

Realism, Science, and Pragmatism

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- Scotus, John Duns, 1982. L. Modrić, S. Bušelić, B. Hechich, I. Jurić, I. Percan, R. Rosini, S. Ruiz de Loizaga, and C. Saco Alarcón, eds., *Lectura. Prologus, dist. 1–7*. Città del Vaticano, Typis Polyglottis Vaticanis.
- , 1999. R. Andrews *et al.*, eds., *Quaestiones in librum Porphyrii Isagoge*. Saint Bonaventure, NY, The Franciscan Institute.
- Thomas Aquinas, 2002. *Super II Sententiarum*. www.corpusthomisticum.org/snp2002.html#3805.
- , 1933. *De ente et essentia*. www.corpusthomisticum.org/oe.html.
- Tiercelin, C., 1999. “L’influence scotiste dans le projet peircien d’une métaphysique scientifique.” *Revue des sciences théologiques et philosophiques*, 83: 117–134.
- William of Ockham, 1967. S. F. Brown, G. Gál, A. Gambatese, and M. Meilach, eds., *Ordinatio. Prologus et distinction prima*. Saint Bonaventure, NY, The Franciscan Institute.
- , 1974. *Summa logicae*. G. Gál and S. F. Brown, eds., Saint-Bonaventure, NY, The Franciscan Institute.
- Wöhler, H.-U., 1992. *Texte zum Universalienstreit*, 2 vols. Berlin, Akademie Verlag.
- Wyclif, John, 1893. M. H. Dziewicki, ed., *Tractatus de logica*, c. 5. London, Trübner.
- , 1985. I. V. Mueller, ed., *De universalibus*. Oxford, The Clarendon Press.

4 Descartes on the Formal Reality, Objective Reality, and Material Falsity of Ideas

Realism through Constructivism?

Dermot Moran

From the standpoint of epistemology, René Descartes (1596–1650) is usually categorized as an indirect or representational realist in that he regards reality (*res*, things) as apprehended *through* our representations (*ideae*, ideas) and that what we immediately experience are our own conscious states. On the other hand, Descartes is also often conceived to be a direct realist in that ‘ideas’ are construed as being the actual ‘things represented’ (*res representata*) rather than the representings, and we have an immediate grasp of the essence of real entities through our ideas of them. It is not exactly clear where to locate Descartes’ realism. Furthermore, how exactly does Descartes approach the issue of realism? How do ‘ideas’—immediate conscious experiences—represent the real and how do they on occasion fail to do so? In this paper I shall explicate the nature of Descartes’ realism by examining his complex and subtle account of the failure of ideas to represent reality, which he calls their ‘material falsity’: *falsitas materialis* (CSM 2:30/AT 7:43). I regard this discussion as illuminating a very rich and subtle account of mental and intentional content that would not again receive such a penetrating account until Edmund Husserl’s (2001) discussion in the *Logical Investigations*. Descartes actually has quite a complex—and indeed coherent—account of the manner in which ideas present or display their content and also intend their objects. He identifies intentional and ideal elements or parts in conscious processes that need to be taken into account in any epistemological characterization of how consciousness gains a foothold in reality outside of it.

Descartes’ brief discussion of ‘materially false ideas’ in his *Meditations* and *Replies* has attracted sustained attention from commentators in recent decades.¹ The general view is that Descartes’ exposition of the notion of ‘material falsity’ is interesting and subtle but confused, and various efforts have been made to set him straight. Already in the seventeenth century, the brilliant Jansenist theologian Antoine Arnauld (1616–1698) in his Fourth Objections makes a number of telling criticisms of Descartes’ account, and Descartes himself admitted to Mersenne in March 1641 that Arnauld “more than anyone else, has entered into the sense of what I wrote” (CSMK, 175/AT 3:331). Indeed, in a still classic account, Catherine Wilson (1978, 115)

claims that Descartes, in response to Antoine Arnauld's probing questions, significantly alters his own position in the *Meditations*. She alleges that Descartes shifts his position from saying that materially false ideas mislead because they represent a "non-thing as a thing," to saying that they mislead because of their "obscurity." On the whole, however, Wilson characterizes Descartes' response to Arnauld as "a model of confusion confounded" (*ibid.*, 110). Likewise, Lilli Alanen (1994a, 206) has argued that the doctrine of material falsity contradicts Descartes' more usual account of truth in judgments, thereby engendering more confusion than clarity.² On the other hand, Norman Wells (1984, 26) argues that the confusion disappears if Descartes is read in the light of his Scholastic sources and especially Francisco Suarez's *Metaphysical Disputations*. The key, he argues, is Descartes' distinction between the truth and falsity of *things* and of *ideas*. For the Scholastics, beings are 'true' in and of themselves. Cecilia Wee (2006) in her recent book-length analysis separates what she takes to be Descartes' official account, according to which an idea is true if it genuinely comes from and accurately reflects its cause, from an alternative account, according to which an idea is true if it represents something as objective reality—though her discussion perhaps over-complicates the picture (see De Rosa 2008).

Before commencing our own discussion we need to clarify some ambiguities. Regrettably, there is widespread confusion about Descartes' use of Latin technical terms, such as *formaliter*, *materialiter*, *objective* and *esse objectivum* ('objective being'; for a good explication, see Wells 2006). Some of this confusion can be attributed to the varying usage found in Descartes' Scholastic sources (he claims to have remembered 'only the Coimbrans, Toletus, and Rubius', AT 3:185),³ some to Descartes' own—quite typical among mathematicians—casual attitude towards language. But these terminological confusions and inconsistencies should not be taken as indicating that Descartes himself was confused. Rather I argue that Descartes is operating with a complex—but overall sound—conception of the phenomenological and conceptual content of our experience.

Descartes acknowledges that an idea can be "obscured and confused"—"because it contains some element of which we are ignorant" (CSM 2:105/AT 7:147). There are degrees of obscurity and clarity, confusion and distinctness (CSM 2:103/AT 7:145), and the obscurity and confusion of specific ideas can be produced as the result of quite different causes.

Furthermore, Descartes speaks both of ideas considered 'materially' (*materialiter*) and of the 'material falsity' (*falsitas materialis*) of ideas. These notions are quite distinct. An idea considered 'materially' is an idea considered as a *mode* of mind, *i.e.* as a temporal extended episode of thinking, a modification of a thinking substance, a moment of conscious life—as distinct from an idea considered in its representative capacity, as something that *represents* something else, or indeed the idea understood as the *thing* represented itself.⁴ Some critics go further and claim—even more confusingly—that Descartes actually identifies *formaliter* with *materialiter*. Thus, in his

classic study, Étienne Gilson (1930, 203) identifies the idea understood *materialiter* with the *formal being* of the idea. Descartes, however, when he talks of ideas *formaliter*, usually means ideas taken in their representative capacity, as representing something, or ideas as they are posited in acts of judgment. In this sense, John Yolton (1981, 79, for instance, identifies the notion of *formaliter* with the notion of the idea understood 'objectively' (*objective*); but this cannot be right—the formal and objective reality of ideas are quite distinct although related notions. Context, however, is usually sufficient to grasp the sense in which Descartes is employing a particular term. As is typical of a good communicator, he tends to reply to his critics employing their own technical terms.

Before focusing on the problem of material falsity, Descartes' overall position on ideas needs to be outlined briefly. (For background texts, see Perler and Haag 2010). As far as I can see, Descartes speaks of ideas in at least five different ways: as (a) *forms*, (b) *modes*, (c) *dispositions*, (d) *immediate* objects of the mind, and (e) *images*. He does not usually make explicit what sense he intends and therefore one has to apprehend his intended sense contextually. As a first move, Descartes distinguishes between ideas as entities or events in themselves, *i.e.* as 'modes or manners of my thinking' (*modes ou facons de ma pensée*; AT 9:1:29) and in their representative function. Thus, for instance, the *Preface to the Reader* (*Praefatio ad lectorem*) in the Second Latin Edition of the *Meditations* Descartes concedes that his initial account had been ambiguous with regard to the term 'idea':

... there is an ambiguity here in the word 'idea'. Idea can be taken materially [*materialiter*], as an operation of the intellect [*pro operatione intellectus*] ... Alternatively, it can be taken, objectively [*objective*], as the thing represented [*re . . . representata*] by that operation; and this thing, even if it is not regarded as existing outside the intellect, can still, in virtue of its essence, be more perfect than me. (CSM 2:7/AT 7:8)

The 'idea' taken on its own (*materialiter*) is to be understood as a temporal episode of 'thinking' and as possessing intentional content. The idea, in this sense, is a thinking episode in the broadest sense, a *cogitatio*. Metaphysically speaking it is a 'mode' (*modus*) of mind (which is a substance), *i.e.* the manner in which the mind itself manifests itself in its temporal flow of consciousness (think of a light bulb changing color). Descartes—and indeed subsequent thinkers including Hume—tends to think of an act of thinking as completely taking over the mind's attention at the moment it is being entertained; the mind is being 'minded' in a certain manner or mode. Descartes also thinks of an idea as a *form*, usually in terms of its causal power or its relation to its own cause. Ideas are forms in that they reflect their *formal cause*. Descartes offers a very elaborate discussion of formal *versus* efficient causes in reply to Arnauld in the Fourth Replies, and there he identifies formal cause with essence. Since God's essence and existence are not distinct,

it is possible to say that God is formal cause of Himself and also efficient cause of Himself (see CSM 2:170/AT 7:243). The main principles Descartes defends are articulated in the Second Replies: 'whatever we perceive as being in the objects of our ideas exists objectively in the ideas themselves' and 'whatever exists in the objects of our ideas in a way which exactly corresponds to our perception of it is said to exist *formally* in those objects' (CSM 2:114/AT 7:161).

