

Descartes' Atomism of Thought: A Solution to the Puzzle about True and Immutable Natures

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Central to Descartes' philosophy is a view about immutable essences and eternal truths. After mentioning a Platonist account of recollection in Meditation V, Descartes declares that the ideas we have of mathematical notions "are not my invention but have their own true and immutable natures" (AT VII, 64/CSM II, 44).¹ Descartes claims that other important philosophical notions, such as God, mind, body, and human free will (AT VII, 68; AT VIII-2, 348; AT III, 383; AT VII, 433, respectively), also have immutable natures or essences. Although Descartes says a good many things about this view, nowhere does he offer definitive doctrine on the matter, and in fact frequently confuses his reader with apparently inconsistent pronouncements about immutable natures and eternal truths. In this essay, I focus on the immutable natures and propose a solution to two of the main problems associated with Descartes' position, the metaphysical status of immutable natures and the purported indivisibility of their existence as ideas in the mind. My analysis seeks to show that essences are metaphysically atomistic insofar as they are the products of God's immutable will and have their eternal ontological residence in God's understanding. The ideas that represent these essences in the human mind are indivisible *atoms of thought*. My contention is that the neglect of this symmetrical atomism, rooted in the structure of Cartesian ideas, has caused interpretive misunderstanding with respect to the simplicity of innate ideas and the ontological status of immutable natures. Although my focus

¹ References to Descartes will be abbreviated as follows: AT: Descartes 1974-1989; CSM: Descartes 1984-1985; CSMK: Descartes 1991. I primarily use Cottingham et al., but I occasionally modify the translation. In these cases, I note it in the text and provide the original in brackets.

will be on immutable essences, Descartes' discussion of the eternal truths is a closely related matter that will be consulted. My strategy in this paper will be as follows. In the first section, I will begin by outlining how innate ideas represent immutable natures. In doing so, I will have to explain why Descartes claims that such ideas are simple and indivisible, which has proved puzzling to recent commentators. The key to solving this puzzle turns out to be Descartes' somewhat unusual understanding of simplicity as the inseparability of component properties. This indivisibility is also grounded in the mind-and-world-independence of the immutable natures as they exist in formal reality. With the basics of this dual atomism established, in the second section I shall refine this interpretation by working through the deficiencies and worthwhile advances in the relevant recent scholarship concerning the ontological status of immutable natures. Several significant paradoxes arise out of the interpretation I have put forward, and I devote the third and final section to resolving these.

1. The Dual Structure of Ideas: Metaphysical Atoms and Atoms of Thought

In order to countenance Descartes' doctrine of immutable natures, we must first highlight several relevant aspects of his more general theory of ideas. Descartes uses the term "idea" in a variety of different ways, yet our focus is on ideas that are *representational*, *innate*, and *indivisible*. As to the first aspect, Descartes writes that "some of my thoughts are as it were the images of things [*rerum imagines*], and it is only in these cases that the term 'idea' is strictly appropriate" (AT VII, 37/CSM II, 25). Descartes employs scholastic terminology in an attempt to clarify how it is that ideas are paradigmatically representational. For example, in the "Preface to the Reader" of the *Meditations*, he writes: "'Idea' can be taken materially, as an operation of the intellect, in which case it cannot be said to be more perfect than me. Alternatively, it can be taken objectively, as the thing represented [*repraesentata*] by that operation" (AT VII, 8/CSM II, 7). In other places, he labels the "material" aspect of ideas their "formal reality" (AT VII, 41/CSM II, 28-29). We need not

wade through the complexities involved with this view here²; it is sufficient to indicate the basic structure of ideas in so far as they are *of* or *about* things (“for example, when I think of a man, or a chimera, or the sky, or an angel, or God” [AT VII, 37/CSM II, 25]). An idea can be understood materially or formally as a mode of my thinking, as well as objectively as the object represented in my mind. Ideas in the material or formal sense derive their degree of reality from the mind itself, and are all equivalent in this regard. The reality of an idea in the objective sense, on the other hand, depends on the thing that is being represented. This gives rise to significant differences between ideas with respect to their representational contents.

There is another important way that Descartes classifies ideas: “Among my ideas, some appear to be innate, some to be adventitious, and others to have been invented by me” (AT VII, 37-38/CSM II, 26). Adventitious ideas appear to come from things external to us, while inventions of the mind are put together out of materials already in our minds (from the senses, etc.). Adventitious ideas act as a connection to the external world and have an important role in Descartes’ physics, yet none of the clear and distinct aspects of material nature are actually derived from our particular experiences of external things, but are innate in us (AT VII, 43-44; AT VIII-2, 358-359). Ideas that are composed by the mind itself do not necessarily represent real things, since they may be arbitrarily constructed out of elements that do not belong together. This leaves only innate ideas, “such as the idea of God, mind, body, triangle, and in general all those which represent true, immutable and eternal essences” (AT III, 383/CSMK, 183). Thus, we see that innate ideas are our only means of access to the immutable and eternal natures. Taking this fact as our starting point, we must now clarify the *immutability* and *eternality* of such essences. To do so, it will be helpful to first ascertain the nature of ideas that represent immutable essences as indivisible. This corresponds to ideas in their objective reality; this will then serve as a guideline for understanding the

² For discussions of the scholastic background to Descartes’ theory of ideas, see Wells 1984; 1993; and Ariew 2011, ch. 3. For more focused discussion of Descartes’ view on the issue, see Chappell 1986 and Nadler 2006. For a more general treatment of ideas in the seventeenth century, see Ayers 1998.

formal nature of immutable essences *per se*. I will argue that innate ideas are *atoms of thought*, while the eternal and immutable essences are *metaphysically atomistic*.

Descartes clarifies his distinction between ideas that represent immutable essences and those that are invented by the mind in several places. Ideas of the former sort have the characteristic of simplicity or indivisibility that makes it impossible for the mind to break them into parts, as explained in his Reply to Caterus:

We must notice a point about ideas which do not contain true and immutable natures but merely ones which are invented and put together by the intellect. Such ideas can always be split up by the same intellect, not simply by an abstraction but by a clear and distinct intellectual operation, so that any ideas which the intellect cannot split up in this way were clearly not put together by the intellect. (AT VII, 117/CSM II, 83-84)

Ideas of triangles or squares cannot be divided into simpler parts and thus represent immutable natures; composite ideas of winged horses or existing lions, on the other hand, can be broken down into their component parts “by a clear and distinct intellectual operation” and thereby do not represent immutable natures. Descartes furthers his explanation in the Reply to Gassendi:

When you attack my statement that nothing can be added to or taken away from the idea of God, it seems that you have paid no attention to the common philosophical maxim that the essences of things are indivisible. An idea represents the essence of a thing, 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/CSM II, 255-256)³

Here the simplicity of immutable essences includes not only the aforementioned indivisibility, but also that nothing can be added to such an idea without transforming it into something else. Contemporary readers of Descartes have found this view confounding, to say the least.⁴ Descartes uses geometrical notions as his primary examples to illustrate his position. Yet if we analyze the idea

³ Eustachius' *Summa philosophiae quadrupartita* would have been fresh in Descartes' mind, as he had read it the previous year (AT VII, 232). “The common philosophical maxim” that Descartes mentions is found in Eustachius 1609, *Metaphysics*, Second Part, Discourse II, Question II. See also Suarez 1877, *Disputation XLVI*, Sectio I, §12-14.

