# Hobbes's Galilean Project: Its Philosophical and Theological Implications

### GIANNI PAGANINI

### I. THE EARLY HOBBES AND THE THEOLOGICAL ARGUMENT IN *DE MOTU*, *LOCO ET TEMPORE*

In the last ten years, discussion of Hobbes's 'theology'<sup>1</sup> has revolved around his provocative and very particular notion of a corporeal God, to be found especially in the 1668 Appendix to the Latin *Leviathan* as well as in Hobbes's *Answer to a Book Published by Dr. Bramhall Called 'Catching of the Leviathan'*. The latter, according to what Hobbes says in his preface 'To the Reader', was written more than ten years earlier, but published only posthumously in 1682. Hobbes's late theology has attracted the attention of scholars<sup>2</sup> because of two aspects in

<sup>1</sup> Here are some comments on the texts and translations used, as well as some abbreviations used in this chapter, in addition to those listed at the front of this volume. *DM* is translated in Harold Whitmore Jones (ed. and trans.), *Thomas White's 'De Mundo' Examined* (London: Bradford University Press and Crosby Lockwood Staples, 1976). I have often modified the English translation to come closer to the Latin original. *DM* 'Introduzione' and *DM* 'Commento' stand respectively for the Introduction and the Commentary contained in: Hobbes, G. Paganini (ed. and trans. [Italian]), *Moto, luogo e tempo* (Turin: UTET, 2010). While I cite the Curley edition of *Lev.*, I have also collated the new critical edition of the *Leviathan* by Noel Malcolm (Oxford: Clarendon Press, 2012). Whenever possible (e.g. for *DM*, *Lev.*, following Curley edn., *DC*, etc.), I quote Hobbes's works by part, chapter, section, without indicating the page number.

<sup>2</sup> Recently the Springborg–Martinich debate has taken the place of the older one between Curley and the same Martinich; however, both debates focus on the theological positions of the later Hobbes. See Patricia Springborg, 'Calvin and Hobbes: A Reply to Curley, Martinich and Wright' ['Calvin and Hobbes'], *Philosophical Readings*, 4 (2012), 3–17; Aloysius P. Martinich, 'On Hobbes's English Calvinism: Necessity, Omnipotence, and Goodness' ['Calvinism'], *Philosophical Readings*, 4 (2012), 18–30; Martinich, 'Epicureanism and Calvinism in Hobbes's Philosophy: Consequences of Interpretation' ['Epicureanism'], *Philosophical Readings*, 4 (2012), 3–15; and for the previous debate: Edwin Curley, 'Calvin and Hobbes, or Hobbes as an Orthodox Christian' ['Calvin and Hobbes'], *Journal of the History of Philosophy*,

#### Gianni Paganini

particular. For some, as for Bishop Bramhall, it constitutes definitive proof of Hobbes's radical heterodoxy, or even potential atheism (crypto-atheism), proof put to good use in their polemic with those who, to the contrary, see Hobbes as a more-or-less orthodox thinker, more-or-less Calvinist or Lutheran,<sup>3</sup> as the case may be, but squarely in the English Protestant tradition. For the latter group of scholars the main problem is to reconcile a corporeal God with Hobbes's fundamental metaphysics, and more generally the internal coherence of Hobbes's theology as it developed from his early to his late works.<sup>4</sup> But with few exceptions<sup>5</sup> scholars on both sides have failed to address one important early work of Hobbes (*De motu, loco et tempore*: his polemic with White), in which he treats theological issues at length and where one cannot fail to note the originality and extreme radicalism of his philosophical approach, even if the doctrine of a corporeal

34 (1996), 257–71; Martinich, 'On the Proper Interpretation of Hobbes's Philosophy' ['Interpretation'], *Journal of the History of Philosophy*, 34 (1996), 273–83; Curley, 'Reply to Professor Martinich' ['Reply'], *Journal of the History of Philosophy*, 34 (1996), 285–7.

<sup>3</sup> I am referring respectively to Martinich, *The Two Gods of Leviathan: Thomas Hobbes on Religion and Politics [Two Gods]* (Cambridge: Cambridge University Press, 1992) and George Wright, *Religion, Politics and Thomas Hobbes [Religion]* (Dordrecht: Springer, 2006).

<sup>4</sup> Two recent articles discuss the late theology of Hobbes, especially the issue of corporeal God, and provide an accurate overview of the different positions (E. Curley, L. Foisneau, D. Jesseph, C. Leijenhorst, F. Lessay, A. Lupoli, A. P. Martinich, A. Pacchi, P. Springborg, D. Weber, etc.). See Springborg, 'Hobbes's Challenge to Descartes, Bramhall and Boyle: A Corporeal God' ['Challenge'], *British Journal for the History of Philosophy*, 20 (2012), 903–34; G. Gorham, 'The Theological Foundation of Hobbesian Physics: A Defence of Corporeal God' ['Foundation'], *British Journal for the History of Philosophy*, 21 (2013), 240–61. For an in-depth study of Hobbes's late and materialistic theology see Agostino Lupoli, *Nei limiti della materia. Hobbes e Boyle: materialismo epistemologico, filosofia corpuscolare e 'dio corporeo'* (Milan: Baldini Castoldi Dalai, 2006).

<sup>5</sup> The most notable exceptions are: Arrigo Pacchi, 'Hobbes and the Problem of God' ['Problem of God'], in G. A. J. Rogers and A. Ryan (eds.), *Perspectives on Thomas Hobbes* (Oxford: Oxford University Press, 1988), 171–88; E. M. Curley, ''I Durst Not Write So Boldly'' or How to Read Hobbes' Theological-Political Treatise' ['I Durst Not'], in Daniela Bostrenghi (ed.), *Hobbes e Spinoza* (Naples: Bibliopolis, 1992), 497–593; Arrigo Pacchi, A. Lupoli (ed.), F. Tricaud (intro.), *Scritti hobbesiani (1978–1990)* [*Scritti*] (Milan: Angeli, 1998), 54–9; Karl Schuhmann, 'La question de Dieu chez Hobbes' ['La question de Dieu'], in Michel Fichant and Jean-Luc Marion (eds.), *Hobbes, Descartes et la métaphysique* (Paris: Vrin, 2005), 121–54; Gianni Paganini, 'Hobbes alla ricerca del primo motore: il *De motu, loco et tempore*' ['Primo motore'], *Rinascimento*, 48 (2009), 527–41; Paganini, *DM* 'Introduzione', 9–126, at 67–96; Paganini, 'How Did Hobbes' Think of the Existence and Nature of God? *De Motu, Loco et Tempore* as a Turning Point in Hobbes's Philosophical Career' ['Turning Point'], in Sharon A. Lloyd (ed.), *The Bloomsbury Companion to Hobbes* (London: Bloomsbury, 2013), 286–303, 321–5 (notes). Martinich, *Two Gods* has very few references to *DM*.

God is not explicitly addressed. Rather we see a rigorous examination of the principal arguments in favor of the existence of God, with results strongly critical of the sustainability of this thesis, at least from a strictly philosophical point of view.

Many interpreters have already noted the more informal, less rigorous, formulation of Hobbes's theological argument when it appears in his political or theological-political, rather than his philosophical, works.<sup>6</sup> The properly philosophical works display the argument in a more systematic way, even though with some problematic features that deserve careful attention. This is the case of the *locus classicus*, *De corpore* (*DC* 26.1), where Hobbes raises the issue of the first cause of the universe in a plainly philosophical context,<sup>7</sup> with consequences that we are going to see later. However, this is not the only systematic work where Hobbes treated the issue, because he made a close examination of the same argument from a strictly philosophical point of view a dozen years before *De corpore*, namely in *De motu, loco et tempore*<sup>8</sup> (*DM*),

<sup>6</sup> For a balanced presentation of the previous literature, see Pacchi, 'Problem of God'; Pacchi, *Scritti*, 53–66, esp. 60; Schuhmann, 'La question de Dieu', esp. 133. R. W. Hepburn, 'Hobbes on the Knowledge of God' ['Knowledge of God'], in Maurice Cranston and R. S. Peters (eds.), *Hobbes and Rousseau: A Collection of Critical Essays* (Garden City, NY: Anchor Books-Doubleday, 1972), 85–108, had already remarked that Hobbes's use of the causal argument 'was not well-presented or well-defended', and did not appropriately distinguish between an infinite regress in time and an infinite regress of causes operating at the same time. On this, see Curley, 'I Durst Not', 574. Appropriately Cees Leijenhorst has reminded us that theological arguments of this kind have in Hobbes' the character of hypothesis, and not of real proof; see Leijenhorst, 'Hobbes's Corporeal Deity' ['Corporeal Deity'], in Luc Foisneau and George Wright (eds.), *New Critical Perspectives on Hobbes's Leviathan upon the 350<sup>th</sup> Anniversary of Its Publications*, special number of *Rivista di Storia della Filosofia*, 59 (2004), 73–95, at 78. See *Third Objections*, v.: 'suppositionem alicujus causae aeternae' (AT vii. 180).

<sup>7</sup> This argument needs close examination, because in *DC* 26.1 (see pp. 29 and 31, this volume) Hobbes reduces to a *psychological* impossibility infinite regress, which Aquinas had treated as a *logical* impossibility. The same point was stressed by Schuhmann, 'La question de Dieu', 130.

<sup>8</sup> I adopt the title used by Mersenne, who also attributed the work to Hobbes in his preface to Ballistica et Acontismologia. In qua Sagittorum, Iaculorum, & aliorum Missilium Iactus, Robur & Arcuum explicantur (Paris: Antonius Bertier, 1644), included in the anthology by the same Mersenne: Cogitata physico matematica. In quibusdam naturae quam artis effectus admirandi artissimis demonstrationibus explicantur (Paris: Antonius Bertier, 1644). Strangely, modern scholarly literature uses spurious titles for this work, such as Anti-White, Critique of De Mundo, De Mundo Examined, etc. On the features of DM, attribution to Hobbes, Mersenne's witnesses, and in general on the content of this work see Jacquot's and Jones's Introduction to DM, 1–97 and Paganini, DM 'Introduzione', 9–126.

the lengthy work of almost four hundred pages, which was devoted to debate of Thomas White's *De mundo dialogi*.

Strangely, this work has been rarely considered by Hobbes scholars, and especially Anglo-American scholarship, even though it represents an anticipation of the philosophical and scientific topics that will be considered subsequently in De corpore. White's book, in turn, was an interesting work that attempted to reach a compromise between scholastic philosophy and the new Galilean cosmology. The title, the dialogical style, and the structure of White's book clearly reflect the main features of Galileo's Dialogo sopra i due massimi sistemi del mondo.9 Hobbes composed his polemic between 1642 and 1643, yet left it unpublished (the work was published, after the only extant manuscript, by Jacquot and Jones in 1973). Thus, DM, together with his Objections to Descartes and De cive, inaugurated the fruitful decade of Hobbes's French exile which saw the writing of Leviathan and of large parts of De corpore. The originality of this work, which Hobbes left unpublished, depends on both extrinsic and intrinsic factors. The former consist in its polemical nature. Being obliged to fight White on his own ground, Hobbes had to follow the path of his interlocutor and could not escape the big theoretical issues raised by scholastic theology in which White excelled. In this case, Hobbes could not simplify or shorten the philosophical agenda, leaving aside metaphysical and theological issues and adopting a deflationary or minimalist approach, as he would do later in *DC*, when he excluded theology from the competence of philosophy. What is more, in *DM* Hobbes shares with White the broad definition of philosophy as a general ontology that includes the Supreme Being, so that properly theological issues could not be avoided in a philosophical treatise of this kind.

Almost every time Hobbes had recourse to some kind of demonstration of God's existence he made use of two classical arguments,<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Beverley C. Southgate, 'Covetous of Truth': The Life and Works of Thomas White, 1593–1676 [White] (Dordrecht: Kluwer, 1993). For a full description of the contents and the philosophical import of DM, see Paganini, DM 'Introduzione'.

<sup>&</sup>lt;sup>10</sup> For a nearly complete catalogue of the theological arguments used by Hobbes it is still useful to refer to Keith Brown, 'Hobbes's Grounds for Belief in a Deity' ['Grounds'], *Philosophy*, 37 (1962), 336–44; Willis Glover, 'God and Thomas Hobbes' ['God'], in Keith Brown (ed.), *Hobbes Studies* (Oxford: Blackwell, 1965), 141–68; Hepburn, 'Knowledge of God'; Peter Geach, 'Hobbes' Religion' ['Religion'], in Preston King (ed.), *Thomas Hobbes: Critical* 

called by Thomas Aquinas respectively 'prima via ex parte motus' and 'secunda via ex ratione causae efficientis'.<sup>11</sup> The former points to God as first mover, and the latter to God as the cause of the world. These arguments had become commonplace in theological discussion, even in the seventeenth century, and it is easy to find them distributed more or less evenly throughout Hobbes's works,<sup>12</sup> so we can say that for Hobbes the best way to infer the existence of God is a causal argument, stating that He is 'the first mover' (TOII 4.15; DCi 13.1; DM 37.3; Lev. 12.6; QLNC 12), or the 'first cause' (DM 37.12 and 13), or 'the cause of all things' (QLNC 11). Sometimes Hobbes joins together the two types of argument, as in Lev. 12.6 or DCi 13.1: in the 'ordinary government of the world [...] God, the mover of all things, produceth naturall effects by the means of secondary causes'. At other times the two types of proof, the causal and the other relating to the mover, succeed one another in the same section (DC 26.1). The blending of the two arguments is due not to looseness on Hobbes's part, but to his own doctrine, according to which motion is the 'universal cause' of all change. Unlike Thomas Aquinas and the scholastics, for Hobbes to act as a mover, given the nature of motion, is exactly the same as acting as an efficient cause, at least in the natural order; and the four types of becoming are all reducible to movement or to the effects of movement.<sup>13</sup> Furthermore, both arguments have in common their reliance on the impossibility of an infinite regress in the search for movers or causes and thus the necessity of arriving at a first mover or first cause. This principle (impossibility of an infinite regress and the necessity of stopping somewhere) is on display in Hobbes's arguments. On the whole, all these proofs are of the causal type (EL i. 11.2; Third Objections, v; Lev. 11.25), or include reference to 'one first mover' (Lev. 12.6), or play on both formulations (DC 26.1). As we shall soon see, the

Assessments, vol. IV: Religion (London: Routledge, 1993), 280–9; Pacchi, 'Problem of God'; Pacchi, Scritti, 53–65.

