God, Descartes and Secularism

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1. The Cartesian Image

Each age tends to reinterpret or refashion the ideas of the great canonical philosophers for its own purposes, and the ideas of Descartes have not been exempt from this process. Indeed, perhaps more than any other major thinker, Descartes has become a kind of philosophical icon, displayed in the textbooks and commentaries of the last hundred years or so in a confusing variety of guises. In a version of the history of ideas that was widely promoted some decades ago, he figured as the archetypal 'rationalist' metaphysician, attempting to spin out a whole deductive system of philosophy and science a priori, from premises derived entirely from inner reflection. In the 'linguistic' phase that gripped philosophy in the wake of Wittgenstein, he was pilloried as the supposed advocate of the fallacy that language and thought can occur within a wholly subjective or private domain. And in the 'naturalistic' turn that has characterized much of the more recent philosophical past, he is routinely lambasted as the champion of a dualistic theory of the mind – the view that consciousness is a wholly immaterial phenomenon, entirely attributable to a non-physical soul.

These images of Descartes are all questionable, but that has not prevented their gaining a secure place in the set of default assumptions which condition how students and scholars use the label 'Cartesian.' In reality, the 'rationalist' image is belied by the importance Descartes himself gave to experimentation, and to empirical hypotheses tested against experience;¹ the image of Descartes's philosophy as starting from a domain of private or subjective ideas is belied by his belief in an objective framework of logic and meaning to which our thought has to conform, like it or not;² and the mind-body 'dualist' label, though containing undeniable elements of truth, needs a great deal qualifying when we start to look at Descartes's own insistence on the embodied nature of much of our human experience, in particular our feelings and emotions.³

The way Descartes is discussed in modern introduction to philosophy courses involves additional distortions. The main focus is on his 'method of doubt', and on his epistemological arguments (how do I know whether I'm awake or sleeping?) In other courses the focus is on Descartes the proto-scientist, and his mathematical physics. But if readers who are new to Descartes pick up any one of his great masterpieces, the *Discourse*, the *Meditations*, or the *Principles*, they will be surprised to find that what has pride of place in the construction of his philosophical system is something that is almost never found in today's typical research agendas – an appeal to God. Within contemporary philosophy departments there are still, of course, a considerable number of academics who discuss arguments for God's existence and

¹ See D. Clarke, *Descartes' Philosophy of Science* (University Park: Pennsylvania State University Press, 1982), and J. Cottingham, 'The Cartesian legacy', *Proceedings of the Aristotelian Society*, Sup. Vol. LXVI, pp. 1-21, reprinted in J. Cottingham, *Cartesian Reflections* (Oxford: Oxford University Press, 2008), Ch. 2.

² See Cottingham, '"The only sure sign . . ." Descartes on Thought and Language', in J. M. Preston (ed.), *Thought and Language*. Cambridge: Cambridge University Press, pp. 29-50, reprinted in Cottingham, *Cartesian Reflections*, Ch. 5.

³ See Cottingham, *Philosophy and the Good Life: Reason and the Passions in Greek, Cartesian and Psychoanalytic Ethics* (Cambridge: Cambridge University Press, 1998), Ch. 3, and Cottingham, *Cartesian Reflections*, Ch. 12.

⁴ See Daniel Garber, Descartes' Metaphysical Physics (Chicago: Chicago University Press, 1992).

other topics concerned with religious belief; but their work, for the most part, occurs within the confines of a specialized branch of philosophy called 'philosophy of religion,' and as a general rule it tends not to spill over into the content of the 'mainstream' arguments and debates that preoccupy those working in the rest of the subject. For Descartes, by contrast, the nature and existence of the Deity is something that lies at the very heart of his entire philosophical system – something without which it would be entirely unrecognizable.

Alongside this 'modern' secularist motive for sidelining the religious elements of Descartes's philosophy, there has been, from more traditional religious quarters, a considerable resistance to accepting him as the devoutly religious philosopher that his frequent and often reverential references to God would suggest him to be. Historically, the Catholic Church, of which Descartes was all his life a member, has been highly suspicious of Cartesian philosophy, regarding it as unorthodox and potentially subversive of the faith. Soon after his death, Descartes's writings were placed by the Church on the Index of prohibited books; and in the succeeding centuries 'the image of Descartes as an anti-clerical and indeed anti-religious force,' was to prove remarkably resilient, even though (as Bernard Williams rightly observed) it is 'deeply contrary to his actual disposition'. In many Catholic seminaries and colleges, Descartes is still cast in the role of villain – someone who set European thought on the road to secularism, launching philosophical attitudes that paved the way for the Enlightenment, and its challenge to the faith, which ultimately led us to the rampant atheism so prominent in our own contemporary culture.

