position. Subsequently, I will show that he cannot consistently countenance such a theory.

There is little doubt that the primary source of confusion over the Cartesian use of the doctrine of objective reality occurred in the contexts relating to causation. His contemporaries found his claims to be incredible: we can see from the objections and replies the shock expressed at his boldly stated position.

Descartes tries to disarm Caterus' and Gassendi's objections (see below) rather than meet them head-on. When questions arise concerning extreme alternative interpretations of the doctrine of objective reality, Descartes always chooses a more orthodox Suarezian position. If opportunity switches of doctrine are actually the case when Descartes is caught being obscure, his eclecticism immediately leads him back to the orthodox position.
1.2.1 OBJECTIONS BY CATERUS

He is asked to choose between two alternatives: Caterus' *quartum quid* on the one side, and the more orthodox Suarezian approach to objective reality on the other. The orthodox view is succinctly stated by the very first objector: Caterus openly wonders whether Descartes can really be putting the objectively real in the causal order:

Now then, tell me, what sort of cause does an idea require? Or, tell me, what is an idea? It is the thing thought [*res cogitata*] itself inasmuch as it is objectively in the intellect. But what is being objectively in the intellect? As I was taught it, it is for the very act of the intellect to terminate in the objective mode (or in the mode of an object). Clearly, this is just an *extrinsic denomination* of the thing and nothing more. For, as *being seen* is nothing more than for the act of vision to tend in me, so *being thought* or to be objectively in the intellect is nothing more than for my thought to halt or to terminate . . . therefore, why should I ask for the cause of that which is not actual, which is a mere name (viz., an extrinsic denomination) and nothing?

Caterus uses phrases (*extrinsic denomination, being seen, being thought*) which, while unfamiliar now, would have signalled to Descartes' audience the scholastic approach to objective reality. Caterus enunciates this point of view and criticizes Descartes from it. If the objective entity is treated as a *quartum quid*, then in the theological context such a creatable objective reality leads to an object coeval with God, while in human knowledge it leads to the incoherence of looking for causes in both (3) and (4) cited in 1.1.

In other words, Caterus takes Descartes to be defending a view in which objective reality is hypostatized into a specious presence which he feels is "nothing in act". Objective reality cannot be taken out of the context of "the objective reality of a thought" anymore than "to the left of" can be taken out of the context of "this pillar is to the left of that pillar". In doing so one runs the danger of locating a predicative entity being-this-being-to-the-left-of-that in the order of being. In the context of intentionality, as we see in Suarez, this problem of identifying the relation of intentionality is avoided by appealing to extrinsic denomination in order to say what constitutes the relevant "of-ness" without reifying a relating relation. An act is "of" an object because it is an act of a certain variety; for this reason it receives an extrinsic denomination which refers to it through a courteous (or paronymous) reference to the object "causing" the act.

1.2.2 OBJECTIONS BY GASSENDI

Descartes is challenged again in the fifth objection. Gassendi reproaches Descartes over the reification of intentional entities:

Now the reality attaching to an idea is distinguished as two-fold by you . . . Moreover, the objectivity can be nothing more than . . . that proportion in the disposition of its parts such that they present me. Whichever way you accept, it seems there is really nothing; since there is only the
relation of the parts among themselves and to me, i.e., a mode of its formal reality, so far as it is formed in this way . . . call it, if you like, objective reality.40

Note that Gassendi is initially tempted to accuse Descartes of relying on a quartum quid but immediately rejects the accusation ("Whichever way you accept"); he finds that there is only the cognition and its intrinsic form or structure. Gassendi puts this by saying: ". . . objectivity can be nothing more than . . . that proportion in the disposition of its parts such that they relate me".

1.2.3 SUMMARY

Caterus and Gassendi appear to be relying on variants of the prevailing orthodox position with which Descartes seems to have no disagreement; especially since it upholds the required conclusion. As I mentioned in the first paragraph, he is not entitled to this. A scholastic like Suarez was able to reduce the objective reality (in (4) above) to some aspect of the form of thought (as in (3) above) because he had a theory of forms of the mind: a theory which Descartes does not provide. For Suarez, objective reality is an intrinsic character or quality of a mental state by virtue of which that state is a completely determinate variety of consciousness. The theory is reductive because it relies on the fact that modifications of the mind have a structure of sufficient articulation to allow for the reinterpretation of the objective reality to the act. In other words, it simply gets rid of objective reality construed as an object. There are no acts cum objective realities, there are only kinds of consciousness. Descartes falls back upon the Suarezian theory to avoid the embarrassing conclusion of Caterus' problem but he is not entitled to the move because he has no theory of the structure of the modifications of the mind. In fact, he cannot accept the doctrine of formal concepts because it relies on the doctrine of the species.

1.3 THE CAUSAL PRINCIPLES

Descartes encourages Caterus' interpretation because he distinguishes the causal axiomata or principles:

IV. Whatever reality or perfection is in a thing, is formally or eminently in its first and adequate cause. [Quidquid est realitatis sive perfectionis in aliqua re, est formaliter vel eminenter in prima & adequata eius causa.]

V. From which it follows also that the objective reality of our ideas requires a cause in which the same reality is contained not merely objectively, but formally or eminently. [Unde etiam sequitur, realitatem objectivam idearum nostratum requiere causam, in qua eadem ipsa realitas, non tantum objective, sed formaliter vel eminenter, continetur.]

I want to examine these principles in an effort to illustrate why they do not really support Caterus' interpretation. At the same time, however, I want to show that Descartes uses them in a form that squares with the traditional use but is at odds with his own.
In the Objections and Replies, Descartes often varies the formulation of the principle of eminence: principle IV—for example, 

There is nothing in the effect that has not preexisted in the cause in a similar or in a more eminent mode [eminentiori modo].

The principle belongs to a family that descended from an Aristotelian theme transmitted to the scholastics through Proclus’ propositions 7 and 30.

