

DESCARTES: IDEAS AND THE MARK OF THE MENTAL*

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Although Cartesian scholars rarely agree on even the most fundamental aspects of Descartes' theory of ideas--e.g., what ideas are, how they represent, what clarity or material falsity are--almost all of them agree that Descartes creates a novel manner of understanding the mental in terms of cognitive transparency.¹ This is an interpretation of Descartes' view of the mind according to which I cannot fail to know with certainty that I am thinking and what it is that I am thinking while I am thinking about it. In the case of ideas, this interpretation says that we always have an immediate and infallible access to the object represented by an idea, and that this is the mark of the mental--to use Rorty's phrase²--i.e., that this is one certain mark by means of which we can tell that a particular representation is a mental operation.

Here I shall put forward some compelling reasons to reject this manner of understanding ideas--and thus the realm of the mental--in Descartes and shall defend an alternative interpretation according to which there is a distinction in Descartes between what an idea appears to represent and what it represents--a distinction which entails that we do not necessarily have either an immediate or an infallible access to the object represented by an idea.³ I argue that my interpretation explains naturally Descartes' contention that some ideas are materially false; that it allows us to make clear sense both of the controversy that took place between him and

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Arnauld concerning the notion of material falsity, and of various passages that in other interpretations appear irremediably obscure. I further argue, against some scholars, that the notion of material falsity has no disastrous consequences for Descartes.⁴ In contrast, in her early writings, Margaret Wilson expresses the view that the notion of material falsity is a disaster "because it entails that the objective reality of an idea is not something the idea wears on its face."⁵ Here I argue that the notion of material falsity in Descartes indeed entails that we cannot always immediately tell what object an idea represents; that, nonetheless, nothing like a veil of illusion threatens Descartes' project on account of this entailment.

Furthermore, in the last two sections of the paper, I show how the Cartesian notions of clarity and distinctness, and of obscurity and confusion, can be satisfactorily explained within an interpretive framework which incorporates the distinction between actually representing and seemingly representing, and I argue that this manner of understanding the aforementioned notions both is textually adequate and coheres nicely with the views previously developed. I also show how to articulate logically most of my views--something which will help to further illuminate and support them.

I. Ideas and Cognitive Transparency in Descartes.

One finds in Descartes a surprisingly large number of passages which directly suggest that he made a distinction between what an idea appears to represent and what it actually represents. In this section, I shall present and examine most of these passages. The first hints we get of Descartes' acceptance of this distinction can be found in a set of key passages in which he asserts that an idea may contain implicitly many perfections of which one is not immediately aware. For example, in the fifth Replies, he says:

Once the idea of the true God has been conceived, although we may detect additional perfections in him which we had not yet noticed, this does not mean that we have augmented the idea of God; we have simply made it more distinct and explicit (expressior), since, so long as we suppose that our original idea was a true one, it must have contained all these perfections. (AT VII 371; my emphasis)⁶

Furthermore, in the letter to Mersenne of June 16, 1641, Descartes says:

if from a constructed idea I were to infer what I explicitly (explicite) put into it when I was constructing it, I would obviously be begging the question; but it is not the same if I draw out from an innate idea something which was implicitly contained in it but which I did not at first notice in it (quidem in ea implicite continebatur, sed tamen prius in ipsa non advertebam). (AT III 383)

Moreover, concerning obscure and confused ideas--some of which are false--one often cannot begin to tell what they represent. An idea is called 'obscure and confused', Descartes says, "because it contains some element of which we are ignorant (aliquid continetur quod est ignotum)" (AT VII 147). And, in the third Meditation, he initially says that he thinks of sensible qualities so obscuredly and confusedly that he does "not know (ignorem) whether they are true or false, that is, whether the ideas I have of them are ideas of real things or of non-things" (AT VII 43).⁷

Notably, there is also the manner in which Descartes explicitly characterizes ideas in the third Meditation:

Some of my thoughts are as it were the images of things (tanquam rerum imagines), and it is only in these cases that the term 'idea' is strictly appropriate. (AT VII 37)

Ideas, he says, are tanquam rerum imagines. In a later passage in the same Meditation he drops the 'imagines', and says that "there can be no ideas which are not as it were of things (tanquam rerum)" (AT VII 44). The French version of this passage reads as follows:

there cannot be any [idea] which does not appear to us to represent some thing (ne nous semble représenter quelque chose). (AT IX-1 34-35; my translation)

Ideas are those of our thoughts which are as it were of things; each of them appears to us to represent some thing, some res. A number of Cartesian scholars overlook the Latin 'tanquam' ('as if' or 'as it were') as well as the French 'semble' in the above passages.⁸ Throughout this paper, however, I will try to show that, in distinguishing between an idea's being tanquam rerum and its being rerum--i.e., between an idea's appearing to represent a thing, and its actually representing it--Descartes is opening the door to the possibility of speaking intelligibly of the falsity of ideas; something which, as we shall see, Aristotelian Scholastics could not do. Indeed, the very characterization of material falsity in Descartes makes use of that distinction. To appreciate this, let us examine now the Cartesian concepts of judgment and of falsity.

Descartes distinguishes, first, ideas from judgments, and secondly, the falsity of ideas (that is, material falsity) from the falsity of judgments (i.e., formal or proper falsity). Ideas are distinguished from judgments in the following manner: although both are mental operations, the former are more basic than the latter, since any judgment presupposes the existence of at least one idea--i.e., the idea of the object about which the judgment is--while ideas do not presuppose judgments. Further, whereas ideas belong to our faculty of perception, judgments are acts of the will.⁹

Additionally, although in the third Meditation Descartes says that, properly or strictly speaking, ideas cannot be false (AT VII 37), a few pages later he goes on to add that there is an improper sense in which one can intelligibly say that some ideas are false:

For although, as I have noted before, falsity in the strict sense, or formal falsity, can occur only in judgements, there is another kind of falsity, material falsity, which occurs in ideas, when they represent non-things as things (non rem tanquam rem repraesentant). (AT VII 43)

Thus, concerning an idea--concerning, at least, a materially false idea--it makes sense to distinguish what the idea represents, from how it represents it; a materially false idea represents a non-thing (non res) as if it were a thing (res). But what does this mean? According to Descartes, non-things are (formally) unreal; and this is to say not only that non-things happen not to exist but also that they cannot exist.¹⁰ For example, in the third Meditation Descartes initially says that we cannot tell, of our ideas of sensible qualities, whether these "are ideas of real things or of non-things" (Ibid.); and in the French version, this statement is expanded to include an explanation of 'non-things':

I do not know . . . whether the ideas of those qualities of which we are aware are in fact the ideas of some real things, or whether they represent to me nothing but some chimerical beings which cannot exist (êtres chimériques, qui ne peuvent exister). (AT IX-1 34; my translation and emphasis)¹¹

Non-things are in complete opposition to real things: the former are not (formally) real and cannot exist;¹² the latter are (formally) real and can exist. Later, in section IV, I shall

complete my defence of this manner of understanding the notions of a non-thing and of material falsity.

But for the moment we can conclude the following points, which the aforementioned passages clearly suggest:

(1) that Descartes is committed to rejecting the view that an idea has to be wholly cognitively transparent since (a) sometimes an idea contains things we do not immediately notice;¹³ (b) sometimes we cannot tell whether an idea represents (objectively contains) a thing or a non-thing; and (c) sometimes it represents a non-thing as a thing (*tanquam rem*); and

(2) that Descartes realizes that his accounts both of (i) the distinction between innate and factitious ideas,¹⁴ and of (ii) the distinction between clear and distinct ideas, and materially false ideas, require that he makes some sort of distinction between what an idea presents in an explicit or immediate fashion--what it appears to represent--and what the idea contains implicitly.

Additionally, a close examination of the exchange between Arnauld and Descartes concerning the notion of material falsity, further supports contentions (1) and (2) above. In the next section, I look at some of the concepts in Aristotelian Scholasticism whose grasp--as I argue in section III--is essential to construct a deeper, coherent, and more adequate understanding of the Arnauld-Descartes exchange, and thus of the Cartesian notions of idea, material falsity, clarity and distinctness, and obscurity.

II. Non-Judgmental Falsity in Aristotelian Scholasticism.

In this section, I present and examine the reasons why Descartes' notion of material falsity could appear very problematic to a philosopher like Arnauld.¹⁵ It is my contention that Arnauld is worried about a traditional objection to the view that non-judgmental cognitions--that

is, cognitive acts or operations distinct from, and more basic than, judgments--can be false; an objection which is ultimately grounded on some of the fundamental tenets of an Aristotelian-Scholastic account of cognition and mental representation. I shall briefly present these tenets. Also, I will compare Descartes' notion of material falsity with Suarez's two notions of falsity as applied to non-judgmental cognitions, and will conclude that Descartes' notion is substantially different from Suarez' notions. This will help us to begin to understand Descartes' notion of material falsity by grasping what this notion is not. However, the defence of my interpretation of material falsity in Descartes shall be completed in section IV.

In Aristotelian Scholasticism, the hylomorphic theory of substance is inextricably intertwined with the theory of cognition and mental representation. In a nutshell, the view is that to be able to know, to think about, and to sense a certain thing, the very form of that thing must be found in the appropriate cognitive faculty. The forms, as they are in a certain faculty, are called species.¹⁶ Thus, for the philosophers in this tradition, knowledge of an object is brought about through the information of a faculty by the species of that object,¹⁷ and the relationship between the cognitive act and its object is one of conformity. Suárez, for example, explicitly states this consequence: "it is necessary that what represents and what is represented conform to each other" (DM IX, 1, 14). The act of simple non-judgmental cognition,¹⁸ he adds, "cannot disagree (difformis) with a thing in so far as it is the object represented" by that act (Ibid.); because if the thing in question is truly represented by the act, then "there will be a conformity (conformitas) between them" (Ibid.)¹⁹

I shall call the view that the object of a non-judgmental cognition must possess all--though not necessarily only--the properties that are depicted in the cognition, the principle of

conformity. The acceptance of this principle by the Aristotelian Scholastics, I suggest, is grounded on their account of cognition and representation in terms of the presence of forms, or species, in a cognitive faculty.

Yet the principle of conformity seems to lead naturally to the view that, strictly speaking, non-judgmental cognitions cannot be false. On this point it is instructive to examine Suárez's views on the falsity of non-judgmental cognitions, since Descartes specifically refers to these views in his response to Arnauld's objection to the concept of material falsity,²⁰ and since, as we shall see, this objection echoes Suárez's own objection against non-judgmental falsity.

Suárez argues that a non-judgmental cognition cannot properly be false: if it were (properly) false, then there would have to be a disagreement or disconformity between the cognition and the thing that is the object of the cognition (i.e., the object represented); but no such disagreement can occur because, as we saw, "it is necessary that what represents and what is represented conform to each other (necesse est repraesentans et repraesentatum habere inter se convenientiam)" (DM IX, 1, 14).²¹

Note that both Suárez and Descartes agree that proper falsity applies only to judgments;²² yet, on the subject of the falsity of non-judgmental cognitions or ideas, they disagree. In particular, in what follows I will argue that neither one of the two Suarezian notions of non-judgmental falsity fits the definition of Descartes' concept of material falsity.