⁴ For example, see Wilson 1978, 172-174; and Curley 1978, 147-155.

we have of a triangle, it does not appear to be indivisible to the human mind. For one can break it apart into simpler components such as “three-sided” and “polygon.” Is Descartes’ view hopelessly incoherent or have his readers misunderstood him?

Although I do think Descartes’ position is somewhat problematic, I also believe that he has been misinterpreted on this point, as many of those who find these passages troubling have read Descartes from a twentieth-century perspective concerned with a notion of analyticity that is at odds with his stated aims.⁵ Descartes was the first to recognize that even ideas representing immutable essences are often complex notions involving multiple characteristics. In the *Second Replies*, he reminds his reader to “examine the ideas of those natures which contain a combination of many attributes, such as the nature of a triangle, or of a square, or of any other figure” (AT VII, 163/CSM II, 115).⁶ From this text, we can infer that Descartes does not understand the simplicity of the immutable natures to be a logical, formal, or semantic property. If this were the case, then there would be no reason to think of triangles or other figures as indivisible. It is better to follow Descartes’ lead when he identifies simplicity not with a lack of parts, but with an *inseparability* of attributes. For example, Descartes tries to head off confusion with regard to God’s nature as both simple and containing many attributes as follows: “On the contrary, the unity, the simplicity, or the inseparability [*unitas, simplicitas, sive inseparabilitas*] of all the attributes of God is one of the most important perfections which I understand him to have” (AT VII, 50/CSM II, 34). We can apply this meaning of simplicity to the idea of a triangle to see that its various attributes are connected together such that the mind cannot clearly and distinctly separate them.

⁵ Margaret Wilson focused her efforts on criteria of “unforeseen and unwilled consequences” (1978, 172) and “unanalyzability” (174). Her analysis of the second criterion is particularly misleading, as she fails to appreciate Descartes’ more nuanced view of simplicity, which will be explained presently. For a helpful rejoinder to Wilson’s commentary, see Schmaltz 2014, 212-213.

⁶ Similarly, Descartes appears to accept Gassendi’s characterization of geometrical figures as being both “indivisible” and yet composed out of elements such as points, lines, and planes, even if he disagrees with the conclusions Gassendi draws from this claim (AT VII, 380-381).

The quality of indivisibility is one that Descartes consistently employs with respect to the mind's apprehension of an idea in the objective sense. Thus, innate ideas that represent immutable natures are *atoms of thought*: human thinking is rationally incapable of dividing notions such as *triangle*, *will*, and *God* into more basic components without fundamentally altering their meanings. If immutable natures represented as ideas in the mind are not logically or even semantically atomic, then it is worth considering what exactly enables us to consider them atoms of thought. There are two factors at work. First, Descartes thinks that the rational intuition of essences and simple truths is not merely an understanding of stipulated definitions (e.g. that all bachelors are unmarried) or a recognition of what is logically obvious (e.g. that unmarried men are unmarried). These unhelpful formalisms are at the heart of the scholastic syllogism, which Descartes finds largely useless. The simplicity of immutable natures instead involves intuiting essences whose attributes are inseparably bound; it is a core feature of the human intellect that it apprehends certain notions as indivisible, while others do not enjoy this status.⁷ This point has been met with criticism because it has been analyzed independently of its divine foundation. Yet, without taking this ground into account, the distinction between composite constructions and immutable natures begins to appear arbitrary.⁸

⁷ Perhaps one will still feel as though Descartes has not adequately justified his belief that certain notions (God, triangle, body, etc.) have true and immutable natures that are understood as indivisible ideas in the mind, while other notions (hippogriff, existing lion, etc.) are composite inventions, whose various characteristics can be legitimately broken apart by the mind. It seems to me that the force of his distinction stands or falls with the clarity and distinctness with which one perceives the inseparability of properties in a true and immutable nature, but not in a composite invention. Thus Descartes is forced to appeal to one's intuition that there is a complex of properties (interior angles add to two right angles, largest angle is opposite the largest side, etc.) that are inseparably connected with the basic notion of a three-sided polygon. This same rational intuition does not appear to hold when considering the property of existence in conjunction with the idea of a lion.

⁸ This should not be surprising, as Descartes admits that the ultimate reasons for God making the essences of things the way they are is "unintelligible to us" (AT VII, 436/CSM II, 294). In making things so, God did not appeal to independent reasons, but was utterly indifferent. Therefore, we are unable to give an explanation, independent of God's will, for why our intellect will perceive certain collections of properties as inseparably bound and not others. It is helpful to recall the priority Descartes places on *intuition* over *deduction* in the *Regulae* (AT X, 368-370).

Walter Edelberg has devised a sophisticated solution to clear Descartes of the philosophical difficulties his position seems to imply (1990). Edelberg suggests we understand immutable natures by way of their “topical entailments,” such that a triangle’s definitional properties conjoined with axiomatic geometrical principles will entail properties such as its interior angles adding to two right angles. This procedure can thus work with other types of natures, whose entailments are instead metaphysical, mental, or theological. These entailments are not merely logical or analytic, since the original definitions and laws of logic are not—individually or jointly—sufficient for inferring a nature’s additional properties. While this proposal does avoid most of the problems associated with compositionality mentioned above, it does not help us make sense of Descartes’ own argumentation. For Descartes does not favor a mechanical strategy of inference from definitions, axioms, and logical laws to draw out the unexpected properties of a nature.⁹ Perhaps this method could prove helpful as *ex post facto* clarification, but it may obscure our rational apprehension of the true natures of things.¹⁰

From the foregoing, we can conclude that atoms of thought derive their simplicity entirely from the inseparability of their component properties, which can only be perceived through clear and distinct intuition. It is on the basis of these atoms of thought that all demonstration in mathematics, science, or metaphysics depends. However, we have not yet clarified the ultimate ground that guarantees the veracity of the clear and distinct intuition of simple ideas, as we have only

⁹ See Descartes’ reluctance to set his *Meditations* out in this fashion in the *Second Replies* (AT VII, 155-159).