<sup>&</sup>lt;sup>11</sup> Thomas Aquinas, *Summa Theologiae*, Iq2a3c. The two ways share the impossibility of a regression to infinite ('Hic autem non est procedere in infinitum'); hence the necessity of reaching a first mover ('primum movens') or a 'first cause' ('prima causa efficiens').

<sup>&</sup>lt;sup>12</sup> For a complete list of Hobbes's formulations referring to the first of Aquinas's ways, see Paganini, 'Turning Point', 286–7.

 $<sup>1^{3}</sup>$  See, among many places, DM 27.10, where Hobbes declares that 'every action that we can understand is motion'; 'there is no way of changing bodies but by motion'.

argument of DC, being a peculiarly philosophical work, deserves especially close examination, because it is carefully qualified by the author himself. By contrast, the other political works seem to take the argument at face value, without any particular reinterpretation.

The imprint of classical Thomist formulations on the theological argument, as it is reworked by Hobbes, is easily recognizable from the clause that concludes one of its best presentations, that of Lev. 12.6. There, combining the first two ways, Hobbes claims that 'there must be (as even the heathen philosophers confessed) one first mover, that is, a first and eternal cause of all things', and wisely Curley comments that this parenthetic clause is apparently a rare, even if implicit, reference to Aristotle.<sup>14</sup> By contrast, the explanation of the nature of this mover or cause ('which is what men mean by the name of God') does not refer to Aristotle's text or that of any other ancient philosopher. It is quite simply the literal English translation of the final phrase by which Thomas Aquinas closes each of his own 'ways' to demonstrate the existence of God ('this is what everyone understands as God': 'et hoc omnes intelligunt Deum').<sup>15</sup> This special qualification appended to the proof from movement or from causality has been interpreted by commentators as a sign of the special care displayed by Aquinas to equate the Aristotelian first mover of the heavens to the Christian God.

As to the epistemological status of these *a posteriori* arguments, Hobbes seems to have had no doubt concerning their rational character, at least in his published works, as he claims that the existence of God 'can be known by natural light' (*DCi* 2.1; cf. *EL* i. 11.2), treating people who do not maintain the existence of God as 'men that are not wont to reason aright, or cannot do it or care not to do it'. Lastly, he considers 'atheists' as 'fools' who are not able to use reason or do not care about that (*DCi* 14.19n). This notwithstanding that God's nature is unknowable. God is absolutely inconceivable, unimaginable, and incomprehensible to humans. On this point, all Hobbes's works agree without exception. We can only conclude that Hobbes did not

<sup>&</sup>lt;sup>14</sup> Curley edn. of *Leviathan*, 64n2.

<sup>&</sup>lt;sup>15</sup> Thomas Aquinas, *Summa Theologiae* Iq2a3c. The second way ends thus: 'Ergo est necesse ponere aliquam causam efficientem primam: quam omnes Deum nominant.' Similar formulations appear for the third, fourth, and fifth way.

take other arguments for God's existence seriously;<sup>16</sup> and they are not taken up again in his political or philosophical works. When he discusses Descartes's Third Meditation (Third Objections, v) and in particular the Cartesian argument inferring the existence of God from having in us an idea which cannot be the product of a finite being. Hobbes rejects the premise, i.e. that we have an idea of God, because, he insists, God is inconceivable ('inconceptibilis': AT vii. 170). Thus, the basis itself for Descartes's 'ideological' proof is overthrown. Hobbes's objections are largely against the notion that we can have any idea of God or of God's nature, that such an idea could be innate, etc. (Third Objections, vi-ix; AT vii. 181-5). Furthermore, the English philosopher dismisses as a failure Descartes's claim to have proved God's existence starting from the original idea of an infinitely perfect being (the Cartesian proof being a reformulation of Anselm's ontological proof, as is well known). Hobbes does not even consider Descartes's second, a posteriori proof as reformulated in the Third Meditation. Finally, the author of the Third Objections does not accept the Cartesian innovation of relying on the idea of divine self-causality (God as causa sui). For once agreeing with the scholastic tradition, Hobbes rejects this notion of self-causality as wholly incompatible with his own doctrine of true causality ('excluditur effectio sui ipsius': DM 29.4).<sup>17</sup>

Since the only good arguments seem to be the first and the second 'ways', and since both merge for Hobbes into one and the same argument, I shall hereafter mention the combination of the two as simply 'the theological argument' or 'the argument'. Furthermore, I shall focus on *DM* not only because it has been largely neglected by Hobbes scholars, but also for two other reasons. First, it is an early presentation of Hobbes's scientific philosophy, whereas the other

<sup>16</sup> For discussion of some other arguments used by White that were typical of the Second Scholastic, see pp. 31–6, this volume.

<sup>17</sup> On the polemic with Descartes, see Curley, 'Hobbes versus Descartes', in Roger Ariew and Marjorie Grene (eds.), *Descartes and His Contemporaries: Meditations, Objections and Replies* (Chicago: University of Chicago Press, 1995), 97–109, and, more generally, Michel Fichant and Jean-Luc Marion (eds.), *Hobbes, Descartes et la métaphysique* (Paris: Vrin, 2005). According to Carraud, the description by Descartes of God as *sui causa* is a great novelty in terms of the whole scholastic tradition, whether Thomist or Scotist or even Ockhamist. See Vincent Carraud, *Causa sive ratio. La raison de la cause, de Suarez à Leibniz [Causa]* (Paris: PUF, 2002), 266–76, esp. 267, even though Descartes does not arrive at the point of speaking about a true efficient cause ('causa efficiens sui ipsius'). works, either preceding or following it, are basically political, like *Elements of Law, De cive*, and *Leviathan*. Secondly, when he wrote *DM*, Hobbes acted as if he were in a 'laboratory', trying to test the possible combination of Galileo's science and his own 'first philosophy', using White's bad fusion of Galileism and scholasticism as a catalyst. For these two reasons, one can find in *DM* a new key to approaching the entire set of problems that make up Hobbes's 'first philosophy', and especially one of its most intriguing pieces, the theological argument.

## 2. THE DEFINITION OF PHILOSOPHY AND THE REQUIREMENT OF UNIVOCITY

The first outstanding feature of DM is the definition of philosophy itself, which is presented here as the 'science of the general theorems' whose 'truth can be demonstrated by natural reason'; within this broader range, 'first philosophy' in particular has to demonstrate 'theorems about the attributes of being in general' (DM I.I).<sup>18</sup> With a rare touch of sympathy for the Stagirite, Hobbes approves in DM the Aristotelian project of a science having as its subject Ens, or being in general, which comprises the principles of all other sciences as well (DM 9.16). However, he breaks away from the scholastic degeneration of this science, which is exemplified by scholastic metaphysics, with its pretensions to be supernatural knowledge aimed at a trans-natural reality. In this context of rigorous rationality, Hobbes sharply rejects the idea of any 'analogy' of being that could encompass the finite and the infinite; on the contrary, he claims from philosophers that the most rigorous univocity of language be applied to every kind of being. (Univocity of being was the idea that words must have the same meaning when describing either the properties of God or those of finite beings, with the result, according to Hobbes, that one cannot apply to God words such as will, understanding, etc. that are typical of human properties.) Thus, for Hobbes there is no middle term between univocity and equivocity, the scholastic notion of analogy being just a meaningless way to talk, as is clear in 'analogical' discourse about God.

 $<sup>^{18}</sup>$  For the general characteristics of this reform of first philosophy contained in DM, see Paganini, DM 'Introduzione', 48–67.

'Analogy' in *DM* ends up meaning only 'deliberate ambiguity' ('aequivocatio ex consilio': *DM* 34.7), and this position marks a notable shift from *De cive* where, shortly before, Hobbes had still admitted the possibility of some kind of analogy. For example, in *De cive*, Hobbes described God's 'will' as 'something analogous that one cannot conceive of' ('aliquid analogum quod non concipere possumus': *DCi* 15.14), whereas in *DM*, even while still using the expression 'God's will', he warns the reader against any confusion, stressing the enormous difference between God's so-called 'will' and the only true will we know, namely man's will (*DM* 30.34; 31.3).

It is also true that in at least one place (DM 32.1) Hobbes speaks of God's 'goal' ('finis') as 'something analogical and above human understanding' ('aliquid analogicum et supra humanum captum'); yet, this is not tantamount to authorizing the use of 'analogy' in theological discourse. On the contrary, Hobbes immediately goes on to explain that this acknowledgment must not open the way to philosophical speculation, like that of scholastics, since a disputation on this topic ought to pertain neither to 'philosophy', nor to 'some natural theology', but only to 'religion', 'in which case the argument should be conducted not according to man's reason but according to Holy Scripture and the decrees of the Church' (DM 32.1; cf. DM 30.34; DM 35.16). It is clear to Hobbes that God has no 'aims' or 'purpose', because this notion would imply also 'need', 'inadequacy', or 'lack', and all these are absolutely incompatible with the definition of God as the most perfect being. Therefore there is no 'appetite' ('appetitus') or 'greed' in God, whereas it is well known that the only philosophical definition of 'will' according to Hobbes means the last act of appetite or aversion (DM 32.1).<sup>19</sup> Moreover, the author of DM sharply criticizes any attempt made by White to use the word 'good' (as the object of any goal) in an 'analogical way' ('analogice') in referring to God. Hobbes's comment on this use of analogy is more than sarcastic: no one, he says, 'could find a more ridiculous statement than this [White's], or one more suitable for someone who would scorn metaphysicians'. And finally he declares not to understand what it is 'to

<sup>&</sup>lt;sup>19</sup> The impossibility of applying notions such as 'will', 'understanding', 'liberty', 'goal', etc. to God has heavy implications for Hobbes's treatment of the problem of theodicy in *DM* 31–5. On this topic, see Paganini, *DM* 'Introduzione', 87–96 ('Questions of theodicy').

assume a term analogically' (DM 32.5; see also 32.1–5). As a general rule, Hobbes assumes that God has no attributes, with the exception of existence, meaning that 'no proposition about the nature of God can be true save this one: God exists'. Everything else pertains not to declaring 'philosophical truth', but to showing 'our affections, by which we wish to magnify, praise, and honour God'. Words such as 'God sees, understands, wills' display 'not the Divine Nature, but our own piety', since by those terms 'we do understand nothing but motion'. In short, these pronouncements 'are rather oblations than propositions' (DM 35.16).

Hobbes remarks that the main theme of the fifth problem ('nodus') discussed by White in the Third Dialogue,<sup>20</sup> is not what the title ('Ens a se unicum esse et caeterorum causa') suggests, but rather what God 'understands and wishes' (DM 30.1). This gives Hobbes the opportunity to engage in a lengthy philosophical discussion of human psychology and what it means to feel, to imagine, to remember, to discourse, to understand, to will, to be free, etc. Indeed, most of the psychology developed in Leviathan is already present in DM, even though his reflections on curiosity and anxiety, which are to become distinguishing characteristics of humans, are much more developed in the later work.<sup>21</sup> The main theological import of this long psychological excursus in DM is to show that it is impossible to apply to God, even analogically, words such as 'to understand', 'to will', in their proper philosophical meaning, which necessarily concerns the way humans feel, understand, wish, etc. Once again the rejection of analogy and the requirement of philosophical univocity impose tight restrictions on discourse about God, making the pretensions of the metaphysicians fruitless. There is no common definition of will ('voluntas') that accommodates both human and divine will (DM 30.34); 'the nature of the divine will is incomprehensible' (DM 30.34); 'the way in which God understands passes our understanding' and 'must be maintained by

<sup>21</sup> Common wisdom has it that mastering artificial language and developing science mark the main gap between men and animals; for a focus rather on the passion of curiosity and its effects for the growth both of reason and language, see Paganini, 'Passionate Thought: Reason and the Passion of Curiosity in Thomas Hobbes' ['Curiosity'], in Sabrina Ebbersmeyer (ed.), *Emotional Minds: The Passions and the Limits of Pure Inquiry in Early Modern Philosophy* (Berlin: Walter de Gruyter, 2012), 227–56.

<sup>&</sup>lt;sup>20</sup> Thomas White, De mundo dialogi libri tres [De mundo] (Paris: D. Moreau, 1642), 306 ff.

faith and not by reason' (DM 30.33). Even though Hobbes often uses expressions like 'God's free will', 'liberum Dei arbitrium' (e.g. DM 30.34), it is clear that this 'arbitrium' is completely different from the human will, where 'reasons' are 'causes', consisting in motion provoked by feelings and imaginings ('phantasmata'). Paradoxically Hobbes can demonstrate that the analogy White sought between divine and human will would result, according to his own principles, in the simple destruction of the theological notion of creation, for to speak of God's 'will', as we would of human will, has the necessary consequence of reducing divine operations to something similar to human operations (DM 30.34-5). So, it is not by chance that this long chapter 30 ends with a harsh tirade against metaphysics. Whereas White saw the difficulty of this kind of philosophical speculation in the nature of things, Hobbes is convinced that the difficulty arises from White's 'ignorance of the nature of the intellect and the will' and from his use of vague analogies devoid of any proper content. In short, it is another instance of the typical usage of metaphysicians who commingle and assemble words and propositions that are completely 'lacking in meaning', without real 'thought about [the nature of] things' (DM 30.36).

These two moves, a broader definition of philosophy<sup>22</sup> and the requirement of precision (univocity) in philosophical language, even when it applies to theology, have a double impact on Hobbes's discourse in DM. On the one hand, theology (as natural theology, compared to revealed religion) must be considered as a fully entitled part of philosophy, at least in principle, as belonging to philosophical discourse about the supreme kind of being, God. On the other hand, theological reasoning needs to be submitted to the same requirement of univocity that is typical of science. The result of these two moves, however, is paradoxical and far from favoring theology, given that the latter demand, precision or univocity, has implications for the former, the science of being in general. This is the reason why Hobbes, after a close examination of the arguments put forward by White, ends up claiming that it is impossible to demonstrate philosophically any

<sup>&</sup>lt;sup>22</sup> On the peculiarities of *DM*'s definition of philosophy, see Paganini, *DM* 'Introduzione', 52–5. For Hobbes's subsequent shift in the definition of philosophy, cf. *Lev.* 46.1 and *DC* 1.2, see Paganini, *DM* 'Introduzione', 129n1, 130n2, and Paganini, 'Turning Point', 289–91.

theological topic, including the basic one concerning the existence of God. The final outcome of DM's critique is theologically disappointing, since Hobbes claims that the best way to deal with religious issues is not to blend faith and reason, but to keep them sharply separated, up to the point of opposing them to each other. From the point of view of semantic correctness, any speech about God, except the bare affirmation of His existence, turns out to have no declarative meaning (cf. DM 27.14; 27.8; 30.36; 34.7; 35.16). Except for this basic statement, all forms of religious speech are a way of performing acts or gestures by which men display submission, worship, and ultimately signs of honor to God. In sum, then, these signs consist in actions rather than in true statements about God's nature or attributes.<sup>23</sup>

This conclusion is reached in DM only after a lengthy deconstruction of White's theological arguments. Hobbes at face value takes very seriously White's 'promise' to rationally demonstrate not only the existence of God, but also creation *ex nihilo* and the purposefulness of the world. However, the final point of his critique is that no one, not even White, can offer such a demonstration from a strictly philosophical standpoint (DM 26.1–2).<sup>24</sup> However, before reaching such a damning conclusion, he first needs to deconstruct the classical Aristotelian and Thomist arguments about the first mover or the first cause, to show that they are not really convincing; secondly, he needs to reconstruct the argument to establish that what it demonstrates is very far from being a first immovable mover. This is the reason why

<sup>23</sup> This point has been stressed by Schuhmann, 'La question de Dieu', esp. 131-3, 135-6, 141.

