

Objections to the Meditations and Descartes's Replies

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[Brackets] enclose editorial explanations. Small ·dots·enclose material that has been added, but can be read as though it were part of the original text. Occasional •bullets, and also indenting of passages that are not quotations, are meant as aids to grasping the structure of a sentence or a thought. Every four-point ellipsis. . . . indicates the omission of a brief passage that seems to present more difficulty than it is worth. Longer omissions are reported between brackets in normal-sized type. The seventh set of objections is long, bad, and omitted. Originally only Hobbes's comments were inter-leaved with Descartes's replies; but that format is adopted here for all six sets, creating a little strain only with the replies to Caterus. Unadorned surnames in this version usually replace something less blunt—'Dominus Cartesius', 'the author', 'my critic', 'the learned theologian' and so on.

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First Objections (Caterus) and Descartes's replies

Objection

(1) [Caterus—a Dutch theologian—is writing to two friends who had asked him to comment on the *Meditations*.] Since you strongly urged me to examine the writings of Descartes in some detail, my friends, I felt that I couldn't say No. . . . I regard him as having the highest intellect and the utmost modesty. . . . He writes:

•'I am thinking, therefore I exist; indeed, I am thought itself—I am a mind.'

Granted.

•'But in virtue of thinking, I have within me ideas of things, and in particular an idea of a supremely perfect and infinite being.'

True again.

•'However, I am not the cause of this idea, because I don't measure up to its representative reality—that is, the idea in question *represents* something that has more reality, more perfection, than I *have*. So something more perfect than myself is its cause, and thus there exists something besides myself, something more perfect than I am. This is someone who is not 'a being' in any ordinary sense, but who simply and without qualification embraces the whole of being within himself, and is as it were the ultimate original cause. . . .'

But here I am forced to stop for a while, to avoid becoming exhausted. My mind ebbs and flows: first I accept, but then I deny; I give my approval, then I withdraw it; I don't like disagreeing with Descartes, but I can't agree with him. My question is this: what sort of cause does an idea need? ·To answer that properly, we need first to answer another

question: what is an idea? It is a thing that is thought of, considered as *existing representatively in the intellect*. But what does *that* mean? According to what I was taught, for x to 'exist representatively in the intellect' is simply for some act of the intellect to be shaped up in the manner of x. And this is merely an extraneous label that tells us nothing about x itself. Just as x's 'being seen' is someone's performing an act of vision, so also x's 'being thought of', or having representative being in the intellect, is some mind's having a thought—it is *just* a thought *in that mind*, and stops there. It can occur without any movement or change in x itself, and indeed without there being any such thing as x being represented. So why should I look for a cause of something that isn't actual, something that is simply an empty label, a non-entity?

'Nevertheless,' says our ingenious author, 'in order for a given idea to have such-and-such representative reality, it must surely derive it from some cause.' Not so! It doesn't need any cause, because 'representative reality' is merely a label, not anything actual. A cause passes on a real, actual influence; but something that doesn't actually exist can't be on the receiving end of any actual causal influence! Thus, I do have ideas but I don't have any cause for them, let alone a cause that is greater than I am, indeed infinite.

'But if you don't grant that ideas have a *cause*, you must at least give a *reason* why a given idea contains such-and-such representative reality.' Certainly; I don't usually grudge things to my friends, and am indeed as lavish as possible! I take the same general view about ·all ideas that Descartes takes about ·the idea of ·a triangle. He says: 'Even if there aren't any triangles outside my thought, and never were, still

there is a determinate nature or essence or form of *triangle* that is eternal and unchanging.’ What we have here is an eternal truth, which doesn’t need a cause. ‘Any more than you need a cause for such eternal truths as that a boat is a boat and nothing else, Davus is Davus and not Oedipus. But if you insist on an explanation, the answer lies in the imperfection of our finite intellect: because it doesn’t take in, all at once, the totality of everything there is, it divides up the universal good and conceives of it piecemeal—or, as they say, inadequately.

Reply

(1) [Descartes is writing to the same two men to whom Caterus’s objections were addressed.] Well, you have called up a mighty opponent to challenge me! His intelligence and learning might well have created great embarrassments for me if he weren’t an earnest and kind-hearted theologian who chose to side with God and with me as God’s counsel for the defence, rather than fighting in earnest. But though it was extremely kind of him to pretend to be opposing me when really he wasn’t, it would be wrong of me to go along with this pretence. So I plan to bring into the open his carefully disguised *assistance* to me, rather than answering him as though he were an adversary.

•First he summarizes my main argument for the existence of God, thus helping readers to remember it better. •Then he concedes the claims that he thinks I have demonstrated clearly enough, thereby adding the weight of his own authority to them. •Finally he comes to the matter that generates the chief difficulty, namely these two questions:

What should we take ‘idea’ to mean in this context?

What cause does an idea require?

Now, I wrote that an idea is a thing that is thought of, considered as existing representatively in the intellect. But

Caterus, wanting to draw me into explaining this more clearly, pretends to understand it in a quite different way from what I meant. ‘For x to exist representatively in the intellect’, he says, ‘is simply for some act of the intellect to be shaped up in the manner of x. And this is merely an extraneous label that tells us nothing about x itself.’ Notice that he refers to ‘x itself’, as though x were located outside the intellect; and when ‘x exists representatively in the intellect’ is taken in *this* way, it certainly is an extraneous label pinned on x; because in *this* sense ‘The sun exists representatively in Henri’s intellect’ says something purely about Henri, implying nothing about the sun. But that isn’t at all what I meant. I was speaking of *the idea*, which is never outside the intellect; and in this sense ‘existing representatively’ simply means being in the intellect in the way that objects normally *are* there. For example, if someone asks me ‘What happens to the sun when it comes to exist representatively in my intellect?’, the best answer is that the only thing that happens to it is that it comes to fit an extraneous label—i.e. comes to answer to the description ‘is thought about by so-and-so’—and this is indeed a mere matter of some act of the intellect’s being shaped up in the manner of an object. But when I am asked ‘What is the idea of the sun?’ and I answer that it is

•the sun considered as existing representatively in the intellect,

no-one will take this to mean

•the sun itself considered as having an extraneous label pinned to it.

And now ‘the sun exists representatively in the intellect’ won’t mean ‘some act of the intellect is shaped up in the manner of the sun’; rather, it will signify the sun’s being in the intellect in the way that its objects are normally there. I mean that the idea of the sun is *the sun itself existing in the*

intellect—not of course existing there as a real blazing star, as it exists in the heavens, but existing representatively, i.e. in the way in which objects normally exist in the intellect. This way of existing is of course much less perfect than the way of existing of things that exist outside the intellect; but, as I did explain, that doesn't make it simply *nothing*.

Can God cause God to exist?

Objection

(2) Descartes goes on to say 'The kind of reality involved in something's being represented in the mind by an idea, though it may not be very perfect, certainly *isn't* nothing, and so it can't *come from* nothing.' The word 'nothing' as used here is ambiguous. On either way of taking it, Descartes is wrong at this point; but the different readings of 'nothing' make a difference to *why* he is wrong. (a) If 'nothing' means *not an entity that actually exists*, then what's represented in the mind—not being actual—really is nothing at all, and therefore *does* come from nothing, i.e. doesn't need any cause. (b) But if 'nothing' means *something imaginary*, or what they commonly call a 'being of reason', then Descartes is half-right, because on this reading of 'nothing' what is represented in the mind is not 'nothing' but rather is something real that is clearly conceived. But Descartes is still half-wrong, because since it is merely conceived and is not actual, although it can be conceived it can't in any way be caused.

[This excessively compact and (in the original) unclear paragraph should perhaps be unpacked further. Its basic thrust is this: Descartes says that his idea of a supreme being

is not nothing, and must be caused by something.

Caterus says that on one reading of 'nothing' the idea in question

is nothing, and isn't caused by anything;

whereas on the other reading the idea

isn't nothing, but still doesn't have to be caused by anything.

Now let us continue.] He further explores the suggestion that his idea of a being more perfect than himself is *not* caused by some more perfect being:

I want to push on with my enquiry, now asking a new question: If the more perfect being didn't exist, could I exist? Well, if God didn't exist, where would I get *my* existence from? It would have to come from myself, or from my parents, or from some other beings less perfect than God. But if I had derived my existence from myself, I wouldn't now doubt or want or lack anything at all; for I would have given myself all the perfections of which I have any idea. So I would be God. . . . But if I derive my existence from something other than myself, then if I trace the series of causes back I will eventually come to a being that gets its existence from itself; and so the argument here becomes the same as the argument based on the supposition that I derive my existence from myself.

Aquinas took exactly the same approach; he called it 'the way to God based on the causality of the efficient cause'. He took the argument from Aristotle, although neither he nor Aristotle was bothered about the causes of ideas. And perhaps they didn't need to be; for can't I take a much shorter and more direct line of argument in which causes of ideas don't play any part? 'I am thinking, therefore I exist; indeed, I am thought itself, I am a mind. But this mind and thought derives its existence either from itself, or from something else. If the latter, then we continue to repeat the question—where does this other being get its existence from? And if the former, then this mind that gets its existence from itself is God. For anything that gets its existence from itself will have no trouble endowing itself with all perfections.'

I beg our author not to hide his meaning from a reader

who, though perhaps less intelligent, is eager to follow. The phrase ‘from itself’ has two senses. In the first (positive) sense it means *from itself as from a cause*. What gets its existence ‘from itself’ in *this* sense bestows its own existence on itself; so if by an act of premeditated choice it were to give itself what it whatever it wanted to have, no doubt it would give itself everything, and so it would be God. But in the second (negative) sense ‘from itself’ simply means *not from anything else*; and I can’t remember anyone taking the phrase in any other sense.

But now, if •something gets its existence ‘from itself’ in the ·second· sense of not getting it from anything else, how can we prove that •this being takes in everything and is infinite? Don’t tell me: ‘If it derived its existence from itself, it could easily have given itself everything.’ For the thing we are now talking about *didn’t* get its existence ‘from itself’ ·in the first sense, i.e.· as a cause; it *didn’t* exist prior to itself so as to be able choose in advance what it would come to be. I heard that Suarez argued like this: ‘Every limitation comes from some cause; so if something is limited and finite, that’s because its cause couldn’t or wouldn’t make it greater and more perfect; so if something gets its existence from itself and not from an ·external· cause, it will indeed be unlimited and infinite.’

I’m not convinced by this argument, ·in Suarez’s form of it or in yours·. What about the case where a thing’s limitation arises from the thing’s own constitutional make-up, i.e. its essence or form? (Remember that you haven’t yet proved this essence to be unlimited; the thing has acquired its existence ‘from itself’ *only* in the sense that it hasn’t acquired it from anything else.) For example, if we suppose that there such a thing as *something that is hot*, it will be hot rather than cold as a result of forces at work in its internal constitution; and this isn’t interfered with by the supposition that its being

what it is doesn’t depend on anything else. ·But· I’m sure that Descartes has plenty of arguments to support a thesis that others may not have presented clearly enough.

Reply

(2) When Caterus says that there’s an ambiguity in what I say here, he apparently means to *remind* me of the point I have just made, for fear that I might let it slip my mind. He says first that when something exists in the intellect through an idea, it isn’t an actual entity, i.e. it isn’t something outside the intellect; and this is true. He says next that ‘it isn’t something made up, or a so-called being of reason, but something real that is distinctly conceived’; here he concedes everything that I have assumed. But he then adds ‘since it is merely conceived and is not actual’—i.e. since it is merely an idea, and not something outside the intellect—‘although it can be conceived there’s no way it can be caused’. This is to say that it doesn’t need a cause of its •existing outside the intellect. This I accept; but it surely *does* need a cause of its •being conceived, and that is the sole point at issue. Suppose for example that someone has in his intellect the idea of a machine of a highly intricate design: there’s nothing wrong with asking ‘What is the cause of this idea?’ And this won’t be properly answered by saying that the idea isn’t something outside the intellect, and therefore can’t be •caused but can merely be •conceived! For the question is asking for *the cause of its being conceived*. Nor will it do to answer that the idea is something •done by the intellect and is therefore •caused by the intellect. For what is at issue is not this, ·i.e. not the cause of the idea considered as mental event·, but rather the cause of the intricacy that is represented in the idea. For the idea of the machine to contain a representation of such great intricacy, it must get it from some cause. Of course there could be various causes of this intricacy:

- it was caused by the person's seeing a real machine with this design, or
- the person had an extensive knowledge of mechanics, or
- he had a very subtle intelligence that enabled him to invent the idea without any previous knowledge.

But notice that all the intricacy that occurs representatively in the idea must necessarily be found, intrinsically (either straightforwardly or in a higher form), in whatever turns out to be its cause.

[‘In a higher form’—Latin *eminenter*—should be explained. My idea of triangles possesses triangularity *representatively*, and so—according to Descartes—its cause must *intrinsically* have triangularity, which taken *straightforwardly* means that the cause must be triangular. But perhaps God caused my idea of triangularity, and we don't want to suppose that God is triangular; so Descartes would say that God possesses triangularity *in a higher form*. He sometimes writes as though there were a clean distinction between ‘intrinsic’ and ‘in a higher form’, but that wasn't his actual view, and those slips are silently corrected in this version. What he really thought was that there is a clean distinction between ‘representatively’ and ‘intrinsically’, and then *within* ‘intrinsically’ there is a distinction between ‘straightforwardly’ and ‘in a higher form’.]

And what I have just said about the represented *intricacy* belonging to *this idea* also applies to the represented *reality* belonging to *the idea of God*. And where can the corresponding *actual reality* be found, if not in a really existing God? But Caterus knows all this perfectly well, which is why he agrees that we *can* ask ‘Why does this idea contain that represented reality?’. His answer applies to *all* ideas what I wrote about the idea of a triangle: ‘Even if there aren't any triangles anywhere, still there is a determinate nature or essence or form of *triangle* that is eternal and unchanging’. And *this*, he says, doesn't need a cause. But he is well aware

that that reply isn't good enough; for even if the nature of the triangle is unchanging and eternal, that doesn't rule out the question of why there is an idea of it within us. So he adds: ‘If you insist on an explanation, the answer lies in the imperfection of our intellect etc.’. What he means by this, I think, is simply that those who have wanted to differ from me on this issue have no plausible reply to make—i.e. that the imperfection of *their* intellects is the cause of their insisting on an explanation! That interpretation of Caterus may itself seem implausible, but what else *can* he have meant? He *can't* have meant to claim that *the imperfection of our intellect is the cause of our having the idea of God, because that* would be as implausible as claiming that *our lack of experience in mechanics is the cause of our imagining some very intricate machine rather than a less perfect one*. That would be flatly wrong. If someone has the idea of a machine, an idea containing every imaginable intricacy of design, then clearly this idea originally came from some cause in which every imaginable intricacy *really did exist*, even though the intricacy now *has only representative existence in the idea*. By the same line of thought, since we have within us the idea of God, containing *representatively* every perfection that can be thought of, it *obviously* follows that this idea depends on some cause that *intrinsically* has all this perfection, namely a really existing God. If the ‘God’ inference seems more problematic than the ‘machine’ one, that's because of this pair of facts about ourselves: **(1)** We aren't all equally experienced in mechanics, so not everyone can have an idea of a very intricate machine; *and when someone does have such an idea we find it natural to ask Why? What caused this idea to occur in his mind?* **(2)** We all equal in our ability to conceive of the idea of God, and we don't notice it coming into our minds from any external source; and this leads us to suppose that it's just natural for our intellect to have

such an idea. This is correct as far as it goes, but something very important has to be added—something on which all the power and illumination of the argument depends—namely that our intellect, being finite, couldn't *have* this ability to contain the idea of God unless God were its cause. When I went on to inquire 'whether I could exist if God didn't exist', I wasn't trying to produce a second proof of God's existence, but merely wanted to explain the first proof more thoroughly.

At this point my critic's *enormous* kindness to me has put me in an uncomfortable position. He compares my argument with one taken from Aquinas and Aristotle, and seems to be asking why I, after starting on the same road as they do, haven't stayed on it all the way. But I hope he'll let me off from commenting on the work of others, and simply give an account of what I have written myself. I have four main things to say. (1) I didn't base my argument on the fact that I observed among perceptible objects an order or succession of efficient causes.

[There is a centuries-old bit of terminology in which '[adjective] cause' stands for different things that could enter into a complete explanation of something. Thus:

- material cause: the stuff the thing is made of (e.g. the silver of a coin)
- formal cause: the pattern or design of the thing (the coin's flatness, circularity, inscriptions, etc.)
- final cause: the thing's purpose (the use of the coin in commerce)
- efficient cause: what made the thing exist (the impact of a die on hot silver).

clearly, 'efficient cause' is what you and I mean by 'cause', though we'll see Descartes stretching it a little.]

I regarded God's existence as much more evident than the existence of anything perceptible through the senses; and in any case I didn't think that such a succession of causes could get me to anything except to a recognition of the limitedness of my intellect. The argument is supposed to be: either the causal series has been running for ever, or there was

a first cause; the former alternative is impossible; so there must have been a first cause. But *an infinite chain of causes from eternity, without any first cause*, is not something I am entitled to *reject*, it is simply beyond my grasp. From the fact that

- I can't grasp the thought of an infinite series

it certainly doesn't follow that

- the series must be finite, i.e. there must be a first cause;

just as from the fact that

- I can't grasp the thought of infinitely many divisions in a finite quantity

it doesn't follow that

- there is a final division beyond which any further division is impossible.

All that follows in each case is that my finite intellect can't take in the infinite. That's why I preferred to base my argument on my own existence, which doesn't drag in any chain of causes, and is better known to me than anything else could possibly be. And the question I asked regarding myself was not

What cause originally produced me?

but rather

What is the cause that keeps me in existence now?

In this way I aimed to escape the whole issue of the succession of causes.

(2) In asking what caused *me*, I was asking about myself purely considered as a thinking thing—my body didn't come into it. This is crucial to my line of thought. By going about things in this way, I could more easily free myself from my preconceived opinions, attend to the light of nature, ask myself questions, and affirm with certainty that there couldn't be anything in me that I wasn't in some way aware of. This is plainly *very* different from observing that my

father begot me, •judging that my grandfather begot my father, •finding it impossible for me to track down parents of parents. . . to infinity, and thus bringing the inquiry to a close by •*deciding* that there is a first cause!

(3) In asking what caused me, I was asking about myself not merely considered as *a thinking thing* but—principally and most importantly—considered as *someone who has among his other thoughts the •idea of a supremely perfect being*. The whole force of my demonstration depends •in three different ways• on this one fact. (a) This •idea contains the essence of God, at least as far as I can understand it; and according to the laws of true logic we should never ask of anything *whether it is* without first asking *what it is*—i.e. we shouldn't ask about its existence until we understand its essence. (b) This •idea prompts me to ask whether I derive my existence from myself or from something else, and to recognize my defects. (c) This •idea shows me not just that I have a cause but that this cause contains every perfection, and hence that it is God.

(4) I didn't say that nothing could possibly be its own efficient cause. This is obviously true when the term 'efficient' is taken to apply only to causes that are temporally prior to or different from their effects. But in the present context that seems not to be the best way of interpreting 'efficient', •for two reasons•. (a) It makes the question 'Am I the cause of myself?' futile; who needs to be told that *nothing* can be prior to itself or distinct from itself? (b) The natural light doesn't demand that we think of an efficient cause as having to be **always** prior in time to its effect. On the contrary! Strictly speaking, x is a cause of y only while it is producing y, which means that an efficient cause is **never** prior to its effect. However, the light of nature *does* ordain that we may always ask, of any existing thing, 'Why does it exist?'—i.e. 'What was its efficient cause, and if it didn't have

one why didn't it need one?' So if I thought that nothing could possibly relate to itself in the way an efficient cause relates to its effect, I certainly would *not* conclude that there was a first cause! On the contrary, if someone postulated a 'first cause' I would ask what *its* cause was, so I would •go on asking for causes of causes of. . . etc., and• never arrive at a genuine first cause of everything. But I freely admit that there could be something with such great and inexhaustible power that it needed no help from anything else in order to exist, or in order to stay in existence. Such a thing would be, in a way, *its own cause*, and I understand God to be like that. •God's place in my philosophical system starts with his role as the cause of myself, and the case for this does *not* depend on that stuff about not being able to track causes back in time to infinity•. Even if I had existed from eternity, so that nothing had existed before I did, I couldn't *stay* in existence unless something •kept me in existence at each moment, which is as though it• created me anew at each moment; and I wouldn't hesitate to call that the 'efficient' cause •of myself•. Why must there be a cause for my staying in existence? Well, in my view the parts of *time* are separable from each other—meaning that the existence of one stretch of time doesn't logically necessitate the existence of any others—and so my existing •now doesn't imply that I'll still exist •in a minute from now. Now apply this line of thinking to God: he has always existed (•which removes *one* possible reason for his needing to be caused by something else•), and he keeps himself in existence (•which removes *the other* possible reason, the one that did apply in the case of myself•). So it seems reasonably appropriate to call God 'the cause of himself'. But don't think that God's keeping himself in existence involves the positive influence of an efficient cause; all it amounts to is that God's essence is such that he must always exist.

Now I am in a position to answer, easily, the point about the ambiguity in the phrase ‘from itself’, which the learned theologian says ought to be explained. Those who attend only to the literal and strict meaning of ‘efficient cause’ think that nothing could be the efficient cause of itself. It hasn’t occurred to them that there is room for another kind of cause, *analogous to an efficient cause* ·strictly so-called·, so when *they* say that something derives its existence ‘from itself’ they mean simply that •it has no cause. But if they would look at the facts rather than the words, they would quickly see that their negative sense of ‘from itself’ comes merely from the limitations of the human intellect and has no basis in reality. For example, if we think that a given body gets its existence ‘from itself’, meaning merely that it has no cause, what we are saying isn’t based positively on any reason, but negatively way from the mere fact that we don’t know of any cause ·for the body in question·. To see that this is a limitation in us, consider the following: The parts of time don’t depend on one another; so the supposed fact that

•this body has existed until now ‘from itself’, i.e. without a cause,

isn’t sufficient to make it the case that

•this body will continue to exist in future,

unless the body has some power which (as it were) re-creates it continuously. But when we see that no such power is to be found in the idea of a body, and immediately conclude that the body doesn’t derive its existence from itself, we shall then be taking the phrase ‘from itself’ in the positive sense. Similarly, when we say that God derives his existence ‘from himself’, we can understand the phrase in the **negative** sense, in which case we shall merely mean that he has no cause. But if we

•inquire into the cause of God’s existing or staying in existence, then •attend to the immense and incomprehensible power that the idea of God contains, then •recognize that this power is so vast that it is plainly the cause of his continuing existence, and that nothing else can be the cause;

and if because of all this

•we say that God derives his existence from himself, then we’ll be using ‘from himself’ not in its negative sense but in a sense that is utterly **positive**. For there *is* this positive sense of the phrase, which is derived from the true nature of things, and it is this sense alone that is employed in my argument. We needn’t say that God is the ‘efficient cause’ of himself, thus starting up verbal disputes. But we can be quite entitled to think that in a certain way God relates to himself as an efficient cause relates to its effect, and hence that he derives his existence from himself in the positive sense. That is because this fact:

God derives his existence from himself, or has no cause apart from himself,

doesn’t come from nothingness—·i.e. isn’t merely the negative fact that there is no other cause of God—but comes from the real immensity of his power. Each of us may ask himself ‘Am I being kept in existence “by myself” in *this* sense?’ (This is a question concerning *now*; there is no chance of being launched on an infinite regress.) When you find within yourself no power sufficient to keep you in existence throughout one second, you will rightly conclude that you get your existence from something else—indeed, from something that *does* get its existence from itself. ·What is my case for that last clause? In answering that·, I’ll add something that I haven’t put down in writing before, namely that a cause that is powerful enough to be able to keep in existence •something other than itself must have at least

enough power to keep •itself in existence; and so the cause of our staying in existence can't be merely a secondary cause, .i.e. a cause that has been caused by something else.

[At this point a paragraph was inserted in the second edition of the French version of the work, which appeared after Descartes had died. It was probably written by his literary executor Clerselier. It faces the objection: 'Perhaps someone might be keeping himself in existence without being aware of it; not finding a power within yourself isn't the same as finding that you don't have that power.' The reply is that self-preservation of the sort in question would be an act of the mind, and as such would necessarily be revealed to consciousness, which would lead to an awareness also of the power to perform it.]

As for the dictum 'Every limitation comes from some cause' [see page 4], I think that what Suarez meant by this is true but not well expressed, and that it doesn't solve the difficulty .it was meant to solve. Strictly speaking, a limitation is merely the negation of any further perfection; a thing that has a limitation comes from a cause, but the limitation—the *negation*—does not. And even if everything that is limited *does* come from a cause, it isn't self-evident that this is so, and needs to be proved from other premises. For, as Caterus points out, a thing can be regarded as limited in various ways; for example, it can have a limitation that is part of its nature, as it belongs to the nature of a triangle that it is limited to three sides. What does seem to me self-evident is that whatever exists gets its existence either *from a cause* or *from itself as from a cause*. We have a good understanding both of *existence* and of the negative *non-existence*; so we can't make sense of any story about something's getting its existence from itself, unless the story includes there being some reason why the thing should exist rather than not exist. [Descartes expresses that in terms not of making sense of a story, but rather of being able to 'feign' or make up something—using a verb that is the Latin source for our word 'fiction'.] So in such a case we

should interpret 'from itself' in a causal way, because of the superabundance of power involved—a superabundance that can easily be demonstrated to be possessed by God alone.

2ex [We are about to meet the first of many occurrences of Latin *clara et distincta* or French *claire et distincte*. (The feminine forms are given here because nearly always the subject is a feminine noun, usually *idea* or *idée*. Every previous translator of Descartes has rendered this phrase by 'clear and distinct', a translation that is demonstrably wrong. A better translation is 'vivid and clear' (in that order), which is adopted throughout this version. The crucial point concerns *clara* (and all this holds equally for the French *claire*). The word can mean 'clear' in our sense, and when Descartes uses it **outside** the *clara et distincta* phrase, it very often seems to be in that sense. But **in** that phrase he uses *clara* in its other meaning—its more common meaning in Latin—of 'bright' or 'vivid' or the like, as in *clara lux* = 'broad daylight'. If in the phrase *clara et distincta* Descartes meant *clara* in its lesser meaning of 'clear', then what is there left for 'distincta' to mean? Descartes's one explanation of the two parts this phrase, in his *Principles of Philosophy* 1:45–6, completely condemns the usual translation. He writes:

I call a perception *claram* when it is present and accessible to the attentive mind—just as we say that we see something *clare* when it is present to the eye's gaze and stimulates it with a sufficient degree of strength and accessibility. I call a perception *distinctam* if, as well as being *clara*, it is so sharply separated from all other perceptions that every part of it is *clara*. . . . The example of pain shows that a perception can be *clara* without being *distincta* but not vice versa. When for example someone feels an intense pain, his perception of it is *clarissima*, but it isn't always *distincta*, because people often get this perception muddled with an obscure judgment they make about something that they think exists in the painful spot. . . .and so on.

He can't be saying anything as stupid as that intense pain is always *clear*! His point is that pain is vivid, up-front, not shady or obscure. And for an idea to be *distincta* is for every nook and cranny of it to be vivid; which is not a bad way of saying that it is in our sense 'clear'.]

Inferring God's existence from his essence

Objection

(3) At last I find something to agree with! Descartes has laid it down as a general rule that 'everything of which I am vividly and clearly aware is something true'. Indeed, I go further: I hold that whatever I think of is true. For from our boyhood onwards we have totally outlawed all chimeras and similar mental inventions. No faculty can be diverted from its proper object. When the will is exercised, it tends towards the good. Not even the senses are guilty of error: sight sees what it sees; the ears hear what they hear. If you see fool's gold and take it to be the real thing, there's nothing wrong with your •vision—the error arises from your •judgment. So Descartes is quite right to put all error down to the •faculties of• judgment and will. [This paragraph will introduce the word 'chiliagon'; it means 'thousand-sided figure', and is pronounced *kill-ee-agon*.] But now—I'm addressing Descartes directly—use this rule to get the conclusion you wanted: 'I am vividly and clearly aware of an infinite being; so this being is a true entity and something real.' But someone will ask: 'Are you vividly and clearly aware of an infinite being? If so, what becomes of the well-known well-worn maxim that *all we can know about an infinite thing are aspects of it that don't involve its infinity*—or, in more technical language, *the infinite qua infinite is unknown?* •There is good reason to think that the maxim is true•. When I am thinking about a chiliagon, and construct for myself a confused representation of some figure •that I take to be a chiliagon•, I don't clearly imagine the chiliagon itself, since I don't clearly see the thousand sides. And if *this* is so, •i.e. if I am to be defeated by a mere **thousand**•, then how can I clearly rather than confusedly think of **the infinite**? . . .

Perhaps that's what Aquinas meant when he denied that the proposition 'God exists' is self-evident. He considers Damascene's objection to that: 'The knowledge of God's existence is naturally implanted in all men; so the existence of God is self-evident.' Aquinas replied that what is naturally implanted in us is knowledge that •God exists, with this understood only in a general or 'somewhat confused' manner, as he puts it; it is just the knowledge that •God-i.e.-the-ultimate-felicity-of-man exists. But this, he says, isn't straightforwardly knowledge that •God exists; any more than knowing that •someone is coming isn't the same as knowing •anything about• •Peter, even though it is Peter who is coming. He says in effect that God is known under some general conception, as

the ultimate end, or as

the first and most perfect being,

or even (this being a conception that is confused as well as general) as

the thing that includes all things;

but he is *not* known through the precise concept of his own essence, for in essence God is *infinite* and so unknown to us. I know that Descartes will have a ready answer to this line of questioning. But I think that these objections, put forward here purely for discussion, may remind him of Boethius's remark that some things 'are self-evident only to the wise'! So Descartes should expect that people who want to become wiser will ask many questions and spend a long time on these topics. . . .

[One of Descartes's standard examples of truths of the form 'There can't be an F without a G' is always translated as 'There can't be a mountain without a valley', which is too obviously false to be what he meant. The Latin provides no escape from it, but Descartes may have been thinking in French, in which *vallée*, as well as meaning 'valley' in our sense, can also be used to refer to foothills, the lower slopes of a mountain, or the plain

immediately surrounding the mountain. The translation used here is a compromise: compact and fairly close to what he presumably meant.] Let us concede, then, that someone does possess a vivid and clear idea of a supreme and utterly perfect being. Where do you go from there? You'll say that this infinite being exists, and that this is so certain that

I ought to regard the existence of God as being at least as certain as I have taken the truths of mathematics to be. Just as it is self-contradictory to think of *highlands in a world where there are no lowlands*, so it is self-contradictory to think of *God as not existing*—that is, to think of a supremely perfect being as lacking a perfection, namely the perfection of existence.

This is the heart of the matter: if I give in on this point I have to admit ·comprehensive· defeat. ·I shan't give in just yet·. I want to push on against my abler opponent, so as to delay for a while his inevitable victory.

I know we are arguing on the basis of reason alone, not on appeals to authority. But I want to bring in Aquinas here, so that you won't think that in taking issue with such an outstanding thinker as Descartes I am merely flailing around. Aquinas presents the following objection to his own position:

As soon as we understand the meaning of the word 'God', we immediately grasp that God exists. For the word 'God' means 'something such that nothing greater than it can be conceived'. Now anything that exists •in the intellect *and in reality* and is greater than anything that exists •in the intellect *alone*. Therefore, since the instant I understand the word 'God', God exists in my intellect, it follows that he also exists in reality.

Here is that argument set out formally:

(1) God is something such that nothing greater than it can be conceived. **(2)** Being such that nothing greater

can be conceived involves *existing*. **(3)** Therefore, God, in virtue of the very word 'God' or concept of God, contains existence; and so he can't not exist and can't even be conceived as not existing.

Now tell me, please: isn't this the very same argument as Descartes's? **(1a)** Aquinas defines God as 'something such that nothing greater than it can be conceived'. **(1d)** Descartes calls him 'a supremely perfect being'—which is of course something nothing greater than which can be conceived. **(2a)** Aquinas's next step is to say that 'being such that nothing greater can be conceived involves existing', for otherwise something greater *could* be conceived, namely a being conceived of as also including existence. And surely Descartes's next step is identical to this. **(2d)** 'God', he says, 'is a supremely perfect being; and as such he must include existence, because otherwise he wouldn't be supremely perfect'. **(3a)** Aquinas's conclusion is that 'since the instant I understand the word "God", God exists in my intellect, it follows that he also exists in reality'. In other words, because the concept or •essence of *a being such that nothing greater than it can be conceived* implies existence, it follows that this very being •exists. **(3d)** Descartes's conclusion is the same: 'From the very fact that I can't think of God except as existing, it follows that existence is inseparable from God and hence that he really exists.' But now let Aquinas reply both to himself and to Descartes:

Let it be granted that the word 'God' means to everyone what this argument says it means, namely 'something such that nothing greater than it can be thought of'. But it doesn't follow from this that everyone understands that 'God' signifies something that exists in the real world. All that follows is that everyone understands that 'God' signifies something that exists in the thought of the intellect. To show

that this being exists in the real world you need the premise that there really *is* something such that nothing greater than it can be thought of; and that premise won't be allowed by the very people you are trying to argue against, namely those who maintain that God doesn't exist.

Putting this, briefly, in my own way: Even if it is granted that a supremely perfect being brings existence with him because of his very title, it still doesn't follow that the existence in question is anything actual in the real world; all that follows is that the *concept* of existence is inseparably linked to the *concept* of a supreme being. So you can't infer that the existence of God is something *actual* (unless you help yourself to the premise that the supreme being actually exists, in which case he will *actually* contain all perfections, including the perfection of real existence; the only trouble being that *that* form of the 'argument' has the conclusion as one of its premises!).

Reply

(3) My opponent grants me a principle which, though it doesn't admit of any doubt, is usually not much attended to. It is the principle 'Everything that I am vividly and clearly aware of is something true'. This is so important for rescuing the whole of philosophy from darkness that Caterus, by supporting it with his authority, has greatly helped me in my enterprise.

But then he goes on to confront me with a good question: 'Are you vividly and clearly aware of the infinite?' I did try to meet this objection in advance, but I had better deal with it now more fully—it occurs so spontaneously to everyone! [In what is to come, 'grasped' translates *comprehendi*, which for Descartes implies *getting one's mind around* something; this being more than merely understanding it.] I start by saying that the

infinite, *qua* infinite, can't possibly be grasped. But it can be understood, because we can vividly and clearly understand x's being such that no limitations could be found in it, which amounts to understanding clearly that x is infinite.

I am here distinguishing the indefinite from the infinite. The term 'infinite' strictly applies only to something in which no limits of any kind could be found; and in this sense God alone is infinite. But 'indefinite' is the word I use for answering questions such as

- How large is imaginary space?
- How many numbers are there?
- How far can one go in dividing and subdividing any quantity of stuff?

Each of these is unlimited in *some* respect, so I call them 'indefinite'. I don't call them 'infinite' because they aren't unlimited in *every* respect.

Moreover, I distinguish the abstract concept of the infinite, i.e. *infinity*, from the thing that is infinite. Even if we understand infinity to be utterly positive, **our way of understanding infinity** is negative, because it depends on our *not* finding any limitation in the thing. Whereas **our way of understanding the infinite thing itself** is positive, but it isn't adequate, i.e. we don't have a complete grasp of everything in it that could be understood. Don't say 'If we don't understand all of it, we don't understand it at all'. When we look at the ocean, our vision doesn't take it *all* in, and we get no sense of its vastness, but we are still said to 'see the ocean'. And this very partial view of the ocean may be the best we can have. If we backed off enough to have almost the entire ocean in our field of vision all at once, we would be seeing it only in a confused manner. . . . But if we stare at some part of the ocean from close up, then our view can be vivid and clear. . . . Similarly, the human mind can't take in God in his entirety—I join

all the theologians in admitting this. Moreover, God can't be clearly known by those who look at him from a distance, as it were, and try to make their minds take in the whole of him all at once. That is the sense in which Aquinas meant his quoted statement that the knowledge of God is within us in a 'somewhat confused' manner. But if you try to attend to God's individual perfections, aiming not so much to •capture them as to •capitulate to them [the semi-pun exists in the Latin—*capi* and *capere*], using all the strength of your intellect to contemplate them, you'll certainly find that God provides much richer and more manageable material for vivid and clear knowledge than any created thing does.

Aquinas didn't deny this in the passage from which Caterus quoted, as is clear from his saying in his very next section that God's existence can be demonstrated. But when I say that we can have 'vivid and clear knowledge' of God, I mean this as a statement about knowledge of the finite kind that I have just described, knowledge that fits the capacity of our minds. That is the only meaning I needed for my arguments ·in the *Meditations*· to succeed, as you'll quickly see if you recall that I made the point about vivid and clear knowledge of God in only two places. **(a)** Once when the question had arisen as to whether our idea of God contains something real, or only the negation of the real (as the idea of cold contains no more than the negation of heat); and this is a point on which there can be no doubt, ·however high- or low-grade one's knowledge of God is·. **(b)** And again when I asserted that •existence belongs to the •concept of a supremely perfect being just as much as •having-three-sides belongs to the •concept of a triangle; and this point can also be understood without adequate knowledge of God.

Caterus here again compares one of my arguments with one of Aquinas's, virtually forcing me to explain how one argument can have more force than the other. I think I can

do this without stirring up trouble, because

- Aquinas didn't offer the argument as one of his, •'his' argument and mine have different conclusions, and
- my position on this matter doesn't differ from his in any respect.

He confronts the question 'Is the existence of God self-evident to us, i.e. obvious to every single one of us?' and he rightly answers No. The argument that he then puts forward, *as an objection to his own position*, can be put like this:

- Once we have understood the meaning of the word 'God', we understand it to mean something such that nothing greater than it can be conceived. •To exist in reality as well as in the intellect is greater than to exist in the intellect alone. Therefore, •once we have understood the meaning of the word 'God' we understand that God exists in reality as well as in the understanding.

Set out like this, the argument is plainly invalid. Understanding the meaning of the word 'God' enables us to understand *not* that •God exists in reality as well as in the understanding, but rather that that •the word **conveys that** God exists in reality as well as in the understanding. Just because a word *conveys* something, this doesn't show that the thing is true! But my argument was as follows:

- What we vividly and clearly understand to belong to the true and unchanging nature (i.e. the essence, the form) of a thing can truly be asserted of it. •Once we have investigated carefully enough what God is, we vividly and clearly understand that existence belongs to his true and unchanging nature. Therefore, •we can truly assert of God that he does exist.

Here at least the conclusion follows from the premises! And the first premise can't be denied, because it has already been conceded that whatever we vividly and clearly understand is

true. That leaves only the second premise, and I confess that there's a lot of difficulty about that. There are two sources of difficulty. (a) We have become so used to distinguishing existence from essence in the case of everything else that we fail to notice that the essence of God—unlike every other essence—has existence unbreakably attached to it. (b) We don't distinguish what belongs to the true and immutable essence of a thing from what is attributed to it merely on the basis of something made up by our mind. So even if we see clearly enough that existence belongs to the essence of God, we don't infer that God exists, because we don't know whether his essence is unchanging and true or merely invented by us.

(a) To remove the first part of the difficulty we must distinguish possible existence from necessary existence. It must be noted that the concept or idea of anything that we vividly and clearly understand contains possible existence, but it is only the idea of God that contains necessary existence. If you attend carefully to this difference between the idea of God and every other idea, you'll undoubtedly see that even though our understanding of other things always involves thinking of them as if they existed, it doesn't follow that they do exist but only that they could. Our understanding doesn't show us that actual existence must be conjoined with their other properties; but from our understanding that actual existence is conjoined, necessarily and always, with God's other attributes, it certainly does follow that God exists.

'Proving' the existence of a lion

Objection

(4) I am now rather tired from all this arguing, and hope you won't mind if I relax a little. The complex existing

lion includes both lion and existence, and it includes them essentially, for if you take away either element it won't be the same complex. But tell me now, hasn't God had a vivid and clear grasp of this complex from all eternity? And doesn't the idea of this composite . . . essentially involve both elements? In other words, **doesn't existence belong to the essence of the composite existing lion?** And yet God's having from eternity a clear knowledge of this complex doesn't force either element in the complex to exist, unless we assume that the composite itself actually exists (in which case it will contain all its essential perfections including actual existence). What goes for the lion goes for God! Although I have distinct knowledge of a supreme being, and although the supremely perfect being includes existence as an essential part of his concept, it doesn't follow that the existence in question is something actual, unless we assume that the supreme being exists (in which case it will include actual existence along with all its other perfections). So we must look elsewhere for a proof that the supremely perfect being exists.

Reply

(4) I can best answer this by going back to (b) the second part of the difficulty I was discussing at the end of my previous Reply. To overcome that difficulty we need a guide to whether a given essence or nature is true and unchanging or merely humanly invented, and I now provide one. Here is a fact about ideas that don't contain true and immutable natures but merely ones invented and assembled by the intellect: such ideas can always be split up by the same intellect—not by mere abstraction, but through a vivid and clear intellectual operation. So any idea that the intellect can't split up in this way clearly wasn't assembled by the intellect in the first place. For example, when I think of

- a winged horse,
- an actually existing lion, or
- a triangle inscribed in a square,

it is easy for me to understand that I can also think of

- a horse without wings,
- a lion that doesn't exist, or
- a triangle that isn't inscribed in a square,

and so on. So these things don't have true and unchanging natures. But if I think of a triangle or a square, then whatever I see to be contained in the idea of a triangle—for example that its three angles are equal to two right angles—I can truthfully assert of the triangle. (And the same holds for anything that I see to be contained in the idea of a square. I have dropped the lion and the horse because their natures aren't transparently clear to us.) I can understand what a triangle is while excluding from my thought its having three angles equal to two right angles; but I can't *deny* that this property applies to the triangle—I mean that I can't deny it by a vivid and clear intellectual operation, i.e. understanding what I mean by my denial. Moreover, if I consider *a triangle inscribed in a square*, not intending to attribute to the square properties of the triangle or vice versa, but only wanting to examine the properties arising out of the conjunction of the two, then the nature of •this composite will be just as true and unchangeable as the nature of •the triangle alone or of •the square alone. So it will be all right for me to affirm that the area of square is at least twice the area of the triangle inscribed in it, and to affirm other similar properties that belong to the nature of this composite figure.