My own view, as I hope will become clear, is that Descartes was a devout believer, whose philosophy not only does not undermine religious faith, but properly understood supports it. Indeed, he provides a paradigm example of how one can combine scientific inquiry, and critical philosophical thinking, with a deep commitment to theistic metaphysics – to a God-centred worldview.

So why was the Church so suspicious of Descartes? During his own lifetime, he was associated with Galileo as a supporter of the 'new,' sun-centred cosmology that was prima facie in conflict with biblical statements that seem to suggest fixed and central Earth; and although Descartes prudently refrained from publishing his treatise on 'The Universe' (*Le Monde*) following the condemnation of Galileo by the Inquisition in 1633, and despite the fact that ten years later he concluded his eventually published magnum opus, *The Principles of Philosophy* with a statement of submission to the authority of the Church, his manoeuvres could not entirely shield him from suspicion in the tense and confrontational religious climate of the seventeenth century.

A more technical dogmatic issue that embroiled Descartes during his lifetime was that of transubstantiation (the doctrine that the bread and wine of the Eucharist are changed into the body and blood of Christ). The problem here was that Descartes aimed to replace the traditional Aristotelian philosophy of physics, which had dominated medieval thought, with a new geometrical conception of matter as consisting simply of extension in length, breadth, and depth. The Church had used the time-honoured Aristotelian concepts to explain how the 'substance' of the bread changes into the body of Christ, while the 'accidents' (the colour, smell, taste, etc. of the bread) remain unaltered, and it was wary of allowing a new schema of physics that might sweep all this away. Descartes protested in a letter that his new physics was quite compatible with the divine 'miracle of transubstantiation' (AT VII:254: CSM II:177),6 but the controversy continued to grind on throughout the remainder of the century.

⁵ Bernard Williams, *Descartes: The Project of Pure Enquiry* (Harmondsworth: Penguin, 1978; repr. London: Routledge, 2005), p. 24.

⁶ In this paper, 'AT' refers to the standard Franco-Latin edition of Descartes by C. Adam & P. Tannery, *Œuvres de Descartes* (12 vols, revised edn, Paris: Vrin/CNRS, 1964-76); 'CSM' refers to the English translation by J. Cottingham, R. Stoothoff and D. Murdoch, *The Philosophical Writings of Descartes*, vols

Nowadays, of course, the Church has no problem with a sun-centred planetary system, nor would it regard the mathematicization of physics as threatening the doctrine of the Eucharist. What happens in the Mass, as the Oxford philosopher Michael Dummett once observed, has nothing to do with physics, but is a *metaphysical* change.

But the negative image of Descartes goes deeper than these issues, and is, I think, philosophically more interesting. In a set of reflections published in the year of his death, the late Pope John Paul II commented on the period of moral disintegration that characterized much of the twentieth century, with first the rise of totalitarianism, and later the erosion of traditional family values; and he went on to trace the philosophical roots of this moral collapse to some of the central ideas put forward by Descartes. The rot started, he argued, with the way Descartes constructed his philosophy, basing it on the foundation of individual self-awareness, the famous *Cogito ergo sum* ('I am thinking, therefore I exist'):

The *Cogito ergo sum* radically changed the way of doing philosophy. In the pre-Cartesian period, philosophy, that is to say the *Cogito* ('I am thinking') ... was subordinate to *esse* [being], which was considered primary. For Descartes, by contrast, *esse* appeared secondary, while he viewed the *Cogito* as primary. This ... marked the decisive abandonment of what philosophy had been hitherto, particularly that of St. Thomas Aquinas ... [For Aquinas] God as fully self-sufficient being ... was considered as the indispensable support for every... created being, and hence for man. The *Cogito ergo sum* carried within it a rupture with this line of thought. The *ens cogitans* (thinking being) thus became primary. After Descartes, philosophy became a science of pure thought: all ... *being* – the created world, and even the Creator – is situated within the ambit of the *Cogito*, as contents of human consciousness.⁷