The two common scholastic propositions correlated with IV are effectus praexsistit virtute in causa agente and effectus praexsistit in causa modo perfectionis. These two, collapsed into one, are self-evident truths or first principles. We find the first mentioned in the extremely influential treatise Liber de Causis; we find the claim that the effect pre-exists in the cause: causatum in causa est per modum causae et causa in causato per modum causati. As far as the range of its effects are concerned, we can say of the cause nemo dat quod non habet. For, if the effect had something not in the cause, it would have arisen from nothing and, as Descartes remarks in defending IV, a nihilo, nihil fit. It is not enough to say that the cause has no more than the power to produce the effect, that would commit us only to the claim that something pre-exists in the cause relative to the effect. The intention of the scholastic principle is stronger: the reality (perfection) of the effect must really exist in the cause. They are persuaded of the principles’ truth by their own view of change: coming-to-be involves the real existence of the possibility to be brought into existence.

The authority Suarez cites for the second scholastic proposition is Aristotle. The idea that the cause possesses in a greater degree whatever it communicates to its effects stems from Metaphysics A, 993b24, where he notes that, "Each thing, in virtue of which a common nature belongs to the other things that have that nature, itself is [i.e., has the nature] in a higher degree than other things". "For example," Aristotle adds, "fire (which is most truly called 'hot') is the hottest and the cause of hotness in others." This principle suggesting a devolution, diminution or degradation in the causal process of "coming from" or "emanation" becomes a basic tenet of Neoplatonism.

The second component of principle IV reiterates a theme found in Proclus’ proposition 30, the so-called law of immanence. The related scholastic slogan, 'Propter quod unusquodque tale et illud magis', we are taught in school. Perhaps more appropriately called the "principle of superiority" which states that, "Every productive cause is superior to that which it produces". This principle actually has nothing to do with resemblance. Proposition 30 reads 'All that is immediately produced by any principle both remains in the producing cause and proceeds from it'. This law however, makes no mention of the requirement that the cause formally contain what is in the effect. The reason for this is that there is another theme, Aristotelian in origin, coming into play. It is a familiar thesis (Metaph. Theta 8, 1040a4-b2) adapted as a cornerstone of Neoplatonic theory. The key notion is expressed in Proposition 77: "Any particular thing passes into actuality through the agency of that in which its potentiality is already actual". The particular thing (which will pass into actuality) as a potentially existent is said to be "imperfect" or alternately "incomplete". It is incomplete in
the sense that it has not reached its form. It is said to be "perfected" in a determinate way when it is causally determined according to its nature. In order for anything to actually be causally determined or "perfected" in a determinate way, proposition 77 demands that the cause have the actual causal determination of an occurrent property: it must be formally in the cause. The proof of this proposition relies, in turn, upon a key proposition in the proof for the vertical stratification of reality: a proposition which states that there is nothing in the effect that is not primitively in the cause. The proof of this proposition in turn depends on the priority of the actual. It is important to realize that the Neoplatonic position relies heavily on the Aristotelian distinction between actuality and potentiality which Descartes avowedly repudiates: the very concept of "perfection" relies on it. The elements of Neoplatonism had become so entrenched in the scholastic explanatory schemes by Descartes' time that they could no longer be said to be exerting a unified influence. I suggest only that Descartes' position is clarified if we understand his requirement regarding "formal containment" in terms of the notions of "perfection" and "actualization". On this account, the perfection of an effect is formally in the cause because it is a perfection of the cause, i.e., it is in the cause in actuality and hence a partial realization of the form of that which is the cause.

Although Descartes lacks the sustained treatment of Suarez or the eloquent defense of the principles in Thomas Aquinas, we must grant that he is aware of their proper use. While he occasionally restricts the application of the principles to the efficient causes, he understands them far better than some of the objectors.

It is easy to see that Descartes regards V as a special case of IV but, since it is tempting to hypostatize the intentional object (as the quartum quid), it is also equally clear that Descartes' choice of words lends itself to Caterus' interpretation: realitatem objectivam idearum nostrarum requirere causam. The attraction of principle V for Descartes is obvious (under Caterus' interpretation, 1.2.1 above): it can be employed as an ad hoc method of relating the hypostatized object to the causal order. However, nothing will heal the explanatory breakdown caused by introducing a specious "correlative entity" into the order of being. I think that the Cartesian can only utilize these principles if he is prepared to provide a theory of mental forms which would preserve both causal principles. Unfortunately, this theory of mental forms (i.e., conspecificity) has been rejected.

If Descartes were an orthodox scholastic, he would be justified in taking IV as a special case of V. For Suarez there really is no difference between the causal and epistemological principles of eminence: such is the legacy of his theory of objective reality. Every perfection which exists objectively in an idea must exist actually in something that causes that idea. According to our exegetical strategy, the concept of perfection is to be interpreted in terms of its classical predecessor. This presents the problem that without the doctrine of formal concepts and the underlying causal/explanatory structure of conspecificity, the concept of perfection is empty. In order to utilize the concept of perfection, we must grant that Descartes is striving for some analogue of mental form. It remains to be seen whether Descartes can have such.
If we take a closer look at Suarez’ theory of mental forms and the cognate notion of objective reality, it will become clear why it proved unacceptable to Descartes. The theory of mental forms is one of the most intricate parts of Suarez’ psychology. The abstractionist account of concept formation traditionally accepted by the Aristotelian tradition is laid to rest by Suarez in whom the key theme becomes "causality". His theory involves tensions which anticipate the radical break that Descartes will make with the Aristotelian (or "faculty") psychology.

1.3.1.1 MENTAL MODIFICATIONS

For example, Suarez rejected classical concept empiricism and Thomistic-Aristotelian abstractionism in the spirit of the Renaissance con-science found in Pico, Ficino, Pomponazzi, Valles and others. He wants to establish an equilibrium between the spirituality of the soul and those incontestable advances in the science of the human body which undermine the existence of a totally self-sufficient soul. The theory he offers is tantamount to a rejection of the use of the form-matter distinction to explain animated sense. The new theory invokes a causal relationship between mind and body that maintains that the action of external objects on the organs of sense causes, formally and efficiently, the sensible species on the organs of sense. The phantasm or sensible species enters causally into the production of the occurrent idea because man and species (a sense impression) have been created with such a nature that the mind naturally ideates in predetermined ways when impressions occur in sense.