Now consider the thought:

The idea of *a supremely perfect body* contains existence, because it is a greater perfection to exist both in reality and in the intellect than it is to exist in the intellect alone.

The most I can infer from this is that a supremely perfect body *could* exist. I can't infer that it actually does exist, •because I can see quite well that this idea has been assembled by my own intellect, which has linked together all bodily perfections; and •because existence doesn't arise out of the other bodily perfections—it can equally well be affirmed or denied of them. •Actually, that case for rejecting the inference to the actual existence of a supremely perfect body can be strengthened even further. •The only existence that is at issue here is *necessary existence*, which gives the thing that has it the power to create itself or keep itself in existence; and when I examine the idea of *a body*, I perceive that no body has such a power as that. From this I infer that necessary existence doesn't belong to •the nature of a body—however perfect it may be—any more than •being without lowlands belongs to •the nature of highlands, or •having angles greater than two right angles belongs to •the nature of a triangle! •And my choice of those examples is my hint that what I'm really saying is that necessary existence is *inconsistent with* the nature of a body.

Now let us turn from *body* and consider •the idea of *a thing*—whatever it turns out to be—that has *all the perfections that can exist together*. Is existence one of these perfections? We will be in some doubt about this at first, because our finite mind is accustomed to thinking of these perfections only separately, so that it may not immediately notice the necessity of their being joined together. But if we address ourselves attentively to the questions

Does existence belong to a supremely powerful being?
and •if it does, what sort of existence is it?

we'll be able to perceive vividly and clearly the following facts. **(1)** Possible existence, at the very least, belongs to such a being, just as it belongs to everything else of which we have a distinct idea, even if it's an idea put together through a

fiction of the intellect. **(2)** When we attend to the immense power of this ·supremely powerful· being, we shan't be able to think of its existence as possible without also recognizing that the being can exist by its own power; from which we'll infer that it really does exist and has existed from eternity (the natural light makes it obvious that what •can exist by its own power •always exists). **(3)** Necessary existence is contained in the idea of a supremely powerful being, not because of anything made up by the intellect but because it belongs to the true and immutable nature of such a being that it exists.

(4) This supremely powerful being can't not have all the other perfections that are contained in the idea of God, so that these perfections do exist in God and are joined together not by any construction of the intellect but by their very nature. All this is obvious if we give the matter our careful attention; and the only difference between it and what I have written previously is in the manner of explanation, which I have painstakingly altered so as to appeal to a variety of different minds. I freely admit that this is a kind of argument that may easily be regarded as fallacious by people who don't keep in mind all the elements making up the proof. For that reason I hesitated to use it, fearing that it might induce those who didn't grasp it to distrust the rest of my reasoning. But there are only two ways of proving the existence of God, •one through his effects, •the other through his nature or essence; and having put my best efforts into expounding •the first proof in the Third Meditation, I thought I should include •the second proof later on.

Objection

(5) With regard to the essence of the soul, and its distinctness from the body, I have only a little to say. (Our highly gifted author has, I admit, so exhausted me already that I can

hardly go on.) He seems to infer that the soul is distinct from the body from the premise that the two can be distinctly conceived apart from each other. On this point I'll get him to fight it out with Scotus, who says that for one object to be clearly conceived as distinct and apart from another, all that's needed is what he calls a •formal and representative distinctness between them (which he says is intermediate between their being •really distinct and their being •only conceptually distinct). The distinctness of God's justice from his mercy is of this kind. For, says Scotus, 'the intrinsic concepts of the two are distinct, independently of what any mind *does*, so that one is not the same as the other. But it would be a bad argument to say: 'Justice and mercy can be conceived apart from one another, therefore they can exist apart'.

But I've gone far beyond the normal limits of a letter. These, gentlemen, are the matters that I thought needed to be raised on this subject, and I leave it to you to judge which are the best points. If you take my side, then Descartes's friendship with you will lead him not to think too badly of me for having contradicted him on a few points. But if you take his side, I'll give up, and admit defeat. In that case you won't pass my comments on to Descartes, and ·I confess that· I'll be only too happy to avoid a second defeat.

Reply

(5) As for the '*formal* distinctness' that Caterus introduces on the authority of Scotus, let me say briefly that it doesn't differ from *modal* distinctness; and it applies only to incomplete entities, which I have precisely distinguished from complete entities. All that is needed for this 'formal' or modal way of distinguishing x from y is that x be conceived distinctly and separately from y by an abstraction of the intellect, an abstraction that conceives x inadequately. A •'formal' or

modal distinction doesn't have to involve such a distinct and separate conception of x and of y that we can understand each as an entity in its own right, different from everything else; for that is the hall-mark of •real distinctness. For example, the distinctness of a given body's •motion from its •shape is 'formal': I can thoroughly understand the motion apart from the shape, and the shape apart from the motion, and I can understand either of them in abstraction from the body. But I can't have a *complete* understanding of the motion apart from the thing that moves, or of the shape apart from the thing that has it; and I can't make up a story about motion in something that can't have a shape, or about shape in something that can't move. In the same way, I can't understand justice apart from the person who is just, or mercy apart from the person who is merciful; and I can't entertain as a possibility a just person who is incapable of

mercy. In contrast with that, when I •think of a body as merely something having extension, shape and motion, and •deny that it has anything belonging •also• to the nature of mind, this involves me in a complete understanding of what a body is, i.e. understanding a body to be a complete thing [the 'i.e.' clause added in the French version]. Conversely, I understand the mind to be a complete thing that doubts, understands, wills, and so on, while denying that it has any of the attributes contained in the idea of a body. This would be quite impossible if the mind weren't really distinct from the body. •That is: it is only because •a body is one thing and a mind is another (i.e. they are *really* distinct, distinct as *things*) that •my thought of a body in all its completeness can exclude any attributes of mind and my thought of a mind in all its completeness can exclude any attributes of body....

Second Objections (mainly Mersenne) and Descartes's Replies

Objection

You have tackled so successfully the task of defending ·God·, the author of all things, against a new race of giants, and of demonstrating his existence, that decent people can hope that anyone who carefully reads your *Meditations* will acknowledge the existence of an eternal power on whom every single thing depends. Just because of that, we wanted to call to your attention to certain passages and ask you to clarify them, so that if possible there will be nothing left in your work that isn't clearly demonstrated. You have trained your mind by continual meditations for several years, so that what seems dubious and *very* obscure to others is quite clear to you; indeed, you may have a clear mental *intuition* of these matters and perceive them as the primary and principal objects of the natural light, ·i.e. as so utterly obvious that they don't need support or explanation·. We are simply pointing out the issues on which it seems worthwhile to lay on you the task of providing clearer and fuller explanations and demonstrations. . . . When you've provided them, hardly anyone will deny that your arguments do indeed have the force of demonstrations. ·We have seven main things to say·.

(1) You'll remember that you didn't •actually reject the images of all bodies as delusive; all you did was vigorously to adopt the •fiction that you were doing this, so as to reach the conclusion that you were exclusively a thinking thing. We remind you of this lest you should think you could go on to draw the conclusion that you really *are* in fact nothing more than a mind, or thought, or a thinking thing. This concerns only the first two Meditations, in which you clearly show at least that you, a thinking thing, certainly exist. But let us pause a little here. At this point ·in the *Meditations*·

you recognize that you are a thinking thing, but you don't know what this thinking thing is. What if it turned out to be a body that *produces* what we call 'thought' through its various motions and interactions? You think you have ruled out *all* bodies, but you may be wrong about that because you didn't exclude yourself, and *you* may be a body. How do you demonstrate that a body can't think? or that thought doesn't consist in bodily motions? It may be that the whole system of your body (which you think you have excluded) or else some of its parts—the parts of the brain, for example—work together to produce the motions that we call 'thoughts'. You say 'I am a thinking thing'; but how do you know that you aren't a bodily motion or a moving body?

Reply

Gentlemen, I read with pleasure your comments on my little book on first philosophy. They show your good will towards me, and your piety towards God and zeal to further his glory. And I rejoice in the fact that you have thought my arguments worth examining *and* that you think I can reply well enough to all your criticisms. **(1)** You warn me to remember that I didn't actually reject the images of all bodies as delusive, but merely adopted the fiction that I was doing this, so as to reach the conclusion that I am a thinking thing; and you said that I shouldn't think it followed from this that I am in fact nothing more than a mind. But I showed that I was well aware of this in the second Meditation, where I wrote:

But these things that I am supposing to be nothing because they are unknown to me—might they not in fact be identical with the *I* of which I am aware? I don't know; and just now I shan't discuss the matter. I wanted to warn the reader openly that at that stage I was

not yet •asking whether the mind is distinct from the body, but was merely •examining those of its properties that I can have certain and evident knowledge about. And since I did become aware of many such properties, I can't without qualification admit your claim that I didn't yet 'know what a thinking thing is'. I admit that I didn't yet know whether this thinking thing is identical with the body or with something else; but I don't concede that I had *no* knowledge of it. Has anyone ever known anything so fully that he knew he had nothing more to learn about it? The more attributes of a thing we perceive, the better we are said to know it; for example, we are said to know our close friends better than casual acquaintances. I think I have demonstrated that the mind, considered apart from attributes that are customarily thought of as the body's, is better known (in the above sense of 'know') than is the body when considered apart from the mind. That is all I wanted to establish in the passage in question.

But I see what you are suggesting. You think that •my readers will be surprised that in the course of the first two Meditations (when there are only six altogether!) the only achieved result is the one I have just mentioned right here; and that •this will lead them to think that the work as a whole is extremely thin and not worth publishing. Well, I was *not* short of material; and no-one who intelligently reads the rest of what I have written will have reason to suspect that I was! •There is a good reason why you don't find a host of topics dealt with in the first two Meditations: it seemed reasonable to deal separately, in separate Meditations, with topics requiring individual attention and needing to be considered on their own.

Now, the best way to get secure knowledge of reality is first to get used to doubting everything, especially things concerning bodies. I had seen many ancient writings by the

platonists and the sceptics on this subject, and didn't fancy re-heating that old cabbage, but I *had to* devote a whole Meditation to it. And I would like my readers not just to whip through it briskly but to spend several **months** (or at least **weeks**) considering the topics dealt with, before proceeding to the other Meditations. This would certainly enable them to get much more benefit from the rest.

Next point: Until now all our ideas relating to the mind have been very confused, and mixed up with the ideas of things that can be perceived by the senses. This is the first and chief reason why we can't get a clear enough understanding of the things that are said about the soul and God. So I thought it would be useful if I were to explain how the mind's properties or qualities are to be distinguished from the body's. 'To understand metaphysical matters, the mind must be pulled away from the senses'—there's nothing new about *that*; plenty of people had said it; but I don't know of anyone who had shown *how* this could be done. My second Meditation presents the right way—I think the *only* way—of achieving this •withdrawal from the senses. But it isn't a method that you can master by going through it carefully just once. You need protracted and repeated study if you are to •eradicate a lifetime's habit of confusing things related to the intellect with corporeal things, and •replace it with the opposite habit of distinguishing the two; it will take you at least a few **days** to acquire this. That seems to me the best justification for spending the whole of the second Meditation on this one topic.

You go on to ask how I demonstrate that a body can't think. Well, excuse me, but •at the second-Meditation stage where we now are I haven't said anything that would raise this question. I don't deal with it until the sixth Meditation, where I write: 'The fact that I can vividly and clearly think of one thing apart from another assures me that the two things

are distinct' and so on. And a little later on I said:

Although there's a body that is very closely joined to me, I have a vivid and clear idea of myself as something that thinks and isn't extended, and one of body as something that is extended and doesn't think. So it is certain that I am (that is, my mind is) really distinct from my body and can exist without it.

We can easily add to that: 'Anything that can think is a mind, or is called "a mind"; but since mind and body are distinct things, no body is a mind, so no body can think.'

I don't see what you can deny in that. Do you claim that clearly understanding one thing apart from another isn't enough to show that they are really distinct? In that case, provide a more reliable criterion for distinctness of things—and I'm confident that you can't. What will you say? That two things are really distinct if one can exist apart from the other? But then how do you know that one thing can exist apart from another? You have to be able to know this ·first· if it's to serve as the criterion for real distinctness. You may say that you get this knowledge from the senses, because you can see, or touch etc. one of the things when the other isn't present. But the senses are less trustworthy than the intellect: there are many ways for it to happen that a single thing appears in different forms or in different places or in different ways, and so be thought to be two things. And anyway, if you remember my discussion of the wax at the end of the second Meditation you'll realize that strictly speaking bodies aren't perceived by •the senses at all, but only by •the intellect; so all there is to

- having a sensory perception of one thing apart from another

is merely

- having an idea of one thing and *understanding* that it isn't an idea of something else.

The only way you can come to understand *this* is by ·intellectually· perceiving one thing apart from another, ·i.e. conceiving one apart from the other·; and that isn't a certain test unless ·in that act of conceiving· the idea of each thing is vivid and clear. ·But that's just what *I* said!· Thus, if that proposed criterion for a real distinction is to be reliable, it must come down to the one that I put forward.

To anyone who claims not to have distinct ideas of mind and body, I can only say: 'Attend carefully to the contents of the second Meditation.' If anyone thinks—as some well may—that parts of the brain co-operate to produce thoughts, ·I say that· there are no positive grounds for this view, which has arisen from two facts ·about the experience of those who hold it·: •they have never had the experience of being without a body, and •they have frequently been obstructed by the body in their ·mental· operations. Similarly, if someone had his legs permanently shackled from infancy, he would think the shackles were part of his body and that he needed them for walking.

The cause of our idea of God

Objection

(2) From the idea of a supreme being that you find in your mind, and that you say couldn't possibly have been produced by you, you *bravely* infer that there must exist a supreme being who alone can be the origin of this idea. However, we can find simply within ourselves a sufficient basis for our ability to form the idea in question, even if the supreme being didn't exist or we didn't know that he exists and never thought about his existing. For surely ·each of us can think as follows·:

I can see that just because I *think* I have some degree of perfection, and hence that others also have a similar

degree of perfection. This gives me the basis for thinking of any number of degrees, and piling up higher and higher degrees of perfection up to infinity. Even if there were only one degree of heat or light, I could always have the thought of further degrees, continuing the process of addition up to infinity. Using the same line of thought, surely I can take a given degree of *being*—the one I perceive myself to have—and add to that any degree you like, thus constructing the idea of *perfect being* from all the degrees that can be added on.

But (you say) an effect can't have a degree of perfection or reality that wasn't previously had by the cause. Yet we see that flies and other animals, and also plants, are produced from sun and rain and earth, which don't have life. Now life (which animals etc. have) is nobler than any merely bodily level of existence (which is all that the sun etc. have); so it *does* happen that an effect gets from its cause some reality which nevertheless isn't present in the cause. Anyway, the idea of a perfect being is merely a thought-entity, which is not nobler than your own mind which is thinking—because no state of a substance, or event in the life of a substance, is nobler than the substance itself. And how do you know that the idea would have come to you if instead of growing up among educated people you had spent your entire life alone in a desert? You derived this idea from thoughts you had in earlier meditations, from books, or from discussion with friends and so on, and not simply from your mind *or from an existing supreme being*. So you need to provide a clearer proof that you couldn't have this idea if a supreme being didn't exist; and when you have provided that, we'll all surrender! But there's good evidence that the idea *does* come from previously held notions, for example the fact that the natives of Canada—the Hurons and

other primitive peoples—have no awareness of any idea of this sort, presumably because their intellectual past doesn't provide the materials for such an idea. Now, *you* could have formed your idea of a supreme being on the basis of your work in physics; the idea you could get from *that* would refer only to this corporeal world, which includes every kind of perfection that you can conceive. In that case, the most you could infer is the existence of an utterly perfect *corporeal* being—unless you add something further that lifts us up to an incorporeal or spiritual plane. We may add that you can form the idea of an angel by the same method as the idea of a supremely perfect being; but this idea isn't produced in you by an angel, although the angel is more perfect than you. The fact is that you *don't* have the idea of God, just as you don't have the idea of an infinite number or an infinite line (and even if you can have the idea, the number is still impossible). Furthermore, the idea of a *single simple perfection that includes all others* arises merely from an operation of the reasoning intellect. . . .

Reply

(2) When you say that we can find simply within ourselves a sufficient basis for forming the idea of God, you don't depart at all from my own view. I said explicitly at the end of the third Meditation that 'this idea of God is innate in me'—in other words, it comes to me from no other source than myself. I concede also that we could form this idea 'even if we didn't know that the supreme being exists', but *not* that we could form it 'even if the supreme being didn't exist'. On the contrary, I pointed out that the whole thrust of my argument lies in the fact that it is only because I was created by God that I have the power of forming this idea.

Your remarks about flies, plants etc. don't show that an effect can have a degree of perfection that wasn't previously

present in the cause. Animals don't have reason, so it's certain that any perfection they have is also possessed by inanimate bodies. [This •reflects Descartes's view that an animal is merely a complex machine, and that its *life* is just the machine's special kind of complexity of structure and operation. We immediately see, though, that he doesn't •rely on this view here.] And if animals *do* have some perfection not shared by inanimate things, they must certainly have received it from elsewhere, in which case the sun, the rain and the earth are not adequate causes of animals. If you •don't find any cause of a fly's existence that has all the degrees of perfection possessed by the fly, and if also you •aren't sure whether the causes of the fly's existence include anything that you haven't yet found, *still* it would be quite irrational to be led by this to doubt •the thesis about perfections of effects and of causes—something that the very light of nature makes obvious, as I'll explain at length below.

Anyway, your point about flies is a point about material things; so it couldn't occur to those who •follow my Meditations and, wanting to philosophize in an orderly manner, •direct their thought away from the things that are perceivable by the senses.

As for your calling our idea of God a 'thought-entity', this hasn't any force against me. If you take a 'thought-entity' to be something that doesn't exist, then it isn't true that our idea of God is a thought-entity. Or it's true only in the sense in which *every* operation of the intellect is a 'thought-entity', i.e. an entity that originates in thought; and indeed this entire universe can be said to be an entity originating in God's thought, i.e. an entity created by a single act of the divine mind. Moreover I have already emphasized several times that I'm dealing merely with the *representative* perfection or reality of an idea; and this, just as much as the representative intricacy in the idea of a very ingenious

machine, requires a cause that contains in reality whatever is contained merely representatively in the idea.

I don't see how I can make it any clearer that this idea couldn't be present to my mind unless a supreme being existed. I can only say that it depends on you: if you attend carefully to what I have written you should be able to free yourself from preconceived opinions that are eclipsing your natural light, and to accustom yourself to believing in the basic principles [*primis notionibus*, literally = 'in the primary notions'], which are as evident and true as anything can be, in preference to •opinions that are obscure and false, though fixed in the mind by long habit.

(a) *There is nothing in an effect that wasn't previously present in the cause, either straightforwardly or in a higher form* [see note on page 5]—that basic principle is as clear as any that we have. It is just the same as the plain man's **(b)** *Nothing comes from nothing*; for if we allow something in the effect that wasn't previously present in the cause, we'll also have to admit that this something was produced by nothing. •That is, if we deny **(a)** we'll be denying **(b)**. So you might say that our acceptance of **(b)** compels us to accept **(a)**. But the real, basic order is the reverse of that: **(a)** is what compels us to accept **(b)**. •The reason why *nothing* can't be the cause of a thing is simply that such a cause wouldn't contain the same features as are found in the effect. *All the reality or perfection that is present in an idea merely •representatively must—either straightforwardly or in a higher form—be •intrinsically present in its cause*; that is a basic principle too. It's the only basis for everything we have ever believed about the existence of things located outside our mind. The only thing that could have led us to suspect that such things exist was the simple fact that ideas of them reach our mind by means of the senses; •and our beliefs about •what things outside the mind are like must have been

inferred somehow from •what our ideas of them are like•.

If you give the matter your careful attention, and spend time meditating with me, you'll clearly see that we have an idea of a supremely powerful and perfect being, and that the reality represented in this idea isn't one that we ourselves have, whether straightforwardly or in a higher form. I can't force this truth on someone who is bored and inattentive; to get it you have to exercise your own powers of thought.

From all this it follows *very* clearly that God exists. But for the benefit of those in whom the natural light is so dim that they don't see that it is a basic principle that every perfection that is •representatively present in an idea must •really—i.e. intrinsically•—exist in some cause of the idea, I provided an even more straightforward demonstration of God's existence, based on the fact that the mind that *has* this idea of God can't have caused itself to exist. I don't see what more is required to get you to 'surrender' •as you promised•!

There's no force in your suggestion that my idea of God might have come not from God but from thoughts I had in earlier meditations, from books, or from discussion with friends and so on. Suppose I *did* get the idea from someone else, then let me ask him where *he* got it from—'from yourself or from some other source?'—and then the argument carries on as before, applied this time to him rather than to me. The conclusion will always be the same, namely that the *original* source of the idea is God.

As for your suggestion that my idea of God could have come from my work in physics: that strikes me as being as implausible as saying 'We can't *hear* anything, but we can learn about sounds by seeing colours'! Indeed, it would be easier to come up with a story about how colours resemble sounds than one about how bodies resemble God! As for your request that I 'add something further that lifts us up to

an incorporeal or spiritual plane', the best I can do is to refer you back to my second Meditation, hoping that you'll see that it is at least good for something. I don't think I have ever put more effort into anything than I did into the long account that give there—one designed precisely for this purpose •of 'lifting us up to a spiritual plane'•. If that failed to achieve its purpose, it would be futile for me to try to achieve it here in a sentence or two.

It doesn't matter that in the second Meditation I dealt only with the *human* mind; for I don't mind telling you that our idea of •the divine intellect—to take just one of God's attributes—differs from our idea of •our own intellect only in the way that the idea of an infinite number differs from the idea of the number 2 or 4. And the same holds for each individual attribute of God of which we recognize some trace in ourselves.

But there is something else: we understand God as having an absolute immensity = simplicity = unity, •a single great attribute• which includes all his other attributes. There are no analogues of *that* in us or anything else; •it is God's alone; and so any evidence of• this uniquely divine attribute is, as I once said, 'like the mark of the craftsman stamped on his work'. We have certain attributes which (because of our limited intellects) we attribute to God separately, one by one, because that is how we perceive them in ourselves; but our grasp of God's simplicity = unity enables us to see that no one of those attributes belongs unambiguously to us and to God. [Descartes probably doesn't mean that (say) the truths 'A man has intellect' and 'God has intellect' mean different things by 'intellect' or by 'has'; he seems to mean just that those two sentences express truths that are radically different in kind.] Moreover, there are many indefinite [see page 12] particulars of which we have an idea, such as unlimited (or infinite) knowledge and power, and infinite number and length and so on; and we recognize that

some of these (such as knowledge and power) are contained straightforwardly in the idea of God, whereas others (such as number and length) are contained in that idea only in a higher form and not straightforwardly. We surely wouldn't see things in that way if our idea of God were merely a figment of our minds.

If the idea *were* a mere figment, it wouldn't always be conceived by everyone in the same manner. It is very striking that metaphysicians unanimously agree in their descriptions of the attributes of God (at least the ones that can be known by unaided human reason). You'll find that philosophers [here = 'philosophers and scientists'] disagree much more about the nature of physical or sense-perceptible things. . . .

If you'll just attend to the nature of •*supremely perfect being*, you can't possibly go wrong when trying to conceive correctly the idea of God. Some people mix other attributes in with •that one, which leads them into contradictions: they construct a chimerical idea of God, and then go on to say—reasonably enough!—that the God represented by *that* idea doesn't exist. So when you talk of an 'utterly perfect corporeal being', if you mean *absolutely* perfect, so that you are talking about a being in which all perfections are found, you are uttering a contradiction. The very nature of a body implies many imperfections, such as its being divisible into parts—with *this* part being a different thing from *that* one; for it is self-evident that being undivided is a greater perfection than being divided. And if you mean 'as perfect as a body can be', you aren't contradicting yourself but you aren't talking about God.

As for your further point that, although we are less perfect than angels, our idea of an angel doesn't have to be produced in us by an angel: I entirely agree. As I said in the third Meditation, that idea can be assembled out of our ideas of God and of man. So that point does no harm to my position.

Some people deny that they have an idea of God, but in this denial they are substituting some idol or the like. [This is a pun. Descartes's point, as you'll see in a moment, concerns the replacing of *the idea of God* by some kind of *mental image of God*. But his choice of words hints at a background thought of replacing *God* as an object of worship by a *physical image* such as the golden calf of Moses' Israelites.] So, although they reject the name, they concede the reality—or at any rate they aren't saying anything that denies the reality. When they say 'I don't have an idea of God', all they mean is that their imaginations don't contain an *image* of God; their having a genuine *idea* of God is a topic on which they are silent. I don't regard the idea of God as the same kind of thing as the images of material things that we depict in our imagination; rather, it is what we perceive with our conceiving or judging or reasoning intellect. [Descartes is echoing an old tradition, which divided intellectual activities into three kinds, exemplified by these: •conceiving *man* (or having the thought of what it is to be a man), •judging that *all men are mortal*, and •reasoning that *Because all men are mortal it follows that Socrates is mortal*.] Now, in my thought—in my intellect—I can come upon some perfection or other that is above me. For example, I take in that when I count I can't reach a largest number, and so I recognize that the process of counting involves something that exceeds my powers. What follows from this? Not that an infinite number exists (but not that it is a contradictory notion, as you say!). Rather, it follows that

this power I have of conceiving that there is a thinkable number which is larger than any number that I can ever think of

is something that I have received not from myself but from some other more perfect being.

. . . .Now, what is this more-perfect-than-myself being? Is it a really existing number, the infinite number that I couldn't get to the end of? Or is it something else? To answer

this, we have to take into account not merely •the power to give me the idea in question but also •all the other attributes that could be possessed by a being that gave me that idea. And when we do take that into account, we shall find that it can only be God. Finally, when they say that God ‘cannot be thought of’, they mean that we can’t have a thought in which we adequately grasp God; they aren’t denying that we can have the sort of thought we *do* have—it’s inadequate but is quite enough to give us the knowledge that God exists. . . .

Two challenges concerning basic certainty

Objection

(3) You aren’t yet certain that God exists, and you say that you can’t be certain of anything—can’t know anything ‘vividly and clearly’—without first getting clear and certain knowledge of God’s existence. It follows that you don’t yet vividly and clearly know *that you are a thinking thing*. At the point ·in your argument· where you conclude that you clearly know what you are, ·namely a thinking thing·, you haven’t yet proved that God exists; but you admit that having clear knowledge ·of anything· requires having clear knowledge of an existing God.

Furthermore, ·this admission of yours seems to be obviously wrong·. An atheist is vividly and clearly aware that the three angles of a triangle are equal to two right angles; but he is so far from supposing the existence of God that he completely denies it. His view goes like this:

If God existed, there *would* be a supreme being and a supreme good; which means that the infinite would exist. But in each category of perfection •the infinite excludes •everything else whatsoever—every ·other· kind of being and goodness, as well as every kind of

non-being and evil. But there are many kinds of being and goodness, and many kinds of non-being and evil; ·so the notion of something that excludes them *all* is incoherent, which implies that God couldn’t possibly exist·.

We think you should deal with this objection, so that irreligious people are left with nowhere to hide

Reply

(3) When I said that we can’t know anything for certain until we are aware that God exists, I said *explicitly* that I was speaking only of knowledge of conclusions that we remember without having in mind the reasoning that led us to them. Now, the dialecticians [= ‘specialists in applied logic’] don’t usually call awareness of first principles ‘knowledge’. And when we take in •that we are thinking things, •this is a basic principle that isn’t arrived at through any syllogism. When someone says ‘I am thinking, therefore I am, or I exist’, he isn’t inferring •existence from •thought by means of a syllogism; rather, a simple intuition of his mind shows it to him as self-evident. If he had been inferring it through a syllogism, ·it would have been this:

Everything that thinks is, or exists;
I think; therefore
I am, or exist.

And for this· he would need already to have known the first premise ‘Everything that thinks is, or exists’; but what actually happens is that he learns it by experiencing in his own case that it isn’t possible to think without existing. Constructing general propositions on the basis of our knowledge of particular ones is something that we just naturally do.

[In the next paragraph Descartes distinguishes *cognitio* from *scientia*. The right English word for *scientia* is ‘knowledge’, with this understood in a full-strength way; often enough *cognitio* can be translated the same

way, but not of course where they are being contrasted. No English word works exactly like *cognitio* (or its French equivalent *connaissance*). A *cognitio* might be called ‘an item of knowledge’ (we can’t say ‘a knowledge’), but when *cognitio* is being contrasted with *scientia*, ‘item of knowledge’ is too strong. This note is meant to explain the use of the clumsy phrase ‘cognitive possession’—something one *has* that is in the general area of knowledge/information/belief/etc.]

I don’t deny that an atheist can be ‘clearly aware that the three angles of a triangle are equal to two right angles’. But this cognitive possession of his isn’t true knowledge, I maintain, because no cognitive possession that can be rendered doubtful seems fit to be called ‘knowledge’; and this applies to our atheist, because—as I have shown well enough—he can’t be certain that he isn’t being deceived about things that seem to him very evident. This ground for doubt may not occur to him, but it can crop up if he thinks about it or someone else raises the point. So he will never be free of this doubt—and thus won’t have true *knowledge*—until he accepts that God exists.

The atheist may think he has demonstrations to prove that there is no God, but that doesn’t matter. His proofs will be quite unsound; we’ll always be able to show him flaws in them; and when this happens he’ll have to abandon his view.

It won’t be hard for us to do this if his only ‘demonstration’ is the one that you offer him, with the premise that ‘in each category of perfection the infinite excludes everything else whatsoever’. This is vulnerable at three points. (a) We can ask him: ‘How do you know that this exclusion of all other entities belongs to the nature of the infinite?’ He will have no reasonable reply to make to this. He can’t try to answer in terms of *the nature of the infinite*, because he regards the infinite as a nonentity, and therefore as not having a nature. So he will have to answer in terms of the

meaning of the word ‘infinite’, a meaning that he has learned from others. And if he does in that way argue from the meaning of ‘infinite’, he is lost, because the term ‘infinite’ is *not* generally taken to mean something that excludes the existence of finite things. (b) We can ask him: ‘What would the infinite power of this imaginary infinite amount to, if it could never create anything?’ And he will be stuck for an answer. (c) And we can point out that his premise is *false*: Our awareness of having some power of thought in ourselves makes it easy for us to conceive that some other being may also have a power of thought, and a power greater than ours; and we can carry this thought right up to conceiving of this other being’s power as infinite, without that making us fear that this would involve some lessening of our own power. The same holds good for everything that we ascribe to God, including the power to create other things; so we can think of God as in every way infinite while still leaving room for the existence of created things. (In all this we must bear in mind that any power of ours is subject to the will of God.)

Can God lie?

Objection

(4) You say that God cannot lie or deceive. Yet some schoolmen say he can. . . . They think that in the strict sense God *does* lie, i.e. communicate to men things that are opposed to his intentions and decrees. For example, he unconditionally said to the people of Nineveh, through the prophet, ‘Forty more days and Nineveh will be destroyed’. And he said many other things that certainly didn’t turn out as he had said, because he didn’t *want* his words to correspond to his intentions or decrees. Now if God hardened Pharaoh’s heart and blinded his eyes, and if he sent upon his prophets the

spirit of untruthfulness, how do you conclude that we can't be deceived by him? Can't God treat men as a doctor treats the sick, or a father his children? In both these cases there is often deception, though it is always employed wisely and beneficially. ·Indeed, doesn't God *have* to do this?· If God showed us the pure truth, what eye, what mental vision, could endure it?

In any case, to explain your being deceived about matters that you think you vividly and clearly know it wouldn't be necessary to suppose that *God* is a deceiver, because the cause of the deception could lie in *you*, without your having the least knowledge of it. Why couldn't it be in your nature to be very often and perhaps always deceived? How can you establish with certainty that you •can't be, or even that you •aren't, deceived in matters that you think you know vividly and clearly? Haven't we often seen people turn out to be wrong in matters where they thought their knowledge was as bright as sunlight? Your principle of vivid and clear knowledge thus requires a vivid and clear explanation! One that will rule out the possibility that anyone of sound mind might be deceived on matters that he thinks he knows vividly and clearly. Otherwise we can't see that any degree of certainty can possibly be within your reach or that of mankind in general.

Reply

(4) In saying that God doesn't lie and isn't a deceiver, I think I have all metaphysicians and theologians—past and future—on my side. What you say against this is on a par with •attacking the thesis that God is not given to anger or other emotions by •offering as counter-examples passages from Scripture where human feelings are attributed to God. ·I'm surprised at your trying this·. *Everyone* knows that there are two distinct ways of speaking about God. One of

them

- is generally employed in the Bible; it fits how the plain man feels about things, and does contain some truth, though only truth relative to human beings.

For example, one might say 'God was angry' meaning that God's conduct might strike the average not very thoughtful human being as an expression of anger. And the other way of speaking

- comes closer to expressing the naked truth—truth that isn't relative to human beings.

The second of these ways of speaking is the one we should all use when philosophizing. In my *Meditations* I had a special obligation to speak in that way, because in that context I wasn't entitled to bring in anything that was 'relative to human beings': I was supposing that no other human beings were yet known to me, and was considering myself only as a mind rather than a mind and body. This shows clearly that what I said in the *Meditations* ·about God's not being a deceiver· was concerned not with the verbal expression of lies but rather with. . . .the internal malice that deception involves.

And anyway the words of the prophet that you cite—'Forty more days and Nineveh will be destroyed'—weren't even a verbal •lie, but simply a •threat, the outcome of which depended on a certain condition. And when we are told that God 'hardened the heart of Pharaoh', or some such, this shouldn't be taken to mean that he •positively brought this about; rather, he contributed •negatively to the hardening of Pharaoh's heart by *not* conferring on him the grace that would have brought about a change of heart in him. Still, I have no quarrel with those who say that God can ·and does·, through the mouths of the prophets, produce verbal untruths; these untruths are free of any malicious intent to deceive—like the lies of physicians who deceive their patients

in order to cure them.

Nevertheless—and this is a more important point—sometimes we do seem to be really deceived by a natural instinct that God gave us. Someone suffering from dropsy has a positive impulse to drink, caused by the nature God has given to the body; the nature was designed to *preserve* the body, yet on this occasion the drink will *harm* it. But in my sixth Meditation I have explained why this is not inconsistent with the goodness or truthfulness of God.

But this kind of explanation wouldn't work with our •clearest and most careful judgments; for if any of *them* were false, we would have no way of correcting them—no •clearer judgments, and no other natural faculty that could do the job. I deal with this by flatly denying that any such judgments could be false. Here is the reasoning that leads me to this conclusion: The fact that we have ideas of truth and falsehood shows that

(a) we have a *real* faculty for recognizing truth and distinguishing it from falsehood.

(I emphasize 'real' because it's important that this faculty is a positive property that we have, not a mere negation.) Now, when I proved God's existence I proved that

(b) anything *real* in us must have been given to us by God.

And since he is the supreme being,

(c) God must be supremely good and true,

from which it follows that

(d) the notion of his creating anything that positively tends towards falsehood is self-contradictory.

From (a) and (b) it follows that

(e) our faculty for distinguishing truth from falsehood was given to us by God.

And from (d) and (e) it follows that this faculty of ours must tend towards the truth, at least when we use it correctly; for

if it didn't, then God (who gave it to us) *would* be a deceiver. By using it 'correctly' I mean 'assenting only to things that we vividly and clearly perceive'; we can't even *invent a story* about any other correct use of this faculty. So you see that once we are aware that God exists, we have to tell ourselves that he is a deceiver if we want to cast doubt on what we vividly and clearly perceive. And we *can't* tell ourselves this; so it follows that whatever we vividly and clearly perceive must be completely accepted as true and certain.

As for doubts that I advanced in the first Meditation, I thought I had rather precisely removed them in the later Meditations; but I see that you are still stuck fast in them, so I shall now expound *again* the basis on which it seems to me that all human certainty can be founded. First of all, as soon as we think we correctly perceive something, we're spontaneously convinced that it is true. Now if this conviction is so firm that it is impossible for us ever to have any reason for doubting what we are convinced of, then there are no further questions for us to ask: we have everything that we could reasonably want. What is it to us that someone may make out that the perception whose truth we are so firmly convinced of may appear false to God or an angel, i.e. that it is, absolutely speaking, false? What do we care about this 'absolute falsity', since we don't believe in it or have even the smallest suspicion of it? For the sort of case that is in question here is one involving a conviction so firm that it is quite incapable of being destroyed; and such a conviction is clearly the same as the most perfect certainty.

But *can* we have any such certainty, any such firm and unshakable conviction?

Well, we clearly *don't* have this kind of certainty when our perception is even slightly obscure or confused; for *any* obscurity is quite sufficient to cause doubts in us. And we don't have such certainty about anything—however clear

·and distinct·—that is based on our use of our senses. For we have often observed that the senses are subject to error, as when someone with dropsy feels thirsty and when someone with jaundice sees snow as yellow—which he does just as •vividly and clearly as we do when we see it as white. Accordingly, if there is any certainty to be had—and it can't be from anything •obscure or anything depending on the •senses—the only remaining alternative is that it occurs in the •brightly lit perceptions of the •intellect, and nowhere else. [Here and below, 'bright' etc. translates a reference to something's being *clare* perceived by the intellect. See note on page 9.]

Some of these perceptions are so transparently open to our gaze and so simple that we can't ever think of them without believing them to be true. Regarding these:

•While I think I exist,

•What has been done can't be undone,

and their like, we manifestly have this kind of certainty. For we can't doubt them unless we think of them; and we can't think of them without believing they are true (as I have just said); from which it follows that we can't doubt them without at the same time believing them to be true; which is to say that we can never doubt them.

You say that we have often seen people 'turn out to be wrong in matters where they thought their knowledge was as bright as sunlight', but that is no good as an objection to what I am saying. We have *not* often seen—indeed, we have *never* seen and *couldn't possibly* see—this happening to those who have sought brightness in their perceptions solely in the intellect. It happens only to those who have tried to get it from the senses or from some false preconceived opinion.

It is also no objection for someone to make out that such as these might appear false to God or to an angel. For the *evidentness* of our perceptions won't let us listen to anyone

who makes up this kind of story.

There are other things that •our intellect perceives very clearly while we are attending to the reasons on which our knowledge of them depends—things that •we therefore can't doubt while we are attending etc. But we may come to forget those reasons while still holding onto the conclusions that we derived from them; and *then* the question arises:

When we simply recollect that P was previously inferred from quite evident principles, ·but have forgotten how the inference went or what the principles were·, do we still have the same firm and unshakable conviction concerning P ·that we had while we were attending to the inference and its premises·?

My answer is '·Yes for some people, No for others·'. The certainty in question is indeed possessed by people whose knowledge of God enables them to grasp that the intellectual faculty that God gave them tends towards the truth; but it isn't possessed by anyone else. I explained this so clearly at the end of the fifth Meditation that I don't think I need to say any more about it here.

Objection

(5) If the will •never strays or sins as long as it is guided by the mind's vivid and clear knowledge, and if it •exposes itself to danger by following a conception of the intellect that is not at all vivid or clear, then note what follows from this. A Turk or other unbeliever doesn't sin in refusing to accept the Christian religion, and *would* sin if he *did* accept it, because he doesn't have vivid and clear knowledge of its truth. Indeed, if your rule is true, then the will is going to be allowed to accept almost *nothing*, because there's almost nothing that we know with the vividness and clarity you demand for the kind of certainty that is beyond any doubt. So you see how, in your desire to champion the truth, you may have proved

too much and wrecked rather than building.

Reply

(5) You deny that the will exposes itself to danger when it follows a conception of the intellect that isn't at all vivid or clear. That surprises me. What can give the will certainty if it follows a perception that isn't clear? Every philosopher and theologian—indeed everyone who *thinks*—agrees that the more clearly we understand something before assenting to it, the smaller is our risk of going wrong; and that those who do go astray are the ones who make a judgment while they are ignorant of the grounds on which it is based. Why have I brought *ignorance* into the story? Because whenever we call a conception 'obscure' or 'confused', that's because it contains some element of which we are ignorant. [As a follow-up to the long note on page 9, note that 'obscure and confused' (in that order) are a perfect contrast to 'vivid and clear' (in that order).]