First, Suárez accepts that there is an improper falsity (falsitas improprie dicta) that applies to non-judgmental cognitions. This falsity occurs when a thing which is not represented by a cognition nevertheless closely resembles the object represented, a fact which may easily lead one to mistakenly judge that that thing is the object represented.²³ But this is not what

constitutes Descartes' material falsity which "occurs in ideas when they represent non-things as things (non rem tanquam rem repraesentant)" (AT VII 43). In this case, the idea gives occasion to error because what it represents is represented as, in some way, being other than what it is-- and not because there is another thing, not represented by the idea, which resembles the object represented; which is when Suárez's improper falsity arises.

Moreover, were Descartes' material falsity identifiable with Suárez's improper falsity, then there would have to be a resemblance between a thing (res) and a non-thing (non-res). Yet, as we saw above, there is no resemblance whatsoever between them, according to Descartes; indeed, they are in complete opposition. Thus, material falsity cannot be equated to improper falsity in Suárez's sense.

In addition, Suárez distinguishes another kind of falsity, called 'quasi-material falsity,' applicable to certain complex non-judgmental cognitions. This falsity occurs, e.g., when one entertains a false proposition without making a judgment as to its truth-value--as when I entertain the proposition that the Earth is flat. Falsity in this act, says Suárez, occurs "as if in a sign that, by itself, signifies falsity" (DM IX, 2, 4).²⁴ And although, according to Descartes, no judgment is constitutive of merely entertaining or having an idea, the material falsity of an idea could not consist merely in non-judgmentally entertaining a proposition that is contingently false. A materially false idea is one which represents a non-thing as a thing; and this means that the idea embodies the more radical--the categorical--mistake of depicting as possible an impossible thing. In section IV I further examine and defend this manner of understanding the Cartesian notion of material falsity.

Note that, by saying that ideas can be materially false, Descartes embraces the view that it is possible for an idea to misrepresent what it represents. Suárez denies this possibility--as we have seen--and so does Arnauld in his Objections--as we will try to show in the next section. In their view, an idea (or a non-judgmental cognition) cannot represent a non-thing as a thing, because ideas, qua representations, must conform completely to what they represent: for them, the principle of conformity belongs to the very essence of cognitive representation.

Descartes, on the other hand, appears to be caught in the horns of a dilemma: either he accepts the principle of conformity and rejects the view that ideas can be materially false (in his sense); or else he accepts this view and rejects the principle of conformity, in which case he is forced to fashion a whole new theory of mental representation. Prima facie, then, Descartes' position is incoherent since he accepts not only the possibility of material falsity but also, as we shall see, the principle of conformity. Yet Descartes' position in this respect is not incoherent because, as I have been trying to argue, he distinguishes what an idea represents--that aspect of the idea to which the principle of conformity applies--from what the idea appears to represent--the aspect of the idea to which, as we shall next see, the principle does not apply. In the next section we shall see that this is a plausible interpretation of the response that Descartes gives to Arnauld.

III. Descartes and Arnauld on Material Falsity.

Descartes' reply to Arnauld's objection concerning the notion of material falsity has been considered by most as either confused or incoherent.²⁵ But I think that his reply ceases to appear unintelligible once we adopt an interpretation which introduces a distinction between what an

idea appears to represent and what it actually represents--a distinction which, as we shall see, is suggested by Descartes also in his response to Arnauld.

The controversy between Descartes and Arnauld in the Fourth Set of Objections and Replies originates in the third Meditation where Descartes defines material falsity as that which occurs in ideas "when they represent non-things as things" (AT VII 43). He gives the following example:

Since there can be no ideas which are not as it were of things (tanquam rerum), if it is true that cold is nothing but the absence of heat, the idea which represents it to me as something real and positive deserves to be called false. (AT VII 44)

If cold is the absence of a positive property (that is, a negation), then the idea which represents it as something positive--as something real, and not simply as the negation of something real--is false.

Arnauld's objection consists of an argument for the conclusion that there cannot be materially false ideas. He says:

if cold is an absence, it cannot exist objectively in the intellect by means of an idea whose objective existence is a positive entity. Therefore, if cold is merely an absence, there cannot ever be a positive idea of it, and hence there cannot be an idea which is materially false. (AT VII 207)

Arnauld here is echoing Suárez's argument for the view that non-judgmental cognitions cannot be false because, as we saw in the previous section, there can be no disconformity between representing and represented: if cold were a non-thing, a non res (e.g., an absence), then its idea would have to represent a non res (not a res) and thus would not be false.

Notice that the soundness of Arnauld's objection does not depend on the truth of the supposition that cold is the absence or negation of heat, which implies the claim that heat is a positive property. In fact, the argument is applicable to any idea which represents a non-thing--be it a negation, a privation, or an impossibility--as a thing. Indeed, there is reason to believe that, according to Descartes, both the ideas of heat and of cold represent unreal things.²⁶ Yet, Arnauld's argument still applies: there cannot be an idea which represents the unreal (a non-thing) as something real (a thing), because there can be no disconformity between what represents and what is represented.

To Arnauld's objection, Descartes replies that "it is clear that he [i.e., Arnauld] is dealing solely with an idea taken in the formal sense" (AT VII 232); i.e., that the principle of conformity--which underlies Arnauld's objection--is relevant only when we are considering an idea formally. Descartes goes on to distinguish an idea taken materially from the idea taken formally, implying that Arnauld is confusing these two aspects of an idea in the formulation of his objection. Our ideas, Descartes says, can be considered from two different viewpoints:

when we think of them as representing something we are taking them . . . formally. If, however, we were considering them . . . simply as operations of the intellect, then it could be said that we were taking them materially. (AT VII 232)²⁷

There are, then, two different ways of considering one and the same idea: (a) materially, as a mode (operation) of thought; and (b) formally, as representing something and as containing (if any) a certain amount of objective reality.²⁸

Notice that an idea taken materially is typically interpreted as the idea without regard to its content.²⁹ However, the only passage in Descartes that supports this interpretation of an idea

taken materially is found in the third Meditation where Descartes says that between any two ideas, considered materially, "I do not recognize any inequality" (AT VII 40; my translation). Yet, later on, in the Principles of Philosophy, he modifies this statement, and says that our ideas, taken materially, "do not differ much from one another" (AT VIII-1 11). If indeed to take ideas materially were to consider them without any regard to their content, then ideas thus considered would not in the least differ from one another.

As I said, this understanding of an idea taken materially is widely shared; nevertheless, I am convinced it is mistaken. The problem with it, in my view, is that it presupposes that an idea represents something solely in virtue of its content: if, taken materially, an idea does not have the function of representing (a function which is characteristic solely of the idea taken formally), then--so the reasoning goes--to consider an idea materially is to disregard its content.³⁰

However, here I shall defend an alternative interpretation of an idea taken materially, according to which to consider an idea in this manner is to consider it in so far as it possesses an explicit or immediate content--a content which does not of itself have a representative function. To take an idea materially also is, according to this reading, to consider it in so far as it is tanquam rerum, as it were of something--i.e., as that which it appears to represent.

There are strong reasons to accept this interpretation of an idea taken materially. First, the connection between an idea's being tanquam rerum and its appearing to represent something, can be seen when one considers the French translation--authorized by Descartes--of the Latin phrase "nullae ideae nisi tanquam rerum esse possunt [there can be no ideas which are not as it were of things]" (AT VII 44): "Il n'y en peut avoir aucune [idée] qui ne nous semble représenter

quelque chose [there cannot be an idea which does not appear to us to represent some thing]" (AT IX-1 34-35; my emphasis and translation).

Furthermore, the connection between an idea taken materially and its having some sort of content can be appreciated through a further examination of Descartes' reply to Arnauld. So far, this reply has consisted in making the distinction between an idea taken materially (materialiter) and the idea taken formally (formaliter)--as, roughly, the distinction between an idea as a mental operation and the idea as a representation--implying that Arnauld's objection could not arise once we take into account this distinction. So far, however, it is not clear how the distinction can be a part of a response to Arnauld's concerns.

To appreciate how the materialiter/formaliter distinction can be part of a successful reply to Arnauld, we must notice that, in explaining the distinction, Descartes does not stop here; he further explains it as follows: taken materially, he says, ideas "have no reference to the truth and falsity of their objects" (AT VII 232; my emphasis)--i.e., taken materially, an idea has no reference to the (objective) reality or unreality of the object represented.³¹ Still speaking of the idea of cold, taken materially, Descartes adds:

Whether cold is a positive thing or an absence does not affect the idea I have of it, which remains the same as it always was. (Ibid., my emphasis)

Taken materially, then, the idea of cold is of cold without regard to the reality or unreality of its object.³² Yet this would not be possible if to consider an idea materially were to disregard its content--i.e., to disregard that (in some sense) it is of something. Further, this passage implies that the principle of conformity is not applicable to the idea taken materially: what cold in fact is--whether something real or unreal--does not affect the idea I have of cold, taken materially.

Additionally, when the question arises as to what the idea of cold represents--what the idea objectively contains³³--Descartes introduces a distinction between that to which an idea is referred and that to which the idea conforms; and explicitly says:

I think we need to make a distinction, for it often happens in the case of obscure and confused ideas--and the ideas of heat and cold fall into this category--that an idea is referred to something other than that of which it is in fact (revera) the idea. (AT VII 233)

But, he adds, the same is not true of our clear and distinct ideas. The clear and distinct idea of God, for example,

cannot be said to refer to something with which it does not correspond (conformis).

(Ibid.)

The occurrence of 'conformare' in this context is noteworthy--as it is noteworthy that, considering together the two previously quoted passages, we can conclude: (1) that to which the idea conforms is that of which the idea actually or in fact is; (2) that to which the idea is referred may sometimes differ from that to which it conforms;³⁴ and (3) conforming to something is not the only aspect or function of an idea.³⁵ Indeed, we saw that there are reasons to think that, according to Descartes, conforming corresponds only to the idea taken formally, i.e., the idea in so far as it represents.

These and previous passages also suggest (4) that the distinction between that to which the idea conforms and that to which the idea is referred is a distinction between (respectively) that of which the idea really (revera) is and that of which the idea merely appears to be; and (5) that the conforming/referring distinction corresponds to the distinction between (respectively) the formal and the material considerations of an idea.³⁶ If so, then an idea taken materially is

referred to X; but, again, this would not be possible if to take an idea materially were to consider it without regard to its content. Thus, there must be a sense in which one can appropriately say that an idea, taken materially, at least appears to be of something. In contrast, when we consider an idea formally--i.e., in its representing or conforming function--we can appropriately ask what it is that the idea actually represents.

IV. Non-Judgmental Falsity in Descartes.

Here I shall complete my defence of an understanding of the concept of material falsity in Descartes according to which a materially false idea is one which represents as real and possible a putative entity which is neither real nor possible.

In order to understand Descartes' concept of material falsity, I claim, it is essential that we grasp his motivation to introduce it. Staying within the bounds of the traditional theory of representation that revolves around the notion of conformity, Descartes wants to assert that there is something radically suspect with some ideas or concepts, not only with our sensory ideas of sensible qualities,³⁷ but also with some of the key notions of rival world views, such as the Aristotelian-Scholastics'; that these ideas and notions fail to correspond not merely to what is, but also to what can be. Thus, just as I can mistakenly represent--as possible, tanquam rerum--a triangle having the property of being such that the sum of its internal angles is 360 degrees without realising that there can be no such triangle, we also are sometimes confronted with certain ideas which represent to us, as possible and real, "things" which cannot exist.

For example, consider our sensory ideas of sensible qualities: when Descartes classifies these as materially false³⁸ and says that a materially false idea represents a non-thing as a thing,³⁹ he is not merely saying that the putative qualities these ideas seem to represent happen not to exist in the physical world. He saying something stronger; namely, that, unlike the shapes or figures we sensorially perceive which can actually exist in corporeal substances,⁴⁰ those putative qualities we sense--such as colours, heat or cold--cannot exist anywhere.