1.3.1.2 HARMONY

If this sounds like harmony (or magic) to the modern reader, it is. But that should not blind us to the fact that Suarez provides a causal explanation (with a decidedly renaissance flavor) in which the concept of "cause" is generalized to include a formative concept of "necessary connection". Sufficient reasons and explanations of an event are given within the context of—and made intelligible by—an overarching, systematically organized universe. Suarezian harmony relies on a distinction between sense impressions as states of the sheer receptivity of sense, sensations as expressions of the spontaneity of sense, and the intellectual awareness of the sensation which follows upon the reception of the species in the intellect. The sensations and the awareness are coordinated by harmony much in the way that Cartesian material ideas are coordinated with occurrent perceptual ideas. Suarez borrows from the Medical Controversies the view that this coordination is causal. The harmony is meant to explain why it is that certain sensory stimuli give rise to one particular perceptual idea rather than another. Sense-impressions in sheer receptivity are constituted by the dynamic role that they play—not by their descriptive characteristics. Suarez popularizes the position that sense impressions cannot be described as objects. Intentionality is spelled out in terms of the doctrine of the species; therefore it is possible to say that two cognitions are "of" the same thing because they are "instances" of the same species, i.e., they are conspecific.
Aside from this role in epistemological explanation, the species play a role in causal explanation: an item like redness, as a real quality, was in another sense the "species" to be inducted into the mind. Two cognitive acts are conspecific if both embody isomorphisms in which these two cognitive episodes exemplify (or enformulate) the same nature. Therefore, two acts are conspecific if they are expressions of the same mental word. It is clear that Descartes has not explained the nature of mental acts with enough accuracy for us to determine how they are to be differentiated by virtue of their form.

1.3.1.3 SUMMARY

Let us relate our discussion to Descartes. The problem for the Cartesian can be summarized as follows. As Caterus interprets him, he cannot utilize principle IV to establish a correspondence or an isomorphism between the objective reality and things in the world formaliter because principle IV pertains to items in the world formaliter—not objective realities. Since objective realities (under his interpretation) don't have the structure required for explaining intentionality, principle V is introduced to try to save the "of-ness" of the objective cognitive state. According to Suarez, on the other hand, objective reality cannot preserve intentionality without a form of the mind upon which it may be parasitic; it's easy to see why he says so. The Cartesian is left with an objective entity which is a form within a form, a word within a word which is not in the world formaliter. It is some quartum quid without the intrinsic complexity formaliter necessary to stand for anything. It is, in short, categorically different from all other entities. The Cartesian thereby introduces a pseudo-category of "contents" into metaphysics.

1.3.2 DIFFERENCES BETWEEN DESCARTES AND SUAREZ

We have already considered Descartes' causal principle IV, the causal principle of eminence:

That there is nothing in the effect, that has not preexisted in a similar or some other eminent mode in the cause, is a first principle than which nothing clearer can be maintained. The common principle from nothing, nothing comes, does not differ from it. Because, if it is conceded that something is in the effect which was not in the cause, it must also be conceded that this something has been created from nothing.61

This is similar to the first principle given by Suarez as he begins his discussion of the relations between causes and effects in DM 26.1.2:

First of all therefore, it is certain that the effect cannot be more perfect than all its causes taken together. It is proved because there is no perfection in the effect that it has not received from its causes; therefore, the effect cannot have any perfection which does not preexist in one of the causes either formally or eminently, because a cause cannot give that which it does not contain in any mode.
Descartes provides a similar discussion in Meditation III:

To take an example, some stone which previously was not, cannot now begin to be unless it is produced by something in which all that is put in the stone is either formally or eminently. 52

In contrast to this similarity, Suarez has no principle governing the objective reality of ideas. Why is there this difference? One can anticipate an answer. A causal principle pertaining to objective reality is unnecessary because it is not, as such, in the causal order. For that matter, we have just seen that Descartes is of the same mind and finds it preposterous that someone would think otherwise. But, if they actually do agree on this, then why does Descartes have the principle, while Suarez does not? Suarez often discusses the "eminent" and "formal" containment mentioned in IV and V, but not in the context of concept formation. In order to understand why Suarez has nothing like V, we have to see how it is used in Descartes. 53

A simple solution to the mystery simply notes that Descartes' dialectical approach to philosophical problems affects his presentation. Generally, when concentrating on ordinary objects, he is concerning himself with the existence of colors, heat, and so on. He is relying on principles like IV which guarantee the real existence of whatever is contained in the object of the idea. He is not relying on the causal relation between pineal states and sensations. Suarez doesn't need V because he utilizes the apparatus of formal concepts (the theory of forms in the mind) in order to guarantee the real existence of the cause. Descartes doesn't have the luxury of this approach because he tries to bypass the theory of forms. Suarez does not have to rely on V because the formal reality of cognition is intrinsically related to the objective reality of cognition. 54

Let us reexamine some of the reasons Descartes cannot accept forms of cognition. He rejects the species as a matter of practical scientific reasoning, and he rejects the concept of eidetic representation to which it had often been tied: as far as he was concerned, inductive arguments for the existence of the species could not presuppose the existence of real qualities. He was actually flogging a dead horse: conspecificity had been purged of "resemblance" in all but an attenuated sense: not even mental pictures "resembled" in a pictorial sense. The doctrine of the species in conjunction with the doctrine of formal concepts had literally evolved (just before Descartes makes his entrance) into a psychological theory of perception which did not depend solely upon naive pictorial representation.

Descartes clearly rejects the view that in the context of sensation our cognitions picture real qualities. But, one can hold this and consistently believe that like is known by like (as Suarez does): it all depends on how "likeness" is to be cashed out. If we take Descartes’ Principles IV and V to be the successors of the causal and epistemological superiority principles (respectively), then we can see why principle V wasn't readily discernible in Suarez who cashes out "likeness" in terms of the doctrine of mental forms. 65

Let's look at the relation of principle IV to the scholastic principles once again. Actually, two principles are involved effectus praexistit
virtute in causa agente and effectus praexistit perfectiori modo in causa. Recall that the first states that, in some real manner, all the being and perfection of the effect must be within the cause, or, as one would say, nemo dat quod non habet. The second states that the reality of the effect is in the cause in the form appropriate to the cause. The cause is more perfect than its effect (it is in a more perfect state than the effect), it has some being and existence which the effect lacks. Principle V merely specifies that our ideas, as things in the causal order, must be subject to the same two causal principles. For example, Descartes' principle V ostensibly borrows conspecificity on the side of concept formation. This mode of conspecificity did not rely on pictorial resemblance.