The orientation alluded to here, centred on the contents of personal consciousness rather than an independent external reality, is indeed one prominent strand in twentieth-century philosophical thought, found most notably in the school of 'phenomenology' founded by Edmund Husserl, whose *Cartesian Meditations* (1931) had argued that 'By my living ... I can enter no world other than the one that gets its sense [*Sinn*] and validity [*Geltung*] *in and from me, myself*.⁸ Such an autocentric vision may indeed be seen as sinister, if it is taken to give primacy to individual consciousness in a way that threatens the existence of objective value and meaning; but a careful reading shows that it is anachronistic to retroject this conception back on to Descartes himself.

Descartes, to be sure, did begin his search for truth by establishing the indubitable certainty of his own existence. As he puts it in his intellectual autobiography, the *Discourse on the Method*, 'seeing that this truth, *I am thinking therefore I exist*, was so firm and sure that even the most extravagant suppositions of the sceptics were incapable of shaking it, I decided that I could accept it without scruple as the first principle of the philosophy I was seeking' (AT VI 32: CSM I 127). Yet it simply does not follow that the 'I' so discovered is 'primary' for Descartes, in the sense that it no longer needs the support of a self-subsistent creator, on which traditional theology had insisted. On the contrary, whenever Descartes discusses his *Cogito* argument, he stresses the frail, temporary nature of his self-awareness: 'I am, I exist – that is certain. But for how long? For as long as I am thinking. For it could be that were I totally to cease from thinking, I should totally cease to exist' (AT VII 27: CSM II 18). Not only is such self-awareness a tiny flickering candle of certainty that could be extinguished at any

I and II (Cambridge: Cambridge University Press, 1985), and 'CSMK' to vol. III, The Correspondence, by the same translators plus A. Kenny (Cambridge: Cambridge University Press, 1991).

⁷ John Paul II *Memory and Identity* (London: Orion, 2005), p. 9.

⁸ Edmund Husserl, E. *Cartesian Meditations* [*Kartesianische Meditationen*, 1931] transl. D. Cairns (Dordrecht: Kluwer, 1988), Ch. 1, §8.

minute, but Descartes soon proceeds to use this very fragility of his thinking as a decisive indicator of his complete dependence on a power greater than himself:

A lifespan can be divided into countless parts, each completely independent of the others, so that it does not follow front the fact that I existed a little while ago that I must exist now, unless there is some cause which as it were creates me afresh at this moment – that is, which preserves me. For it is quite clear to anyone who attentively considers the nature of time that the same power and action are needed to preserve anything at each individual moment of its duration as would be required to create that thing anew if it were not yet in existence. (Third Meditation, AT VII 49: CSM II 33)

For Descartes, my own existence may be the first thing I come to know, but as soon as I reflect on it I see that I could at any moment slip out of existence were there not an independent sustaining force to preserve me. I owe my being to God, the infinite creator of all things; and indeed Descartes argues that the initial act of creation is only verbally or conceptually distinct from the same eternal and perpetual divine action whereby I am 'preserved' in every single moment of my existence.

In his early work, the Regulae or 'Rules for the Direction of our Native Intelligence', Descartes produces a maxim not as well known as Cogito ergo sum. He says Sum, ergo Deus est ('I am, therefore God exists'; AT X:422: CSM I:46). But the priority of the self over God is simply an *epistemic* priority. Descartes, as St. Augustine had done many centuries before, descends into his own interior self in order to discover his creator; but none of this denies the genuine priority of God in the order of reality. So far from initiating a 'rupture' with tradition, Descartes is here following a traditional line, going back to Aristotle, and further articulated by Thomas Aquinas in the thirteenth century, when he distinguished matters that were 'prior from our point of view' (priora quoad nos) from those that were 'prior in themselves' (priora simpliciter) (Summa theologiae [1266-73], Part Ia, qu. 2. art. 2). Epistemically, when it comes to our human knowledge, the route may be from knowledge of self to knowledge of God; ontologically, by contrast, in the order of reality, God retains absolutely primacy. As Descartes makes clear in the Third Meditation, the infinite substance that is God has 'more reality' that a mere finite substance such as myself. My very recognition of my own imperfection (which may come first in my order of discovery) already presupposes the ontological priority of this greater and more perfect reality:

I clearly understand that there is more reality in an infinite substance than in a finite one, and hence that my perception of the infinite, that is God, is in some way prior to my perception of the finite, that is myself. For how could I understand that I doubted or desired – that is lacked something – and that I was not wholly perfect, unless there were in me some idea of a more perfect being which enabled me to recognize my own defects by comparison? (Third Meditation, AT VII 46: CSM II 31)

2. How God affects Descartes's science and moral philosophy

In the second half of this paper, I want to say something about how Descartes's religious outlook affects his science and moral philosophy. I've already mentioned Descartes's programme for the 'mathematicization of physics.' We need perhaps to recover a sense of just how revolutionary was the new scientific method of the seventeenth century – a sense that has perhaps been lost by familiarity. That the great book of the universe should, as Galileo put it, be written in the language of mathematics, is on any showing a remarkable fact – one that we perhaps have still not fully assimilated. The universe appears to operate in accordance with precise mathematical equations – equations which enable us, when we plug in the

appropriate values for the relevant variables, to deliver predictions of extraordinary accuracy. Descartes's own formulations (in his work on physics) may have been flawed, but with the achievements of his successors, Newton and then Einstein, and on down to the present, we appear to be getting closer: our mathematical intuitions, intricately elaborated and fed into hypotheses that can be checked against careful observation, do indeed appear to be capable of mirroring the workings of nature. Descartes's take on all this is that our finite human minds, though limited in scope, are in principle capable of reflecting the mathematical and logical structures laid down by our creator in the workings of the universe.

The role of God in Descartes's system is not simply that of a mysterious 'prime mover' or 'first cause' of the kind envisaged by Aristotle, and subsequently developed in the first two of the five 'ways' or proofs of God offered by Thomas Aquinas. Certainly, that is part of the story: God is described in Descartes's *Principles* as 'the primary cause of motion' insofar as 'in the beginning he created matter, along with its motion and rest'. Descartes's universe is corpuscular universe, a world of moving particles, operating strictly in accordance with certain mathematically expressed laws. What God does, in Descartes's cosmology, is, as it were, to write the equations governing the behaviour of all the particles out of which the cosmos is composed – to determine the values of the mathematical constants which give our world its rhythm and shape and order: 'I noticed certain laws which God has so established in nature, and of which he has implanted such notions in our minds, that after adequate reflection we cannot doubt that they are exactly observed in everything which exists or occurs in the world.' (*Discourse on the Method*, part v)

Moreover, because God's action is immutable, the universe is perpetually held in being and conserved without any change in the overarching laws. Descartes's God is thus very far from the caricature that his contemporary Blaise Pascal accused him of leaving us with – that of the initial mover who 'flicks' the universe into motion and then leaves it to its own devices; rather, God is the sole perpetual dynamic force in a cosmos that would otherwise, being simply 'extended matter,' be as devoid of activity as a mere set of geometrical shapes.

So God is there at the heart of the Cartesian scientific system. So far from science clashing with religion, on Descartes's view they are complementary. If you are looking for a villain of the piece (or a hero, depending on your religious views), that is to say a herald of secularism, Descartes is the wrong man. It's a subject for another paper, but if I had to name someone one I would say the prime suspect is not Descartes but a Scottish atheist philosopher writing a century later. I mean of course David Hume. It was Hume who denied the rationality of the cosmos, and (at least on one common interpretation) regarded its workings as mere brute correlations, opaque to reason. And similarly in the moral domain, Hume regarded morality as ultimately reducible to mere feeling, depending not on objective rational demands that we have to acknowledge whether we like it or not, but on mere passions. Reason, as he famously observed, is the slave of the passions. What is more, in Hume's philosophy there is a radical gap between 'is' and 'ought', a rupture between fact and value, which leaves humanity essentially adrift in a Godless universe. Nature is a mere collection of brute facts, disenchanted, value-free, and we have no moral guidance apart from our own inclinations or sentiments.

This is the true atheistical picture, a blank, value-free universe, a 'maze with no centre', as G. K. Chesterton put it. Nothing could be further from the picture we find in Descartes. In Descartes, the God who is the source of the physical creation is also the source of goodness. What Descartes calls the 'light of reason', the *lux rationis*, the faculty that enables humans to intuit the mathematical structures underlying the universe, also allows us to perceive the structure of goodness. Hence Morals can emerge as one of the most important branches of

⁹ See David Hume, *An Enquiry concerning Human Understanding* [1748], Sectn VII, part 2.