So your objection concerning the faith that should be embraced has no more force against me than against anyone who has ever developed the power of human reason—really it has no force against *anyone*. Our faith is said to concern obscure matters, but there's nothing obscure about the reasons for embracing the faith; on the contrary they are brighter than any natural light. We must distinguish •the subject-matter, i.e. *what* we assent to, from •the formal reason that moves the will to give its assent: all that we have to be shinningly clear about is the reason. No-one has ever denied that the subject-matter—the *content* of our faith—can be obscure, indeed can be obscurity itself! In my judgment that

Obscurity must be removed from our conceptions, so that we can assent to them without any danger of going wrong,

I'm forming a vivid judgment *about this obscurity*. There are

two kinds of brightness or transparency that can move our will to assent to something: one comes from •the natural light, the other •from divine grace. Although our faith is commonly said to concern obscure matters, this refers only to the content or subject-matter of our faith; it doesn't imply that there's any obscurity in the formal reason for our assenting to matters of faith. Quite the contrary: this formal reason consists in a certain inner light that God supernaturally beams into us, making us confident that what we are asked to believe has been revealed by God himself. And it's quite impossible that he should lie; so this is •more certain than any natural light, and is often even •more evident because of the light of grace.

When Turks and other infidels refuse to embrace the Christian religion, their sinfulness doesn't come from their unwillingness to accept obscure doctrines (and they certainly *are* obscure!), but from •their resisting the impulses of divine grace within them, or from •their having by their other sins made themselves unworthy of grace in the first place. Consider an infidel who is untouched by supernatural grace and knows nothing of the things that we Christians think God has revealed to us: if he is induced by fallacious arguments to accept them—obscure as they are to him—I'm willing to say boldly that this doesn't make him a true believer; it only means that he is committing a sin by not using his reason correctly. I don't think that any orthodox theologian would have disagreed with me on this. No-one who reads what I write can think that I didn't recognize this supernatural light, because in the fourth Meditation, where I was looking into the cause of falsity, I said explicitly that the supernatural light produces in our innermost thought a disposition to will, without lessening our freedom.

But please remember that in the context of questions about how one can legitimately use the will, I distinguished

very carefully the •conduct of life from the •contemplation of the truth. When it's a matter of getting on with our lives, I am very far from thinking that we should assent only to what is clearly perceived. In fact I don't think that we should always wait even for probability; sometimes we have to choose one alternatives out of many, knowing nothing about them; and once we have made our choice, so long as no reasons can be brought against it, we must stick to it as firmly as if it had been chosen for brilliantly clear reasons. I explained this in *Discourse on the Method* [early in Part 3]. But when our concern is solely with the contemplation of the truth, surely no-one has ever denied that we should withhold our assent from anything that we don't perceive clearly enough. Now in the *Meditations* my sole topic was the contemplation of the truth. You can see this in my way of going about the whole thing, and also in my explicit declaration, at the end of the first Meditation, that I couldn't possibly go too far in my distrustful attitude, since *what was at stake was not action but only the acquisition of knowledge*.

Two more objections

Objection

(6) In your reply to the First Objections [page 13], you seem to go astray in one of your inferences, namely this:

•What we vividly and clearly understand to belong to the true and unchanging nature of a thing can truly be asserted of it. •Once we have investigated carefully enough what God is, we vividly and clearly understand that existence belongs to his nature. Therefore,...

And the conclusion you reached was

Therefore,•we can truly assert of God that he does exist,

but it *ought* to have been:

Therefore, •we can truly assert that existence belongs to the nature of God.

It doesn't follow from this that God in fact exists, but merely that if his nature is possible, or non-contradictory, he must exist. In other words, the nature or essence of God can't be conceived apart from existence; hence, if the essence exists then God exists. This comes down to an argument that others have put like this:

- If there is no contradiction in God's existing, it is certain that he exists;
- There is no contradiction in his existing;
- Therefore. . . etc.·

The second premise brings trouble: opponents of the argument either •claim to doubt the truth of this premise or •deny it outright. Moreover, the clause in your argument 'Once we have investigated carefully enough what God is. . . ' presupposes as true something that not everyone accepts; indeed you admit that you apprehend infinite being only in an inadequate way; and obviously you would have to say the same regarding every single attribute of God. Whatever is in God is utterly infinite; so who can for a moment apprehend any aspect of God except in an extremely 'inadequate' manner? So how can you have investigated vividly and clearly enough what God is?

Reply

(6) In criticising the conclusion of a syllogism of mine, *you* made a mistake in the argument. To get the conclusion you want, you should have stated the first premise as follows:

•What we clearly understand to belong to the nature of something can be truly asserted to belong to its nature;

and *that* premise is nothing but a useless tautology. But my

first premise was this:

- What we clearly understand to belong to the nature of something can truly be affirmed of that thing.

Thus if *being an animal* belongs to the nature of *man*, it can be affirmed that man is an animal; and if *having three angles equal to two right angles* belongs to the nature of a *triangle*, it can be affirmed that a triangle has three angles equal to two right angles; and if *existence* belongs to the nature of *God*, it can be affirmed that God exists, and so on. Now the second premise of my argument was:

- It belongs to the nature of God that he exists.

And from these two premises the evident conclusion to be drawn is the one I drew:

- Therefore •it can truly be affirmed of God that he exists.

The correct conclusion is *not*, as you maintain, ‘Therefore we can truly assert that existence belongs to the nature of God’. As a basis for the objection that you go on to make, you should have replaced the first premise by

- What we clearly understand to belong to the nature of a thing cannot for that reason be affirmed of that thing *unless its nature is possible, or non-contradictory*.

Notice how weak this qualification is. •If ‘possible’ is taken to mean what everyone commonly *does* mean by it—namely ‘whatever doesn’t conflict with our human concepts’—then *obviously* the nature of God as I have described it is possible, because I supposed it to contain only things that according to our vivid and clear perceptions *must* belong to it; so it can’t *conflict* with our concepts! Alternatively, you may be inventing some other kind of possibility that relates to •the object itself •rather than to •our concepts•; but this can never be known by the human intellect unless it matches the first sort of possibility, •in which case God’s nature has this invented kind of possibility as well as the normal

kind. If you try to avoid this result by supposing that the in-the-object kind of possibility that you have invented can part company with the normal relative-to-our-concepts kind•, that won’t so much support a denial of the possibility of God’s nature and existence as serve to undermine every other item of human knowledge. As far as our concepts are concerned, there is no impossibility in the nature of God; on the contrary, all the attributes that we include in the concept of God’s nature are so interconnected that it seems to us to be self-contradictory that any one of them should *not* belong to God. So if we deny that the nature of God is possible—•meaning that it is impossible according to your in-the-object kind of possibility•—we may just as well deny that the angles of a triangle are equal to two right angles, or that he who is actually thinking exists; and if we do this, we’ll be even better placed to deny that anything we acquire through the senses is true. The upshot will be that all human knowledge will be destroyed, though for no good reason.

As for the argument that you compare with mine—namely

- (1) If there is no contradiction in God’s existing, it is certain that he exists;
 - (2) There is no contradiction in his existing;
- Therefore . . . etc.

—although this is materially true, it is formally invalid. For (1) has to mean:

- (1*) If there is no contradiction in the concept of **the cause on which the possibility of God’s existence depends**, it is certain that he exists,

whereas (2) says that

- (2*) There is no contradiction in the concept of **the nature and existence of God**.

. . . .These are very different. For it may be, with respect to a given thing, that we understand there to be nothing in the thing itself that makes it impossible for it to **exist**, we

also understand, from the causal point of view, that there is something that prevents its being **brought into existence**.

·As for your next point·: even if we conceive of God only in an inadequate—or, if you like, ‘utterly inadequate’—way, this doesn’t rule out its being *certain* that his nature is possible or not self-contradictory. And it doesn’t prevent us from examining his nature with sufficient clarity (i.e. enough clarity to know that •his nature is possible and that •necessary existence belongs to this divine nature). Self-contradictoriness or impossibility resides solely in our thought, when we wrongly join together mutually inconsistent ideas; it can’t occur in anything outside the intellect. If something exists outside the intellect, then *obviously* it is possible and not self-contradictory. Self-contradictoriness in our concepts arises merely from their obscurity and confusion; it can’t occur in vivid and clear concepts. Thus, in the case of the few attributes of God that we do perceive, it is enough that we understand them vividly and clearly, even if not adequately. And when we take in that our admittedly inadequate concept of God contains *necessary existence*, we are entitled to say both that •we have examined his nature with sufficient clarity, and that •his nature is not self-contradictory.

Objection

(7) You don’t say a word about the immortality of the human mind. You should have taken special care to prove and demonstrate this, to counter the people (who aren’t themselves worthy of immortality!) who utterly deny and dislike it. You can’t infer that the mind cannot collapse or die from the premise that it is distinct from the body. (Not that you have given a good proof of that premise, as we pointed out in (1) above; ·but let that pass·.) What if its nature gave it the same life-span as the body, God having endowed it with just

enough strength and existence to ensure that it came to an end with the death of the body?

These, Sir, are the points we wanted you to clarify, so as to enable everyone to derive the utmost benefit from reading your *Meditations*, which are argued with great subtlety and are also, in our opinion, true. For just that reason it would be worthwhile if you, after resolving our difficulties, were to set out the entire argument in geometrical fashion, starting from a set of definitions, postulates and axioms. You are highly experienced in employing this method, and it would enable you to fill the mind of each reader so that he could see everything at a single glance, as it were, and be permeated with awareness of God.

Reply

(7) I explained in the Synopsis of my *Meditations* why I wrote nothing about the immortality of the soul. And I *have* adequately proved that the soul is distinct from every body. But there remains your point that the soul’s distinctness from the body doesn’t imply that it is immortal, because God may have given it a nature such that it goes out of existence at just the moment when the body dies. I admit that I can’t refute this. I don’t undertake to use the power of *human* reason to settle matters that depend on the free will of *God*. Our natural knowledge tells us that the mind is distinct from the body, and that it is a substance. But. . . the final death of a human body depends solely on things’ coming apart or changing their shape; and we have no arguments, and no experience, suggesting that the death or annihilation of a substance like the mind results from such a trivial cause as a change in shape; for shape is simply a mode [= ‘non-essential property’], and what’s more it is a mode not of the mind but of the body, which is a different thing from the mind. Indeed, we don’t have arguments or experience suggesting that *any*

substance can go out of existence. And this entitles us to conclude that the mind, so far as it can be known by natural philosophy, is immortal.

But if it's a question about the absolute power of God—'Might God have decreed that human souls are to cease to exist precisely when the bodies he has joined to them are destroyed?'—then only God can answer that. And since he has revealed to us that this *won't* occur, there is no room left for even the slightest room for doubt on this point.

It remains for me to thank you for the helpful and frank way in which you have brought to my notice not only points that have struck you, but also ones that might be raised by atheists and other hostile critics. In the objections that you raise I can't see anything that I haven't already answered, or ruled out in advance, in the *Meditations*. As to the points about the flies generated by the sun, the natives of Canada, the inhabitants of Nineveh, the Turks and so on, the objections you raise can't occur to anyone who •follows the road I have pointed out and •lays aside for a time whatever he has acquired from the senses, so as to attend to dictates of pure and uncorrupted reason. Hence I thought that I had already adequately ruled out such objections in advance. But despite this, I think that these objections of yours will be a big help to me in my enterprise. For I expect that hardly any of my readers will be prepared to give such careful attention to everything I have written that they'll remember all the contents by the time they reach the end. Those who don't remember everything may easily fall prey to certain doubts; and they will subsequently see that 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.

Methods of presenting results

I now turn to your suggestion that I set out my arguments in geometrical fashion, so that readers could perceive them 'at a single glance, as it were'. 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 distinguish two things that are involved in the geometrical manner of writing—the •order of demonstration and the •method of presentation. [Descartes speaks of the order and method of *demonstratio*—the same word for each. But that word sometimes did mean 'presentation', and it seems clear that that's what it means when Descartes writes about 'method'.]

The **order** consists simply in this: what is put forward at any stage in the demonstration must be known without *any* help from anything that comes later. I tried to follow this order very precisely in my *Meditations*, which is why I dealt with the mind's distinctness from the body only at the end, in the sixth Meditation, rather than in the second. It is also the reason why I deliberately omitted many things that would have required me to explain an even larger number of things.

The **method** of presentation divides into two varieties: the first proceeds by •analysis and the second by •synthesis. [The next two paragraphs use 'analysis' and 'synthesis' in senses that were current in Descartes's time but have since died. They don't stand for *methods of discovery*, but for *methods of presenting something that has been discovered*. A procedure that is 'analytic' in Descartes's sense starts with *what the investigator started with*, and then follows his route from that first discovery through to others; whereas a 'synthetic' procedure starts with *the most basic truths* about the matter in hand, and then deductively arrives at others on the basis of them.]

Analysis shows how the thing was methodically arrived at. . . ., so that if the reader is willing to follow it and attend sufficiently to everything in it, he will make the thing his own

and will understand it as completely as if he had discovered it for himself. That is an obvious advantage of the analytic procedure, but it also has a drawback, namely that it has no way of compelling belief in an argumentative or inattentive reader; for if he fails to attend to the smallest points, even, he won't see the necessity of the conclusion. And there are many such small points—important truths that are often scarcely mentioned in analytic presentations because they are transparently clear to anyone who *does* attend to them.

Synthesis, on the other hand, moves in the opposite direction. . . . It *demonstrates* [= 'rigorously proves'] the conclusion clearly, using a long series of definitions, postulates, axioms, theorems and problems, so that if anyone denies a conclusion reached at any step in the argument, it can be immediately shown to be contained in what has gone before, so that even the stubbornest or most quarrelsome reader is compelled to give his assent. Still, this method is less satisfying than the method of analysis, and it doesn't engage the minds of those who are eager to learn, since it doesn't show how the thing in question was discovered.

The ancient geometers usually followed the synthetic procedure in their writings—think for example of the axioms and postulates that kick off Euclid's *Elements*. This wasn't because they were ignorant of analysis, I think, but because they valued it so highly that they kept it to themselves like a sacred mystery.

Analysis is the true method—the best method—of instruction, and it's the one I followed in my *Meditations*. As for synthesis, which is of course what you're asking me to use here, it can be very suitable to use in geometry as a follow-up to analysis, but it can't so conveniently be applied to these metaphysical subjects. •On the one hand: the basic principles from which geometrical demonstrations start are readily accepted by anyone, because they agree with what

our senses tell us. Hence there is no difficulty there, except in the proper deduction of the consequences; and even less attentive people can do *that*, provided they remember what has gone before; and that isn't much of a proviso, because the analytic procedure breaks propositions down into their smallest elements, to enable them to be easily recited so that the student recalls them whether he wants to or not.

•On the other hand, nothing in metaphysics causes as much effort as getting vivid and clear perceptions of the basic principles. In themselves they are as evident as, or even more evident than, the basic principles that geometers study; but they conflict with many sense-based opinions that have become ingrained in us down through the years, so that they—the basic principles of metaphysics—won't be fully known except by people who really concentrate and meditate and withdraw their minds from corporeal things as far as they can. Indeed, if the basic principles of metaphysics were put forward out of any context, they could easily be denied by those who like to contradict just for the sake of it.

That's why I wrote 'meditations' rather than 'disputations' (a favourite with philosophers) or 'theorems and problems' (which the geometers like). I wanted to make it clear that I would have no dealings with anyone who wasn't willing to join me in meditating and attending closely. Someone who is all set to attack the truth will, for just that reason, be less suited to perceive it: when confronted with convincing arguments that support the truth, he won't attend to them properly because he'll be busy looking for counter-arguments.

At this point you may want to object:

When we *know* that a given proposition is true, we certainly shouldn't look for arguments against it; but while we are still in doubt about its truth, it is right for us evaluate all the arguments for and against, so as to find out which are the stronger. It isn't reasonable

for you •to expect your arguments to be accepted as correct before they have been looked at hard, and •to prohibit consideration of any counter-arguments.

That would be a valid objection if the arguments that I ask my readers to attend to without fighting back were of a kind that might divert the reader's attention from other arguments that had at least some chance of containing more truth than mine do. But ·that isn't how things stand·. My exposition includes the highest level of doubt about everything: I am strongly recommending that each item should be scrutinized with the utmost care, so that absolutely nothing is accepted until it has been so vividly and clearly perceived that we can't help assenting to it. The only opinions I want to steer my readers' minds away from are ones that they have never properly examined—ones they have acquired not through firm reasoning but only from the senses. I don't think that anyone who focuses his attention on my propositions can possibly think he is running a greater risk of error than he would have if he attended instead to other propositions that are somehow opposed to mine and that reveal only darkness (i.e. the preconceived opinions of the senses).

So I am entitled to require careful attention from my readers. Of the possible ways of presenting my results, I chose the one—·namely •analysis·—that would do the best job of getting readers to attend. I'm sure they will get more benefit from this than they will realize. When the •synthetic method of presentation is used, many people think that they have learned more than they really have. I would add that I think I can fairly give the back of my hand to the worthless verdict given on my work by those who stick to their preconceived opinions and refuse to meditate with me. But even those who do concentrate, and earnestly pursue the truth, will find it hard to take in my *Meditations* •as a whole, while also taking in the •individual parts that make

it up. But both the •overall and the •detailed scrutiny are needed if the reader is to get the full benefit from my work. So I'll tack on a short exposition in the synthetic style, which I hope will help my readers a little. But I ask them to bear in mind that I'm not aiming to include in this as much material as I put in the *Meditations*. If I *did*, I would have to go on much longer than I did there. Also, even the items that I do include won't be explained precisely—because I want it to be brief, and also because I don't want anyone to think that what follows is adequate on its own. Anyone who thinks this may give less careful attention to the *Meditations* themselves; yet I'm convinced that the *Meditations* will yield by far the greater benefit.

A 'geometrical' argument for God's existence and the soul's distinctness from the body

Definitions:

D1. **Thought.** I use this term to cover 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 aware*' so as to exclude the consequences of thoughts; my voluntarily snapping my fingers originates in a thought, but isn't itself a thought.

D2. **Idea.** I use this term to refer to the form of any given thought, immediate perception of which makes me aware of the thought. When I express something in words and understand what I am saying, there must be within me an *idea* of what is signified by the words in question. So 'ideas' aren't restricted to images depicted in the imagination. Indeed, in so far as these images are in the corporeal imagination [= 'the imagination that is a part of the body'], i.e. are depicted in some

part of the brain, I don't call them 'ideas' at all. I call them 'ideas' only in so far as they make a difference to the mind itself when it is directed towards that part of the brain.

D3. **Representative reality** of an idea. By this I mean the being of the thing that the idea represents, in so far as this exists in the idea. In the same way we can talk of 'representative perfection', 'representative intricacy' and so on. For whatever we perceive as being in •the objects of our ideas exists representatively in •the ideas themselves.

D4. Whatever exists in an object of one of our ideas in a way that exactly matches our perception of it is said to exist **intrinsically** in the object. And an object is said to contain something **in a higher form** [Latin *eminenter*, see note on page 5 above] when, although it doesn't exactly match our perception of it, its greatness is such that it can fill the role of something that *does* match our perception.

D5. **Substance**. When we perceive—have a real idea of—some property, quality or attribute, any thing that this perceived item is immediately *in* (as in a subject), any thing by means of which this item exists, is a *substance*. Our only idea of substance itself, strictly understood, is the idea of
 that in which x exists, either straightforwardly or in a
 higher form,

where x is anything that we perceive, anything that has representative being in one of our ideas. We are entitled to be sure that any such item that we perceive is in *something*, in some thing, in some subject, because we know by the natural light that *nothing* can't have a real attribute.

D6. The substance in which thought immediately resides is called **mind**. I use that term rather than 'soul' because the word 'soul' is ambiguous and is often applied to something corporeal.

D7. The substance that is the immediate subject of spatial

extendedness, and of the qualities that presuppose extendedness (shape, position, movement, and so on), is called **body**. Whether what we call 'mind' and 'body' are one substance or two is a question to be dealt with later on.

D8. The substance that we understand as supremely perfect, and in which we conceive *nothing* that implies any defect or limitation in that perfection, is called **God**.

D9. When we say that something is **contained in the nature or concept** of a thing, that's the same as saying that it is true of—or can be asserted of—that thing.

D10. Two substances are said to be **really distinct** when each can exist apart from the other.

[A 'synthetic' presentation might at this point set down some **postulates**—unargued propositions with something like the status of axioms. Descartes is about to present seven *postulata*, which is Latin for 'postulates', but he means it in a different sense—in fact its dominant sense—namely as meaning 'requests'. In his demonstration of Proposition 4, he treats something in Request 2 as a premise in the argument, as though it were a 'postulate' in our sense. That's one of several bits of evidence that Descartes is not very serious about this supposedly 'geometrical' presentation.]

Requests to the reader

1. Please realize how feeble the reasons are that have led you to trust your senses until now, and how uncertain the judgments are that you have built up on the basis of the senses. Reflect long and often on this point, until at last you get the habit of no longer placing too much trust in the senses. You will need to do this, I think, if you are to perceive the certainty of metaphysical things—i.e. of metaphysical truths.

2. Please reflect on your own mind and all its attributes. You'll find that you can't be in doubt about these, even if you are supposing that everything you have ever acquired through your senses is false. Continue with this reflection until you get the habit of •perceiving the mind clearly and of •believing that it can be known more easily than any corporeal thing.

3. Ponder on the self-evident propositions that you'll find within yourself—ones like 'The same thing can't both exist and not exist at the same time', and 'Nothingness can't be the efficient cause of anything', and so on. This will have you exercising the intellectual vision that nature gave you, in the pure form that it takes on when freed from the senses; for sensory appearances generally interfere with it and greatly darken it. This will enable you to see easily the truth of the axioms that are to follow.

4. Examine the ideas of the natures that contain a combination of many attributes, such as the nature of a triangle or a square or any other figure, as well as the nature of mind, the nature of body, and above all the nature of God = the supremely perfect being. Keep in mind that whatever you perceive to be contained in these natures can be truly affirmed of them. For example, the nature of a triangle includes its having three angles that are equal to two right angles; the nature of a body or an extended thing contains divisibility (for we can't conceive of any extended thing that is so small that we can't divide it, at least in our thought). That is why it can be truly asserted that the three angles of every triangle are equal to two right angles, and that every body is divisible.

5. Please put a lot of time and effort into contemplating the nature of the supremely perfect being. Above all, 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 tell you that God exists; and this will come to be just as self-evident to you as the fact that 2 is even and 3 is odd. There are truths that some people find self-evident while others come to understand them only through argument.

6. Ponder all the examples that I went through in my *Meditations*, both of vivid and clear perception and of obscure and confused perception. That will enable you to distinguish •for yourself• what is clearly known from what is obscure. It is easier to learn this through examples than to learn it by rules, and I think that in the *Meditations* I explained, or at least touched on, all the relevant examples.

7. When you notice that you have never detected any falsity in your clear perceptions, and have never—except by accident—found any truth in what is obscure to you, please conclude that it is quite irrational to cast doubt on the vivid and clear perceptions of the pure intellect merely because of •preconceived opinions based on the senses or •mere hypotheses that are partly leaps in the dark. That will get you to readily accept the following axioms as true and unquestionable. Some of these axioms could have been better explained, and indeed should have been introduced as theorems rather than as axioms, if I had wanted to be more precise.

Axioms or common notions

A1. Nothing exists concerning which one can't ask 'Because of what cause does it exist?' This question can even be asked about 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 *doesn't* need any cause in order to exist.

A2. The present doesn't depend on the immediate past, and therefore a thing's *staying in existence* needs a cause just as much as does its *starting to exist* in the first place.

A3. No thing, and no actual perfection in any thing, can possibly be caused by nothing, which is a non-existing thing.

A4. Whatever reality or perfection there is in a thing is present, either straightforwardly or in a higher form, in its first and adequate cause.

A5. It follows from axiom 4 that the representative reality of our ideas needs a cause that contains this reality, not merely representatively but intrinsically—whether straightforwardly or in a higher form. If you aren't sure that this is true, bear in mind that we *must* accept this axiom because our knowledge of all things—sense-perceptible and otherwise—depends on it. How do we know that the sky exists? Because we see it? But this 'seeing' doesn't affect the mind except by giving it an idea—I mean a sheerly mental idea, not an image depicted in the corporeal imagination. Well, why can we use this idea as a basis for judging that the sky exists? It is because every idea must have a really existing cause of its representative reality; and in this case we judge that the cause is the sky itself. And we make similar judgments in other cases.

A6. There are various degrees of reality or being: a substance has more reality than a quality; an infinite substance has more reality than a finite one. So there is more representative reality in the idea of a substance than in the idea of a quality, and more representative reality in the idea of an infinite substance than in the idea of a finite substance.

A7. The will of a thinking thing is drawn voluntarily and freely (for this is the essence of will), but still inevitably, towards a clearly known good. Hence, if it knows of perfections that it lacks, it will proceed at once to give itself these perfections if it can.

A8. Whatever can bring about a greater or more difficult thing can also bring about a lesser thing.

A9. It is a greater thing to create or preserve a substance than to create or preserve the attributes or properties of that substance. But it isn't a greater thing to create something than to preserve it, as I have already said in Axiom 2.

A10. Existence is contained in the idea or concept of each thing, because we can't 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 1: The existence of God can be known just by considering his nature.

Demonstration: Saying that something is contained in the nature or concept of a thing is the same as saying that it is true of that thing (D9). And necessary existence is contained in the concept of God (A10). Therefore it can be truly affirmed of God that necessary existence belongs to him, or that he exists.

This is the syllogism that I employed [on page 31 above] in replying to your Objection (6). Its conclusion can be seen to be self-evident by anyone who is free of preconceived opinions, as I said in my Request 5 above. But since it isn't easy to arrive at such clarity of mind, I'll now try to establish the same result in two other ways.

Proposition 2: The existence of God can be demonstrated a posteriori from the mere fact that we have within us an idea of him.

Demonstration: The representative reality of any of our ideas has to have a cause that contains the very same reality, not merely representatively but 'intrinsically', whether straightforwardly or in a higher form (A5). But we have an idea of God

(D2 and D7), and its representative reality isn't contained in *us* either straightforwardly or in a higher form (A6); and indeed it can't be contained in any being except God himself (D8). Therefore this idea of God, which is in us, must have God as its cause; and hence God exists (A3).

Proposition 3: God's existence can also be demonstrated from the fact that we, who have the idea of him, exist.

Demonstration: If I had the power to keep myself in existence, I would have even more power to give myself the perfections that I lack (A8 and A9); for these perfections are merely attributes of a substance, whereas I am a substance. But if I had the power to give myself those perfections, I would already have them (A7); so I *don't* have the power to keep myself in existence.

Now, I couldn't exist unless I was kept in existence either by myself (if I have that power) or by some other being who has it (A1 and A2). But I *do* exist, and (as has just been proved) I *don't* have the power to keep myself in existence. Therefore I am preserved by some other being.

Moreover, he who keeps me in existence has within himself, either straightforwardly or in a higher form, everything that is in me (A4). But I have within me the perception of many of the perfections I lack, as well as an idea of God (D2 and D8). Therefore he who keeps me in existence has a perception of those same perfections.

Finally, this being can't have a perception of any perfections that he lacks, i.e. that he doesn't have within himself either straightforwardly or in a higher form (A7). For since he has the power to keep me in existence (as I have already said), he has even more power to give himself those perfections if he lacked them (A8 and A9). And he has a perception of all the perfections that I know I lack and that I conceive to be capable of existing only in God, as has just been proved.

Therefore he has those perfections within himself, either straightforwardly or in a higher form; and hence he is God.

Corollary: God created the heavens and the earth and everything in them. And he can bring about everything that 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 I proved that God exists from the premise that there must exist someone who possesses, either straightforwardly or in a higher form, all the perfections of which we have any idea. Well, we have the idea of a power so great that he who has it—and he alone—created the heavens and the earth and can produce everything that I understand to be possible. Therefore in proving God's existence I have also proved these other propositions about him.

[To call *x* and *y* 'really distinct' is to say that they are distinct *things*; *realiter* = 'really' comes from *res* = 'thing'.]

Proposition 4: Mind and body are really distinct.

Demonstration: God can bring about everything that we clearly perceive, in a way exactly corresponding to our perception of it (Corollary to P4). We clearly perceive the mind, i.e. a thinking substance, apart from the body, i.e. apart from an extended substance (Postulate [or Request!] 2). And conversely no-one denies that we can clearly perceive the body apart from the mind. 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 substance *x* can exist apart from substance *y*, then *x* is really distinct from *y* (D10) But the mind and the body are substances (D5–7) which can exist apart from each other (as has just been proved). Therefore mind and body are really distinct.

Why do I speak of mind and body being separated *through the power of God*? Not because any such extraordinary power is needed to separate them, but because the preceding arguments have dealt solely with God, so there was nothing

else I could use to make the separation. ·Bringing in God doesn't weaken the result: our knowledge that x is really distinct from y isn't affected by the nature of the power that separates them.

Third Objections (Hobbes), and Descartes's Replies

First Meditation: 'On what can be called into doubt'

Objection

(1) The things that are said in this Meditation make it clear enough that there is no criterion by which we can distinguish our dreams from the waking state and from truthful sensations. So the images we have when we're awake and having sensations aren't properties that inhere in external objects, and don't prove that any such external object exists at all. Therefore, if we follow our senses and leave our reason out of it, we'll be justified in doubting whether anything exists. Thus, I acknowledge the correctness of this Meditation. But since Plato and other ancient philosophers discussed this uncertainty relating to the objects of the senses, and since the difficulty of distinguishing the waking state from dreams is common knowledge, I am sorry that Descartes, who is an outstanding original thinker, should be publishing this old stuff.

Reply

(1) •The arguments for doubting that Hobbes here accepts as valid are ones that I was presenting as merely plausible. I wasn't hawking them as novelties! ·In offering them, I had three purposes in mind·. (a) I wanted to prepare my readers' minds for the study of things related to the intellect, and help them to distinguish those from corporeal things; and •such arguments seem to be wholly necessary for this purpose. (b) I introduced the arguments partly so that I could reply to them in the subsequent Meditations. (c) And I wanted to show the firmness of the truths that I advance later on, in the light of the fact that they can't be shaken by these metaphysical doubts. I wasn't looking for praise when I presented these

arguments; but I don't think I could 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.

Second Meditation, 'The nature of the human mind'

Objection

(2) [In this next paragraph, 'I think' translates *cogito*, and 'I am thinking' translates *sum cogitans*. The latter is deliberately clumsy Latin, which Hobbes uses in order to get *sum* = 'I am' = 'I exist' into the picture.] 'I am a thinking thing.' Right! For from the fact that I think, or have an image (whether I'm awake or dreaming), it follows that I am thinking; for 'I think' and 'I am thinking' mean the same thing. And from the fact that *I am thinking* it follows that *I am*, because something that thinks isn't *nothing*. But when Descartes adds 'that is, I am a mind or intelligence or intellect or reason', a doubt arises.

'I am thinking, therefore I am thought.'

'I am using my intellect, hence I am intellect.'

Neither of those seems to be valid. Compare

'I am walking, therefore I am a walk.'

Descartes is identifying •the thing that understands with •thinking, which is something that the thing *does*. Or at least he is identifying •the thing that understands with •intellect, which is a power ·or faculty· that the thing *has*. Yet all philosophers distinguish a subject from its acts and faculties, i.e. distinguish a subject from its properties and its essences: an entity is one thing, its essence is another; ·the entity *has* the essence·. Hence it may be that the thing that thinks—the subject that *has* mind, reason or intellect—is

something corporeal. Descartes assumes that it isn't, but he doesn't prove this. Yet the conclusion that he seems to want to establish is based on this inference.

In the same passage we find the following:

I know that I exist, and am now asking: what is this *I* that I know? If the *I* is understood strictly, as I have been doing, it can't depend on things of whose existence I am still unaware.

It is quite certain that the knowledge of the proposition 'I exist' depends on the proposition 'I think', as Descartes himself has explained to us. But where do we get our knowledge of the proposition 'I think' from? It can only be from our immediate awareness of some *thinking*, together with our inability to conceive an act without its subject—of jumping without a jumper, of knowing without a knower, or of thinking without a thinker.

It seems to follow from this that a thinking thing is something corporeal. For it seems that the subject of any act—the thing that performs the act—can be understood only in terms of a body or in terms of matter. Descartes himself shows this later on, with his example of the wax—which despite its changes in colour, hardness, shape and other acts is still understood to be the same thing, i.e. the same matter that is the subject of all these changes. Also, I don't arrive at 'I think' through another thought. Someone can think that he *did* think (for that is simply an act of remembering), but it is impossible to think that one thinks, or to know that one knows. For then an infinite chain of questions would arise: 'How do you know that you know that you know. . . ?' Knowing the proposition 'I exist' thus depends on knowing the proposition 'I think'; and knowing 'I think' depends on our inability to separate thought from the matter that is thinking. So the right conclusion seems to be that the thinking thing is material rather than immaterial.

Reply

(2) When I said 'that is, I am a mind, or intelligence, or intellect or reason', I meant those terms to stand not for mere faculties or abilities, but for things that *have* the faculty of thought. Nearly everyone understands the first two terms in that way, and the third and fourth are also often understood like that. I said this so explicitly and so often that it seems to me there was no room for doubt. There is no comparison here between 'a walk' and 'thought'. 'A walk' is usually taken to refer simply to the act of walking, whereas 'thought' is sometimes taken to refer to the act, sometimes to the faculty or ability to perform the act, and sometimes to the thing that has the faculty and performs the act. [Latin doesn't distinguish 'walk' from 'a walk', or 'thought' from 'a thought'. This version follows Cottingham in selecting 'a walk' and 'thought', these being what best fit the context.]

I don't say that the thing that understands is the same as the act of understanding. And I don't identify the thing that understands with the intellect, if 'the intellect' is taken to refer to a faculty or capacity; they are identical only if 'the intellect' is taken to refer to the thing that understands. I admit that I referred to this thing or substance using absolutely abstract words, because I wanted to strip away from it everything that didn't belong to it; whereas Hobbes uses absolutely concrete words—'subject', 'matter' and 'body'—to refer to this thinking thing, so as to make it something that couldn't be separated from the body.

I have no fear that anyone will think Hobbes's procedure—running together many different things—is better suited to the discovery of the truth than my procedure of distinguishing each individual item as far as I can. But let's stop discussing words, and come to the subject-matter.

'It may be', Hobbes says, 'that the thing that thinks is something corporeal. Descartes assumes that it isn't, but he

doesn't prove this.' But I *didn't* assume it, nor did I 'base' my argument on it. I left it quite undecided until the sixth Meditation, where it is proved.

Hobbes is quite right in saying that 'we can't conceive an act without its subject'. We can't conceive of thought without a thinking thing, because something that thinks isn't nothing. But he then goes on to say, quite without any reason, and in violation of all usage and all logic: 'So the right conclusion seems to be that the thinking thing is something corporeal, .i.e. something in the nature of a body.' The subject of any act has to be understood as a •substance, but it doesn't follow that it must be understood as a •body. Hobbes likes to say that it must be understood as 'matter'; that is all right, as long as it's understood to mean *metaphysical* matter, .but Hobbes means *physical* matter, which is on a par with 'body'. [Descartes means 'metaphysical matter' to refer to an Aristotelian tradition in which each thing is seen as a combination of *form* with *matter*, where 'form' includes all the qualities/properties/attributes/accidents and 'matter' stands for whatever it is that *has* the form. In those terms, a mind could be seen as involving •mentalistic acts and properties and of •the 'matter' that has them; which doesn't imply that the mind in question is a 'material' thing in the physical sense, something that takes up space etc.]

Logicians and plain folk usually say that some substances are spiritual and some corporeal. All that I proved with the example of the wax was that colour, hardness and shape don't belong to the concept of *wax*. I wasn't dealing there with the concept of *mind* or even with that of *body*.

I'll explain the point briefly. It is certain that a thought can't exist without a thing that is thinking; and quite generally no act or property can exist without a substance for it to belong to. But we don't .ever. come to know a substance •immediately, knowing it in itself, but only •through its being the subject of certain acts. This makes it perfectly reasonable

and normal for us to use different names for substances that we recognize as being the subjects of radically different acts or properties, and then later on to consider whether these different names signify different things or one and the same thing. Now there are certain acts .and properties. that we call 'corporeal', such as size, shape, motion and all others that can be thought only in terms of spatial extension; and we label as 'body' the substance that they are in—i.e. the thing that *performs* the acts and *has* the properties. We can't intelligibly supposed that one substance •has shape, and another substance •moves, and so on, because all these acts fall under the common concept of *extension*. There are other acts that we call 'acts of thought', such as understanding, willing, imagining, having sensory perceptions, and so on; these all fall under the common concept of *thought* or *perception* or *consciousness*, and we call the substance that has them a 'thinking thing' or a 'mind' or any name you like as long as you don't confuse this substance with corporeal substance. .That confusion would be very bad., because •acts of thought have nothing in common with •corporeal acts, and thought (the common concept of the •former) is radically different from extension (the common concept of the •latter). Once we have formed two distinct concepts of these two substances, it is easy, on the basis of what I have said in the sixth Meditation, to establish whether they are one and the same or different.

[A passing remark of Descartes's—'One thought can't be the subject of another thought, says Hobbes; but who ever thought that it could?'—occurs at the *start* of this paragraph, a position suggesting that it connects with the rest of the paragraph, which it doesn't.]

Objection

(3) 'Which of all these activities is •distinct from my thinking? Which of them can be said to be •separate from myself?'

One might answer this question as follows: I who am thinking am •distinct from my thought; but I am not •separate from my thought—I'm •distinct from it •only• in the way that (to repeat my earlier example) a jumper is distinct from his jump. If Descartes means to suggest that •he who understands is the same as •the understanding, we'll be going back to the scholastic way of talking: the understanding understands, the sight sees, the will wills, and, by a very close analogy, the walking (or at least the faculty of walking) walks. All these expressions are obscure, improper, and quite unworthy of Descartes's usual clarity.

Reply

(3) I don't deny that I, who am thinking, am distinct from my thought, in the way a thing is distinct from a mode •or property• that it has. But when I ask 'Which of all these activities is distinct from my thinking?', I'm referring to the various ways of thinking that I have just listed, not to myself as a substance. And when I add, 'Which of them can be said to be separate from myself?', I simply mean that all these ways of thinking inhere in me. I don't see how one can pretend that there is any doubt or obscurity here.

Objection

(4) 'I'm forced to admit that the nature of this piece of wax isn't revealed by my imagination, but is conceived [Descartes wrote 'perceived'] by the mind alone.'

•Imagining (i.e. having an idea) is *very* different from •mentally conceiving (i.e. reasoning one's way to the conclusion that something is, or exists). But Descartes hasn't explained what the difference is. Even the Aristotelians in ancient times taught clearly enough that a substance is not perceived by the senses but is inferred by reasoning.

Now, suppose it turned out that reasoning is nothing but the joining together and linking of names or labels by means

of the verb 'is'—what should we say then? It would follow that the inferences in our reasoning tell us nothing about the nature of things, but merely tell us about the labels applied to them—specifically, tell us whether we are combining the names of things in compliance with the arbitrary conventions that we have laid down for what they are to signify. If this is so, as it may well be, it will follow that reasoning depends on names, that names depend on the imagination, and that imagination depends (as I believe it actually does) on the motions of parts of our bodies. So the bottom line will be this: the mind is nothing more than the movements of various parts of an organic body.

Reply

(4) I did explain the difference between •imagination and a •purely mental conception in this very example, where I listed the features of the wax that we imagine and those that we conceive by using the mind alone. And in another place I also explained how one and the same thing, say a pentagon, is •understood in one way and •imagined in another. As for the joining that occurs in reasoning, what we join are not •names but •things signified by them, and I'm surprised that anyone should think otherwise. Who doubts that a Frenchman and a German can reason about the same things, although the words they think of are completely different? And surely Hobbes refutes his own position when he talks of 'the arbitrary conventions that we have laid down for what words are to signify'. For if he grants that the words signify something, why won't he allow that our reasoning deals with this signified *something* rather than merely with the words? As for his conclusion that the mind is a movement, if he is entitled to say *that* then he is entitled to say that the earth is the sky, or anything else he likes!

Third Meditation, 'The existence of God'

Objection

(5) 'Some of my thoughts are, so to speak, images or pictures of things—as when I think of a man, or a chimera, or the sky, or an angel, or God—and strictly speaking these are the only thoughts that should be called "ideas".'

When I think of a •man, I am aware of an idea or image with a certain shape and colour; and I can wonder whether this image portrays a man. Similarly when I think of the sky. When I think of a •chimera, I am aware of an idea or image, and I can wonder whether it portrays a non-existent animal that could exist, or one that may but may not have existed at some previous time.

But when I think of an •angel, what appears before my mind is an image, now of a flame, now of a beautiful child with wings, but nothing that accurately portrays an angel—so it isn't an *idea of* an angel. But I believe that there are invisible and immaterial creatures who serve God; and we give the name 'angels' to these things that we believe in or suppose to exist. But the idea I use in order to imagine an angel is composed of the ideas of visible things.

In the same way, we have no idea or image corresponding to the sacred name 'God'. That's why we are forbidden to worship God in the form of an image; for if we did, we might think that we were conceiving of him who is incapable of being conceived.

It seems, then, that there is no idea of God in us. A man born blind, who has often approached fire and felt hot, knows that there is something that makes him hot; and when he hears this being called 'fire' he concludes that fire exists. But he doesn't know what shape or colour fire has, and absolutely no idea or image of fire appears before his mind. The same applies to a man who recognizes that his

images or ideas must have a cause, which must have a prior cause. . . and so on until eventually he arrives at the supposition of some eternal cause that can't have a *prior* cause because it never *began* to exist. And so he concludes that something eternal must necessarily exist. But he has no idea that he could call the 'idea of that eternal being; he merely gives the name or label 'God' to the thing that he admits or believes in.