¹⁰ This is not intended to be a critique of Edelberg’s paper, as he makes this point himself (Edelberg 1990, 505-506), and accepts that his interpretation may only amount to an “extensional equivalence” with Descartes’ position. Tad Schmaltz has recently proposed a solution that builds off of Edelberg’s model. He claims that “properties can reveal that a nature is immutable only if they derive from that nature solely in virtue of the principal attribute to which that nature is referred” (Schmaltz 2014, 213-214). This is an interesting hypothesis that would indeed solve some of Descartes’ issues concerning constructed and immutable natures. However, Schmaltz does not marshal any textual evidence on behalf of his claim, and while his proposal does appear to work for geometrical figures, it is less clear how it might work for other natures. How might one derive the immutable nature of *doubt* from the nature of *thought* (the principal attribute of mental substance)? It would be even more difficult to see how natures common to multiple substances (*existence, duration, number, etc.*) could be explained on this view.

considered immutable natures from the side of the mind perceiving them. In order to do so, we must ascertain the metaphysical nature of that which is represented by innate ideas, i.e. the immutable and eternal essences as they exist in formal reality. This dual structure of immutable natures as both mental representation and metaphysical entity represented is indicated by the structure of ideas in the objective sense. In a famous passage from Meditation V, Descartes discusses the entities that are represented by innate ideas:

I find within me countless ideas of things which even though they may not exist anywhere outside me [*etiam si extra me fortasse nullibi existant*] still cannot be called nothing; for although in a sense they can be thought of at will, they are not my invention but have their own true and immutable natures. When, for example, I imagine a triangle, even if perhaps no such figure exists, or has ever existed, anywhere outside my thought, there is still a determinate nature, or essence, or form of the triangle which is immutable and eternal, and not invented by me or dependent on my mind. This is clear from the fact that various properties can be demonstrated of the triangle, for example that its three angles equal two right angles, that its greatest side subtends its greatest angle, and the like; and since these properties are ones which I now clearly recognize whether I want to or not, even if I never thought of them at all when I previously imagined the triangle, it follows that they cannot have been invented by me. (AT VII, 64/CSM II, 44-45)

There are a few important things to draw attention to in this text. Descartes indicates that there is some “nature, or essence, or form” that has some sort of being independent of my mind. Although he says that figures such as triangles may potentially have no existence outside his mind, I think he means to contrast the kind of existence ideas have with the kind of existence external, material bodies have. In writing “they may not exist anywhere outside me [*etiam si extra me fortasse nullibi existant*]” and later in Meditation V “outside my thought [*extra cogitationem meam*]” (AT VII, 37-39) Descartes is employing language that echoes texts from Meditation III (which repeatedly include the phrase “*extra me*”) where he is more clear about distinguishing inner, mental existence from outer, material existence.¹¹ So, if objects such as triangles may not exist anywhere in the world, but their

¹¹ It should also be noted that the French translation of Meditation V reads “anywhere in the world outside my thought [*aucun lieu du monde hors de ma pensée*]” (AT IX-1, 51), which corroborates my own reading of the text.

essences “still cannot be called nothing,” there must be some way these essences exist independent of the mind.¹² Whatever kind of entity this turns out to be will be the thing that is represented in the objective content of an innate idea.

In order to fully appreciate Descartes’ underlying reasons for considering true and immutable natures both mentally indivisible and metaphysically immutable, we must investigate the closely related notion of the creation of the eternal truths.¹³ In his letters to Mersenne of 1630, he explains that God’s will is the ultimate reason why the eternal truths are true and the immutable natures immutable:

The mathematical truths which you call eternal have been laid down by God and depend on him entirely no less than the rest of his creatures. [...] It is God who has laid down these laws in nature just as a king lays down laws in his kingdom. [...] They are all inborn in our minds just as a king would imprint his laws on the hearts of all his subjects if he had enough power to do so. (AT I, 145/CSMK, 23)

We have discussed the way that innate ideas exist in human minds. We now see that the independence of the true and immutable natures (from the human intellect) derives from the power of God’s will. Likewise, the indivisibility of essences as inseparability of components finds its basis in God. Descartes’ startling first pronouncement of this doctrine undoubtedly evoked probing questions from Mersenne about the nature of the eternal truths.

There are two other important passages from this series of correspondence to which we should call attention. The first comes from the letter of May 6, 1630:

¹² Of course, there are other texts that appear to directly contradict this reading. In *Principles* I.48, Descartes says that eternal truths “have no existence outside our thought” (AT VIII-1, 22/CSM I, 208). These issues will be dealt with in the next section.

¹³ Descartes appears to understand the true and immutable natures and the eternal truths in much the same way (AT I, 152), as many commentators have pointed out (Schmaltz 1991; Chappell 1997; Nolan 1997; Rozemond 2008). I believe there is a difference between the two, as Descartes mentions that “I do not think that the essences of things and the mathematical truths which can be known of them are independent of God” (AT VII, 380/CSM II, 261). This implies that essences or natures are known immediately by the intellect, while truths are based on these essences. In Meditation III, Descartes distinguishes ideas, which “cannot, properly speaking, be false” (AT VII, 37/CSM II, 26) from judgements, which are the bearers of truth and falsity. Admittedly, Descartes is not altogether clear on this issue, since at a different point he appears to say that truth might also be a correspondence of idea and essence (AT II, 597). See Hattab 2016, 212-214 for discussion of this issue. For our purposes, the remarks Descartes makes concerning the creation of the eternal truths apply equally well to the creation of the true and immutable natures.

If men really understood the sense of their words they could never say without blasphemy that the truth of anything is prior to the knowledge which God has of it. In God willing and knowing are a single thing in such a way that by the very fact of willing something he knows it and it is only for this reason that such a thing is true. (AT I, 149/CSMK, 24)

This text alludes to Descartes' position on the long-standing theological issue of divine simplicity. Whatever else Descartes may say about God's simplicity, we see here his unequivocal identification of God's will and understanding.¹⁴ Thus if the eternal truths and natures exist as free and creative decrees from God, they simultaneously exist as items of God's understanding. This form of existence in God's understanding is the formal reality to which our ideas objectively aim. The final passage occurs in the letter of May 27, 1630:

And it is certain that these truths are no more necessarily attached to [God's] essence than are other created things. You ask what God did in order to produce them. I reply that from all eternity he willed and understood them to be, and by that very fact he created them. Or, if you reserve the word created for the existence of things, then he established them and made them. (AT I, 152-153/CSMK, 25)

Much recent scholarship has explained the background debate to which Descartes implicitly refers in the first sentence of the above text. Descartes most clearly disagrees with Thomas Aquinas, who held that eternal truths and natures existed as part of God's essence, and were not a result of God's will as creatures are. It is, of course, important not to identify God with his creatures and Aquinas' doctrine is a simple way of accomplishing this, while Descartes' is not.¹⁵ Note, however, that Descartes seems to think of the eternal truths and natures as a different sort of creation than that of the "existence of things." At the same time, Descartes made it clear in the first letter that the creation of eternal truths and natures was just like that of creatures (AT I, 145). How can we make sense of this tension?

¹⁴ This view was one Descartes maintained throughout his career, as evidenced by nearly identical comments in a letter to Mesland of 1644 (AT IV, 119).

¹⁵ There were a host of different solutions to this problem in Hellenistic, medieval, and scholastic thought, though it is unnecessary for our purposes to give an exhaustive analysis of such views. See Schmaltz 1991, Rozemond 2008, and Hattab 2016 for very thorough discussions of the matter.