To put this another way, the Suarezian counterpart of principle V does not rely on naive pictorial "likeness". Cognitive acts are characterized in such a way that one can bridge the gap from the metaphysical proof that a thought of an object has a structure (of a complexity sufficient for grounding the isomorphism) and has a place in the hierarchy of intelligible species, to the epistemological proof that the thought, as a consciousness of an object, is a specific kind of thought. This is accomplished by taking consciousness as primitive and arguing that forms introduce its varieties. As far as Suarez is concerned, an explicit principle like V is unnecessary: he need only explain how the cognition gets a specific form. The perfection of the representing (like the Cartesian reality referred to in IV) is presumed contained in its cause. The "of-ness" constituting the represented (the "objective reality" in V) is reduced to the occurrent determinate "kind" or variety of consciousness (of which the representing is an expression). Once we provide the explanation of the form of cognition, there is little left over to explain about objective reality. Suarez' approach to the formal/objective reality distinction makes objective reality a parasitic notion, more appropriately taken to be a redescription of the formal concept rather than a different entity.

We can see Descartes' shortcomings in this regard by the following: Suarez uses objective reality to mean either the first intention or the second intention. As a first intention, objective reality is merely the meaning of the mental word, i.e., a determinate kind of consciousness which constitutes "the meaning", the "standing for" itself of the mental word (to put it crudely) as an occurrent, vital objective presence. As a second intention, objective reality is the reality of the object of thought, the being of being an object-of-thought. This sort of reality is the object of a reflexive cognition; an ens rationis which does not exist as such at the level of first intention. It is merely that feature of a first-order thought by virtue of which it represents, but only insofar as that feature is made the object of a reflexive cognition. Suarez and Descartes use objective reality in the same ambiguous manner, but only Suarez has provided a theory of that structure of mental acts which disarms the ambiguity.

1.3.3 SENSATION

So far, we have been concentrating on intellective cognition but, when it comes to sensitive cognition, the issues become more complicated. In this case, I believe that we cannot say Descartes adopts a scholastic position (like the Suarezian) because either (a) his view is incompatible with any scholastic interpretation of sensation or, (b) a re-
construction of his view to make it compatible calls into question the vi-
ability of his theory of sense perception.

It is a consequence of the Suarezian view that Descartes' principle V does not apply to sensations because they are not the sort of things that can have any objective reality. Thus, for example, the sensation of pain is actually a pain, whereas the concept of pain is not. As a sensation, it has full actual existence as a pain and we are aware of it as being a pain. It is not an awareness "of" anything, it is just a feeling of pain. The sense of "of-ness" employed rules out the possibility that sensory awareness might contain painfulness as objectively present. If Descartes maintains that both his principles IV and V apply to perceptual ideas, then sensation is regarded as existing at the level of the objectively real: when we represent pain there is no actual case of the pain, it is there only intentionally by way of content—just like the inten-
tional presence of God's wisdom when we're thinking about His wis-
dom. This would be, to say the least, an odd view. It could follow that in every case in which there was a cognition of pain, there was actually no pain. Now, while Descartes might convince us that sensations of red never involve the phenomenological character redness, it's not plausible in the case of pain.70

Is it possible that Descartes does not apply IV and V to sensation? Such an interpretation has been proposed in studies by Wilson and Normore.71

The orthodox view (found in Suarez and others) regards the application of objective reality to sensation as a category mistake. The intuition behind this is that the presence of pain in a sensation of pain is radically (categorically) different from the presence of pain in a thought of pain. If Descartes holds that sensations have no objective reality, then it is because he recognizes this categorical difference and not because, as Wilson argues, they have no cause (and, therefore, are not subject to IV and V).

Unfortunately, Descartes provides ample evidence that he includes sensation under IV and V. Two features of Descartes' argument mislead Wilson: (1) the argument from imperfection and, (2) the role of harmony theories in Descartes' philosophizing.

It is fairly easy to understand Descartes' account of the causes of sensation and at no point does it involve the idea that sensations have no cause. Descartes uses a variant of Suarezian harmony to explain how bodily states give rise "by nature" to sensation. Roughly, harmony theo-
ries countenance a very broad sense of causality in which it is suffi-
cient that a state be necessarily connected to another for it to be a cause. The necessary connection must be exponible in terms of the natural states of the entities involved—a condition which turns out to be satisfied by a rather broad range of properties. Causes can even be 'metaphorical' or final (in Suarez’ terminology) in the sense that we can say "x causes y" because we can form (on general metaphysical grounds, e.g., by an appeal to the first and adequate cause) law-like statements about their relation.72 Wilson's argument requires that states which "arise from 'some defect in my nature'"; i.e., out of imperfection, be uncaused: an untenable claim. One need only reflect upon the famous tradition of Augustine's motus defectivus in Augustin's De libero arbitrio voluntatis. Evil arises from our imperfection and is a mere nothing
in the sense in which there really is no separably existing evil (which the Manicheans held). Evil is the lack of qualities which ought to be had, i.e., a restriction of the perfection or being of a thing. Since two polar opposites don't exist (good and evil), it is false that to be less good means to participate in more evil. It really means that it lacks the qualities it ought to have to exist in the fullest degree. Evil doesn't really exist but things are more or less good according as they have more or less properties perfecting them. Good and being are like intensive magnitudes so, in a sense, "non-being" doesn't mean "nothing" simpliciter, it means "less being", "less good", "less perfection" or "fewer properties than it ought to have". Descartes' position is so clear on this point (and he uses it so frequently) that we need not add any commentary to his words: "Such ideas obviously do not require me to posit a source distinct from myself. For on the one hand, they are false, that is, represent non-things, I know by the natural light that they arise from nothing—that is, they are in me only because of a deficiency and lack of perfection in my nature. If on the other hand they are true, then since the reality which they represent is so extremely slight that I cannot even distinguish it from a non-thing, I do not see why they cannot originate from myself". It is in this sense of "nothing" Descartes employs when he says that sensations have no cause. He does not, as Wilson and Normore argue, imply that the phrase means "uncaused". He merely means to emphasize (as he points out to Gassendi) that the ideas of physical objects might originate from the mind.