Descartes thinks of an idea not just as a 'mode' of mind, but also as having a certain representative 'content' for which he uses the Scholastic term 'objective reality' (*realitas objectiva*) which in turn points to, or in some sense represents some real or possible being (*realitas formalis*) beyond the idea itself. As Descartes puts it, "nature has taught" him to think of ideas as resembling the things they represent (CSM 2:26/AT 7:38). So, ideas do not just refer to actualities but in the first instance to possibilities, possible beings, essences *capable* of existing. The reality of some possible thing is expressed by its essence which is reflected in its 'objective reality'. As Descartes says in his Fifth Replies, "an idea represents the essence of a thing, and if anything is added or taken away from the essence, then the idea automatically becomes the idea of something else" (CSM 2:256/AT 7:371). Objective reality comes in degrees. There are degrees of 'objective being'—from the lowest (materially false or materially empty) to the highest—the infinite positive idea of God. Some 'real' entities also have, beyond their 'possible essence' an *actuality* or existence as a result of being caused. Existence is produced by the 'formal reality'; Descartes is clear about this in answering Arnauld, who wants existence to flow from the efficient cause alone (cf. CSM 2:149/AT 7:212). For Descartes certain ideas (e.g. God) have an objective reality so great that it can be accounted for only by them also having formal reality. Other ideas have objective reality but fail to have a formal cause and even mislead in presenting the kind of objective reality they possess. These are 'materially false' ideas.

For most of our ideas, there is a strong tendency to think of their objects as actually existing and also as being *like* the ideas of them. The assumption of actuality and the assumption of resemblance permeate our experience of our ideas. What Descartes is alluding to here is what Edmund Husserl calls the 'general thesis' of 'belief in being' (*Seinsglaube*), which he characterizes as the 'basic belief' (*Urdoxa*) that belongs to all perceptual acts. In the 'natural attitude', to invoke Husserl's conception which very much suits the naïve outlook Descartes' meditation is meant to challenge, there is a natural instinct to accept our experience as of the real and as adequately reflecting what reality is like. Descartes has exactly this understanding of the kinds of ideas that are experienced by an embodied sensory being. We have a natural if 'blind impulse': *ex caeco aliquo impulsu* (CSM 2:27/AT 7:40) to accept our experiences in a realist way.

Descartes often discusses the idea in itself in terms of what causes it or what it stands for in the outside world. Thus in a famous letter to Fr.

Giboeuf of 19 January 1642, Descartes says in relation to ideas being made inadequate by an act of abstraction from the intellect:

I am certain that I can have no knowledge of what is outside me except by means of the ideas I have within me, and so I take great care not to relate my judgments immediately to things, and not to attribute to things anything positive which I do not first perceive in the ideas of them. But I think also that whatever is to be found in the ideas is necessarily also to be found in the things themselves. (CSMK, 201–2/AT 3:474)⁵

Ideas are what the mind primarily experiences. But we may also consider ideas in different ways.

In Descartes' convoluted language, when we consider an idea *materialiter*, we consider it *metaphysically* in terms of what it is, namely, as a 'mode' or 'operation of the mind' (*operatio intellectus*, AT 7:160; *opération de l'entendement*, AT 9:1:124). An 'operation' in Scholastic terms must be understood as the exercise of a *power*. A power, furthermore, must always be located in and dependent on a *substance*. No idea, then, can be 'greater' than the substance in which it inheres and the power of an idea ultimately depends on the substance in which it inheres. Substance underpins everything else.

On the other hand, when Descartes considers an idea *objective* he is focused on the 'thing' (*res*) or object presented in and through this operation of the mind (*pro re per istam operationem repraesentata*). This 'object', Descartes adds, need not actually exist outside the mind (*extra intellectum*; CSM 2:7/AT 7:8) but we are considering the thing in itself as given in the thought (this formulation is admittedly ambiguous). Thinking of an idea *objective* is thinking of that idea's 'objective reality', a concept introduced first—and controversially since it violates Descartes' own *epoché* concerning importing metaphysical doctrines—in the Third Meditation. At this point in the methodological self-scrutiny conducted in the *Meditations*, Descartes does not know whether there exists anything 'outside' the mind, and yet he knows he has ideas, because he *experiences* them immediately. He resolves to re-examine the flow of ideas to see if he can learn something more about them. At this point he introduces various taxonomies of idea (innate, adventitious, factitious; CSM 2:26/AT 7:37–38) based on how they appear to him and what their source appears to be—this is a phenomenological classification (e.g. some ideas seem subject to the will, others appear even if I will them not to).

But just to complicate things Descartes has another use of *materialiter*. He invokes this Scholastic term when he refers to ideas as capable of being 'materially false'. According to Descartes, ideas *scarcely* (*vix, à peine*) ever give material for error when they are considered *in themselves* (i.e. as modes of thought) and are not referred to anything else (CSM 2:26/AT 7:37). But they can be materially false as well as formally false. The distinction between formal and material falsity is explained in Meditation Three:

For although as I have noted before, falsity in the strict sense, or formal falsity [*falsitatem proprie dictam, sive formalem*], can occur only in judgements, there is another kind of falsity, material falsity [*falsitas materialis*], which occurs in ideas, when they represent non-things as things [*cum non rem tanquam rem representant*]. For example, the ideas which I have of heat and cold contain so little clarity and distinctness that they do not enable me to tell whether cold is merely the absence of heat [*privatio caloris*] or heat the privation of cold, or whether both of them are real qualities, or neither is. And since there can be no ideas which are not as it were of things [*nullae ideae nisi 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 [*idea quae mihi illud tanquam reale quid & positivum repraesentat*] deserves to be called false; and the same goes for other ideas of this kind. (CSM 2:30/AT 7:43)

Formal falsity occurs where a judgment fails to correspond with reality, the *res*. Ideas on their own (as components of judgments) can be materially false if they supply my mind with material which in itself is misleading (*materia errandi*) and which will therefore mislead the unaided intellect or, on the other hand, if their obscurity means that they do not intentionally guide in the right direction. These are, as it were, *naturally* misleading ideas; we instinctively take up ideas in certain ways. As Descartes puts it, somewhat misleadingly, materially false ideas are ideas that ‘represent a non-thing as a thing’ (*non rem tanquam rem representant*; AT 7:43). The French translation of the *Meditations* adds a gloss on the phrase that there can be no ideas which are not ‘as it were of things’ which states that “since ideas, being like images, must in each case appear to us to represent something” (. . . *les idées étant comme des images, il n’y en peut avoir aucune qui ne nous semble représenter quelque chose*, CSM 2:30 n. 2/AT 9.1:34–5). Ideas—as conscious experiences—must have some kind of phenomenologically apprehended content; there is something it is *like* to experience such an idea. Descartes also says that materially false ideas “arise from nothing [*a nihilo*]*—that is, they are in me only because of a deficiency and lack of perfection in my nature*” (CSM 2:30/AT 7:44). To say they arise from ‘nothing’ is not to violate the Aristotelian maxim *ex nihilo nihil fit*, as is clear from his discussion with Caterus in the First Replies. Descartes means that the phenomenological quality in the idea does not arise from something *outside* the mind. It is due to the mind’s own sensuous character as an embodied mind. In his conversation with Burman, he is clear that the “body has an obstructive effect on the soul” (Cottingham 1976, 8/AT 5:150). Ideas—both as acts and as appearances of objects—have a distinct phenomenological character. Experiences have the character of appearing to be ‘about’ something (see García 1999, who claims Descartes is using a distinction between what an idea seems to represent and what it actually does). Cold, for instance, is a distinctly positive feeling—I can feel the *coldness* of my hand when I touch it to my face.

The experience of cold is not—as Arnaud wants to suggest—the experience of a *privation*. That would be to understand what cold is ‘formally’, *i.e.* to grasp its metaphysical nature, not materially. Cold, moreover, is not just a qualitative sensory feeling, it has an intentional arrow (as it were) that seems to point to some state of the world outside us. It tells us something (the air, the room, my hand) *is* cold. This, for Descartes, is perfectly natural; but precisely this natural intending must be resisted by the meditating scientist. Furthermore, this ‘natural tendency’ emerges from my embodiment and is ingrained since childhood and can be uncoupled or bracketed only by the meditating activity of the scientific mind.