<sup>24</sup> Hobbes lists accurately the main topics of White's Third Dialogue and summarizes them thus: (1) 'An sit Deus'; (2) 'An mundus fuerit creatus, his verbis, an motus extiterit ab aeterno'; (3) 'Rursus an Deus fuerit ab aeterno'; (4) 'An Deus sit causa mundi'; (5) 'An potuerit facere mundum meliorem eo quem fecit'. A few lines later on Hobbes epitomizes the whole matter of this part in one single question: 'An existat et extiterit Deus omnipotens creator coeli et terrae, prout credendum nobis in symbolo fidei proponitur, an non existat vel non extiterit' (*DM* 26.1). It seems that Hobbes conflates strictly philosophical topics (the existence of God as a first cause) and theological ones (creation and theodicy), also with explicit reference to the doctrine of faith (the symbol). In reality, to mingle different topics deriving from different sources is more typical of White, whereas Hobbes's constant focus is on the necessity of sharply separating what pertains to philosophical reason and what belongs to revelation and its vehicles (Scripture and the Church). But White's Third Dialogue is much less ambitious, at least in appearance. Addressing Ereunius, Andabata says: 'Ergo, ex his quae dixisti Dei existentiam, et quod mundum condiderit, et gubernet, et quo fine, elici posse putas?' White, *De mundo*, 267. Hobbes's argument takes the form of rewriting: instead of writing a new demonstration, or even a counter-demonstration, he tries to rework the traditional argument, testing its robustness and giving new meanings to old metaphysical terms. In so doing, he changes the whole structure and scope of the proof; instead of confirming or strengthening it, Hobbes's close examination leads to the simple destruction of the supposed proof. His intentions are deflationary rather than constructive.

Since DM takes the form of a critique much more than a new construction, Hobbes does not need any form of 'secret writing', in Leo Strauss's sense. Indeed, in this work he never hides or conceals between the lines the substance of his position, because he has no true demonstration to put in the place of the false one. He could even think he was safe from theological attack, by showing that what harms religion is not his own sharp separation between faith and reason, but White's philosophical ambitions, which turned out to be entirely deceiving. White's pretensions are not only contrary to philosophy, Hobbes says, but also to theology, religion, providence, laws, and even justice (DM 26.2-6). In the provocative question of the nature of God, scholastic demonstrations prove to be anti-philosophical and harmful to theology, because supporting theology by weak reasons that can easily be confuted is definitely noxious for religion. Therefore, White's scholastic approach risks jeopardizing faith, which cannot rest securely on philosophy, and Hobbes manages to present his own deconstruction of scholastic theology as much more respectful of religion than White's dogmatic construction. He does not propose to replace White's theology with his own, however, since this would prove in the end to be absolutely contrary to his own theses about religion, as we shall see.

If he does not need (at least in DM) a Straussian art of secret writing, because he can protect himself by this differentiation between philosophy and religion, Hobbes does need a careful and rigorous art of rewriting philosophy, as we have already said. His approach to Aristotelian and scholastic discourse in DM is literally a sort of translation from the older language of metaphysics to the new language of his own 'first philosophy'. In order to assess the real import of White's arguments, Hobbes must first translate them into meaningful and exact speech. Obviously, this does not require completely new words, but rather using the same words with new meanings. In brief, his exercise of rewriting concerns both the form and the content of the demonstration, both the syntax of the proof and the semantics of the terms.<sup>25</sup>

# 3. REWRITING 'FIRST PHILOSOPHY' ACCORDING TO GALILEO'S SCIENCE OF MOTION

Of these two transformations, the first concerns the epistemological status of the 'demonstration'. Hobbes thinks of demonstration as a consequential truth,<sup>26</sup> which has not as such any direct existential implication. Consequential or 'conditional' truth merely makes it explicit that in a true proposition the predicate is contained in the subject. For example, the proposition "man is an animal" is true because the word "animal" includes and contains in itself all that is really meant by the word "man" (DM 26.2). To demonstrate from this that the subject of the proposition really exists is a different matter. Unlike a logical statement, an existential one needs always to be confirmed by direct experience. So long as there is no experimental verification required, rational discourse takes the form of a series of propositions, the conclusion of which has only hypothetical value ('vim hypotheticam', not 'categoricam': DM 26.2; see also DM 26.7).<sup>27</sup> From the time of the *Elements* and his polemic with Descartes on, Hobbes admits no experimental verification for things incorporeal, such as God.<sup>28</sup> To ascertain existence ('to prove that something exists')

 $^{28}$  Hobbes makes this statement explicitly regarding the existence of God and other incorporeal beings, as well as the idea of the beginning of the world (*DM* 26.2). He makes

<sup>&</sup>lt;sup>25</sup> On the idea of 'first philosophy' as a new 'nomenclature', see DM 14.1–6. Hobbes has the ambition of replacing the Aristotelian doctrine of the categories by his own 'nomenclature' (DM 27.1–7, to be compared to DC 7–11). For a close examination of this 'reform of first philosophy' as it is presented in DM, see Paganini, DM 'Introduzione', 48–67.

<sup>&</sup>lt;sup>26</sup> See also *Leviathan* where it is said that demonstration is 'not absolute but conditional' (*Lev.* 5.17; 7.3; cf. *Third Objections*, iv, in AT vii. 178).

 $<sup>^{27}</sup>$  In fact, 'the word in any demonstration which is the subject of the demonstrated conclusion is not considered as the name of an existing thing, but something supposed' (*DM* 26.2). The example of geometry is particularly significant. Of a triangle, one can demonstrate its properties, regardless of the actual existence of any object which is called a triangle, whereas to prove that it exists 'there is need of sensation or experience'. Also the empirical verification must meet precise standards of reliability and cannot be endorsed without particular caution. For example, he who affirms that Socrates 'lives or exists' will be requested to add to his statement: 'unless I have seen a phantasm or ghost or dreamed of one, then I saw Socrates, therefore Socrates exists' (*DM* 26.2).

requires 'sensation or experience' (*DM* 26.2), and obviously there is no empirical experience of divine substance.

The second great change in DM regards the semantics of terminology, which in turn depends on general ontology or, more properly according to Hobbes, 'first philosophy'. The chapter of DM which is devoted to rewriting Aristotelian metaphysics chronologically precedes the so-called preparatory sketches of *De corpore*,<sup>29</sup> and reveals its close connection with Galileo's scientific revolution. This connection is crucial in order to understand the new semantics that is at the heart of Hobbes's philosophical undertaking. Whereas White seeks a compromise between Aristotelian metaphysics and the new cosmology, Hobbes emphasizes the contrast between the truth of Galileo's science and the content of scholastic philosophy; what is more, he applies the conceptual results of the new physics to reshape the general theory of being called 'first philosophy'. This is a true reformation of philosophy and takes the form of a general semantics, which is a prerequisite to any treatment of the theological issue. White summarized his own argument thus: 'The motion of the universe comes from an external principle.' Hobbes more precisely formulates the issue at stake in these words: 'whether the parts of the world are moved by one another and so on for ever, or whether one must finally come to a part that owes its motion not to another part of the world but to some external moveri.e., whether the parts of the world have been set in motion, or instead been moved from eternity' (DM 27.13). In other words, before

the same point, concerning God and angels clearly in the *Third Objections*, v (AT vii. 179–80), even cautiously claiming there to believe ('credens') them. As noted by Pacchi, *Scritti*, 60, scientific truth always has for Hobbes the conditional character of an 'if... then' sort, so that any conclusion has hypothetical but not categorical force. By contrast, to ascertain existence always requires 'sensation or experience'.

<sup>29</sup> As regards the so-called preparatory sketches of *DC* (NLW Ms 5297 '1° De Principiis cognitionis. 2° De Principiis actionis', published as Appendix II to Jacquot and Jones edn. of *DM*, 449–60; Chatsworth Ms. A 10, published with variants from Harleian Ms. 6083, ibid., Appendix III, 461–513), which also relate to logic and first philosophy, I am inclined towards a later dating for these drafts, around 1645–6, in agreement with Jones and Jacquot, and unlike M. M. Rossi and A. Pacchi, who placed them between 1637 and 1640. Some arguments in favor of the later date can be found in Paganini, 'Hobbes, Gassendi und die Hypothese der Weltvenichtung' ['Hypothese'], in Martin Mulsow and Marcelo Stamm (eds.), *Konstellations-forschung* (Frankfurt a. M.: Suhrkamp, 2005), 258–339. Noel Malcolm dates the Ms 'De principiis' around 1643–4, thus a bit earlier but still after *DM*. See Malcolm, *Aspets of Thomas Hobbes* [*Aspets*] (Oxford: Clarendon Press, 2002), 17.

entering the theological debate, Hobbes considers it mandatory to first establish the correct 'definitions' of the terms that are involved in the demonstration. This comes down to fixing the proper and exact metaphysical 'nomenclature' (the list of terms with their correct meanings: DM 14.1), because all the most general terms, such as 'being, body, matter, existence, accident, essence, form, substance, action, nature', and especially 'cause' (DM 27.1–7), are involved in this theological argument. One ought to redefine these terms to meet the requirement of meaningfulness established by Hobbes. This requirement implies that every word has an 'imaginable' referent (DM 27.1), that is, a notion that comes from experience and can be empirically tested; and this standard excludes words that have no comprehensible meaning within the limits of a language which is supported by a strict empiricist theory of confirmation.<sup>30</sup>

Hobbes's new approach to philosophical semantics involves no less than a profound rearrangement of the table of categories. First, Hobbes distinguishes between two kinds of entities (imaginable and unimaginable), declaring that philosophy should be concerned only with the former, and not with the latter. Consequently, he proceeds to establish the identity between being and body (DM 27.1) and to outline an ontology based on two major 'kinds of things': i.e. 'what there is, to on, or ens (being), and to be, to eînai, esse', a dichotomy that multiplies in other corresponding pairs such as body/action, substance/accident (DM 34.2). At first glance, Hobbes reduces Aristotle's ten categories to just two, substance and accident. In reality, the ultimate outcome goes much further than that, because Hobbes does not limit himself to giving a scheme; he tries to give a full description of the world as it is made of 'bodies' and 'accidents': the former 'are things, and not generated', the latter, by contrast, 'are generated, and are not things'. Here we have the beginnings of Hobbes's famous materialism, or better, corporealism. In actual fact, he thinks that, at least for philosophers who 'tie themselves to natural reason', body 'can neither be generated nor destroyed'; it just 'may appear otherwise than it did to us,

 $<sup>^{30}</sup>$  It is remarkable that in chapter 27 of *DM* Hobbes addresses most of the topics that will establish the core of his 'first philosophy' in the more mature *DC*: body and accident, cause and effect, power and act (*DM* 27.1–6, to be compared to *DC* 7–10), whereas the nature, features, and varieties of movement (*DM* 27.7–12) will be treated in *DC* 15–16, 21–2.

that is, under different species' and consequently is 'called' by a different name. In other words, accidents, under which the body appears and according to which it is named, are what is generated and destroyed, whereas body is in principle an eternal reality that is neither generated nor perishable. 'Becoming' is just a matter of accidents,<sup>31</sup> not of substance, because 'what comes to be produced and absolutely perishes is not bodies but those acts, forms and accidents that distinguish them from other entities' (DM 35.1; DM 34.2; cf. DC 8.20).<sup>32</sup> According to Hobbes, the general cause of the becoming is movement (DM 27.1).

Where did Hobbes find this peculiar dichotomy that differentiates the perennial 'being' of bodies and the vanishing 'being' of accidents? DM attributes it alternatively either to Plato (DM 27.1) or to Aristotle (DM 35.1). The more appropriate reference would be to Aristotle's Metaphysics, where he distinguishes between 'essential being' and 'to be in an accidental sense';<sup>33</sup> but, significantly, both Plato's and Aristotle's names disappear from the final version of this argument in De corpore. In actual fact, DM's new ontology or 'science of being' is much more Hobbes's invention than the revival of ancient topics; or better, it is his own translation of the basic notions of Galileo's physics into a new philosophical 'nomenclature'. The author's reliance on Galileo is well known and it is displayed throughout Hobbes's work, most of all in the famous dedicatory epistle of *De corpore*, where it is said that 'Galileo was the first who opened to us the gateway to all natural philosophy, which is the knowledge of the nature of motion, so it seems that the age of physics begins with him.'34

However, there is an important difference between DM and DC. Whereas in DC this praise of Galileo is limited to the science of motion, in DM his eulogy is much more emphatic and broader,

<sup>&</sup>lt;sup>31</sup> On the theory of accidents in Hobbes, in comparison to the scholastic background, see Cees Leijenhorst, The Mechanisation of Aristotelianism: The Late Aristotelian Setting of Thomas Hobbes' Natural Philosophy [Mechanisation] (Leiden: Brill, 2002), ch. 4.

<sup>&</sup>lt;sup>32</sup> If that is 'to be' (tò eînai), i.e. the 'occurring' of the accidents that specify the body depending on how it is 'conceived' or how it 'appears', what there is (tò ón) is instead unchangeable, incorruptible, and incapable of generation: ultimately, what there is must be the body-substance, defined by the only 'accident' which can never be separated from it (or under which it cannot fail to appear), namely 'corporeality' understood as spatial extension (DM 27.1).