Two things are noteworthy about his remarks to Gassendi and the corresponding discussion in the third of the Meditations. First of all, he does not say that all the ideas he is considering are materially false simpliciter. The Cartesians later learn to live with the claim that sensory ideas (sensations) are intrinsically obscure and confused. What they have trouble explaining is how the same sensory ideas qua materially true can be clear and distinct: more on this point below. The second point worth emphasizing is Descartes' tying this part of his argument to the sixth of the Meditations. For, in the latter context, he is using the passivity of sense to argue that the cause of the ideas of sense must contain, eminently or formally, the objective reality in the idea. Unless such a cause exists, God is a deceiver. Descartes clearly believes that the ideas of sense are extremely confused and, in some respect, totally indistinct. The objective reality may not be of a high grade of perfection but it isn't none—somehow, the notion of a minimal degree of perfection is supposed to make sense of this: corporeal objects "may not all exist in a way that exactly corresponds with my sensory grasp of them, for in many cases the grasp of the sense is very obscure and confused . . . at least they possess all the properties which I clearly and distinctly understand . . .".

Apparently, to protect Descartes from the absurdity of saying that pain can be merely objectively in an idea, we have to take him very seriously when he argues that in some way there is a phenomenological difference between the experiences of proper sensibles (e.g., this perception of pain and red) and the experiences of the common sensibles (e.g., the perception of figure). Can we plausibly do so when he so frequently contracts the divisions of cognition (common to the faculty psychology) into one faculty?

Descartes often appears to be isolating (if not distinguishing) thought from sensation, for example, in the paragraph ending atque nihil
He frequently hedges in ways which lends itself to distinguishing grades of sense—perhaps this would help: & ideo puto sensum illum, sive ideam caloris, a re a me diversa. What is the force of the 'sive' here? Is he invoking an implicit distinction between intellect and sensation to persuade his audience?

If we are to acquit Descartes of the charge of conflating sensation and thought, we must find him developing the distinction between cognitions in two theses.

First of all, it would require Descartes to articulate causal principles other than IV and V. These principles would govern the perplexing interaction between mind and body: confusi quidam cognitandi modi ab unione & quasi permixtione mentis cum corpore exorti (AT VII, 81). The most prominent place where Descartes features an explanation anything like this is Meditation IV. It would be necessary then, to regard Meditation VI as relying on a version of causal harmony (like the one found in Suarez) to explain the causal interaction between the pineal effluence and mind.

Secondly, we would have to take Descartes to be drawing a distinction between sensorily experienced qualities (at the second grade of sense) and intellectively experienced qualities at the third. He frequently appears to be drawing such a distinction. A successful interpretation along these lines would have the common sensibles on the side of sense and the proper sensibles on the side of intellect. As I mentioned previously, the Cartesians have trouble with this point. It is evident in Bayle (1647-1706) how problems occur. In his recitation of Simon Foucher's (1644-1706) argument against the Port-Royalists, he remarks, "Why then would you dare to say, 'Since certain bodies appear large to one animal, medium to another, and very small to a third. I ought to affirm that in general they are extended, though I do not know their absolute extension?' This argument illustrates how difficult the question of sensory presence was for the Cartesians. Watson claims that Le Grand maintains the distinction between sensations (of outer sensibles) and ideas (of primary qualities) inasmuch as the latter can exist only ideally in the mind. I find that Le Grand sometimes appears to treat indifferently the sensory presence of color and the ideal presence of extension in experience.

Clearly, qualia have to be in cognition either formally or objectively. Descartes' contemporaries had trouble trying to figure out whether or not the presence of a shaped-expanse-of-red was the sort of thing that could occur in sense. Could red be there without shape being present somehow? If not, then shape may occur in two ways, sensed and thought. Descartes frequently opens the door to this problem, e.g., in itemque \ quod ex istius coloris extensione, terminatone, ac situs . . . We reason from an expanse of red to cognition of pure magnitude (see also the related passages in the Optics, VI). By 1713, Berkeley was still separating the epistemological problems relating to the primary/secondary quality distinction from the ontological problem of their presence. The problems faced by the Cartesians are exploited by Foucher. He cannot find any justification for denying that where there is color, there is also extension and figure. The cognition of extension must be as sensible as the cognition of color. As Bayle notes in commenting on Foucher's skepticism, "Today the new philosophy speaks more positively.
Heat, smells, colors, and the like, are not in the objects of our senses. They are modifications of my soul. I know that bodies are not at all as they appear to me. They would have wished to exempt extension and motion, but they could not. For if the objects of our sense appear colored, hot, cold, odoriferous, and yet they are not so, why can they not appear extended and shaped, in rest and in motion, though they are not so?"92 Behind Foucher's challenge is the question of whether there can be any real difference between cognitions of color and cognitions of shape. Since he finds no articulated difference, he challenges the Cartesian's to block the skeptical arguments against the knowledge of primary qualities.

If Descartes is to maintain the above distinctions between pure sense and pure thought, he must grant that cognition has a structure such that this is a live possibility. But, he has discarded conspecificity and the doctrine of formal concepts which had borne the burden of articulating the necessary structure. On the side of concept formation, while principle V ostensibly eliminates the need for a lengthy appeal to the generation of the forms of (pure) thought, Descartes does not have a theory with enough articulation to provide even a modest account of the required forms. When questions arise, he refers all questions to principle V, which he thinks summarizes the intuitions appealed to by the Scholastics. On the side of the causes of sensation, Descartes invokes the familiar doctrine of causal harmony to explain how they arise due to the coordination of mind and body. But his extrapolation of causal harmony does not provide an account of the intrinsic structure of sensation which clarifies how a non-cognitive state (in the pineal system) initializes a cognitive sensory state. These deficiencies did not escape Descartes' contemporaries. Foucher (1673) led the attack against the Cartesians for their separation between causes of sensation (color, sound, taste, smell, etc.) and causes of pure perceptions (extension, figure, motion, etc.).93 Spinoza and Leibniz attacked Descartes' version of the harmony theory.94