Descartes expresses variants of this idea in different texts: first, when he explains in the French version of the Meditations that the non-things which materially false ideas represent are "but some chimerical beings which cannot exist" (AT IX-1 34; my translation); secondly, when he says that our sensory ideas of sensible qualities "represent nothing real" (AT VII 234; my translation), and, in consequence, that these ideas lack objective reality⁴¹--something which could not be said of our ideas of shapes or figures, not even of those which belong to our faculties of imagination or of sense perception: our ideas of modes, according to Descartes, have some degree of objective reality, although to a lesser extent than our ideas of substances.⁴² The (clear and distinct) ideas of modes--even of those modes that do not exist--represent properties which can exist.⁴³ Saying, in contrast, that our sensory ideas of colour are materially false--that, in consequence, they represent nothing real and have no objective reality--amounts to saying that the putative qualities apparently represented by those ideas enjoy not even the reduced ontological status of modes; that they cannot be counted among the possible modes or qualities that inhere in substances.⁴⁴

In addition, a careful examination of what Descartes says to Burman in connection with this issue further supports my interpretation. Burman objected that "since all error concerning

ideas comes from the relation and application to external things, there seems to be no subject-matter for error whatsoever if they [i.e., ideas] are not referred to externals" (AT V 152).

Descartes replies:

Even if I do not refer my ideas to anything outside myself, there is still subject-matter for error, since I can make a mistake with regard to the actual nature of the ideas. For example, I may consider the idea of colour, and say that it is a thing or a quality (esse rem, qualitatem); or rather I may say that the colour itself, which is represented by this idea, is something of the kind [i.e., a thing or a quality]. For example, I may say whiteness is a quality. (Ibid.)⁴⁵

Notice that the mistake I may make lies not in supposing that there exists a white thing, since, even if I do not suppose this, says Descartes, "I may still make a mistake in the abstract, with regard to whiteness itself and its nature" (Ibid.) The mistake, hence, is of a more fundamental sort; it lies in thinking that whiteness is a thing, a possible entity, something that can have some degree of formal reality, like a quality or mode. Again, the mistake lies in thinking, in the abstract, that whiteness is a quality, i.e., a possible modification of a substance.

Furthermore, a number of other passages in Descartes suggest that the reason why he regards our ideas of sensible qualities as materially false, and confused, is that they purport to explicitly portray certain qualities in terms that are both physical and mental. One such passage is found in the Principles of Philosophy where he says that, when pain and colour "are judged to be real things existing outside our mind, there is no way of understanding what sort of things they are" (AT VIII-1 33), and adds:

If he examines the nature of what is represented by the sensation of colour or pain--what is represented as existing in the coloured body or the painful part (tanquam in corpore colorato vel in parte dolente existens, repraesentet)--he will realize that he is wholly ignorant of it. (Ibid.)

Already, at the pre-judgmental level, the putative quality seemingly represented by the sensation of pain is represented as (tanquam) existing or inhering in an extended thing, that is, as being a mode of extension⁴⁶--something which, according to Descartes, is downright unintelligible.⁴⁷

It is noteworthy that Descartes often criticizes some Aristotelian-Scholastic notions adducing the same kind of reasons he gives against our ideas of colour, taste, and the like.⁴⁸ Consider, for example, the traditional notion of heaviness; that is, the idea of a quality that certain bodies were thought to have in virtue of which they were carried towards their putative natural place which was the center of the earth. According to Descartes, this idea was radically mistaken because, although heaviness in the idea was conceived of as a quality "which inhered in solid bodies" (AT VII 441), the idea was also "taken largely from the idea I had of mind" (AT VII 442). The idea, that is, involved the notion that "heaviness carried bodies towards the centre of the earth as if it had some knowledge of the centre within itself" (Ibid.)

This idea of heaviness and, as I have argued, our sensory ideas of sensible qualities are materially false, according to Descartes, because it is not possible that there exist something that is both a mode of extension and a mode of thought. In the case of the idea of heaviness, it is not possible that there is a mode which, when possessed by a corporeal substance, enables this substance to know something. One could form such false ideas, Descartes says, when one does not have the clear and distinct ideas of corporeal substance and of thinking substance, which

ideas must explicitly contain the notion of their real distinctness.⁴⁹ In section VI I shall have more to say about the manner in which false ideas arise out of confused ideas, according to Descartes.

I must emphasize that the reason why an idea is materially false, in my interpretation, is not that it fails to represent--which is what Norman Wells, for example, says.⁵⁰ Indeed, I think there are compelling reasons to reject this interpretation; principally, that Descartes himself carefully characterizes materially false ideas as those which represent non-things as things, and not as those which do not represent. In contrast, in my interpretation, the reason why an idea is materially false is that it explicitly presents to us a putative entity as having a combination of properties which cannot be jointly instantiated--a fact which is not apparent to the cognizer; and it is for this reason that what is immediately accessible to her may provide her intellect with erroneous subject matter, materia errandi, for judgment.⁵¹

In a recent article, Paul Hoffman argues that although Descartes "seems committed to the view that it is theoretically possible for a sensory idea to represent a non-thing as a thing"⁵²--i.e., that it is possible for a sensory idea to be materially false--the truth is that Descartes "does not think that as a matter of fact sensory ideas lack objective reality"⁵³--i.e., are false. Now, I disagree with Hoffman on this second point. I think that there are sufficient reasons--both of textual adequacy⁵⁴ and of overall interpretive coherence--to think that Descartes is committed to the view that sensory ideas, not only can be, but also are materially false: that they represent non-things and lack objective reality. I have already presented most of these reasons and shall complete my interpretation in the next section by responding to the "veil-of-illusion" objection to it.

Hoffman, however, thinks that there are serious problems with the interpretation I have been defending, to wit, that

[Descartes'] physics rules out the possibility that the idea of cold referentially refers to a privation. The idea of cold is presumably caused either by a particular motion or range of motions of bodies or by the absence of such motions. But according to his physics the absence of motion [i.e., rest] is not a privation, it is not a non-thing. . . . Since he is clearly committed to denying that the cause of the idea of cold is a privation, there is nothing motivating him to deny that the idea of cold has objective reality. And he never does deny it.⁵⁵

However, as we have seen, Descartes does deny it.⁵⁶ Besides, Hoffman's objection presupposes Wilson's view that, for Descartes, an idea 'referentially represents' (i.e., actually represents) its cause or causes--something which, I think, is very implausible.⁵⁷ Furthermore, even if Hoffman is right that Descartes' physics requires him to say that our sensory ideas of sensible qualities (colour, taste, and the like) are caused by corporeal things or their modes (i.e., by positive things), still this is compatible with his saying that those ideas are materially false. The point is that sensory ideas could be materially false, even if they were caused by positive things.⁵⁸

Now, as a matter of fact and in many passages, Descartes' explicit view concerning the actual causes of materially false ideas is that those ideas arise when we fail to exercise some faculty;⁵⁹ false ideas are in us, he says, "only because we are not wholly perfect" (AT VI 38), because we lack, or fail to do, something. In the Meditations he claims that materially false ideas "arise from nothing (a nihilo procedere)" (AT VII 44); and he adds an explanation:

that is, they are in me only because of a deficiency or lack of perfection in my nature.

(Ibid.)

And this assertion is in accordance with Descartes' own causal principles; specifically, the so-called 'principle of objective reality'. In the third Meditation, concerning an idea taken formally--i.e., the idea in so far as it represents something, or in so far as it contains a certain degree of objective reality--he says:

in order for a given idea to contain such and such objective reality, it must surely derive it from some cause which contains at least as much formal reality as there is objective reality in the idea. (AT VII 41)

Roughly, formal or actual reality is the (degree of) perfection an actually existing thing has in virtue of its positive properties. Moreover, the (degree of) objective reality of an idea of X is proportional to the (degree of) formal reality that X would have if X existed.⁶⁰ Thus, even if a certain thing does not exist, we can still think about it, have an idea of it; and this idea has a degree of objective reality proportional to the degree of formal reality that thing would have if it existed.

Note, however, that the causal principle quoted above does not require that an idea be caused by the very thing or things it represents; it only says that the cause of an idea has to have at least as much formal reality as there is objective reality in the idea. Here I cannot enter into a detailed examination of the content of the causal principle. It has been variously interpreted and much discussed in the scholarly literature.⁶¹ Yet, however interpreted, there is no doubt that it implies that, given that a materially false idea represents a non-thing which lacks (formal) reality, a materially false idea lacks objective reality and its cause must have at least zero

(formal) reality. As we have seen, in many texts Descartes favors the view that the causes of our materially false ideas as a matter of fact have exactly zero (formal) reality and are unreal--these causes consist in a privation, defect, or lack we have. How? Sometimes a materially false idea comes from our own intellectual carelessness; as when I represent to myself a triangle being such that the sum of its internal angles is 360 degrees, without carefully examining the question relative to the possible existence of such a putative thing. At other times, a materially false idea arises, not out of any intellectual fault we could correct, but simply because God created us in such a way that we are not perfect in all respects; this is what happens in the case of our sensory ideas of sensible qualities. Of course, God's decision to create us this way (as opposed to some other way) is not arbitrary, according to Descartes: there are reasons why our sensory ideas of sensible qualities (of colour, cold, taste, texture, and so on) present to us as possible certain putative qualities which cannot exist--e.g., reasons why God made me in such a way that, usually, when one of my feet is hurt, I feel "the sensation of a pain as (tanquam) occurring in the foot" (AT VII 88)--where no such thing could ever occur in my foot.⁶²

The important point for our purposes is that a materially false idea could be caused by something having more than zero reality;⁶³ and hence, that even if we granted that Descartes' physics required that our sensory ideas of sensible qualities are caused by corporeal things or their modes, still this is not incompatible with his saying that those ideas are materially false.

V. Ideas, Essences and the Veil of Illusion.

In this section I attempt to answer the "Veil of Illusion" objection to my interpretation both by introducing a few more elements into the picture--the concepts of essence and of a mental faculty in Descartes--and by interweaving together all of these results to form a coherent

view not only of material falsity, but also of the Cartesian notions of clarity and distinctness, and obscurity and confusion.

So far we have articulated an interpretation of Descartes' theory of ideas, and of material falsity, according to which there is a distinction in Descartes between what an idea appears to represent and what it actually represents; a distinction which explains how ideas can be materially false, and represent a non-thing as a thing. Few authors, however, have accepted this distinction mostly because they think it would be disastrous for Descartes, since the argument for the existence of God in the third Meditation requires that we have the ability to know what the idea of God represents.⁶⁴

It is true that, in my interpretation, Descartes would have a serious problem on his hands if his distinction between what an idea appears to represent and what it actually represents implied that we could not have access to the latter using only those resources available to us at the beginning of the third Meditation--e.g., the explicit or immediate contents of our ideas, and our own mental faculties. But Descartes' position does not imply this. Indeed, I will try to show that, according to him, we can have the desired access to the object actually represented by an idea only through the use of our faculty of perception. To appreciate the details of the solution to this problem in my interpretation, I explore a bit further the Cartesian conception of essence and of a mental faculty.