Cf. Aristotle, Metaphysics, ed. W. D. Ross (Oxford: Oxford University Press, 1924), V, vii, 1 (1017a); VII, i, 1 (1028a). <sup>34</sup> DC, ed. Schuhmann, 3.

because there Hobbes considers Galileo not only as a scientist, but also as a philosopher who provided the true foundations of philosophical thought: 'not only the greatest philosopher of our century, but of all the ages', he says (DM 10.9). In the *Vita carmine expressa* (1672), Hobbes dates his strong interest in natural philosophy, which he considers to be focused on the science of motion ('What motion is, and what motion can do'),<sup>35</sup> to his early travels in France and especially Italy. It seems extremely likely that Hobbes's study of the laws of motion was aroused thanks to his acquaintance with Galileo, whom he met in Italy in 1636, and therefore before his meeting with Mersenne in Paris. Still, in his *Vita carmine expressa*, Hobbes writes that he 'showed Mersenne what I ever knew', namely what he had learnt from the Italian tour and before returning to Paris.<sup>36</sup>

Furthermore, it is firstly and mainly in DM that one can see the elaboration of this new 'first philosophy' and the acceptance of Galilean science developing side by side and intertwined in tight connection.<sup>37</sup> Most probably, the Italian scientist would have disliked this designation as a 'philosopher' and would have rejected the idea of drawing some sort of metaphysics or 'science of being' out of his physics and cosmology, as Hobbes tried to do. In fact, praising Galileo meant for Hobbes a way of seeking legitimacy for his own project of building exact philosophy on the grounds of the new science. Hobbes's theory of bodysubstance, his oversimplification of the table of categories, his theory of causality, as well as the doctrine of accidents were his own philosophical elaborations of the basic notions involved in Galileo's teaching. Most of all, Hobbes took Galileo's theory of matter to its ultimate conclusion,<sup>38</sup> emphasizing the distinction between secondary and primary qualities, and reducing ultimately primary qualities to only one, 'corporeality', that is, being located in space. He then combined this view, on which it is probable that the French and Parisian skeptics also

<sup>35</sup> Hobbes, Vita carmine expressa (LWi. lxxxviii–lxxxix). <sup>36</sup> Ibid., xc.

 $^{37}$  In *DM*, as well as defending Galileo from White's criticisms (regarding the constant wind, the causes of the rotation of the earth, and of tides), Hobbes supports Galileo's positions on specific points, such as the thesis of perpendicular illumination (*DM* 9.13) and the fabrication of the telescope (*DM* 10.9). For an overview of some passages in other works in which Hobbes maintains Galileo's views, see my commentary: Paganini, *DM* 'Commento', 250–114.

<sup>38</sup> See Galilei, *Il Saggiatore*, in Galileo Galilei, *Le Opere di Galileo Galilei*. Edizione Nazionale (Firenze: Barbera, 1890–), vol. 6, 347 ff. exerted some influence,<sup>39</sup> with a corpuscular conception of matter. This theory of matter in DM still coexists with some hypotheses about the existence of vacuum and atoms,<sup>40</sup> whereas DC would definitely substitute an all-pervasive fluid (*plenum*) for the vacuum and therefore exclude the atomistic hypothesis. Like Galileo, Hobbes could thus explain already in DM the physical properties manifested by bodies resolving them into the characteristics of their particles and into the motion generating accidents, because motion is their sole cause.

The full contrast between Hobbes and White thus clearly shows that Hobbes's first philosophy was rooted not in a post-Suarezian meta-physics but in a Galilean understanding of science.<sup>41</sup> In the *Vita carmine* 

<sup>40</sup> The issue of a vacuum and atomism in *DM* and more generally in Hobbes's other works is particularly intricate. Hobbes gives a general presentation of the atomistic doctrine in DM 7.2; he admits the existence of the so-called 'vacuum interspersum' in his description of the experiment of the 'thermoscopium' (DM 3.9); moreover, he shows that he despises the traditional arguments (used also by White) against a void (DM 3.8). Until the First Draught of the Optiques and also in DM 9.1-3, Hobbes's theory of light necessitates a double movement of systole and diastole, which both require the existence of small spaces of void to permit motions of expansion and contraction. In DM Hobbes still speaks of 'atomi' (DM 12.7), whereas in DC he will deny that there is a minimum which cannot be further divided (DC 7.13). This same work is a polemic against Epicurean atomism, referring to Lucretius (DC 26.3). But there are still relics of atomistic language even in DC (30.3). On the topic of Hobbes's relation to Epicurean atomism see Pacchi, 'Hobbes e l'epicureismo' ['Epicureismo'], Rivista critica di storia della filosofia, 33 (1978), 54-71; Franco Giudice, 'Thomas Hobbes and Atomism: A Reappraisal' ['Atomism'], Nuncius, 2 (1997), 471-85; Paganini, DM 'Introduzione', 45; Paganini, DM'Commento', 159–60n10, 224–5n3, 274n5. In a broader context, the connections between Hobbes and Epicureanism are accurately examined by Springborg, 'Hobbes's Theory of Civil Religion' ['Civil Religion'], in Gianni Paganini and Edoardo Tortarolo (eds.), Pluralismo e religione civile (Milan: Bruno Mondatori, 2003), 61-98; Springborg, 'Hobbes and Epicurean Religion' ['Epicurean Religion'], in Gianni Paganini and Edoardo Tortarolo (eds.), Der Garten und die Moderne: Epikureische Moral und Politik vom Humanismus bis zur Aufklärung (Stuttgart-Bad Cannstatt: Frommann-Holzboog Verlag, 2004), 161–214. See also Paganini, 'The Political Neo-Epicureanism of the 17th Century: Gassendi's Dialogue with Hobbes', in Phillip Mitsis (ed.), The Oxford Handbook of Ancient and Modern Epicureanism (Oxford: Oxford University Press, forthcoming).

<sup>41</sup> I stressed the connection between Hobbes's reform of 'first philosophy' and Galilean science in Paganini, *DM* 'Introduzione', 24–67, and the point has been effectively captured by Luc Foisneau in his review essay, 'Hobbes's First Philosophy and Galilean Science' ['Galilean Science'], *British Journal for the History of Philosophy*, 19 (2011), 795–809. For a notable illustration of Hobbes's first philosophy, see Martine Pécharman, 'Le Vocabulaire de l'être dans la philosophie première: *ens, esse, essentia*' ['Vocabulaire'], in Yves-Charles Zarka (ed.), *Hobbes et son vocabulaire* (Paris: PUF, 1992), 31–59; Zarka, *La Décision métaphysique de Hobbes: conditions de la politique* (Paris: Vrin, 1992).

<sup>&</sup>lt;sup>39</sup> Cf. Paganini, 'Hobbes among Ancient and Modern Sceptics: Phenomena and Bodies' ['Phenomena and Bodies'], in Paganini (ed.), *The Return of Scepticism: From Hobbes and Descartes to Bayle* (Dordrecht: Kluwer 2003), 3–35.

expressa he shows himself proud of making up his mind about matter and motion on his own. He says that during his travels the world took the place of books, so that he followed only nature as his teacher.<sup>42</sup> Nevertheless it is clear, also from the retrospective view adopted in *De* corpore, that Hobbes had developed his own conception of matter in movement taking his lead from Galileo's physics. The new physics of Dialogo sopra i due massimi sistemi and Discorsi e Dimostrazioni intorno a due nuove scienze underlie both his epistemology and materialist ontology. His prose *Vita* also shows Hobbes (after fleeing to Paris in 1641) deeply involved in 'scientific enquiry with Mersenne, Gassendi, and with others who were all well known for their learning and their vigour in reasoning', which means that he was profoundly integrated into the Galilean party and strongly opposed to scholastics. These latter are depicted as 'those who are called philosophers', whereas they usurp a name that, because of them, has become 'trite and corrupt', being borne by 'charlatans'.<sup>43</sup>

# 4. LOOKING FOR THE MOVER OF THE UNIVERSE IN A GALILEAN CONTEXT

The new semantics established in Hobbes's 'first philosophy' had a strong impact on the treatment of the theological arguments also. It is not by chance that the list of basic metaphysical notions ('Quid significant voces ens, corpus, materia, esse, accidens, essentia, forma, subjectum, actus et natura': DM 27.1) precedes the 'quaestio de motu

<sup>&</sup>lt;sup>42</sup> Hobbes, Vita carmine expressa (LW i. lxxxix).

<sup>&</sup>lt;sup>43</sup> Th. Hobbes Vita (LWi. xv). On Hobbes and Galileo, see Fritjof Brandt, Thomas Hobbes' Mechanical Conception of Nature [Mechanical Conception] (Copenhagen and London: Levin & Munksgaard-Hachette, 1928) and more recent work in: Samuel Mintz, 'Galileo, Hobbes, and the Circle of Perfection' ['Circle'], Isis, 43 (1952), 98–100; Leijenhorst, Mechanisation; Leijenhorst, 'Hobbes and the Galilean Law of Free Fall' ['Free Fall'], in Carla R. Palmerino and J. M. M. H. Thijssen (eds.), The Reception of the Galilean Science of Motion in Seventeenth-Century Europe (Dordrecht: Kluwer, 2004), 165–84; Douglas M. Jesseph, 'Galileo, Hobbes, and the Book of Nature' ['Galileo, Hobbes'], Perspectives on Science, 12 (2004), 191–211. Cf. also Paganini, DM 'Introduzione', 24–48 (§2 'Motion, Place, and Time: A Galilean Philosophy') and Paganini, 'Turning Point'. More general, but useful is Jesseph, 'Hobbesian Mechanics' ['Mechanics'], Oxford Studies in Early Modern Philosophy, 3 (2006), 119–52. In a broader context: Daniel Garber, 'Hobbes's Natural Philosophy in Seventeenth-Century Context', in A. P. Martinich (ed.), The Oxford Handbook of Thomas Hobbes (Oxford: Oxford University Press, forthcoming).

universi' (DM 27.13) in the very same chapter of DM.<sup>44</sup> At first, it is the proof 'ex parte motus' that needs rewriting to fit Galileo's new concept of motion and Hobbes's 'nomenclature' as well. But before considering the theological argument in itself, let us have a look at the main tenets of this science of motion as it is reworked by Hobbes in DM out of Galileo's physics.

The first point of this 'natural philosophy universal' (as Galilean physics is called in the epistle dedicatory of *De corpore*) states that the efficient cause of any movement is always motion imparted by another 'external' and 'contiguous' body. Every transmission of motion is either a 'push' or a 'pull' and both kinds of action imply contact and contiguity. Secondly, the capacity to move requires that something be in motion: 'if put in motion, the body moves in turn', as seen in the cases of traction and impact (*DM* 27.9). The third point rests directly on Galileo's modern notion of inertia.<sup>45</sup> While we cannot 'conceive' of a motion starting without a cause, by contrast no cause is needed for its simple continuation. This is in sharp conflict with the Aristotelian dynamics for which not only the commencement, but also the continuation, of motion requires input from a mover (*DM* 20.8; *DM* 27.10).

Even though Hobbes claimed to have drawn these points from the 'careful analysis of the nature of motion' that was made by Aristotle in Book III, I of his *Physics (DM* 27.7), it is clear that this is a pretense, not only in the case of the doctrine of inertia, which is completely missing in Aristotle, but also for the general concept of movement.<sup>46</sup> Contrary

<sup>&</sup>lt;sup>44</sup> At the very least it may be said that this Galilean imprinting of Hobbes's first philosophy has been underestimated by current scholarship focused on theological topics.

<sup>&</sup>lt;sup>45</sup> On the principle of inertia in *DM*, see 6.9; 20.8; 21.13; 27.11 and my commentary on these passages in Paganini, *DM* 'Commento', 191–2, 373, 390, 478.

<sup>&</sup>lt;sup>46</sup> Hobbes criticizes the Aristotelian notion of movement as the act of being in potency as it is in potency (*DM* 40.1–6) and replaces it with the modern scientific notion of 'unius loci dereliction, et alterius acquisitio continua'. On the relations between Hobbes and Gassendi on the modern notion of space, see Paganini, 'Hypothese', 282–300, 308–20, and Paganini, 'Le néant et le vide. Les parcours croisés de Gassendi et Hobbes' ['Le néant et le vide'], in Sylvie Taussig (ed.), *Gassendi et la modernité* (Turnhout: Brepols, 2008), 177–214. Jacquot and Jones (*DM* 435n.v) remark that Hobbes's definition of motion is the same as the Epicurean definition. In reality, I have shown that this Epicurean definition '*Metábasin apà tópou eis tópon*' was drawn from Sextus Empiricus (*Adv. Mathematicos* X = *Adv. Dogmaticos* IV = *Adv. Physicos* II, 42) and launched by Gassendi as the correct definition in his *Animadversiones in decimum librum Diogenis Laertii*. See Paganini, *DM* 'Introduzione', 27n43.

to Aristotle, Hobbes does not conceive motion any longer as a particular species of the more general kind of 'becoming', but as the unique and universal cause of change. Furthermore, he no longer explains the process of becoming as a metaphysical shift from possibility to actuality.<sup>47</sup> Hobbes rejects the Aristotelian definition of movement, which is still accepted by White,<sup>48</sup> as 'actum entis in potentia quatenus in potentia' (DM 40.1), and replaces it with a sounder one, which is the same as Galileo's and his contemporary Gassendi's: 'motus est unius loci derelictio, et alterius acquisitio continua' (DM 40.1; see also DM 27.7).<sup>49</sup>

The Galilean imprint is particularly evident when Hobbes interprets the intricate passage from Aristotle on the nature of motion (*Physics* III, 1, 200b–201a), claiming that its true meaning is much simpler, amounting to no more than the axiom that 'every active power is motion' and that 'a body at rest cannot act so long as it is at rest' (DM 27.7). From this it follows that 'one cannot understand how anything moves without motion', since 'every action (at least such as can be conceived) is motion' (DM 27.10; cf. 40.2). Rest does not cause any effect; by contrast, it is the result of some movement, even if only a movement of resistance. In DM, we face a world of physical bodies continually

<sup>47</sup> For the shift in the notion of movement as compared to Aristotle, see Paganini, *DM* 'Introduzione', 26–9. It is true, as Leijenhorst, *Mechanisation*, ch. 5, 171 ff., writes, that Hobbes still shares with Aristotle some general principles, such as the principle of contact between the mover and the moved, the exteriority of the former to the latter, the reject of self-movement; however, the whole frame of Hobbes's dynamics has changed in comparison to Aristotle's.

<sup>48</sup> White, *De mundo*, 435.