On the one hand, Descartes is acknowledging in his usual manner that ideas are *always* representative or at least present themselves to us phenomenologically *as representative*. Ideas *seem* to represent something; they are ‘as of’. Ideas in this sense are ‘like images’ (even if they are not all images) in that they convey something beyond themselves to the mind, namely that which they ‘picture’ or ‘image’ or, generally, *represent*. Now the question arises whether certain kinds of ideas which, when analyzed logically (or scientifically—the scientific meaning of ‘cold’ for instance) turn out to be ‘non-things’ or to arise from our ‘defective’ (*i.e.* embodied) nature, continue to exercise a representative function. Does, for instance, the idea of phlogiston continue to represent something even after it is shown to be an empty idea (in chemistry)? Inaccurate ideas—as the pagan’s idea of God—can still refer in a genuine way to their object. I can *intend* or *mean* something even if I have an incorrect concept of what I intend. This referential function of an idea beyond itself is crucial for Descartes’ argument for the existence of God, but it is also what can be misleading in the case of sensory ideas.

Descartes’ overall discussion revisits a debate found in late-thirteenth- and fourteenth-century authors concerning the status of our thoughts of ‘nothing’ or privations, of impossible beings, possible but non-actual beings and so on. This discussion is taken up again in Arnaud’s analysis of the idea of cold as a privation, and later, in the nineteenth century, by Bernard Bolzano (1781–1848) and Hermann Lotze (1817–1881), and thereafter by Franz Brentano and his followers (Meinong, Twardowski, Husserl), as well as by Frege and Russell. Indeed, Brentano’s student Kasimierz Twardowski (1866–1938) explicitly invokes Descartes’ account of material falsity in his discussion of the possibility of Bolzanian ‘objectless presentations’. Thus Twardowski comments:

The doctrine of true and false presentations as it still appears in Descartes and his successors remains incomprehensible without the presupposition that to every presentation without exception there corresponds an object. Every presentation, according to Descartes, presents something as an object. Now, if this object exists, then the presentation is materially true; if it does not exist, then the idea is materially false. (Twardowski 1977, 23)

Twardowski continues:

It is obviously Descartes' view that, irrespective of whether the object exists or not, it is always presented through the presentation. The question is only whether there corresponds to this intentional existence of the object in the presentation a true existence; and in presenting the really existing objects as well as the merely intentionally existing objects indiscriminately in the same way, the presentation easily leads to false judgments, since one can be as inclined to believe that the merely intentionally existing objects truly exist as that the really existing objects exist. (Twardowski 1977, 23)

We thus find in Descartes a confirmation of our view that to every presentation there corresponds an object (Twardowski 1977, 23–24).

Twardowski is enlisting Descartes in support of the Brentanian claim that every presentation presents an object; in other words experiences are essentially intentional. Twardowski thinks, however, that the *mode of relation* between the presentation (idea) and its object differs from the mode of relation of a judgment to its object because in the case of the judgment the 'existence or non-existence of the object' *matters*. Presentations, on the other hand, merely *present* or are entertained, and their formal truth or falsity is not immediately the issue; formal truth occurs only in judgments. Ideas on their own are merely entertainings, musings, appearances, and do not have judicative 'force'; they are not animated by the act of judging, the 'judgment stroke'. Certainly there are grounds for thinking that Descartes also holds that truth and falsity are generated in and by the judgment. There are many places where he says that strictly speaking the senses in and of themselves do not mislead but only the judgments that are hastily made on the basis of what is assumed to belong in the judging. The point is that, aside from formal positings and negatings, there are certain experienced aspects of our conscious episodes that have an intentional character, although their intentional direction needs to be treated with suspicion.

In his Fourth Replies to Antoine Arnauld's criticisms, Descartes admits having entertained a worry that his usage of the term 'materially false' might not be in conformity with what he calls the 'standard philosophical usage' (since he has never spent much time reading philosophical texts) but he is reassured by finding the term 'material' used in precisely the same sense in the very first author he went to consult, namely Suarez's *Metaphysical Disputations*, Part IX, Section 2, Number 4 (see CSM 2:164/AT 7:235). The term *materialiter* is then admittedly ambiguous for Descartes: it can mean the idea thought of as an operation or mode of the mind; or it can mean the manner in which this idea presents its intentional object in a way that it provides 'material' for error. The problem is this: In material falsity, what exactly in the idea provides the material for error? Is it the mental act or operation itself, the 'ideating'? Or is the failure a failure of content, of what

elsewhere is called the 'objective reality' of the idea? Here one must be careful in supposing that the act and its content can be neatly distinguished. In fact, the thinking act is already contentful in a particular way. Thinking on its own (independent of its content) has a phenomenological character: there is something it is like to imagine as opposed to remember, will, judge and so on. But, to use Scholastic language, one can make a formal distinction between the kinds of content involved in an act of thinking.

I believe that Descartes' distinct uses of *materialiter* have confused almost all the commentators, because a material falsity is false because of our way of considering the idea *objective* not *materialiter*. Ideas considered *materialiter*, on the other hand, would seem to be all 'true', at least in the one sense that they really are mental occurrences appearing with an apparent phenomenological content that one's mind is entertaining, no matter whether they are perceptions, fantasies, or whatever. For this reason, in Meditation Three, Descartes says that ideas considered *in se* are all the same: that is there is no inequality among them, and moreover they cannot as such be false:

Now as far as ideas are concerned, provided they are considered solely in themselves [*si sole in se spectentur*] and I do not refer them to anything else [*nec ad aliud quid illas referam*], they cannot strictly speaking be false. (CSM 2:26/AT 7:37)

That is: they have the experiential character they have, and that is that. And again:

Of course if I considered just the ideas themselves simply as modes of my thought [*ut cogitationis meae quosdam modos considerarem*], without referring them to anything else [*nec ad quidquam aliud referrem*], they could scarcely give me any material for error [*materiam errandi*]. (CSM 2:26/AT 7:37)

Note here that Descartes does not say absolutely that ideas are *never* false but only that ideas *scarcely* (*vix*) *ever* give rise to falsity. This at least allows for the possibility that they may *sometimes* mislead—even within the manner in which they are being experienced and bracketing here their referential character. Normally, for an idea to mislead is for it to *misrepresent* in some way. Material falsity, then, most have concluded, must relate to the representative or objective side of ideas rather than to the *act* of thinking itself. I suggest instead that Descartes thinks literally of material falsity as a flaw in the sensory basis of the idea itself. Many of our sensorially experienced ideas have a 'natural' flaw in their nature: we are led to feel them as having a character which more careful scrutiny might lead us to question. It is not that they do not continue to have the phenomenological character of appearing to be 'real' and referring to real things outside the experience, but precisely that phenomenological character is what is suspect.

Consider a phenomenon such as referred pain. One really does have an experience or presentation of a distinctly located pain, as being *in the shoulder* for instance. But one can be told by the doctor (a doctor once told me that the first thing one was taught in medical school was never believe the patient) that this pain is actually ‘referred pain’—it does not indicate damage in the shoulder but rather, let us say, in the vertebrae of the neck. The neck itself might separately be sore, and have its own phenomenologically experienced pain, but that manifests itself as a separate, unconnected event. The Cartesian account of the apparent shoulder pain is of course that it is a ‘confused idea’ that does not clearly and distinctly *represent its cause*. But is it a materially false idea? Is there something inherently misleading in the very concept of the very specific *pain* itself as felt in the shoulder? With the concept of material falsity Descartes is trying to express something more complex than simply the usual contrast between the phenomenological manifestation of the idea (with its *quale* and ‘content’) and its representational character. There must be something else involved in material falsity—that is, that the peculiar qualitative character of the experience is itself somehow ‘misleading’. Let us follow this thought further.

As we saw, in his reply to Arnauld (which some consider a departure from the Third Meditation account), Descartes explains that material falsity means providing material for falsity, that strictly speaking the falsity is located in *judgment* (AT 7:233–5). Is Descartes’ response to Arnauld merely a rhetorical concession to Arnauld’s way of putting it, or is this account consistent with what he actually says in Meditation Three? In Meditation Three, it is unclear whether our ideas of sensible qualities “are ideas of real things or of non-things” (CSM 2:30/AT 7:44); 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*. (AT 9.1:34; my trans. and italics)⁶

Certain experiences have a phenomenological character which is confused because the causal ‘source’ cannot be really determined. (Interestingly, Descartes here uses the late Latin term *author*, AT 7:44 ll. 9–10, rather than *auctor*.) In such cases, Descartes will conclude there is really no reason to seek a source for these ideas *beyond* myself. In other words, my embodied nature conveys experiences in a certain way which is due to my incarnation. I experience cold as something really out there, but on higher reflection I should rather regard it as a modality of my own incarnate being, for which ‘I’ am the source, and I should uncouple the intentional thrust of the experience. Many of my conscious experiences really can be related to *me* as a causal source. The ego (as a substance), for Descartes, has sufficient formal reality to be the formal or indeed eminent cause of anything which is ‘below’

it on the chain of being. According to Meditation Three, for instance, the notion of substance carries more objective reality, more content than that of accidents or modes. Furthermore, within the category of substance, the idea of an *animal* carries more objective reality than the idea of a *stone*. Let us look further at this conception of formal reality.