First, then, let us examine the connection that, in my view, exists between ideas and essences in Descartes. For example, in the Fifth Replies, Descartes says to Gassendi:

An idea represents the essence of a thing (rei essentiam); and if anything is added to or taken away from the essence, then the idea automatically becomes the idea of something else. (AT VII 371)⁶⁵

What Descartes says in this passage, I suggest, is of the utmost importance; that ideas actually represent essences (if anything). Indeed, all clear and distinct ideas represent essences--even those which represent the essences of things which do not in fact exist.⁶⁶ Descartes expresses this view differently in the fifth Meditation: when one entertains a clear and distinct idea of a triangle that has never existed, "there is still a determinate nature, or essence, or form of the triangle which is . . . not invented by me or dependent on my mind" (AT VII 64). The properties one demonstrates of it, "are true, since I am clearly aware of them, and therefore they are something, and not merely nothing (non merum nihil)" (AT VII 65). In examining Descartes' discussion with Caterus on the objective being of things in the intellect, we can gather that, when Descartes says that those essences and properties (of things which do not in fact exist) are nevertheless non nihil, not nothing, he is talking about them in so far as they exist objectively in the intellect: to Caterus he says that, when one entertains the idea of an object, that object exists objectively in the mind; and this mode of existing in the mind, though different from actual existence outside the mind, is not nothing: "non . . . nihil est" (AT VII 103).

In contrast, materially false ideas are a limiting case: since material falsity "occurs in ideas when they represent non-things as things (non rem tanquam rem repraesentant)" (AT VII 43), a materially false idea, I suggest, does not objectively contain or represent any essence. If it did, then there could be a thing having that essence, and the idea would represent a real thing--i.e., the idea would not be false. This explains why Descartes says that such ideas have no

objective reality,⁶⁷ since the objective reality of an idea is a function of the perfections included in the essence represented by the idea,⁶⁸ and false ideas do not represent essences.

Furthermore, since ideas can represent the essences of things that do not exist, according to Descartes, ideas represent things (when these things actually exist) by representing their essences. Primarily, then, ideas represent essences; and only in a derivative sense can it be said that ideas represent actually existing things.⁶⁹ Essences, however, do not actually exist--in the way in which, say, the Sun exists. An existing thing and its essence are not really distinct--i.e., they are not two mutually independent things.⁷⁰ But note that, since ideas primarily represent essences and not actually existing things, and since no essence actually exists independently of the existing thing (if any) of which it is an essence, it follows that ideas primarily represent essences in so far as these exist objectively in the intellect. To put it bluntly, representing, in its primary sense, is intra-ideational. Often--though not always--and in a derivative sense, an idea represents an extra-ideational entity; i.e., when there actually exists a thing which has the essence primarily represented. Let us now turn to examine briefly Descartes' concept of a mental faculty.

First, Descartes thinks that the capacity we have to entertain and form clear and distinct ideas constitutes an actual faculty of our minds. For example, to Hyperaspistes, he says:

It is through a real (realem) faculty of the mind that it perceives two things, one apart from the other, as complete things; and . . . it is through a lack of the same faculty (facultatis privationem) that the mind apprehends these two things in a confused manner, as a single thing. (AT III 434)

Since the perception of a thing as a complete thing includes the clear and distinct perception or idea of that thing,⁷¹ and since the mind can perceive a complete thing only through the use of a certain faculty, the possession of this faculty is required in order for us to have clear and distinct ideas.⁷² When we use this faculty to explicitly portray an object to ourselves, we form an idea which is clear and distinct.⁷³ Yet, since we are finite and fallible, sometimes we fail to use this faculty; and it is from this failure that material falsity arises in our ideas, as we saw above.⁷⁴

Furthermore, of a clear and distinct idea, such as the idea of God, "it cannot be supposed that . . . [it] represents something unreal" (AT VII 46). Clear and distinct ideas have some degree of objective reality, and represent real things which can exist.⁷⁵ I think Descartes is saying something like this to Caterus concerning clear and distinct ideas:

Possible existence is contained in the concept or idea of everything that we clearly and distinctly understand. (AT VII 116)

Additionally, we saw that, to Arnauld, Descartes had said that a clear and distinct idea is one which "cannot be said to refer to something with which it does not correspond (conformis)" (AT VII 233). The idea is clear since it, so to speak, explicitly points to the very thing to which the idea conforms; in other words, its explicit content--that to which it is referred, what it appears to represent--coincides, at least in part, with its implicit content--that to which it conforms.⁷⁶

But remember that a clear and distinct idea can only be produced through the use of our faculty of perception. Then it must be that this partial coincidence of contents--a coincidence in which the clearness and distinctness of an idea consists--must be the result of using our faculty of perception when conceiving the idea. It must be, too, that we can get an access to the implicit content of an idea through its explicit content, since the explicit content is the only cognitive part

of the idea to which we have immediate access. Thus, the implicit content of an idea must itself be constituted, on the basis of its explicit content, in accordance with the principles which define the correct representation of things in terms of (at least some) of their essential properties--the principles the ability to apply which constitutes our faculty of perception; otherwise we could not have a guaranteed access to the implicit content.⁷⁷

Notice that what I have been doing so far is constructing an argument to accept the following interpretation of an idea in Descartes: an idea can be considered either materially or formally. To consider an idea materially is to consider it as a mental event or occurrence that has an explicit content; i.e., the content that is immediately accessible to us. More precisely, to consider an idea in this manner is to consider it in so far as it explicitly portrays a putative entity in terms of certain properties such that, for all one could immediately tell, they could be jointly instantiated. This is so because, as we have argued, the idea taken materially is the idea considered in so far as it is tanquam rem, as if of a real thing. Moreover, taken materially, the idea could explicitly present a putative entity in terms of certain properties which cannot be jointly instantiated so long as this impossibility is not immediately apparent to the cognizer.⁷⁸ This is so because an idea taken materially is the idea considered as a product of our finite, fallible minds, according to Descartes.⁷⁹ Hence, the constraints that govern ideas, when considered materially, are not necessarily logical in the sense that there is not always a need to postulate a cause for the idea taken materially, other than the ability of our minds to conceive and/or combine contents in ways which are not necessarily in accordance with the principles which govern the correct representation of a thing; i.e., the representation of a thing by means of its essential properties.

On the other hand, the idea taken formally is the idea considered as representing an object, or as conforming to something. As such, the idea is considered as having an implicit content part of which may or may not be explicitly present to our minds. Roughly, an idea considered formally is the idea viewed as a logically ideal entity, i.e., as constituted in such a way that it consistently obeys certain logical-normative principles characteristic of our faculty of perception.⁸⁰ Further, the content of an idea, when considered formally--i.e., what the idea actually represents--is partially a function of the content of the idea taken materially: if an idea taken materially explicitly contains certain properties that can in fact be jointly possessed by some thing, then the idea taken formally will objectively contain or represent the essence of that thing (which may or may not exist). When, on the other hand, an idea taken materially explicitly presents a putative entity in terms of a number of properties which cannot be jointly instantiated, then the idea is materially false; taken formally, the idea will represent a non-thing, and will not represent any essence--which is not to say that the idea will not represent.

We must emphasize that, according to the interpretation I have been defending, we can have access to the idea taken formally, i.e., the object represented: we saw that the faculty of perception allows us to perceive an object clearly and distinctly; and my interpretation construes the relationship between an idea taken materially and an idea taken formally in such a way that, by using our faculty of perception, and by knowing only the content of the idea taken materially, we can know which object is represented (objectively contained) in the idea. The Evil Demon cannot enter here and deceive us about this content--as he does in mathematics--since, unlike mathematical facts, the formal content of an idea is constituted precisely in a manner that makes

it knowable by us as long as we use a faculty we possess--i.e., a resource that is strictly intramental. We now turn to articulating in a more rigorous manner all of these ideas.

VI. A Logical Reconstruction.

One of my aims in providing the following reconstruction is to logically illuminate the interpretation I have been defending by capturing some of the logical relations that, according to my understanding, hold among the Cartesian concepts of idea, essence, clarity and distinctness, obscurity and confusion, material falsity, etc.⁸¹ Another of my aims here is to show how the supposition that all clear and distinct ideas and some (but not all) obscure and confused ideas represent essences in Descartes, is essential to understand and articulate the relationships that, in his view, exist between clear and distinct ideas and the concept of possible existence, materially false ideas and obscure and confused ones, etc. Now, in carrying out this reconstruction, I will be using standard first-order logical notation; expressions that quantify over properties; propositional modal logic; and quantified modal logic.⁸² Note that, since Descartes accepts a number of necessary truths that are not logical truths, 'p' cannot be understood solely as 'it is logically necessary that p'.

(A) The Notion of Idea.

I will consider an idea as a structure that consists of two sets of property-like entities (i.e., properties in so far as they have existence in the mind⁸³), and a specific function between these sets. We will call the sets that constitute an idea I, 'MAT_I' (for idea I taken materially) and 'OBJ_I' (for idea I taken objectively or formally); and the function between these sets will be called 'F_I'. Hence $I = \langle \text{MAT}_I, \text{OBJ}_I, F_I \rangle$.

In principle, MAT_I could be any finite, non-empty set of properties such that, for all one could immediately tell, they could be jointly instantiated. Thus, MAT_I could contain properties which could not be jointly instantiated so long as this fact is not immediately apparent to the cognizer.

The relation F_I between MAT_I and OBJ_I is as follows: if MAT_I contains properties P_1, \dots, P_m (and no others), then any property Q belongs to OBJ_I if and only if the following three conditions are satisfied:

(a) It is necessary that, if anything has property Q , then it has that property essentially; i.e.,

$$\Box(\forall x)(Qx \supset \Box[(\exists y)x=y \supset Qx])$$

(b) It is necessary that anything that has all the properties contained in MAT_I has property Q ; i.e.,

$$\Box(\forall x)[(P_1x \& \dots \& P_mx) \supset Qx]$$

(c) It is possible that there exists something which has all the properties that belong to MAT_I ; i.e.,

$$\Diamond(\exists x)(P_1x \& \dots \& P_mx)$$

F_I is a specific relation that holds between MAT_I and OBJ_I : $F_I = \langle MAT_I, OBJ_I \rangle$. Further, we will understand OBJ_I as that which is actually represented by idea I , and as its implicit content. And, although this content is not immediately accessible to us--in the way in which MAT_I is--we can have access to it, since, intuitively, F_I is an essentialising relation that takes a set of properties which may or may not be merely accidental --i.e., MAT_I of idea I -- and assigns it, either the empty set (when the properties in MAT_I cannot all be jointly possessed by

anything), or (when all the properties in MAT_I can be jointly possessed by something) the set of all and only those properties that (1) can only be possessed essentially, and (2) are possessed essentially by everything that possesses (essentially or not) all the properties in MAT_I . Hence, we can interpret F_I as a specific application of our faculty of perception; a faculty which, when applied to the explicit content of a particular idea I , MAT_I , assigns it an implicit content, OBJ_I .⁸⁴

(B) Clear and Distinct Ideas.

The characterization that follows formally articulates Descartes' view that a clear and distinct idea is one which explicitly portrays an object exclusively in terms of properties that can be possessed only essentially.

Let MAT_I contain properties P_1, \dots, P_m and no others. Then idea I is clear and distinct if and only if

(a) it is possible that there exists something that possesses all of the properties in MAT_I ; i.e.,

$$\Diamond(\exists x)(P_1x \& \dots \& P_mx)$$

(b) for each property P_i in MAT_I ($i=1, \dots, m$), it is necessary that anything that possesses this property, possesses it essentially; i.e.,

$$\Box(\forall x)(P_ix \supset \Box[(\exists y)x=y \supset P_ix]) \quad (\text{for each } i)$$

Notice that a corollary of this definition is that a clear and distinct idea I is such that it is possible that there is something that possesses all of the properties of MAT_I essentially. This result is desirable because it allows us to distinguish clear and distinct ideas from obscure and confused ones, since, as we shall see, there can be an obscure and confused idea J for which it is

possible that there is something that possesses all of the properties in MAT_J , though not essentially.