<sup>49</sup> Hobbes refers mainly to Aristotle, *Physics* III, 1 (200b–201a), where also the example of building a house is given to illustrate the nature of motion as the passage from potency to act. However, Hobbes's commentary on both doctrine and example is extremely deflationary and goes against the Aristotelian metaphysical definition: 'Id omne quod Aristoteles ex ratiocinatione eo loco adhibita colligere legitimè potuit, hoc tantum est, omnem potentiam activam esse motum, quod quidem verum est, in corporibus, id est in entibus conceptibilibus, quia corpus quiescens dum quiescit non potest agere' (DM 27.7). In Aristotle this shift from potency to act is connected to the doctrine of natural places, which Hobbes criticizes and abandons (see DM 6.6). For White it implies movement towards perfection (White, De mundo, 435: Ereunius. 'Quid ais esse motum?' Andabata. 'Actum entis in potentia prout in potentia; seu, quod idem est, rei, quae ad perfectionem tendit, viam seu progressionem ad eam'). Hobbes demolishes the Aristotelian theory of natural motions using one of his most ironic paradoxes: 'Aristotle, however, did not think that someone hurled into a pit tends to perfection or presses on towards it; yet such a fall very obviously constitutes motion.' To White's naïve notion of a 'good genius' behind any natural motion, Hobbes scornfully comments: 'If Aristotle interpreted "motion" in this way, then the same Aristotle must have believed that murderers and robbers are driven to homicide and stealing by a good genius, which is inconceivable' (ibid.). moving: a physical, not a metaphysical, world where every action or change consists in local motion.

It is notable that when discussing the question of free choice Hobbes himself summarized the novelty of his own conception of motion in five points or 'theorems of motion': (1) 'whatever is moved or is movable is body, or substance possessed of three dimensions', a proposition to which Hobbes maintains all philosophers, including Aristotle, would subscribe; (2) 'motion is movement from place to place'; (3) 'whatever moves is moved' (and here Hobbes introduces an exception: 'save God the First Mover', an exception that will be implicitly disqualified later, as we shall see): 'in fact, whatever moves either pushes, which is typical of what thrusts ahead, or pulls, which is typical of what thrusts backwards'; (4) 'nothing can move itself' (DM 27.11–12); (5) 'every motion drives in some direction' (DM 37.3). We also have to add that for Hobbes the efficient cause of motion is always the movement of another 'external' but 'contiguous' body, since there is no transmission of motion that is not a 'push' or 'pull'; both kinds of action involve contact and therefore contiguity. Furthermore, it is clear that the capacity to move something else requires that the mover be in motion: in fact, 'if put in motion, the body moves in turn', as seen in the cases of traction and impact. These actions can be brought about only by bodies that themselves move (DM 27.9). This principle of the externality of the mover was accepted by Aristotle too, according to Hobbes (DM 27.12; cf. also 27.11).

We can now come back to the theological argument as it is presented in  $DM_{27.13-18}$ . Since the first and main proof for the existence of God is 'via motus', the fact of changing the notion of movement cannot but profoundly transform the nature, the scope, and the aim of this demonstration. With the new principles of the Galilean physics, Hobbes is now able to qualify the structure and the result of the 'first way'. Starting from his new 'nomenclature', he first deconstructs the argument and then reconstructs it in a completely new form. Hobbes's critique of the theological argument occupies only a few paragraphs, yet it is crucial, because it is positioned in a chapter (27) devoted to defining his materialistic ontology based on the notions of body and causality. This ontology, as we have already seen, is the necessary premise for any causal reasoning and culminates in the fourfold affirmation: (1) that the capacity for movement involves the fact of being itself in motion (DM 27.9); (2) the exclusion of self-movement because 'nobody can produce in itself any act', and that motion is an act (DM 27.4-5); (3) the exclusion of self-production (DM 27.5); (4) unlike the beginning, the continuation of a motion does not need an external mover and lasts until the action of another 'external agent' intervenes and at last stops it (DM 27.10).

Only after founding his ontology and establishing these principles does Hobbes proceed to examine the topic of White's second 'problem' ('nodus'): 'Motum universi a principio externo esse', 50 from White's Third Dialogue (entitled 'De duratione et gubernatione mundi', but the running header at the top of the page is abbreviated to read: 'de causis Mundi'). In the corresponding chapter of DM Hobbes is merciless towards his adversary, explaining that he was wrong even about the basic question to be asked. Thinking he was asking about the motion of the universe, White actually investigated only 'the motion of its parts' (DM 27.13). Moreover, according to Hobbes, White's principles could only bring about the 'destruction of faith in God's existence' ('Deum esse nihil': DM 27.14). This conclusion depends on the combined effect of two of White's theses: first, that God is external to the world; and, second, the idea that the world is unique and finite. Hobbes argues: if God is outside the universe and outside the universe there is nothing, 'conficitur ex authoris doctrina non esse Deum', then God does not exist. Something he expressly denies in this passage, 'sicute verisssimum esse credo' (DM 27.14).<sup>51</sup> But Hobbes thinks that the arguments in favor of infinity have not been correctly refuted (DM 2.8) and that it is also possible that the universe contains a plurality of worlds (DM 3.5 and 7). From White's reasoning that 'motion is from eternity' it also follows that 'creation is impossible', according to the bad consequences of his argument (DM 27.15). Finally, Hobbes gives a blow to the basis of the argument itself: 'by the same reason given (according to our author) by the ancients [Hobbes obviously refers to Aristotle and his disciples] for inferring the existence of some incorporeal mover, they could equally have inferred that that incorporeal mover was in motion' (DM 27.18, quoting from the titles of

<sup>&</sup>lt;sup>50</sup> White, *De mundo*, 269–85.

<sup>&</sup>lt;sup>51</sup> See pp. 38–9, this volume for a commentary on this phrase.

the section). This conclusion is exactly the one that Hobbes draws from a close scrutiny of White's 'first way'. Let us examine now in detail the way Hobbes deconstructs White's theological argument, as it is set forth in *DM*.

At the outset, Hobbes reports quite correctly Ereunius's argument, which is attributed directly to Aristotle in one of White's marginal notes.<sup>52</sup> According to Hobbes, Aristotle and White reached their 'truth' (the existence of a first mover) starting from two basic principles ('axioms') which—White says—are known by 'induction', even though Hobbes deplores the factual cases White puts forth as examples of 'prolixity' and even 'absurdity'.<sup>53</sup> Apparently, Hobbes limits himself to rephrasing the argument of his adversary. Like him, he relies on the same two principles or axioms (DM 27.18). The first is plainly Aristotelian and was shared also by Aquinas: 'Quicquid movetur, movetur ab alio' (everything which is moved is moved by another), while the second principle: 'Quicquid movet, movetur' (anything that moves is in turn moved, or is in motion) actually overlaps with White's second axiom, but will be reinterpreted in light of Galileo's physics, though Hobbes passes it off as Aristotelian.

Let us compare Ereunius's argument, as it is presented in White's *Dialogi* and discussed by Hobbes in *DM*, with the classical Aristotelian sources, including the physical argument for the existence of a first mover of *Physics* VIII, 4–6; the more theoretical presentation of book *Lambda: Metaphysics* XII, 6; the Thomist reprise of the arguments as constituting a 'second way';<sup>54</sup> and the late scholastic representation

<sup>52</sup> White, De mundo, 275.

<sup>53</sup> What White says exactly is the following: 'Non novi equidem eos [on the previous page: Aristotelem, et Peripateticos et etiam S. Thomam et Theologos eius sequaces] hoc argumento uti [cessante motu primi mobilis, omnem inferiorem cessaturam mutationem]; sed ex duobus principiis inductione notis tantumdem colligunt. Quorum unum est, quicquid movetur ab alio moveri; reliquum verò, corpus non movere nisi ipsum motum sit. Ex quibus inducunt hanc ipsam veritatem [the existence of a first mover]. Cum enim in mundo finite neque moventia neque mota possint esse infinita; à moto accepto ad immediatum movens, et sic per gradus ad ultimum sive primum progrediuntur; quod cum motum esse ex secundo axiomate illis constet, necessario ad motorem incorporeum derivatur speculatio' (White, *De mundo*, 275). This is a good exposition of the 'first way', with the addition of the hypothesis that the world is not infinite.

<sup>54</sup> Thomas Aquinas, Summa Theologiae, Iq2a3; cf. also Sent., d. 3, div. prim. part. textus; 1 Cont. Gent., c. 13, 15, 16, 44; 2, c. 15; 3, c. 64; Compendium Theologiae, c. 3. in Suarez's Disputationes metaphysicae.<sup>55</sup> One cannot but be struck by recurrent analogies, sometimes even clear identities, but also some notable differences. In terms of the analogical features, the most important is the first principle, that everything which is in motion is moved in turn by something else; however, equally important are the exclusion of self-movement and the rejection of an infinite regress. As to the differences, they are many and various.

(A) In Aristotle, Aquinas and Suarez, and also in White, the fact of motion is not purely physical; it also has a metaphysical aspect, being framed in terms of the basic duo, act and potentiality. What is in motion is also in potentia, while the mover by contrast is in actu. Therefore, motion is just one episode of the great metaphysical odyssev that in the Aristotelian system leads from pure potentiality (prime matter) to pure act (God Himself). This aspect plays an important role in theological argument, given that the first mover must be fully *in* actu and never in potentia. Hobbes retains the lexicon of 'potentia' and 'actus' (see for example  $DM_{35.4-5}$ ), even though he deprives them of any metaphysical import, reducing potentiality to causality ('causa et potentia eadem res sunt', DM 35.4) and act to the automatic effect, so that there is no ontological difference between potentiality and act, in contrast to scholastic philosophy, but a purely mechanical one.<sup>56</sup> Moreover, as we have already seen,<sup>57</sup> in this simple 'destruction of the Aristotelian cosmos',<sup>58</sup> as DM may be considered. Hobbes rejects any connection between the physical reality of motion, defined along the lines established by Galileo, and the metaphysical shift from potentiality to act that was at the heart of Aristotelian ontology.

(B) According to Aristotle and his followers, including White, the first mover is unique, immortal and, above all, incorporeal.<sup>59</sup> Chapter 5 of Book VIII of Aristotle's Physics is extremely important from this

<sup>&</sup>lt;sup>55</sup> See Francisco Suarez, *Disputationes metaphysicae*, esp. *Disp.* XXIX ('De Deo primo ente et substantia increata, quatenus ipsum esse ratione naturali cognosci potest), Sectio I, §§7-27 ('Expenduntur rationes physicae, quibus probatur Deum esse'), in Suarez, Opera, XXVI, <sup>22–30.</sup> <sup>56</sup> See on this point Leijenhorst, *Mechanisation*, 231.

<sup>&</sup>lt;sup>57</sup> See pp. 21–2, this volume.

<sup>&</sup>lt;sup>58</sup> I draw this formula from Alexandre Koyré, *Etudes galiléennes* (Paris: Hermann, 1966), passim, who however does not consider Hobbes's DM.

<sup>&</sup>lt;sup>59</sup> Aristotle, *Physics* VIII, 10, 266a 10–11: 'the first movement must be without parts and without magnitude'.

point of view. First of all, it contains the claim that 'it is impossible that there should be an infinite series of movements, each of which is itself moved by something else, since in an infinite series there is no first term' (256a 16–20). Secondly, even if the possibility of a self-mover seems to be admitted by Aristotle (cf. 256b 1–3; 257a 31–3), it is immediately explained away as depending on the fact that this kind of mover is in reality made up of two parts, the one which is in action and really moves, and the other which is *in potentia*, by being moved (257b 9–14; 258a 1–9). Therefore, the first mover has to be unmovable, since it is fully *in actu* (258b 4–10) and absolutely not moved, not even by accident (VIII, 6, 259a 20–b31).

(C) The first mover is unmovable, according to Aristotle and his followers, Suarez and White. Hence the big issue: how can something cause motion without being moved? According to Aristotle, the physical causality of motion implies the mutual contact of the mover with the moved, including also a reaction of the moved on the mover. This point is especially addressed in the Metaphysics (see XII, 6-8) and Aristotle's answer to the conundrum is that the unmoved first mover must cause motion in a non-physical way, that is, as an object of desire, or as a goal towards which all beings that are moved are tending, as towards their absolute perfection. This metaphysical solution was constantly taken up by scholastics like Thomas Aquinas and late scholastics like Suarez; and was still being proposed by White.<sup>60</sup> However. Hobbes's deconstruction of White's argument is more in the nature of a subversion than a transformation, not only because he rejects the unmoved mover as a metaphysical notion and reduces it to a physical reality in movement according to Galileo's science and the principle of inertia, but also because he rejects the doctrines that fall under B and C.

Furthermore, Hobbes does not specify here, as he did elsewhere, that the second axiom ('Quicquid movet, movetur') should apply exclusively to secondary causes, and not to the prime mover, at least according to Aristotle and the scholastics. In 'orthodox' philosophical theology, this mover can be 'prime' if and only if it moves the heavens by operating not as an efficient, but as a final, cause—that is, without moving itself, whence the denomination of unmovable mover. Obviously, this reticence was

<sup>&</sup>lt;sup>60</sup> Cf. White, *De mundo*, 276: 'docente Aristotele bonum et finem immota movere'.

#### Gianni Paganini

not due to an oversight on Hobbes's part,  $^{61}$  but was a deliberate strategy to exclude all causes except efficient causes that act by motion (*DM* 27.2). The ultimate result is to turn White's, Aristotle's, and Aquinas's argument upside down. At the very least one can say that 'via motus' does not accomplish what his adversary and the tradition he relied on meant it to do, that is, to prove the existence of an unmoved and therefore incorporeal prime mover.