2. *A Consideration of Recent Scholarship Concerning Immutable Natures and Eternal Truths*

We have mostly completed our analysis of Descartes' atomism of thought, but we still must show how this doctrine fits coherently into Descartes' overall system, given the above-noted tension. It will be helpful at this point to go through several important scholarly interpretations of Descartes' view of the eternal truths and immutable natures. One classic interpretation comes from Anthony Kenny, who argues that Descartes is the "founder of modern Platonism" (Kenny 1970, 692-693). He takes the letters to Mersenne of 1630 and the opening passages of Meditation V to indicate that the eternal truths are distinct from God (though not independent) and independent of human minds and other existing things. Eternal truths must be independent of God, since they are causal effects of God's will (Cause X and Effect Y cannot be identical). When Descartes claims of a figure such as a triangle that "perhaps no such figure exists, or has ever existed," yet nevertheless the triangle has an essence that is "not invented by me or dependent on my mind" (AT VII, 64/CSM II, 45), Kenny takes this to mean that the eternal truths and natures exist in a way that is akin to Platonic forms. This interpretation has been roundly criticized for attributing to Descartes a type of being that is explicitly disallowed in his ontology (Schmaltz 1991; Nolan 1997; Chappell 1997; Cunning 2003).

I think these criticisms are clearly correct and that there is no way to conceive of Descartes as a radical Platonist in this sense. However, Kenny emphasizes one point worth consideration. Reiterating his comments from Meditation V, in the *Sixth Replies* Descartes declares that "we should not suppose that eternal truths 'depend on the human intellect or on other existing things'" (AT VII, 436/CSM II, 294). Commentators have warned that we should take neither this claim about dependence nor the one from Meditation V as assertions about the *ontological* dependence of eternal truths on the human intellect or existing things. Rather, Descartes means to emphasize that their *causal* origin has its seat in God, as opposed to being an invention of our mind or a contingent configuration of matter. The emphasis on causal dependence is well taken; however, if we look

more closely at the context in which the above passage from the *Sixth Replies* appears, we see that this dependence simply cannot be an ontological one either:

Again, there is no need to ask how God could have brought it about from eternity that it was not true that twice four make eight, and so on; for I admit this is unintelligible to us. Yet on the other hand I do understand, quite correctly, that there cannot be any class of entity that does not depend on God; I also understand that it would have been easy for God to ordain certain things such that we men cannot understand the possibility of their being otherwise than they are. (AT VII, 436/CSM II, 294)

If the eternal truths and natures were truly created *from eternity*, while human minds and the material world have *not* existed from eternity, then there can be no ontological dependence of eternal truths and natures upon “existing things,” just as there can be no causal dependence either. I take this to be the meaning of Descartes’ claim that “there cannot be any class of entity that does not depend on God.”¹⁶

This point deserves additional emphasis.¹⁷ Descartes is very careful to distinguish *eternality* from other temporal concepts like *immortality* and *incorruptibility*. Although he does not specifically define these terms, his use of them makes it clear that *eternality* is a notion associated with God’s sempiternal existence (“[God] has existed from eternity and will abide for eternity” [AT VII, 68/CSM II, 47]¹⁸), while the meaning of *immortality* is tied to the unending future existence of the human soul after its beginning in time.¹⁹ Aside from being a characteristic of God’s own being, Descartes employs the term “eternal” (*aeternus/eternel*) to refer exclusively to God’s decrees and the eternal truths and essences that are the result of such decrees. Consider two texts that indicate the difference between eternality and immortality. Embedded in remarks concerning God’s self-causation in the *First*

¹⁶ Cf. AT VII, 380. My reading here should be compared with Nolan’s (1997, section 4) and De Rosa’s (2011, 612).

¹⁷ Rozemond (2008, 46) mentions the importance of eternality, but does not explore the topic; De Rosa (2011) and Hattab (2016) both investigate the philosophical implications of understanding truths and essences to be eternal, but do not analyse Descartes’ specific use of the term.

¹⁸ See also AT VII, 119; AT VIII-1, 10, 13.

¹⁹ Nearly every time Descartes uses the term “immortal” (*immortalis/immortel*) he is referring to the immortality of the human soul (e.g. AT VI, 60; AT I, 182; AT III, 266, 297). Any other uses of the term are philosophically insignificant (e.g. AT IV, 202; AT VIII-2, 244).

Replies, Descartes begins a conditional statement by writing, “if I had existed from eternity, and thus nothing had existed prior to myself, [...]” (AT VII, 109/CSM II, 79) thereby equating eternity with time that stretches back to an infinite degree. An even better indication of this fact comes in a letter to Chanut of 1647, in which Descartes writes that “no one infers from the infinite duration which the world must have in the future that it must have been created from all eternity” (AT V, 53/CSMK, 320). The clear implication of this statement is that the temporal status of eternity is reserved for beings that have always existed and will always exist, as opposed to those immortal or incorruptible ones (such as the world and human souls), which have not always existed. Descartes unfailingly designates the immutable essences and truths as *eternal*, meaning that their primary ontological place cannot be in the human soul or in the world, since these beings do not have the required temporal duration to sustain eternity.²⁰

These latter concerns doom two recent strands of interpretation. The first strand is spearheaded by Vere Chappell (1997) and Lawrence Nolan (1997), and subsequently defended by John Abbruzzese (2007). These authors contend that the eternal truths and natures exist objectively as ideas in the human mind. The key text is *Principles* I.48, where Descartes writes: “All the objects of our perception we regard either as things, or affections of things, or else as eternal truths which have no existence outside our thought” (AT VIII-1, 22/CSM I, 208). Descartes appears to be very clear in stating that the eternal truths have their ontological place in human thought and nowhere else. How can we reconcile this assertion with our findings from the *Sixth Replies* and associated texts concerning eternity?

If one looks more closely at the phrase “eternal truths which have no existence outside our thought [*aeternas veritates, nullam existentiam extra cogitationem nostram habentes*],” it becomes apparent that the meaning is not necessarily that *all*

²⁰ It should also be noted that Descartes employs the term “immutable” (*immutabilis/immuable*) almost exclusively to refer to God (AT III, 649; AT IV, 314; AT VI, 35; AT VIII-1, 61-63, 66; AT XI, 38, 43), to God’s will and decrees (AT V, 166; AT XI, 438-440), and of course to eternal natures or essences (especially Meditation V, *First Replies*, and *Fifth Replies*). Occasionally Descartes uses the term to refer to firm conviction or knowledge in the human mind (AT VII, 145, 146; AT VII, 428) or in non-philosophical ways (AT IV, 490). None of these latter cases carry significance for Descartes’ general use of the term.

eternal truths are such that they do not have extra-mental existence, but that only those that were not already classified as things or affections of things.²¹ It is noteworthy that Descartes lists only the following as examples of *this* type of eternal truth in the next aphorism:

Everything in the preceding list we regard either as a thing or as a quality or mode of a thing. But when we recognize that it is impossible for anything to come from nothing, the proposition Nothing comes from nothing is regarded not as a really existing thing, or even as a mode of a thing, but as an eternal truth which resides within our mind. Such truths are termed common notions or axioms. The following are examples of this class: It is impossible for the same thing to be and not to be at the same time; What is done cannot be undone; He who thinks cannot but exist while he thinks; and countless others.²²

Normally in discussions of the eternal truths and immutable natures Descartes references mathematical examples about triangles or simple arithmetic as paradigm cases. Here he instead mentions the kinds of empty logical principle he finds otiose in metaphysical investigations:

It is one thing to look for a common notion so clear and so general that it can serve as a principle for proving the existence of all the beings, or entities, to be discovered later; and another thing to look for a being whose existence is known to us better than that of any other, so that it can serve as a principle for discovering them. In the first sense, it can be said that “It is impossible for the same thing both to be and not to be at the same time” is a principle which can serve in general, not properly speaking to make known the existence of anything, but simply to confirm its truth once known, by the following reasoning: “It is impossible that that which is, is not; I know that such a thing is; so I know that it is impossible that it is not.” This is of very little importance, and makes us no better informed. (AT IV, 444/CSMK, 290)

In the above passage, he is implicitly criticizing the Aristotelian maxim that the law of non-contradiction is the first and most certain of all principles (*Metaphysics* 1005a19-b34). For Descartes, when philosophizing correctly the first and most certain item of knowledge is, of course, the cogito. The law of non-contradiction, *pace* Aristotle, does not actually help us in discovering the existence

²¹ The French translation indicates the same: “& l’autre, toutes les veritez ... qui ne sont rien hors de nostre pensée” (AT IX-2, 45).

²² AT VIII-1, 23-24/CSM I, 209.

of anything. If such common notions are so unimportant, why do they appear so conspicuously at this juncture of the *Principles*?

In order to clear up this dilemma, I think it is essential to recall Descartes' initial reasons for writing the *Principles of Philosophy*. In 1640 Descartes was busy disseminating the *Meditations* to prominent philosophers and theologians. He was particularly concerned with getting the approval of the Sorbonne in order to solidify his defences against the impending attack from the Jesuits such as Bourdin (AT III, 184). This causes Descartes to request help from Mersenne in understanding current scholastic philosophy, since he has done little to keep up with the contemporary debates and scarcely remembers the authors he has read (AT III, 185). Mersenne apparently recommended Eustachius a Sancto Paulo to him, which inspired Descartes to formulate the following proposal:

I must tell you that I have resolved to write [the principles of my philosophy] before leaving this country, and to publish them perhaps within a year. My plan is to write a series of theses which will constitute a complete textbook of my philosophy. [...] In the same volume I plan to have printed a textbook of traditional philosophy, perhaps Father Eustache's, with notes by me at the end of each proposition. (AT III, 233/CSMK, 156-157)

Although Descartes did not carry his original vision of a side-by-side scholastic and Cartesian textbook to fruition, it is clear that he intended the *Principles* to be a teaching manual competing with those popular in the schools.²³ He thus adopts much of the scholastic terminology and style in an effort to improve the reception of his philosophy.

Given this context, we should not be surprised to find principles such as the law of non-contradiction and other common notions being dealt with in the *Principles*. This type of logical principle played a central role in scholastic textbooks and thus Descartes would be remiss to fail to discuss it in his own competing textbook.²⁴ Descartes claims that this type of eternal truth “is regarded not as a

²³ See Ariew 2014.

²⁴ Admittedly, this did not stop Descartes from omitting many other standard topics that were supposed to find a place in textbooks of this sort, such as nearly all of ethics and logic.

really existing thing, or even as a mode of a thing” (AT VIII-1, 23/CSM I, 209) as opposed to other eternal truths “which I recognized clearly in connection with shapes, or numbers or other items relating to arithmetic or geometry, or in general to pure and abstract mathematics”; this latter group of eternal truths “are something, and not merely nothing” (AT VII, 65/CSM II, 45). I believe that Descartes makes this distinction because common notions are nothing more than empty logical principles, which do not actually refer to any existing entity. Nevertheless, they do have some sort of mental existence, since dialecticians make use of them in their (largely useless) reasoning.²⁵

This last point brings us to a final reason for rejecting the interpretations of Chappell, Nolan, and Abbruzzese. These authors hold that eternal truths and immutable natures exist objectively as ideas in our mind. This, of course, is true, as we have ideas of triangles and arithmetic truths in the mind’s eye. Yet the key question is whether they have any extra-mental existence in addition to their home in the mind. The answer is indicated in the structure of the objective reality of ideas. Recall that the essential feature of ideas existing objectively is that they are *of some thing*. There must be some *object* that is represented by the *objective* content of an idea. Now in the case of invented or adventitious ideas, our representation may not actually correspond with anything existing outside the mind. But in the case of an innate idea—and this necessarily includes ideas of eternal truths and immutable natures—there must be some real existent to which the idea refers. Thus, to say that eternal truths and natures are *nothing more* than objectively existing ideas is to violate one of Descartes’ most important tenets.²⁶

The second type of interpretation that falls prey to concerns regarding the ontological independence of eternal truths and natures on existing things is one

²⁵ Descartes does, however, make it clear that “whatever is true is something; and I have already amply demonstrated that everything of which I am clearly aware is true” (AT VII, 65/CSM II, 45); and that “in the case of the common notions, there is no doubt that they are capable of being clearly and distinctly perceived” (AT VIII-1, 24/CSM I, 209). From these statements it follows that the common notions must be *something*.

²⁶ This last line of criticism should be compared with the comments Cunning makes in his two articles on the topic (2003; 2008), although I do not find similarities to my other critical remarks in the literature.

offered by David Cunning in a pair of recent articles (ibid.). Cunning contends that “true and immutable natures are just the objects that have those true and immutable natures: the true and immutable nature of God is God, and the true and immutable nature of a geometrical property is that property itself” (2003, 239). Cunning’s position easily solves one of the glaring deficiencies of the previous strand of interpretation: the existing thing that is indicated by the objective content of an idea is nothing more than an actually existing object (such as a material triangle or the sun burning hydrogen eight light-minutes away). Cunning’s interpretation captures the case of God quite accurately, since God’s essence and existence are identical in a way that nothing else is. Thus, when our idea of God refers to some immutable essence, it is nothing more than God himself.

However, there are many other problems with Cunning’s account. His primary source of evidence comes from the following passage:

Thus, when I think of the essence of a triangle, and of the existence of the same triangle, these two thoughts, as thoughts, even taken objectively differ modally in the strict sense of the term “mode”; but the case is not the same with the triangle existing outside thought, in which it seems manifest that essence and existence are in no way distinct. The same is the case with all universals. (AT IV, 350/CSMK, 280).

This does seem to give us good reason to believe that when we have the idea of a mathematical essence, our idea refers to an actually existing mathematical figure.²⁷ As Cunning puts it, “Descartes also holds that the true and immutable natures of geometrical properties are nothing more than those properties themselves” (2003, 240). This statement leaves open the most important questions concerning the ontological status of the true and immutable natures: How do these properties exist? Are these properties subject to the continual fluctuations of material substance? I can agree with Cunning (with some reservations) in saying that an existing triangle manifests its essence. However, is this the primary way that Descartes means to indicate *eternity* and *immutability* of essences? Descartes makes a point in Meditation V to say that these characteristics would hold of a triangle,

²⁷ For an alternative critique of Cunning’s interpretation of this passage, see Doney 2005.