1.4 CONCLUSION

Both Cartesian positions we have explored apply the causal principles differently in the case of sensations and intellections. The orthodox Cartesian, working as he is with a scholastic doctrine of mental forms, presupposes that it is possible to reduce objective reality to manners of cognition; Caterus' Cartesian does not have the option. It is evident from Descartes' response to Caterus and Gassendi that he often tends towards a causal explanation of conceptualization which his contemporaries regard as incoherent. His problems arise because the way out of Caterus' problem involves supplementing his doctrine of intentionality with a full-scale theory of mental forms (as implied by the orthodox position). If he doesn't, then it appears that his causal principles won't work: concept formation will be impossible. However, this variant relies on a theory of mental forms—a doctrine of intentionality (like the Suarezian)—that Descartes cannot accept because he has rejected conspecificity on scientific grounds. Hence, his escape avoids the problem of fitting an unwanted quartum quid into the explanatory causal scheme, but commits him to a position which he ought to feel discomfort in embracing.
ENDNOTES

1 This note is confined to general remarks on the debated question of the "true" doctrine of Suarezian intentionality while more detail is given in 1.1.1 below. My subsequent argument depends on the claim that, in Suarez, there is no real difference between being an object-of-thought and being a thought-of-an-object. In some respects this claim is compatible with the position recently taken by Normal Wells in the Journal of the History of Philosophy, (January, 1984). However, I take the position that the identity results from an attempt to view cognition "modally". On this view, Descartes' definition of an idea as a 'form' of thought bears explanatory significance. My interpretation attempts to say exactly what it is. Wells cites Cronin's work (see n. 14, p. 25) in which we find a reference to the famous definition of thought and the object of thought given in DM 2.1.1. A glance at Cronin's notes on pp. 228-23 indicates that he sides with Copleston in finding that Descartes' term "form" retains none of its scholastic meaning: Gilson (his opponent) disagrees, as do Wells and I.

2 There are several features of the definitions of "idea" and "objective reality" that are important to our topic: "By the name idea I understand the form of any cognition, through the immediate awareness of which I am conscious of that cognition. . . . By the Objective Reality of an idea, I mean, the entity of the thing represented by the idea, in so far as it is in the idea; and in the same way we can speak of objective perfection, objective device, etc. For whatever we perceive as in the objects of our ideas, these are in the ideas objectively" Oeuvres de Descartes, ed. Adam and Tannery (Paris: Vrin, 1956 ff.) cited hereafter as AT, volume VII, 160-61; and E. Haldane and G. Ross, The Philosophical Works of Descartes (Cambridge: Cambridge University Press), cited as HR, volume II, 52-3: appendix to the Second Meditation.

3 AT VII, 102; HR II, 10.


5 The phrase "being of a thought-of-an-object" is meant to capture the flavor of Suarez' frequent references to the esse of the esse objectivum. Descartes and Suarez use phrases like "objective reality" ambiguously, sometimes applying them to the being of being-an-object thought (the esse of the esse objectivum), sometimes to simply being-an-object-thought (the esse objectivum as such). Some of the confusion about Suarez' and Descartes' theories can be traced to this tendency.

6 Cæterus in Objections I, AT VII, 92; HR II, 2; and Gassendi in Objections V, AT VII, 289; HR II, 161.

7 AT VII, 92-93; HR II, 2.

8 AT VII, 103; HR II, 10.

9 AT VII, 194; HR II, 3.
10 AT VII, 103; HR II, 10.

11 AT VII, 103; HR II, 11.

12 Why Suarez? Among the hundreds of studies on Suarez' influence, one might begin with Fidel Garcia's article in Pensamiento, vol. 4 (Madrid: 1948); John Doyle's "The Metaphysical Nature of the Proof for God's Existence According to Francis Suarez" (University of Toronto, Dissertation, 1966), Chapter 1, n. 74; Etienne Gilson's Index Scholastico-cartesien (Reprinted New York: Franklin, 1963) and Etudes sur le rôle de la pensée médiévale dans la formation du système cartesien (Paris: J. Vrin, 1951); T. Cronin's Objective Being in Descartes and Suarez (Analecta Gregoriana: vol. 154, 1966, 31-6). Descartes himself mentions Suarez (AT VII, 235, 95) and Eustasius a Sancto Paulo (Summa philosophiae quadripartita, AT VII, 185, 232, 251, 259, 470) but Eustasius' work on intentionality is of the parasitic type typical in the encyclopedic tradition. I find that Toletus' (1532-1596) view (Commentaria, una cum quaestionibus, in universam Aristotelis logicam [Cologne: 1583, 3]) on formal and objective concepts has the same precision reflected in Suarez' view in Cod. salmanticense, Ms 583, De Anima, disp. IX, q. 3, fol 217v-218r, but Toletus provides no details. Fonseca (1528-1599) (Commentarii in libros Metaphysicorum Aristotelis stagirita, tomi quatuor, q. ii, sectio 1) and Eustasius gloss over the important distinctions between levels of formal and objective concepts but their interpretation of the intelligible species (not to be confused with the express species) appears to be mainstream (n.b.: Cronin fails to make these distinctions on pp. 34-5). The deferential character of the occasional references to Toletus in Pavia, no. 135 (Expositio librorum De Anima R.P. Francisci Suarez in the University of Pavia (Italy) library) indicate to me that Suarez must have been familiar with the works of Toletus in the early 1570's but the systematic development of a theory of intentionality using the objective/formal being distinction simply does not exist before Suarez. I have found no references to accounts more comprehensive than those we find in the Metaphysical Disputations and On the Soul. This, taken in conjunction with later (mid-16th century) references to Suarez' theory, has led me to regard the existence of some other source than he as a myth.

13 Complete accounts of the Suarezian theory can be found in Cronin op. cit.; E. Elorduy, "El Concepto Objectivo en Suarez" Pensamiento 4:335-425, 1948 and in Suarez' own commentary on the De Anima. Cronin's work suffers from his reliance on a corrupt text of the De Anima but it is readily available and serves well as an introduction. Suarez' own presentation in the Disputations is clear enough for Leibniz to have remarked that it reads like a novel. One should also refer to Vasquez, Lyons, 1631 In Iam Partem, D. 76, c.1. (293); D. 70, c.2.5-8 (277), D. 75, c.3, 15-16 (292). A contemporary of Suarez with whom Suarez disagrees.