¹⁰ See David Hume, A Treatise of Human Nature [1739-40], Bk. II, Part 3, sectn iii; Bk III, Part 1, sectn i.

Descartes's philosophical system because of the theistic metaphysics in which the system was rooted. The God who is for Descartes the source of the physical creation is also the source of goodness; and the 'light of reason' enabling humans to intuit the mathematical structures underlying the universe also allows us to perceive the good. Descartes is strongly influenced by the Platonic model according to which the good and the true are aspects of a single underlying reality. In the Fourth Meditation, we are told that when the mind focuses on an object with perfect clarity, the assent of the will automatically follows. When you see that there is a clear reason for the truth of some proposition (for example, that two plus two makes four), what happens is not simply a passive intellectual perception, but a spontaneous judgment of assent – 'Yes: it's true!' But in precisely the same way, according to Descartes's model, when you clearly focus on some action and see there is a clear reason why it is good, then again, you automatically and spontaneously judge – 'Yes: it should be done!' The will is the faculty of affirming or denying a truth, and of pursuing a good (or avoiding its opposite). As Descartes puts it: 'The more I incline in one direction ... because I clearly understand that reasons of truth and goodness point that way ... the freer is my choice' (AT VII 57-8: II 40). And the response involved is one of free submission to the light of truth and goodness, calling to mind the phrase at the end of the Third Meditation: 'Here let me pause for a while' Descartes says, and gaze at, wonder, and adore the beauty of this immense light'.

The flavour of the passage, with its overtones of something like religious submission is highly significant. We tend to think of the 'modern age' that Descartes inaugurated as championing the independent, critical, and autonomous power of humanity to determine the truth for itself. Descartes was certainly a critical thinker, resistant to relying on the authority of established wisdom, and insisting that each of us should follow for themselves the disciplines of reflective inquiry. But the destination of the journey is for Descartes not some supposedly quite independent and wholly self-determining state, but rather an awareness of the divine light which, once perceived, leaves us no choice but to assent. Just as the ancient prayer had affirmed that 'to serve God is perfect freedom,' so Descartes's model of the free human intellect is of an intellect that is so gripped by the clarity of the divinely ordained truth and goodness it perceives that no other option is possible than to align oneself towards it.

This harmonious, theistically inspired vision may appear starkly at odds with the ordinary realities of human struggle, error, and failure; but Descartes is in fact acutely aware of the weakness of our nature, and spends a great deal of effort endeavouring to explain it in a manner consistent with his belief in a divine creator who is the source of goodness and truth. Theologians for many centuries prior to Descartes had wrestled (as they have subsequently continued to do) with the so-called 'problem of evil' - the existence of so much wrongdoing and suffering in a world supposedly produced by a surpassingly good creator; and St. Augustine in the fourth century had offered a 'theodicy' (a vindication of God's justice) that laid great emphasis on the faulty human use of our free will. Descartes, strongly influenced by Augustine, 11 takes a very similar line in his own theodicy in the Fourth Meditation. If our minds are illuminated by the divine light, how come we make false judgments, or choose the bad, or a lesser good, when the greater good is staring us in the face? Descartes, as we have seen, maintains that while we focus on the truths disclosed by the light we cannot but assent; but because our intellects are *finite in scope*, there are many truths we do not clearly perceive. In such cases, we ought to withhold our assent, but instead we often rashly jump in and make a judgment – and 'in this incorrect use of free will' is to be found 'the essence of error' (AT VII 60: CSM II 41).

On the purely theoretical plane, this recipe for the avoidance of error ('Withhold judgment when the truth is not clear') may have much to commend it; but on the level of practical morality, Descartes has to admit that we do not always have the luxury of such aloof

¹¹ See Stephen Menn, *Descartes and Augustine* (Cambridge: Cambridge University Press, 1998).

abstention from commitment (AT VI 22: CSM I 122). Choices often have to be made even when the evidence is not conclusive; people need to eat, without waiting for a full chemical analysis of the bread in front of them. The problem is compounded by the fact that much of our ordinary human life is not concerned with abstract intellectual judgment, but is inextricably bound up with bodily sensations, and more complex emotions – a whole range of affective states from hunger and thirst and pleasure and pain, to hope, fear, anger, love, joy, sadness, and so on. The belief in a benevolent creator faces a direct challenge here, that Descartes must confront, for several reasons.