“even if perhaps no such figure exists, or has ever existed, anywhere outside my thought” (AT VII, 64/CSM II, 45).²⁸ This is because these essences are in no way beholden to material existence; it is clearly the other way around, that material existence must be mathematically ordered according to the eternal truths and essences that exist independent of (and prior to) the created world.²⁹ The atomistic property of a triangle’s *immutable* nature likewise cannot be captured by existing triangles, which are mutable and divisible.

There are two more promising interpretations that have influenced my own thinking on the issue. Tad Schmaltz argues that God’s essence includes a set of “strong” attributes that are not the result of his free will, but also a set of “weak” attributes that are created, including the eternal truths and natures (1991).³⁰ I believe that Schmaltz is right to locate the eternal truths and natures in God, as it avoids all of the problems noted above with the other important interpretations, while capturing the eternity and immutability of truths and essences. In addition to the evidence amassed above, I think it is important to reinforce the fact that eternal truths and immutable natures must have *some* existence in God’s understanding and will. A frequent concern with a view like Schmaltz’s is that locating the created truths and natures in God is akin to identifying the created world with God. Yet, as Schmaltz is keen to point out, Descartes makes an explicit distinction between “the essence of created things” and their actual existence (AT

²⁸ Cunning’s reason for not reading too much into this passage is that he believes the meditator to be in an inadequate epistemic position in Meditation V to make claims about the ontological status of the true and immutable natures. This would have to wait until Meditation VI, when the meditator is warranted in affirming that mathematical essences exist in existing material objects. However, I think that Cunning is misapprehending the meditator’s epistemic situation in Meditation V. It is not that she is unable to assess the ontological status of essences, since many claims are in fact made there (“they cannot be called nothing”; “they are not my invention but have their own true and immutable natures”; they have a “determinate nature, or essence, or form”; “I can demonstrate various properties of these shapes” [AT VII, 64-65/CSM II, 44-45]). The meditator is simply not in position to say whether geometrical properties exist in extended material nature. Furthermore, the evidence Cunning offers from Meditation VI only shows that material objects conform to geometrical properties, and not that extension is their sole (or even primary) ontological home.

²⁹ My remarks here apply also to two theses consonant with Cunning’s, Funkenstein 1975 and McRae 1991.

³⁰ For a more thorough treatment of Descartes’ view of God’s uncreated attributes, see Wells 1982.

I, 152/CSMK, 25).³¹ He goes even further in disambiguating the two types of creation in a passage we puzzled over before: “[...] *if you reserve the word created for the existence of things, then he established [the eternal truths] and made them*” (AT I, 152-153/CSMK, 25; emphasis added). We are now in a position to make more sense of this text. God made the free decision to create the world, the eternal truths, and the immutable essences in a single act of divine will. As we have seen, God’s will and understanding are identified such that this act of creation exists in God’s understanding. This should not be surprising, as God must surely understand both the world he creates and the eternal truths, essences, and laws through which it is fashioned.³² This is why Descartes states that “this entire universe can be said to be an entity originating in God’s thought, that is, an entity created by a single act of the divine mind” (AT VII, 134/CSM II, 97). This is a point that has never been satisfactorily explained on views that situate the eternal truths and essences in the world or in human minds. Where could these truths and essences have existed before the existence of the world and the inception of our immortal minds?³³ The answer can only be in God’s understanding, and on this point, Schmaltz appears to have it right.³⁴

³¹ Descartes makes this point even more clearly in the *Sixth Replies* (cited by Schmaltz 1991, 137): “A king may be called the efficient cause of a law, although the law itself is not a thing which has physical existence, but is merely what they call a ‘moral entity’” (AT VII, 436/CSM II, 294).

³² In *Le Monde*, Descartes claims that the laws of nature would be true in any world God created (AT XI, 47).

³³ I thus take literally Descartes’ claim that God is the one “in whom all the treasures of wisdom and the sciences lie hidden” (AT VII, 53/CSM II, 37).

³⁴ However, there are some important flaws with Schmaltz’s account. When analyzing Descartes’ ontology, one recognizes that all characteristics of God must be unchanging and thus cannot be called modes or qualities, but only attributes. This is, presumably, why Schmaltz labels the eternal truths and natures as “weak” attributes, since they are only identified with God because of his will, rather than as core features of his essence. Aside from the fact that Descartes does not actually use this language of strong and weak attributes himself, it does not appear that Descartes ever allows for a difference in types of attributes. And in the case of God, Descartes is clear that in discussing his attributes, “any variation is unintelligible” (AT VIII-1, 26/CSM I, 211). Given this point, it would be strange to conceive of certain of God’s attributes as “weaker” or somehow lesser than any of the others. Indeed, as we have noted, Descartes considers God’s unity or simplicity to be a matter of “the inseparability of all [his] attributes” (AT VII, 50/CSM II, 34). How, then, could some attributes be strong and others weak?

More recently, Marleen Rozemond has offered a similar account that takes the eternal truths and natures to be objective beings in God's mind (2008). She follows Schmalz in emphasizing significant historical precedents for her view (e.g. Scotus and Suarez), arguing that others had considered immutable essences to be products of God's will and to have objective being in God's mind. Her account is also appealing insofar as it avoids the drawbacks of the three other main types of interpretation, yet the direct textual evidence for her thesis is as scant as it was for Schmalz. Although many other authors had discussed the objective being of divine ideas, Descartes never once mentions God's understanding to be structured like ours, with ideas having material and objective existence. In fact, he goes out of his way to underscore the vast difference between God's understanding and our own (AT VII, 56-57).³⁵ Descartes even admits that "the mode of being by which a thing exists objectively in the intellect by way of an idea, *imperfect though it may be*, is certainly not nothing [...]" (AT VII, 41/CSM II, 29; emphasis added). If the objective mode of being is imperfect, then surely the supremely perfect being does not possess ideas of this sort. In spite of these difficulties, Rozemond's interpretation does reveal one aspect of Descartes' view that had been previously neglected. Most commentators have rightly emphasized the problems Descartes encounters with divine simplicity, particularly if the eternal truths and essences are taken to exist in God. Rozemond reminds us that there can be distinctions between different aspects of God's being that are nothing more than distinctions of reason. These distinctions do not indicate any difference in reality or between modes (both impossible), but "only between our thoughts about God" (*ibid.*, 55). Descartes discusses various faculties and attributes of God and this insight affords us a way

³⁵ Similarly, in his reply to Gassendi concerning our understanding of the infinite, Descartes distinguishes between the way ideas exist in the human mind with the way ideas exist in God's mind: "The manner of representation, however, is the manner appropriate to a human idea; and undoubtedly God, or some other intelligent nature more perfect than a human mind, could have a much more perfect, i.e. more accurate and distinct, idea" (AT VII, 368/CSM II, 253).

to make distinctions between the different aspects without obviously violating divine simplicity.³⁶

3. *Immutable Natures as Forms of Divine Perception*

We have rejected accounts that attempt to identify the ontological status of eternal truths and essences with created substances, material or mental. This was primarily for ontological reasons, both temporal and structural. Since the material world and human minds were created in time, neither can sustain the eternality of essences or truths.³⁷ Descartes makes this particularly clear in the case of the human soul, which he considers *immortal* and not *eternal*. The eternal nature of truths and essences pairs with their metaphysical immutability (the products of God's will are absolutely unchanging), which is mirrored by their indivisibility in the mind. This symmetrical atomism is also not accounted for on the aforementioned views.³⁸ The main objection these authors level against those who wish to situate the eternal truths and immutable natures in God is that this dissolves the distinction between God and his creatures or else identifies the truths and natures with God's essence (both of which are rejected by Descartes). I wish to propose a solution that maintains the eternality and immutability of truths and essences that Descartes

³⁶ Consult Hattab 2016 for a critique of Schmaltz and Rozemond's neglect of the influence of Neoplatonism (particularly Proclus) on Descartes's view in favor of a reliance on medieval and scholastic sources.