Also, notice that, in the case of a clear and distinct idea I , conditions (a), (b) and (c) of F_I are fulfilled by each of the properties in MAT_I ; OBJ_I is not the empty set; and MAT_I is a subset of OBJ_I . In my interpretation, this means that what the idea appears to represent, which is immediately accessible to us, is identical to at least part of what it actually represents; to put it metaphorically, the idea is transparent. This is also the sense in which we understand Descartes' assertion that a clear and distinct idea is one which "cannot be said to refer to something with which it does not correspond (conformis)" (AT VII 233).

Further, a clear and distinct idea I is such that the properties in MAT_I can be jointly instantiated. In other words, a cursory inspection of a clear and distinct idea--of the properties explicitly portrayed in the idea--would in itself warrant the conclusion that there could exist an object which possesses those properties. I think Descartes is saying something like this to Caterus concerning clear and distinct ideas:

Possible existence is contained in the concept or idea of everything that we clearly and distinctly understand. (AT VII 116)

In the Principles of Philosophy Descartes also uses 'clear and distinct' as applied to his ideas of mind and body, in a way that supports our reconstruction:

Thought and extension can be regarded as constituting the natures of intelligent substance and corporeal substance; . . . In this way we will have a very clear and distinct understanding of them. (AT VIII-1 30-31)

The clear and distinct idea of, say, a corporeal substance must explicitly portray it in terms of the property of extension--a property essential to that substance. Indeed, the idea of a corporeal substance (let us call it 'C') which explicitly exhibits only the property of extension in general (call this property 'P') is, according to our definition, clear and distinct, since, in this case, MAT_C contains only P; it is possible that there is something which possesses P; and it is necessary that anything that possesses P possesses it essentially. Further, OBJ_C will contain, not only P, but also any other property Q which is such that, (1) necessarily, anything that possesses P also possesses Q, and (2) necessarily, anything that possesses Q possesses Q essentially. For example, OBJ_C will also contain the property of being divisible.

The reconstruction proposed here is also confirmed by what Descartes says in the second Meditation concerning a piece of wax which was originally conceived through its perceptible properties, such as its particular shape and size. After the wax is melted, and its particularities change, Descartes concludes that the piece of wax is "merely something extended, flexible and changeable" (AT VII 31). This idea of the wax, which includes only the essential properties of being extended, flexible and changeable, is clear and distinct, according to Descartes; while the previous idea, which included its accidents, such as its particular shape and size, was not clear and distinct. Our analysis concurs on all of these points: the initial idea, call it 'W', explicitly portrays a body in terms of its particular shape and size (say, P_1 and P_2) which are accidental. In this case, MAT_W contains only these properties, and the idea is not clear and distinct since it is possible that there is something which has, e.g., that particular shape, P_1 , but not essentially. Indeed, OBJ_W will contain neither P_1 nor P_2 . On the other hand, the second idea, which explicitly portrays that body solely as something extended, flexible and changeable, is clear and distinct, in

accordance with our definition, for reasons similar to those we presented with some detail in the previous paragraph.

(C) Obscure and Confused Ideas.

Roughly, the intuitive idea that this formal characterization captures is that an obscure and confused idea is one which explicitly portrays an object in terms of some properties, at least one of which cannot be possessed essentially by anything.

If MAT_I contains properties P_1, \dots, P_m (and no others), then idea I is obscure and confused if and only if it is not possible that there exists something that jointly possesses all of the properties in MAT_I essentially; i.e.,

$$\neg \Diamond (\exists x) \Box [(\exists y) x=y \supset (P_1x \& \dots \& P_mx)]$$

It can be shown straightforwardly that, according to our reconstruction, an obscure and confused idea I cannot be clear and distinct; and that MAT_I is not a subset of OBJ_I .

Furthermore, it is possible that there is an obscure and confused idea I such that none of the properties that belong to MAT_I belong to OBJ_I (although OBJ_I is not the empty set)--i.e., it is possible that there is an obscure and confused idea I such that none of the properties in MAT_I fulfill conditions (a) and (b) of $FORM_I$, though they jointly fulfill (c).

Let us examine the wax passage. The original idea of the piece of wax which explicitly portrayed the wax by means of its perceptual particularities which are non-essential, is, according to Descartes, obscure and confused⁸⁵--and this is precisely the result we get in our reconstruction: we already saw that this idea, which we called 'W', is not clear and distinct. Furthermore, it is obscure and confused because it is not possible that there exists something that possesses all of the properties in MAT_W essentially. Indeed, MAT_W contains only accidental

properties which, according to Descartes, cannot be possessed essentially by anything--i.e., the properties of having a particular shape and size. Further, in this case, OBJ_W is not the empty set since there could exist something possessing all of the properties in MAT_W , even though OBJ_W contains none of the accidental properties belonging to MAT_W because, by definition, OBJ_W contains only properties which, when possessed by anything, are possessed essentially.

In addition, we can now appreciate why Descartes says that "whenever we call a perception obscure or confused this is because it contains some element of which we are ignorant" (AT VII 147). For any obscure and confused idea I , it is not only the case that there may be essential properties in OBJ_I which are not revealed by looking at MAT_I (as may be the case for some clear and distinct ideas); it is also that some, possibly all, of the properties contained in MAT_I are accidental, and, hence, (a) that MAT_I can deceive us with respect to the true nature or essence contained in OBJ_I (if any); and (b) that it is possible that all of the essential properties in OBJ_I (again, if any) are hidden when MAT_I contains only non-essential ones--and, as we shall see, this is what gives rise to materially false ideas:

All self-contradictoriness or impossibility . . . [arises] when we make the mistake of joining together mutually inconsistent ideas; . . . Self-contradictoriness in our concepts arises merely from their obscurity and confusion. (AT VII 152)

Thus, if two ideas are obscure--i.e., we ignore some or all of the properties (if any) they objectively contain--then it is very likely that, in trying to join the ideas, I will be unable to assess reliably whether or not they are mutually consistent, that is, whether or not the properties objectively contained in one of the ideas and the properties objectively contained in the other can

all be jointly instantiated. The result of joining the ideas, thus, could be a materially false idea.

Let us now turn to material falsity.

(D) Materially False Ideas.

The following characterization of material falsity formally expresses the view that a materially false idea is one which explicitly portrays a putative object in terms of certain properties all of which, however, cannot be jointly instantiated.

If MAT_I contains properties P_1, \dots, P_m (and no others), then idea I is materially false iff it is not possible that there exists something that possesses all the properties in MAT_I ; i.e.,

$$\neg \Diamond (\exists x)(P_1x \& \dots \& P_mx)$$

In this case, OBJ_I is the empty set, and MAT_I is not a subset of OBJ_I . Also, notice that, as we defined these concepts, a materially false idea must be obscure and confused, though the converse is not necessary; and this is confirmed in Descartes.⁸⁶

VII. Conclusion.

I have defended an interpretation of the Cartesian theory of ideas that is radically different from the standard reading in at least three respects: (1) in the manner it understands an idea taken materially as the idea in so far as it has an explicit content; (2) in the distinction it incorporates between what an idea appears to represent and what it represents; and (3) in its assertion that an idea actually and primarily represents an essence (if any thing).

This interpretation, I have argued, not only finds support in the texts but also is required to explain a large number of assertions in Descartes which would, under more traditional readings, appear irremediably obscure or problematic. Such is the case with the well-known controversy surrounding Descartes' concept of material falsity. My interpretation explains why,

although this concept indeed forces Descartes to draw a distinction between what an idea represents and what it appears to represent, the distinction itself is not disastrous because we can have access to what is actually represented so long as we use our faculty of perception.

Yet my interpretation has wider and more fundamental implications: it forces us to rethink Descartes' epistemology, and, in particular, to reject the traditional manner of understanding clarity and distinctness according to which saying that something is clear and distinct is saying that it is obvious; an understanding which implies that we can never be mistaken in thinking that a certain idea is clear and distinct. And although Descartes himself emphatically denies all of this and insists that there is a "proper distinction between what is clearly and distinctly perceived and what merely seems or appears to be" (AT VII 462), few have taken him seriously; this is understandable enough since, according to more traditional interpretations, he cannot draw this distinction; or if he could, it would be fatal for him to do so. In this paper, however, I show why we should take this assertion seriously, and how we can understand it.

For Descartes there is a crucial epistemological stake in all of this, since he is convinced that clearing the way for the upcoming philosophy of nature requires fundamental conceptual (and not merely "judgmental") changes; it requires, in other words, that we discard some of the old, apparently innocent concepts as inherently mistaken.⁸⁷ Descartes' position on the nature of ideas and on the possibility of material falsity, evinces his conviction that our finitary predicament can infect not only our judgments but also the very manner in which we conceive of things. Ironically, for Descartes, the challenge takes the form of reconciling that conviction with

an epistemology of Aristotelian-Scholastic inspiration that appears to exclude the possibility of non-judgmental mistakes--a challenge which, as I have argued, Descartes meets with success.

NOTES

1. Some of the materials in this paper also appear in my "Transparency and Falsity in Descartes' Theory of Ideas," The International Journal of Philosophical Studies 7 (1999): 349-372. Also, the fundamental thesis underlying the interpretation I here defend first appeared in my Ph.D. dissertation (University of Southern California, 1989). Note that interpreting the Cartesian theory of ideas is particularly difficult because, as we shall see, Descartes is creating a whole new set of related concepts in the areas of cognition and representation using both some of the terminology and some of the philosophical intuitions of rival schools of thought, without indicating clearly where their influences end and his own contribution begins.

I shall be using the following abbreviations of the editions of the works of Descartes and other authors:

- AT Oeuvres de Descartes. Edited by Ch. Adam and P. Tannery. 12 vols. Paris: Cerf, 1897-1913; reprint, Paris: Vrin, 1957-58.
- Suárez DA Francisco Suárez. Comentarios a los libros de Aristóteles sobre el alma. Edición bilingüe y traducción por Carlos Baciero y Luis Baciero. Edición crítica por Salvador Castellote. 4 vols. Madrid: Editorial Labor, 1981.
- Suárez DM Francisco Suárez. Disputaciones metafísicas. Edición bilingüe y traducción por S. Rábade Romeo, S. Caballero Sánchez, y A. Puigcerver Zanón. 7 vols. Madrid: Editorial Gredos, 1960.
- AquinasDA Thomas Aquinas. In Aristotelis librum De Anima commentarium. Edited by A. M. Pirotta. Fourth edition. Marietti, 1959.

I will be translating the passages of Suárez's works here quoted. When available, and unless otherwise indicated, I will use the translations found in the following editions:

The Philosophical Writings of Descartes. Vols. I-III. Translated by John Cottingham, Robert Stoothoff, Dugald Murdoch, and Anthony Kenny (for vol. III). Cambridge: Cambridge University Press, 1985 and 1991.

Aristotle's De Anima in the Version of William of Moerbeke and the Commentary of St. Thomas Aquinas. Translated by Kenelm Foster, and Silvester Humphries. Introduction by Ivo Thomas. New Haven: Yale University Press, 1951.