In the Third Meditation, to articulate the special relation between the idea of God and its cause, Descartes introduces what Suarez elsewhere calls a ‘commonly found distinction’ (*vulgaris distinctio*) between formal and objective reality. This distinction stems from Suarez and the Scotist tradition (Dalbiez 1929; Cronin 1966; Wells 1990, 2006). Indeed, the French text of the *Meditations* acknowledges this borrowing, adding a reference to “what the philosophers call actual or formal reality” (*cette réalité que les Philosophes appellent actuelle ou formelle*; CSM 2:28/AT 9:32). The Scotists used a fine-grained set of distinctions between objective reality, formal reality, ideal being, and so on; see Kobusch (1987, 79–104), who traces the origin of the discussion in Roger Bacon, Albertus, Siger of Brabant, Martin of Dacia and others. Francisco Suarez (1548–1617) made a similar distinction between the objective and formal concepts, whereby the ‘formal concept’ refers to the form of the *act of thinking* itself and the ‘objective concept’ to the representative content of the thought. As Suarez writes in his *Metaphysical Disputations* (1597):

The objective concept (*conceptus objectivus*) is said to be the thing (*res*) or *ratio* which is properly and immediately known or represented through the formal concept, as for example, when we conceive of a man, that act which we make in the mind in conceiving the man is called the formal concept [*conceptus formalis*], whereas the man known and represented by that act is called the objective concept [*conceptus objectivus*].⁷

Many commentators have thought that these sets of distinctions made essentially the same discriminations. If ideas are *forms* of some kind, then speaking of them as they actually are is to speak of them *formally*. However, this is precisely what Descartes calls speaking of an idea *materialiter*, as we have seen (and this is why Gilson identifies *formaliter* with *materialiter*); we are picking out the immaterial ontological nature of the act of thinking. In the ‘Preface to the Reader’ and also in the Third Meditation, Descartes uses *materialiter* to refer to ideas thought of *in themselves* without reference to their objects. In the Replies to the Fourth Set of Objections Descartes confirms this way of speaking when he says:

Since ideas are forms of a kind [*formae quaedam*] and are not composed of any matter [*nex ex material ulla componantur*], when we think of them as representing something [*quatenus aliquid repraesentant*] we are taking them not materially [*materialiter*] but formally [*formaliter*]. If

however, we take them, not as representing this or that, but simply as operations of the intellect [*operationes intellectus*], then it could be said that we were taking them materially, but in that case there would be no reference to the truth or falsity of their objects. (CSM 2:163/AT 7:232)

It is clear that referring to an idea as some kind of object, process or event in itself is to refer to it *materialiter*. In the Replies he says '*formaliter*' characterizes the representative character of an idea: we are thinking of what the idea is of, its intentional object.

With respect to Étienne Gilson's eminence in the field of mediaeval philosophy, we must still ask whether *formaliter* and *materialiter* here mean the same thing for Descartes? The majority of commentators have thought so, but Norman Wells (1990, 34 n. 3), in perhaps the most careful and erudite discussion of the topic, argues that the material/formal distinction here is quite different from the objective reality/formal reality distinction in Meditation Three. My own view is this: an idea considered as an activity which modifies the mind, or as a mode in which the mind manifests itself to itself consciously, is considered *materialiter*. When it is considered as *representative*, it is considered *formally* (what, confusingly, the 'Preface to the Reader' calls 'objective', CSM 2:7/AT 7:8). Descartes is confusing the issue because he is saying that ideas considered materially are forms of thinking, but to speak of them as 'forms' is not to speak formally. When some idea is considered representatively in terms of what those forms are forms of (*i.e.* what is objectified by the thinking) then the idea is considered 'formally' or 'objectively'; hence the formal/objective distinction applies only when we consider an idea in terms of the cause of its intentional object. Formally and materially are two ways of considering ideas which pick out the ambiguity of the term, *i.e.* as both act and object. But now we appear to be identifying *objective* (as found in the *Preface to the Reader*, AT 7:8) and *formaliter* as found in the Reply to Arnauld (AT 7:231). However Descartes' first proof for the existence of God in Meditation Three turns on whether we can distinguish between the objective and formal reality of an idea. Although considering an idea formally and objectively means thinking of it epistemologically in terms of the representative function or activity the idea possesses, nevertheless when we come to examine that representative function in detail we now need to distinguish the objective and formal components as referring to two *ontologically* distinct aspects of the representing process.⁸

Descartes himself offers an important formal definition of 'objective reality' in his Second Replies:

Objective reality of an idea. By this I mean the being of the thing (*entitatem rei*) which is represented by an idea (*repraesentatae per ideam*), in so far as this exists in the idea (*quatenus est in idea*); . . . For what we perceive as being in the objects of our ideas (*in idearum objectis*) exists objectively (*objective*) in the ideas themselves. (CSM 2:113–4/AT 7:161)⁹

This is a complex—and initially confusing—definition, but at least he is clear that objective reality refers to the idea *in itself*—bracketed from its causal source. In the First Objections, Fr. Caterus therefore denies that 'objective reality' in the mind is anything real possessing formal reality and hence not anything requiring a causal explanation. Caterus denies that there is a 'real' intentional object between the external thing and the mind. Thinking of 'nothing', for him, is not apprehending an object which is not itself nothing; rather it is not thinking at all. Opposing him, Descartes adopts a Scotist stance whereby the 'objective reality' of an idea is something whose content requires a causal explanation. For Descartes, the thought of nothing is 'not nothing', though it is of course 'less perfect' than the thing itself (since it lacks formal reality or else any formal reality it has it owes to its causal source). The objective reality on this account contains the properties and the 'being' (*entitas*) of the thing represented in the manner in which they are so represented. Thus, for example, the objective reality of the idea of God contains the property of 'infinity' which is also a property of the infinite deity itself. Later Descartes will get into a tangle as to whether the objective reality is an exact mirror of the object represented (the formal reality) or is just a signpost pointing to it in a certain way. Clearly, as he recognized, the finite mind cannot *contain* within itself an idea that is itself actually infinite. The ego as a finite substance does not have enough formal reality to be the source of a genuinely infinite idea. But it can generate a *finite idea* of infinity (and this is Descartes' fallback position). A finite idea can have or somehow intend an infinite 'objective reality' and indeed, in the case of the idea of God, it does just that.

In her now classic study *Descartes*, Margaret Wilson (1978, 106) interprets material falsity as a falsity of ideas which "derives from their representative character." She distinguishes between the representational character of an idea and its objective reality. Wilson appears, then, to be in agreement with Twardowski (1977, 107)—whom she does not discuss—in holding that Descartes' idea is of a thing does not just concern existent things. The concept of a *res* is wider than the notion of an existent thing, as we saw earlier. A thing is a possible existent for Descartes. For instance, the Fifth Meditation argument moves from demonstrating that entities with mathematical properties are possible to the demonstration that they exist and also that they are actually as they are conceived to be. Wilson distinguishes an idea's 'of a thing' status and its representative character:

Consequently, the claim that an idea or thought is 'of a thing (*res*)' must be distinguished *both* from the claim that it represents something that in fact exists, *and* from the claim that it has representational character. An idea may have representational character, yet fail, in the relevant sense, to represent *any thing*. (Wilson 1978, 108)

Wilson (*ibid.*) wants to distinguish (a) the claim that an idea is *of a thing*, (b) the claim that it *represents* something that in fact exists, and (c) the claim that it

has 'representational character'. Wilson's tripartite distinction is not coherent, nor is it supported by the text of Meditation Three. Wilson thinks that something can have 'representational character' and yet fail to be 'of a thing'. But it seems to me that to represent is to have something presented through the idea.¹⁰ Curiously, Wilson's discussion in her book does not require this tripartite classification. She does want to have ideas of a kind which are not sufficiently clear and distinct that we are able to tell whether they represent anything real (where 'real' means *possible*). Something is real if it does not contain a contradiction; everything conceived clearly and distinctly contains the notion of possible existence (AT 7:116, 166). Wilson does not give a very clear definition of the representational character of an idea, she simply uses it as a rendering of Descartes 'as if they were images of things':

I will use the expression 'representational character' to designate that feature of ideas by which they are '*tanquam rerum imagines*'. (Wilson 1978, 102–3)

Wilson also interprets this Latin phrase in a very specific way:

First, when Descartes says that ideas are '*tanquam rerum imagines*' I think he is saying more than that thoughts have 'objects', according to which they are classified (as ideas of *God*, of *heat*, or *cold*, etc.). He means also that ideas are received by the mind *as if exhibiting to it* various things—or as if making things *cognitively accessible*. . . . Second, when Descartes speaks of ideas being '*tanquam rerum imagines*', he does not mean that every idea involves a mental picture with visual properties: an idea, in other words, can purport to bring something into cognitive ken without purporting to represent it visually. . . . I will use the term 'representational character' to designate that feature by which they are '*tanquam rerum imagines*'. (Wilson 1978, 102–3)

Here Wilson acknowledges that all ideas seem to be *of* something; ideas have *aboutness*, as it were (*cf.* Shapiro 2012; Perler 1996). Yet she goes on to give a very confused picture. Of course, ideas do not necessarily have to have *visual* properties; we have representational ideas of smells and tones, for example, or of abstract entities. To smell an orange is not to have a *quale* of a certain olfactory character combined with a visual representation of an orange; this is a cartoon depiction of ideas. To my knowledge, Descartes does not use the term *imago* to mean pictorial image in this way. Indeed, he continues to employ the term 'idea' as *terminus technicus* to refer to 'forms of perception' in the divine mind in the traditional way. As he writes in the Third Replies:

I used the word 'idea' because it was the standard philosophical term [*terminus technicus*] used to refer to the forms of perception belonging to the divine mind [*ad formas perceptionum mentis divinae significandas*],

even though we recognize that God does not possess any corporeal imagination. (CSM 2:127/AT 7:181)

The term 'idea' does not include any reference to the imagination.

How should we understand the distinction between the *being* of a thing and its having representational character? Wilson tries to employ her tripartite distinction to sort out the puzzle of how there can be materially false ideas. Wilson (1978, 105) uses the representational character of ideas to explain the notion of 'objective reality'. Ideas exhibit to us different degrees of objective reality. She states:

This account [of material falsity] forces us to recognize a distinction between the representative character of an idea and its objective reality. (Wilson 1978, 106)

It is not clear how she arrives at this conclusion and it makes no sense to me. It is entirely unclear how the representational character of an idea can be distinguished from its objective reality. Indeed there is no evidence that Descartes makes anything like such a distinction. There is, rather, the distinction between the phenomenological experience of having the idea, the conscious episode with the 'natural' intentional thrust, and the intentional object which is intended in and through this conscious process.

According to Wilson, material falsity in sensory ideas is to be explained by a gap between the objective reality of the idea and its representational character. Sensations for Descartes, according to Wilson (1978, 111), "lack objective reality, despite having representational character." It is again not clear what this means. Is the suggestion that sensory ideas apparently carry content but actually do not refer? Wilson (1978, 112) suggests that Descartes thinks of objective reality as something the idea 'wears on its face'. However, in the case of materially false ideas this does not hold and we cannot infer from the objective reality of the idea to its formal cause. Here Wilson seems to mean by 'representational character' the connection between the objective reality of an idea and its *formal cause*. The question is whether an idea has in some sense to *represent* what causes it. John Searle (1983, 61) has claimed, for instance, that a perception is uniquely characterized by representing its conditions of satisfaction, such that in seeing a yellow station-wagon, I know that that seeing precisely involves that it is caused by the presence of a yellow station wagon. Other philosophers of perception, *e.g.* Edmund Husserl, deny that perception necessarily involves grasping a causal connection. The question is, as Cecilia Wee puts it, whether an idea has to both represent its cause in some way, and also be an adequate representation of that cause. She writes:

. . . an idea represents truly only if (1) the idea comes from the cause from which it purports to come, and (2) the idea accurately represents that cause. (Wee 2006, 39–40)

For example, consider a toy that says “made in China” on it. Some of our ideas—what Descartes calls our ‘adventitious’ ideas—come with ‘made in the outside world’ written on their faces, to use Wilson’s expression. Other ideas could simply have written on them ‘possible candidates for extramental existence’. In her discussion, Wee claims that the idea of the sun is not materially false, although it is inaccurate. It is still an idea *caused by the sun*. Now, the idea of the sun is problematic because Descartes thinks we operate with at least *two* different ideas of the sun. There is the commonsense idea and the astronomer’s idea, which, as we shall see, is a constructed idea.

Descartes’ argument in the Third Meditation will be that only in the case of God is this testimony (what is as it were written on the face of the idea, to use Wilson’s locution) incontrovertible. Only ‘God’ is an idea which in and of itself is most true (AT 7:46), although in a certain sense not even chimeras are false in themselves (Meditation Three and *Letter to Clerselier* 23 April 1649, CSMK 376/AT 5:354).

Norman Wells (1984, 27–8) sees the problem as one of distinguishing between representing a true or false object and the notion of representing *falsely*. Wells is right to remind us that Descartes follows tradition in thinking of entities themselves as *true* in so far as they have being (‘truth consists in being’; *Letter to Clerselier* 23 April 1649, CSMK 377/AT 5:356) and that falsity and deception are rooted in non-being, in defect. In other words, in this special ontological sense not just judgments but things may be said to be ‘true’. Thus in Meditation Three the idea of God considered in itself is considered to be most true. What these true ideas ‘represent’, ‘exhibit’ (*exhibet*, AT 7:42 l. 30, 46 l. 14), or ‘contain’ (*contineat*, AT 7:46 l. 9) is something stable and immutable (a true essence, genuine *entia*). As Lilli Alanen (1994a, 208) remarks, the ‘objective’ truth of an idea is wedded to its objective reality and to the clarity and distinctness with which that objective reality is conceived. But the formal truth of the idea consists in its accurately representing its cause and conveying accurately the qualities of that cause as qualities contained in the objective reality of the idea.

From Suarez Descartes took the idea that an idea in and of itself cannot be false. In a sense whatever is given in *simplex apprehensio* must be true. Simple apprehension simply conforms to its object as Suarez says (*Disputationes Metaphysicae*):

It is impossible that a concept of the mind be given which does not have something which represents the proper object; therefore, if it is compared to something else, it is not possible for it not to be a true conception of such an object since it necessarily is of it and represents it nor can it represent it naturally, if not intentionally and conforming to it, it is therefore true, since truth is nothing other than conformity of intellect to the thing. (*Disputationes Metaphysicae* 8,3,3; 25:284)¹¹

To have an idea is to have something represented to one and this involves some kind of conformity with what is represented. This is the basis of both

Suarez’s and Descartes’ thinking on this subject. Ideas taken in themselves cannot strictly speaking be false. When I imagine a goat or a chimera I have a genuine object before my thought even if it does not exist; only in the case of God is an essential judgment also an existential judgement.

We cannot misapprehend at the level of *simplex apprehensio*, as Descartes emphasizes in reply to Gassendi (CSMK 2:260/AT 7:378) and in his letter to Hyperaspistes August 1641: “falsehood is never apprehended as truth and those who deny that we have an idea of God do not really apprehend this even though perhaps they affirm it, believe it and argue for it” (CSMK 195/AT 3:432). Descartes here clearly is making use of the notion of apprehension as distinct from what we actually conceive or think.

What precisely is in the objective reality of an idea? The problem is whether the ‘objective reality’ of the idea is the total ‘content’ of the idea; *i.e.*, whether it actually possesses all the properties in the idea or whether the objective reality is a *subjective phenomenal appearance* which gives us just an aspect or profile, an *Abschattung* of the object, to use Husserl’s terms. Is it the ideal essence of the object, or just those qualities we are currently able to think in the object? If I am thinking of ‘gold’, is the objective reality of that idea that it is yellow, heavy, precious, shiny metal, or is it the chemical composition, its place in the table of elements, and so on? Twardowski attempts to distinguish between properties of the object and properties of the content of my thought and with Descartes we must do likewise (and Malebranche makes this problem acute).

This question becomes crucial in regard to the argument for the existence of God. Because if the objective reality does not guarantee a firm toe-hold from which to argue to the need for a formal reality as the sole cause of that objective reality, then the whole notion of the objective reality of the idea becomes fraught with difficulty. It becomes unreliable in precisely the way in which Brentano’s ambiguous understanding of content became unreliable as between the *psychical occurrence* and the *ideal* signification, to use Husserl’s (1994, 388–395) terminology in his criticism of Twardowski.

Let us leave aside for the moment the question of the objective reality of the idea of God and concentrate on those ideas which Descartes acknowledges can be materially false, ideas of sense and ideas of privative and negative concepts (but not the ideas of infinite objects, which are positive for Descartes). Are sensory ideas intrinsically deceptive? Or are they merely deceptive because of some extrinsic context in which we normally find them embedded?

According to Descartes we assume two things when we have sensory ideas: that they come adventitiously from outside (AT 7:38, 9.1:30), and that they resemble qualities in the objects which cause them (AT 7:38). He is vehement in denying the second claim all through his life, from his early works to the *Principles*.