Let us examine now the details of the argument as it features in DM.<sup>62</sup> It looks as if Hobbes had decided not to speak *in propria persona*, nor to call upon White to speak, but to make Aristotle himself speak. The beginning of the argument reads accordingly in DM:

After seeing that the bodies constituting the finite world are finite in number, Aristotle derived from any one of them that was moved the motion of the second, and from the motion of this the motion of the third, until he reached the last. Now, because it was clear, in accordance with the second axiom, that the body was in movement, since it had moved the next-to-last, and, in accordance with the first axiom, that it was moved by another one, he saw that he had to postulate the existence of an incorporeal mover. (*DM* 27.18)

At first glance, this is exactly the traditional understanding of 'via motus', ruling out the possibility of an infinite regress and postulating to this effect the existence of a first incorporeal mover that neither moves (as an efficient cause, that is by motion itself) nor is moved, but to which everything tends as a final cause. However, the ramifications of this Aristotelian argument are for Hobbes very different from the conventional wisdom, given that he understands the combination of these two axioms to produce exactly the opposite of a demonstration of the eternal unmovable mover. Hobbes continues thus:

However, Aristotle ought to have added that, from the second axiom, also this incorporeal mover is moved, and from the first axiom that it is also moved by something else. (*DM* 27.18)

In other words, even the 'first' mover needs to be moved by another, so that it cannot be truly 'first', and it cannot be spiritual or incorporeal,

<sup>&</sup>lt;sup>61</sup> In just one passage Hobbes referred to the correct Aristotelian doctrine: 'quicquid enim movet aliud, id ipsum et movetur (excepto primo motore Deo inconcepibili)' (*TOII* 4.15).

<sup>&</sup>lt;sup>62</sup> I have analyzed this crucial section of *DM* in a previous article: Paganini, 'Turning Point', 293–4.

since it is in movement. Hobbes does not immediately stress here this latter point, but this is the implication of all the previous argumentation, since only body can be put in motion or put other things in motion. One could also think of an infinite series of movers, one moving the other. This same hypothesis is hinted at in *De corpore* as an acceptable position, since an infinite regress is only a psychological impossibility for human beings, not a logical impossibility (*DC* 26.1). Moreover, Hobbes in *DM* does not share with White the idea that the world is necessarily finite, which is one of his premises (see *DM* 27.6; 28.8). And since every causal action ultimately consists in motion, the second classical argument, 'ex ratione causae efficientis', falls into the same difficulties. Given Hobbes's equivalence between causality and motion, Aquinas's second way boils down to the first one.

At this stage of Hobbes's critique only one possible alternative seems to survive: the conclusion of an infinite chain of corporeal movers, all of them in movement. However, one point has yet to be explained. In the passage we quoted, Hobbes was still referring to the possibility of the first mover being incorporeal. According to this classical hypothesis an incorporeal mover could move something else without itself being in motion, and thus would be really 'first' and thus stop the infinite regress. The challenge of this alternative is plainly understood by Hobbes, but he throws it back into the court of the Aristotelians:

Either he [Aristotle] should have shown how incorporeal things move, or else he should have changed the second axiom to this: 'Every body that moves [another] needs to be in motion'.  $(DM 27.18)^{63}$ 

By this phrase, Hobbes warns his adversary that the aim of any theological argument is not a mover or a cause as such, but an intelligent and spiritual principle; furthermore, by substituting in the argument the more precise expression 'every body' ('omne corpus') for the more vague 'quicquid' ('anything'), the reader is addressed to the real substances constituting the world: bodies. Therefore, the issue at stake now becomes to understand 'if' and 'how', possibly, 'incorporeal things could move'. The exclusion of this last possibility is the very

 $<sup>^{63}</sup>$  DM 27.18: 'Verum ex 2° axiomate [Aristoteles] addere debebat etiam motorem hunc incorporeum moveri, et ex 1° etiam ab alio moveri, vel ostendere quomodo incorporea movent, vel mutare axioma illud 2<sup>um</sup> hoc modo: Omne corpus quod movet, moveatur.'

core of the destruction made by Hobbes of the theological argument. In this connection, for White as well as for Hobbes, the example of the 'soul in animals' turns out to be crucial, because referring just to this example White tried to 'show how the incorporeal even though not in motion can nonetheless move [others]' (DM 27.18). Thus, it is not by chance that at this very point the theological debate of DM shifts to the examination of human psychology. It is not a detour,<sup>64</sup> since the human soul and God were supposed to share the same spiritual nature, at least in some measure, and according to White, by analogy.<sup>65</sup>

For, by looking at the human soul, White maintains, one might see 'how incorporeal things, even if they are not themselves in motion, may nonetheless move [others]' (DM 27.20).66 But according to Hobbes, White's detour through psychology turns out to be a dead end, and in the mechanistic psychology of DM 'there is no need to take refuge in an incorporeal mover' or to resort to a 'motionless mover' (DM 27.19) in order to explain the real functioning of mental operations. Mechanistic and materialistic psychology represent one of the longest sections of DM that Hobbes transferred to Leviathan and De corpore, almost intact.<sup>67</sup> Thus, Hobbes's final conclusion seems to be very clear, even while remaining implicit. Just as in the case of the human body he explicitly excludes a motionless and external incorporeal mover, so in the case of the universe he insinuates that there is no need to resort to an external, first and spiritual mover, contrary to the thesis White 'promised to demonstrate' rationally. Hobbes not only shows that White failed in attempting such a demonstration, but also seems to suggest that White's argument (once an infinite universe is

<sup>&</sup>lt;sup>64</sup> The treatment of psychological topics occupies a large part of *DM*: see *DM* 27.19–20; 30.3–33. This topic is treated more briefly in Paganini, 'Turning Point', 294.

<sup>&</sup>lt;sup>65</sup> White himself, commenting on the basic assertion: 'Incorporea non mota movent' (White, *De mundo*, 278), invokes the possibility of knowing incorporeal beings 'ex animae nostrae Analogiâ' (279).

<sup>&</sup>lt;sup>66</sup> Given this psychological connection, and in order to exclude this very possibility, it is not an oddity that Hobbes should introduce his own materialistic and mechanistic psychology in the theological chapter devoted to the problem of the first mover. It is also developed in  $DM_{30.3-30}$ , and resumed in DC. An excerpt of this mechanistic psychology was published (in an abridged form, corresponding to  $DM_{30.3-26}$ ) by Mersenne in the preface of his *Ballistica*, dated 1644 (see LW v. 309–18) and it will be largely reprised in the first part of the anthropological argument of *Leviathan*, as well as in *De corpore*.

 $<sup>^{67}</sup>$  See esp. DM 30.3–33 to be compared to DC 25.1–13. There are also many parallel passages in Lev. 1–9.

given) entails first, that a corporeal mover is enough, second, that it should be always in motion, and third, therefore, that it has to be moved by another mover, and so on in an endless regress (DM 27.19).<sup>68</sup>

At the very least Hobbes's materialist psychology ends up implying a similar materialist and mechanist theology, since human individual mover and divine universal mover are perfectly similar from this point of view. One of the most scornful passages of DM is the one in which Hobbes presents White explaining 'how unmoved things still move [others]'. All the complex argumentation put forth by White to show that, 'being unmoved, the soul moves itself', to Hobbes amounts to a plain contradiction, whereby 'we are allowed to pronounce contradictory statements about spiritual nature', whereas the same 'is not allowed as regards corporeal nature'. The tone of this section is full of sarcasm, indeed it is one of the most satirical passages in Hobbes's whole work, evoking the most artful satirist of ancient times: 'How Lucian would have laughed at such metaphysical arguments if in his day there had lived metaphysicians, as there did scientists and moral philosophers? Not only because of this [White], but also because of the whole mob of metaphysicians: O Lucian, I wish you were alive!' (DM 27.21).

### 5. OTHER THEOLOGICAL ARGUMENTS EXAMINED IN DM

Following in White's tracks, Hobbes presents and discusses in *DM* many other arguments and notions that, according to his interlocutor, would bring about new demonstrations of the existence of God or would strengthen the first two 'ways' (by motion and causality).<sup>69</sup> First,

<sup>&</sup>lt;sup>68</sup> The section's title (*DM* 27.18: 'Eadem ratione qua dicit author veteres collegisse motorem esse aliquem incorporeum, eadem colligere potuerunt motorem illum incorporeum esse mobilem') is therefore a little misleading. The title dialectically refers to White's theory rather than Hobbes's, because it is clear that according to Hobbes, the 'moving' mover is in fact corporeal, and it is impossible philosophically for it to be 'incorporeal'. The whole tenor of Hobbes' psychological argumentation moves in this direction. Elsewhere, referring to the soul, Hobbes criticizes White because 'against Aristotle and all philosophers he attributes motion to an incorporeal thing, while in fact, all deny, even against reason, that the soul is a body' (*DM* 37.9). In yet another passage, Hobbes mentions 'incorporeal God', but this is an *ad hominem* argument, by which he seeks to reduce to absurdity those who speak of a world which is 'pleasing' to divinity (*DM* 31.2).

 $<sup>^{69}</sup>$  For a more extensive treatment of these proofs, see Paganini, DM 'Introduzione', 79–84.

#### Gianni Paganini

Hobbes rejects the idea that to accept the eternal duration of motion implies the eternity of the mover. Whereas White still held to the Aristotelian view that not only the beginning, but also the continuation, of motion requires the impulse of a mover, Hobbes sticks firmly to the Galilean law of inertia. For him, if a motion has started and does not meet any obstacle, it continues indefinitely, without any need of a new impulse from the mover. The two concepts (eternity of motion and eternal mover), which were tightly entangled in White's scholastic philosophy, are now disaggregated by Hobbes, who can 'conceive' of eternal movement without an eternal mover (DM 27.11–14; on inertial motion see 27.9 and 17). To him White did not understand the 'metaphysical' impact of the Galilean principle of inertia, being convinced that, if 'the motion of the world will last for ever', it must follow that 'the mover of the world must also endure everlastingly'. To Hobbes, White's worst mistake consists in thinking that 'motion needs an efficient cause not only to start, but also to continue' (DM 27.21), which Hobbes claims to have already rejected on Galilean grounds (DM 27.11). With great audacity in the context of a discussion of the metaphysical doctrine of God as a being which 'pendet a se' (according to White's 'barbarous' and 'obscure', i.e. scholastic, language). Hobbes dares to attribute to motion a feature that was usually predicated only of the divinity: 'in this sense', Hobbes says, the motion of any body, once commenced 'depends on itself [pendet à se] and, if unhindered by anything else, will continue for ever' (DM 29.1).

Second, Hobbes deconstructs another argument that his adversary draws from the infinity of time. White thinks that motion cannot exist in the universe from eternity, because time cannot be infinite. But, subscribing to Galileo's 'negative' conception of the infinite, which is radically distinguished from the 'positive' and metaphysical notion of infinity as perfection,<sup>70</sup> Hobbes considers infinity rather as indefinite,

<sup>&</sup>lt;sup>70</sup> For the notion of those who conceive 'infinitum tamquam positivum aliquid', see DM 28.3. Hobbes attacks the Cartesian use of a positive notion of infinite as a synonym of infinite perfection in the nearly contemporary *Third Objections* to the *Meditations*. See *Third Objections*, x (AT vii. 186), where Hobbes redefines thus the infinity of the substance of God, as it was presented by Descartes (*Meditations* III, AT vii. 45): 'Infinitam (*hoc est, quod non possum concipere, neque imaginari terminos ejus, sive partes extremas, quin adhuc possim imaginari ulteriores*); *ex quo sequitur ad nomen* infiniti *non oriri ideam infinitatis divinae, sed meorum ipsius finium, sive limitum*.'

calling it 'an imaginary progression which may be continued as long as we wish by the addition of one progression to another, i.e. without any termination fixed by things. This is what we call "infinite". Hence time may be understood as being perpetually prolonged more and more to infinity' (DM 28.9). So, the artificial distinction between God's eternity, conceived as the incomprehensible 'nunc stans' (DM 28.3) and the simple indefinite prolongation of time fails; and the metaphysical use made by White of the infinite in order to exclude the eternity of the world and movement fails with it. Hobbes marvels at how men, on hearing this word 'infinite', 'go mad or do metaphysics' (which is the same for him), although not when they have to deal with 'uncountable', since to be 'infinite in size' is exactly the same as 'being uncountable using numbers that are finite'. Therefore, 'eternal' is the same as being 'infinite in duration', i.e. something that 'cannot be reckoned in terms of a finite number of times' (DM 29.6).

Third, Hobbes addresses the notion of 'necessity' that plays an important role in the idea of God as a necessary being. In this case also we witness a deflationary deconstruction of metaphysical discourse, because Hobbes first reduces necessity to a logical and conditional truth, disentangled from any existential import (as we have already underscored), then conceives this necessity ('the impossibility to conceive otherwise') not as 'the inability of things' but simply 'our own inability' (DM 28.7): not as metaphysical impossibility, but a psychological one. Therefore, the 'succession of necessities' on which White relies to explain the steps of the world's production (DM 28.6) is debunked by Hobbes: 'The succession White is speaking about, then, is a succession not of things themselves but of our thoughts' (DM 28.7). It is true, Hobbes adds, that there can be 'a progression from necessity to necessity which has no end', but this argument counts against White, since this progression 'does not lie in external things but is produced inside the imagination', i.e. it is a 'successio imaginaria', which may be continued as long as we wish 'additione unius successionis ad alteram' (DM 28.8). It is an operational procedure of our finite understanding and not a reflection of the metaphysical structure of reality.<sup>71</sup>

 $<sup>^{71}</sup>$  An infinite regress in the search for causes belongs to 'necessities' that are a product of the operational procedure of our finite understanding, as Hobbes was to argue in *DC* 26.1, suggesting that they concern the limitations of imagination and not ontology.

#### Gianni Paganini

Fourth, Hobbes attacks another argument which was in fashion, especially in the late Scholastic, and that is the idea that God necessarily exists from eternity because he is 'esse [or ens] a se', or is the cause of his own existence. 'Aseitas' is the opposite of 'alietas', i.e. depending on something else.<sup>72</sup> Hobbes considers these arguments to be futile inventions made by metaphysicians in order to introduce into our speech 'the greatest obscurity', and that 'without necessity'. For him 'esse a se' is tantamount to 'being eternal'; 'pendere a se' boils down to 'not depending on anything else' (DM 29.1).73 Given that these explanations simply expose the usual linguistic abuses of metaphysics, Hobbes turns to the argument itself, and not only White's deceptive representation of it. White had claimed that from the proposition that 'There has been a certain change before which there was no other prior change [Fuit mutatio quaedam quâ non fuit alia prior]' (a proposition that Hobbes considers correct, even though White had not demonstrated it), it would follow that 'something had existed from eternity'. Hobbes accepts the inference but turns it around, maintaining that from the same premise one could equally conclude not the eternity of the prime mover or the first cause, but that of matter, which would thus occupy the place of an *ens a se*. This is a logical entailment of the notion of 'change' (mutatio):

something that itself has been changed must have existed before the change [mutatum ante extitisse necesse est quàm mutationem], because as often as there is change something must be changed; we shall not say, however, that what was first changed has existed from eternity. That which was first changed

 $^{72}$  In *DM* 29.1 there is a long list of the arguments used by White to demonstrate that 'there is something which exists from eternity' (title of the chapter 29) and that, in particular, 'no body existed from eternity' (still according to White). Hobbes refers in particular to White, *De mundo*, 290, 292, 295–6, 301, 304. White's demonstration involves the relation between existence and essence in God, since 'existentiam enti a se, essentialem esse' (White, *De mundo*, 301, quoted in *DM* 29.1).