Now, from the •very suspect• premise that we have an idea of God in our soul, Descartes proceeds to derive the theorem that God (i.e. the supremely wise and powerful creator of the world) exists. But he ought to have •given a better account of this 'idea' of God, and to have •inferred—•showing how the inference works—•not only the existence of God but also the creation of the world.

Reply

(5) Hobbes wants the term 'idea' to be used to refer only to the images of material things that are portrayed in the corporeal imagination; and with this on board he can easily 'prove' that there can't be any proper idea of an angel or of God. But I make it quite clear in several places throughout the *Meditations*, and especially in this very place, that I take 'idea' to refer to *whatever is immediately perceived by the mind*. For example, when I want (or fear) something, I simultaneously perceive that I want (or am afraid); and that's why I count wanting and fearing among my ideas. I used the word 'idea' because it was the term that philosophers standardly used to refer to the kinds of perception belonging to the divine mind, although we recognize that God doesn't have any corporeal imagination. And I had no more appropriate term at my disposal. I think I explained the idea of God fully enough to satisfy anyone who is prepared to attend to my meaning; I cannot possibly satisfy those who prefer to give

my words a different sense from the one I intended. As for the final comment about the creation of the world—that is quite irrelevant.

Objection

(6) ‘Other thoughts have more to them than that: thus when I will, or am afraid, or affirm, or deny, my thought represents some particular thing but it also includes •something more than merely the likeness of that thing. Some thoughts in this category are called volitions or emotions, while others are called judgments.’

When someone wills, or is afraid, he has an image of the thing that he fears or the action that he wills; but what is the •‘something more’ that his thought includes? This isn’t explained. Even if fear were a thought, I don’t see how it could be anything but the thought of the thing we are afraid of. For *fear of a charging lion* is nothing but *the idea of a charging lion* together with *the effect that this idea has on the heart*, which in turn causes in the frightened man the animal motion that we call ‘flight’. And this motion of fleeing is not a thought; so we are left with the conclusion that fear doesn’t involve any thought except the thought that portrays the thing feared. And the same applies to willing.

As for affirmation and denial, these don’t exist apart from language and names; which is why brute beasts can’t affirm or deny, even in thought; and therefore can’t make judgments. But *thought* may be similar in man and beast. For when we say ‘That man is running’ our thought is just like that of a dog when it sees its master running. So affirmation and denial don’t add anything to simple *thoughts*, except perhaps the thought that the names involved in the assertion stand for what the asserter means them to stand for. And that isn’t a case of a thought’s including more than a portrayal of a thing; it’s a case of portraying the thing twice.

Reply

(6) It is *self-evident* that •seeing a lion while being afraid of it is different from simply •seeing it; and that •seeing a man run is different from •silently affirming to oneself that one sees him. I don’t see anything here that needs answering.

Objection

(7) ‘It remains for me only to ask *how* I received this idea from God. I didn’t get it from the senses: it has never come to me unexpectedly, as do most of the ideas that occur when I seem to see and touch and hear things. And it’s not something that I invented, either; for clearly I can’t take anything away from it or to add anything to it. The only remaining alternative is that my idea of God is innate in me, just as the idea of myself is innate in me.’

If there isn’t any idea of God (it hasn’t been proved that there is, and there seems not to be), then this entire argument collapses. As for ‘the idea of myself’: if ‘myself’ refers to •my body then this idea arises from eyesight; and if it refers to my soul, then there isn’t any idea of it. We infer by reason that there is •something in the human body that causes in it the animal movements by which it has sensations and moves; and we call this •something a ‘soul’, without having an idea of it.

Reply

(7) If there is an idea of God (and obviously there *is*), then this entire objection collapses. As for the further claim that (a) we don’t have an idea of the soul but (b) infer its existence by reason, this amounts to saying that (a) we don’t have an image ·or likeness· of the soul in the corporeal imagination, but (b) we nevertheless do have what I call an ‘idea’ of it.

Objection

(8) 'The other idea of the sun is based on astronomical reasoning, i.e. is derived from certain notions that are innate in me.'

Whether we are •looking at the sun with our eyes, or •learning through reasoning that it is much bigger than it looks, it seems that there is only one idea of the sun at any one time. The 'other idea' isn't an *idea* of the sun; it is a reasoned *inference* that the idea of the sun would be many times larger if one looked at the sun from a much closer distance.

There can of course be different ideas of the sun at different times, e.g. if one looks at the sun with the naked eye and then later looks at it with a telescope. But astronomical arguments don't make the idea of the sun larger or smaller; what they do is to show that the idea acquired from the senses is deceptive.

Reply

(8) Here again, what Hobbes says is not an idea of the sun, but which he nevertheless describes, is the very thing that I call an 'idea'.

Objection

(9) 'Undoubtedly, the ideas that represent substances amount to something more—they contain within themselves more representative reality—than do the ideas that merely represent modes [= 'qualities']. Again, the idea that gives me my understanding of a supreme God—eternal, infinite, omniscient, omnipotent and the creator of everything that exists except for himself—certainly has in it more representative reality than the ideas that represent merely finite substances.'

I have already remarked, *often*, that we don't have any idea of God or of the soul. I now add that we don't have

any idea of substance. For substance, considered as the •metaphysical• matter [see note on page 44] that is the subject of accidental properties and of changes, is something that is brought out purely by reasoning; it isn't something that is conceived, or that presents any idea to us. If this is true, how can it be said that ideas that represent substances to me have more to them, contain more representative reality, than those that represent qualities? And Descartes should re-think what 'more reality' means. *Does* reality admit of more and less? Does he think that one thing can be more of a *thing* than another? [Reminder: in Latin 'reality' and 'thing'—*realitas* and *res*—are cognate terms.] If so, he should think about how to explain this to us with the degree of clarity that every demonstration demands, and that he himself has employed elsewhere.

Reply

(9) I have pointed out, *often*, that I use the term 'idea' to apply to •what is brought out by reasoning as well as •anything else that is perceived in any way whatsoever. And I have adequately made clear how reality admits of more and less. A substance is more of a thing than a mode; if there are real qualities or incomplete substances, they are things to a greater extent than modes but to a lesser extent than complete substances; and, finally, if there is an infinite and self-sufficient substance, it is more of a thing than a finite and dependent substance. All this is completely self-evident. [For an explanation of 'real qualities', see the note on page 78.]

Objection

(10) 'So there remains only the idea of God: is there anything in *that* which couldn't have originated in myself? By the word "God" I understand

- a •substance that is
- infinite,

- independent,
- supremely intelligent,
- supremely powerful,
- the creator of myself and of anything else that may exist.

The more carefully I concentrate on these attributes, the less possible it seems that *any* of them could have originated from me alone. So this whole discussion implies that God necessarily exists.' When I consider the attributes of God in order to get an idea of God and to see whether that idea contains anything that couldn't have been derived from myself, what I think I find is this: What I think of in connection with the name 'God' doesn't originate in myself but needn't be derived from any source other than external ·material· objects. By the term 'God' I understand

- a •substance,

i.e. I understand that God *exists*, though I get this not from an idea but from reasoning.

- Infinite,

i.e. I can't conceive or imagine any supposed limits or outermost parts of it without being able to imagine further parts beyond them; so that what the term 'infinite' presents me with is not an idea of the infinity of God but an idea of my own boundaries or limits.

- Independent,

that is, I don't conceive of a cause that produced God; which makes it clear that the ·only· idea I have linked to the term 'independent' is the memory of my own ideas, which began at different times and hence are dependent ·on the causes that started them up·. Hence 'God is independent' simply means that God is one of the things for which I can't imagine an origin. And 'God is infinite' means that God is one of the things that we don't conceive of as having bounds. This rules out any *idea* of God—for what sort of idea is it that has no

origin and no limits?

- Supremely intelligent.

What, may I ask, is the idea through which Descartes understands the operation of God's understanding?

- Supremely powerful.

Again, through what idea is *power* understood—power that relates to future things, i.e. things that don't yet exist? My own understanding of power comes from an image or memory of past events, and I arrive at it as follows: 'It did that, so it was able to do that, so if it continues to exist it will be able to do that again—which is to say that it has the *power* to do that.' And these are all ideas that could have arisen from external objects.

- The creator of all that exists.

I can construct a sort of image of creation from what I have seen, e.g. a man being born or growing from a single point (as it were) to the size and shape that he now has. That's the only sort of idea anyone has to go with the term 'creator'. But our ability to imagine the world to have been created isn't an adequate proof of the creation! Even if it had been demonstrated that there exists something infinite, independent, supremely powerful etc., it still wouldn't follow that a creator exists. Unless anyone thinks that the following inference is correct: 'There exists a being whom we believe to have created all things; therefore, the world was in fact created by him at some stage!'

Also, when Descartes says that the ideas of God and of our souls are innate in us, I want to know: when people are in a deep, dreamless sleep, are their souls *thinking*? If they aren't, they don't have any ideas at that time. It follows that no idea is innate, because what is innate is always present.

Reply

(10) Nothing that we attribute to God can have been derived

from external objects by copying them, because nothing in God resembles anything in external things, i.e. bodies. And elements in our thought that don't resemble external objects clearly can't have come from external objects, and must have come from another cause that produced this diversity in our thought.

What, may I ask, is the method Hobbes uses to derive his notion of God's understanding from external things? I can easily explain the idea I have of God's understanding; for by 'idea' I mean 'anything that is the form of some perception'. [Descartes thinks of a perception as a fully detailed mental event, and the ideas that it involves are aspects of it, properties of it, its 'form'.] Now *everyone* perceives that he understands some things. So everyone has the form—or idea—of *understanding*; and by indefinitely extending this he can form the idea of God's understanding; and similarly with God's other attributes.

I proved the existence of God by using the idea of God that is within me. This idea contains a representation of such immense power that I understand that if God exists it is a contradiction that anything else should exist that he didn't create. The upshot, clearly, is that in demonstrating the existence of God I also demonstrated that God created the entire world, i.e. everything that exists apart from him. Lastly, when we say that an idea is innate in us, we don't mean that it is always on view; that would mean that no idea was innate. All we mean is that we have within ourselves the faculty or ability to summon up the idea.

Objection

(11) 'The core of the argument is this: I couldn't exist with the nature that I have—that is, containing within me the idea of God—if God didn't really exist. By "God" I mean the very being the idea of whom is within me.' Well, it hasn't been demonstrated that we have the idea of God; and the

Christian religion obliges us to believe that God cannot be conceived of (which I think implies that we have no idea of him); so it follows that no demonstration has been given of the existence of God, let alone of the creation of the world.

Reply

(11) When they say that God 'cannot be conceived of', this means 'conceived of in such a way as to have a fully adequate grasp of him'. As for how we can have an idea of God, I have gone over this till I'm sick of it! There's absolutely nothing in this objection to invalidate my demonstrations.

Fourth Meditation, 'Truth and Falsity'

Objection

(12) 'So error is not something real, but is merely a defect. So there is nothing positively error-producing in the faculty of judgment that God gave me.'

Certainly *ignorance* is merely a defect, and we don't need any positive faculty or power in order to be ignorant; but it's not obvious that the same thing holds for *error*. Why can't sticks and stones be guilty of errors? It seems to be because they don't have the power of reasoning and imagining. If that is right, then it follows that one can't err unless one has the power of reasoning, or at least the power of imagining; and these are *positive* faculties that have been given to everyone who sometimes errs, and not to anyone else.

What is more, a page later Descartes writes: 'It comes to my attention that my errors have two co-operating causes—my faculty of knowledge and my faculty of choice or freedom of the will.' This seems to contradict the earlier passage. It should also be noted that Descartes *assumes* freedom of the will, opposing the view of the Calvinists but giving no argument for his view

Reply

(12) It's true that in order to go wrong we need the faculty of reasoning, or rather of judging (i.e. affirming and denying), because error is a defect in this faculty. But it doesn't follow that this defect is something real, any more than *blindness* is something real. I am sure Hobbes would agree about blindness, but then he should consider the fact that sticks and stones cannot see and yet we don't call them 'blind'. I am surprised that so far I haven't found a single valid argument in these objections.

I don't see why the passage about 'two co-operating causes' is said to contradict the earlier one. On the question of our freedom, all I 'assumed' was something that we all experience within ourselves. Our freedom is very evident by the natural light. There may indeed be many people who worry about how God's pre-ordaining everything is consistent with our being free. But anyone who simply thinks about us will realize from his own experience that voluntariness and freedom are one and the same thing; and of course it is beyond dispute that many of our actions are voluntary. This is no place for examining the opinion of other people on this subject.

Objection

(13) 'For example, a while ago I asked whether anything in the world exists, and I came to realize that the fact of my raising this question shows quite clearly that *I* exist. I understood this so vividly that I couldn't help judging that it was true. This wasn't the "couldn't help" that comes from being compelled by some external force. What happened was just this: *a great light in the intellect was followed by a great inclination in the will*. I wasn't in a state of indifference, but this lack of indifference was a measure of how spontaneous and free my belief was.' [Indifference' is the state of being evenly

balanced between two alternatives—not forced or even slightly pushed towards one of them.]

The phrase 'a great light in the intellect' is metaphorical, and so has no argumentative force. And in any case, *anyone* who has no doubt concerning some opinion of his claims to have this sort of 'great light' and is just as strongly drawn to affirm his opinion as someone would be who had real knowledge of it. So this 'light' can explain why someone stubbornly defends or holds on to a given opinion, but not why he *knows* it to be true.

Further, it's not only knowing something to be true that lies outside the scope of the will, but also believing it or assenting to it. If something is supported by valid arguments, or reported as credible, we are forced to believe it. It is true that affirming and denying propositions, defending and refuting them, are acts of will; but it doesn't follow that our inner assent depends on the will.

Thus, no valid demonstration is given for the conclusion that 'The privation that constitutes the essence of error lies in the incorrect use of free will'. [A privation—Latin *privatio*—is an absence, or lack, of something that ought to be present; Descartes holds that being in error is merely *not* having some knowledge that one ought to have. He and some of his critics often use *privatio* just to mean lack or absence, with no implication about what ought to be present; for example on pages 64–66 the question of whether cold is just a 'privation' of heat, translated there by 'absence'.]

Reply

(13) It is quite irrelevant whether the phrase 'a great light' has argumentative force; what matters is whether it has explanatory force—and it does! Everyone knows that 'light in the intellect' is taken to mean knowledge that one can see right into. Perhaps not everyone who thinks he has this does in fact have it, but that doesn't stop it from being quite

different from a stubborn opinion that is arrived at without any evident perception.

As for the claim that we assent to things that we clearly perceive, 'even if we don't want to', that's like saying that we seek a clearly known good even if we don't want to! The qualification 'even if we don't want to' is inappropriate in such contexts, because it implies that we both will and don't will the same thing. [The clause 'even if we don't want to' replaces the Latin *volentes nolentes* = 'wanting-to not-wanting-to'. It's like the English 'willy-nilly', but it would hardly do to have Descartes saying 'the qualification "nilly" is inappropriate!']

Fifth Meditation, 'The Essence of Material Things'

Objection

(14) 'Even if there are not and never were any triangles anywhere outside my thought, still, when I imagine a triangle there is a determinate nature or essence or form of *triangle* that is eternal, unchanging, and independent of my mind. This is shown by the fact that the triangle can be demonstrated to have various properties.' If triangles don't exist anywhere, I don't understand how *triangle* can have a nature. For what isn't anywhere doesn't exist, and so doesn't have any essence or nature. A triangle in the mind comes from a triangle we have seen, or else it is made up out of things we have seen. But once we give the name 'triangle' to the thing from which, we *think*, the idea of a triangle came, then the •name remains even if the triangle itself is destroyed. Similarly, when our thought leads us to conceive that the angles of a triangle add up to two right angles, and we give the triangle this second name 'having its angles equal to two right angles', then the •name would remain even if no angles existed in the world; and so this will be the case:

The proposition 'a triangle is that which has its angles equal to two right angles' is forever true.

But this will not be the case:

The nature of a triangle exists for ever;
for it may be that every single triangle will cease to exist.

Similarly, the proposition 'Man is an animal' is eternally true because the names are eternal; but when the human race ceases to be, there will be no human nature any more.

This shows clearly that *essence*, considered as distinct from *existence*, is merely a linking of names by the verb 'is'. And hence *essence without existence* is a human artifact. It seems that •essence is to •existence as •the mental image of a man is to •the man. Or •we could say that •the essence of Socrates is to the •existence of Socrates as •the proposition 'Socrates is a man' is to •the proposition 'Socrates exists'. At a time when Socrates doesn't exist, the proposition 'Socrates is a man' signifies merely a linking of terms; and 'is' or 'to be' carries the image of the unity of a thing to which two terms are applied. [Hobbes has said that so-called 'essences' are merely pairs of 'names' linked by 'is' (Latin *est*). In that last sentence he throws in 'or "to be"' (Latin *vel esse*), Why? Because *esse*—'to be'—is the root of *essentia* = 'essence'. This little subtlety is lost when we move out of Latin.]

Reply

(14) The distinction between essence and existence is known to everyone. And this talk about eternal names, as opposed to concepts or ideas of eternal truths, has already been amply refuted.

Sixth Meditation, 'The existence of material things'**Objection**

(15) 'God has given me no faculty for finding out whether ideas are emitted by bodies or not; but he has strongly inclined me to believe that bodies produce them. So if the ideas were transmitted from a source other than corporeal things, God would be a deceiver; and he is not. So bodies exist.'

It is generally thought that doctors aren't at fault if they deceive their patients for their health's sake, and that fathers aren't at fault if they deceive their children for their own good. The wrongness of deception consists not in the falsity of what is said but in the harm done by the deceiver. Descartes should thus consider whether the proposition 'God can never deceive us' is *universally* true. For if it isn't universally true, the conclusion 'So bodies exist' doesn't follow.

Reply

(15) My conclusion doesn't require that we can never be deceived (indeed, I have readily admitted that we are often deceived). All it requires is that we aren't deceived in cases where our going wrong would be evidence that God intended to deceive us—which would be inconsistent with his essence. Yet again, bad argument!

Objection

(16) 'For I now notice that the waking state is vastly different from dreams, in that dreams are never linked by memory with all the other actions of life as waking experiences are.'

Consider someone who dreams that he isn't sure whether or not he is dreaming; couldn't he *dream* that his dream fits in with his ideas of a long series of past events? If this is possible, then the dreamer will judge certain items that appear to be events from his past life to be true occurrences, just as he might if he were awake. Moreover, as Descartes himself asserts, the certainty and truth of all knowledge depends solely on our knowledge of the true God. But in that case an atheist can't infer that he is awake on the basis of memory of his past life. The alternative is that someone can know he is awake without knowledge of the true God.

Reply

(16) A dreamer cannot *really* connect his dreams with the ideas of past events, though he may dream that he does. Everyone knows that a man may be deceived in his sleep. But afterwards, when he wakes up, he will easily recognize his mistake.

An atheist can infer that he is awake on the basis of memory of his past life. But if he doesn't know that he was created by a non-deceiving God, he can't know for sure that this criterion is sufficient to make it certain that he isn't mistaken.

Fourth Objections (Arnauld) and Descartes's Replies

Introduction to the Objections

[Arnauld, born in 1612, wrote these Objections in **1640**; his important exchange of letters with Leibniz began in **1686**! Here he addresses his comments to Mersenne, who had solicited them.] You have done me a kindness, but are making me pay a high price for it! You have allowed me to see this brilliant work only on condition that I make public my opinion of it. This is a hard condition, which I have been driven to accept by my eagerness to see this superb piece of work. . . . You know how highly I rate the power of Descartes's mind and his exceptional learning.

The work you are giving me to scrutinize requires an uncommon intellect; and if *you* over-rate my powers, that doesn't make *me* any less aware of my own inadequacy. The work also requires a mind that is calm, free from the hurly-burly of all external things, and attentive to *itself*—which can happen only if the mind meditates attentively and focuses on itself. You know this, and you also know about all the tiresome duties that are keeping me busy; but still you command, and I must obey! If I go astray it will be your fault, since it's you who are making me write.

This work could be claimed to belong entirely to philosophy; but Descartes has very properly submitted himself to the judgment of the theologians, so I am going to play a dual role here. I shall first present what seem to me to be the possible philosophical objections concerning the major issues of the nature of our mind and [starting at page 64] of God; and then [starting at page 75] I shall present problems that a theologian might come up against in the work as a whole.

Introduction to the Replies

[Descartes addresses his replies to Mersenne.] I couldn't possibly wish for a more perceptive or more courteous critic of my book than ·Antoine Arnauld·, whose comments you have sent me. He has dealt with me so gently that I can easily see his good will towards myself and the cause I am defending. ·He does attack various things in the *Meditations*, but two aspects of his attacks keep me cheerful·. •When he does attack me, he has looked into the issues so deeply, and examined all the related topics so carefully, that I am sure there aren't any other difficulties that he has overlooked. •And where he thinks my views are not acceptable, he presses his criticisms so acutely that I'm not afraid of anyone's thinking that he has kept back any objections for the sake of the cause. So I am not so much •disturbed by his criticisms as •happy that he hasn't found more to attack.

Objections concerning the human mind

The first thing that I find remarkable is that Descartes has based his whole philosophy on a principle that was laid down by St Augustine—a man of amazing abilities in theology and also in philosophy. In his book *On Free Will* a participant in a dialogue [Arnauld gives the details] prepares the way for a proof of the existence of God, thus:

First, if we start from what is most evident, I ask you: Do you yourself exist? Or are you perhaps afraid of making a mistake in your answer? ·You shouldn't be, because· if you didn't exist it would be quite impossible for you to make a mistake.

Compare that with what Descartes says:

·Perhaps· there is a supremely powerful and cunning deceiver who deliberately deceives me all the time. Even then, if he is deceiving me I undoubtedly exist.

But let us move on from this to the more central matter of Descartes's way of getting from this principle to the result that our mind is separate from our body [Arnauld here fairly represents Descartes's argument, but this isn't an exact quotation from the *Meditations*]:

- I can doubt whether I have a body, and even whether there are any bodies at all in the world; but I can't doubt that I am, or that I exist, so long as I am doubting or thinking.
- So I who am doubting and thinking am not a body. For if I were, my doubts about my body's existence would be doubts about *my* existence, and we have just seen that the latter doubt is ruled out.
- Indeed, even if I stubbornly maintain that there are no bodies whatsoever, the conclusion I have reached still stands: I am something, and therefore I am not a body.

This is certainly very acute. But someone will bring up the objection that Descartes raises against himself: the fact that I have doubts about bodies, or even deny that there are any, doesn't make it the case that no body exists. He writes [this is quoted from the *Meditations*]:

These things that I suppose to be nothing because they are unknown to me—mightn't they in fact be identical with the *I* of which I am aware? I don't know; and just now I shan't discuss the matter, because I can form opinions only about things that I know. I know that I exist, and I am asking: what is this *I* that I know? My knowledge of it can't depend on things of whose existence I am still unaware.

But Descartes admits ·in his Preface to the *Meditations*· that in the ·version of the· argument set out in his *Discourse on the Method*, the proof excluding anything corporeal from the nature of the mind was put forward not 'in an order corresponding to the actual truth of the matter' but in an order corresponding to his 'own perception'—so that the sense of the passage was that he wasn't aware of anything that *he knew* belonged to his essence except that he was a thinking thing. That makes it clear that the objection still stands, exactly as before, and that he still owes us an answer to the question 'How does he get from the premise that •he isn't aware of anything else belonging to his essence to the conclusion that •nothing else does in fact belong to it?' I admit that I'm a bit slow about such things, but I haven't been able to find an answer to this question anywhere in the second Meditation. It seems, though, that Descartes *does* attempt a proof of this conclusion in the sixth Meditation, ·presumably postponing it because· he takes it to depend on his having clear knowledge of God, which he hadn't yet achieved in the second Meditation. Here is the proof:

I know that **(1)** if I have a vivid and clear thought of something, God could have created it in a way that exactly corresponds to my thought. So the fact that **(2)** I can vividly and clearly think of one thing apart from another assures me that the two things are distinct from one another—that is, that they really are *two*—since they can be separated by God. Never mind *how* they could be separated; that doesn't affect the judgment that they are distinct. . . . On the one hand I have a vivid and clear idea of myself as something that thinks and isn't extended, and one of body as something that is extended and doesn't think. So it is certain that I am really distinct from my body and can exist without it.

We must pause a little here, for it seems to me that in these few words lies the crux of the whole difficulty.

First of all, if premise **(1)** of this argument is to be true, its topic must be not •any kind of knowledge of a thing, or even •vivid and clear knowledge, but rather •knowledge that is adequate. For Descartes admits in his reply to Caterus [page 16] that for one thing to be conceived distinctly and separately from another they don't have to be really distinct—i.e. to be two things rather than one—and that all that is needed is for them to be 'formally distinct', which can be achieved 'by an abstraction of the intellect that conceives the thing inadequately'. And in that same passage he draws the following conclusion:

In contrast with that, when I think of a body as merely something having extension, shape and motion, and deny that it has anything belonging to the nature of mind, this involves me in a complete understanding of what a body is. Conversely, **(2)** I understand the mind to be a complete thing that doubts, understands, wills, and so on, while denying that it has any of the attributes contained in the idea of a body. This would be quite impossible if the mind weren't really distinct from the body.

But someone may question whether **(2)** is true, and maintain that the conception you have of yourself (•your mind•) when you conceive of yourself as a thinking, non-extended thing is an inadequate one; and the same may be true of your conception of yourself (•your body•) as an extended, non-thinking thing. So we must look at how this is proved in the earlier part of the argument. For I don't think that this matter is so clear that it should be assumed without proof as a first principle that can't •and therefore needn't• be demonstrated.

Let us start with the first part of your claim, namely that when you think that a body is merely something having extension, shape, motion etc., and deny that it has anything in the nature of a mind, you have a complete understanding of what a body is.

This is evidently true, but it doesn't do much for you. Those who maintain that our mind is a body don't infer from this that every body is a mind. On their view, •body relates to •mind as •genus to •species. A *complete* thought of a genus can leave out a species, and can even include a denial of properties that are special to that species—which is why logicians say 'The negation of the species doesn't negate the genus', for example, 'x is not a marmoset' doesn't entail 'x is not a mammal'. Thus I can understand the genus *figure* without bringing in my understanding of any of the properties that are special to a *circle*. So it remains to be proved that the mind can be completely and adequately understood apart from the body.

I can't see anywhere in the entire work an argument that could serve to prove this claim, apart from what is laid down at the start [this isn't an exact quotation from the *Meditations*]:

I can deny that *any body* exists, or that anything is extended, but while I am thus denying, or thinking, it goes on being certain to me that *I* exist. Thus, I am a thinking thing, not a body, and *body* doesn't come into the knowledge I have of myself.

But so far as I can see, all that follows from this is that I can obtain some knowledge of myself without knowledge of the body. But it isn't transparently clear to me that this knowledge is *complete and adequate*, enabling me to be certain that I'm not mistaken in excluding body from my essence. I'll explain through an example.

Suppose someone knows for certain that the angle in a semi-circle is a right angle, and thus that this angle and the

diameter of the circle form a right-angled triangle. In spite of knowing this, he may •doubt, or •not yet have grasped for certain, that the square on the hypotenuse equals the sum of the squares on the other two sides; indeed he may even •deny this if he has been misled by some fallacy. (•For brevity's sake, I'll express this as 'the triangle's having the property P'.) But now, if he argues in the same way that Descartes does, he may appear to have confirmation of his false belief, as follows: 'I vividly and clearly perceive that the triangle is right-angled; but I doubt that it has the property P; therefore it doesn't belong to the essence of the triangle that it has the property P.'

Again, even if I deny that the square on the hypotenuse equals the sum of the squares on the other two sides, I still remain sure that the triangle is right-angled—my mind retains the vivid and clear knowledge that one of its angles is a right angle. And given that this is so, not even God could bring it about that the triangle is not right-angled.

Therefore, •I might argue•, the property P that I can doubt—or indeed that I can *remove*—while leaving my idea •of the triangle• intact doesn't belong to the essence of the triangle. Now look again at what Descartes says:

I know that if I have a vivid and clear thought of something, God could have created it in a way that exactly corresponds to my thought. So the fact that I can vividly and clearly think of one thing apart from another assures me that the two things are distinct from one another—i.e. that they are *two*—since they can be separated by God.

Well, I vividly and clearly understand •that this triangle is right-angled, without understanding •that the triangle has the property P. It follows, on Descartes's pattern of reasoning, that God at least could create a right-angled triangle with the square on its hypotenuse not equal to the sum of the

squares on the other sides!

The only possible reply to this that I can see is to say that the man in this example *doesn't* vividly and clearly perceive that the triangle is right-angled. But how is my perception of the nature of my mind any better lit than his perception of the nature of the triangle? He is just as certain •that the triangle in the semi-circle has one right angle (which is the criterion of a right-angled triangle) as I am that •I exist because I am thinking.

Now although the man in the example vividly and clearly knows that the triangle is right-angled, he is *wrong* in thinking that property P doesn't belong to the nature •or essence• of the triangle. Similarly, although I vividly and clearly know my nature to be something that thinks, mightn't I also be *wrong* in thinking that nothing else belongs to my nature apart from my being a thinking thing? Perhaps my being an extended thing *also* belongs to my nature. Someone might also point out that since I infer my •existence from my •thinking, it's not surprising if the •idea that I form by thinking of myself in this way represents me to myself purely as a thinking thing; for the •idea was derived entirely from my thought. So •this idea can't provide any evidence that only what is contained in •it belongs to my essence.

One might add that the argument seems to prove too much, and takes us back to the Platonic view (though Descartes rejects it) that nothing corporeal belongs to our essence, so that man is only a mind, with the body being merely its vehicle—giving rise to the definition of man as 'a mind that makes use of a body'.

You might reply, •in an attempt not to be pushed to the Platonic extreme of denying that I am any way corporeal•, that body is

•excluded from my essence only in so far as I am a thinking thing,

and not

•excluded from my essence *period*.

But that could raise the suspicion that in my knowledge of myself as a thinking thing I don't, ·after all·, have a complete and adequate conception of myself, but only an inadequate conception reached through intellectual abstraction.

Geometers conceive of a line as a length without breadth, and they conceive of a surface as length and breadth without depth, despite the fact that no length exists without breadth and no breadth without depth. Well, in the same way someone might suspect that every thinking thing is also an extended thing, having •the attributes that all extended things have—shape, motion, etc.—and also •the special power of thought. Given that it had that power, it could by an intellectual abstraction be thought of as just a thinking thing, though really it had bodily attributes as well. In the same way, although quantity can be conceived in terms of length alone, in reality breadth and depth belong to every quantity, along with length.

The difficulty is increased by the fact that the •power of thought seems to be tied to bodily organs, since •it can be thought to be dormant in infants and extinguished in madmen. Impious soul-destroyers—·i.e. those who deny there is such a thing as the soul·—make a great deal of this fact; ·but it can also be appealed to by those who think that there are indeed souls, which are bodies·.

Up to here I have been discussing the real distinction between our mind and the body. But since Descartes has undertaken to demonstrate •the immortality of the soul, we ought to ask whether •this obviously follows from soul's being distinct from the body. No it doesn't, according to the philosophical principles of the man in the street; for people ordinarily take it that the souls of brute animals are distinct from their bodies, but nevertheless perish along with them.

I reached this point in my comments, and was planning to show how Descartes's own principles, which I thought I had gathered from his way of doing philosophy, would make it easy to infer •the immortality of the soul from •the mind's real distinctness from the body. But then a little study composed by our illustrious author—·namely, his 'Synopsis of the *Meditations*'·—was sent to me. It sheds much light on the *Meditations* as a whole, and offers the treatment of the immortality issue that I had been about to propose. As for the souls of the brutes, Descartes elsewhere indicates that they don't have souls; all they have is a body whose structure of parts is such that all the movements we see ·the animal make· can be produced *in* it and *by means* of it.

I'm afraid this view won't be widely accepted unless it is supported by very solid arguments. Consider just one example:

The light reflected from the body of a wolf onto the eyes of a sheep moves the tiny fibres of the optic nerves, and when this motion reaches the brain it spreads the animal spirits throughout the nerves in the manner required for the sheep to start running away.

At first sight it seems incredible that this should happen without the assistance of any soul. [Cartesians and others believed in 'animal spirits', which have been described as the animal body's 'hydraulic system'—a fluid or gas that was so superfine that it could move around the body very fast and get in anywhere.]

I want to add here that I wholly agree with Descartes's views about •how imagination differs from intellect or thought, and about •how much more certain we can be of things we have grasped through reason than of what we observe through the bodily senses. I long ago learned from Augustine. . . .that we must completely dismiss those who think that what we see with the intellect is less certain than what we see with these bodily eyes. . . . He wrote. . . .that

when doing geometry he found •the senses to be like a ship, because. . .

. . . when •they had brought me to the place I was aiming for, I sent them away; and now that I was standing on dry land I started to examine these •geometrical-matters using only my thought, •with no appeal to my senses•, though for a long time my footsteps were unsteady. Thus, I think that a man has a better chance of •sailing on dry land than of •perceiving geometrical truths through the senses, although the senses do seem to help a little when we begin to learn.

Replies concerning the nature of the human mind

I shan't waste time here by thanking my distinguished critic for bringing in Augustine's authority to support me, and for setting out my arguments so vigorously that his •main• fear seems to be that others won't see how strong they are. But I will begin by pointing out *where* it was that I set out to prove that from

•the fact that all I am aware of as belonging to my essence (that is, the essence of the mind alone) is my being a thinking thing

it follows that

•nothing else does in fact belong to my essence,

—namely, in the place where I proved that God exists, a God who can bring about everything that I vividly and clearly recognize as possible. Now there may be much within me that I'm not yet aware of. For example, in the passage in question I was supposing that I wasn't yet aware—as I would come to be in the sixth Meditation—that the mind had the power of moving the body, or that the mind was substantially united to the body.

[That later awareness was expressed in a memorable passage in the sixth Meditation:

Nature teaches me, through these sensations of pain, hunger, thirst and so on, that I (a thinking thing) am not merely *in* my body as a sailor is in a ship. Rather, I am *closely joined to it*—intermingled with it, so to speak—so that it and I form a unit. If this weren't so, I wouldn't *feel* pain when the body was hurt but would *perceive* the damage in an intellectual way, like a sailor seeing that his ship needs repairs.

Descartes uses 'substantial unity' and its cognates in various places, though not in the *Meditations*, to refer to the 'not-like-a-sailor-in-a-ship' idea. He never provides an account of what this substantial unity is, as distinct from what it *is not*.]

But what I *am* aware of •in the second Meditation• is sufficient for me to be able to exist with it and it alone; so I am certain that •I *could* have been created by God without having other attributes of which I am unaware, and hence that •these other attributes don't belong to the essence of the mind. For it seems to me that if something can exist without attribute A, then A isn't included in its essence. And although •mind is part of the essence of •man, •being united to a human body is not part of the essence of •mind.

I must also explain what I meant by this:

A real distinction between x and y can't be inferred from the fact that x is conceived apart from y by an abstraction of the intellect that conceives x inadequately. It can be inferred only if we have a •complete understanding of x as apart from y, an understanding of x as a complete thing.

Arnauld assumes my view to be that •adequate knowledge of a thing is required here; but that's not what I was saying. Complete knowledge is different from adequate knowledge. If a piece of knowledge about x is to be *adequate*, it must contain absolutely all the properties of x. God has adequate knowledge of •everything, and knows that he has; but that is his special privilege. A created intellect, though it may have adequate knowledge of many things, can never know

for sure that it has such knowledge of •anything unless God tells it through a special revelation.

It isn't hard to *have* adequate knowledge of x: all you need is an intellect whose power of knowing is adequate for x. But for the intellect to *know for sure* •that it has such knowledge, i.e. •that God put nothing into x beyond what the intellect is aware of, its power of knowing would have to equal the infinite power of God, and for this to happen would be flatly self-contradictory.

For us to recognize that x and y are distinct things •through the 'conceiving-separately' test•, it *can't* be required that we have adequate knowledge of them, because—as I have just explained—we can never know that we have such knowledge, •so that the test would never be usable•. So when I said that

For x to be really distinct from y, it isn't enough that x is understood apart from y by an abstraction of the intellect that conceives x inadequately,

I didn't think that anyone could take this to imply that what is needed for •the 'conceiving-separately' way of• establishing a real distinction is adequate knowledge. All I meant to be requiring was knowledge that we haven't ourselves *made* inadequate by an abstraction of the intellect. There is a great difference between

'My knowledge of x is wholly adequate',

which we can never know for sure unless God reveals it to us, and

'My knowledge of x hasn't been made inadequate by an abstraction of the intellect.'

It's not hard for our knowledge to be adequate enough for us to know that *that* is true.

Similarly, when I said that x must be understood completely, I didn't mean that my understanding of x must be adequate, but only that I must understand x well enough to

know that my understanding is complete.

I thought I had made this clear from what I had said just before and just after the passage in question. For a little earlier I had distinguished 'incomplete' from 'complete' entities, and had said that for there to be a real distinction between x and y each of them must be understood as 'an entity in its own right that is different from everything else'.

And later on, after saying that I had 'a complete understanding of what a body is', I immediately added that I also 'understood the mind to be a complete thing'. The meaning of these two phrases was identical; i.e. I took 'a complete understanding of x' and 'understanding x to be a complete thing' to mean exactly the same.

You could fairly enough ask at this point **(1)** 'What do you mean by "complete thing"?' and **(2)** 'How do you prove that all it takes to establish that x is really distinct from y is •that x and y be understood as "complete" and that •each be capable of being understood apart from the other?'

My answer to **(1)** is that all I mean by a 'complete thing' is a substance endowed with forms or attributes that suffice for me to recognize that it is a substance.

We don't have immediate knowledge of substances, as I have pointed out elsewhere. We know them only by perceiving certain forms or attributes that can't exist except as inhering *in* something; and we call the thing they inhere in a 'substance'. If we then tried •in thought• to strip the substance of the attributes through which we know it, we would be destroying our entire knowledge of it. We might still be able to apply various words to it, but we couldn't have a vivid and clear perception of what we meant by these words.

I realize that certain substances are commonly called 'incomplete'. But if the reason for that is that they can't exist on their own, then this involves something that I see as self-contradictory:

- they are substances, i.e. things that exist on their own;

- they are incomplete, i.e. not fit to exist on their own.

We can also call a substance ‘incomplete’ in a different sense: *x* is itself a complete substance, but it has a kind of incompleteness because •it combines with some other substance *y* to form something that has a unity in its own right, and so •considered in the light of that combination *x* is ‘incomplete’ because it is only a part of the larger thing. For example, a hand is a complete substance when it is considered on its own, but it is an incomplete substance when it is thought of in relation to the whole body of which it is a part. In just that way, a mind and a body are incomplete substances when thought of in relation to the human being which they together make up. But considered on their own they are complete.

For just as being extended and divisible and having shape etc. are forms or attributes by which I recognize the substance called ‘body’, so understanding, willing, doubting etc. are forms by which I recognize the substance called ‘mind’. And I don’t have any less grasp of a thinking substance as a complete thing than I have of an extended substance as a complete thing.

Arnauld suggests that ‘body relates to mind as genus relates to species’, but there is no way that can be right. For although a •genus can be understood without this or that specific differentia—i.e. without thinking of this or that •species falling under the genus—there is no way for a •species to be thought of without its •genus.

For example, we can easily understand the genus ‘figure’ without thinking of a circle (though our understanding won’t be distinct unless it *does* involve a specific figure, and it won’t involve a complete thing unless it also brings in the nature of body). But we can’t understand the specific differentia

that marks off *circle* without at the same time thinking of the genus *figure*—because to be a circle is, precisely, to be a figure that is characterised by that specific differentia.

Now, I think I showed well enough in the second Meditation that the mind can be perceived distinctly and completely (i.e. sufficiently for it to be considered as a complete thing) without any of the forms or attributes by which we recognize that body is a substance. And similarly a body can be understood distinctly and as a complete thing without any of the attributes belonging to mind.

Arnauld comes in at this point, arguing that although I can have some knowledge of myself without knowledge of the body, it doesn’t follow that this knowledge is complete and adequate, so as to enable me to be certain that I’m right to exclude body from my essence. He uses the example of a triangle inscribed in a semi-circle, which we can vividly and clearly understand to be right-angled although we don’t know, or may even deny, that •it has property *P*, i.e. •the square on the hypotenuse equals the sum of the squares on the other sides. But we can’t infer from this that there could *be* a right-angled triangle that lacked the property *P*.

But this example differs in many (•at least three•) respects from the case under discussion.

First: a triangle may be taken concretely as a substance with a triangular shape, but there is certainly no way of understanding the property *P* as a substance! So neither the triangle nor the property can be understood as a complete thing, as mind and body are. And neither of them can be called a ‘thing’ in the sense I was using when I said in the sixth Meditation ‘it is enough that I can understand one thing apart from another’ and so on, meaning ‘thing’ as ‘*complete* thing’. This is clear from what •I said at the start of the paragraph that• came after that: ‘Besides I find in myself faculties’ and so on. I didn’t say that these faculties

were things, but carefully distinguished them from things or substances.

Second: although we can vividly and clearly understand that a triangle in a semi-circle is right-angled without being aware of its having property P, we cannot have a clear understanding of a triangle's having property P without at the same time taking in that it is right-angled. In contrast with that, we can vividly and clearly perceive the mind without the body *and* the body without the mind.

Third: although it is possible to have a concept of *triangle inscribed in a semi-circle* that doesn't include

- the triangle's having property P, i.e. equality between the square on the hypotenuse and the sum of the squares on the other sides,

it is *not* possible to have a concept of *triangle inscribed in a semi-circle* that *does* include

- there being no ratio at all between the square on the hypotenuse and the squares on the other sides.

