

their doubts have been dealt with in these replies of mine, or failing that, these replies will at least give them the opportunity to examine the truth more deeply.

I now turn to your proposal that I should set out my arguments in geometrical fashion to enable the reader to perceive them 'as it were at a single glance'.¹ It is worth explaining here how far I have already followed this method, and how far I think it should be followed in future. I make a distinction between two things which are involved in the geometrical manner of writing, namely, the order, and the method of demonstration.

The order consists simply in this. The items which are put forward first must be known entirely without the aid of what comes later; and the remaining items must be arranged in such a way that their demonstration depends solely on what has gone before. I did try to follow this order very carefully in my *Meditations*, and my adherence to it was the reason for my dealing with the distinction between the mind and the body only at the end, in the Sixth Meditation, rather than in the Second. It also explains why I deliberately and knowingly omitted many matters which would have required an explanation of an even larger number of things.

As for the method of demonstration, this divides into two varieties: the first proceeds by analysis and the second by synthesis.

Analysis shows the true way by means of which the thing in question was discovered methodically and as it were *a priori*,² so that if the reader is willing to follow it and give sufficient attention to all points, he will make the thing his own and understand it just as perfectly as if he had discovered it for himself. But this method contains nothing to compel belief in an argumentative or inattentive reader; for if he fails to attend even to the smallest point, he will not see the necessity of the conclusion. Moreover there are many truths which – although it is vital to be aware of them – this method often scarcely mentions, since they are transparently clear to anyone who gives them his attention.

Synthesis, by contrast, employs a directly opposite method where the search is, as it were, *a posteriori* (though the proof itself is often more *a*

¹ Above p. 92.

² Descartes' use of the term *a priori* here seems to correspond neither with the modern, post-Leibnizian sense (where *a priori* truths are those which are known independently of experience), nor with the medieval, Thomist sense (where *a priori* reasoning is that which proceeds from cause to effect). What Descartes may mean when he says that analysis proceeds 'as it were *a priori*' (*tanquam a priori*) is that it starts from what is epistemically prior, i.e. from what is prior in the 'order of discovery' followed by the mediator. Cf. note 2, above p. 25.

priori than it is in the analytic method).¹ It demonstrates the conclusion clearly and employs a long series of definitions, postulates, axioms, theorems and problems, so that if anyone denies one of the conclusions it can be shown at once that it is contained in what has gone before, and hence the reader, however argumentative or stubborn he may be, is compelled to give his assent. However, this method is not as satisfying as the method of analysis, nor does it engage the minds of those who are eager to learn, since it does not show how the thing in question was discovered.

It was synthesis alone that the ancient geometers usually employed in their writings. But in my view this was not because they were utterly ignorant of analysis, but because they had such a high regard for it that they kept it to themselves like a sacred mystery.

Now it is analysis which is the best and truest method of instruction, and it was this method alone which I employed in my *Meditations*. As for synthesis, which is undoubtedly what you are asking me to use here, it is a method which it may be very suitable to deploy in geometry as a follow-up to analysis, but it cannot so conveniently be applied to these metaphysical subjects.

The difference is that the primary notions which are presupposed for the demonstration of geometrical truths are readily accepted by anyone, since they accord with the use of our senses. Hence there is no difficulty there, except in the proper deduction of the consequences, which can be done even by the less attentive, provided they remember what has gone before. Moreover, the breaking down of propositions to their smallest elements is specifically designed to enable them to be recited with ease so that the student recalls them whether he wants to or not.

In metaphysics by contrast there is nothing which causes so much effort as making our perception of the primary notions clear and distinct. Admittedly, they are by their nature as evident as, or even more evident than, the primary notions which the geometers study; but they conflict with many preconceived opinions derived from the senses which we have got into the habit of holding from our earliest years, and so only those who really concentrate and meditate and withdraw their minds from corporeal things, so far as is possible, will achieve perfect knowledge of them. Indeed, if they were put forward in isolation, they could easily be denied by those who like to contradict just for the sake of it.

¹ Descartes may mean that though the proofs involved are *a priori* (viz., in the traditional, Thomist sense), the method of synthesis starts from premisses which are epistemically posterior – i.e. which are arrived at later in the order of discovery. (See previous footnote.)