 $^{73}$  It is remarkable that, contrary to the idea of God as *sui causa*, His representation as an *ens a se* was accepted by Suarez. See Suarez, *Disputationes metaphysicae* XXVIII, s. I, §7 (in Suarez, *Opera*, XXVI, 3a). In this same section of *DM* (29.1) Hobbes mentions another consequence drawn by White from *ens a se*, that is the idea of an 'existence' which is included in God's essence ('existentiam enti a se, essentialem esse': White, *De mundo*, 301). I have discussed Hobbes's doctrine of essence and its origins not from Suarez but from Valla, in Paganini, 'Hobbes's Critique of the Doctrine of Essences and Its Sources' ['Essences'], in Patricia Springborg (ed.), *The Cambridge Companion to Hobbes's Leviathan* (Cambridge: Cambridge University Press, 2007), 337–57.

is the world, or part of the world; consequently, the world or any part of it has existed from eternity, which goes against faith. Surely, it is no less impossible to conceive of motion or of change as having been started without matter, that is without an efficient cause. Those who infer from the fact that once the commencement of motion or of change was set in train, its efficient cause was eternal, could by the same argument conclude that matter is eternal. For if anything is to be moved or changed, why is it necessary to suppose an efficient cause by which [causam efficientem à quâ], rather than matter in which [materia in qua], the effect must be produced? As long as the metaphysicians attribute not to faith or to the authority of Holy Writ, but to their own knowledge the fact that we consider God, but not the world, to be truly eternal, then through their paralogisms they make God and the world to be coeternal. (DM 29.2)

In reality, the edifying tone of this last sentence, chastising, as usual, both the audacity and obscurity of metaphysics, should not hide the fact that it is not the 'metaphysician' White, but the 'philosopher' Hobbes, who is in fact claiming this 'coeternity'. There is no trace of this possible 'coeternity' in the corresponding section of White's De mundo dialogi.74 The whole lexicon of philosophical theology (with its key words like 'necessity', 'infinite', 'eternity', 'aseitas', 'prima mutatio', etc.) has been completely deconstructed, or better reinvented, by Hobbes's deflationary approach, which is always aimed at definitions consistent with his empiricist theory of the origins of knowledge. If one adds this last claim to his previous considerations about the chain of movers and the material nature of any mover that is in motion, one is forced to conclude that either there is an infinite sequence of corporeal movers always in motion; or it is precisely 'eternal matter' that plays the role of the first cause eternally in motion. This conclusion is not explicitly asserted and affirmed as such; but, it is continuously insinuated as one of the most reasonable outcomes of having dissolved the scholastic 'paralogisms' and 'obscurities' behind which White had tried to hide the absolute unintelligibility of his metaphysics.

What is more, it appears that this kind of eternal, possibly divine matter (divine in that it plays the role of the mover of the universe) is much more comprehensible than the incomprehensible God of the

<sup>&</sup>lt;sup>74</sup> See White, *De mundo*, 289–92.

theologians. Obviously, this affirmation is not flatly stated in DM, needing opportune qualification. Indeed, Hobbes stresses the fact that God's way of acting is impossible to understand, because it does not require motion (DM 33.7), that 'mutation' ('mutatio') is different from 'factio', which is nearly the same as creation ('facere ex non ente' DM 29.1), and that this latter needs the supernatural power of the only being, God, that can make things pass from and to nothing (DM 12.5 and 8; 13.9; 25.1; 27.1).<sup>75</sup>

However, there is no point-according to Hobbes-in appealing to the notion of creation from nothing without motion or matter, because all these notions evidently exceed the limits of reason and go against any natural reasoning: 'The fact that God, being unmoved, yet moves is not natural but supernatural' and ought to be admitted only 'by faith in honour of God' (DM 7.1). It is again an honorific sign, not a declarative proposition.<sup>76</sup> Therefore, there is neither proof nor demonstration (contrary to White) about the existence of God, His causality, the dependence of the world on Him, even less about creation without any preexisting matter, since every attempt made by natural reason to demonstrate 'rationally' these topics ends up by involving the supposed first cause in the whole chain of physical laws and the entire complex of causes and effects, according to the basic physical regularities discovered by Galileo. From this point of view it is not true (even staving within the limits of DM) that there would be some sort of equivalence between a first unmoved mover and a first mover itself in motion, which is impossible to imagine, as Karl Schuhmann claimed.<sup>77</sup> In reality, at least in DM and later works, the scales are tipped in favor of a mover inside the world and in motion with it.

<sup>7</sup> Schuhmann, 'La question de Dieu', 129.

<sup>&</sup>lt;sup>75</sup> On the supernatural power of God, see Luc Foisneau, *Hobbes et la toute-puissance de Dieu* (Paris: PUF, 2000).

 $<sup>^{76}</sup>$  It is notable, especially in *DM* 27.8, that Hobbes denies even in relation to God that repose is more noble than movement: 'Holy Scripture attributes both [motion and rest] to Him, yet not in the same sense in which they are attributed to bodies, but in a manner we cannot understand.' Moreover, Hobbes records (ibid.) that, except for the Epicureans, the pagans thought of their god not as 'calm' (*hesúkhous*) or 'placid' (*aprágmonas*), but 'indefatigable' (*akámatous*).

### 6. NOT FIDEISM, BUT A LINGUISTIC COMPROMISE

From a strictly philosophical point of view, the notion of a prime mover and the parallel idea of a primary cause led Hobbes in DM slowly away from the 'orthodox' theory of a stationary and immaterial mover in the exact opposite direction.<sup>78</sup> This development began with the *early* Hobbes, not only the *late* Hobbes. However, in DM, Hobbes is aware of the difficulties connected with his own approach and tries to avoid these issues (not to resolve them) by clearly separating reason and religion, philosophy and faith. One could say that for Hobbes a good divorce is better than a hostile union that harms both parties, as he tried to demonstrate to White (see DM 26.2–6).

Can this position can be characterized as 'fideism',<sup>79</sup> as some interpreters have done? If this is fideism it must be said that it is an extreme fideism that attacks and renders impossible what are called the 'praeambula fidei' (the existence of God, the causal connections between God and the world), and not only proper dogmas of faith (like the creation, the Trinity, etc.). By contrast with other cases of seventeenth-century fideism studied by Popkin,<sup>80</sup> this presumptive 'fideism' is based on 'strong' reason and a well-structured, even Galilean, scientific language, and not on the 'weakness' of reason of Christian Pyrrhonism, so-called, to which Hobbes decidedly does not belong.<sup>81</sup> In some recent studies it has been emphasized that the uniqueness of *DM* lies in the fact that it speaks against any possibility of rationally proving the

<sup>78</sup> On this point, see ibid., 127-30.

<sup>79</sup> Pacchi, 'Problem of God', 59, wrote on Hobbes's 'sceptical fideism', even though on the whole he ended up diminishing the contrast between this fideism and the attempts to 'prove' the theological arguments that are present in Hobbes's other works (ibid., 61). Curley, 'I Durst Not', 581-2, asked whether *DM* was to be seen as a 'fideistic experiment', even if 'aberrant' in relation to the rest of Hobbes's work, but concluded that this attempt was finally abandoned in the face of its 'tactical disadvantages': 'It brings him dangerously close to the doctrine of a double truth' (ibid., 582).

<sup>80</sup> Richard H. Popkin, *The History of Scepticism from Savonarola to Bayle*, 3rd edn. (Oxford: Oxford University Press, 2003); for a different view of the development of early modern skepticism, see Paganini, *Skepsis. Le débat des modernes sur le scepticisme. Montaigne–Le Vayer–Campanella–Hobbes–Descartes–Bayle* [Skepsis] (Paris: Vrin, 2008).

<sup>81</sup> On the other hand, see Paganini, 'Phenomena and Bodies', and Paganini, *Skepsis*, ch. 4 on Hobbes, 171–227, concerning the relation between Hobbes's scientific approach and some trends in seventeenth-century skeptical phenomenalism.

existence of God.<sup>82</sup> But it should be remembered that this objection to orthodox theology (as not having proved the existence of God or the creation of the world) goes back to 1641 (thus one year before *DM*) and Hobbes's *Third Objections* against Descartes's *Meditations*, where he claims against the French philosopher, 'sequitur existentiam Dei non esse demonstratam [by him], multo minus creationem' (*Third Objections*, xi).<sup>83</sup>

Precisely because he was aware of the radical nature of the position that he took in *DM*, Hobbes added to the chapter dedicated to White's Third Dialogue some final considerations designed to avoid too much of a conflict with religion. When he charged White with proceeding 'aphilosóphōs' in his efforts to demonstrate the existence of God (*DM* 26.2), it was not so much a declaration of method as a clarification of his own position. In this clarification, Hobbes affirmed *belief* that God is the motor that started motion in the world (*DM* 27.14: 'sicut verissimum esse *credo*').<sup>84</sup> In another passage he asserted that God 'understands

<sup>83</sup> Descartes AT vii. 189. Note that in this objection the impossibility of demonstrating the existence of God is strictly tied to the impossibility of conceiving of God ('Quoniam ergo non est demonstratum nos ideam Dei habere, et Christiana religio nos obligat credere Deum esse inconceptibilem, hoc est, ut ego opinor, cujus idea non habetur', ibid.)—two theses that interpretations of a more-or-less 'orthodox' Hobbes usually claim are distinct (cf., for example, Martinich, *Two Gods*, 346–9 *contra* Schuhmann, 'La question de Dieu', 130–1). On the limits of the argument in the *Third Objections*, v (AT vii. 180), cf. ibid., 134–5. Note that Hobbes is not talking about a proof or a demonstration, but just a 'suppositio alicujus causae aeternae' (*Third Objections*, v, in AT vii. 180). On the whole, about the theological topic, Hobbes is very vague in this text: he writes only of 'aliquid aeternum' and notes that we give the name of God to something that we do not really understand, on the basis of *fides* or *agnitio*: i.e. faith or some sort of recognition (also this second term is very vague because we have no direct experience of God as such). Schuhmann, 'La question de Dieu', 135 rightly comments that it is a 'common mode of reasoning' more than a philosophical demonstration.

<sup>84</sup> See *DM* 27.14: 'Si denique verum sit (sicut verissimum esse credo) motorem illum, quo motus in mundo primus effectus fuerit, esse Deum, conficitur ex authoris doctrina non esse Deum. Cum enim verum sit motus universi principium esse extra ipsum universum, et principium motus universi esse Deum, facile colligitur Deum (utpote infinitum) esse etiam extra universum quod est finitum.' It is worth noting that this statement occurs in an argument *ad hominem: first*, Hobbes concedes this in order to embarrass the adversary and to reduce him *ad impossible*, as the title of §14 reads: 'From what our author says here, and from what he said above in the Third Problem of the First Dialogue, faith in the existence of God is destroyed'; *secondly*, Hobbes provides elsewhere (*DM* 27.6) a definition of the universe that counters White's idea of an external mover. For Hobbes conceives of the universe as 'an aggregate of all *entia*', about which it is absurd to say that its motion comes from outside. In the same context, Hobbes qualifies the universe as 'infinite'. Even from White's perspective it should be impossible to imagine anything outside of the universe: 'adeo ut externum et nihil

<sup>&</sup>lt;sup>82</sup> See Pacchi, *Scritti*, 59, and Schuhmann, 'La question de Dieu', 131-41.

*simpliciter*' (i.e. in an immediate manner, without the action of the object and the meaning of names), but because this is 'undemonstrable', 'we must believe [credendum] in it with the same faith [eadem fide] with which we believe that He exists [credimus Eum esse]' ( $DM_{30.33}$ ). Thus, Hobbes maintains a very negative attitude towards the pretensions of metaphysics to demonstrate that which it is impossible to demonstrate. In addition, he maintains that there is also an error symmetrical to this one, which is to refuse to admit anything that one cannot conceive of rationally:

By the way, it is worth observing into what serious errors those philosophers must fall who are ashamed to avow that there is *any ens* or *act* that they *do not conceive* or the properties of which they cannot *demonstrate*. I believe without doubt that those who worship no God but the one they conceive are not Christians; and that those who think they can demonstrate any property of something they do not conceive [are also not Christians]. (DM 27.14)

This thesis is further developed in important sections of DM. The theory of movement, says Hobbes, is surely valid for 'corporeal causes that do not exceed our comprehension', but not for the 'first cause of all effects', which is 'God' who therefore 'must not be said to be movable or changeable, but He remains ever the same and unchanged' (DM 27.16). Concerning the principle that identical causes ought to produce identical effects (with destructive consequences for the idea of creation in a determined time period, since it is supposed that God is the identical cause par excellence), Hobbes maintains that one must go against this perfectly rational rule in the case of the 'intellectus divinus':

What is unintelligible is impossible, but this should not be said generally: it is unintelligible to a human and finite understanding, but one must not say that it is unintelligible to the divine understanding.  $(DM \ 27.15)$ 

Elsewhere, disputing White's argument that would render impossible the notion of the eternity of the world together with eternity *tout court* ('impossibilitas temporis infiniti'), including that of God, Hobbes contrasts the 'faith not only of Christians but of all peoples' to this kind of 'metaphysics, unheard of by the ancients' and disqualifies it claiming that it was 'sent forth under the name of knowledge by I do not know what evil spirit'. This kind of metaphysics is nothing but 'a liberty to speak rashly about God' (*DM* 28.9).

All of these arguments against metaphysics are well situated in the Protestant polemics (especially Lutheran) against scholastic philosophy and its 'pagan' (i.e. Aristotelian) origins,<sup>85</sup> and in fact, Hobbes refers to its dangerousness for the faith (DM 29.2). The enormous mistake of White ('singularem animi errationem') seems to Hobbes the 'emblem [of error] of every metaphysics' (DM 29.5).<sup>86</sup> Nevertheless it is necessary to be clear that, as in his other works, Hobbes's position in DM is more complex than the typical position of a 'Protestant' philosopher, as described by Wright and Martinich. Hobbes's is not the classical confrontation of two terms (reason/faith or religion/philosophy), but a more complex relation among three terms: metaphysics (the 'Aristotelity' he has condemned)/'first philosophy' or philosophical 'nomenclature' (in Hobbes's peculiar sense)/and religion or faith. The second attacks the first, but not necessarily the third; metaphysics claims to defend and demonstrate faith, but its vanity is undermined by true 'first philosophy'. True philosophy (not the servile philosophy of White) leads to conclusions opposite to those of faith, although it is said not to wish to invade the territory of the latter.