2. See Richard Rorty, "Incorrigibility as the Mark of the Mental" Journal of Philosophy 67 (1970): 406-409.

3. J. M. Beyssade (in "Descartes on Material Falsity," in Phillip Cummins and G. Zoeller (eds.), Minds, Ideas and Objects, (Atascadero: Ridgeview Publishing Company, 1992), 6), asserts that, for Descartes, "every thought is conscious." Now, in a sense, this is true. If I have a certain thought, then I am immediately aware of having that thought. We shall see that, for ideas, this means that one is always immediately aware of what an is as if of--which does not mean that one

is always immediately aware of the object the idea is actually of--the object the idea actually represents.

4. Richard W. Field, in his "Descartes on the Material Falsity of Ideas," Philosophical Review 102 (1993): 309-333, also attempts to show that the concept of material falsity in Descartes is neither disastrous nor incoherent; although his interpretation differs from mine in some crucial respects. For example, I argue that the distinction between what an idea represents and what it appears to represent is not only present in Descartes but also essential to articulate his notion of material falsity--while Field appears to overlook this distinction.

5. See her Descartes, (London: Routledge & Kegan Paul, 1978), 112. However, in a more recent work of hers, "Descartes on the Representationality of Sensation," (in Central Themes in Modern Philosophy, J. A. Cover and Mark Kulstad, eds.; Hackett, 1990; 1-22), she appears to think that Descartes' notion of material falsity, though not fully explained, is not necessarily disastrous. Also, Martha Bolton, in her "Confused and Obscure Ideas of Sense," in Essays on Descartes' Meditations, ed. by Amelie Oksenberg Rorty (Berkeley, Los Angeles, London: University of California Press, 1986), 393, thinks that the notion of material falsity in Descartes is a disaster because it entails that "the cognitive content of an idea can diverge from the object of the idea." She herself, however, does accept that there could be a non-disastrous version of the distinction between what an idea appears to represent and what it actually represents (*Ibid.*, 395)--although she does not explain precisely what this version is.

6. On implicit content, see also AT VII 147, and AT VIII-1 24. Some authors have taken seriously (as I think one should) Descartes' assertion that our ideas have an implicit content; e.g., Robert McRae, "Descartes' Definition of Thought," in Cartesian Studies, ed. by R. J. Butler (Oxford: Basil Blackwell, 1972), 67-68; and Alan Gewirth, "Clearness and Distinctness in Descartes," Philosophy 18 (1943), 27-29.

7. Notice that later in the same Meditation Descartes will assert something stronger concerning the idea of cold: not merely that we ignore whether it represents something real or unreal, but also that it "represents something unreal (*nihil reale mihi exhibere*)" (AT VII 46); and, in the fourth Replies, he will say that the ideas of both heat and cold "represent nothing real (*nihil reale exhibere*)" (AT VII 234; my translation).

8. Norman Wells, in his "Material Falsity in Descartes, Arnauld, and Suárez," Journal of the History of Philosophy 22 (1984): 25-50, says that the "contemporary tendency to interpret the *tanquam* in Descartes' phrase *tanquam rerum imagines*, . . . to mean 'as it were', 'like', or 'as if' fails to do adequate justice to Descartes' doctrine on *idea* taken formaliter." *Ibid.*, 28 n. 20. Hence, for Wells, ideas *proprie* are all of things (*rerum*). However, as we shall see, Descartes realizes that the precise articulation of the notions of material falsity and of obscurity requires that one draw a distinction between what an idea appears to represent (*tanquam rerum*), and what it actually represents (*rerum*). Besides, see the French version of '*tanquam rerum imagines*', authorized by Descartes: "Entre mes pensées, quelques-unes sont *comme* des images des

choses." AT IX-1 29, (my emphasis). There is also the use of 'tanquam' at AT VII 43; and, at AT IX-1 34-35, Descartes says: "Il n'y en peut avoir aucune [idée] qui ne nous semble représenter quelque chose" (my emphasis), as an explanation of the Latin phrase: "nullae ideae nisi tanquam rerum esse possunt." AT VII 44.

9. In the fourth Meditation, in Principles, as well as in the Passions, Descartes asserts that judgments are acts of the will, and classifies our mental faculties into two general categories: "perception, or the operation of the intellect, and volition, or the operation of the will" (AT VIII-1 17). Judgments--assertions or denials--are acts of the will, although "to make a judgement, the intellect is of course required since, in the case of something which we do not in any way perceive, there is no judgement we can make. But the will is also required so that, once something is perceived in some manner, our assent may then be given" (AT VIII-1 18). Thus, judgments are among those thoughts which include 'more than the likeness of a thing' (AT VII 37), since judgments presuppose that we have an idea--i.e., perceive an object. See also AT VIII-1 21 and AT XI 342-48.

10. That a thing exists and that it is (formally) real are not equivalent, according to Descartes (although the latter implies the former.) For one, whereas formal reality is a matter of degrees, existence is not. Formal or actual reality is the degree of perfection an actually existing thing has in virtue of its form or essence. See AT VII 47, where actual or formal being (esse actuali sive formali) is contrasted with "merely potential being"; and in AT VII 102-103, "the sun itself existing in the intellect" (or objectively existing) is contrasted with the sun "formally existing, as it does in the heavens." Now, the objective reality of an idea is "the being (entitatem) of the thing which is represented by an idea, in so far as this exists in the idea" (AT VII 161), even if no such thing actually exists. For the notions of the degrees of formal (and of objective) reality, see, e.g., AT VII 41 and AT VII 165. Care must be taken not to confuse the formal reality of something--e.g., this body, or my mind, or a particular idea--with an idea taken formally. The formal reality of any one of my ideas is the degree of perfection that the idea has as an actually existing thing. As such, it is only a modification of my mind, and it is less perfect than any other existing substance. On the other hand, the idea taken formally (see AT VII 232) is the idea considered in so far as it represents a thing which may or may not exist.

11. There are, I think, conceptual antecedents in the Aristotelian-Scholastic tradition corresponding to the Cartesian notion of a non-thing. For example, for Suárez an entity of reason, or entia rationis, "has in itself no reality (entitatem)" (DM LIV, 1, 6). The concept of an entity of reason has nothing in common with the concept of a real entity, entia realis, which should not, strictly speaking, be called an 'entity' (see Ibid., 1, 9). Hence, entities of reason (like Cartesian non-things) cannot exist. Note that, for Suárez, all impossible beings (e.g., a chimera or an irrational man (Ibid., 4, 10; and DM XXX, 16, 14)) are, strictly speaking, entities of reason. Also, see note 31 below. For a conceptually delicate treatment of the concept of an entity of reason in Suárez, see John P. Doyle, "Suárez on Beings of Reason and Truth (1)," Vivarium 25 (1987), 53-60 and 69-75.

12. For Descartes, non-things are unreal (AT VII 43, AT IX-1 34)), and among unreal things, Descartes counts privations, negations, and impossibilities (i.e., putative entities whose concepts are self-contradictory). See, e.g., AT VII 190-91: "it does not follow that this defect [i.e., error] is something real, any more than blindness is something real (realem)"; AT VII 428: "the form of deception is non-being (non ens).". For impossibilities, see, e.g., AT VII 138: "when you talk of an 'utterly perfect corporeal being', . . . you are uttering a contradiction." In his "Descartes on Misrepresentation," (*Journal of the History of Philosophy* 34 (1996), 36), Paul Hoffman denies that Descartes would ever hold that "as a matter of fact sensory ideas lack objective reality." In section IV, I argue that there are good reasons to think Hoffman wrong. Also, see note 38, above.

13. In fact, I think that this point underlies Descartes' assertion that not all clear and distinct ideas need be obvious, and his denial of the view that all ideas which appear to be clear and distinct are in fact clear and distinct. See, e.g., AT VII 68: "Some of the things I clearly and distinctly perceive are obvious to everyone, while others are discovered only by those who look more closely and investigate more carefully." See also AT VII 462, where he says that there is a "proper distinction between what is clearly and distinctly perceived and what merely seems or appears to be."

14. Here I cannot examine the issues that surround Descartes' innateness doctrine, due to obvious limitations of space. See my "Ideas innatas, esencias y verdades eternas en Descartes" en La Revista latinoamericana de filosofía (Buenos Aires, Argentina), Vol. XXIII No. 2, (1997): 273-293, where I discuss some of these issues.

15. A more detailed defence of some of the views presented in this section can be found in my "Descartes y Suárez: sobre la falsedad no judicativa", Analogía filosófica, Año 12 No. 2 (1998): 125-150.

16. Concerning sensory cognition, for example, Aquinas says that "it must be maintained in general, as true of all the senses without exception, that the senses receive forms (specierum) without matter" (Aquinas DA II, lect. 24, sec. 551). Suárez also structures his account of sensory and intellectual cognition around the notion of species. He says that the union of an object with a cognitive faculty is necessary for knowledge. This union is achieved by means of certain "intentional species (species intentionales)" (Suárez DA V, 1, 3).

17. For Aquinas, for example, when intelligible species are understood, they become "the form of the intellectual power" (Aquinas DA III, lect. 8, sec. 692). Further, for Suárez, the principle productive of knowledge of an object is "the faculty informed by the species" of the object (Suárez DA V, 4, 15).

18. Suárez uses 'simple cognition', 'simple apprehension,' and 'simple concept' interchangeably to refer to a cognitive act whose sole function is that of representing an object and which involves neither composition nor division. See, e.g., Suárez DM VIII, 3, 7; Ibid., VIII, 4, 6; and Ibid., IX, 1, 14 and 18. Simple cognitions are non-judgmental since all judgment involves either composition or division. See, e.g., Ibid., VIII, 4, 5; and Suárez DA V, 6, 7. However, Suárez

accepts that there are certain complex cognitions that are non-judgmental and yet involve either composition or division. See *Ibid.*; and DM VIII, 4, 5. Complex cognitions shall be relevant here only in connection with our discussion of Suárez's notion of quasi-material falsity below.

19. See also Suárez DM IX, 1, 21; and *Ibid.*, IX, 1, 15.

20. See AT VII 235.

21. Aquinas agrees with Suarez that certain basic non-judgmental cognitions cannot be false. He says that "the intellect's proper object is indeed the essence of things" (DA III, lect. 8, sec. 717), and later on adds that this "object is a simple one, and therefore, as bearing on this object, the act of the understanding is neither true nor false" (*Ibid.*, lect. 11, sec. 760). Indeed, "just as sight is infallible with respect to its proper object, so is the intellect with respect to essence" (*Ibid.*, sec. 762). Paul Hoffmam ("Descartes on Misrepresentation," 366-69) argues that both Aquinas and other Seventeenth-Century Scholastic philosophers--such as Ruvio--allow for the possibility of sensory misrepresentation. As Hoffman tells it, however, it appears to me that what these Scholastics are talking about is the sense of non-judgmental falsity which Suárez later calls 'improper falsity' which, as we shall see, is not a true falsity (i.e., not a form of misrepresentation) but a "falsity" that is compatible with the principle of conformity and which is completely different from Descartes' notion of material falsity.

22. See Suárez DM IX, 1, 17-18, and *Ibid.*, IX, 2, 4; and, in Descartes, AT VII 37 and 43.

23. See Suárez DM IX, 1, 16-22.

24. Suárez distinguishes (1) truth (or falsity) of cognition (veritas cognitionis) which, properly speaking, "occurs in the judgment, and any other intellectual act participates in such truth in so far as it participates in a judgment" (DM VIII, 4, 5), from (2) truth (or falsity) of signification (veritas in significando) which applies to the verbal proposition and consists in "the immediate conformity of the meaningful word to the thing signified" (*Ibid.*, VIII, 1, 3). Further, the chief and most basic sense of 'truth' is the first, veritas cognitionis (*Ibid.*, VIII, 8, 9)--while the second sense, that of veritas in significando, appears to be, for Suárez, parasitic on the other one. See *Ibid.*, VIII, 8, 2.