This is why I wrote 'Meditations' rather than 'Disputations', as the philosophers have done, or 'Theorems and Problems', as the geometers would have done. In so doing I wanted to make it clear that I would have nothing to do with anyone who was not willing to join me in meditating and giving the subject attentive consideration. For the very fact that someone braces himself to attack the truth makes him less suited to perceive it, since he will be withdrawing his consideration from the convincing arguments which support the truth in order to find counter-arguments against it.

But at this point someone may raise the following objection: 'When we know that the proposition before us is true, we certainly should not look for arguments to contradict it; but so long as we remain in doubt about its truth it is right to deploy all the arguments on either side in order to find out which are the stronger. Nor does it seem that I am making a fair demand if I expect my arguments to be accepted as correct before they have been scrutinized, while at the same time prohibiting consideration of any counter-arguments.'

This is not a just criticism. For the arguments in respect of which I ask my readers to be attentive and not argumentative are not of a kind which could possibly divert their attention from any other arguments which have even the slightest chance of containing more truth than is to be found in mine. Now my exposition includes the highest level of doubt about everything, and I cannot recommend too strongly that each item should be scrutinized with the utmost care, so that absolutely nothing is accepted unless it has been so clearly and distinctly perceived that we cannot but assent to it. By contrast, the only opinions I want to steer my readers' minds away from are those which they have never properly examined — opinions which they have acquired not on the basis of any firm reasoning but from the senses alone. So in my view no one who restricts his consideration to my propositions can possibly think he runs a greater risk of error than he would incur by turning his mind away and directing it to other propositions which are in a sense opposed to mine and which reveal only darkness (i.e. the preconceived opinions of the senses).

I am therefore right to require particularly careful attention from my readers; and the style of writing that I selected was one which I thought

would be most capable of generating such attention. I am convinced that my readers will derive more benefit from this than they will themselves realize; for when the synthetic method of writing is used, people generally think that they have learned more than is in fact the case. In addition, I think it is fair for me to reject out of hand, and despise as worthless, the verdict given on my work by those who refuse to meditate with me and who stick to their preconceived opinions.

158 But I know that even those who do concentrate, and earnestly pursue the truth, will find it very difficult to take in the entire structure of my *Meditations*, while at the same time having a distinct grasp of the individual parts that make it up. Yet I reckon that both the overall and the detailed scrutiny is necessary if the reader is to derive the full benefit from my work. I shall therefore append here a short exposition in the synthetic style, which will, I hope, assist my readers a little. But they must please realize that I do not intend to include as much material as I put in the *Meditations*, for if I did so I should have to go on much longer than I did there. And even the items that I do include will not be given a fully precise explanation. This is partly to achieve brevity and partly to prevent anyone supposing that what follows is adequate on its own. Anyone who thinks this may give less careful attention to the *Meditations* themselves; yet I am convinced that it is the *Meditations* which will yield by far the greater benefit.

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Arguments proving the existence of God and the distinction between the soul and the body arranged in geometrical fashion

DEFINITIONS

I. *Thought*. I use this term to include everything that is within us in such a way that we are immediately aware of it. Thus all the operations of the will, the intellect, the imagination and the senses are thoughts. I say 'immediately' so as to exclude the consequences of thoughts; a voluntary movement, for example, originates in a thought but is not itself a thought.

II. *Idea*. I understand this term to mean the form of any given thought, immediate perception of which makes me aware of the thought. Hence, whenever I express something in words, and understand what I am saying, this very fact makes it certain that there is within me an idea of what is signified by the words in question. Thus it is not only the images depicted in the imagination which I call 'ideas'. Indeed, in so far as these images are in the corporeal imagination, that is, are depicted in some part of the brain, I do not call them 'ideas' at all; I call them 'ideas' only in so far as they give form to the mind itself, when it is directed towards that part of the brain.

III. *Objective reality of an idea*. By this I mean the being of the thing which is represented by an idea, in so far as this exists in the idea. In the same way we can talk of 'objective perfection', 'objective intricacy' and

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so on. For whatever we perceive as being in the objects of our ideas exists objectively in the ideas themselves.