The connections between these three zones make it particularly complicated and difficult to interpret Hobbes's position clearly. It would all be simpler if Hobbes would acknowledge that his beliefs are supported by certainties that derive from sources that are superior to or independent from philosophy. On only one occasion in *DM* does Hobbes write as if he were a true 'fideist' in this sense. This is *DM* 30.2, a chapter crucial for the criticism of metaphysical theology.<sup>87</sup> After having maintained that White has not even succeeded in demonstrating rationally that the *ens a se* is one and not many,<sup>88</sup> and after having

<sup>&</sup>lt;sup>85</sup> This is the thesis of Wright, *Religion*, 292, who writes of the 'de-Hellenization' of philosophy realized by Hobbes.

<sup>&</sup>lt;sup>86</sup> Cf. also *DM* 30.36, where metaphysics is described as 'delirium', which takes the form of 'foolhardiness in speaking': 'temeritas loquendi', meaningless 'oratio'.

<sup>&</sup>lt;sup>87</sup> Cf. White, De mundo, 306 ff.

 $<sup>^{88}</sup>$  Note that *DC* 26.1 also speaks, to our surprise, of 'one eternal cause or more causes', singular on a par with plural, which is astounding in theology.

inveighed against the 'many vices' ('non pauca vitia') of metaphysics, Hobbes counters with a faith based on Scripture, tradition, and the Church. He admits that he is not making this claim as an 'accuratissima demonstratio[ne], ut quae fidei partim innitatur'. Thus, he recognizes once again that it is not 'a very accurate demonstration, since it relies partly on faith', and yet he declares that this sort of reasoning ('ratiocinatio') 'far more closely approaches to the laws of demonstration than does any argument we have so far heard from the metaphysicians' (*DM* 30.2). Of course, in this passage Hobbes is also scornful, saying that simple faith is better than White's and scholastic metaphysics; however, he keeps his own 'first philosophy', which is always distinguished from bad metaphysics, out of this confrontation.

As mentioned, this is an isolated claim. Moreover, DM does not deal at length with the credibility of Scripture, miracles, or the ecclesiastical tradition (as *Leviathan* will do with such controversial results, as we know).<sup>89</sup> In fact, DM limits itself to excluding from the tradition any 'fraud' ('fraus'), and accordingly 'the dogmas of Christ are true' (DM 30.2). In DM, this declaration of the true and proper faith remains as minimal as possible and it is impossible to evaluate the depth and consistency of this kind of statement; on the whole, it seems to be somewhat extemporaneous and accidental. What Hobbes calls the 'Christian method', opposing it to the metaphysical method, seems to fall into circular reasoning by which 'dogmas' and 'well verified miracles' ('miracula valde scientifica', DM 30.2) are relied on to support philosophical theses such as the existence of God, and vice versa.

<sup>89</sup> Scholars have given diametrically opposite interpretations. See for example the thesis of the substantial 'orthodoxy' of Hobbes in Martinich, *Two Gods*, 220–46, esp. 225: 'Hobbes is simply adding philosophical weight to the official position of England.' Compare the very different position of Leo Strauss, *Die Religionskritik des Hobbes. Ein Beitrag zum Verständnis der Aufklänng* (1933–4), in Leo Strauss, Heinrich und Wiebke Meier (eds.), *Gesammelte Schriften* (Stuttgart: J. B. Metzlersche Verlagbuchhandlung und Carl Ernst Poeschel, 2001), Band 3, esp. 279–84, 334–9. According to Strauss, in Hobbes's opinion revelation cannot be recognized with certainty either by one who receives it firom intermediaries (raising all the problems concerning authenticity, canon, historicity, meaning, etc., of Scripture). Besides, according to Strauss, Hobbes insinuates a 'discreet rejection of miracles', suggesting simply that 'it is very difficult to verify miracles' (ibid., 339–40). Equally critical theses about revelation, prophecy, miracles, the authority of Scripture, etc., are attributed to Hobbes by Curley, 'I Durst Not', 520–72.

To explain the conflict between reason and faith some scholars, such as Schuhmann and Leijenhorst,<sup>90</sup> have underlined the importance of the distinction (affirmed in DM and repeated in Lev. 12.7), between 'honorific' and 'assertive' predicates. The expressions of religious discourse, in Hobbes's opinion, do not have the function of 'affirming' anything about God, but only of 'honouring' Him. This distinction, present in some of the other works of Hobbes, is also found in DM. Nevertheless, as Patricia Springborg has noted,<sup>91</sup> the distinction between 'pious' and 'dogmatic' language (cf. DM 34.9; 35.16),<sup>92</sup> does not justify us in attributing to Hobbes the acceptance of 'parallel truths' in philosophy and theology. Honorific signs do not constitute a body of doctrine, but merely govern reverent and obedient behavior. In fact, there is in Hobbes no hint of the old doctrine of 'double truth', if it ever existed. Hobbes is extremely clear about the fact that what is 'false' in philosophy cannot be 'true' in religion, even though it can be 'legal', becoming a matter of counsel or even obligation. From the theoretical standpoint he subscribes to the principle that what is above reason cannot go against it. What contradicts reason should not be passed off as a superior truth, but only recommended as a warning (counsel or order) aimed at guaranteeing respect for the 'legal order'. This is a dimension of religious discourse that concerns only obedience. Springborg convincingly argues that, besides assertive and honorific discourse, there is a third register to be taken into account in Hobbesian discourse, and that is the legal and the authoritative, <sup>93</sup> which does not stem from a demonstration, but from a command. This aspect is also well represented in DM.

In fact, the solution that Hobbes points to in *DM* is not 'political' in the broad sense (as it will be in *Leviathan*, where the authority and even the canons of Scripture are subject to the authority of the sovereign), nor 'fideistic' in a strict sense (for the reasons given earlier in connection with the strong Galilean foundation of Hobbes's philosophical discourse), but rather 'linguistic'. Rather than of 'fideism' in *DM*, one

<sup>&</sup>lt;sup>90</sup> Schuhmann, 'La question de Dieu', 141–7; Leijenhorst, 'Corporeal Deity'.

<sup>&</sup>lt;sup>91</sup> Springborg, 'Challenge', 926, 930–1, which I follow on this point.

<sup>&</sup>lt;sup>92</sup> For the use only of honorific attributes in reference to God in the *Elements of Law*, cf. Paganini, *DM* 'Commento', 584n4.

<sup>&</sup>lt;sup>3</sup> Springborg, 'Challenge', 933–4.

should talk of a *linguistic compromise*, congruent with Hobbes's doctrine of the conventionality of definitions, which supply the meaning of terms and thus determine the truth or falsity of propositions. The problem is clearly formulated in the chapter that introduces the theological themes of White's Third Dialogue. After having removed the 'articuli fidei' from rational examination, Hobbes presents the specific problem of the attitude of the philosopher who has come to conclusions that are opposite of those of faith, above all in matters of divinity and movement ('Quid faciendum philosopho cum inciderit in quaestionem fidei')—and it is understood that he is talking about Galileo and perhaps himself:

Perhaps someone will ask: 'What then, will the philosopher not be allowed to investigate the cause of motion [de causâ motus]?' Or, if this is not the case, 'What is it, then, that we shall assign as his proper task?'  $(DM \ 26.7)$ 

The answer to this decisive question has important ramifications for central elements of Hobbes's understanding of philosophy in DM: (a) the definition of philosophy as 'nomenclature' that consists of attributing correct meanings to the terms that are used; (b) that the truth of propositions consists in 'the correct coupling of terms, i.e. of the subject and the predicate, in accordance with their proper and adequate meanings'; (c) in consequence, the thesis that 'there cannot be a true philosophy that does not lay its foundation on a right nomenclature of things' (DM 14.1); (d) the affirmation that the value of a demonstration ('syllogism') depends on stipulation of the meaning of the terms involved in the propositions (DM 26.2; cf. 11.9: 'omnis demonstratio debet a definitionibus incipere').<sup>94</sup> And in responding to the above question (DM 26.7), Hobbes adds a fifth presupposition which is at the foundation of his philosophical nomenclature: (e) the thesis that only terms that refer to imaginable beings have comprehensible meaning while terms that refer to unimaginable beings (like God or the spirits) are incomprehensible, unless they are conceived as subtle bodies,

 $<sup>^{94}</sup>$  Cf. Lev. 5.17; 7.3; the arbitrary character of the definitions and of the imputation of meaning ('quae arbitrio nostro fecimus circa ipsarum [appellationum] significationes') is clearly affirmed in *Third Objections*, iv, in AT vii. 178, and it is found again not only in DC 3.9, but also in the so-called early draft of DC: 'Logica' (Harleian Ms 6083), published by Jacquot and Jones (appendix to the Latin edn. of DM, esp. 466–7).

almost invisible because of their fine dimensions, but that nevertheless do have dimensions (DM 27.1). On the basis of presuppositions (a), (b), (c), (d), but excluding presupposition (e), Hobbes responds tentatively to his own question in the following terms:

First, I reply that nothing may be concluded as true or false by natural reason, except by supposing that terms and names are accepted only in the way we can understand them [nisi ex supposito, quod nomina et appellationes eo modò accipiantur quatenus à nobis intelliguntur]: all reasoning starts from the settled meanings of the terms, so that if either the meaning is changed, or the thing which has been named cannot be conceived by the mind [vel res nominata concipi animo non possit], all the strength of the syllogism falls to the ground at once, and the only conclusion one can reach is that we do not understand how the thing could be otherwise [omnis vis syllogistica statim concidat, nec concludi amplius possit quam quod non intelligamus quo modo aliter res se habere possit]. Hence the conclusion 'I do not know in what way this is true or false' is correctly inferred; but the other, 'It is not true, or it is false', is incorrectly inferred. (DM 26.7)

This approach tends to immunize expressions of religious discourse about spirits and immaterial beings from the danger of being considered 'false' or 'erroneous'. The value of truth and falsity, Hobbes argues, applies only to propositions that have meaning; but terms that refer to an incomprehensible reality (like God and the spirits) have no meaning because they are not 'imaginable', *ergo* religious discourse cannot be declared false, even though it contradicts the definition of basic terms such as substance, cause, etc., as fixed in the 'nomenclature' of *DM*: 'in fact, how can you know if a proposition that cannot be understood is true or false?' (*DM* 26.7).<sup>95</sup> The argument may seem specious, but in Hobbes's eyes it has the great advantage of protecting *libertas philosophandi* from a clash with the authority of the Church in matters that might get him into hot water, such as those that reveal contradictions between notions of God, the world, and motion. This is precisely the advantage that Hobbes presses in the following passage:

Next, I say that the philosopher is indeed free to inquire into the nature and cause of motion, but that as the investigation proceeds and he stumbles upon a

<sup>&</sup>lt;sup>95</sup> It could be objected that it becomes *ipso facto* meaningless, but on this point Hobbes would respond that its meaning is not in what it seems to say, but in what it does: it expresses signs of honor, submission, worship.

proposition that is already held by the Christian faith and that seems to contradict the conclusions he has established earlier, the philosopher can infer (if he has previously reasoned correctly): 'I do not understand under what meaning of terms that proposition is true [se non intelligere quâ nominum significatione illa vera sit]'. So, for instance, he says: that he does not see, or that it is beyond his grasp how that which is not in motion moves something else, or how that which exists is not in a place, or how something incorporeal sees, hears, understands, wills, loves, hates, etc. This is the attitude both of a moderate mind and, as I have said, of one that reasons correctly. However, he cannot thence conclude that it is false, for how can anyone know whether a proposition is true or false that he does not understand [sed concludere non potest ideo falsum esse quomodo enim scire potest quis verane an falsa sit propositio quam non intelligit]? (DM 26.7)

So, in DM Hobbes relies on a linguistic (or semantic) compromise of this type to maintain an equilibrium between two demands that he holds as of equal value: (a) to guarantee the space to 'free philosophy [libere philosophari]' and to be 'allowed to advance as far as correct reasoning [recta ratio] leads him', and (b) to 'not impinge upon the Church's authority, which he acknowledges and conforms to' (DM 26.7). The compromise rests on two theses present throughout his work: the conventional stipulation of meaning that is at the foundation of definitions and the emphasis on the relative autonomy of language, and in particular scientific-philosophical language, on the one hand, and religious language on the other. Nevertheless, it is an extremely fragile compromise and, in fact, in Leviathan Hobbes abandons it and never again returns to it. In the latter work, instead of guaranteeing the independence of religious language from the strict requirements of proper philosophical semantics, Hobbes engages directly in a reform of religious discourse in order to bring it into accord with the correct 'nomenclature'. The ambition of this reform is to provide the right interpretation of the 'meaning' of the key terms of Scripture and of the Christian religion such as 'Spirit, Angel, Inspiration' (Lev. 34), 'Kingdom of God, Holy, Sacred, and Sacrament' (Lev. 35), 'Word of God, and of Prophets' (Lev. 36), 'Miracles' (Lev. 37), 'Eternal Life, Hell, Salvation, The World to Come, and Redemption' (Lev. 38), 'Church' (Lev. 39), etc. It is noteworthy that this effort to reform the meaning of words brings Hobbes to affirm for the first time the corporeality of spirits and of the human soul (in the English Leviathan), and then also

the corporeality of God (in the Latin *Leviathan*). And that which in *DM* Hobbes still defined as 'incomprehensible' or 'unimaginable' is in the English *Leviathan* now openly declared 'absurd'.<sup>96,97</sup>

Università del Piemonte Orientale / Institut d'Etudes Avancées (Paris)

<sup>96</sup> Cf. Paganini, 'Turning Point', 301–3 for developments from *DM* to *Leviathan*. For a non-Straussian interpretation of Hobbes's philosophical treatment of these theological topics, see also Paganini, 'Art of Writing or Art of Rewriting? Reading Hobbes's *De motu* against the Background of Strauss' Interpretation', in Winfried Schröder (ed.), *Leo Strauss and the History of Early Modern Philosophy* (Berlin: De Gruyter, 2015).

<sup>97</sup> I am very grateful to Patricia Springborg and John Christian Laursen for their advice, for translating into English some portions of this chapter, and for their remarks that helped me to improve both the argument and the stylistic form.