Hence, though we may be unaware of what the ratio is, we can't rule out any candidate unless we clearly understand that it is wrong for the triangle; and we can't clearly understand this for the ratio *equality*, because it is right for the triangle. So the concept in question must, in an indirect and oblique way, involve the property P: it must involve a thought of 'some ratio or other' which *could* take the value *equality*. In contrast with this, the concept of *body* doesn't include—or even indirectly and obliquely involve—anything at all that belongs to the mind, and the concept of *mind* doesn't include—or even indirectly and obliquely involve—anything at all that belongs to the body.

Summing up: Although I said 'it is enough that I can vividly and clearly understand one thing apart from another' and so on, I can't go on to argue 'yet I vividly and clearly understand that this triangle is right-angled without

understanding that the square on the hypotenuse' and so on: •because the ratio between the square on the hypotenuse and the sum of the squares on the other sides isn't a complete thing; •because we don't clearly understand the ratio to be equality except in the case of a right-angled triangle; and •because there is no way of understanding the triangle distinctly while denying that it has property P.

But now I must move towards question (2) [on page 60] and explain how the mere fact that I can vividly and clearly understand one substance apart from another is enough to make me certain that one excludes the other.

The answer is that the notion of a substance is just this: a substance is something that can exist by itself, i.e. without the help of any other substance. And no-one has ever perceived two substances by means of two different concepts without judging them to be really distinct—i.e. judging that they are two substances and not one.

Thus, if I hadn't been looking for greater than ordinary certainty, I'd have settled for showing in the second Meditation that the mind can be understood as a subsisting thing without anything belonging to the body being attributed to it, and conversely that the body can be understood as a subsisting thing without anything belonging to the mind being attributed to it. I wouldn't have added anything more to my demonstration that the mind is really distinct from the body, because it is generally accepted that the way things are according to our perception of them is the way they are in reality. But one of the extravagant doubts that I put forward in the first Meditation deprived me of certainty about this very point (namely whether things are in reality as we perceive them to be), as long as I was supposing myself to be ignorant of God, the author of my being. That's why everything I wrote about God and truth in the third, fourth and fifth Meditations contributes to the conclusion—finally

established in the sixth Meditation—that the mind is really distinct from the body.

Arnauld says: ‘I have a clear understanding of a triangle inscribed in a semi-circle without knowing that the triangle has the property P.’ It is true that one can understand the triangle without thinking of the ratio of •the square on its hypotenuse to •the sum of the squares on the other sides; but one can’t understand it as *not* having this ratio. Whereas we can understand the mind to exist •without bringing in any thought of the body, and indeed •while denying of it all the attributes of a body. For it is of the nature of substances that they should mutually exclude one another.

Arnauld continues: ‘Since I infer my existence from my thinking, it’s not surprising if the idea that I form in this way represents me purely as a thinking thing.’ But this is no objection to my argument. For in the same way when I examine the nature of the body, I don’t find the least trace of thought in it. And there can’t be a stronger argument for a distinction between two things than the fact that when we examine them separately everything we find in one is different from what we find in the other.

And I don’t see why this argument ‘proves *too much*’. The *least* thing one can say to establish that x really is distinct from y is that x can be separated from y by the power of God. Also, I thought I was being very careful to ward off the false inference that man is simply ‘a mind that makes use of a body’. In the sixth Meditation, where I dealt with the mind’s distinctness from the body, I showed along with this that the mind is substantially united with the body [see note on page 59]. And the arguments I used to prove this are as strong as any I can remember ever having read. Saying that •a man’s arm is a substance that is really distinct from the rest of his body isn’t denying •that the arm belongs to the nature of the whole man. And saying that •the arm belongs

to the nature of the whole man doesn’t create the suspicion that •it can’t subsist apart from the rest of the man’s body. I don’t think I proved too much in showing that the mind can exist apart from the body, or that I proved too little in saying that the mind is substantially united with the body, for that substantial union doesn’t prevent us from having a vivid and clear concept of the mind on its own, as a complete thing. This is quite different from the concept of a surface or a line, which can’t be understood as complete things unless we attribute to them not just length and breadth but also depth.

Finally the fact that •the power of thought is dormant in infants and disturbed—not ‘extinguished’, as Arnauld said—in madmen doesn’t show that we should regard •it as attached to bodily organs in such a way that it can’t exist without them. We have plenty of experience of thought being •impeded by bodily organs, but it doesn’t follow from this that thought is •produced by those organs—a view that there’s not the slightest reason to accept.

Admittedly, the closeness of the mind’s union with the body—a union that we experience constantly through our senses—makes us unaware of the real distinctness of mind from body unless we attentively meditate on the subject. But I think that those who repeatedly ponder on what I wrote in the second Meditation will be easily convinced that the mind *is* distinct from the body—not merely *thought of as* distinct by a fiction or abstraction of the intellect, but *known to be* a distinct thing because that’s what it really is.

I shan’t respond to Arnauld’s observations about the immortality of the soul, because they don’t conflict with my own views. As for the souls of brute animals: this isn’t the place to go into that subject. I make some explanatory remarks about it in Part 5 of my *Discourse on the Method*, and I couldn’t add to them without giving an account of the

whole of physics. Still, so as not to pass over the topic in complete silence, I'll say the thing that it is most important to say, namely: in our bodies and those of the brutes, no movements can occur without the presence of all the organs or instruments that would enable the same movements to be produced in a machine. So even in our own case the mind doesn't directly move the physical limbs, but simply controls the animal spirits [see note on page 58] that flow from the heart via the brain into the muscles, and sets up certain motions in them; for the spirits are naturally adapted to moving in all sorts of ways without difficulty. Many of the motions occurring inside us don't depend in any way on the mind: heartbeat, digestion, nutrition, breathing when we are asleep, and also such waking actions as walking, singing and the like when we do them without thinking about them. When someone falls, and holds out his hands so as to protect his head, he isn't instructed by reason to do this. Rather, the sight of the impending fall reaches the brain and sends the animal spirits into the nerves in the manner needed to produce this movement of the man's hands, without any mental volition, just as it would be produced in a machine. And since our own experience reliably informs us that this is so, why should we be so amazed that the 'light reflected from the body of a wolf onto the eyes of a sheep' should equally be capable of arousing the movements of flight in the sheep?

Are any of the movements of the brutes similar to ones that occur in us with the help of the mind, or do they all resemble only those that depend merely on the flow of the animal spirits and the disposition of the organs? If we want to think our way through to an answer to this, we should consider the differences between men and beasts—I mean the differences set out in Part 5 of my *Discourse on the Method*, for I don't think there are any others. If we do this, we'll easily see that •all the actions of the brutes resemble

only •human actions that occur without help from the mind. This will force us to conclude that we don't know of any source of movement in animals other than the layout of their physical parts and the continual flow of the spirits that are produced by the heat of the heart as it rarefies the blood. We shall also see that what led us to imagine that the brutes have some other source of motion was merely our failure to distinguish the two sources of motion just described: seeing that the source depending solely on the animal spirits and physical organs exists in the brutes just as it does in us, we jumped to the conclusion that the other source—mind or thought—also exists in them. Beliefs that we have had since our earliest years, even though we have since had solid evidence against them, can't easily be eradicated unless we think long and hard about that evidence.

Objections concerning God

(1) The first proof of the existence of God, which Descartes sets out in the third Meditation, falls into two parts: **(a)** God exists if there is an idea of God in me; **(b)** Given that I possess such an idea, the only possible source of my existence is God. I have only one criticism of **(a)**. Descartes first asserts that 'falsity in the strict sense can occur only in judgments', but a little later he admits that ideas can be false—not 'formally false' but 'materially false', and this strikes me as inconsistent with his own principles. I am anxious to be clear about this dark matter, so I'll discuss an example, which may help to clarify things. Descartes says that 'if cold is merely the absence of heat, the idea of cold that represents it to me as a positive thing will be materially false'.

But if cold is merely an absence, there can't be an *idea* of cold that represents it to me as a positive thing; so Descartes is here confusing a •judgment with an •idea. What is the

idea of cold? It is coldness itself existing representatively in the intellect. But if cold is an absence, it can't exist representatively in the intellect by means of an idea whose representative existence is something positive. So if cold is merely an absence, there can't ever be a positive idea of it, so there can't be an idea ·of it· that is materially false.

This is confirmed by an argument of Descartes's own—the argument to prove that the idea of an infinite being *has to* be a true idea because, although I can tell a story according to which no such being exists, I can't tell one according to which the idea of such a being doesn't represent anything real to me.

This obviously holds for any positive idea. For although I can tell a story according to which cold is represented ·to me· by a positive idea, but is actually not something positive, I can't tell one according to which the positive idea doesn't represent anything real and positive to me. For what makes an idea count as 'positive' isn't •any fact about it considered as a psychological event (for if *that* were the test all ideas would be positive), but rather •the facts about its representative nature, what it represents to our mind. Thus, the idea we have been discussing may perhaps not be the idea of cold, but it can't be a false idea.

You may reply: 'What makes it false is precisely its not being the idea of cold.' No: what is false is your *judgment* that it's the idea of cold; the *idea* that you have is, in itself, perfectly true. Just as the idea of God should never be called 'false'—not even 'materially false', though someone might transfer it to something that isn't God, as idolaters have done. Summing up ·this part of my discussion·: what *does* the idea of cold—the one you say is materially false—represent to your mind? An absence? Then it is true. A positive entity? Then it isn't the idea of cold.

Also: what is the cause of the positive representative

being—the *content* of the idea—which you say makes the idea materially false? 'The cause is myself, you may answer, 'in so far as I come from nothing.' But in that case the positive representative being of an idea *can* come from nothing, and that shakes the foundations of Descartes's theoretical structure.

Start of replies to objections concerning God

(1) Up to here I have tried confront Arnauld's arguments and refute them. But now I am going to do what people do when fighting stronger opponents: instead of meeting him head on I will dodge his blows.

He presents only three criticisms in this section, and each can be accepted if what I wrote is understood in his way, But I meant each in a different sense from his, one that seems to me to be equally correct.

The first point concerns my statement that certain ideas are materially false—by which I mean that those ideas provide subject-matter for error. But Arnauld concentrates on ideas considered *formally*, and maintains that there is no falsity in them. [Descartes then sketches the other two points; these sketches will be presented at the starts of his **(2)** and **(3)** respectively. He continues:] But let us deal with the points more carefully one at a time.

When Arnauld says 'if cold is merely an absence, there can't be an *idea* of cold that represents it to me as a positive thing', it's clear that he is dealing solely with an idea taken formally. Since ideas are forms of a kind, and aren't composed of any matter, when we think of them as representing something we are taking them not materially but formally. But if we consider ideas not as •representing this or that but simply as •intellectual events, *then* we can be said to be taking them materially; but in that case no question arises about whether they are true or false of their objects.

The only remaining sense for ‘materially false’ as applied to an idea is the one I am presenting here, namely ‘providing subject-matter for error’. Whether cold is something positive or merely an absence makes no difference to my idea of cold, which remains the same as it always was. It is this idea which, I claim, can provide subject-matter for error if cold is in fact an absence and doesn’t have as much reality as heat; for if I consider the ideas of cold and heat just as I received them from my senses, I can’t tell that one of them represents more reality to me than the other.

I certainly didn’t ‘confuse a judgment with an idea’. For I said that the falsity to be found in an idea is material falsity, while the falsity involved in a judgment can only be formal.

When Arnauld says that the idea of cold ‘is coldness itself existing representatively in the intellect’, I think we need to make a distinction. It often happens with obscure and confused ideas—such as the ideas of heat and cold—that an idea of something is wrongly taken to be the idea of something else. Thus if cold is merely an absence, the idea of cold is not ‘coldness itself existing representatively in the intellect’ but something else that I wrongly mistake for this absence, namely ‘a sensation that in fact doesn’t exist outside the intellect’.

This doesn’t apply to the idea of God, because that can’t be taken to be the idea of something that it doesn’t fit, i.e. of something other than God. I’m saying that about the *vivid and clear* idea of God; as for the confused ideas of gods that idolaters concoct, I see no reason why *they* can’t be called ‘materially false’ because they provide the idolaters with subject-matter for false judgments. But ‘material falsity is a matter of degree’: ideas that give the judgment little or no scope for error don’t seem *as much* entitled to be called ‘materially false’ as those that give great scope for error. It’s easy to show by examples that some ideas provide much

more scope for error than others. Confused ideas that ‘are made up at will by the mind, such as the ideas of false gods, don’t provide as much scope for error as the confused ideas that ‘come from the senses, such as the ideas of colour and cold (if I am right that these ideas don’t represent anything real). The greatest scope for error is provided by the ideas arising from the sensations of appetite. Thus the idea of thirst that the patient with dropsy has does indeed give him subject-matter for error, since it can lead him to judge that a drink will do him good, when in fact it will do him harm.’

But Arnauld asks, concerning the idea of cold that I called ‘materially false’, what it represents to me. He says:

If it represents an absence, it is true. If it represents a positive entity, it isn’t the idea of cold.

That is correct; but my only reason for calling the idea ‘materially false’ is that its obscurity and confusedness made me unable to judge whether what it represents to me is something positive existing outside of my sensation; so that I may be led to judge that it is something positive when really it is a mere absence.

So when Arnauld asks ‘What is the cause of the positive representative being which you say makes the idea materially false?’, he is asking an improper question. I don’t claim that an idea’s material falsity results from some positive entity; it arises solely from the obscurity of the idea—although something positive underlies it, namely the actual sensation involved.

Now this positive entity, ‘the sensation’, exists in something real, namely *me*; but the obscurity of the idea (which is the only cause of my judging that the idea of the sensation of cold represents some external item called ‘cold’) doesn’t have a real cause but arises simply from the fact that my nature is not perfect in all respects.

This doesn’t in any way ‘shake the foundations’ of my

philosophy. When I use the label ‘materially false’ for ideas that I think provide subject-matter for error, am I moving too far away from standard philosophical usage? I might have been worried about this (I have never spent very much time reading philosophical texts), but I found the word ‘materially’ used in exactly my sense in the first philosophical author I came across, namely Suarez, *Metaphysical Disputations* IX.ii.4.

Objection

(2) I turn now to **(b)** the second half of the proof [given on page 64], where Descartes asks ‘whether I who have the idea of an infinite being could derive my existence from any source other than an infinite being, and in particular whether I could derive it from myself’. He maintains that I couldn’t derive my existence from myself, because ‘if I had given existence to myself I would also have given myself all the perfections of which I find I have an idea’. But Caterus in the first set of Objections has an acute reply to this: ‘derived from oneself should be taken not •positively but •negatively, so that it simply means ‘not derived from anything else’. He continues:

But now, if something gets its existence ‘from itself’ in the sense of not getting it from anything else, how can we prove that this being takes in everything and is infinite? Don’t tell me: ‘If it derived its existence from itself, it could easily have given itself everything.’ For the thing we are now talking about *didn’t* get its existence from itself as a cause; it *didn’t* exist prior to itself so as to be able to choose in advance what it would come to be. [page 4]

To refute this argument, Descartes maintains that the phrase ‘deriving one’s existence from oneself’ should be taken not •negatively but •positively, even when it refers to God, so that ‘in a certain way God relates to himself as an efficient

cause relates to its effect’ [page 8]. This seems to me to be a hard saying, and indeed to be false.

Thus I partly agree with Descartes and partly disagree with him. I agree that I couldn’t derive my existence from myself in any way but positively; but I don’t agree that the same holds for God. On the contrary, I think it is obviously self-contradictory to maintain that anything derived its existence positively—as it were *causally*—from itself. So I propose to establish Descartes’s conclusion but by a completely different route, as follows [this slightly expands Arnauld’s formulation]:

(i) To derive my existence from myself, I would have to derive it positively—as it were, causally.

(ii) Nothing can positively—as it were, causally—derive its existence from itself.

Therefore **(iii)** it is impossible that I should derive my existence from myself.

Premise **(i)** is proved by Descartes’s own arguments based on the fact that, since the moments of time are separable from each other—meaning that the existence of one stretch of time doesn’t logically necessitate the existence of any others—my existing now doesn’t imply that I’ll still exist in a minute from now, unless there is some cause which as it were creates me anew at each moment’ [page 7].

As for premise **(ii)**, I think this is so clearly shown to be true by the natural light that it can hardly be given any proof except for the piffling kind of ‘proof’ that establishes a well-known result by means of premises that are less well-known. And Descartes seems to have recognized its truth, since he hasn’t ventured to deny it openly. Consider this reply that he makes to Caterus:

I didn’t say that nothing could possibly be its own efficient cause. This is obviously true when the term ‘efficient’ [see note on page 6] is taken to apply only to

causes that are •temporally prior to or •different from their effects. But in the present context that seems not to be the best way of interpreting 'efficient'. . . .because the natural light doesn't demand that we think of an efficient cause as having to be •temporally prior to its effect. [page 6 above]

The •temporal-priority part of this is quite true, but why did Descartes drop the •having-to-be-different part? Why didn't he add that the natural light doesn't demand that an efficient cause of x be different from x? Was it because the light of nature wouldn't let him say this •because it *does* make that demand•?

Since every effect depends on its cause, gets its existence from its cause, isn't it clear that no thing can depend on *itself*, receive its existence from *itself*?

Again, every cause is the cause of *an effect*, and every effect is the effect of *a cause*. So there is a two-way relation between cause and effect, and a relation must involve two terms.

Also, it's absurd to conceive of a thing as having existence and then at a later time receiving existence. But that's what we would be thinking if we applied the notion of cause and effect to a thing in respect of itself, •thinking that there are cases of cause-effect that instead of the form x-y have the form x-x•. The notion of *cause* is the concept of •giver of existence. The notion of *effect* is the concept of •receiver of existence. The notion of a cause is essentially prior to the notion of an effect.

We can't use our notion of *cause* to conceive of something as giving existence unless we conceive of it as having existence; for no-one gives what he doesn't have. So •in our attempted thought of something as cause of itself• we would be putting our conception of the thing as having existence before our conception of it as receiving existence; but in the

case of any receiver, it *first* receives x and *then* has x.

Another way of putting the argument: No-one gives what he doesn't have. So no-one can give himself existence unless he already has it. But if he already has it, why should he give it to himself? Finally, Descartes asserts that 'there is no real distinction between preservation and creation—only a conceptual one—this being one of the things that the natural light makes evident'. But the same natural light makes it evident that nothing can create itself. Therefore nothing can preserve itself, •i.e. keep itself in existence•.

If we come down from the general thesis to the application of it to God in particular, I think it is even more clearly true: God cannot get his existence from himself positively, but only negatively, i.e. not getting his existence from anything else.

This is clear first of all from Descartes's own argument to prove that if a body gets existence from itself it must do so in the positive way. He says:

The parts of time don't depend on one another; so the supposed fact that this body has existed until now 'from itself', i.e. without a cause, isn't sufficient to make it the case that this body will continue to exist in future, unless the body has some power which (as it were) re-creates it continuously. [page 8]

But so far from this argument being applicable to a supremely perfect or infinite being, we can actually infer the opposite result, and for opposite reasons. It goes like this:

Built into the idea of an infinite being is the being's having a duration that is infinite, i.e. not restricted by any limits; and it follows from this that it is indivisible, permanent, and existing all at once, so that the concepts of 'before' and 'after' can't be applied •to it•, except through an error and imperfection of

our intellect.

It obviously follows from this we can't conceive of an infinite thing as existing, even for a moment, without conceiving of it as something that has always existed and will always exist, for eternity (Descartes himself establishes this elsewhere). So there's no point in asking *why* this being continues to exist.

Augustine, whose remarks on the subject of God are as noble and sublime as any that have appeared since the time of the sacred authors, frequently teaches that in God there is no past or future but only eternally present existence. This makes it even clearer that the question of why God should continue in existence cannot be asked without absurdity, since the question manifestly involves the notions of 'before' and 'after', past and future, which should be excluded from the concept of an infinite being.

And God can't be thought of as positively getting his existence 'from himself', as if he had created himself in the beginning. For that would require him to exist (·so as to give existence·) before he existed (·as a result of receiving it·). As Descartes often says, his sole basis for holding that God gets existence 'from himself' is his view that God really does *keep* himself in existence.

But an infinite being can't be thought of as •keeping itself in existence, any more than it can be thought of •being brought into existence. For what is keeping-in-existence except continual re-creation, ·i.e. continual being-brought-into-existence·? Thus all keeping-in-existence presupposes being-brought-into-existence. . . .

So we should conclude that God cannot be conceived of as positively getting existence from himself, except through an imperfection of our intellect, which conceives of God after the fashion of created things. Another argument will make this even clearer.

When we look for the efficient cause of something, we are looking for the cause of its •existing, not the cause of its •essence. When I see a triangle, I may look for the efficient cause of this triangle's existing; but it would be absurd to inquire into the efficient cause of this triangle's having three angles equal to two right angles. If anyone asks what causes the triangle to have that property, the right response is not to give an efficient cause but rather to explain that this is the nature ·or essence· of a triangle. That's why mathematicians, who aren't concerned with the existence of the objects they study, never give demonstrations involving efficient or final causes [see note on page 6]. But it belongs to the *essence* of an infinite being that it exists—or stays in existence, if you wish—just as it belongs to the essence of a triangle to have its three angles equal to two right angles.

•Why does a triangle have three angles equal to two right angles? •Because this is the eternal and unchangeable nature of a triangle.

•Why does God exist, or continue in existence?
•Because this is the nature of a supremely perfect being.

That is the answer we should give. We shouldn't try to find any efficient cause either in God or outside him. (Nor any 'quasi-efficient' cause! My concern is with realities, not labels.)

Descartes says that the light of nature lays it down that for *any* existing thing we may ask why it exists—that is, we may ask •what its efficient cause is or, if it doesn't have one, •*why* it doesn't. I reply to this that if someone asks

Why does God exist?

we oughtn't to answer in terms of an efficient cause, but should explain that he exists simply •because he is God, or •because he is an infinite being. And if someone asks

What is the efficient cause of God's existing?

we ought to reply that he doesn't need an efficient cause. And if the questioner goes on to ask

Why doesn't he need an efficient cause?

we ought to answer that it's because he is an infinite being whose existence is his essence. For the only things that need an efficient cause are those in which actual existence can be distinguished from essence.

This disposes of the argument that follows the passage just quoted:

So if I thought that nothing could possibly relate to itself in the way an efficient cause relates to its effect, I certainly would *not* conclude that there was a first cause! On the contrary, if someone postulated a 'first cause' I would ask what *its* cause was, so I would never arrive at a genuine first cause of everything.

Not at all! If I thought we ought to look for the efficient cause. . . .of any given thing, then what I would be looking for was a cause distinct from the thing in question, because it seems perfectly obvious that nothing can possibly relate to itself in the way that an efficient cause stands to its effect. Descartes should be advised to re-think this matter very carefully, because I know for sure that almost every theologian will be upset by the proposition that God derives his existence from himself positively, as it were causally.

Reply

(2) Arnauld's second point concerns my claim that God derives his existence from himself 'positively and as it were causally'. All that I meant by this was that the reason why God doesn't need any efficient cause in order to exist is based on something positive—namely the very immensity of God, which is as positive as anything can be! Arnauld, however, shows that God is not self-created or self-preserved by the positive influence of any efficient cause; and this I

quite agree with. [That is the sketch mentioned in a note on page 65. Then we come to what Descartes says when 'dealing with the points more carefully one at a time':]

The complaint that Arnauld emphasizes •most—though it seems to me to be the •least deserving of emphasis—concerns the passage where I said that 'in a certain way God relates to himself as an efficient cause relates to its effect'. Arnauld says that it is 'a hard saying, and indeed false' to suggest that God is his own efficient cause; but I actually *denied* that suggestion in the passage just quoted. For in saying that God 'in a certain way' stands in the same relation ·to himself· as an efficient cause ·does to its effect·, I made it clear that I did *not* suppose he was the same as an efficient cause; and in using the phrase 'we are quite entitled to think', I meant that I was explaining the matter in these terms merely because of the imperfection of the human intellect. Indeed, throughout the rest of the passage I confirmed this. Right at the beginning, having said 'we may always ask, of any existing thing what its efficient cause was', I added 'and if it didn't have one, why didn't it need one?' These words show clearly that I did believe that there is something that doesn't need an efficient cause. And what could that be but God? A little further on I said that there is in God 'such great and inexhaustible power that he needed no help from anything else in order to exist, or in order to stay in existence' so that he is, 'in a way, *his own cause*'. Here the phrase 'his own cause' can't possibly be taken to mean an efficient cause; it simply means that God's inexhaustible power is the cause or reason why he doesn't need a cause. And since that inexhaustible power—that immensity of essence—is utterly positive, I said that the reason or cause why God needs no cause is a positive one. Now this can't be said of any finite thing, even one that is perfect of its kind. When a finite thing is said to get its existence 'from itself', this has to taken in a

negative sense, meaning that its positive nature provides no basis for thinking that it doesn't need an efficient cause.

Similarly, in every passage where I compared

- the formal cause—the reason provided by God's essence, in virtue of which he needs no cause in order to exist or to stay in existence—

with

- the efficient cause—without which *finite* things can't exist—

I always chose my wording so as to make it clear that the two kinds of cause are different. [See the note on them on page 6.] And I *never* said that God preserves himself by some positive force, in the way created things are preserved—kept in existence—by him; what I described as a 'positive' thing was the immensity of his power or essence, in virtue of which he doesn't need a preserver.

So I can freely accept everything Arnauld puts forward to prove (and this is the *only* upshot of his arguments) that God isn't the efficient cause of himself and doesn't keep himself in existence himself by any positive power or by continuously re-creating himself. But I hope Arnauld won't deny that •the immensity of God's power in virtue of which he doesn't need a cause in order to exist is a positive thing in God, and that •nothing else contains anything positive that frees it from needing an efficient cause in order to exist. That is all I meant when I said that the •only sense in which anything *other than God* can be said to get its existence 'from itself' is a •negative one. . . .

But since Arnauld has given me such a sombre warning that 'almost every theologian will be upset by the proposition that God derives his existence from himself positively, as it were causally', I'll explain a little more carefully why this way of talking is very useful—even necessary—when dealing with these matters, and explain why there is absolutely nothing in

it to be upset about. [Then a paragraph about the Latin and Greek terminology used by theologians when writing about relations ('producing', 'begetting' etc.) amongst the members of Christianity's Holy Trinity. In that tricky area, Descartes says, there are reasons to be wary of the word 'cause', but:] where there is no such risk of error, and we are dealing with God not as a trinity but simply as a unity, I don't see why the word 'cause' must be avoided at all costs, especially in a context where it seems to be

- very useful, because it serves to demonstrate the existence of God,

and also

- indispensable, because it is needed if that demonstration is to be completely clear.

I think it is clear to everyone that the concept of *efficient causes* comes into our primary and principal way, if not our only way, of demonstrating that God exists. We can't make the demonstration precise unless we set our minds free to ask about the efficient causes of *everything*, even of God—for we can't legitimately make an exception of God at a stage where we haven't yet proved that he exists! So we should ask about *everything* 'Does it get its existence from itself or from something else?'; and this question leads to the inference that God exists, even though we have not given an explicit account of what it means to say that something gets its existence 'from itself'. Those who are guided purely by the natural light will in this context, unprompted, form a concept of cause that is common to •efficient causes and to •formal causes: they will take

- 'x gets its existence from something else'

to mean that x gets its existence from that thing as an *efficient* cause, and

- 'x gets its existence from itself'

to mean that x gets its existence from itself as a *formal*

cause, meaning that x's essence entails that x doesn't need an efficient cause. Accordingly, I didn't explain this point in my *Meditations*, but left it out, assuming it was self-evident.

Some people are in the habit of assuming that nothing can be the efficient cause of itself, and they carefully distinguish efficient causes from formal ones. So when they confront the question

Does anything get its existence from itself?

they find it natural to think of this only in terms of efficient causes, strictly so-called. And that leads them to suppose that the phrase 'from itself' must be taken not as meaning ·positively· •'from a cause' but only negatively •'without a cause'—implying that for some reason we mustn't ask why the thing exists. Caterus showed in the first set of Objections that if we read the phrase 'from itself' in this way, we won't be able to produce any argument for the existence of God based on his effects; so this interpretation must be totally rejected. To deal with this matter properly, I think, we have to show that between •'efficient cause' in the strict ·and narrow· sense and •'no cause at all' there is a third possibility, namely •'the positive essence of a thing', *to which the concept of an efficient cause can be extended*. (·This kind of concept-stretching is perfectly legitimate·. In geometry the concept of •'the arc of a circle is standardly extended, for the case of an indefinitely large circle, to cover •'straight lines; and the concept of a •'straight-sided polygon is extended, for the case of a polygon with indefinitely many sides, to cover •'circles.) I thought I explained this in the best way available to me when I said that when we are exploring this question we shouldn't restrict the meaning of 'efficient cause' to causes that are •'prior in time to their effects or •'different from them.

·We need to leave •'priority and •'otherness out of the meaning of 'efficient cause'· because if we don't, the question

would be trivial, since everyone knows that nothing can be •'prior to itself or •'distinct from itself. ·And omitting •'priority is legitimate·, because the restriction 'prior in time' can be deleted from the concept while leaving the notion of *efficient cause* intact. That a cause needn't be prior in time ·to its effect· is clear from the fact that something counts as a cause only *while* it is producing its effect, as I have said.

The second condition—·otherness·—can't also be deleted; but this shows only that a cause that isn't distinct from its effects is not an 'efficient cause' in the strict ·and narrow· sense; and this I admit. But it doesn't follow that such a cause is in no way a positive cause that can be regarded as analogous to an efficient cause; and that's all that my argument requires. The natural light that enables me to perceive that

if I had given myself existence, I would have given myself all the perfections of which I have an idea, also enables me to perceive that nothing can give itself existence in the restricted sense usually implied by the proper meaning of the term 'efficient cause'.

For in *that* sense, 'x gives existence to x' would mean that x as giver was different from x as recipient, so that we would have 'x is different from x *and* x is x'—which is self-contradictory. So the question 'Can anything give itself existence?' must be taken to mean 'Does anything have a nature or essence such that it doesn't need an efficient cause in order to exist?'

The further proposition that

•if there is something that doesn't need an efficient cause in order to exist, it will give itself all the perfections of which it has an idea, if it doesn't already have them,

means that this being must actually have all the perfections it is aware of. This is because we perceive by the natural

light that a being whose essence is so immense that it

- doesn't need an efficient cause in order to exist

is also a being that

- doesn't need an efficient cause in order to have all the perfections it is aware of.

The being's own essence is the higher-form source from which it gets everything that we can think of as gettable from an efficient cause.

The point of saying that it will give itself all the perfections 'if it doesn't already have them' is just to help you get your mind around this, and not to imply that such a being might for a while be aware of perfections that it didn't yet have. For the natural light enables us to perceive that it is impossible for such a being to have the power and will to give itself something that it doesn't yet have; rather, its essence is such that it possesses *from eternity* everything that we can now suppose it would give to itself *if* it didn't yet have it. [In this, 'it' could be replaced by 'he'; there is no difference in the Latin.]

All the above ways of talking, derived from an analogy with the notion of efficient causation, are utterly necessary for guiding the natural light so that we get a clear awareness of these matters. It was exactly that sort of analogy, between a curved-line figure and a straight-line one, that enabled Archimedes to demonstrate various properties of the sphere that could hardly have been grasped in any other way. No-one criticizes these proofs for likening a sphere to a polyhedron, and in the same way—so it seems to me—I shouldn't be criticized for using the analogy of an •efficient cause to explain features that in fact belong to a •formal cause, i.e. to the essence of God.

There's no possible risk of error in using this analogy, because the one feature of an efficient cause that can't be transferred to a formal cause is in no danger of being carried across to the 'cause of itself' context, because that

transfer involves an obvious contradiction that no-one would be seduced into accepting: specifically, it involves saying that something could be different from itself. . . .

[Descartes then points out that although he calls God the cause of himself, he doesn't call him the effect of himself, because the status of *effect* involves a certain indignity. He sees a precedent for this in what theologians say about the Christian Trinity—the Father is the 'originating source' of the Son, they say, but they don't say that the Son is 'originated'.—He then spends a short paragraph contending that in equating God's essence with his formal cause he is following Aristotle. Then:]

It was, however, scarcely possible for me to handle this topic without applying the term 'cause' to God. See what happened when Arnauld tried to reach the same conclusion as I did, but by another route. He completely failed in this, or so it seems to me. •First, he explains at length that God isn't his own efficient cause, since 'x is the efficient cause of y' entails that x is distinct from y. •Then he shows that God doesn't *positively* get his existence from himself, where 'positively' is taken to imply the positive power of a cause. •And then he shows that God doesn't really preserve himself or keep himself in existence, if 'preservation' is taken to mean the continuous creation of a thing. I am happy to accept all this. But then Arnauld *again* tries to show that God can't be called his own efficient cause, on the grounds that 'when we look for the efficient cause of something, we are looking for the cause of its •existence, not the cause of its •essence'. He continues:

But it belongs to the essence of an infinite being that it exists, no less than it belongs to the essence of a triangle to have its three angles equal to two right angles. And hence if someone asks whether God exists, it wouldn't be right to answer that in terms of

an efficient cause, any more than it would be to do that if someone asks why the three angles of a triangle are equal to two right angles.

This line of thought can easily be turned against Arnauld, as follows. Although we don't ask for the efficient cause of something's essence, we can properly ask for the efficient cause of something's existence; and in the case of God, essence is not distinct from existence; therefore we can ask for the efficient cause of an essence in the case of God.

But to reconcile our two positions, the question 'Why does God exist?' should be answered not in terms of an efficient cause in the strict sense, but simply in terms of the essence or formal cause of the thing. And precisely because in the case of God there is no distinction between existence and essence, the formal cause will be strongly analogous to an efficient cause, and hence can be called something close to an efficient cause.

Finally, Arnauld adds:

If someone asks 'What is the efficient cause of God's existing?', we should reply that he doesn't need an efficient cause. And if the questioner goes on to ask 'Why doesn't he need an efficient cause?' we should answer that it's because he is an infinite being whose existence is his essence. For the only things that need an efficient cause are those in which actual existence may be distinguished from essence.

This, he says, disposes of my argument that 'if I thought that nothing could possibly relate to itself in the way an efficient cause relates to its effect, then in the course of my inquiry into the causes of things I would never arrive at a first cause of everything'. But it seems to me that this point of Arnauld's neither disposes of my argument nor in any way shakes or weakens it. In fact the principal force of my proof depends on it, as do all the proofs that can be

constructed to demonstrate the existence of God from his effects. And most theologians maintain that an argument based on God's effects is the only kind that can be adduced to prove his existence.

Thus, in denying that God relates to himself in a manner analogous to that of an efficient cause to its effect, Arnauld not only fails to clarify the proof of God's existence, but actually prevents the reader from understanding it. This is especially true at the end when he concludes that 'if we thought we ought to look for the efficient cause . . . of any given thing, then what we would be looking for would be a cause distinct from the thing in question'. 'Think about what this implies regarding arguments for God's existence, arguments that aim to bring non-believers to believe that God exists'. Take someone who doesn't yet know that God exists: how can he inquire into the efficient cause of other things (this being his route to the knowledge of God), unless he thinks he can inquire into the efficient cause of anything whatsoever? And how can he terminate his inquiries by arriving at God as the first cause, if he thinks that for any given thing we must look for a cause that is distinct from it?

[Descartes then argues that Arnauld's resistance to concept-stretching, if applied to mathematics, would undercut the good work that Archimedes did on the basis of treating a circle as a polygon with infinitely many sides. Then:] I have pursued this issue at somewhat greater length than the subject required, in order to show that I am extremely anxious to prevent anything at all being found in my writings which could justifiably give offence to the theologians.

Objection

(3) Let me add something that I missed earlier. Descartes lays it down as certain that there can be nothing in him,

considered as a thinking thing, of which he isn't aware, but it seems to me that this is false. For by 'himself, considered as a thinking thing' he means simply his mind, considered as distinct from the body. But surely we can all see that there may be many things in our mind of which the mind isn't aware. To give one example out of ever so many: the mind of an infant in its mother's womb has the power of thought, but isn't aware of it.

Reply

(3) Arnauld's third and last point concerns my saying that 'there is nothing in the mind of which we aren't aware'. I meant this to refer to the operations of the mind, but Arnauld takes it to apply to the mind's powers, and so denies it. [That is the sketch mentioned in the note on page 65. Then we come to what Descartes says when 'dealing with the points more carefully one at a time':]

It seems to me *self-evident* that the mind, considered as a thinking thing, can't contain anything of which it isn't aware. We can't make sense of the proposition that the mind, seen as a thinking thing, contains something that isn't a thought or something dependent on a thought. . . .and we can't have any thought that we aren't aware of at the very moment when it is in us. Which is why I am sure that the mind begins to think as soon as it is implanted in the body of an infant, and that it is immediately aware of its thoughts, even though it doesn't remember this afterwards because the impressions of these thoughts don't remain in the memory.

But although we are always •actually aware of the acts or operations of our minds, we aren't always aware of the mind's faculties or powers, except •potentially. By this I mean that when we concentrate on employing one of our faculties, then we immediately become actually aware of it, if the faculty in question resides in our mind. So we can say:

it's not in the mind if we aren't *capable* of becoming aware of it.

Objection

(4) I have one further worry, namely how Descartes avoids reasoning in a circle when he says that it's only because •we know that •God exists that we are sure that whatever we vividly and clearly perceive is true.

But we can be sure that God exists only because we vividly and clearly perceive this; so before we can be sure that God exists we need to be able to be sure that whatever we perceive clearly and evidently is true.

Reply

(4) Lastly, as to my *not* being guilty of circularity when I said that •our only reason for being sure that what we vividly and clearly perceive is true is the fact that •we know for sure that •God exists, and that •we are sure that God exists only because we perceive this clearly: I have already given an adequate explanation of this point in items (3) and (4) in my reply to the second Objections [starting on page 25], where I distinguished •perceiving something clearly from •remembering having perceived it clearly at an earlier time. At first we are sure that God exists because we are attending to the arguments that prove this; but afterwards all we need to be certain that God exists is our memory that we did earlier perceive this clearly. This •memory• wouldn't be sufficient if we didn't know that God exists and isn't a deceiver.

Points that may give difficulty to theologians

(1) In order to bring to an end a discussion that is growing tiresomely long, I'll now aim for brevity, and simply indicate the issues rather than argue them out in detail.

First, I am afraid that Descartes's somewhat free style of philosophizing, which calls everything into doubt, may cause offence to some people. He himself admits in his *Discourse on the Method* that this approach is dangerous for those of only moderate intelligence; but I agree that the risk of offence is somewhat reduced in the Synopsis.

Still, I think the first Meditation should be furnished with a brief preface explaining that there is no •serious doubt cast on these matters, and that all he wants to do is to set aside *temporarily* anything about which there is even the •'slightest' and most •'exaggerated' doubt (as Descartes himself puts it elsewhere); this being done as an aid to discovering something so firm and stable that not even the most perverse sceptic will have any scope for doubt about it. And a related point: I suggest that the clause 'since I *didn't* know the author of my being' should be replaced by 'since I *was pretending that I didn't know*. . .' etc.

In the case of the fourth Meditation ('Truth and Falsity'), I strongly urge—for reasons that it would take too long to list—that Descartes should make two things clear, either in the Meditation itself or in the Synopsis.

The first is that when he is inquiring into the cause of error, Descartes is dealing above all with how we go wrong in •distinguishing true from false, not with how we go wrong in •pursuing good and •avoiding evil.

All Descartes needs for his purposes is the discussion of the •first kind of error; what he says there about the cause of error would give rise to *serious* objections if it were stretched to cover •the second. So •errors having to do with good and evil should be *explicitly* declared off-limits: it seems to me that prudence requires, and the expository order that Descartes values so much demands, that anything that isn't relevant and could generate controversy should be omitted. Otherwise the reader may be drawn into pointless

quarrels over irrelevancies, and be blocked from taking in the essentials.

The second point I would like Descartes to stress is this: Where he says that we should assent only to what we vividly and clearly know, he is talking only about scientific and theoretical matters, and not with matters having to do with faith and the conduct of life; so that he is condemning only •rashly adopted views of the opinionated, not •prudent beliefs of the faithful. As St Augustine wisely points out:

Three things in the soul of man need to be distinguished, even though they are closely related: understanding, belief and opinion.

A person •understands if he grasps something through a reliable reason. He •believes if he is influenced by weighty authority to accept a truth even though he doesn't grasp it through a reliable reason. And he is •opinionated if he thinks he knows something that he actually doesn't know.

Being opinionated is a very grave fault, because: **(a)** If someone is convinced that he knows the answer already, he won't be able to learn, even when there is something to be learnt; and **(b)** rashness •in rushing to judgment• is in itself a mark of a disordered soul.

Understanding comes from reason; belief from authority; opinionatedness from error. This distinction will help us to understand that we aren't guilty of being hasty and opinionated when we hold on to our faith in matters that we don't yet grasp.

Those who say that we shouldn't believe anything that we don't know for sure are scared of being thought to be •opinionated. Admittedly •that is a disgraceful and wretched fault; but we should carefully reflect on the fact that

•reckoning one knows something

is very different from

- understanding that one is ignorant about something, while believing it under the influence of some authority.

If we reflect on this we will surely avoid the charges of error on the one hand, and inhumanity and arrogance on the other. (*The Usefulness of Belief*, ch. 15)

A little later, in Chapter 12 [sic], Augustine adds: 'I could produce many arguments to show that absolutely nothing in human society will be safe if we set ourselves to believe only what we can regard as having been clearly perceived.' These, then, are the views of Augustine.