IV. Whatever exists in the objects of our ideas in a way which exactly corresponds to our perception of it is said to exist *formally* in those objects. Something is said to exist *eminently* in an object when, although it does not exactly correspond to our perception of it, its greatness is such that it can fill the role of that which does so correspond.¹

V. *Substance*. This term applies to every thing in which whatever we perceive immediately resides, as in a subject, or to every thing by means of which whatever we perceive exists. By 'whatever we perceive' is meant any property, quality or attribute of which we have a real idea. The only idea we have of a substance itself, in the strict sense, is that it is the thing in which whatever we perceive (or whatever has objective being in one of our ideas) exists, either formally or eminently. For we know by the natural light that a real attribute cannot belong to nothing.

VI. The substance in which thought immediately resides is called *mind*. I use the term 'mind' rather than 'soul' since the word 'soul' is ambiguous and is often applied to something corporeal.²

VII. The substance which is the immediate subject of local extension and of the accidents which presuppose extension, such as shape, position, local motion and so on, is called *body*. Whether what we call mind and body are one and the same substance, or two different substances, is a question which will have to be dealt with later on.

VIII. The substance which we understand to be supremely perfect, and in which we conceive absolutely nothing that implies any defect or limitation in that perfection, is called *God*.

IX. When we say that something is contained in the *nature* or *concept* of a thing, this is the same as saying that it is true of that thing, or that it can be asserted of that thing.

X. Two substances are said to be really *distinct* when each of them can exist apart from the other.

and how uncertain are all the judgements that they have built up on the basis of the senses. I ask them to reflect long and often on this point, till they eventually acquire the habit of no longer placing too much trust in the senses. In my view this is a prerequisite for perceiving the certainty that belongs to metaphysical things.

Secondly, I ask them to reflect on their own mind, and all its attributes. They will find that they cannot be in doubt about these, even though they suppose that everything they have ever acquired from their senses is false. They should continue with this reflection until they have got into the habit of perceiving the mind clearly and of believing that it can be known more easily than any corporeal thing.

Thirdly, I ask them to ponder on those self-evident propositions that they will find within themselves, such as 'The same thing cannot both be and not be at the same time', and 'Nothingness cannot be the efficient cause of anything', and so on. In this way they will be exercising the intellectual vision which nature gave them, in the pure form which it attains when freed from the senses; for sensory appearances generally interfere with it and darken it to a very great extent. And by this means the truth of the following axioms will easily become apparent to them.

Fourthly, I ask them to examine the ideas of those natures which contain a combination of many attributes, such as the nature of a triangle, or of a square, or of any other figure, as well as the nature of mind, the nature of body, and above all the nature of God, or the supremely perfect being. And they should notice that whatever we perceive to be contained in these natures can be truly affirmed of them. For example, the fact that its three angles are equal to two right angles is contained in the nature of a triangle; and divisibility is contained in the nature of body, or of an extended thing (for we cannot conceive of any extended thing which is so small that we cannot divide it, at least in our thought). And because of these facts it can be truly asserted that the three angles of every triangle are equal to two right angles and that every body is divisible.

Fifthly, I ask my readers to spend a great deal of time and effort on contemplating the nature of the supremely perfect being. Above all they should reflect on the fact that the ideas of all other natures contain possible existence, whereas the idea of God contains not only possible but wholly necessary existence. This alone, without a formal argument, will make them realize that God exists; and this will eventually be just as self-evident to them as the fact that the number two is even or that three is odd, and so on. For there are certain truths which some people find self-evident, while others come to understand them only by means of a formal argument.

POSTULATES³

The first request I make of my readers is that they should realize how feeble are the reasons that have led them to trust their senses up till now,

¹ Cf. Med. III, above p. 28.

² E.g. a tenuous wind permeating the body. Cf. Med. II, above p. 17.

³ Lat. *Postulata*. Descartes is here playing on words, since what follows is not a set of postulates in the Euclidian sense, but a number of informal requests.

Sixthly, I ask my readers to ponder on all the examples that I went through in my *Meditations*, both of clear and distinct perception, and of obscure and confused perception, and thereby accustom themselves to distinguishing what is clearly known from what is obscure. This is something that it is easier to learn by examples than by rules, and I think that in the *Meditations* I explained, or at least touched on, all the relevant examples.