In the first place, our sensory states do not always seem to be reliable indicators of what is good for us: 'Those who are ill may desire food or drink that will shortly afterwards turn out to be bad for them' (AT VII 84: CSM II 58). Descartes here (in a further phase of his project of theodicy, this time in the Sixth Meditation) replies that the mind-body complex is designed by God to work in accordance with fixed principles: certain physiological states (e.g., a shortage of fluid in the body) will produce certain psychological signals (e.g., a feeling of dryness in the throat). And although there may be some conditions, like dropsy, where drinking when thirsty is not advisable, nevertheless 'the best system that could be devised is that [a given state of the nervous system and the brain] should produce the one sensation which, of all possible sensation, is most especially and most frequently conducive to the preservation of the healthy human being' (AT VII 87: CSM II 60).

This picture of a divinely crafted system of mind-body correlations that generally works for our survival and welfare as human beings is threatened, however, by a further problem: that of the complex set of emotional states and dispositions that were known in Descartes's time as 'the passions.' Often – and this is an age-old issue in moral philosophy – feelings of anger, or arousal, or fear or enthusiasm may lead us astray, making some good appear more important, or some evil more threatening, than it really is. The passions, as Descartes at one point puts its, often 'represent the goods to which they tend with greater splendour than they deserve, and they make us imagine pleasures to be much greater before we possess them than our subsequent experiences show them to be.' The result, all too familiar, is that giving rein to our passions can frequently lead to 'dissatisfaction, regret and remorse' (AT IV 285: CSM III 264).

Descartes's theocentric ethics, however, offers a way out. He maintained, as we have seen, that human beings are equipped, via the 'light of reason' with clear and distinct perceptions of the good, and that contemplating the good leaves us no choice but to wish to pursue it. Human concentration, however, is weak and limited, and we cannot always be focusing on the clear deliverances of the light of reason. Moreover, as embodied creatures we also have emotional responses, which, though generally conducive to our welfare (fear makes us flee from danger, anger helps us defend ourselves, attraction leads us to seek out friends and partners), can nevertheless sometimes lead us astray. But the solution to this, according to Descartes, lies in drawing on the results of Cartesian science: our scientific knowledge of the workings of the passions, and the way they are linked to physiological mechanisms, will enable us to manage and control them, so that they can be brought into line with what our reason perceives to be good, and thus become a source of joy (AT VII 285: CSM III 264).

The working out of this Cartesian moral theory, though quite subtle and complex in its ethical, psychological, and physiological detail, leaves us in the end with a picture of the good life that is remarkably positive. There is a strong sense of a benevolent presence at the roots of our humanity. So far from being the product of 'fate or chance or a continuous chain of events', our human nature bears the stamp of its creator. Our intellect or 'light of reason' is directly God-given. As for our sensory an emotional faculties, it's true that that Descartes thinks these can lead us astray (again following Plato and Augustine); but again he is essentially optimistic here, and argues that once we learn to understand and control these

faculties we shall see that there is 'absolutely nothing to be found there that does not bear witness to the power and goodness of God.' (AT VII 87: CSM II 60).

3. Conclusion

Let me now draw to a close. The moral to be drawn from what I've been saying is I hope pretty clear: so far from being a precursor of modern secularism, Descartes is through and through a profoundly theistic philosopher. But how should that affect what we think of him today? Is the place he accords to God just one more reason to criticize his philosophy, along with the other supposed flaws of Cartesianism which I began this paper by referring to? Wouldn't Descartes's philosophy be better if we lopped off the outmoded references to God, and just preserved the elements that are of interest to the typical modern analytic philosopher – perhaps Descartes's ideas on mathematical science, or his views on clear and distinct perception, or his wrestling with the problem of consciousness and the relation between mind and brain, or, in ethics, his idea of managing our impulses by scientifically investigating and controlling the neurophysiology of the passions (the research project that occupied his later years)?¹²