Descartes, sensible man that he is, will readily judge how important it is to make those distinctions. Otherwise, people who are prone to impiety (and these days there are plenty of them) may distort his words in order to subvert the faith.

Reply

(1) I countered Arnauld's first group of arguments and dodged the second group. The arguments in his final section I completely agree with—except for the last one, and don't think it will be hard to bring him around to my view on that.

I completely concede, then, that the contents of the first Meditation, and indeed the others, aren't suitable for every mind. I said this whenever the occasion arose, and I'll go on doing so. That is the only reason why I didn't deal with these matters in the *Discourse on the Method*, which was written in French and therefore aimed at a wider audience, reserving them for the *Meditations*, which I warned should be studied only by very intelligent and well-educated readers. Someone might object: 'If there are things that very many people ought not to read about, you'd have done better to avoid writing about them!' I don't accept that, because I regard these matters as so crucial that without them no firm

or stable results can ever be established in philosophy. Fire and knives are dangerous in the hands of careless people or children, but they are so useful for human life that no-one thinks we should do without them altogether.

The next point concerns the fact that in the fourth Meditation I dealt only 'with how we go wrong in distinguishing true from false, not how we go wrong in pursuing good and avoiding evil', and that when I asserted that 'we should assent only to what we clearly know' this was always subject to the exception of 'matters having to do with faith and the conduct of life'. This is shown by the structure and texture of my book, and I also said it explicitly in (5) in my reply to the second Objections [page 31], and I also gave advance warning of it in the Synopsis. I say this in order to show how much I respect Arnauld's judgment and how much I welcome his advice. [What comes next is Arnauld's 'last one'.]

Objection

(2) What I see as most likely to offend theologians is the fact that Descartes's doctrines do damage to the Church's teaching concerning the sacred mysteries of the Eucharist.

We believe on faith that the substance of the bread is taken away from the bread of the Eucharist and only the accidents—the properties—remain. These are extension, shape, colour, smell, taste and other qualities perceived by the senses.

But Descartes thinks there aren't any sensible qualities—merely motions in the bodies that surround us, enabling us to perceive the various impressions that we then call 'colour', 'taste' and 'smell'. Thus, only shape, extension and mobility remain; and these, Descartes maintains, are not intelligible apart from some substance for them to inhere in, and therefore can't exist without such a substance. He repeats this in his reply to Caterus.

Also, the only distinctness that he allows between a substance and its states is a *formal* one; and that doesn't seem to be enough distinctness to allow for the states to be separated from the substance even by God.

Descartes's great piety will lead him, I'm sure, to ponder on this matter attentively and diligently, regarding himself as obliged to put his most strenuous efforts into the problem. Otherwise, even though he was aiming to defend the cause of God against the impious, he may seem to have endangered the very faith, founded by divine authority, that he hopes will lead him to the eternal life of which he has undertaken to convince mankind.

Reply

(2) There remains the sacrament of the Eucharist, with which Arnauld believes my views are in conflict. He says: 'We believe on faith that the substance of the bread is taken away from the bread of the Eucharist and only the accidents remain'; and he thinks that I don't admit that there are any real accidents, but recognize only modes that are unintelligible apart from some substance for them to inhere in and therefore can't exist without such a substance.

['Accident' means 'property'. A 'real accident'—where 'real' comes from *res* = 'thing'—is a thing-like property, which can move across from one substance to another: x becomes cool while y becomes warm because (so the theory goes) the *individual instance of warmth* that x had moves across to y.

As well as this kettle (a **particular** thing), and warmth (a universal **property**), there is the warmth of this kettle (a **particular property**).

Some philosophers thought that real accidents—also called 'real qualities' by Descartes—can also exist apart from any substance; hence the contrast with 'modes that are unintelligible apart from some substance'. Descartes's writings show him as sceptical about real accidents, even if he doesn't explicitly deny that there are any. How do 'real accidents' connect with the Eucharist? Descartes is about to tell us.]

I can easily escape this objection by saying that I have never denied that there are real accidents. It is true that in the *Optics* and the *Meteorology* I didn't use them to explain the matters which I was dealing with, but in the *Meteorology* I said explicitly expressly that I wasn't denying their existence. And in the *Meditations*, although I was supposing that I didn't yet have any knowledge of them, that didn't commit me to there not being any. The analytic style of writing [see note on page 34] that I adopted there allows us sometimes to assume things that haven't yet been thoroughly examined; and this is what happened in the first Meditation, where I made many assumptions which I then refuted in the subsequent Meditations. And I certainly didn't intend at that point to reach definite conclusions about the nature of accidents; I simply set down what appeared to be true of them on a preliminary survey. And when I said that modes are not intelligible apart from some substance for them to inhere in, I didn't mean to be denying that they can be separated from a substance by the power of God; for I firmly insist and believe that God can bring about many things that we can't understand.

But I now openly acknowledge that I am convinced that when we perceive a body by our senses, what affects our senses is simply the surface—the outer boundary—of the body in question. That is because **(a)** nothing can affect our senses except through contact (as all philosophers agree, even Aristotle); and **(b)** contact with an object takes place only at the surface. So bread or wine, for example, are perceived by the senses only to the extent that the surface of the bread or wine comes into contact with our sense organs, either immediately or via the air or other bodies (as I maintain) or via 'intentional species' (as many philosophers hold). [This use of 'species' has nothing to do with classification, species/genus etc. Its meaning has to do with *resemblance*. Some medievals thought they

found in Aristotle a theory of sense-perception according to which when you see (for example) the full moon, the moon is sending to your eyes 'species', i.e. items that *resemble* the moon. As you might expect, some philosophers interpreted these 'species' as real accidents (see note early in this Reply). A few lines down the next page Descartes will kidnap 'species' and make it mean something that fits with his utterly different views about sense-perception. All occurrences of 'species' other than in the discussion of the Eucharist will be replaced by 'image'.]

·WHAT IS A SURFACE?·

Our conception of a body's surface shouldn't be based merely on what we could learn through our fingers; it should also cover all the tiny gaps between the particles of flour that make up the bread, the tiny gaps between the particles of alcohol, water, vinegar etc. that are mixed together to make wine, and similarly for the particles of other bodies. ·Don't think of· these particles ·as static, uniform cubes; they· have various shapes and motions, so that when they are packed together, however tightly, there are bound to be many spaces between them—spaces that are not empty but full of air or other matter. Bread, for example, has gaps that we can see with the naked eye; they are big enough to contain not just air but water or wine or other liquids. And since bread doesn't lose its identity when the air or other matter in its pores is replaced, it is clear that this matter doesn't belong to the substance of the bread. So the surface of the bread isn't

•the smallest area that completely surrounds the entire piece of bread,

but rather

•the area that immediately surrounds the bread's individual particles.

·That is, the surface isn't smooth; it is extremely bumpy, because it tightly wraps over the outside of each tiny particle at the edge of the bread·.

This surface moves •in its entirety, of course, when a whole piece of bread is moved from one place to another, and there is also •partial movement when some particles of the bread are agitated by air or other bodies that enter its pores. Thus, if a body has some or all of its parts in continual motion (as I think that most of the particles of bread do, and all those of wine), then its surface must be understood to be in some sort of continual motion.

Don't think of the surface of a body—bread, wine or whatever—as •a part of the substance or the quantity of the body in question, or as •a part of the surrounding bodies. It should be thought of as the boundary that •the individual particles share with •the bodies that surround them. This boundary isn't a *thing* out there in the world; it is a *way of conceptualising* a part of the world.

·THE EUCHARIST, SURFACES, REAL ACCIDENTS·

Contact occurs only at this boundary, and we have sensory awareness of things only through contact. With those two results on board, consider the statement that ·in the Eucharist·

the substances of the bread and wine are changed into the substance of something else in such a way that this new substance •is contained within the boundaries that the bread and wine formerly had

—meaning that the new substance •exists in the same place that the bread and wine formerly occupied (or, ·to be really accurate about it·, the place that the bread and wine *would* occupy *now* if they *were* still present; this differs from the other formulation because the boundaries of the bread and wine are continually in motion). Clearly, this ·indented· statement entails that the new substance must affect all our senses in exactly the way that the bread and wine would be affecting them if no transubstantiation had occurred.

Now, the teaching of the Church in the Council of

Trent. . . is that ‘the whole substance of the bread is changed into the substance of the body of our lord Christ, while the species of the bread remains unaltered’. The only sense that can possibly be made of ‘the •species of the bread’ is as referring to the •surface between the individual particles of the bread and the bodies surrounding them.

I repeat that contact occurs only at this surface. Aristotle himself acknowledges (*De Anima* III.13) that all the senses—not just the sense of touch—operate through contact. [Descartes quotes this in Greek.]

No-one thinks that ‘species’ here means anything other than ‘whatever it is that is needed in order to act on the senses’. And no-one who believes that the bread is changed into the body of Christ would deny that this body of Christ is precisely contained within the same surface that would contain the bread if it were present. [The Latin means that no believer would *say* this; evidently the word *non* was dropped out.] Christ’s body, however, isn’t supposed to be spatially present, but to be (•and here again I quote the Council of Trent) present ‘sacramentally, with a kind of existence which •we cannot express in words but which •we nevertheless can, when our thought is enlightened by faith, understand to be possible with God, and in which •we should most steadfastly believe’. All this is so smoothly and correctly explained by my principles that I have no reason to fear that anything here will give the slightest offence to orthodox theologians. On the contrary, I confidently look to them for hearty thanks to me for putting forward opinions in physics that fit with theology much better than those commonly accepted. For as far as I know the Church has never taught that the ‘species’ of the bread and wine that remain in the sacrament of the Eucharist are real accidents that miraculously subsist on their own when the substance in which they used to inhere has been removed.

[The remaining part of the Replies to Arnauld were added in the second edition of the work.] •Still, ‘real accidents’ loom large in much of what theologians say about the Eucharist, so that they might be thought to be essential to it. I’ll explain why they aren’t. Perhaps what happened was that the theologians who first tried to give a philosophical account of the Eucharist were so firmly convinced that there are ‘real accidents’ that stimulate our senses and are distinct from any substance that it didn’t enter their heads that there could ever be any doubt about this. They found so many difficulties in the way of doing this that they should have come to think what travellers think when they find themselves confronted by rough territory that they can’t get through—namely they had strayed from the true path! •I now present three reasons why it was a bad move to interpret the Eucharist in terms of ‘real accidents’.

(a) Anyone who makes this move, and who agrees that all sense-perception occurs through contact, seems to contradict himself in supposing that for objects to stimulate the senses they need •real accidents, i.e. •something more than the various configurations of their surfaces. •Don’t say ‘The real accidents are not something over and above contact; they are needed for there to *be* contact’; for it is self-evident that a surface is *on its own* sufficient to produce contact. As for those who deny that sense-perception occurs through contact, nothing *they* can contribute to the topic will have any semblance of truth!

(b) We can’t have the thought of the accidents of the bread as real [= ‘thing-like’] and yet existing apart from the bread’s substance, without thinking of *them* as substances. So it seems to be a contradiction to say that

•the whole **substance** of the bread changes, as the Church believes, and that

•**something real** that was in the bread remains.

For the ‘something real’ that is thought of as remaining must be thought of as something that subsists and is therefore a substance, even if the word ‘accident’ is applied to it. [Something ‘subsists; if it exists on its own, not supported or possessed by something else.] So the ‘real accidents’ interpretation of the Eucharist maintains that

- the whole substance of the bread changes,
- and that
- a part of the bread’s substance (the part called a ‘real accident’) remains.

If this is expressed in terms of ‘real accident’ without explicitly equating this with ‘substance’, it isn’t *verbally* self-contradictory; but it is still conceptually self-contradictory.

That seems to be the main reason why some people have taken issue with the church of Rome on this matter; but their quarrel should have been not with •the doctrine of the Eucharist as such but only with •the interpretation of it in terms of ‘real accidents’. Surely everyone agrees that we ought to prefer opinions that can’t give others any opportunity or pretext for turning away from the true faith—as long as •they aren’t in conflict with any theological or philosophical considerations, and •we are at liberty to make up our own minds. And the supposition of real accidents is inconsistent with theological arguments, as I think I have just shown clearly enough; and it is also completely opposed to philosophical principles, as I hope to demonstrate in the comprehensive philosophical treatise [the *Principles of Philosophy*] on which I am now working. I’ll show there how colour, taste, heaviness, and all other qualities that stimulate the senses, depend simply on the exterior surface of bodies.

(c) The words of consecration [= ‘the words with which the officiating priest blesses the sacramental bread and wine’] imply, all on their own, that a miracle of transubstantiation is occurring. To bring ‘real accidents’ into the story is to add to that

miracle something new and incomprehensible—namely real accidents existing apart from the substance of the bread without themselves becoming substances. As well as being contrary to human reason, this violates the theologians’ •axiom that the words of consecration bring about nothing more than what they signify, and their •preference for not explaining in terms of miracles anything that can be explained by natural reason. All these difficulties disappear when my explanation is adopted; for it removes the need to posit a miracle to explain how accidents can remain once the substance has been removed. . . .

And there is nothing incomprehensible or difficult about supposing that God, the creator of all things, can change one substance into another substance that remains within the surface that contained the former one. Nor can anything be more in accordance with reason or more widely accepted among philosophers than the general statement that

not just all •sense-perception but all •action between bodies occurs through contact, and this contact can take place only at the surface.

This clearly implies that any given surface must always act and react in the same way, even though the substance beneath it is changed.

So if I can speak the truth here without giving offence, I venture to hope that the theory of ‘real accidents’ will some day be •rejected by theologians as irrational, incomprehensible and hazardous for the faith, and be •replaced by my theory which will be regarded as certain and indubitable. I thought I should come right out with this here, so as to do what I could to forestall slanders—I mean the slanders of people who want to seem more learned than others, and are thus never more annoyed than when someone comes up with a new scientific proposal that they can’t pretend they knew about already. It is often the case with these

people that the truer and more important they think a new-thesis is, the more fiercely they will attack it; and when they can't refute it by rational argument, they'll claim *without any justification* that it is inconsistent with holy scripture and revealed truth. Actually, it is the height of impiety to try to

use the Church's authority in this way to subvert the truth. But I appeal against the verdict of such people to the higher court of pious and orthodox theologians, to whose judgment and correction I most willingly submit myself.

Fifth Objections (Gassendi) and Descartes's Replies

Introduction to objections

Sir, Mersenne gave me great pleasure in letting me see your splendid book, the *Meditations on First Philosophy*. I'm most impressed by your excellent arguments, your sharpness of intellect, and your brilliant style. And I'm happy to congratulate you on the intelligent and successful way in which you have tried to push back the boundaries of the sciences and lay bare things that have been hidden in darkness all through the centuries. Mersenne asked me, as a friend of his, to send you any unresolved doubts about your book, but it has been hard for me to do this. I was afraid that if I didn't accept your arguments I would simply be showing my lack of intelligence. . . . Still, I have yielded to my friend, thinking that you will accept and approve of a plan that is more his than mine; and I'm sure that your good nature will make you see that my intention was simply to uncover the reasons for my doubts about some of the things you have written. I'll be more than satisfied if you have the patience to read through my comments. If they lead you to have any doubts about your arguments, or to spend time answering them instead of doing more important things, that won't be my fault! I'm almost embarrassed to present you with my doubts; I'm sure that each of them has often occurred to you in the course of your meditations, only to be dismissed as negligible or else ignored for some other reason. The comments that I shall make, then, I intend merely as suggestions, not about your conclusions but about your ways of arguing for them. I acknowledge, of course, the existence of almighty God and the immortality of our souls; my reservations are only about the force of the arguments that you employ to prove these and other related metaphysical matters.

Introduction to replies

Distinguished Sir, In criticizing my *Meditations* you have produced an elegant and careful essay that I think will be of great benefit in shedding light on their truth. I am greatly indebted to you for writing down your objections and to Mersenne for encouraging you to do so. He wants to inquire into *everything*, and tirelessly supports everything that furthers the glory of God; he knows that the best way to discover whether my arguments deserve to be regarded as valid is to have them examined and vigorously attacked by critics of outstanding learning and intelligence, and to see whether I can reply satisfactorily to all their objections. . . . What you offer, in fact, are not so much philosophical arguments to refute my opinions as oratorical devices for getting around them; but I like that! You have read the arguments contained in the objections of my other critics, and it now seems that there may be no other *arguments* that could be brought against me; because if there were, your diligence and sharpness of intelligence would have found them. What you are up to, I think, is to call to my attention the argument-dodging devices that might be used by people whose minds are so immersed in the senses that they shrink from all metaphysical thoughts, and thus to give me the opportunity to deal with them. In replying to you, therefore, I'll address you not as the discerning philosopher that you really are, but as one of those men of the flesh whose ideas you have presented. [The significance of 'men of the flesh' will emerge on page 88.]

Objections to the first meditation

There's very little for me to pause over in the first Meditation, for I approve of your project of freeing your mind from all preconceived opinions. There is just one thing that I don't understand: why didn't you didn't say, simply and briefly, you were regarding your previous knowledge as •uncertain so that you could later single out what you found to be true? Why instead did you treat everything as •false, which seems more like acquiring a new prejudice than relinquishing an old one? Proceeding in terms of 'uncertainty' rather than 'falsehood' would have spared you the need for two dubious moves. Specifically, it would have spared you the need to imagine a deceiving God or some evil Spirit who tricks us, and enabled you instead simply to point to the darkness of the human mind or the weakness of our nature. And that might have led you away from •pretending that you are asleep and •taking everything that you are confronted with to be an illusion. Can you make yourself believe that you aren't awake, and make yourself regard as false and uncertain whatever is going on around you? One trouble with these two moves of yours is that they won't convince anybody. Say what you will, no-one will believe that you have really convinced yourself •that *nothing* you formerly knew is true, and •that your senses, or sleep, or God, or an evil Spirit, have been deceiving you all along. Wouldn't it have been more in accord with philosophical openness and the love of truth simply to state the facts candidly and straightforwardly, rather than (as some critics may say) to resort to artifice, sleight of hand and circumlocution? However, this is the route you have chosen, so I'll let the point drop.

Replies regarding the first meditation

You say that you approve of my project of freeing my mind from preconceived opinions—and indeed no-one could find

fault with it. But you would have preferred me to carry it out by saying something 'simply and briefly'—i.e. in a perfunctory fashion. Is it really so easy to free ourselves from all the errors we have soaked up since our infancy? Is it possible to be *too* careful in carrying out a project that everyone agrees should be pursued? Presumably you meant only to point out that most people, although verbally admitting that we should escape from preconceived opinions, never actually do so because they don't •put any effort into it and don't •count as a preconceived opinion anything that they have once accepted as true. You make a fine job of acting the part of such people here, omitting none of the points that they might raise, and saying nothing that sounds like philosophy. For when you say that there's no need to imagine that God is a deceiver or that we are dreaming and so on, a philosopher would have thought he should supply a *reason* why these matters shouldn't be called into doubt; and if he had no such reason—and in fact none exists—he wouldn't have made the remark in the first place. Nor would a philosopher have added that in this context it would be sufficient to 'point to the darkness of the human mind or the weakness of our nature'. We aren't helped to correct our errors when we are told that we make mistakes because our mind is in darkness or our nature is weak—this is like saying that we make mistakes because we are apt to go wrong! It is obviously more helpful to focus as I did on all the circumstances where we may go wrong, to prevent our rashly giving assent in such cases. Again, a philosopher wouldn't have said that 'treating everything as false seems more like acquiring a new prejudice than relinquishing an old one'; or at least he would have first tried to prove that regarding everything as false might create a risk of some deception—because if it doesn't do *that* it shouldn't count as a 'prejudice'. You don't do that. . . . A philosopher wouldn't

be surprised at such suppositions of falsity, any more than he would be surprised if we tried to straighten out a curved stick by bending it in the opposite direction. Of course the proposition that *everything I have hitherto believed is false* is itself false; but a philosopher would know that such assumptions of falsehoods *often* contribute to bringing the truth to light, for example when astronomers imagine the equator, the zodiac, or other circles in the sky, or when geometers add new lines to given figures. Philosophers frequently do the same. Someone who calls this ‘resorting to artifice, sleight of hand and circumlocution’ and says it is unworthy of ‘philosophical openness and the love of truth’ merely reveals himself as wanting to indulge in rhetorical display rather than being philosophically open and wanting to give reasons.

[Gassendi published a book containing his Objections to the *Meditations* and his answers to Descartes’s Replies. Descartes didn’t think the new material was worth answering; but his friend Clerselier asked some of his friends to read Gassendi’s book and select points that they thought Descartes should attend to. Descartes replied to those in a letter to Clerselier, doing this ‘more in recognition of the work your friends have put in than through any need to defend myself’. These replies concern the first three Meditations; the points Clerselier’s friends raise about Meditations 4–6 have already been answered, Descartes says. Here is what he wrote in answer to the points concerning the first Meditation:]

Your friends note three criticisms made against the first Meditation.

(a) In wanting us to give up every kind of preconceived opinion, they say, I am asking for something impossible. This reflects Gassendi’s failure to understand that the term ‘preconceived opinion’ applies not to all the notions in our mind (I admit we can’t get rid of all *those*) but only to all the present opinions that are residues of previous judgments that we have made. And because, as I have explained in the

appropriate place, it is a voluntary matter whether we judge or not, this is obviously something that is in our power. For, after all, all that’s needed to rid ourselves of every kind of preconceived opinion is a policy of not affirming or denying anything that we have previously affirmed or denied until we have examined it afresh, though still retaining all the same notions in our memory. I did say that there was some difficulty in expelling from our belief system everything we have previously accepted; partly because •we can’t decide to doubt until we have some reason for doubting (which is why in my first Meditation I presented the principal reasons for doubt), and partly because •no matter how strongly we have resolved not to assert or deny anything, we easily forget this unless we have strongly impressed it on our memory (which is why I suggested that we should think about it very carefully).

(b) In thinking we have given up our preconceived opinions, they say, we are in fact adopting other even more harmful preconceptions. This rests on an obviously false assumption. I did say that we should push ourselves to the point of *denying* the things we had previously affirmed too confidently, but I explicitly stipulated that we should do this only at times when our attention was occupied in looking for something more certain than anything that we could deny in this way. And obviously during those times one couldn’t possibly adopt any preconceptions that might be harmful.

(c) They say that the method of universal doubt that I have proposed can’t help us to discover any truths. This is mere carping. It’s true that doubt doesn’t on its own suffice to establish any truth, but doubt is nevertheless useful in preparing the mind for the establishing of truths later on; and that is all I used it for.

Objections to the second meditation

(1) Turning to the second Meditation, I see that you still *pretend* to have been deceived about everything, but you go on to recognize at least that you, the pretender, exist. And you conclude that the proposition *I am* or *I exist* is true whenever it comes before you, i.e. is conceived by your mind. But I can't see that you needed all this apparatus, when you were already rightly certain, on other grounds, that you existed. You could have made the same inference from any one of your other actions, since it is known by the natural light that whatever acts exists.

You add that you don't yet have much understanding of *what* you are. Here I seriously agree with you; I accept this, which is the starting-point for the hard work. But it seems to me that you could have raised this question—'What am I?'—without all the circumlocutions and elaborate suppositions.

Next, you set yourself to meditate on what you formerly believed yourself to be, so as to remove the doubtful elements and be left with only what is 'certain and unshakable'. Everyone will be with you in this: you are now getting to grips with the problem. You used to believe you were a man; and now you ask 'What is a man?' You carefully dismiss the common definitions and concentrate on 'the first thought that came to mind', namely that you had a face and hands and the other limbs making up what you called the body; followed by the thought that you were nourished, that you moved about, and that you engaged in sense-perception and thinking—actions that you attributed to the soul. Fair enough—provided we don't forget your distinction between the soul and the body. You say that you didn't know what the soul was, but imagined it to be merely 'something like a wind or fire or ether' permeating the more solid parts of

your body. That is worth remembering. As for the body, you had no doubt that its nature consists in its being 'capable of taking on shape and having boundaries and filling a space so as to exclude any other body from it, and in its being perceived by touch, sight, hearing, smell and taste and being moved in various ways'. But you can still attribute these things to bodies even now, though not attributing all of them to every body: wind isn't perceived by sight, but it is a body. And some of the other attributes that you mention as seemingly not possessed by bodies are possessed by some of them: wind and fire can move many things. When you go on to say that you used to deny that bodies have the 'power of self-movement', it's not clear how you can still maintain this. For it would imply that every body must by its nature be immobile, that all its movements have some non-bodily source, and that we can't suppose that water flows or an animal moves unless it has some non-bodily power of movement.

Reply

(1) You are still •using rhetorical tricks instead of •reasoning. You make up fictions about me:

- that I am *pretending*, when in fact I am serious, and
- that I am *asserting* things, when in fact I am merely raising questions or putting forward commonly held views in order to inquire into them further.

When I said that the entire testimony of the senses should be regarded as uncertain and even as false, I was entirely *serious*. This point is essential for a grasp of my *Meditations*—so much so that anyone who won't or can't accept it won't be able to come up with any objections that deserve a reply. Don't forget, though, the distinction that I insisted on in several of my passages, between •getting on with everyday life and •investigating the truth. For when we are making

practical plans it would of course be foolish not to trust the senses; the sceptics who paid so little heed to human affairs that their friends had to stop them falling off precipices deserved to be laughed at. That's why I pointed out in one place that no sane person ever seriously doubts such things. But when we are investigating what can be known with complete certainty by the human intellect, if we are to be reasonable we must *seriously* reject these things as doubtful and even as false; the purpose here is to come to recognize that certain other things are in reality better known to us because they *can't* be rejected in this way.

You don't accept as having been made seriously and in good faith my statement that I didn't yet properly grasp what this 'I' who thinks is, but I did provide a full explanation of the statement which showed that it was meant seriously. You also question my statements that •I had no doubts about what the nature of the body consisted in, that •I didn't credit it with any power of self-movement, and that •I imagined the soul to be like a wind or fire, and so on; but these were simply commonly held views that I was bringing forward so as to show in the appropriate place that they were false.

It's hardly honest to say that I refer nutrition, motion, sensation, etc. to the soul, and then immediately to add 'Fair enough, provided we don't forget your distinction between the soul and the body'. For just after that I explicitly assigned nutrition to the body alone; and as for movement and sensation, I assign them mostly to the body, attributing to the soul only the element of thought involved in my being conscious that I walk, or that I sense.

What is your reason for saying that I 'didn't need all this apparatus' to prove that I existed? This remark of yours gives me a strong reason to think that I haven't used *enough* 'apparatus', since I haven't yet managed to make you understand the matter correctly. You say that I could

have made the same inference from any one of my other actions, but that is far from the truth, because my thought is the only one of my actions of which I am completely certain—I'm talking here about *metaphysical* certainty, because that's what this is all about. For example, I can't say 'I am walking, therefore I exist', except by adding to •my walking •my awareness of walking, which is a thought. The inference is certain—meaning that it makes the conclusion certain—only if its premise concerns this awareness, and not the movement of my body; because it can happen, e.g. in dreams, that I seem to myself to be walking but am really not doing so. And so from the fact that *I think I am walking* I can very well infer the existence of a mind that •thinks but not the existence of a body that •walks. And the same holds for all the other cases.

Objection

(2) You go on to ask whether, given that you are being deceived, you can still attribute to •yourself any of the properties that you believed to belong to the nature of •body; and after a careful examination you say that you can't find in yourself any such attributes. But at that stage you're already regarding yourself not as a whole man but as an inner or hidden *part* of one—the kind of component you previously thought the soul to be. So I ask you, Soul (or whatever name you want to go by!), have you at this stage corrected your earlier thought that you were like a wind diffused through the parts of the body? Certainly not! So why isn't it possible that you *are* a wind, or rather a very thin vapour. . . .diffused through the parts of the body and giving them life? Mightn't it be this vapour that sees with the eyes, hears with the ears, thinks with the brain, and does all the other things that would ordinarily be said to be done by *you*? And if that is so, why shouldn't *you* have the same shape as *your whole body*

has, just as the air has the same shape as the vessel that contains it? Why shouldn't you think that you are enclosed within •whatever it is that encloses your body, or within •your body's skin? Why shouldn't you occupy space—the parts of space that the solid body or its parts don't fill? I mean that you may be diffused through pores in the solid body, so that no region that is entirely filled by a part of you contains also a part of your body; just as in a mixture of wine and water the •very small• parts of the wine aren't to be found where parts of the water are, although we can't see them as separated from one another. Again, why should you not be able to exclude any other body from the space which you occupy, given that the spaces you occupy can't be occupied at the same time by the parts of the more solid body? Why shouldn't you be in motion in many different ways? You move many parts of your body, and you couldn't do that without being in motion yourself, could you? . . . If all this is so, why do you say that you have within you 'none of the attributes that belong to the nature of body'?

Reply

(2) You adopt an amusing figure of speech in which you address me not as a whole man but as an unembodied soul. I think you mean to tell me that these objections came not from the mind of a subtle philosopher but from flesh alone. I ask you then, Flesh (or whatever name you want to go by!), are you so out of touch with the mind that you couldn't take it in when I corrected the common view that what thinks is like a wind or similar body? I *certainly* corrected this view when I showed that I can •suppose that there are no bodies—and thus no wind—while still •retaining everything that lets me recognize myself as a thinking thing. So your questions about whether I might be a wind, or occupy space, or move, are so fatuous as to need no reply.

Objection

(3) Moving on, you say that of the attributes ascribed to the soul, neither nutrition nor movement are to be found in you. But •that doesn't prove that you aren't a body, because• something can be a body without receiving nutrition. Also, if you are a body of the •extremely rarefied• kind we call 'spirit' [see note on page 58], then given that your limbs •and large organs•, being more solid, are nourished by a more solid substance, why shouldn't you, being more rarefied, be nourished by a more rarefied substance? ['Rarefied' means 'extremely finely divided'; a rarefied body is a gas. The kind that constitutes the 'animal spirits' in our bodies was thought to be even more rarefied—even more gaseous—than any of the gases we are familiar with, such as the air of our atmosphere.] Moreover, when the body that these limbs are part of is growing, aren't *you* growing too? And when the body is weak, aren't *you* weak too? As for movement: what causes your limbs to move is *you*; they never adopt any posture unless *you* make them do so; and how can this happen unless *you* also move? You say 'Since I don't have a body, these are mere inventions', •but what is the status of 'Since I don't have a body'?• If you are fooling us, or are yourself befooled, there's nothing more to say. But if you are speaking seriously, you ought to prove that •you don't have a body that you inform, and that •you aren't the kind of thing that is nourished and that moves. [In this occurrence, 'a body that you inform' means 'a body of which you are the soul or mind'. This use of 'inform' comes from the scholastics, who were partly following Aristotle's doctrine that the soul is 'the form of the body'.]

You go on to say that you don't have sense-perception. But surely it is *you* who see colours, hear sounds, and so on. 'This', you say, 'doesn't happen unless there is a body •at work•.' I agree. But •what right have you to assume that there *isn't* a body at work?• For one thing, you have a body, and you yourself are present within the eye, which obviously

doesn't see unless *you* are at work. Also, you could be a rarefied body operating by means of the sense organs. You say: 'In my dreams I have appeared to perceive through the senses many things that I realized later I hadn't perceived through the senses at all.' Admittedly, it can happen that you are deceived in this way: seeming, at a time when your eyes are not in use, to have sense-perception of something that couldn't be really perceived without using eyes. But this kind of falsity isn't a common occurrence in your life; you have *normally* used your eyes to see and to take in images—ones that you can *now* have without the eyes being at work.

Finally you reach the conclusion that you think. No question about that; but it remains for you to prove that the power of thought is so far beyond the nature of a body that neither a spirit nor any other mobile, pure and rarefied body can be organized in such a way as to be capable of thought. Along with that you'll have to prove that the souls of the brutes are incorporeal, because *they* think too—i.e. they're aware of something internal, over and above the doings of the external senses, not only when they are awake but also when dreaming. You'll also have to prove that this solid body of yours contributes nothing whatever to your thought (·which may be hard to prove·, given that you have never *not* had this body, and ·therefore· have never had any thoughts when separated from it). You will thus have to prove that you think independently of the body, so that you can never be hampered by it or disturbed by the nasty thick fumes that occasionally have a bad effect on the brain.

Reply

(3) If I'm a rarefied body, why can't I be nourished etc.? This question doesn't put me under pressure any more than the preceding ones did, because I deny that I am a body. I'll say

this just once:

You nearly always use the same style, not attacking my arguments but ignoring them as if they didn't exist, or quoting them inaccurately or in a truncated form; and you round up various 'difficulties' of the sort philosophical novices raise against my conclusions or against others like them—or even unlike them! Each of these 'difficulties' either •is irrelevant or •has been discussed and resolved by me in the appropriate place. So it's simply not worth my while to answer all your questions individually; doing so would involve me in repeating myself a hundred times.

I'll just deal briefly with the points that might possibly cause difficulty to readers who aren't utterly stupid. Perhaps some readers are impressed more by •how many words are used than by •the force of the arguments; but I don't care so much about *their* approval that I am prepared to become more verbose in order to earn it!

First point: I don't accept your statement that the mind grows and becomes weak along with the body. You don't support this by any argument. It's true that the mind works less perfectly in the body of an infant than in an adult's body, and that its actions can often be slowed down by wine and other corporeal things. But all that follows from this is that the mind, so long as it is joined to the body, *uses it like an instrument* to perform the operations that take up most of its time. It doesn't follow that the mind is made more or less perfect by the body. That inference of yours is on a par with this: •A craftsman works badly whenever he uses a faulty tool; *therefore* •The source of a craftsman's knowledge of his craft is the good condition of his tools.

I have to say, Flesh, that you seem to have no idea of what is involved in arguing rationally. You say that although it •has sometimes happened that when my eyes were not

in use I seemed to have sense-perception of things that actually can't be perceived without the eye, this kind of falsity hasn't happened to me •all the time, and *therefore* I shouldn't suspect the trustworthiness of the senses. As though discovering error on *some* occasions isn't a sufficient reason for doubt! You also imply that whenever we make a mistake we can discover that we have done so; whereas really the error consists precisely in our not recognizing it as a case of error.

Finally, Flesh—you who often demand arguments from me when *you* don't have any and the onus of proof is on you—you should realize that good philosophical method doesn't make this requirement of us:

- When you refuse to admit something because you don't know whether it is true, you should prove it to be false.

What is required is this:

- When you admit something as true, you should prove it to be true.

Thus, when I recognize that I am a thinking substance, and form a vivid and clear thinking-substance concept that doesn't contain any of the things relating to the concept of bodily substance, that's all I need to be entitled to assert that *so far as I know myself I am nothing but a thinking thing*. And that is all that I asserted in the second Meditation, which is our present concern. I didn't have to admit that this thinking substance was some mobile, pure and rarefied body, because I had no convincing reason for thinking it was. If you have such a reason, teach it to us! and don't require me to prove the falsity of something that I refused to accept precisely because I didn't know whether it was true or false. . . . When you add that I'll also have to prove that 'the souls of the brutes are incorporeal' and that 'this solid body contributes nothing to my thought', you show that you don't know where

the onus of proof lies, i.e. what must be proved by each party ·to the dispute·. I *don't* think that the souls of the brutes are incorporeal, or that this solid body contributes nothing to our thought; but this isn't the place to go into all that.

Objection

(4) You conclude: 'Strictly speaking, then, I am simply a thing that thinks—a mind, or soul, or intellect, or reason.' Oh, I now learn that *I* have been dreaming! I thought I was addressing a human soul, the internal generator by which a man lives, has sensations, moves around and understands; and now I find that I have been addressing nothing but a mind, which has divested itself not just of the body but also of the very soul.

[In the early modern period, the

Latin *anima* = French *âme* = English 'soul'

was often used to mean about the same as the

Latin *mens* = French *esprit* = English 'mind'.

But Gassendi is here using *anima*= 'soul' differently, harking back to the scholastics and to Aristotle. They understood the *anima* to be the animator, the life-giver, the source of an organism's vital processes, so that it made sense for them to speak of the *anima* of a plant—its 'vegetative soul', as the English translators put it.]

Are you going along with the ancients who believed that the soul is diffused through the whole body, but thought that its principal part—its 'controlling element' [he gives it in Greek]—was located in a particular part of the body, such as the brain or the heart? Of course they thought that the •soul was also to be found in this part, but they held that the •mind was, as it were, added to and united with the soul that existed there, and joined with the soul in informing [see note on page 88] this part of the body. I ought to have remembered this from the discussion in your *Discourse on the Method*, where you seemed to hold that all the functions that are ·customarily· assigned to the vegetative and sensitive soul

don't depend on the rational soul but can be exercised before the rational soul arrives in the body, as is the case with the brutes who according to you don't have reason. I don't know how I came to forget this, unless it was because I still wasn't *sure* that you preferred not to apply the word 'soul' to the source of the vegetative and sensory functions in both us and the brutes, and wanted instead to say that the 'soul' in the strict sense is our mind. But it's the vegetative and sensitive source—the *anima* = 'soul' in my sense—that is properly speaking said to '*animate*' us; so all that is left for the mind to do is to enable us to think—which is what you do in fact assert. So I'll set 'soul' aside, and proceed with the term 'mind', understood to be strictly a *thinking thing*.

You add that thought is the only thing that can't be separated from you. There is certainly no reason to disagree, especially if you are only a mind, and don't allow that your substance is distinct from the substance of the soul in any way except conceptually. But I want to stop here, not to disagree, but to ask whether in saying that thought can't be separated from you, you mean that you will think continuously for as long as you exist. This squares with the claims of the famous philosophers who, in arguing that we are immortal, help themselves to the premise that *we are perpetually thinking* (which I interpret as meaning that we are perpetually in motion!). But it will hardly convince those who don't see how anyone could think during deep sleep—or in the womb, for that matter. And here I pause with another question: Do you think that *you* were infused into the body, or into one of its parts, while still in the womb? or at birth? But I shan't press this point too insistently, asking whether you remember what you thought about in the womb or in the first few days or months or even years after you were born. If you do address that question, and answer that you have forgotten, I shan't ask why. But I suggest that you bear in

mind how obscure, meagre and virtually non-existent your thought must have been during those early periods of your life.

You go on to say that you are not 'that structure of limbs and organs that is called a human body'. No question about that, because you are considering yourself solely as a thinking thing and as a *part* of the whole composite that is a human being—a part that is distinct from the external and more solid part. You go on: 'Nor am I a thin vapour that permeates the limbs—a wind, fire, air, breath, or whatever I imagine; for I have supposed all these things to be nothing. But even if I go on supposing *these* to be nothing . . .'—stop right there, Mind! *Don't* go on making those 'suppositions' (really, those *fictions*); rather, get rid of them. You say: 'I'm not a vapour or anything of that kind.' But if the entire soul is something of this kind, why shouldn't *you*. . . be regarded as the most refined and pure and active *part* of the soul, and thus as being 'of that kind', after all? You say: 'These things that I am supposing to be nothing—mightn't they in fact be identical with the *I* of which I am aware? I don't know; and just now I shan't discuss the matter.' But if you 'don't know', if you aren't discussing the matter, why do you assume that you are none of these things? You say: 'I know I exist; this knowledge can't depend on things of whose existence I am still unaware.' Fair enough; but remember that you haven't yet made certain that you are *not* air or a vapour or something else of this sort.

Reply

(4) This next question of yours calls attention to the troubling ambiguity of the word 'soul'. But I dealt with this ambiguity in the proper place, doing it so precisely that I just can't face saying it all over again here. I'll just say this: because words are usually given their meanings by ignorant people,

•words don't always have a good fit with •things. It's not for us to change meanings that have become current in ordinary usage; but it is all right for us to emend a meaning when we see it creating misunderstandings. Thus, those who first gave 'soul' its meaning probably didn't distinguish between two sources ·of energy or activity· that are in us:

•the one by which we are nourished and grow and unthinkingly perform all the other actions that we have in common with the brutes,

and

•the one by virtue of which we think.

So they used the one word 'soul' to name both; and when it came into their minds that thought is distinct from nutrition, they called the thinking element 'mind', and took it to be the principal part of the soul. Whereas I, realizing that what leads to our being nourished is *radically* different from what leads to our thinking, have said that when the word 'soul' is used to name to both of these sources it is ambiguous. If we want to take 'soul' in its special sense, as meaning—to put it in scholastic terms—the 'first actuality' or 'principal form of man', then it must be understood to apply only to the source in us of our thinking; and to avoid ambiguity I have generally used the term 'mind' for this. For the mind, as I understand it, isn't a *part* of the soul; it is the *whole* thinking soul.

You say you want to stop and ask whether I'm wedded to the view that the soul always thinks. Why shouldn't it always think, given that is a thinking substance? It's not surprising that we don't remember the thoughts the soul had when in the womb or in a deep sleep, because there are many other thoughts that we also don't remember, although we know we had them as healthy, wide-awake adults. While the mind is joined to the body, its only way of remembering its past thoughts is by applying itself to *traces of those thoughts*

imprinted on the brain. So wouldn't we expect that the brain of an infant, or of a man fast asleep, is not in a good state for receiving these traces?