Seventhly, and lastly, when they notice that they have never detected any falsity in their clear perceptions, while by contrast they have never, except by accident, found any truth in matters which they grasp only obscurely, I ask them to conclude that it is quite irrational to cast doubt on the clear and distinct perceptions of the pure intellect merely because of preconceived opinions based on the senses, or because of mere hypotheses which contain an element of the unknown. And as a result they will readily accept the following axioms as true and free of doubt. Nevertheless, many of these axioms could have been better explained, and indeed they should have been introduced as theorems rather than as axioms, had I wished to be more precise.

AXIOMS OR COMMON NOTIONS

I. Concerning every existing thing it is possible to ask what is the cause of its existence. This question may even be asked concerning God, not because he needs any cause in order to exist, but because the immensity of his nature is the cause or reason why he needs no cause in order to exist.¹⁶⁵

II. There is no relation of dependence between the present time and the immediately preceding time, and hence no less a cause is required to preserve something than is required to create it in the first place!¹⁶⁶

III. It is impossible that *nothing*, a non-existing thing, should be the cause of the existence of anything, or of any actual perfection in anything.

IV. Whatever reality or perfection there is in a thing is present either formally or eminently in its first and adequate cause.

V. It follows from this that the objective reality of our ideas needs a cause which contains this reality not merely objectively but formally or eminently. It should be noted that this axiom is one which we must necessarily accept, since on it depends our knowledge of all things, whether they are perceptible through the senses or not. How do we know, for example, that the sky exists? Because we see it? But this 'seeing' does not affect the mind except in so far as it is an idea – I mean

¹⁶⁵ 'Preserve', here and below, has the technical sense of 'to maintain in existence'.

an idea which resides in the mind itself, not an image depicted in the corporeal imagination. Now the only reason why we can use this idea as a basis for the judgement that the sky exists is that every idea must have a really existing cause of its objective reality; and in this case we judge that the cause is the sky itself. And we make similar judgements in other cases.

VI. There are various degrees of reality or being: a substance has more reality than an accident or a mode; an infinite substance has more reality than a finite substance. Hence there is more objective reality in the idea of a substance than in the idea of an accident; and there is more objective reality in the idea of an infinite substance than in the idea of a finite substance.

VII. The will of a thinking thing is drawn voluntarily and freely (for this is the essence of will), but nevertheless inevitably, towards a clearly known good. Hence, if it knows of perfections which it lacks, it will straightforwardly give itself these perfections, if they are in its power.

VIII. Whatever can bring about a greater or more difficult thing can also bring about a lesser thing.

IX. It is a greater thing to create or preserve a substance than to create or preserve the attributes or properties of that substance. However, it is not a greater thing to create something than to preserve it, as has already been said.

X. Existence is contained in the idea or concept of every single thing, since we cannot conceive of anything except as existing. Possible or contingent existence is contained in the concept of a limited thing, whereas necessary and perfect existence is contained in the concept of a supremely perfect being.

PROPOSITION I

*The existence of God can be known
merely by considering his nature*

Demonstration

To say that something is contained in the nature or concept of a thing is the same as saying that it is true of that thing (Def. ix). But necessary existence is contained in the concept of God (Axiom x). Therefore it may be truly affirmed of God that necessary existence belongs to him, or that he exists.

This is the syllogism which I employed above in replying to the sixth point in your Objections.¹ And its conclusion can be grasped as

¹ Above pp. 106f.

self-evident by those who are free of preconceived opinions, as I said above, in the Fifth Postulate. But since it is not easy to arrive at such clear mental vision, we shall now endeavour to establish the same result by other methods.

PROPOSITION II

*The existence of God can be demonstrated
a posteriori merely from the fact that we
have an idea of God within us*

Demonstration

The objective reality of any of our ideas requires a cause which contains the very same reality not merely objectively but formally or eminently (Axiom v). But we have an idea of God (Def. ii and viii), and the objective reality of this idea is not contained in us either formally or eminently (Axiom vi); moreover it cannot be contained in any other being except God himself (Def. viii). Therefore this idea of God, which is in us, must have God as its cause; and hence God exists (Axiom iii).