It won't work. Bracketing off God from the rest Descartes's philosophy simply can't be done. If you bracket off God, you destroy the entire coherence of the Cartesian system. What is more, not only can't it be done, but even if it could be done it's by no mean clear that the result would be an improvement – and here there is a lesson, I think, for the self-confident secularism that dominates our contemporary philosophical scene. In science, if you take away the divine light of reason, our clear and distinct intuitions of the basic truths of logic and mathematics, we are left without any principled reason to trust the reliability of the human intellect. Indeed, as Alvin Plantinga has recently argued, if we live in a Godless universe, where our mental faculties depend simply on a contingent process of random mutation and natural selection, they will be configured in a way that is governed by purely *functional or* utilitarian constraints (to do with the struggle for survival), not by any necessary aptness for tracking the truth. A purely naturalist account might give us some reason to expect we are good at navigating the immediate environment (finding food and avoiding predators, for example), but no principled reason to expect that our minds will be 'instruments of transcendence', to use Thomas Nagel's phrase from his recent book *Mind and Cosmos*: intellectual instruments that are able to grasp 'objective, mind-independent truths': including those belonging to the abstract domain of logic and mathematics, and also to the domain of objective moral truth.13

In ethics, the secular picture is, in my view, of equally dubious coherence (though to argue this out in full would of course take another paper, if not several). There are some secular philosophers today, working under the naturalist paradigm, who seem drawn to a supposedly purely 'scientific' and 'empirical' conception of ethics, perhaps thinking that the age-old problems of humanity can be addressed by drawing on the advances of the modern technological age. At its most rampant, this would be the arrogant idea that we can take salvation wholly into our own hands, through manipulating our physiology and psychology to whatever ends we decide to pursue. It's more or less Aldous Huxley's 'Brave New World', where psychotropic drugs like 'soma' are a panacea for all ills (or substitute Viagra, or Valium, or whatever is your preferred item from the pharmacist's shelf). Descartes in some moods seems to share something of this 'quick-fix' vision: there's a notorious passage in his first publication, the *Discourse on the Method* (1637), where he talks of human beings becoming 'masters and possessors of nature': he foresees a day when the new science and technology

¹² See Descartes, Passions of the Soul [Les passions de l'âme, 1649].

¹³ Thomas Nagel, *Mind and Cosmos* (Oxford: Oxford University Press, 2012), p. 85.

will give us mastery of the natural world and control over the conditions for our own health and welfare (for example by artificially prolonging life).

But we need to remember that this ambitious programme still remains, for Descartes, at the service of the theistic worldview that shines out so clearly in the *Meditations*. Descartes would never have subscribed to the absurd modern idea of purely managerial or instrumental ethics, as if all we need is technological know-how. Nor would he ever have accepted the Nietzschean fantasy that we can somehow chose our own ends or create our own values; for in Descartes's view these are already laid down for us by the light of reason-perceived via the faculty of clear and direct intuition of goodness and truth, which is bestowed on us as the gift of God. In dealing with the passions, which can so often be a source of misery when they lead us astray, Descartes thinks we can indeed harness the power of science to retrain and reprogram them. But this is only against a secure metaphysical background: we know *how* to reprogram our biological impulses, the right direction to point them, as it were, because we have a rational vision of the good. The message of Descartes's metaphysical vision in the *Meditations* is that although our nature is weak and our intellect limited, provided we use our reason correctly, and focus on what is compellingly clear, we can know which path to follow.

As one of the inaugurators of modern science, Descartes has a measure of that optimism about our human nature, and our future, that is displayed by some of the breezier modern advocates of science-plus-technology as the key to improving our lot. But, for Descartes, unlike many present-day enthusiasts for science, this optimism is rooted in a cosmology that provides it with a secure anchor point. Given the assurance of a rationally ordered universe, and a supremely benevolent creator, we can be sure we have the means at our disposal to achieve knowledge of the true and the good, and to regulate our lives in a way that allows us to be oriented towards that truth and goodness. The vision may not be as 'modern' as might be expected from a thinker who is often called the father of modern philosophy; but if we understand it properly, it remains I think an inspiring vision of what a philosophical system, grounded in religious belief, can aspire to articulate.¹⁴

¹⁴ For further discussion of some of the themes explored here, see John Cottingham, *Cartesian Reflections* (Oxford: Oxford University Press, 2008), esp. chapters 10, 12 and 13.