In his Conversation with Burman Descartes returns to the idea of the falsity of ideas (AT 5:152). He is challenged with the objection that there is no error within ideas considered in themselves but only in so far as they

refer beyond themselves to something external (*relatio et applicatio ad res externas*, AT 5:152). In response, Descartes is recorded as saying that if he considers an idea (e.g. whiteness) in itself then even without referring the idea to anything else outside me, *ad nullam rem extra me referram* (e.g. a white thing), then even the idea of whiteness itself is somehow materially false and 'material for error' (*materia errandi*). I am making an error about the 'nature' (*natura*) of whiteness, as to what kind of quality it is. This occurs even if I am thinking of white *in abstracto* and am not referring it to anything else:

Even if I do not refer my ideas to anything outside myself, there is still subject matter for error. . . . For example, I may say whiteness is a colour; and even if I do not refer this idea to anything outside myself [*ad nullas res extra me referram*],—even if I do not say or suppose that there is any white thing—I may still make a mistake in the abstract [*in abstracto*], with regard to whiteness itself and its nature or the idea I have of it. (Cottingham 1976, 11/AT 5:152)

Descartes here suggests that even the thought of 'white' on its own can be misleading if we think of it (as we naturally do) as a quality inherent in things. A materially false idea is one which naturally leads the mind to a certain assumption and that assumption unfortunately is incorrect (metaphysically and epistemologically).

In what sense does an idea contain all the content it ought to have? Descartes, as a mathematician, recognizes that one can frame an idea of a mathematical figure (e.g. a triangle) and consider many of its properties but there is still room to discover new properties of that figure without the idea becoming 'augmented', so that our grasp on the idea becomes clearer (see CSM 2:256/AT 7:371). Are these properties somehow already 'contained' in the objective reality of my idea? Descartes' answer is yes: we get clearer about the objective reality. He often speaks of what is immediately available in an idea; he does not want to say that in entertaining an idea, one is at the same time entertaining all the logical consequences of that idea. Clearly we need to distinguish between the 'aspect' of the objective reality of the idea that is available immediately to me, and the ideal objective content of the idea, such as would be available to the expert or perhaps as it is in the divine mind. Husserl in his review of Twardowski makes this precise distinction between the real psychological token, as it were, and the ideal sense that it instantiates. Malebranche and Arnaud develop Descartes' thoughts further in this area but it is clear that Descartes thinks that an idea, properly considered, can allow the essence of its object to show itself, *i.e.* the nature of that entity, as possible; this is at the heart of the exercise in the Fifth Meditation. But Descartes wants to distinguish between different ways of apprehending the idea. For instance, the sensory ideas of the geometrical shapes themselves do contain material for error; precisely because sensory experience

clouds the intellect. It is not the actual drawn line that the geometer relies on to construct the idea and arrive at the essence, but an ideal line purified of extraneous and misleading sensory content. Descartes is aware that he is making a fine distinction here: sensory ideas of size and shape (according to the Fifth Meditation) can be relied on in so far as they convey accurate information about true size and shape (a right-angle not only looks like 90 degrees but can be measured to show it is 90 degrees). Descartes does not draw the inference that Berkeley does, namely, that sensory ideas of primary qualities are as misleading as ideas of secondary qualities. This is because Descartes somehow thinks that certain sensory ideas more clearly point beyond themselves to the nature (and not just the existence) of their source. Claudia Lorena García puts it as follows:

Take, for example, our sensory ideas of sensible qualities: when Descartes classifies these as materially false and says that a materially false idea represents a non-thing as a thing, he is not merely saying that the putative qualities these ideas seem to represent *happen not to exist* in the physical world. He is saying something stronger: namely, that, unlike the shapes or figures which we sensorially perceive and which can actually exist in corporeal substances, those putative qualities we sense—such as colours, heat, or cold—cannot exist anywhere. (García 2001, 357)

Similarly, in the *Principles of Philosophy*, Descartes says that color and pain (*color et dolor*) "are judged to be real things existing outside our mind [*extra mentem nostrum existentes*], there is no way of understanding what sort of things they are" (CSM 1:217/AT 8.1:33), and concludes the passage:

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. (CSM 1:217/AT 8.1:33)

A Cartesian idea must be understood not just as a mental occurrence (of a certain temporal duration, qualitative feel, act quality, and so on), and not just as the object conveyed by the idea or thought, but also precisely as an act of intending, an intentional act with its own complex structure (as Husserl attempted to articulate). The occurrence in the mind is a temporal disturbance of the conscious flow; it has a certain peculiar character as an act (its 'act quality', to use the language of Husserl's *Logical Investigations*) and also a certain qualitative feel and experiential content (which belongs both to the act and the object-as-experienced-in-the-act). But beyond that there is an act whereby it intends or means something. I can intend this specific dog even if I am thinking the idea 'animal'. This specific referential feature of the act is not explicitly named by Descartes, but he invokes it all the time

to characterize how finite humans possess a true idea of the infinite God, no matter what errant content their idea may have. This intending allows non-theologically expert believers—such as Mersenne’s “the natives of Canada, the Hurons and other primitive peoples” (CSM 2:89/AT 7:124), invoked in the Second Objections—to have an idea of God that correctly is of God even if the phenomenological properties of that idea (God is a sacred tree or rock) are misleading.

Descartes wants to say that everyone can have a genuine idea of God. “What about the Hurons?,” he was asked by the theologian Marin Mersenne, who think God is a tree or a stone? According to Descartes the Huron idea of God falsely represents God but still counts as a genuine idea of God. All humans, according to Descartes—including the Hurons—have an innate idea of God, though through inattention and through an indiscrimination between imagination and intellect the Hurons populate their idea poorly. The case of ‘coldness’ is not the same, because here it is a question of our corporeal incarnation cloaking our experience in a certain manner that is completely natural and, in daily life, unavoidable. We cannot shed our skin; so we will always have materially false experiences of cold. Only the scientist—from a ‘transcendental’ view, as it were—can have a genuinely scientific concept of ‘energy’ (or whatever) that cuts across our folk conceptions of heat and cold.

As Descartes clearly states in Axiom V of the Second Replies, the security of all our knowledge, both sensible and intellectual, depends on the acceptance and employment of the axiom that “the objective reality of our ideas requires a cause which contains this reality not merely objectively but formally or eminently” (CSM 2:116/AT 7:165). Descartes’ notion of objective reality combines psychological or semantic content with a certain measure of ontological actuality or reality, a reality which requires a causal explanation. This content signifies, and may be causally linked to, but should not to be confused with, the idea’s *object*, the thing (*res*) it actually represents.

Descartes stressed the distinction between act and content by insisting that they require separate causes: a cause of the *act* and a cause of the *content* of the thought.¹² In one sense all ideas are *of* the mind (they are mental entities, modes of thinking substance); in another sense, they are not, since they are about (‘of’ in a different sense) other things. Though, Descartes allows, we can recognize an object as much by its shape as by its color (e.g. *Principles* I §69, CSM 1:217–8/AT 8.1:33), nevertheless, our cognition of *what shape* is more clear and certain than our cognition of what color is (Wilson 1993, 164–6, 173). This is the message of the account of the wax example in Meditation Two, but it is also the central message of the important discussion of the two ideas of the sun in Meditation Three. Although Descartes holds that the primary qualities manifested in our idea of that object are exhibited exactly as they are possessed in formal reality by that object itself (e.g., *Principles* I §70), this statement cannot be taken at face value, because Descartes is clearly aware that we sense size, motion, shape,

and so on, in a way determined by our sense organs, bodily location relative to the object, and so on. Hence Descartes is not saying that the primary quality (e.g. size) as sensorially perceived exactly mirrors the property as it is in the object. We know *what* size and motion are and we further know that they must be in the body. But how precisely these primary qualities are in the body is determined by mathematical physics, the laws of perspective, and so on, and *not* by sense observation and its associated ‘impressions’.¹³

Descartes’ language is revealing, particularly his use of *tanquam* (‘as it were’) with regard to the source of our sensory idea of the sun:

For example, there are two different ideas of the sun which I find within me. One of them, which is acquired as it were [*tanquam*] from the senses and which is a prime example of an idea which I reckon to come from an external source [*inter illas quas adventitias*], makes the sun appear very small. The other idea is based on astronomical reasoning, that is it is derived from certain notions which are innate in me [*ex notionibus quibusdam mihi innatis*] (or else it is constructed by me in some other way [*vel quocumque alio modo a me factam*]), and this idea shows the sun to be several times larger than the earth. Obviously both these ideas cannot resemble the sun which exists outside me; and reason persuades me that the idea which seems to have emanated most directly from the sun itself has in fact no resemblance to it at all. (CSM 2:27/AT 7:39)

Here Descartes is not even persuaded that the sensory idea of the sun actually comes from outside the intellect (which he normally characterizes as *extra intellectum* or *extra mentem*); rather the sensory idea is a product of certain implicit judgments made by us (CSM 1:170/AT 6:138) combined with a certain ‘natural’ tendency of our sensory experience. But he is certain that the astronomical idea is either constructed or derived from innate ideas within me by a process of reasoning—a process he had already described in the *Dioptrics* (CSM 1:172/AT 6:140). It is clear that Descartes is tending towards the view that all sensory ideas contain in them ‘material for falsity’ and ultimately may be considered to be materially false—not just heat, cold, heaviness, lightness, roughness, smoothness, but also the apparent sensory sense of distance, depth, and so on. Nothing in his express examples of ‘materially false’ ideas restricts the class of such ideas to those examples. Only ideas that lend themselves to *a priori* conceptual ‘construction’—purely scientific or geometric ideas—will ultimately have nothing of material falsity in them. The exact opposite of a materially false idea, indeed, is the (genuine) idea of God, which contains only what is causally put there by its eminent source.