PROPOSITION III

*God's existence can also be demonstrated from the
fact that we, who possess the idea of God, exist*

Demonstration

If I had the power of preserving myself, how much more would I have the power of giving myself the perfections which I lack (Axioms viii and ix); for these perfections are merely attributes of a substance, whereas I am a substance. But I do not have the power of giving myself these perfections; if I did, I should already have them (Axiom vii). Therefore I do not have the power of preserving myself.

Now I could not exist unless I was preserved throughout my existence either by myself, if I have that power, or by some other being who has it (Axioms i and ii). But I do exist, and yet, as has just been proved, I do not have the power of preserving myself. Therefore I am preserved by some other being.

Moreover, he who preserves me has within himself, either formally or eminently, whatever is in me (Axiom iv). But I have within me the perception of many of the perfections which I lack, as well as an idea of

God (Defs. ii and viii). Therefore he who preserves me has a perception of the same perfections.

Finally, this being cannot have the perception of any perfections which he lacks, or which he does not have within himself either formally or eminently (Axiom vii). For since he has the power of preserving me, as I have already said, how much more would he have the power of giving himself those perfections if he lacked them (Axioms viii and ix). But he has the perception of all the perfections which I know I lack and which I conceive to be capable of existing only in God, as has just been proved. Therefore he has the perfections within himself either formally or eminently, and hence he is God.

COROLLARY

*God created the heavens and the earth and everything in them. Moreover
he can bring about everything which we clearly perceive in a way exactly
corresponding to our perception of it*

Demonstration

All this clearly follows from the preceding proposition. For in that proposition we proved that God exists from the fact that there must exist someone who possesses either formally or eminently all the perfections of which we have any idea. But we have the idea of a power so great that the possessor of this power, and he alone, created the heavens and the earth and is capable of producing everything that I understand to be possible. Therefore in proving God's existence we have also proved these other facts about him.

PROPOSITION IV

There is a real distinction between the mind and the body

Demonstration

God can bring about whatever we clearly perceive in a way exactly corresponding to our perception of it (preceding Corollary). But we clearly perceive the mind, that is, a thinking substance, apart from the body, that is, apart from an extended substance (Second Postulate). And conversely we can clearly perceive the body apart from the mind (as everyone readily admits). Therefore the mind can, at least through the power of God, exist without the body; and similarly the body can exist apart from the mind.

Now if one substance can exist apart from another the two are really distinct (Def. x). But the mind and the body are substances (Defs. v, vi and vii) which can exist apart from each other (as has just been proved). Therefore there is a real distinction between the mind and the body.

Notice that I introduce the power of God as a means to separate mind and body not because any extraordinary power is needed to bring about such a separation but because the preceding arguments have dealt solely with God, and hence there was nothing else I could use to make the separation. Our knowledge that two things are really distinct is not affected by the nature of the power that separates them.

THIRD SET OF OBJECTIONS¹ WITH THE AUTHOR'S REPLIES

On the First Meditation ("What can be called into doubt")

FIRST OBJECTION

From what is said in this Meditation it is clear enough that there is no criterion enabling us to distinguish our dreams from the waking state and from veridical sensations. And hence the images we have when we are awake and having sensations are not accidents that inhere in external objects, and are no proof that any such external object exists at all. So if we follow our senses, without exercising our reason in any way, we shall be justified in doubting whether anything exists. I acknowledge the correctness of this Meditation. But since Plato and other ancient philosophers discussed this uncertainty in the objects of the senses, and since the difficulty of distinguishing the waking state from dreams is commonly pointed out, I am sorry that the author, who is so outstanding in the field of original speculations, should be publishing this ancient material.

Reply

The arguments for doubting, which the philosopher here accepts as valid, are ones that I was presenting as merely plausible. I was not trying to sell them as novelties, but had a threefold aim in mind when I used them. Partly I wanted to prepare my readers' minds for the study of the things which are related to the intellect, and help them to distinguish these things from corporeal things; and such arguments seem to be wholly necessary for this purpose. Partly I introduced the arguments so that I could reply to them in the subsequent Meditations. And partly I wanted to show the firmness of the truths which I propound later on, in the light of the fact that they cannot be shaken by these metaphysical doubts. Thus I was not looking for praise when I set out these arguments; but I think I could not have left them out, any more than a medical writer can leave out the description of a disease when he wants to explain how it can be cured.

¹ By Hobbes; see Translator's preface, p. 64 above.