25. For example, Margaret Wilson, in her earlier Descartes, thinks that this reply "is a model of confusion confounded" (p. 110). Anthony Kenny has a similar opinion of Descartes' reply to Arnauld. See his Descartes: A Study of His Philosophy, (New York: Random House, 1968), 119-120.

26. See AT VII 46 and 233-34, and note 38 below.

27. In the "Synopsis" to the Meditations (see AT VII 8), Descartes makes a distinction in the manner of considering an idea--between an idea considered materialiter and the idea considered

objective--which may or may not coincide with the materialiter/formaliter distinction to which he refers in his reply to Arnauld, in AT VII 40, and in AT VIII-1 11. Here I will not examine this question, due to obvious limitations of space.

28. Notice that the distinction between an idea taken materially and an idea taken formally is not a distinction between two different kinds of ideas. Rather, it is a distinction between two different ways of considering one and the same idea. See Monte L. Cook's "The Alleged Ambiguity of 'Idea' in Descartes' Philosophy" The Southwestern Journal of Philosophy 6 (1975): 87-94.

29. For example, E. J. Ashworth implicitly accepts this interpretation when she sets up a contrast between an idea in so far as it is "a mode or attribute through which the mind might be perceived" (idea taken materially), and the idea "considered as having a certain content" which she identifies with the idea taken objectively or formally. See her "Descartes' Theory of Objective Reality," New Scholasticism 49 (1975), 335; my emphasis. In her Descartes (p. 111), Margaret Wilson also accepts implicitly this interpretation of idea taken materially.

30. In the scholarly Cartesian literature there is a tendency to confuse this issue and to attribute the tanquam rerum character of an idea to the idea taken either formally or objectively. For example, Margaret Wilson, in her Descartes, 102-103, associates an idea taken formally with its tanquam rerum character by identifying this character with the idea's representational character. However, attributing the tanquam rerum character to an idea taken formally creates a severe difficulty since, as we have argued, to take an idea formally is to consider its representative function; and it is hard to see how this can possibly be identified with the idea considered as that which it appears to represent.

31. See AT V 356: "Truth consists in being and falsehood in non-being." There was a tradition in the Schools that spoke of an ontological or transcendental truth--i.e., the truth of things--to denote the reality or entitatem of things. Suárez, e.g., says that "truth can be applied to any real entity (enti reali) in the same sense" (DM VIII, 7, 4); furthermore, "transcendental truth intrinsically denotes the real entity of the thing (entitatem realem ipsius rei) that is called true" (Ibid., VIII, 7, 24). On the other hand, "entities, in so far as they are entities, are not false" (Ibid., IX, 1, 12). Yet sometimes an object is called 'false' "because it is the object of a false statement, even though that object only exists objectively in the intellect. Aristotle has said something like it, and adds that things that are called false in this sense are many; thus, some are also impossibilities (impossibilia), for example, that the diameter be commensurable with the arch's length; others, in contrast, are only false, as when Peter runs if he is at rest" (Ibid., IX, 1, 13).

32. I agree with Paul Hoffman when he says that "an idea's being as if of something is not conceptually or logically connected to its having objective reality. An idea taken materially--in other words, an idea considered as an operation of the mind--can also be as if of something." See his "Descartes on Misrepresentation," 372.

33. The question, put in Scholastic jargon, is whether the idea of cold 'objectively contains' (i.e., represents) some positive entity which would be nothing more and nothing less than coldness itself (assuming that cold is a real or positive entity). The question can also be formulated by asking whether the idea of cold is "coldness itself [if any] in so far as it exists objectively in the intellect" (AT VII 206 and 233)--Descartes' answer is that "these ideas [both of heat and of cold] represent nothing real" (AT VII 234), that is, they objectively contain no positive entity.

34. In her more recent "Descartes on the Representationality of Sensation," 9, Margaret Wilson distinguishes what an idea presentationally represents from what it referentially represents. Her terminological choices are unfortunate, I think--not very close to Descartes' own choice of words, for I think that what an idea 'presents' me with (what I am immediately aware of) is what Descartes himself, in the fourth Replies, calls the 'reference' of the idea (that to which the idea is referred), which he distinguishes from that to which the idea conforms, which--as it is clear from the text--it is that of which the idea truly is, what the idea really represents. Even more unfortunate is the fact that Paul Hoffman ("Descartes on Misrepresentation") follows Wilson's choices in this respect, which may give rise to some misunderstandings. Terminological differences aside, however, I agree with Wilson that material falsity arises in ideas (roughly) when there is a mismatch between what the idea in fact represents and what it presents (appears to represent). She puts it as follows: "what the idea referentially represents is not what it presentationally represents" (Ibid., 9).

35. In some sense, I agree with Paul Hoffman when he says that Descartes' view "is similar to the Aristotelian view in that he thinks cognition occurs when things that exist outside the soul come to have another kind of existence in us." See his "Descartes on Misrepresentation," 370. It is true that, in essence, Descartes' view of cognitive representation is similar to the mainstream Scholastic Aristotelian view which explains a cognitive act's representing in terms of the presence of a substantial form in a cognitive faculty; yet it differs from it in that Descartes does not have a concept of substantial form; indeed, I think that he designs and uses the concept of material falsity precisely for the purpose of rejecting that other concept. Note that, although Descartes rejects substantial forms, he accepts that 'there are some immutable and eternal essences', and, as we shall argue in sections V and VI, Descartes accepts that an idea represents a thing when its essence has an objective existence in the soul.

36. This assumption is necessary to explain why Descartes suggests to Arnauld that once we make the materialiter/formaliter distinction, we are in a position to respond satisfactorily to Arnauld's objection. However--and this is something which has baffled many of Descartes' interpreters--that distinction, understood in the standard manner as the distinction between the idea as a thought without regard to its content, and the idea with regard to its content, simply does not furnish one with sufficient conceptual resources to answer the objection. What I am suggesting--with good textual support--is that the materialiter/formaliter distinction is the distinction between two distinct kinds of content--or, if you wish, two distinct cognitive functions of an idea, referring and conforming. I shall have more to say about the relationship I think there is between these two kinds of content in Descartes. Thus interpreted, the materialiter/formaliter distinction can be the beginning of an answer to Arnauld, as I will try to

show in the next section.

37. By 'sensible qualities' I mean here what is purportedly represented in our sensory ideas of colors, sounds, textures, odors, etc., with the exclusion of the modes of extension--which are but magnitudes--such as size, shape, motion, figure, etc.

38. Paul Hoffman believes that Descartes never held that sensory ideas --indeed, any ideas-- are materially false. See his "Descartes on Misrepresentation," esp. 361. However, I think there are good reasons to reject Hoffman's interpretation, some of which refer to considerations of textual adequacy. See, e.g., AT VII 46: it cannot be said that the clear and distinct idea of God "is perhaps materially false . . . which is what I observed [noticed, animadverti] just a moment ago in the case of the ideas of heat and cold (caloris & frigoris)." Also, see AT VII 233-34: "Confused ideas which are made up at will by the mind [i.e., factitious ideas] , . . . do not provide as much scope for error as the confused ideas arriving from the senses, such as the ideas of heat and cold (if it is true, as I have said (ut dixi), that these ideas do not represent anything real (nihil reale exhibere))." Notice that, in this passage, the 1904 printing of the seventh volume of the AT edition says "caloris & frigoris" (heat and cold); while a more recent reprint, e.g., the one made in 1983, changes this to "coloris & frigoris" (color and cold) without any explanation, which leads me to consider the latter as a typographical error. This is confirmed by the French translation of this passage, authorized by Descartes: "les idées du froid & de la chaleur . . . ne représentent rien de réel." AT IX-1 181.

39. See AT VII 30.

40. See AT VIII-1 34: "there are many other features, such as size, shape and number which we clearly perceive to be actually or at least possibly present in objects in a way exactly corresponding to our sensory perception (in sensu)".

41. See AT VII 44: if our sensory ideas of sensible qualities "are false, that is, represent non-things, I know by the natural light that they arise from nothing," and thus have no objective reality whatsoever.

42. For the notion of a mode, see, e.g., AT VIII-2 355, and AT IV 349.

43. See AT VIII-1 33 and 34, AT VII 43 and 63, and AT III 692, where Descartes explicitly states that we clearly and distinctly perceive the modes of corporeal substances. And since anything we perceive clearly and distinctly can exist (see AT III 544-45, AT V 160 and AT VII 152), it follows that the modes of extension can exist in those substances.

44. For the technical sense of the word 'quality' in Descartes, see AT VIII-1 24 and 26.

45. One must be careful in interpreting the part of this passage where Descartes says that it would be a mistake to say that the idea of colour "is a thing or a quality." He cannot be saying that the idea, considered as a mode of thought, is not a res, i.e., is not real, because, thus

considered, the idea has some degree of (formal) reality. See, e.g., AT VII 165. Hence, he is speaking of the idea taken formally--i.e., in so far as it represents an object. This explains why in this passage he goes on to say: "or rather I may say that the colour itself, which is represented by this idea,..."

46. Repeatedly Descartes says that "we feel pain as it were (tanquam) in our foot . . . [or that] we see light as it were (tanquam) in the sun" (AT VIII-1 32-33). Notice the use of 'tanquam' in these passages. It indicates that Descartes is talking about what the sensation or idea appears to represent--i.e., about the idea taken materially.

47. See AT VIII-1 34, where Descartes says that "we cannot find any intelligible resemblance between the colour which we suppose to be in objects and that which we experience in our sensation." (my emphasis). See also AT VII 441-43. In her Descartes, 114, Margaret Wilson agrees that, according to Descartes, our ideas of sensible qualities lack objective reality in the sense that they "fail to exhibit to us any possibly existent quality in an intelligible manner."

48. Descartes holds that the Scholastic-Aristotelian notion of substantial form suffers from the same malady that affects the notion of heaviness examined here. Unfortunately, he does not offer, for the notion of form, as detailed and clear an explanation, as the one he elaborates for heaviness, of how such a notion proceeds from the mingling of the ideas of body and mind. Also, note that often Descartes' criticism of the notion of either heaviness or substantial form, accompanies a rejection of the ideas of qualities, or real qualities (e.g., of heat or cold), for the same reasons. See AT III 420-21, AT III 667, AT III 693, AT V 222, and AT VII 442-43.

49. For example, the clear and distinct idea of body must include, says Descartes, the notion that it is essentially an extended, non-thinking thing. See AT VII 78.

50. See Norman Wells, "Material Falsity," 37.

51. For the connection between materially false ideas and their providing materia errandi for judgment, see AT VII 233-34.