14 Geach has a similar characterization "What makes a sensation or a thought of an X to be of an X is that it is an individual occurrence of that very form or nature which occurs in an X—it is thus that our mind "reaches right up to the reality": what makes it to be a sensation or thought of an X rather than an actual X or an actual X-ness is that X-ness here occurs in the special way called esse intentionale and not in the "ordinary" way called esse naturale. This solution . . . shows how being of an X is not a relation in which the thought or sensation stands but is simply what the thought or sensation is . . ." (from Peter Shee-
If we want to correctly understand "consciousness" under this description, we have to be sensitive to the fact that for Suarez it does not involve reflective awareness.

The intentional relation between a cognitive state and its object is thought of in terms of the relation between the generic and the specific (this relation seems to provide an intuitive paradigm), and given the adherence to an abstractive theory of concept formation, there is a temptation to suppose that this generic-specific relation is an appropriate way of dealing with all levels of cognition. "Immateriality" gets parsed out in terms of the ostensibly clear relation between universals and particulars.

For a caveat, see DA.d.5.5.156ff.

The issues involved are summarized by Suarez in volume 1, book 2, DA.5.q.5.

DM 2.1.1. For comparative studies, see J. Hellin, "Sobre la unidad del ser en Suarez" Giornale di Metafisica vol. 3, 1948, 455ff; and see e.g., F.X. Marquart Elementa Philosophiae, seu brevis Philosophiae Speculativae Synthesis ad Studium Theologiae Manuducens, (Paris: 1937), cf. vol. I, 72 (a strong anti-Suareesian); and I. Quiñones, "Influyo del elemento psicologico en ciertos juicios acerca de los meritos de Suarez" in Actas del IV Centenario del Nacimiento de Francisco Suarez, 1548-1948, t. 1, 157ff. See also Marquart vol. 4, 23.

Descartes makes a great deal of this point: cf. AT VII, 161.5 and 102.5ff. In order to appreciate the tangle of issues involved in these differences of opinion one should first turn to Francis Wade's translation of Cajetan's "Commentary on Being and Essence" (Marquette University Press, 1964), 23, n. 68 for the relevant background and then to Cajetan's use of the distinction (67-71, 122-24).

For the exposition of objective or representative reality, see De Deco (Vives ed.) 11, 13.1:1.93: De Deo 1,1.b.2,c.13 num. 3: De Inc. q.25.a.3.d.54.sect.4. num. 818,621 (Vives ed.).

The various positions are described in the Salamanca manuscript num. 583 "Francisci Suarez Societatis Iesu Commentaria una cum quaestionibus in libros Aristotelis De Anima" disp. IX, q. 3, fol. 217v-218 and (less clearly) in Alvarez' edition, DA. 4.3.21. See also, DA.d.5.5.7 Franciscus Suarez' De Anima edited by Salvador Castellote, (Madrid: 1978 and
1980). Aside from attacking Cajetan, Suarez' denial that the mind is a mirror is probably a rebuttal of Vazquez, D.38,c.4.26, 150. Vazquez would also have said that the species expressa is the verbum and that both are ipsa cognitio vel intellectio but he doesn't see Suarez' insight that this still leaves us with a superfluous object.

25 DA.d.5.q.5.1.
26 DA.d.5.q.5.2.
27 See also Vazquez, Opera, (Lyons: 1631), D.38,c.2.5, 147.
28 De fine hominis, d.7,s.1. num.61; vol. 4, 87-8 (Vives ed.).
29 De Deo II, 13,1; 1,93 and De Inc. q.25.a.3.d.54.sect.4.num.8; 18, 621 (Vives ed.). See also De Inc., d.54, sect. 5,q.25.a.3; 18, 638.
30 Cf. De Auxil., opus. II,8.a.6; 2,328 (Vives ed.) and De Auxil., opus II, 8.9; 11,329.
31 DM 54.2.13.
32 See DM 54.2.13.
33 Note that this is what his realism comes to.

34 Many philosophers have been misled by B. Alvarez' egregious emendation (4.3.21; 728-29) of the redaction S, Ms 583, 217v-18. See the comments in Castellote, lxii "sobre el problema del 'conceptus objectivus' del que el editor Alvarez da mas bien la interpretacion de Cayetano que la de Suarez, anadiendo expresamente 'conceptus objectivus' alli donde el Manuscrito solo dice 'prima intentio objectiva'". They believe that the objective concept must be the reality objectively present in the first order thought.

35 Suarez tends to conflate immediate retrospection with simultaneous introspection.

36 Cognitive acts exhibit considerable complexity, one can easily speculate that this tradition was influential in the development of the Leibnizian and Kantian positions.

37 In some ways, this paper contributes to a long-standing debate. On occasion, Descartes remarks that qua modes of thought, ideas are the same (AT VII, 40; HR I, 162) but at the same time, he distinguishes between (a) ideas as modes and, (b) ideas as forms. An example will clarify the difference. With respect to (a), on analogy with the way that two states of extended substance qua substance are indifferent, two modes of mental substance qua substance are indifferent: they are alike in being modifications of substance. On the other hand, just as matter partakes of different forms, so too does mental substance: with respect to (b), just as we can say that different chunks of matter comprise different bodies, similarly we say that different forms comprise different mental states (i.e., ideas). Distinct ideas are as different as one informed piece of material substance from another. Two bronze statues are (as in (a)), equally, modifications of bronze but they may not be the same statue (as in (b)). When Descartes calls ideas form (AT VII, 232, 37, 160, 188,
181), he treats them in sense (b) and, in two of these occasions (232, 181), he distinguishes the two senses. When he refers to Suarez (AT VII, 235), it is obvious that he needs the distinction. I do not agree with either Cronin (op. cit., 11) who maintains that the Cartesian use of "form" retains none of its scholastic implications or Gilson (Discours de la Methode, text et commentaire, 319), who wants to emphasize its kinship with the Scholastic concept. My argument cuts across both sides of the debate: my thesis is that Descartes often presupposes the doctrine of formal/objective being (forms of the mind) but that he is not entitled to it.

38 AT VII, 93; HR II, 2.

39 It should be obvious that Suarez is a realist because he reifies the relation which upholds the extrinsic denomination; a very odd theory of relations.

40 AT VII, 290; HR II, 161. I have inserted the italics to emphasize the point at which the orthodox interpretation intrudes into Gassendi's comments.