In conclusion, then, Descartes’ analysis of the phenomenological content, conceptual content, referential character, and intended object of conscious experiences is far richer and more subtle than commentators in general have acknowledged. There is now (cf. Perler 1996) a growing recognition that

Descartes did have a conception of the intentionality of conscious experiences. He also carefully distinguished (though when pressed he unfortunately fell back on the Scholastic distinctions of his day) between the phenomenological character of the act and its object, the subjective (sometimes called 'psychological') and objective (sometimes called 'ideal') content of the experience, and the manner in which the idea represents both an object or thing independent of the experience and also carries a representation of the manner in which it is caused. This analysis in many ways foreshadows the complex distinctions made later by Husserl (2001) in his *Logical Investigations*. Of interest also is the manner in which Descartes identifies a kind of natural attitude with a general thesis of world-belief that needs to be systematically challenged by scientific ideas that are in some sense constructed geometrically out of clear and distinct innate ideas. The true idea of the sun is 'constructed' in this way. Descartes' discussion of the source of the content of the idea of a previously unimagined 'ingenious machine': *idea machinae alicujus valde ingeniose excogitatae* (CSM 2:97/AT 7:134)—a discussion quite neglected by commentators—provides a paradigm of Descartes' conception of the knowing process, *i.e.*, how an object is conceived or constituted 'through an idea' (*per ideam*). On several occasions—in the First Replies (CSM 2:75/AT 7:104), the *Synopsis* to the *Meditations* (CSM 2:10–11/AT 7:14), the Second Replies (CSM 2:97/AT 7:134), *Principles* I §§17 and 20 (CSM 1:198–9/AT 8a:11–12)—Descartes considers the case of the 'idea of a highly intricate machine' (*idea alicujus machinae valde artificiosae*, AT 8a:11), a 'very perfect machine' (*machina valde perfecta*, AT 7:14 l. 28) never before conceived by anyone. This example is invoked precisely to explain the concept of 'objective reality', or the 'objective perfection' or 'objective intricacy' of an idea. In a thought experiment, Descartes asks us to conceive of a machine of such intricacy that it bears no resemblance to any existing machine. What is the cause of such an idea? Descartes entertains a number of possibilities. The idea of a complex machine might be caused by an actual complex machine which I have seen at some time, "thus producing an idea resembling the original" (CSM 2:76/AT 7:104). This option is ruled out *ex hypothesi*. A second possibility is that "the cause might be the extensive knowledge of mechanics (*magna Mechanicae scientia*) in the intellect of the person concerned" (CSM 2:76/AT 7:104) or, thirdly, the cause might be a "subtle intelligence" (*magna ingenii subtilitas*) which enables someone "to invent the idea without any previous knowledge." The mind, since it is a substance, has the formal reality to generate the objective reality it requires for the idea from its own resources. Furthermore, Descartes wants clearly to separate the cause of the idea *as act of the mind* from the cause of the complexity of the idea's content:

Nor will it suffice to say that the intellect itself is the cause of the idea, in so far as it is the cause of its own operations, for what is at issue is not this, but the cause of the objective intricacy [*artificium objectivum*]

which is in the idea. For in order for the idea of the machine to contain such and such objective intricacy, it must derive it from some cause; and what applies to the objective intricacy belonging to this idea also applies to the objective reality belonging to the idea of God. (CSM 2:75/AT 7:103–4)

Ideas—even of external objects—can be constituted in the mind out of its own resources. Even ideas of external things such as the sun which are occasioned in us through our sensory experiences need to be systematically replaced by the geometrically constituted clarified ideas of the sun as generated in astronomical reasoning. Descartes is, on this account, what one might call a 'constitutional realist'.

NOTES

1. See *inter alia* Alanen (1994a), (1994b), (2003); Beyssade (1992); Bolton (1986); Clemenson (2007); Field (1993); Kaufman (2000); Secada (2000); Shapiro (2012); Wee (2006); Wells (1984), (2006); and Wilson (1982), (1990), (1993). Descartes' works are cited according to the edition of Adam and Tannery (1996), designated as 'AT'. Except as noted, English translations are from Cottingham, Stoothoff and Murdoch, eds., (1985), designated 'CSM'; English translations of the letters are from Cottingham, Stoothoff, Murdoch and Kenny, eds. (1991), designated 'CSMK'. Citations are by volume:page numbers; occasionally line numbers are indicated by 'l.' or 'll.'.
2. See also Wells (1984, 25), who quotes Kenny, Cottingham and Robert McRae, as all thinking that Descartes' account of material falsity is confused.
3. Clemenson (2007, 70–91), shows the parallels between Descartes' analysis of ideas that misrepresent and the views of Rubio on obscure and confused sensations.
4. Descartes also discusses arguments materially and formally. He cites a syllogistic inference in the Second Replies which he says is 'materially true' (*i.e.*, the three statements in the inference are in fact all true) but that the formal inference is itself formally false and a 'sophism', see CSM 2:107/AT 7:151).
5. The French version reads: "Car étant assuré que je ne puis avoir aucune connaissance de ce qui est hors de moi que par l'entremise des idées que j'en ai eu en moi, je me garde bien de rapporter mes jugements immédiatement aux choses, et de leur rien attribuer de positif, que je ne l'aperçoive auparavant en leurs idées; mais je crois aussi que tout ce qui se trouve en ces idées, est nécessairement dans les choses."
6. The French text reads: "c'est-à-dire si les idées que je conçois de ces qualités, sont en effet les idées de quelques choses réelles, ou bien si elles ne me représentent que des êtres chimériques, qui ne peuvent exister."
7. My translation. The Latin text reads: "Conceptus objectivus dicitur res, vel ratio, quae propria et immediata per conceptum formalem cognoscitur seu representatur, ut verbi gratia, cum hominem concipimus, ille actus quem in mente efficitur ad concipiendum hominem vocatur conceptus formalis, homo autem cognitus, et representatus illo actu dicitur conceptus objectivus." See F. Suarez, *Disputationes Metaphysicae* 2.1.1 (Salamanca, 1597; rpt. Paris: L. Vivès 1856–67), 25:65. For commentary on this passage, see Cronin (1996, 79ff), and Wells (1993), esp. 522–528.

8. Wells (1990, 34 n.3) seeks to characterize the two uses of *objective* and *formaliter* with respect to ideas as an epistemological notion distinct from the ontological distinction between formal and objective reality in ideas. Wells (1990, 45 n. 51) likewise argues that Descartes' use of *formaliter* to mean the idea thought of as the act of representing is taken from Suarez, *Disputationes Metaphysicae* 25: I, 39 and 25,910.
9. 'Being of the thing' (*entitas rei*) clearly means here the thing understood as a possible essence, as a set of perfections understood by the mind. Descartes further claims that every genuine idea represents an essence.
10. Wells (1984, 2006) also correctly argues against Wilson that the notion of representing is none other than the idea of exhibiting. There is no need to separate as she does between being 'of a thing' and having 'representational character'.
11. My translation of a passage in Suarez quoted in Wells (1984, 29 n. 25).
12. This is recognized by Perler (1996, 78–99), who employs the notation of Chappell (1986, 177–98), whereby ideas as operations of the intellect ('ideas_m') are distinguished from ideas in the objective sense ('ideas_o'). I have not employed this notation as it tends to mask the more complex relation between act, content and object which Descartes employs.
13. In the Sixth Replies Descartes makes a very interesting distinction between 'three grades of sensory experience': the physical stimulation of the sense organs (in terms of the motion of particles), the immediate effects in the mind (e.g., colors and smells) due to the "intermingling of mind and body," and the "judgments about things outside us that we are accustomed to make from our earliest years" (CSM 2:294–95/AT 7:437).