52. Paul Hoffman, "Descartes on Misrepresentation," 363.

53. Ibid., 361.

54. See note 38 above.

55. Ibid., 362.

56. See esp. note 38 above.

57. I disagree with Wilson when she suggests that the best account Descartes could construe of the 'referential' representative function of an idea--what I call 'actually representing' or 'conforming'--is a causal account. She says: "I suspect that the causal account was influential in

Descartes' thought, even if he was unable to develop it fully, to create a theory immune to counterexamples." ("Descartes on the Representationality," 11). By the 'causal account' she means an account according to which "an idea referentially represents its cause (or cause under normal conditions), whatever that might be." (Ibid.) I think that, though at some early point Descartes toyed with the causal account, later on he discarded it. For if he actually held it--if he actually held that an idea is truly of the very particular thing which causes it--then, how could there be abstract ideas?; secondly, our most fundamental ideas, innate ideas, would all be about the very mind which perceives them since to say they are innate is to say that "they derive simply from my own nature" (AT VII 38), i.e., that the faculty of thinking alone is their proximate and principal cause (AT VIII-2 360); thirdly, he would not be in a position to say that there can be ideas which are about things which do not exist. Hence, if Descartes holds some causal account of sorts, it cannot be one which simply asserts that the cause of an idea is the object ('referentially') represented. In fact, I think there is no such interesting causal account of representation in Descartes; not only that he did not develop it, but that it would be counterproductive if he did.

58. In my interpretation there is no problem of explaining Descartes' motivation to saying (if he did) that, although sensory ideas are caused by positive things--e.g., by the motion of bodies--still they are materially false. The motivation is that Descartes wants to deny that there are some sensible qualities distinct from the modes of extension and of thought; yet at the same time he cannot and does not say that the object(s) represented by our sensory ideas of sensible qualities are either modes of extension or modes of thought. But if neither the modes of extension nor the modes of thought are the objects represented by those ideas--i.e, if neither of those modes are objectively contained in the ideas--and thus the ideas' objective reality is not a function of the positive perfections either one of those possible modes consist in, then I see no other candidate entity which could possibly explain why sensory ideas of sensible qualities have objective reality, and what the entitatem is that those ideas presumably objectively contain. Thus, the most natural conclusion for Descartes to draw is that sensory ideas of sensible qualities lack objective reality and are thus false.

59. See, e.g., AT III 434.

60. See, e.g., AT VII 165-66.

61. See, e.g., Eileen O'Neill, "Mind-Body Interaction and Metaphysical Consistency: A Defense of Descartes," The Journal of the History of Philosophy 2 (1987): 227-245; Kenneth Clatterbaugh, "Descartes' Causal Likeness Principle," The Philosophical Review, 89 (1980): 379-402; and Margaret Wilson, "Descartes on the Origin of Sensation," Philosophical Topics 19 (1991): 293-323.

62. The reason why God created us in this way is that it is the best system which "is most especially and most frequently conducive to the preservation of the healthy man" (AT VII 87).

63. Indeed, in the third Meditation, Descartes says that it could not be said of his idea of God that

it "is perhaps materially false and so could have come from nothing <i.e., could be in me in virtue of my imperfection>" (AT VII 46; words in triangular brackets added in the French version).

64. See Wilson, Descartes, 113.

65. See also AT IV 350.

66. The main objection to saying that all clear and distinct ideas represent essences in Descartes is the following: Presumably, we clearly and distinctly perceive that we exist, according to Descartes, yet in no sense can it be said that existence is part of our essence. Thus, it appears that the clear and distinct idea we have of ourselves as existing things does not represent--or not merely represent--our essence. Here I cannot provide a fully satisfactory response to this objection. I can however point in the direction of a satisfactory response: What we clearly and distinctly perceive, according to Descartes, is not that we exist, but rather that we exist so long as we think-- i.e., that it is necessary that if we think, we exist--which is an eternal truth (see, e.g., AT VII 145-46, AT V 147, AT VIII-1 7, 8, and 23-24). We also clearly and distinctly perceive that we are thinking things--i.e., that thought in general is one of our essential attributes (see, e.g., AT VII 140). Yet nowhere do I find Descartes saying that, given that I am aware that I am now thinking as if of this particular thing, it follows both that I have a clear and distinct idea of myself as now thinking as if of this particular thing, and that I have a clear and distinct idea of myself as existing now. I do not deny however that, according to Descartes, my judging now that I exist based upon my awareness that I am now thinking, is certain and indubitable--neither am I denying that the certainty and indubitability of this judgment is inherited partly from my clear and distinct perception of the eternal truth to the effect that, necessarily, I exist so long as I think (see, e.g., AT VIII-121-22).

67. See AT VII 44.

68. The passage at AT VII 8 is very suggestive: the thing (res) represented by an idea "even if it is not regarded as existing outside the intellect, can still, in virtue of its essence (ratione suae essentiae), be more perfect than myself."

69. In a letter of 1646 Descartes says: "if by essence we understand a thing as it is objectively in the intellect, and by existence the same thing in so far as it is outside the intellect, it is manifest that the two are really distinct" (AT IV 350; my emphasis). This passage suggests that an existing thing can be represented in the mind--i.e., can become an object of thought--only through the presence in the mind of its essence. This provides additional support for our claim that ideas primarily represent essences, and that only derivatively do they represent things that exist.

70. For example, to Burman, Descartes says that the essence and the existence of a thing "cannot be separated in reality . . . for there was no essence prior to existence, since existence is merely existing essence" (AT V 164). Indeed, for Descartes, there is only a conceptual distinction

between a thing and its essence; that is to say, we can merely "separate the two in our thought, for we can conceive of essence without actual existence" (Ibid.) See AT VIII-1 28-29, for the notion of a real distinction.

71. See the discussion with Arnauld on complete things and their connection to clear and distinct ideas in AT VII 220-27.

72. Another passage where Descartes talks about the connection that exists between the clearness of our ideas and our faculty of perception is found in AT VIII-1 16.

73. See AT VIII-1 21, where Descartes distinguishes the faculty of perception (also called 'the light of nature') from the faculty of assent. Whereas ideas are acts of perception, judgments are acts of assent. See AT VII 376-77 and AT VIII-1 17. We must note that often Descartes portrays perception "or the operation of the intellect"--of which sensory perception, imagination, and pure understanding are various modes (AT VIII-1 17)--as being a causally active faculty which allows us to conceive (or form ideas) of things; indeed as a faculty which is the main source of all our innate ideas (see, e.g., AT VIII-2 359 and 361). Yet, in other passages, Descartes appears to contrast our volitions (the products of our faculty of assent which is active) with our passions or perceptions in which we are passive (see, e.g., AT XI 343-344 and 349). Here I cannot attempt to reconcile these assertions in Descartes.

74. In different passages Descartes repeats this theme, to wit, that material falsity in our ideas is not the result of the exercise of some faculty; see, e.g., AT VI 38, and AT VII 44.

75. The passages where Descartes explicitly states the connection between an idea's having some degree of objective reality and the possibility that it represents an existing thing, are AT III 544-45, AT V 160, AT VII 152 and AT III 215. Many authors acknowledge this connection in Descartes. See, e.g., Calvin Normore, "Meaning and Objective Being: Descartes and His Sources," in *Essays on Descartes' Meditations*, 238; and Norman J. Wells, in his "Objective Reality of Ideas in Descartes, Caterus, and Suarez," *Journal of the History of Philosophy* 28 (1990), 48 and 56.

76. This is one of the respects in which my views on clarity and Alan Gewirth's differ: he says that "the clearness and distinctness of an idea may be said to consist in the 'equality' of its direct and interpretive contents." See his "Clearness and Distinctness," 24. In contrast, in my view, the content of a clear and distinct idea, taken materially, need only be identical with a part of the content of the idea taken formally or objectively. The reason why I set it up this way in my interpretation is that, according to Descartes, the idea of God can be clear and distinct even if, taken materially, it explicitly portrays only some of His attributes. See AT VII 220-225, and AT VII 373. In my "Descartes: la imaginacion y el mundo fisico," *Dianoia* 41 (1995): 65-82, I also argue that this is what allows Descartes to assert that we can clearly and distinctly imagine a mode of extension even though we cannot in any way imagine some of the features essential to that mode.

77. We can now understand the sense in which Descartes claims to have proved, in the fourth Meditation, that all our clear and distinct ideas are true: "Inasmuch as I have my faculty of perception from God, and in so far as I use it correctly, . . . I cannot be deceived or tricked by it" (AT V 147). In other words, in using my faculty of idea-creation, or perception, correctly, I cannot make mistakes in figuring out the essences of things; and in knowing which things can exist (or must exist as in the case of God). I cannot make mistakes this way, because God guarantees that this faculty with which he endowed me indeed gives me access to the essences which he, in fact, decided to create.

78. We saw that an idea taken materially is tanquam rerum. In our interpretation this means that we cannot explicitly or consciously portray a thing in terms of a set of properties which are such that (1) they cannot be jointly instantiated, and (2) their, so to speak, incompatibility is immediately apparent to the cognizer who entertains them all together.

79. See AT VII 8: "'Idea' can be taken materially, as an operation of the intellect, in which case it cannot be said to be more perfect than me"; and AT VII 41: the idea taken materially "requires no formal reality except what it derives from my thought, of which it is a mode."

80. Alan Gewirth expresses a somewhat similar thought when he says that an idea taken formally (or what he calls the 'direct content' of an idea) is the idea viewed normatively. See his "Clearness and Distinctness," 25-26.

81. There are two different types of essentialist assertions in Descartes: (1) In one sense, a property P is essential to a thing x if and only if, necessarily, if x exists, then x has P--in logical symbols: $\Box[(\exists y)y=x \supset Px]$. See AT VII 219. Thus he says, e.g., that to be extended is part of the essence of this substance, since it would cease to exist altogether if it was not extended; it is not simply that it would cease to be this kind of thing (e.g., a body). (2) In a different sense, a property P is essential to a thing x qua Q if and only if, necessarily, if x has Q then x has P --in logical symbols: $\Box[Px \supset Qx]$. For example, Descartes says that it is essential to a mountain to have a valley; i.e., to be that kind of thing, a mountain. Yet, in the first sense of 'essential property', to have a valley is not essential to this thing, since it can cease to have this property and continue to be this thing, i.e., this chunk of matter. Here I propose a reconstruction of Descartes' concept of idea, and related concepts, only in so far as they involve the first sense of 'essential property', as when he speaks of the clear and distinct idea of God, body, or mind, due to the obvious limitations of space.

82. All of the inferences required in this reconstruction are valid in Saul Kripke's revised (quantified) S5 of 1963. See his "Semantical Considerations on Modal Logic," Acta Philosophica Fennica Fasc. XVI (1963): 83-94; and "Semantical Analysis of Modal Logic I: Normal Modal Propositional Calculi," Zeitschrift für mathematische Logik und Grundlagen der Mathematik 9 (1963): 63-96.

83. Henceforth, for the sake of brevity, I shall use 'properties' instead of 'properties in so far as they have existence in the mind.'

84. We could consider our faculty of perception in general--as opposed to a specific application of that faculty to idea I, F_I --as a relation whose domain is a set of finite, non-empty sets of properties (all those MAT-sets of each of our ideas) and whose range is a set which includes the empty set and other sets of properties (the OBJ-sets). The characterization of this relation, let us call it 'F', could be achieved by generalizing the characterization we gave of F_I .

85. See AT VII 30-32. Also, in the Second Set of Replies, Descartes says that we ought to know that people can "never, except by accident, [find] any truth in matters which they grasp only obscurely." AT VII 164; my emphasis. See also AT VIII-1 21.

86. See AT III 215, AT VII 164, and AT VII 233-34.

87. In my "Descartes: La teoría de las ideas y el cambio científico," Cuadernos de filosofía (Buenos Aires, Argentina; forthcoming), I argue in more detail for the claim that Descartes has a scientific theoretical need to introduce the concept of material falsity.