Lastly, there is the passage where I said that perhaps that of which I don't yet have knowledge (namely my body) is not distinct from the 'I' of which I do have knowledge (namely my mind). 'I don't know; and just now I shan't discuss the matter.' Here you object: 'If you don't know, if you aren't discussing the matter, why do you assume that you are none of these things?' But it's not true that I 'assumed' something that I didn't know. Quite the contrary: because I didn't know whether the body was identical with the mind, I made *no* assumptions about this, and attended only to the mind; then later on, in the sixth Meditation, I *demonstrated*—I didn't *assume*!—that the mind is really distinct from the body. In this area it is you, Flesh, who are seriously at fault, because you *assume* that the mind is not distinct from the body, while having little or no rational basis for saying so.

Objection

(5) You next describe the thing you call the 'imagination'. You say that 'imagining is simply contemplating the shape or image of a bodily thing'; and you want to infer from this that what enables you to know your own nature is something other than your imagination. But since you are allowed to define 'imagination' as you like, then if you are a body—and you haven't yet proved that you aren't—why can't your contemplation of yourself involve some bodily form or image? And when you contemplate yourself, do you find that anything comes to mind except some pure, transparent, rarefied substance like a wind, pervading the whole body or at least the brain or some part of it, and from that location animating you and performing all your functions. 'I realize', you say, 'that none of the things that the imagination enables

me to grasp has any relevance to this knowledge I have of myself.' But you don't say *how* you 'realize' this. A little way back you decided that you didn't yet know whether these things belonged to you; so how do you now arrive at the conclusion just quoted?

Reply

(5) What I wrote about the imagination will be clear enough to those who study it closely, but it isn't surprising if those who don't meditate on it find it very obscure. But I should point out to such people that my assertion that 'certain things don't belong to my knowledge of myself' is consistent with my previous statement that 'I didn't know whether certain things belong to me or not. For 'belonging to me' is clearly quite different from 'belonging to my knowledge of myself'.

Objection

(6) You say next that 'the mind must be carefully diverted from such things if it is to perceive its own nature as distinctly as possible'. Good advice. But after you have carefully diverted yourself from these things, how distinctly *have* you managed to perceive your nature? In saying that you are simply 'a thing that thinks', you mention an 'activity that we were all already aware of; but you tell us nothing about the 'substance that performs this activity—what sort of substance it is, how it holds together, how it organizes itself to perform so many functions of such different kinds, and other matters of this sort that we haven't known until now.

You say that we can perceive by the intellect what we can't perceive by the imagination (and you identify the imagination with the 'common sense'). [The 'common sense' was a supposed faculty, postulated by Aristotle, whose role was to integrate the data from the five specialized senses.] But, my good Mind, can you show that there are several internal faculties and not one simple

all-purpose one that enables us to know whatever we know? When I 'see the sun with open eyes, 'sense-perception occurs, obviously. And when later on I 'think about the sun with my eyes closed, 'internal cognition occurs also, obviously. But how can I tell that I am perceiving the sun with my 'common sense' or faculty of imagination, rather than with my 'mind or intellect that can choose sometimes to take in the sun imaginatively (which is different from taking it in intellectually) and sometimes to take it in intellectually (which isn't the same as taking it in imaginatively)? If brain damage or some injury to the imaginative faculty left the intellect untouched, still properly performing its particular functions, *then* we could say that the intellect was as distinct from the imagination as the imagination is from the external senses. But because that isn't what happens, there is surely no easy way of establishing the distinction.

You say that imagination occurs when we contemplate the image of some bodily thing, which surely implies that our knowledge of bodies must come from the imagination alone—or at any rate that no other way of knowing them can be recognized. That's because all our knowledge of bodies comes from contemplating images of them.

You say that you can't help thinking that the bodily things that you form images of in your thought, and that the senses investigate, are known with much more distinctness than 'this puzzling "I" that can't be pictured in the imagination'; which yields the surprising result that you have a more distinct knowledge and grasp of things that are doubtful and foreign to you! First comment: You are quite right in using the phrase 'this puzzling "I"'. For you really don't know what you are, or what your nature is, so you can't be any more confident that your nature is such that you can't be grasped through the imagination. Second comment: All our knowledge appears to have its source in our senses. The

maxim

•Whatever is in the intellect must previously have existed in the senses

seems to be true, although you deny it. For unless our knowledge enters in a single swoop, it is slowly established by analogy, composition, division, extrapolation and restriction, and in other similar ways that I needn't list here. So it is no surprise if the things that rush in of their own accord and strike the senses should make a more vivid impression on the soul than things that the soul constructs and compounds for itself (when the occasion arises) out of the material that impinges on the senses. Another point: you call bodily things 'doubtful', but—own up!—you are just as certain of the existence of the body you inhabit and of all the objects in your environment as you are of your own existence. Also: if what makes you manifest to yourself is the activity called 'thought' and nothing else, what about how other things are manifested? They are made manifest not just by various activities but also by various qualities—size, shape, solidity, colour, taste, etc.—so that although they exist outside you, it's to be expected that your knowledge and grasp of them should be more distinct than your knowledge and grasp of yourself. How could you understand something outside you better than you understand yourself? Well, the same thing happens in the case of the eye, which sees other things but doesn't see itself.

Reply

(6) The things you say here, my dear Flesh, seem to me to amount to grumblings more than objections. There's nothing here that needs an answer.

Objection

(7) 'Well, then, what am I?' you ask. 'A thing that thinks. What is that? A thing that doubts, understands, affirms,

denies, wants, refuses, and also imagines and senses.' That's a long list, but I won't query each individual item. My only question concerns your statement that you are a thing that *senses*. This is surprising, because you earlier maintained the opposite. Or ·when you wrote 'I am a thing that senses'· did you perhaps mean this?—

In addition to •yourself there is a •bodily faculty lodged in the eyes, ears and other organs—a faculty that receives the images of sensible things and thus •starts the act of sense-perception which you then •complete, so that it's *you* who really sees and hears and has the other sensory perceptions.

I think that's what leads you to class both sense-perception and imagination as kinds of thought. Fair enough; but then you should consider whether sense-perception in the brutes shouldn't also be called 'thought', since it is quite like your own. If it does count as 'thought', that means that the brutes have minds quite like yours.

·I can think of nine things you might say to distinguish yourself from the brutes; I'll go through them—labelled (a) through (i)—one by one. (a) You may say that you occupy the citadel in the brain and receive *there* whatever messages are transmitted by the animal spirits that move through the nerves; so that sense-perception occurs there where *you* are, though it is said to occur throughout the body. So be it, ·but that *doesn't* distinguish you from the brutes, because· they too have nerves, animal spirits and a brain, and their brain contains a cognition-generator that receives messages from the spirits (just as yours does) and thus completes the act of sense-perception.

(b) You may say that this generator in the brains of animals is merely the corporeal imagination or faculty for forming images. But in that case you must show that *you*, who reside in the brain, are something different from the

corporeal imagination or the human faculty for forming images. I asked you a little while ago for a criterion proving that you are something different, but I don't think you'll provide one.

(c) You may cite ·human· operations that far surpass what the animals do; but that shows only that man is the finest animal, not that he isn't an animal. Similarly, though *you* show yourself to be the finest of imaginative faculties, you still count as one of them. Give yourself the special label 'mind' if you like, but your having this grander name doesn't mean that your nature is different, ·i.e. that you are *radically* different·. To prove *that*—i.e. to prove that you are not a body—you need to do something quite different *in kind* from anything the brutes do—something that takes place outside the brain or at least independently of it. That's what you need to do, and you don't do it, ·apparently because no such thing exists in the human behavioural repertoire·. On the contrary, •when the brain is disturbed *you* are disturbed, •when the brain is overwhelmed *you* are overwhelmed, and •when images of things are erased from the brain *you* don't retain any trace of them.

(d) You may say that whatever occurs in animals happens through blind impulses of the animal spirits and the other organs, just as motion is produced in a clock. This may be true for ·animal· functions like nutrition and the pulsing of blood, which occur in just the same way in the case of man. But can you cite any sensory events—any so-called 'passions of the soul'—that are produced by a blind impulse in brutes but not in us? ·Here is how it goes in brutes·:

•A scrap of food transmits its image into the eye of a dog; •the image is carried to the brain, where •it hooks onto the soul (so to speak), with the result that •the soul and the entire body joined to it is drawn towards the food as if by tiny, delicate chains.

Similarly if you throw a stone at a dog: the stone transmits its image and, like a lever, pushes the soul away and thereby drives off the body, i.e. makes it flee. But doesn't all this occur in the case of man? Perhaps you have in mind some quite different process in a man ·who ducks away from a missile·; if you have, I would be so grateful if you would explain it.

(e) You may say that ·you are radically different from the brutes in that· you are *free*, and have the power to prevent yourself from running away and ·the power to prevent yourself· from charging forward. But the cognition-generator in an animal does just the same: a dog, despite its fear of threats and blows may rush forward to snap up a bit of food it has seen—just like a man! You may say that a dog barks simply •from impulse, whereas a man speaks •from choice. But there are causes at work in the man too—ones that we might describe by saying that he ·also· speaks from some impulse. What you attribute to choice occurs as a result of a stronger impulse, and indeed the brute also *chooses*, when one impulse is greater than another. [He gives an anecdotal example. Then:]

(f) You say that the brutes don't have reason. Well, of course they don't have •human reason, but they do have •their own kind of reason. So it doesn't seem right to call them 'non-rational' except in contrast with us or with our kind of reason; and anyway *reason* seems to be something general that can be attributed to animals just as well as can the cognitive faculty or internal sense.

(g) You may say that animals don't engage in reasoning. But although they don't reason as perfectly or about as many subjects as man does, they *do* still reason, and the difference ·between their reasoning and ours· seems to be merely one of degree.

(h) You may say they don't speak. Well, of course, not

being human beings they don't produce human speech, but they still produce their own form of speech, which serves them just as our speech serves us.

(i) You may say that even a delirious man can still string words together to express his meaning, which even the wisest of the brutes cannot do. But it's not fair to expect the brutes to use human language and to turn one's back on the kind of language that they do have. But to go into this would need a much longer discussion.

Reply

(7) Here again you produce a lot of grumblings, which don't need a reply any more than the previous lot did. Your questions about the brutes are out of place in this context because the mind, when engaged in private meditation, can experience its own thinking but can't have any experience to settle whether or not the brutes think. It must tackle that question later on, by an empirical investigation of their behaviour. I won't take time off to disown the nine foolish claims that you put into my mouth; I'll settle for merely pointing out that you don't accurately report everything I say. Despite what you allege, I *did* provide—indeed I *often* provided!—a criterion to establish that the mind is different from the body, namely that the whole nature of the mind consists in its thinking, while the whole nature of the body consists in its being an extended thing; and there is absolutely nothing in common between thought and extension. I also showed clearly—and *often*!—that the mind can operate independently of the brain; for the brain can't have any role in pure understanding, but only in imagining or perceiving by the senses. Admittedly, when imagination or sensation is strongly active (as happens when the brain is in a disturbed state), it's hard for the mind to have leisure for understanding other things. But when the imagination is

less intense, we often have thoughts that have nothing to do with it. For example, when we are asleep and are aware that we are dreaming: we need imagination in order to dream, but only the intellect will tell us that that's what we are doing.

Objection

(8) Next you introduce the example of the wax, and you explain at length that the so-called accidents of the wax [= 'qualities of the wax'] are one thing, and the wax itself—the substance of the wax—is another. You say that only the mind or intellect can give us a distinct perception of the wax itself or its substance, and that sensation and imagination don't come into it. First comment: This is just what everyone commonly asserts, namely that we can abstract the concept of the wax or its substance from the concepts of its accidents. But does *that* imply that the substance or nature of the wax is itself distinctly conceived? We conceive that besides the colour, shape, meltability etc. of the wax there's something that is the *subject* of the accidents and changes we observe; but we don't know what this subject is, what its nature is. This always eludes us; and our view that *there is* something underneath the accidents is only a sort of guess. So I'm surprised at your saying that when the forms or accidents have been stripped off like clothes, you perceive more perfectly and evidently what the wax is. Admittedly, you perceive that the wax or its substance must be something over and above such forms; but if we are to believe you, you *don't* perceive what this something is. For what is happening here is nothing like seeing the clothes that a man is wearing and then stripping them off so as to see who and what he is! Second comment: When you *somehow* perceive this underlying 'something', I'd like to know what you perceive it *as*. Don't you perceive it as spread out and extended? (Presumably you do, because you don't

conceive of it as a point, yet it is the kind of thing that expands and contracts.) And since its extension isn't infinite, but has limits, don't you conceive of it as having some kind of shape? And when you seem to as-if-were-see it, don't you attach to it some confused sort of colour? You certainly take it to be something more solid, and so more visible, than a mere vacuum. Thus, even your 'understanding' turns out to be some sort of imagining. And if you say that you conceive of the wax apart from any extension, shape or colour, then tell us openly what sort of conception you *do* have of it.

What you have to say about 'men whom we see, or perceive with the mind, when we make out only their hats or cloaks' doesn't show that judgments are made by the mind rather than by the imagination. You deny that a dog has a mind like yours, but *it* certainly makes a similar kind of judgment when it sees not its master but simply the hat or clothes ·that he is wearing·. [Gassendi develops this point in more detail and with another example. Then:] When you go on to say that the perception of colour and hardness and so on is 'not vision or touch but is purely a scrutiny by the mind alone', I agree, as long as •the mind is not something different from •the imaginative faculty. You add that this scrutiny can be imperfect and confused or vivid and clear, depending on how carefully we concentrate on what the wax consists in. But that doesn't show that the scrutiny made by the mind, when it examines this mysterious 'something or other' that exists over and above all the forms ·or qualities·, constitutes vivid and clear knowledge of the wax. What it really consists in is a scrutiny *by the senses* of all the possible accidents and changes that the wax can undergo. From these we can certainly arrive at a conception and explanation of what we mean by the term 'wax'; but the alleged naked substance—better, *hidden* substance—is something we can't conceive for ourselves or explain to others.

Reply

(8) Here, as often elsewhere, all you show is that you don't have a proper grasp of what you are trying to criticize. I *didn't* abstract the concept of the wax from the concept of its accidents. Rather, I wanted to show how the substance of the wax is revealed by means of its accidents, and how a reflective and distinct perception of it (the sort of perception, *Flesh*, that *you* seem never to have had!) differs from the ordinary confused perception. I don't see what argument you are relying on when you so confidently say that a dog makes discriminating judgments in the same way that we do, unless it is this: A dog is made of flesh, so everything that is in you also exists in the dog. But I observe no mind at all in the dog, so I don't think there is anything to be found in a dog that resembles the things I recognize in a mind.

Objection

(9) You now go on as follows:

But what am I to say about this mind, or about myself? (So far, remember, I don't admit that there is anything to me *except* a mind.) What, I ask, is this 'I' that seems to perceive the wax so clearly? Surely, I am aware of my own self in a truer and more certain way than I am of the wax, and also in a much more distinct and evident way. What leads me to think that the wax exists—namely, that I see it—leads much more obviously to the conclusion that I exist. What I see might not really be the wax; perhaps I don't even have eyes with which to see anything. But when I *see* or *think I see* (I am not here distinguishing the two), it is simply not possible that I who am now thinking am not *something*. Similarly, that *I exist* follows from the other bases for judging that *the wax exists*—that I touch it, that I imagine it, or any other basis, and

similarly for my bases for judging that anything else exists outside me.

I quote all this so that you'll realize that it demonstrates that you do indeed distinctly know that you exist because you distinctly see and know that the wax and its accidents exist, but not that you know (distinctly *or* indistinctly!) *what* you are, what *kind* of thing you are. That would have been worth proving, whereas your existence wasn't worth proving because it was never in doubt. But I shan't press this point, any more than I did my earlier point that although you aren't at this stage admitting that you have anything except a mind—and therefore are excluding eyes, hands and other bodily organs—you nevertheless speak of the wax and its accidents that you see and touch etc. But to see or touch these things (or, as you put it, to think that you see and touch them) without eyes or hands is obviously impossible.

You proceed as follows:

As I came to perceive the wax more distinctly by applying not just sight and touch but other considerations, all this too contributed to my knowing myself even more distinctly, because whatever goes into my perception of the wax or of any other body must do even more to establish the nature of my own mind.

No. All that you establish through your conclusions about the wax is that you perceive •the existence of your mind and not its •nature, and your other considerations won't take you any further than that. If you want to infer anything more from your perception of the substance of the wax, you'll have to settle for this:

Our conception of this substance is merely a confused perception of something unknown; therefore our conception of the mind is also a confused perception of something unknown.

You may well repeat your earlier phrase 'this puzzling "I"'.

Now for your conclusion:

See! With no effort I have reached the place where I wanted to be! I now know that even bodies are perceived not by the senses or by imagination but by the intellect alone, not through their being touched or seen but through their being understood; and this helps me to know plainly that I can perceive my own mind more easily and clearly than I can anything else.

That's what you claim; but I don't see how you can deduce or 'know plainly' that anything can be perceived regarding your mind except that it exists. I can't see that you have done what you promised in the heading of this Meditation, namely to establish that 'the human mind is better known than the body'. You weren't aiming to prove •that the human mind exists, or •that its existence is better known than the body's existence, because the *existence* of the human mind is something that no-one questions. What you were setting out to do, surely, was to establish that the mind's *nature* is better known than the body's; and you haven't succeeded in that. As regards the nature of the body, you have listed all the things we know: extension, shape, occupying space, and so on. But after all your efforts, Mind, what have you told us about *yourself*? You aren't a bodily structure, you aren't air, or a wind, or a thing that walks or senses, you aren't this and you aren't that! Even if we grant all these (though you yourself rejected some of them), they aren't what we were led to expect. They are simply negative results; but the question is not what you *aren't* but what you *are*. And so you refer us to your principal result, that you are *a thing that thinks*—i.e. a thing that doubts, affirms etc. First point about this: Saying that you are a 'thing' isn't giving us any information. 'Thing' is a general, imprecise and vague word that doesn't apply to you any more than it does to anything in the world that isn't a mere *nothing*. You are a 'thing'—i.e.

you aren't nothing, i.e. you are something. But a stone is something and not nothing, and so is a fly, and so is everything else! Next point: When you go on to say that you are a *thinking* thing, then we know something—but what you say has real content—but we knew it already! We weren't looking to you for *that*. Who doubts that you are thinking? What we didn't have, and were looking to you for, was knowledge about that inner substance of yours whose defining property is to think, . . . about what sort of thing this 'you' who thinks really is. If we ask about wine, wanting to know more about it than what is common knowledge, we won't settle for your telling us that 'wine is a liquid thing, squeezed from grapes, white or red, sweet, intoxicating' and so on. You will have to launch an investigation of the internal substance of wine, letting us see how it is manufactured from spirits, tartar, the distillate, and other ingredients mixed together in such and such quantities and proportions. Well, similarly, if you want to give us knowledge of yourself that goes beyond common knowledge (i.e. the kind of knowledge we have had until now), you must see that it won't do for you to announce that you are a thing that thinks and doubts and understands etc. If you are to succeed in uncovering your internal substance and explaining it to us, you'll have to dig into yourself, subjecting yourself to a kind of as-it-were-chemical [*labore quodam quasi chymico*] investigation. If you provide us with that, we'll be able to investigate for ourselves whether you are better known than the bodies whose nature we know so much about through anatomy, chemistry, so many other sciences, so many senses and so many experiments.

Reply

(9) You say that all my points about the wax demonstrate that •I distinctly know that I exist, but not that •I distinctly know what I am, what sort of thing I am. This surprises

me, because •the former can't be demonstrated without •the latter. And I don't see what more you expect here, unless you want to be told what colour or smell or taste the human mind has, or the proportions of salt, sulphur and mercury from which it is compounded. You want us, you say, to conduct 'a kind of chemical investigation' [*labore quodam chymico*] of the mind, as we would of wine. This is indeed worthy of you, Flesh, and of anyone who has only a confused conception of everything and so doesn't know the right questions to ask about each thing. Speaking for myself, I have never thought that anything more is required to reveal a substance than its various attributes, so that the more attributes of a given substance we know, the more completely we understand its nature. Now we can pick out many different attributes in the wax:

it is white,
it is hard,
it can be melted,

and so on. And there are correspondingly many attributes in the mind:

it has the power of knowing that the wax is white,
it has the power of knowing that it is hard,
it has the power of knowing that it can lose its hardness
(i.e. melt),

and so on. These are genuinely distinct powers, because someone can know about the hardness without thereby knowing about the whiteness, e.g. a man born blind; and so on in other cases. This clearly shows that we know more attributes of our mind than we do of anything else. For no matter how many attributes we recognize in a thing, we can list the same number of attributes in the mind—attributes that enable it to know the attributes of the thing. So the nature of the mind is the one we know best of all. Finally, you criticise me for this: although I haven't admitted that

I have anything apart from a mind, I nevertheless speak of the wax that I see and touch, which is impossible without eyes and hands. You should have noticed that I carefully pointed out that I was here dealing not with •actual sight and touch, which need bodily organs, but with •the thought of seeing and touching, which doesn't need those organs (our dreams teach us that). Of course you can't *really* have failed to notice this—your purpose must have been just to show me what absurd and unfair quibbles can be thought up by people who are more anxious to attack a position than to understand it.

[Now follows material that Descartes wrote to Clerselier in answer to Gassendi's book; see note on page 85.]

Your friends note six objections against the second Meditation.

(a) Gassendi claims that when I say 'I am thinking, therefore I exist' I presuppose the premise 'Whatever thinks exists', and thus I have already adopted a preconceived opinion. Here he once more misuses the term 'preconceived opinion'. For although we can call that proposition a preconceived opinion when it is carelessly believed to be true only because we remember having judged it to be true previously, we can't say that it is *always* a preconceived opinion. For when we examine it, it appears so evident to the understanding that we can't help believing it, even if this is the first time in our life that we have thought of it—which would clear it from the charge of being a preconceived opinion! But the most important mistake Gassendi makes here is to suppose that knowledge of particular propositions (•for example about *my* thinking•) must always be deduced from universal ones (•for example, about *everyone's* thinking•), following the same order as that of a syllogism in applied logic. This shows how little he knows about how truth should be sought; for it is certain that to discover the truth we need always to start

with •particular notions en route to •general ones that we come to later on; though then we may also reverse the order, take a general truth that we have discovered •on the basis of •some particular truths•, and deduce •other particular truths from it. If you are teaching a child the elements of geometry, you won't get him to understand the general proposition 'When equal quantities are taken from equal amounts the remaining amounts will be equal', or 'The whole is greater than its parts', unless you show him particular examples. It is by failing to take heed of this that Gassendi has gone astray and produced so many invalid arguments that pad out his book. He has simply made up false •allegedly suppressed• premises whenever the mood takes him, as though I had used them to deduce the truths that I expounded.

(b) Your friends note that in order to know that I am thinking I must know what thought is; and yet, they say, I *don't* know this, because I have denied everything. But I have denied only preconceived opinions—not notions like these, that are known without any affirmation or negation. [Descartes's main point here seems to be that in the second Meditation he was denying *propositions*, whereas his notion of thought—his knowledge of 'what thought is'—isn't propositional; in making room for it in his mind he isn't assenting to any proposition.]

(c) It is objected that thought can't exist without an object (•i.e. with something that is thought *about*•), for example some *body*. Let's beware of the ambiguity in the word 'thought': it is used to refer to •the thing that thinks and also to •what that thing *does*. Now, I deny that the thing that thinks needs any object apart from itself in order to do what it does (though it *may* also extend the scope of its activity to material things when it examines them).

(d) It is objected that although I have a thought of myself, I don't know if this thought is a •bodily event or a self-moving atom, rather than an •immaterial substance. This involves

the ambiguity of ‘thought’—again! Apart from that, I can see only a challenge that has no basis, rather like this:

‘You judge that you are a man because you perceive in yourself all the things that lead you to give the name “men” to those who possess them; but how do you know that you aren’t an elephant rather than a man, for various other reasons that you don’t perceive?’

·Why is that a fair comparison?· Because the present objection amounts to this, addressed to the substance that thinks:

‘You judge that you are an intellect because you have observed in yourself all the properties of intellectual substances, and can’t detect any of the properties of bodies; but how do you know that you aren’t a body rather than an immaterial substance?’

(e) It is objected that even if I find no extension in my thought, it doesn’t follow that my thought is not extended, because my thought isn’t the standard that determines the truth of things.

(f) And that although my thought finds a distinction between thought and body, this distinction may be false. These two stand or fall together. Now, we must be *very* careful to notice the ambiguity in the words ‘my thought isn’t the standard that determines the truth of things’. If it means that my thought mustn’t be the standard for others, obliging *them* to believe something just because *I* think it is true, then I entirely agree. But that is quite irrelevant in the present context, because I never wanted to force anyone else to follow my authority. On the contrary, I said repeatedly one shouldn’t allow oneself to be convinced by anything except the evidentness of *reasons*. Again, if we take ‘thought’ to apply to *any* kind of activity of the soul, we can indeed have many thoughts that don’t imply anything about things that are outside us. But this too is irrelevant

in the present context, where the topic is •thoughts that are vivid and clear perceptions and •judgments that each of us must make, for himself, as a result of these perceptions. That’s why I say that, in the sense in which the words should be understood here, the thought of each person—i.e. his perception or knowledge of something—should be for him the ‘standard that determines the truth of the thing; in other words, his judgments about this thing are correct only if they conform to his perception. This holds even for the truths of faith: we shouldn’t decide to believe them until we have perceived some convincing reason for thinking that they have indeed been revealed by God. What about ignorant people? Wouldn’t it be as well for them, on difficult topics, to follow the judgment of those who know more? Yes, but *they* must be guided by *their own perception* which tells them that •they are ignorant, and that •those whose judgment they propose to follow may be less ignorant than they are. Without that, they ought not to follow those others; and if they did, they would be behaving more like automatons or beasts than like men. Thus the most absurd—the most *wild*—mistake that a philosopher can make is to be willing to make judgments that don’t correspond to his perception of things; and I don’t see how Gassendi could be cleared of having committed this blunder in most of his objections. For he doesn’t want each person to abide by *his own* perception, and claims that we should instead believe the opinions or fantasies that *he* chooses to set before us, although we haven’t the least perception of them.

Objections to the third meditation

(1) In the third Meditation you recognize that •your vivid and clear knowledge of the proposition ‘I am a thing that thinks’ is the cause of •your certainty regarding it; and from this

you infer that you can lay down the general rule 'Everything that I perceive very vividly and clearly is true'. Perhaps this was the best rule to be found in the darkness that prevailed there; but when we see that many great thinkers, who must have perceived very many things vividly and clearly, have judged that the truth of things is hidden either in God or at the bottom of a well, isn't it reasonable to suspect that this rule ·of yours· may be •deceptive? Or perhaps it is •empty! According to the arguments of the sceptics, which you know, it seems that the only thing we can regard as true because vividly and clearly perceived is this: *for anyone, what appears to be so is what appears to be so!* ·We might give your 'general rule' a little content:

propositions about what appears to x at time t are themselves vividly and clearly perceived by x at t, and so—in accordance with your 'general rule'—can be accepted as true by x at t;

but this is not enough content for your purposes or anyone else's. I vividly and clearly perceive the pleasant taste of a melon, so it's true that that's how the taste of a melon appears to me; but how can I convince myself that it is therefore true that such a flavour really exists in the melon? When I was a boy and in good health I vividly and clearly perceived a quite different taste in the melon; and I see that many people also perceive it differently. . . . Do we then have truth conflicting with truth? Isn't it rather that something's being vividly and clearly perceived doesn't mean •that it is true in itself, but only •that *that* is how it is vividly and clearly perceived? And what holds for tastes also holds for intellectual matters. I used to be utterly certain of these:

- we can't go from a quantity less than Q to one greater than Q without passing through Q ; and
- if two lines are extended to infinity they *must* eventually meet.

I thought I perceived these things so vividly and clearly that I counted them as utterly true and unquestionable axioms; and yet I have since come across arguments that convinced me that each of them is false and that I perceived *this* even more vividly and clearly. But when I *now* consider the nature of mathematical propositions I am back in doubt again. I recognize that such and such propositions about quantities, lines and so on are indeed just as I conceive or suppose them to be; *that* is true, but it doesn't imply that those propositions are true in themselves. Anyway, setting aside mathematical matters and returning to our present topics: why do people have so many different opinions about them? Everyone *thinks that* he vividly and clearly perceives the truth that he champions. Don't reply that most of them are either tentative in their beliefs or insincere ·in what they say about what they believe·; there are those who face *death* for their opinions, even though they see others dying for the opposite cause. You can hardly think that their dying words are less than utterly sincere. Admittedly you do mention the difficulty that 'I previously accepted as perfectly certain and evident many things that I afterwards realized were doubtful'. But in that passage you don't •remove the difficulty or •confirm your rule; you merely snatch the opportunity to •discuss ideas that can deceive you into thinking that they represent things external to yourself, when in fact they may never have existed outside you. You return to the theme of a deceiving God who can mislead you about the propositions 'Two and three are five' and 'A square has no more than four sides', implying that we mustn't expect confirmation of your rule until you have shown that there is a God who cannot be a deceiver. May I make a suggestion? What you ought to be working on is not •establishing this rule, which makes it so easy for us to accept falsehoods as true, but rather •proposing a method to guide us and show us, on those occasions when we *think*

we vividly and clearly perceive something, whether we are mistaken or not.

Reply

(1) Well done! Here at last you produce—for the first time, as far as I can see—an *argument* against me. You want to prove that the rule ‘Whatever we vividly and clearly perceive is true’ isn’t reliable, and you say that great thinkers, who must surely have perceived many things vividly and clearly, have nevertheless judged that the truth of things is hidden in God or at the bottom of a well. Your argument from authority is sound enough, Flesh; but you shouldn’t have presented it to a mind—like mine at the start of the third Meditation—that can’t be influenced by the authority of past people because it is so withdrawn from bodily things that it doesn’t even know whether there have been any such people! Your next point, taken from the sceptics, is a standard move, and not a bad one, but it doesn’t prove anything. Nor does the fact that some people face death to defend opinions that are in fact false; for it can never be proved that they vividly and clearly perceive what they so stubbornly affirm. You conclude this section by saying that what I should work on is not •a rule to establish the truth but •a method for determining whether or not we are deceived when we *think* we perceive something clearly. I don’t dispute this; but I maintain that I carefully provided such a method in the appropriate place, where I first eliminated all preconceived opinions and afterwards listed all my principal ideas, distinguishing the clear ones from those that are obscure or confused.

Objection

(2) You next distinguish ideas (by which you mean image-like thoughts) into three classes:

(a) innate, (b) caused from outside, and (c) invented.

In **(a)** you put your ‘understanding of what a *thing* is, what *truth* is and what *thought* is’. In **(b)** you put your ‘hearing a noise or seeing the sun or feeling the fire’. And in **(c)** you put your ‘invented ideas of sirens and hippogriffs’. You add that it may be that all your ideas belong in **(a)**, or all in **(b)**, or all in **(c)**, because you haven’t yet clearly perceived their origin. Well, to guard you against slipping into error at this stage, before you have managed to perceive the origin of your ideas, I point out to you that all ideas *seem* to be **(b)** caused by things that exist outside the mind and are within range of one of our senses. The mind has the faculty—actually it *is* the faculty—of perceiving ideas that things send to it through the senses; these ideas are clear and uncluttered, and they are presented to us exactly as they are. But the mind also has the faculty of assembling these ideas into larger structures, pulling them apart into smaller ones, comparing them, and so on.

So class **(c)** isn’t distinct from **(b)**, because we invent ideas by assembling them out of ideas that come to us from things outside us. [Gassendi goes on to present examples. Then:]

What about class **(a)**—the images that you say are innate? There don’t seem to be any: all the ideas that are said to belong in **(a)** appear to have an external origin. You say ‘I derive from my own nature my •understanding of what a thing is’, by which you presumably. . . .mean that you derive your •idea of *thing*. Now, all individual items are things, but you don’t say that our ideas of *them*—e.g. our idea of the sun, or of this pebble—are innate. So you must be talking about the idea of *thing* considered in general. . . . But how can the mind contain this idea unless it also contains. . . .the ideas of • all the kinds of things from which the mind abstracts so as to form this all-purpose concept of *thing*? Surely if the idea of *thing* is innate, the ideas of *animal*, *plant*, *stone*, and of any other universal will also be innate. . . .

You also say 'I derive from my nature my •understanding of what truth is', presumably meaning your •idea of *truth*. But if a judgment's *truth* is simply its •conformity with the thing that it is about, then truth is a •relation, which implies that there is nothing to it over and above the thing and the idea •or judgment• that are so related. . . . And since this applies to any particular truth, it can also apply to truth in general, the notion or idea of which is derived from the notions or ideas of particular things (in the way I have said that the idea of *thing* is).

Again, you say that 'I derive from my own nature my •understanding of what thought is' (presumably meaning, again, your •idea of thought). But just as the mind can construct the idea of one town from the idea of another [this had been one of his examples], so from the idea of one action such as seeing or tasting, it can construct the idea of another action such as *thinking*. For the various cognitive faculties are known to be analogous, so that a grasp of one easily leads to a grasp of another. Anyway, what needs work here is not the idea of *thought*, but rather the idea of *the mind itself*, the *soul*. If we grant that *this* idea is innate, we won't jib at admitting that the idea of thought is also innate. So we must wait for you to prove the innateness of •our idea of the mind or soul.

Reply

(2) I'm amazed at the line of argument by which you try to prove that all our ideas are caused from outside us, and that we don't make any of them, because (you say) the mind is capable not merely of perceiving ideas that are caused from outside it but also 'of assembling these ideas into larger structures, pulling them apart into smaller ones, comparing them, and so on'. From which you infer that the ideas of chimeras that the mind makes up by assembling and pulling

apart etc. aren't made by the mind but are caused from outside. By this argument you could prove •that Praxiteles never made any statues, because he didn't get the marble he used in them *from within himself*; or •that you didn't produce these objections, because you put them together using words that you acquired from others rather than inventing them yourself. Actually, the form of a •chimera doesn't consist in parts of the goat and the lion, and the form of your •objections doesn't consist in the individual words you have used; each of them consists in the elements' being put together in a certain way.

I am also surprised by your contention that the idea of *thing* can't be in the mind unless the ideas of *animal*, *plant*, *stone*, and all the •other• universals are there. As if I can't grasp my own status as a *thinking thing* unless I also grasp •ideas of• animals and plants, these being needed for me to have the idea of *thing*. Your remarks about the idea of *truth* are equally false. And the remarks with which you close the section are about things that I didn't discuss at all, so in them you are simply beating the air.

Objection

(3) What you seem to question next is not just whether any ideas come from external things, but whether there *are* any external things. Apparently you argue like this:

I have within me ideas of things that are called 'external'; but the ideas don't establish that the things exist, because the ideas don't necessarily arise from •such things rather than from •myself or •some other source—I don't know what.

I think this is why you said earlier that you hadn't previously perceived the earth, the sky and the stars, but only *the ideas of* the earth, the sky and the stars, which might be illusory. But if you still don't believe that the earth, sky, stars and so

on exist, why do you walk on the earth and move your body to look at the sun? . . . You can certainly *say* that you have these doubts, and you can develop them with great subtlety, but they don't push things on for you. Anyway, you *don't* really doubt that the things outside you exist, so let's stop this game, and discuss things as they are, doing this in an honest adult fashion. If, granting the existence of external objects, you think it can't be properly shown that our ideas are derived from them, you'll have to dispose not only of the objections that you raise against yourself, but also of other difficulties that can be raised.

You admit that we accept that our ideas come from external things because nature has apparently taught us to think that they do, and also because we know by experience that the ideas in question don't depend on us or on our will. I set aside those arguments and their solution, and present something else that you ought also to have raised and answered, namely: Why does a man born blind have no idea of colour? a man born deaf no idea of sound? Surely it's because external objects have never been able to transmit any images of themselves to the minds of such unfortunate people, because ever since their birth the doors have been closed against the entry into their minds of these images.

Later on you push the example of your two ideas of the sun: one of them, deriving from the senses, makes the sun appear small and isn't accurate; the other, based on astronomical reasoning, gives us a truer conception of the sun as huge. The latter idea, you say, isn't drawn from the senses but derived from innate notions or produced in some other way. Actually, both these ideas of the sun resemble it, and are true (i.e. conform to the sun), though one more than the other. . . .

Although the second, vast idea of the sun is perceived by the mind alone, it doesn't follow that the idea is derived

from some innate notion. Experience establishes that objects appear smaller from a distance than they do from close up, and reasoning based on experience confirms this. And because we know this, our mind's power amplifies the idea of the sun that comes to us through sense-perception so that it corresponds exactly with the agreed distance of the sun from us. . . . Do you want to know how it can be that no part of this idea has been implanted in us by nature? Go to the congenitally blind man to find out! You will find that the idea of the sun in his mind

•has no colour or luminosity, •is not even round (unless someone has told him the sun is round and he has previously held a round object in his hands), and

•isn't nearly as large as yours and mine, (unless he has amplified his previously accepted idea as a result of reasoning or the influence of some authority). Here is a question for you, concerning you and me—we who have so often looked at the sun, seen its apparent diameter, and reasoned about its true diameter. Do *we* have any image of the sun other than the ordinary one? Reasoning tells us that it is more than 160 times bigger than the earth, but does that give us an *idea* of such a vast body? We certainly amplify the idea derived from the senses as much as possible, and exert our mind as much as possible; but all that we succeed in creating for ourselves is pitch-black darkness. If we want to have a distinct idea of the sun, then our mind must always return to the image that it has received through the eye. It is enough if we accept that the sun is bigger than it looks to us, and that we would have a larger idea of it if our eyes could move closer to it. . . .

Reply

(3) Here, aiming to destroy the arguments that led me to judge that the existence of material things should be doubted,

you ask why in that case I walk on the earth etc. This obviously •assumes the very thing that had to be •proved, namely that my walking on the earth is so certain that there can be no doubt of it.

In addition to the arguments that I put forward against myself, and refuted, you raise the challenge ‘Why is there no idea of colour in a man born blind? or of sound in a man born deaf?’ This shows plainly that you have no significant arguments to produce. *How do you know* that there is no idea of colour in a man born blind? We know that we sometimes have sensations of light and colour while our eyes are closed, •so why shouldn’t the man born blind have them too? [The next sentence expands what Descartes wrote, in ways that can’t easily be indicated by the •small dots• convention.] And even if we grant that the man born blind has no ideas of colour, that doesn’t have to be explained in your way, by supposing that his lack of eyesight prevents such ideas from being passed on from material things into his mind; those who deny the existence of material things can offer a quite different explanation, namely that the blind man’s isn’t capable of *making* such ideas.

Your next point about the two ideas of the sun proves nothing. You take the two ideas to be one because they are ideas of only one sun, which is like saying that a true statement doesn’t differ from a false one that is asserted about the same thing. In saying that the idea we reach through astronomical reasoning is not in fact an idea, you are restricting the term ‘idea’ to images depicted in the corporeal imagination; but this goes against my explicit assumption.

Objection

(4) Next, you recognize the inequality and diversity to be found among our ideas. You say:

Undoubtedly, the ideas that represent substances amount to something more—they contain within themselves more representative reality—than do the ideas that merely represent qualities. Again, the idea that gives me my understanding of a supreme God—eternal, infinite, omnipotent and the creator of everything that exists except for himself—certainly has in it more representative reality than the ideas that represent merely finite substances.

[Gassendi comments at some length on the distinction between ‘intrinsic reality’ of x and the ‘representative reality’ in an idea of x. Then:] You and I agree that the representative reality in an idea of x is to be measured not •by the total intrinsic reality of x (the reality that x has in itself) but •by. . . .how much knowledge of x is possessed by the mind that has the idea. Thus you count as having a complete idea of a man if you have looked at him •carefully and •often •from all sides; but your idea will be incomplete if you have merely seen him •in passing •once •from one side. If you haven’t seen the man himself, but only a mask over his face and clothes covering the rest of him, then you count as not having any idea of him, or anyway of having one that is very incomplete and utterly confused.

In the light of this I claim that we *do* have a distinct and genuine idea of qualities, but that our idea of the unseen substance that underlies them is confused—and is indeed a pure fiction. So when you say that the idea of a substance has more representative reality than does the idea of its qualities, •I have two objections•. **(a)** We don’t have *any* genuine idea or representation of a substance, so we don’t have one with representative reality. **(b)** Even if we grant that there is such an idea, and that it has some representative reality, we must still deny that this reality is greater than what there is in the idea of the qualities. Why? Because the

idea of the substance gets its representative reality from the ideas of the •qualities under which—in the guise of which—we conceive of the •substance. . . .

Now for what you say about the idea of God: since at this stage in the third Meditation you aren't yet sure whether God exists, *how do you know* that he is represented by your idea of him as 'supreme, eternal, infinite, omnipotent and the creator of all things'? Don't you get this from your previously conceived knowledge of God, that is, from having heard these attributes ascribed to him? Would you describe him like that if you hadn't previously heard anything of the sort? You'll say 'I introduced this just as an example, without meaning to lay down any definition of God at this stage'. All right; but watch out that you don't later take it as an established result!

The idea of an infinite God, you say, has more representative reality than does the idea of a finite thing. I have three points to make about this. **(a)** The human intellect is not capable of conceiving of infinity, so it can't contemplate—and indeed can't even *have*—any idea representing an infinite thing. When someone calls something 'infinite', he is attributing to

- a thing that he doesn't grasp

(because it extends beyond any grasp of it he can have)

- a label for which he doesn't have a meaning that he can grasp!