41 AT VII, 165; HR II, 56.

42 AT VII, 135; HR II, 34.

43 See, for example, Thomas Aquinas, S.T., I.4.2; Descartes states the first as nihil est in effectu quod non praebetur.

44 AT VII, 135. See Scotus' remarks on self-evidence with respect to these principles in IV, d.12. q. 3, n. 12.

45 "The thing caused is in the cause according to the nature of the cause; the cause is in the thing caused according to the nature of the thing caused". Lect. xii.

46 AT VII, 135.

47 Compare Proclus, Elements of Theology. Trans. E. Dodds, (Oxford: Clarendon Press, 1963), prop. 7, p. 193. Dodds refers to this principle as that, "on which the whole structure of Neoplatonism is really founded". He provides several helpful citations as well as a discussion of vertical causation and the key themes of perfection, completeness and self-sufficiency.

48 Aristotle, An. Post., 1.2, 72a 26ff: "That on account of which something is such, has itself such and more perfection".

49 See Proclus, The Elements of Theology, prop. 7.

50 Dodds, 217 offers some helpful commentary on this puzzling principle.

51 See Dodds' commentary, 77-8.

52 Dodds, 75.

53 Dodds, 21, 200, 242.
54 Dodds, 242.

55 See Thomas Aquinas, ST I.104.1 and CG 2.21.

56 Gassendi, for example, makes some rather non-standard claims (AT VII, 366) which Descartes can reasonably rebut. In this context, he restricts the causal principles to the efficient cause in a way the scholastics would find appropriate only if he were talking about the total efficient cause (God). Descartes does this enough (i.e., extend the concept of the total efficient cause to the efficient cause) to see in him a temptation to say that there is really only one efficient cause.

57 Ibid. For a Cartesian commentary on the principles, consult Watson's The Downfall of Cartesianism, (Nijhoff: 1966), 33.

58 See 1.3.2 below.

59 He finds it uniting two cognitions while Descartes uses it to correlate the pattern of the effluence of spirits (from the surface of the pineal gland) with a cognition. Cf., e.g., Pavia 301v in contrast to Alvarez' DA 4.2.13.

60 Cf. De Deo 2, 12.5 & 6; 1.87 (Vives ed.) and DM 8.4.2.

61 Resp.2ae, VII, 135.11-16; HR II, 34.

62 AT VII, 41; HR I, 162.

63 Principles which are the "opposite" of V are not hard to find. The notion that the effect preexists in a more perfect way in an idea frequently appears in discussions of Ideas as the total, exemplary causes: "In the divine wisdom are the models of all things, which we have called ideas—i.e., exemplary forms existing in the divine mind . . . . In this manner, therefore, God Himself is the first exemplar of all things." Thomas Aquinas, ST I.44.3. Naturally, in the case of God, the effect preexists in a more perfect way in its cause.

64 Strictly speaking, Suarez would argue that the objective reality of cognition can only be distinguished from the formal reality of cognition in a second intentional thought; in which case, the objective reality is distinguished from the formal reality by reason reflexively directing itself upon the nature of its own acts. Objective reality, as the object of a second intentional cognition, is regarded as the esse of the esse objectivum. Both Suarez and Descartes played on the ambiguity of "objective reality": at times applying it to the first intention and at other times applying it to the object of a second intentional act.

65 Reference to the objective reality or intention of an idea is eliminated in favor of a reference to the role of mental words in inner speech (a special case of determinate varieties of consciousness).

66 Liber de Causis, lect. xii.

67 See Watson (op. cit.), 33 and Wilson (op. cit.), 27, although they do not provide an informed account of the role or nature of these principles in Descartes.
I regard this jump from the existence of a thought with a structure to the existence of an occurrent case of a determinate kind of consciousness as the myth which perpetuates Aristotelian theories of mind: it leaves unexplained the nature of consciousness itself.

See 1.1.2.


The Philosophical Writings of Descartes, trans. J. Cottingham, R. Stoothoff and D. Murdoch, (London: Cambridge University Press, 1984); hereafter, CSM, Volume II, 30; AT VII, 44. See also CSM II, 38; AT VII, 54 where Descartes belabors the point—significantly, in the context of the problem of evil. Please note how Descartes links the notion of lack of perfection to obscurity and confusion. I'll say something about this in a moment.

CSM II, 253; AT VII, 367.

Wilson does not recognize the incoherence of the position defended on p. 114 of Descartes.

CSM II, 55; AT VII, 79.

CSM II, 55; AT VII, 80.

Cf., for example, HR I, 39, AT VII, 71-2 (HR I, 185); 73 (HR I, 186); 268 (HR II, 175); 358-9 (HR II, 208-9).

AT VII, 437.

AT VII, 38.

See also . . . oriturque ex eo quod mens cerebro tam intime conjuncta sit (AT VII, 437) where Descartes is explaining the second grade of sense appearing in Meditation VI.

I find causality spelled out in terms of harmony fairly obvious in the sixth meditation. In general, causality as harmony was common among people working in psychology but Suarez, as far as I have seen, is the only one to clearly promote it as a solution to the problem of concept formation.
Compare AT VII, 74: 1-5. Also, AT VII, 34: 21-30 and AT VII, 33:22-25. Nancy Maull, in "Cartesian Optics" in Descartes: Philosophy, Mathematics and Physics. Ed. S. Gaukroger, (Sussex: 1980) argues that there is a distinction between reflective and unreflective judgments about sensations (33) and sensations (see the letter to Arnauld, July 29, 1648; AT V, 219). D. Clarke in Descartes' Philosophy of Science, (Penn State: 1982) argues for a distinction between sensations, observations, pre-reflective judgments and reflective judgments (32).

Dictionary, (NY: Bobbs-Merrill, 1964, LLA)
Bayle, 365.
Watson, 38.
Antoine Le Grand, An Entire Body of Philosophy, WING, AC A3, reel 215, 9 and 326.
AT VII, 437, 11. 27-8.
Three Dialogues, I, the 144th time Hyias responds.
Critique de la verite, (Paris: Martin Coustelier, 1675).
Cf. Watson, op. cit., 69.
Dictionary, 197. Cf. the articles on "Pyrrho", note B; "Zeno", notes G and H and see Popkin's note, 197, on Berkeley and Hume.