³⁷ Chappell tries awkwardly, and unsuccessfully, to avoid this objection (1997, 126-127). He bites the bullet and claims that Descartes did not really think that eternal truths and natures are eternal. Chappell's main worry appears to be infringing on divine simplicity, yet his own position appears to imply a rather serious infringement itself. If the knowledge of eternal truths and essences (and of the world to be created) does not exist in God's understanding from eternity, then there is a breach in the identity of his will and understanding. God knew from all eternity that he would create the world in time, just as he knew that a square has four sides, and none of this had to wait for the actual moment of world- or mind-creation.

³⁸ I should emphasize that this neglect of Descartes' atomism helps to explain the texts marshaled in favor of the interpretations that place the eternal truths and essences in finite substances. My account does not deny that truths and essences have existence in minds and matter; however, we must be careful about how we understand this existence. Simple, indivisible ideas of eternal truths and immutable essences exist in the mind, yet as objective beings they point indelibly toward that which they represent. At this point, it appears possible that the *representatum* could be a materially existing object, such as a triangle (à la Cunning); yet if we recognize that the ontological foundation of the atomistic nature of our innate idea is something immutable, then it follows that the *representatum* cannot be an existing triangle, which is divisible and mutable.

repeatedly asserted, while avoiding the latter two positions that Descartes consistently denied.³⁹

We can make sense of the fact that eternal truths and essences *do* have objective existence in human minds, and perhaps also formal existence in material bodies, by considering a passing remark Descartes makes in response to Hobbes:

I am taking the word “idea” to refer to whatever is immediately perceived by the mind. [...] I used the word “idea” because it was the standard philosophical term used to refer to the forms of perception belonging to the divine mind, even though we recognize that God does not possess any corporeal imagination. And besides, there was not any more appropriate term at my disposal. (AT VII, 181/CSM II, 127-128)

When Descartes mentions the “standard” philosophical terminology, he is referring to the long-standing tradition that understood ideas as exemplars in God’s mind. This is the Augustinian reformulation of Platonic Ideas or Forms that serve as the perfect models through which God created all things in this world.⁴⁰ Unfortunately, Descartes never elaborates on this notion, and we cannot make too much out of such an insignificant text. But it does give us a reasonable way of understanding how created truths and essences relate to created minds and matter. Earlier we demonstrated that eternal truths and essences were created from eternity and that this creation existed simultaneously in God’s understanding. We are not provided with a fully worked out account of how divine ideas exist in God’s

³⁹ Consider this an attempt to answer De Rosa’s challenge (2011, 619-621), and in particular to reject her assertion that for Descartes “the being of essences in God’s mind is not prior to their being in human minds” (2011, 620).

⁴⁰ One might be skeptical that such a tradition had a direct influence on Descartes. There were, however, currents in the scholastic tradition that made use of this Platonic-Augustinian conception in a way that looks forward to the more familiar Cartesian ideas. For example, in his *Summa*, Eustachius a Sancto Paulo writes: “What the Greeks call Idea the Latins call Exemplar, which is nothing else but the explicit image or species of the thing to be made in the mind of the artificer. Thus the idea or exemplar is in this case some image (*phantasma*) or work of imagination (*phantasiae*) in the artificer to which the external work conforms. And so in the artificer insofar as he is an artificer there are two internal principles of operation, namely the art in his mind or reason and the idea or exemplar in his imagination (*phantasia*). Art is a certain disposition, but idea is a certain act or concept represented by the mind” (Eustachius 1609, Physics, Part III, disputation I, question III, 54; quoted in Ariew 2014, 108-109). See Chapter 3 of this latter work (co-written with Marjorie Grene) and Wells 1993 for more on this matter.

infinite understanding, yet however it is they exist there, they seem to function as blueprints for the fashioning of human minds and material objects.⁴¹

Before attempting to clarify Descartes' view of divine ideas, we must first illustrate the philosophical difficulties such a position faces. We can exhibit the problem in its most basic form by noting the following Cartesian tenets: (1) God's essence is distinct from his creations, including the eternal truths and immutable essences, since he was entirely free to create them; (2) these truths and essences are eternally fixed in God's understanding; and finally, (3) God's nature is absolutely simple. My suggestion is that the eternal truths and essences are created by God, and are thus not part of his essence, but must also be understood by God, and so exist in his understanding. This appears to violate (3), as one aspect of God—his understanding—would be somehow distinct from his essence. However, given that Descartes insists on the identification of God's understanding and will, I do not see how it could be any other way. The free choices of God's will, including the creation of the world, cannot be part of his essence (lest they be determined), yet are necessarily part of his understanding. However, there is also a problem with Descartes' insistence that for God, "willing, understanding and creating are all the same thing without one being prior to the other, even rationally [*ne quidem ratiōne*]" (AT I, 153/CSMK, 26; translation modified). This identification appears only to account for truths that are the result of God's will, since truths about God's essence (e.g. his existence) must be known by God, but are not created by him. If this is correct, the scope of God's understanding would surpass that of God's will.

There is also the issue of the potentially heretical identification of God with his creatures. I think this question turns on the solution to divine simplicity for the following reasons. Those who think that locating eternal truths and essences in God involves identifying creator with creatures have not paid close enough attention to the difference between the way that finite material and mental substances exist as creatures and the way that truths and essences exist as products

⁴¹ This also provides a way of understanding Descartes' claim in *Le Monde* that God's immutability implies that laws of nature would be true in any world (AT XI, 47).

of God's will. In the case of existing creatures such as human minds and the material world, their being is distinct from God's being, even though such creatures causally depend on God at every moment of their existence. Despite this ontological independence, God nevertheless has knowledge of his creatures, which exists in his understanding (lest he be ignorant of his own creation). We do not think that this knowledge of creation existing in God's understanding in any way involves an identification of creator and creation. As stated above, an important component of God's creation of the world is the divine forms through which the particulars of finite existence are fashioned. These are, of course, truths and essences of things, which have their eternal abode in God's understanding. Descartes claims that truths and essences are "established" (*disposuit*) or "made" (*fecit*) in contrast with "the existence of things", which are "created" (*creavit*) (AT I, 152-153/CSM III, 25).⁴² It would be a much greater sin of heresy to assert that truths and essences do not exist in God's eternal understanding, implying a denial of divine omniscience, than it would be to suppose that the products of God's will also exist in his understanding. Therefore, the burden of philosophical coherence with Descartes' position falls almost entirely on the question of divine simplicity, rather than on the supposed heresy of identifying creator and creation.⁴³

The above concerns are challenging rational obstacles for Descartes, but I believe he does attempt to address them. There are three considerations that work to alleviate this puzzle. First, we must recall Descartes' understanding of simplicity as inseparability of attributes, especially in the case of God. Just as the simplicity of a triangle involves the inseparability of its various properties, rather than its semantic or formal analyticity, divine simplicity refers to the fact that God's infinity of attributes are impossible to separate. Second, the reason that the human intellect is able to coherently discuss God's various attributes (existence, essence, understanding, etc.) is not because these parts are really or modally distinguished,

⁴² Schmaltz offers a different take on this passage (1991, 136-145), which should also be reviewed.