REFERENCES

- Alanen, Lilli, 2003. *Descartes's Concept of Mind*. Cambridge, Mass., and London, Harvard University Press.
- , 1994a. "Une certaine fausseté matérielle: Descartes et Arnauld sur l'origine de l'erreur dans la perception sensorielle." In: J.-M. Beyssade and J.-L. Marion, *Descartes. Objecter et répondre* (Paris, PUF), 206–230.
- , 1994b. "Sensory Ideas, Objective Reality and Material Falsity." In: J. Cottingham, ed., *Reason, Will and Sensation: Studies in Descartes's Metaphysics*. (Oxford, The Clarendon Press), 229–250.
- Ariew, Roger, and Marjorie Grene, 1995. "Ideas, In and Before Descartes." *Journal of the History of Ideas* 56: 87–106.
- Beyssade, J. M., 1992. "Descartes on Material Falsity." In: P. D. Cummins and G. Zoeller, eds., *Minds, Ideas and Objects. Essays in the Theory of Representation in Modern Philosophy* (Atascadero, Cal., Ridgeview), 5–20.
- Bolton, Martha, 1986. "Confused and Obscure Ideas of Sense." In: A. O. Rorty, ed., *Essays on Descartes' Meditations* (Berkeley, University of California Press), 389–403.
- Chappell, Vere, 1986. "The Theory of Ideas." In: A. O. Rorty, ed., *Essays on Descartes' Meditations* (Berkeley, University of California Press), 177–198.
- Clemenson, David, 2007. *Descartes' Theory of Ideas*. London, Continuum.
- Costa, M., 1983. "What Cartesian Ideas Are Not." *Journal of the History of Philosophy* 21: 237–38.
- Cottingham, John, 1976. *Descartes' Conversation with Burman*. Oxford, The Clarendon Press.
- Cronin, T. J., 1966. *Objective Being in Descartes and Suárez*. Analecta Gregoriana 154; Rome, Gregorian University Press.
- Dalbiedz, Roland, 1929. « Les sources Scolastiques de la théorie cartésienne de l'être objectif à propos du 'Descartes' de M. Gilson. » *Revue d'Histoire de la Philosophie* 34: 64–72.
- De Rosa, Raffaella, 2004. "Descartes on Sensory Misrepresentation: The Case of Materially False Ideas." *History of Philosophy Quarterly* 21.3: 261–280.
- , 2008. "Material Falsity and Error in Descartes's *Meditations*." (Review of Wee 2006) *Journal of the History of Philosophy* 46.4: 641–642.
- Descartes, René, 1996. C. Adam and P. Tannery, eds., *Oeuvres de Descartes*, 11 vols. Paris, Vrin.
- , 1985. J. Cottingham, R. Stoothoff and D. Murdoch, eds. and trs., *The Philosophical Writings of Descartes*, vols. 1, 2. Cambridge, Cambridge University Press.
- , 1991. J. Cottingham, R. Stoothoff, D. Murdoch and A. Kenny, eds. and trs., *The Philosophical Writings of Descartes*, vol. 3: *The Correspondence*. Cambridge, Cambridge University Press.
- Field, Richard W., 1993. "Descartes on the Material Falsity of Ideas." *Philosophical Review* 102: 309–334.
- Flage, Daniel E., and C. Bonnen, 1999. *Descartes and Method: A Search for a Method in Meditations*. London and New York, Routledge.
- García, Claudia Lorena, 1999. "Transparency and Falsity in Descartes' Theory of Ideas." *International Journal of Philosophical Studies* 7.3: 349–372.
- Gilson, Étienne, 1930. *Études sur le rôle de la pensée médiévale dans la formation du système cartésien*. Paris, Vrin.
- Hatfield, Gary, 2003. *Descartes and the Meditations*. London and New York, Routledge.
- Husserl, Edmund, 1994. D. Willard, tr., *Early Writings in the Philosophy of Logic and Mathematics*. Collected Works 5. Dordrecht, Kluwer.
- , 2001. D. Moran, ed.; J. N. Findlay, tr., *Logical Investigations*, 2 vols. Introduction by Dermot Moran, Preface by Michael Dummett. London and New York, Routledge.
- Kaufman, Dan, 2000. "Descartes on the Objective Reality of Materially False Ideas." *Pacific Philosophical Quarterly* 81.4: 385–408.
- Kenny, Anthony J. P., 1968. *Descartes: A Study of his Philosophy*. New York, Random House.
- Kobusch, Theo, 1987. *Sein als Sprache. Historische Grundlegung einer Ontologie der Sprache*. Leiden, Brill.
- Normore, Calvin, 1986. "Meaning and Objective Being: Descartes and His Sources." In: A. O. Rorty, ed., *Essays on Descartes' Meditations* (Berkeley, University of California Press), 223–241.
- Perler, Dominik, 1996. *Repräsentation bei Descartes*. Frankfurt am Main, Klostermann.
- , and Johannes Haag, 2010. *Ideen. Repräsentationalismus in der Frühen Neuzeit*, 2 vols. Berlin and New York, de Gruyter.
- Searle, John R., 1983. *Intentionality. An Essay in the Philosophy of Mind*. Cambridge, Cambridge University Press.
- Secada, J., 2000. *Cartesian Metaphysics: The Scholastic Origins of Modern Philosophy*. Cambridge, Cambridge University Press.
- Shapiro, Lionel, 2012. "Objective Being and 'Ofness' in Descartes." *Philosophy and Phenomenological Research* 84.2: 378–418.
- Simmons, Alison, 1999. "Are Cartesian Sensations Representational?" *Nous* 33: 347–69.
- Twardowski, Kasimir, 1982. *Zur Lehre vom Inhalt und Gegenstand der Vorstellungen. Eine Psychologische Untersuchung*. Wien, Hölder 1894; rpt. with an Introduction by Rudolf Haller, München: Philosophia Verlag, 1982.

- Twardowski, Kasimir, 1977. R. Grossmann, tr., *On the Content and Object of Presentations*. The Hague, Martinus Nijhoff.
- Vinci, Thomas C., 1994. *Cartesian Truth*. New York, Oxford University Press.
- Voss, Stephen, ed., 1993. *Essays on the Philosophy and Science of René Descartes*. Oxford, Oxford University Press.
- Wee, Cecilia, 2006. *Material Falsity and Error in Descartes's Meditations*. London and New York, Routledge.
- Wells, Norman J., 1984. "Material Falsity in Descartes, Arnauld and Suárez." *Journal of the History of Philosophy* 22: 25–50.
- , 1990. "Objective Reality of Ideas in Descartes, Caterus and Suárez." *Journal of the History of Philosophy* 28.1: 33–62.
- , 1998. "Descartes and Suárez on Secondary Qualities: A Tale of Two Readings." *The Review of Metaphysics* 51.3: 565–604.
- , 2006. *Descartes on Material Falsity*. New York, Peter Lang.
- Wilson, Catherine, 2003. *Descartes's Meditations: An Introduction*. Cambridge, Cambridge University Press.
- Wilson, Margaret D., 1978. *Descartes*. London, Routledge & Kegan Paul.
- , 1990. "Descartes on the Representationality of Sensation." In: J. A. Cover and M. Kustad, eds., *Central Themes in Early Modern Philosophy* (Cambridge, Mass, Hackett Publishing Co.), 1–22.
- , 1993. "Descartes on the Perception of Primary Qualities." In: S. Voss, ed., *Essays on the Philosophy and Science of René Descartes* (Oxford, Oxford University Press), 162–76.
- Yolton, John W., 1981. "Perceptual Cognition with Descartes." *Studia Cartesiana* 2: 63–83.

5 Quine's Conception of Objects Beyond Realism and Anti-realism

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1 INTRODUCTION

If a philosopher professes to be a naturalist, it is natural to assume that she is also a realist, at least a realist about physical objects.¹ As perhaps the most influential twentieth-century naturalist, W.V.O. Quine, puts it, a naturalist leaves it to science to tell what there is and subscribes to an "unregenerate realism, the robust state of mind of the natural scientist who has never felt any qualms beyond the negotiable uncertainties internal to science" (1981a, 72). He describes his position as "robust realism," "unswerving belief in external things—people, nerve endings, sticks, stones" (1981c, 21). Hence, for Quine, physical objects like atoms, sticks, and stones are "ultimately real denizens of an ultimate real world" (1995b, 260). Since science, in a broad sense that also includes the social and the human sciences and parts of common sense, manifestly treats of material objects, there is no further philosophical question about their existence in general.

Thus, Quine explicitly adheres to realism about external objects, both macro- and microphysical ones. On the other hand, he has in many books and articles elaborated a view of objects as our constructions, posits or "reifications" of our theories of the world. He links the positing of objects to linguistic reference, and even describes objects, ontology, as a mere "spin-off" of our use of referential language (1986, 115). This part of Quine's philosophy makes it seem that he conceives of objects as dependent for their existence on us, more precisely on our holding specific kinds of theories. This in turn can be, and has been, understood as an anti-realist position about objects.

It seems that Quine's writings can be used to support a realist as well as an anti-realist reading. At a first glance, it might be thought that these do not really amount to two different readings at all: when Quine is speaking about ontology, he is a naturalistic realist, and it is only when he is engaged in epistemology that he speaks about objects being posits, constructed by us. I think this reaction does not by itself suffice to remove the unease one may feel about the coexistence of the realist and the anti-realist elements in Quine's philosophy. This is because for Quine, philosophy, in particular