⁴³ Add to these comments De Rosa's keen observation that Descartes does not appear to have a nuanced enough theory of distinctions to account for a proper distinction between God and his created essences (2011, 618-619).

but merely rationally so. Descartes explains the latter distinction as “between a substance and some attribute of that substance without which the substance is unintelligible; alternatively, it is a distinction between two such attributes of a single substance” (AT VIII-1, 30/CSM I, 214). With respect to God’s will and understanding, there is not even a rational difference, while we can apparently make intellectual partitions between divine will/understanding and divine essence, for example.⁴⁴ Finally, it is in these moments, when trying to understand how God could have an infinite number of attributes while remaining absolutely simple, that Descartes emphasizes the incomprehensibility of God’s power. In the key letters to Mersenne of 1630, Descartes variously mentions the following:

The greatness of God [...] is something which we cannot grasp even though we know it”; “In general we can assert that God can do everything that is within our grasp but not that he cannot do what is beyond our grasp”; “God as a being who is infinite and beyond our grasp”; “God is a cause whose power surpasses the bounds of human understanding”; “the incomprehensible power of God”; “God is infinite and all powerful.” (AT I, 145-152/CSMK, 23-25)

Descartes repeatedly affirms the infinite power of God in these passages in order to reinforce the point that although we cannot fathom how mathematical truths could be any other way, God was free to make them otherwise. We try to understand how God could have made a triangle’s angles add to more than two right angles and fail to do so.⁴⁵

What conclusion can we draw from the above texts? We have thus far attempted to demonstrate that the eternal truths and immutable natures must exist as “forms of perception” in God’s eternal understanding. When we then try to ascertain precisely how these divine forms exist, Descartes appeals to God’s

⁴⁴ I do not think that one should rely too heavily on the controversial Conversation with Burman, but the remarks at AT V, 165-166 support my interpretation of this point.

⁴⁵ This juxtaposition of the weakness of human understanding in the face of God’s incomprehensible power is not limited to the early letters. In the Fourth Meditation, Descartes writes that given God’s nature as “immense, incomprehensible and infinite [...] he is capable of countless things whose causes are beyond my knowledge” (AT VII, 55/CSM II, 39). Likewise, in the *Principles*, where Descartes claims that “there is much, both in the immeasurable nature of God and in the things created by him, which is beyond our mental capacity” (AT VIII-1, 14/CSM I, 201). It should be noted that the topic of divine simplicity is incredibly complex, and as the focus of this paper has been on atoms of thought and immutable natures, I do not pretend to have solved this issue.

incomprehensible power to achieve an inseparability of infinite attributes.⁴⁶ This is the reason we earlier rejected attempts to specify the nature of the eternal truths and natures as either “weak attributes” of God or objective ideas in God’s mind, both of which imply some form of imperfection. Descartes does not use this language, and does not try to devise a sophisticated schematic for the apparatus of the divine understanding. This should not be surprising, as the structure of the finite human mind is vastly different from the constitution of the infinite mind.

Therefore, in response to the question—how do eternal truths and essences exist in God?—we can only say the following, as derived from our earlier analysis. The eternal truths and immutable essences have been wrought eternally from God’s immutable will. As God’s will and understanding are identical, and there can be no doubt that God understands his own creative acts for all eternity, truths and essences exist as immutable beings in God’s mind. Their metaphysical nature is such that their meanings can in no way be altered or divided. God has decreed each of them to have various properties that are inseparably bound and this unbreakable metaphysical nature of the eternal truths and immutable essences gives rise to their privileged status as atoms of thought in human minds. Our minds have been fashioned such that we necessarily have a clear and distinct perception every time we alight upon these natures. We are unable to divide or change these atoms of thought, and are forced to recognize their independent existence. The objective content of such ideas indicates the unwavering formal reality that our ideas represent.

⁴⁶ Nolan appeals to God’s incomprehensibility in order to explain how truths and natures existing in human minds can be eternal (1997, 184-186). This appears as a last ditch attempt to resolve one of the fundamental problems I have emphasized with his interpretation (the eternity of truths and natures). Why can the same not be said of my own appeal? In the texts I have offered as evidence, Descartes specifically addresses the problem of divine simplicity by deferring to God’s incomprehensibility. In all of these texts, it is God’s nature itself (as both simple and infinite) that presents us with his sheer power and corresponding incomprehensibility. Descartes never states that the issue of the eternity of truths and natures (existing as objective ideas in human minds) is solved by God’s incomprehensibility because eternity is simply not a problem if truths and essences reside in God’s understanding. When Descartes comes face to face with a real tension in his views, such as the reconciliation of God’s preordination and our free will, he makes very specific reference to incomprehensibility (AT VIII-1, 20), reference that Nolan fails to provide. Nonetheless, Descartes’ repeated reliance on this strategy is not without its intrinsic difficulties, as I shall discuss below.

Is Descartes' solution to the puzzle about immutable natures and eternal truths satisfactory? Ultimately it would be hard to convince the modern reader that this is so. When Descartes resolves the difficult tensions in his philosophy by invoking notions that are, in principle, beyond human reason, it would appear that he is engaging in something akin to the speculations of theology that he had promised to avoid. However, as nearly all of the problems with Descartes' account of eternal truths and essences involve determining the nature of divine simplicity, is his view any worse off than those of the countless medieval, scholastic, and early modern thinkers who faced the same problem? If anything, Descartes has at least offered a relatively plausible account of simplicity as inseparability of attributes that avoids immediate paradox. Some recent commentators have tried to make Descartes' philosophy (particularly his epistemology) more palatable to contemporary taste by emphasizing that the tenor of his work is closer to our own time than to the dominant Christian worldview of his predecessors.⁴⁷ To do so is to miss Descartes' justification for the atomism of thought, which has its foundation in God's immeasurable power. Today's proponents of various ungrounded forms of conceptual and linguistic atomism might even learn from the father of modern philosophy on this score.

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⁴⁷ For example, Michael Della Rocca argues that "Descartes is starting to make room for the view that epistemology can proceed without concerning itself with God" (2005, 30). If my analysis is correct, then there is no way to properly understand the basic units of epistemological inquiry (atoms of thought) without reference to God. I see some of the other commentators referenced in this paper (Edelberg 1990; Chappell 1997; Nolan 1997; Cuning 2003) as adopting a line of interpretation similar to Della Rocca's in this regard.

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