(because his intelligence is always confined within some limit, so that he can't understand the limitlessness that the label attributes to the thing). **(b)** Although commonly every supreme perfection is attributed to God, it seems that such perfections are all taken from things that we admire in ourselves, such as

longevity, power, knowledge, goodness, blessedness and so on. We amplify these as much as we can, and say that God is

- eternal, omnipotent, omniscient, supremely good, supremely blessed

and so on. So the idea representing all these things—these divine attributes—doesn't contain more representative reality than do the ideas of the finite things taken together; it is compounded and augmented from the ideas of these finite things in the way I have just described. When someone calls something 'eternal', he isn't getting his mind around the entire extent of its duration—a duration that never started and will never end. Similarly. . . .with the other divine attributes.

(c) Can anyone claim that he has an authentic idea of God—one that represents God *as he is*? If there were nothing to God except what is contained in our little idea of him, what an insignificant thing he would be! Surely we must believe that God's perfections are less like man's than an elephant is like a tick on its skin. We can no more form a genuine idea of God on the basis of what we observe of men's perfections than we can form a genuine idea of an elephant by observing the tick. Can we really congratulate ourselves if, after seeing the perfections of a man, we form an idea which we maintain is the idea of God and is genuinely representative of him? How *could* we detect in God the presence of those puny perfections that we find in ourselves? . . . God is infinitely beyond anything we can grasp, and when our mind sets itself to contemplate him, it is in the dark—indeed, it is *nothing*. So we have no grounds for claiming that we have any authentic idea that represents God. And we don't *need* such an idea. What we can do—namely to

- construct, on the analogy of our human attributes, an idea of some sort for our own use, an idea that doesn't

- go beyond what we humans can grasp and doesn't
- contain any ·representative· reality except what we perceive in our encounters with other things

—is more than enough ·for our purposes·.

Reply

(4) ·At the end of my preceding comment I pointed out your mistake of equating ideas with images in the corporeal imagination·. And now you are doing it again! You deny that we have a true idea of *substance* on the grounds that *substance* is perceived not by the imagination but by the intellect alone. But I have already made it clear, Flesh, that I don't want any conversation with someone who is prepared to use only his imagination and not his intellect.

You next say: 'The idea of a substance gets its ·representative· reality from the ideas of the qualities under which—in the guise of which—we conceive of the substance.' Here you prove that in fact you have no distinct idea of substance. For a substance can never be conceived 'in the guise of' its qualities, and can't derive its reality from them. (On the contrary, philosophers commonly conceive of qualities in the guise of substances, since they often say that they are 'real' [= 'thing-like', i.e. substances in disguise; see note on page 78].) In fact, any reality that can be attributed to a quality. . . .is taken from the idea of a substance.

You go on to say that we have the idea of God merely through of having heard others ascribing certain attributes to him. What about the first men—the first who were 'heard' speaking of these attributes? Where did *they* get their idea of God from? If they got them from themselves, why can't we also get it from *ourselves*? If by divine revelation, then God exists.

You add: 'When someone calls something "infinite", he is attributing to a thing that he doesn't grasp a label for which

he doesn't have a meaning that he can grasp.' Here you fail to distinguish

- an understanding that is suited to the scale of our intellect,

(and each of us knows by his own experience that he has *this* sort of understanding of the infinite) from

- a fully adequate conception of things

(and no-one has this sort of conception of the infinite or of anything else, however small). Also, it is false that the infinite is understood through the negation of a boundary or limit [this refers to Gassendi's speaking of 'the limitlessness that the label "infinite" attributes to a thing']; on the contrary, all limitation implies a negation of the infinite; ·so that 'finite' is a negative term and 'infinite' a positive one·.

It is also false that the idea representing all the perfections that we attribute to God 'doesn't contain any more representative reality than do ·the ideas of· the finite things taken together'. •You yourself admit that in order to attribute these perfections to God we must use our intellects to 'amplify' them. In amplifying them don't we make them greater than they would have been if they weren't amplified? •And another point: how could we be able to amplify ·our ideas of· all created perfections (i.e. to conceive of something greater or more ample than they are) if we didn't ·already· have an idea of something greater, namely God? •Finally, it is again false that 'God would be an insignificant thing if there were nothing to him except what is contained in our understanding of him'. For we understand God to be infinite, and nothing can be greater than that! You are still mixing up •understanding with •imagination, and supposing that we imagine God to be like some enormous man—likening us to someone who has never seen an elephant and makes a fool of himself by imagining it to be like some enormous tick.

Objection

(5) You next assume that ‘it is obvious by the natural light that the total cause of something must contain at least as much ·reality· as does the effect’. From this you infer that there must be at least as much *intrinsic* reality in the cause of an idea as there is *representative* reality in the idea. Stop for a moment, while we examine this huge step that you have just taken.

First, it is indeed commonly said that ‘There is nothing in the effect that isn’t in the cause’, but this seems to refer to •material causes rather than •efficient causes [see explanatory note page 6]. clearly an efficient cause is something external to the effect, and is often of a quite different nature. An effect is indeed said to ‘get its reality from’ its efficient cause, but it doesn’t follow that the efficient cause must have had this reality in itself; it may have borrowed it from elsewhere. To see this clearly, consider effects produced by some skill. A house gets all its reality from the builder, but the builder doesn’t have this reality in himself—he simply takes it from some other source and passes it on to the house. [He gives other examples; and then attacks Descartes’s use of the concept of containing something ‘in a higher form’ [see note on page 5]: to say that the efficient cause of my being F ‘possessed Fness in a higher form’ is just to say that my efficient cause *wasn’t* F but was able to cause me to be F. Then:] In short, an efficient cause doesn’t contain ·the reality of· its effect except in the sense that it can shape it and produce the effect out of a given material.

To discuss what you say about representative reality, I take the example of *my own image*, which I can look at either in a mirror or in a painting. •The image in the mirror has •me for its cause because I transmit my image onto the mirror, whereas •the image on the canvas is caused by •the painter. Now consider the idea or image of me that is in (for example)

you: do I cause this idea by transmitting my image onto your eye and on through to your intellect? or does some other cause trace the image out in the intellect as if with a pen or pencil? It seems that there doesn’t have to be any cause other than myself; for although your intellect may subsequently modify its idea of me—amplify or reduce it, combine it with something else, or whatever—I myself am the primary cause of all the reality that the idea contains within itself. And if this holds for ·ideas of· me it must also hold for ·ideas of· any external object.

Now, you divide the reality belonging to this idea into two kinds. [Gassendi’s account of the idea’s •intrinsic reality is obscure, and seems not to contribute to what follows. Then:] The •representative reality of an idea of me has to be

- the representation or likeness of me that the idea carries,

or at any rate

- the way the parts of the idea are fitted together to make a pattern that represents me.

Either way, it seems to be nothing real, but merely a relation amongst the various parts and between the parts and myself; in other words, it is merely a *feature* of the idea’s intrinsic reality. . . . But never mind; let’s call it ‘representative reality’, since this is what you want.

Against that background, it seems that you ought to compare

- the intrinsic reality of the idea of me with the
- intrinsic reality of me

(i.e. with my substance), or to compare

- the •representative reality of the idea of me with •the proportion obtaining between my various parts or my external form and outline.

But what you want to do is to compare the •representative reality of the idea with my •intrinsic reality.

Returning now to the ‘as-much-reality’ axiom: clearly there is in me as much intrinsic reality as there is representative reality in the idea of me; and indeed that the representative* reality of the idea is virtually *nothing* by comparison with my intrinsic reality, i.e. my entire substance. [*Gassendi wrote *formalem* = ‘intrinsic’—evidently a slip.] So we must grant you that ‘there must be at least as much intrinsic reality in the cause of an idea as there is representative reality in the idea’, for the whole of what is in the idea is virtually nothing in comparison with its cause. [Perhaps Gassendi meant to write here that ‘the whole *representative reality* in the idea is virtually nothing’ etc. That would fit his down-playing account of what representative reality is.]

Reply

(5) You say a great deal here to give the appearance of contradicting me, but in fact you don’t contradict me at all, because you reach exactly the same conclusion as I do. But your discussion includes many assertions that I strongly disagree with. You say that the axiom ‘There is nothing in the effect that didn’t previously exist in the cause’ should be taken to refer to material rather than efficient causes; but it’s obviously unintelligible that perfection of form should ever pre-exist in a material cause; it can do so only in an efficient cause. [There is a note on page 6 about these different kinds of cause. An example of what Descartes is getting at here: If we want to explain the inscription on a coin (its ‘form’), we must look at the die that stamped the coin out of the silver plate (the coin’s ‘efficient cause’); we couldn’t explain it by investigating the nature of silver (the coin’s ‘material cause’).] Nor do I agree that the intrinsic reality of an idea is a substance, and so on.

Objection

(6) Your next step is as follows. If the representative reality of any one of your ideas turns out to be so great that you

don’t contain it within you either in a higher form or straightforwardly, so that you can’t yourself be its cause, it follows that something besides you exists in the world. For if this weren’t so, you would have no argument to convince yourself that anything else exists. Certainly, what you have already said shows that you aren’t the cause of the representative-reality of your ideas; the cause is, rather, the things that the ideas represent—things that send images of themselves to you as though to a mirror. . . . But does •the question of what causes your ideas affect •the confidence of your belief that there exist things besides yourself in the world? Please give a straight answer; for whatever the ‘idea’ situation turns out to be, we hardly need to look for *arguments* to prove that other things exist.

Then you list the ideas that are in you, namely ideas of
 yourself,
 God,
 inanimate bodily things,
 angels,
 animals, and
 men.

You find no problem in the idea of •yourself, and you think that your ideas of •bodily things could have come from yourself; and you go on to say that starting with those two ideas and your idea of •God you can assemble your ideas of •angels, •animals and •men. Your idea of yourself is—in your hands—so fertile that you can derive many other ideas from it; I am puzzled by your claim that there is no problem about it. In fact you have *no* idea of yourself, or at most you have a very confused and incomplete one, as I noted when commenting on the second Meditation. In the latter you concluded that

•there is nothing that you could perceive more easily or evidently than yourself.

But since you don't *and can't* have any idea of yourself, what you ought to have said was that

•you can perceive anything at all more easily and more evidently than yourself!

Thinking about why •sight doesn't see itself and •intellect doesn't understand itself, I realize that these are just special cases of the more general truth that •nothing acts on itself. (Other special cases: the finger-tip doesn't tap on itself, the foot doesn't kick itself.) For us to become aware of something, that thing has to *act on* our cognitive faculty by sending its image to the faculty. . . .and of course a faculty can't send an image of itself to itself. . . . [He applies this to the case of seeing yourself in a mirror: you act on the mirror, which then acts back on you.] Show me a mirror that you yourself—you considered as the *mind* that you say you are—can act on in this way, and I promise that when it bounces your image back to you you'll finally succeed in perceiving yourself. Not otherwise. [Gassendi mentions difficulties that he could point out regarding Descartes's claim to have ideas of God and angels, but he doesn't press them. Then:]

But let us consider your ideas of bodily things. There's a big difficulty about how you can derive these from your idea of yourself at a time when you claim that you aren't a body and don't consider yourself as one. If all you know is a non-bodily substance, how can you get a grasp of bodily substance? [He suggests an answer that Descartes might give, and criticises it; then develops the original criticism further.]

Reply

(6) If you had any argument to prove the existence of material things, you would surely have produced it here. But all you do is to ask whether my mind is uncertain about whether anything exists in the world apart from itself; and you

say that there's no need to look for arguments to decide this—thus appealing to our preconceived opinions. Here you show that you can't produce any argument to support your assertion—it wouldn't be more obvious if you hadn't said anything at all!

What you then say about ideas doesn't need to be answered, because in it you restrict the term 'idea' to images depicted in the imagination, whereas I extend it to cover every object of thought.

But I have a question about the argument you use to show that 'nothing acts on itself'. You don't usually give arguments; but here you do—supporting your case with the example of the finger that doesn't tap itself and the eye that doesn't see itself directly but only in a mirror. It is easy to answer this. It isn't the case that *the eye* sees itself not directly but in a mirror. Rather, it is the mind—and only the mind—that recognizes the mirror, the eye, *and itself*. The realm of bodies provides other counter-examples: when a top spins, isn't its turning a case of the top's acting on itself?

Finally, I did *not* say that the ideas of material things are derived from the mind, as you (not very honestly) say I did. Later on I explicitly showed that these ideas often come to us from bodies, which is what enables us to show that bodies exist. All that I said about this in the passage we are now discussing was that we never find so much reality in these ideas that we have to conclude (given that there is nothing in the effect that didn't not previously exist in the cause, either straightforwardly or in a higher form) that they *couldn't* have originated in the mind alone. And this claim you don't attack at all.

Objection

(7) You then draw the following conclusion:

So there remains only the idea of God: is there any-

thing in *that* which couldn't have originated in myself? By the word 'God' I understand a substance that is indefinite [Descartes had written 'infinite'], independent, supremely intelligent, and supremely powerful, which created myself and anything else that may exist. The more carefully I concentrate on these attributes, the less possible it seems that *any* of them could have originated from me alone. So this whole discussion implies that God necessarily exists.

This is the result you were aiming for. I accept the conclusion, but I don't see how it follows from your premises. The attributes that you understand God to have are of such a kind, you say, that •they couldn't have originated from you alone, and you want to infer from this that •they must have originated from God. Well, it's absolutely true that they didn't originate from you alone, . . . but that's because they were derived from things in your environment—parents, teachers, professors, and human society generally. 'But I am merely a mind', you may say; 'I am not admitting anything outside of me—not even ears to hear with or men to talk to me.' You may *say* this, but would you be saying it if there were no men to talk to you or you had no ears to hear them with? Let's be serious: can you honestly deny that all the words you use in describing God come from the human society in which you live? And if this is true of the *words*, isn't it also true of the underlying *notions* that these words express? . . . Granted, if you really *understood* the nature of God, whatever it is, that would give us reason to think that you had learnt this from God; but •you don't have such an understanding, because •all the characteristics you attribute to God are merely perfections that you have observed in people and other things, and that the human mind can understand, build with, and amplify, as I have already explained several times.

You say that the idea of a substance could come from yourself because you are a substance, but that the idea of an infinite substance couldn't come from you because you are not infinite, •and so must have come from God. But you *don't* have the idea of an infinite substance except verbally—i.e. except in being able to manage the phrase 'infinite substance' So there isn't an idea here that must originate from an infinite substance: •whatever substitute you have for a genuine idea of *infinite substance*, it can be constructed by building and amplifying in the way I have explained. The philosophers of ancient times took in •this visible space and •this single world and •these few sources of energy, and acquired their ideas of these things; then they amplified these ideas to form ideas of an •infinite universe, •infinitely many worlds and •infinitely many sources of energy. Do you want to say that they didn't form those ideas by their own mental powers, and that the ideas were put into their minds by an infinite universe, an infinity of worlds, and an infinity of sources of energy? You insist that your thought of the infinite involves 'a true idea'; but if it *were* a true idea it would represent the infinite as it is, and you would hence perceive its principal feature, namely its infinity. But in fact your thought never gets beyond the finite, and you call it 'infinite' only because you don't perceive what is out of reach of your thought; so it is quite right to say that you perceive the infinite by a negation of the finite. [Gassendi elaborates on this at some length.]

You say that it doesn't matter that you don't grasp [Latin *comprehendas* = understand, with a suggestion of *getting one's mind around* something] the infinite or everything that is in it, and that all you need for •a true and completely vivid and clear idea of it is •an understanding of a few of its attributes. But if you don't *grasp* the infinite but merely the finite, then you don't have a *true idea* of the infinite but merely of the finite.

You can perhaps claim to know *part of the infinite*, but not to know *the infinite*. A man who has never left an underground cave knows a part of the world, but. . . he would make a fool of himself if he took his idea of this tiny portion of the world to be a true and authentic idea of the entire world. You say that

•it is in the nature of the infinite not to be grasped by a finite creature like yourself.

I agree, but I also insist that

•it is *not* in the nature of a true idea of an infinite thing to represent such a tiny part of it!

Actually, not even a *part* of it, because it is not a fraction of the whole. . . . Do you hold that there would be a fine likeness of me if a painter merely painted one of my hairs, or only its tip? Yet the gap between •the tip of one of my hairs and •the whole of me is not just smaller, not just enormously much smaller, but *infinitely* smaller than the gap between •everything we know of the infinite, or God, and •God himself in his entirety. . . .

Reply

(7) You have said all this before, and I have disposed of it. I'll make one •point about the idea of the infinite. You say that this can't be a true idea unless I grasp the infinite; and that the most I can be said to know is a part of the infinite, and a very small part at that, which doesn't match the infinite any better than a picture of one tiny hair represents the whole man. My •point is that, on the contrary, the proposition 'I grasp something that is infinite' is a flat-out contradiction, because a true idea of the infinite can't be grasped at all, that being a consequence of the essence of infinity. [Descartes's thought here is that (a) *having no limits* is an essential feature of the infinite, and that (b) to *grasp* something is to have a mental hold on it *all*, to get your mind *around* it, to ride around its boundaries, so to

speak; and you can't do this if the thing has no boundaries. As noted earlier, 'grasp' translates *comprehendere*; and the phrase 'not bounded by any limits' at the end of this paragraph uses the same word—*nullis limitibus comprehensam*.] And yet it is obvious that our idea of the infinite represents not merely one part of it but the whole of it—representing it in a manner that is appropriate to a human idea. No doubt God, or some other intelligent nature more perfect than a human mind, could have a much more perfect idea, i.e. one that is more exact and distinct. Similarly when a beginner in geometry understands that a triangle is a figure bounded by three lines, we don't doubt that he has an idea of the whole triangle, even though he is unaware of many properties of that idea that geometers can pick out. Well, just as it suffices for •having an idea of the whole triangle to •understand that it is a figure contained within three lines, so it suffices for •having a true and complete idea of the infinite in its entirety to •understand that it is a thing that isn't bounded by any limits.

Objection

(8) In another passage you argue as follows:

Whenever I know that I doubt something or want something, I understand that I *lack* something and am therefore not wholly perfect. How could I grasp this unless I had an idea of a more perfect being—an idea that enabled me to recognize my own defects by comparison?

Well, it is hardly surprising that you should •be in doubt about something, or •want something, or recognize that you •lack something, given that you don't •know everything, don't •possess everything, and •aren't everything! . . . It's true that you aren't wholly perfect (and it isn't rude of me to say this), but does that lead you to understand that there is something more perfect than you? Surely things that you *want* are not

always in some sense more perfect than you. [In this paragraph and elsewhere, it may be worthwhile to remember that ‘perfect’ translates *perfectus*, which can easily mean ‘complete’.] When you want some bread, the bread isn’t in any way more perfect than you or your body; it is merely more perfect than the emptiness of your stomach. [Gassendi offers a mildly complex explanation of why Descartes came to hold his wrong view about this. Then:]

A little later you raise a possible objection to your argument:

Perhaps I am greater than I myself understand: perhaps all the perfections that I attribute to God are ones that I *do* have in some potential form, and they merely haven’t yet shown themselves in actuality, as they would if my knowledge gradually increased to infinity.

You respond to that:

Though it is true that my knowledge is increasing, and that I have many potentialities that aren’t yet actual, this is all quite irrelevant to the idea of God, which contains nothing that is potential. Indeed, this gradual increase in knowledge is itself the surest sign of imperfection.

But although the features that you perceive in the idea actually exist in •the idea, it doesn’t follow that they actually exist in •the thing that it is an idea of. . . . Some ancient philosophers had an idea that actually contained an infinity of worlds, but you won’t infer from this that this infinity of worlds actually exists! [He develops this point in terms of an architect’s •actual plans for a •potential building, and then returns to the impossibility of having ‘a true and genuine idea of God’, because there is always so much more to be discovered about God. . . .]—infinitely more than remains to be discovered about a man when you have seen only the

tip of one of his hairs. Indeed, even if you haven’t seen the whole man, you have seen *other* men, and this will give you a basis—by comparison—for making some conjectures about him. But we have never been in a position to know anything that resembles God and his immensity.

You say that you ‘take God to be actually infinite, so that nothing can be added to his perfection’. But you are here making a judgment about something of which you are ignorant. Your judgment is based simply on a presumption, like that of the philosophers who thought there are •infinitely many worlds, •infinitely many sources of energy, and an •infinite universe. Your further comment that ‘the representative being of an idea cannot come from potential being but only from actual being’ can hardly be true, given my point about the ideas of the architect and of the ancient philosophers, especially when you remember that ideas of this sort are constructed from other ideas, which the intellect originally derived from actually existing causes.

Reply

(8) When you **(a)** deny that we have a •true idea of God, you repeat the mistake you made in (7). For although we don’t know everything that is in God, all the attributes that we recognize in him are •truly there. You also **(b)** say that if someone wants some bread, the bread is not more perfect than him; and **(c)** that although a feature that I perceive in an idea actually exists in the idea, ‘it doesn’t follow that it actually exists in the thing that the idea is an idea of’. And finally you **(d)** say that I am making a judgment about something of which I am ignorant. But these comments and their like merely show that you, Flesh, are anxious to rush in and attack many statements without understanding them. **(b)** The fact that someone wants bread doesn’t imply that •bread is more perfect than •he is, but merely that •his state

when he doesn't need bread is more perfect state than •his state when he does need it. (c) From something's existing in an idea I don't infer that it exists in reality, except when we can't come up with any cause for the idea except the actual existence of the thing it represents. And I have demonstrated that that's how things stand with the idea of God, and *not* with the idea of many worlds or of anything else. (d) I am not making a judgment about something of which I am ignorant: I gave *reasons* to back up my judgment—reasons that are so solid that you haven't been able to mount the slightest attack against any of them.

Objection

(9) You next ask whether, given that you have an idea of a being more perfect than you, you could exist if no such being existed. And you say in reply: 'Well, if God didn't exist, from what would I derive my existence? It would have to come from myself, or from my parents, or from some other beings less perfect than God.' And you go on to prove—quite unnecessarily!—that you don't derive your existence from yourself, followed by a reason why you haven't always existed. There was no point in that either, except that it leads into your view that you have a cause that not only •created you but •keeps you in existence. I have some comments to offer on that view. From the premises

- the time through which you live has many parts, and
- each part is independent of the others,

you infer that

- you must be created anew in each individual part.

But look at this another way: There are indeed *some* effects that can't keep going unless the efficient cause that produced them in the first place continues to act. The light of the sun is an example of this (though in cases like that, it isn't really the •same effect that keeps going but rather 'an •equivalent

effect', as they say about the water in a river). But we see *some other* effects continuing when their acknowledged cause has stopped acting and perhaps has even stopped existing. Manufactured things and organisms are cases of this; I shan't bore us with a list; it's enough to cite *you* as an example, whatever your cause eventually turns out to be! You say that the parts of your time are 'independent of each other'. This is open to challenge: can we think of anything whose parts are *less* 'independent of each other', more inseparably linked together? Is there anything whose later parts are more inevitable, more closely tied to the earlier parts and more dependent on them, •than a period of time? But I'll set that aside, and put this to you:

The parts of time •are external, they •are successive [meaning that none of them sticks around for long enough to achieve anything], they •do not act. So how can *their* being dependent or independent make any difference to *your* coming into existence or staying in existence?

They have no more effect on that than the flow of water-particles in a river has on the creation and preservation of some rock over which it flows. From the fact that you existed a little while ago, you say, it doesn't follow that you must exist now. I agree; but •you are wrong about *why* this is so. It isn't because

- a cause is needed to create you anew,

but rather because

- there may be some cause present that could destroy you, or you may have some weakness within you that will lead to your destruction.

You say: 'There is no real distinction between preservation and creation—only a conceptual one—and this is one of the things that the natural light makes evident'. But how is this 'evident' if not in the case of light and similar effects? [Gassendi presumably means: light and its like are the nearest things

you'll get to examples of something's being kept in existence by the cause that brought it into existence, yet even with *them* it isn't 'evident' that bringing-into-existence is the same process as keeping-in-existence.] You go on to argue like this:

•You are not aware of having any power that will keep you in existence for the next few minutes. •You are a thinking thing and thus would be aware of such a power if you had it.

Therefore

•You don't have any such power.

But you *do* have a power in virtue of which you can think you'll exist a few minutes hence (though not necessarily or indubitably, because this power—this natural constitution—of yours, whatever it is, doesn't guard against *every* external or internal cause that might destroy you). So you will indeed continue to exist because of a power that you have—not •to create yourself anew at every moment, but •to ensure that you will continue unless some destructive cause intervenes. [Gassendi criticises Descartes's reasons for denying that he owes his existence to his parents. Then:] You say:

But if your parents were the cause of your existence, then that cause may have derived its existence not from itself but from another cause; and the same may be true of that prior cause, and so on ad infinitum. The only way you could rule out such an infinite regress would be to prove that the world *began* at some time, so that there must have been a first parent who had no parent. An infinite regress seems to be absurd only for causes that are linked in a hierarchical way so that a cause that is lower in the chain can't act without the motive power of one that is higher. For example, when something is pushed by a stone, the stone by a stick, and the stick by a hand; or when a weight is lifted by the first link of a chain, which is

pulled by the second link, and so on. In such cases we must eventually reach one link in the chain that is the first to move; it *would* be absurd to think of a weight as lifted by an infinitely long chain. But there seems to be no absurdity when we have causes that are inter-related in such a way that if an earlier cause is destroyed the subsequent cause depending on it can survive and continue to act. So when you say that it's clear that an infinite regress is impossible in the case we are discussing, you must ask whether this was just as clear to Aristotle, who was strongly convinced that there was never any first parent!

You go on as follows:

It might be thought that several *partial* causes contributed to my creation—that I received the idea of one of the perfections that I attribute to God from one cause, and the idea of another from another. But this can't be right, because God is the only thing that has all these perfections, and his *simplicity*—that is, the unity or inseparability of all his attributes—is one of the most important of the perfections that I understand him to have.

Two points about this: **(a)** For you to have an idea of a certain perfection, you don't have to have been acted on by something that *has* that perfection. **(b)** Even if I am wrong about that, your idea of something that has *all* the perfections could be something that *you* put together out of your ideas of the individual perfections. . . . You know how the poets describe Pandora! [They say that she was made out of clay by a master sculptor, and that in being made she received all perfections, as gifts from all the gods of Olympus, presumably one gift per god.] You might have acquired that idea in the following way:

You admired various people's outstanding knowledge, wisdom, justice, steadfastness, power, health, beauty,

happiness, longevity and so on; then you put all these things together and thought how admirable it would be if one person had all these perfections at once. You then heightened all these perfections, by large steps and small, leading you to the thought that this person would be all the more admirable if his knowledge, power, duration and so on were *unlimited*, so that he was omniscient, omnipotent, eternal and so on. And when you saw that human nature would not admit of such perfections, you supposed that if they were all combined in one nature, that would be a blessed nature indeed. Then you thought it worth investigating whether such a being existed, and came up with certain arguments to make it seem more reasonable than not that he should exist. And that led you to exclude all bodily attributes and other limitations that imply some imperfection.

Why couldn't your idea of God have come about in *that* way? . . . As for the perfection of *unity*, there is certainly no contradiction in conceiving of all the perfections that we attribute to God as being intimately connected and inseparable; even if your ideas of them were not •placed in you by *God* but •derived by *you* from things you have seen, and then amplified etc. Pandora. . . is not the only example. People have also conceived of the perfect republic, the perfect orator and so on. . . Although your conclusion that *God exists* is true, it doesn't seem to me that you have provided a very compelling demonstration of it.

Reply

(9) When you say that we can stay in existence without the continual action of our cause, you are disputing something that all metaphysicians affirm as an obvious truth—though uneducated folk often miss it because they attend only to

the causes of •coming into existence and not the causes of existence itself—i.e. the causes of •staying in existence. Thus

•the architect is a cause of the house, and a father is a cause of his child,

only in being the causes of their coming into being; so that once the work is completed (•the house built, the child born•) it can remain in existence with no input from *this* kind of cause. But

•the sun is the cause of the light it emits, and God is the cause of created things,

not just as causes of the coming-into-existence of these things, but also as causes of their existence (•i.e. their staying in existence•); so in these cases the cause must continue to act in the same way on the effect in order to keep it in existence.

This can be clearly demonstrated from what I have said about the independence of the parts of time. You try to dodge this by talking about how the parts of *time*, considered in the abstract, are necessarily inter-connected. But what is in question here is not that, but rather the *time or duration of a thing that lasts through time*; and you wouldn't deny that each individual moment of *that* can be separated from its immediate predecessor and successor, which implies that the thing that lasts through time may go out of existence at any given moment. You say that we have a power that ensures that we shall continue to exist unless some destructive cause intervenes. You don't realize that in •implying that a created thing can stay in existence independently of anything else, you are •attributing to it a perfection that only a creator can have. Similarly, in implying that •the creator could bring the existence of something to an end only by performing some positive act (thus tending towards non-being), you are •attributing to him the imperfection of a created thing.

It isn't absurd to suppose an infinite regress, you say, but this is undermined by what you say later on. For you admit that an infinite regress *is* absurd in the case of 'causes that are linked in a hierarchical way so that a cause that is lower in the chain can't act without one that is higher'. But those are just precisely the causes that are at issue here, since we are dealing with causes of existence, not causes of coming into existence (such as parents). So you can't set the authority of Aristotle against me here, or the stories about Pandora. You agree that I can augment—a little or a lot—all the perfections that I observe in people, until I see that 'through my augmentations' each has become a kind of perfection that can't possibly belong to human nature; and this is all I need to demonstrate the existence of God. For I maintain and insist that if we hadn't been created by God we wouldn't have had *this amplifying power*. But I'm not surprised that you can't see that I have given an utterly evident demonstration of this, because I can't see that you have managed to get a correct understanding of any one of my arguments..

Objection

(10) You say this:

It remains for me only to ask *how* I received this idea from God. I didn't get it from the senses; and it's not something that I invented, either; for clearly I can't take anything away from it or to add anything to it. The only remaining alternative is that my idea of •God is innate in me, just as the idea of •myself is innate in me.

But, I repeat, you could have partly derived it from the senses and partly made it up. When you say that you can't add anything to it or take anything away, remember that when you first acquired it, it wasn't as complete as it is now. Bear

in mind

- that there may be men or angels or other natures more learned than you from which you may learn things about God that you don't know now;
- that God (at least) could give you such information and instruct you so clearly, in this life or the next, that you would have to regard your present knowledge of him as worthless; and
- that we can ascend from the perfection of created things to knowledge of the perfections of God in such a way as to uncover more perfections every day.

So we can't at any one moment possess a complete idea of God, but only one that becomes more and more complete each day. You go on as follows:

It is no surprise that God in creating me should have placed this idea in me, to serve as a mark of the craftsman stamped on his work. The mark need not be anything distinct from the work itself. But the mere fact that God created me makes it believable that I am somehow made in his image and likeness, and that I perceive this likeness in the same way that I perceive myself. That is, when I turn my mind's eye on myself, I understand that I am a thing that is incomplete and dependent on something else, and that aspires without limit to ever greater and better things; but I also understand at the same time that he on whom I depend has within him all those greater things—not just indefinitely but infinitely, not just potentially but actually—and hence that he is God.

All your assertions here are plausible, and I don't deny their truth; but how do you prove them? Setting aside my previous points, 'I'll present four main difficulties about this'. (a) If the idea of God is in you like the mark of a craftsman stamped on his work, what kind of stamping is this? What is this

'mark' *like*? How do you recognize it? If it isn't 'distinct from the work' or the thing itself, does that mean that you are an idea? Are you nothing but a way of thinking? Are you both •the mark that is stamped and •the subject on which it is stamped? **(b)** It is believable, you say, that you are made in the image and likeness of God. This is certainly believable, given religious faith; but how are we to understand it through natural reason, unless you are making God to be like a man? What could that likeness consist in? Since you are dust and ashes, can you presume that you resemble that eternal, incorporeal, immense, most perfect, most glorious and above all most invisible and incomprehensible nature? Have you known that nature face to face? Is *that* what enables you to compare yourself with it and say that you resemble it? **(c)** The fact that he created you, you say, makes it believable that you resemble him. On the contrary, this fact makes such a resemblance wholly *unbelievable*, because ·in general· a product is not similar to the workman who made it except when he engenders it by communicating his nature to it—for example, when the 'workman' is a father and the 'product' is his son·. But you aren't begotten by God in this way: you aren't his offspring; you don't share his nature; you are merely created by him, i.e. produced by him in accordance with an idea. You can't *resemble* him, any more than a house resembles a bricklayer! This objection stands even if we grant you—though you haven't yet proved it—that you were indeed created by God. **(d)** You say that you perceive the likeness when you take in that you are a thing that is incomplete and dependent, and that aspires to greater and better things. But why isn't this rather an argument for a *dissimilarity* between you and God, since he is utterly complete and independent and self-sufficient, being the greatest and best of all things? ·Two further points, that I'll mention but not discuss·. **(e)** When you understand

yourself to be dependent, you shouldn't immediately infer that the thing on which you depend is something other than your parents; and if you do think it is something other than them, that doesn't explain why you should think you *resemble* it. **(f)** There is no reason why God shouldn't be thought to have imprinted the idea of himself on everyone else as well as on you; which makes it surprising that other people •don't have your understanding of these matters. The fact that they •don't shows that there is no idea imprinted on us by God. . . . But I have already spent too much time on this topic.

Reply

(10) You attack my statement that nothing can be added to or taken away from the idea of God—so you are ignoring the common philosophical maxim that the essences of things are indivisible. An idea represents the essence of a thing, and if anything is added to or taken away from an idea then it automatically becomes the idea of something else. This is how the ideas of Pandora and of all false gods are formed by those who don't have a correct conception of the true God. But once the idea of the true God has been conceived, although we may detect additional perfections in him that we hadn't previously noticed, this doesn't mean that we have added anything to the idea of God; we have simply made it more distinct and explicit. This presupposes that our original idea did contain all these perfections ·though we didn't notice them in it·, and this presupposition must be right if the original idea was a true one. Similarly, when we become aware of various properties in the triangle of which we were previously ignorant, we aren't adding to our idea of a triangle. Also [harking back to a part of Gassendi's (9), on page 116]: the idea of God isn't something that we form step by step, amplifying the perfections of his creatures; it

is formed—*snap!*—all at once and in its entirety as soon as our mind reaches an infinite that can't be amplified.

(a) You ask how I prove that the idea of God is present in us like the mark of a craftsman stamped on his work. 'What kind of stamping is this? What is this "mark" *like?*' Well, suppose there is a painting in which I observe such skill that I judge that it could only have been painted by Apelles, and the following interchange occurs:

Descartes: That unmatched technique is like a kind of mark that Apelles stamped on all his pictures to distinguish them from others.

Gassendi: What kind of stamping is this? What is this 'mark' *like?*

If you did ask such a question, everyone would see you as deserving to be laughed at rather than answered.

(b) You go on as follows: 'If it isn't "distinct from the work" or the thing itself, does that mean that you are an idea? Are you nothing but a way of thinking? Are you both the mark that is stamped and the subject on which it is stamped?' This doesn't deserve an answer either. Here's another fragment of conversation:

Descartes: The technique by which we can distinguish Apelles's paintings from others isn't anything distinct from the paintings themselves.

Gassendi: So you are saying that the paintings are nothing but the technique; they don't consist of any material, and are simply a way of painting.

That would obviously be absurd, and so is the 'distinct from the work' jibe that you launched at me.

(c) You deny that we are made in the image of God, and say that this would make God like a man; and you list ways in which human nature differs from the divine nature. That is about as clever as saying 'That picture isn't a portrait of Alexander, because it isn't *like* Alexander: it is made of

wood and paint, while he is composed of flesh and bones.' An image doesn't have to be in all respects exactly like the thing of which it is an image, but merely to resemble it in some respects; and it is clear that the wholly perfect power of thought that we understand to be in God is represented by our less perfect faculty of thought.

You compare God's creation to the labour of a workman rather than to parental procreation, but you have no reason for this. Even if the three ways of acting—divine creation, parental procreation, and manufacture—are completely different in kind, divine creation is nevertheless *more* closely analogous to natural procreation than to artificial production or manufacture. But I didn't say that we resemble God as closely as children do their parents. Also, even in manufacture there is sometimes a resemblance between the craftsman and his product, for example when a sculptor makes a statue resembling himself.

(d) You report me as saying that I perceive my likeness to God in the fact that I am an incomplete and dependent thing. That is false and quite unfair. I brought my incompleteness etc. into the discussion as evidence of a *dissimilarity*, so as to show that I wasn't trying to make men equal to God. What I did say was this: •God has very great qualities; •I am inferior to him in this respect because I only *aspire to* have them; and •my venturing to aspire to them shows that there is in me something resembling them.

(e) Finally, you say that it is surprising that not everyone shares my understanding of God, since he imprinted the idea of himself on them just as he did on me. This is like being surprised that although everyone is aware of the idea of a triangle, people differ in what properties of it they notice, and some people may draw false conclusions about it.

[Now follows material that Descartes wrote to Clerselier in answer to Gassendi's book; see note on page 85.]

Your friends have noted four objections against the third Meditation.

(a) ‘Not everyone is aware of the idea of God within himself.’ But if we take the word ‘idea’ in the way I explicitly announced that I was taking it (not taking refuge in ambiguity, like those who restrict ‘idea’ to images of material things formed in the imagination), then we can’t deny that we have some idea of God, unless we’re willing to say that we don’t understand the meaning of the phrase ‘the most perfect thing we can conceive of’; for that is what everyone calls ‘God’. The wish to disagree is being taken to extraordinary lengths when someone says that he doesn’t understand the meaning of one of the most ordinary expressions in common use! Also, someone who denies having any idea of God, in my sense of ‘idea’, is making the most impious confession he could make. He is saying not only that he doesn’t know God by natural reason, but also that he couldn’t get knowledge of God through faith or in any other way. The point is that someone who has no perception or idea corresponding to the meaning of the word ‘God’ can’t meaningfully say ‘I believe that God exists’. One might as well say that one believes that *nothing* exists, thus remaining in the depths of impiety and the extremes of ignorance.

(b) Their next point is the claim that if I did have this idea, I would grasp it. [They use the verb *comprendre*, and this is like the Latin *comprehendere*—see page 113—in involving the thought of getting one’s mind *around* something.] This has no basis. Since the word ‘grasp’ implies some limitation, a finite mind can’t grasp God, who is infinite. But that doesn’t prevent it from having a perception of God. Similarly, one can’t hug a mountain, but one can touch it.

(c) Your friends make a point about my arguments, namely that many people have read them without being convinced by them. Well, I push back with the fact that other

people have understood them and found them acceptable. We should give more credence to one person who honestly says that he has seen or understood something than to a thousand others who deny what he says because they haven’t been able to see or understand it. Think of the discovery of the antipodes: the report of a few sailors who had circled the earth was believed in preference to the views of those thousands of philosophers who didn’t believe the earth was round. My critics cite Euclid’s *Elements*, claiming that they are easy for everyone to understand, presumably implying that the truth needn’t be difficult. They should remember this: among those who are regarded as the most learned experts in scholastic philosophy, not one in a hundred understands the *Elements*; and not one in ten thousand understands all the demonstrations of Apollonius or Archimedes, although these demonstrations are just as evident and certain as Euclid’s.

(d) Lastly, your friends say that from the fact that I recognize some imperfection in myself it doesn’t follow that God exists. So? I didn’t infer God’s existence directly from that premise alone, but brought in further considerations. Here they merely remind me of Gassendi’s habitual ploy: truncating my arguments and reporting only parts of them, so as to make them seem imperfect.

Objections to the fourth meditation

(1) You start the fourth Meditation by going over the results you think you have demonstrated in the previous Meditations—results that you expect to open the way to further progress. To speed things up, I shan’t keep insisting that you should have provided better demonstrations of these results; it will do if you remember what has been conceded and what hasn’t, so that the discussion doesn’t get dragged

into the realm of preconceived opinion.

Next you reason that it is impossible that God should deceive you; and to excuse the deceptive and error-prone faculty that God gave you, you suggest that the fault lies in *nothingness*. You have some idea of that, you say, and your nature involves it, because you take yourself to be something intermediate between nothingness and God. This is a splendid argument! I'll pass over the impossibility of explaining how we have an idea of nothingness, and what kind of idea it is, and how our nature can involve it, and so on. I simply point out that this distinction between God and nothingness doesn't alter the fact that God could have given man a faculty of judgment that was immune from error. Without giving man a faculty of infinite scope—which would clear him, according to you, of all involvement with *nothingness*—God could have given him a kind of faculty that would never lead him to assent to falsehood. With that he would clearly perceive anything he did know, and would avoid taking sides in matters where he was ignorant.

When you discuss this objection, you say that it's not surprising if you don't understand the reason for some of God's actions. That is right; but it is surprising that you should •have a true idea representing God as omniscient, omnipotent and wholly good, and yet •observe that some of his works are not wholly perfect. Given that he could have made things •if not completely perfect then• at least *more* perfect than he did make them, this seems to show that he must have lacked either the knowledge or the power or the will to do so. He was (to put it mildly) somewhat imperfect if, having the knowledge and the power, he lacked the will and preferred imperfection to perfection.

Your •refusal to invoke final causes in physics might be right in a different context, but when you are dealing with God •it obviously creates a risk of losing touch with

the principal argument that establishes by the natural light the wisdom, providence and power of God, and indeed his existence. Leaving aside the universe as a whole, the heavens and its other main parts, where can you find better evidence for the existence of such a God than in the function of the various parts in plants, animals, and man. . . . We have seen great thinkers being led by a study of anatomy not just to a knowledge of God but also to singing his praises for having organized all the parts and harmonized their functions in such an admirably providential way.

You will say that we should investigate the physical causes of this organization and arrangement, and that it is foolish to bring in •purposes rather than •agents or •materials. [Gassendi is here echoing the traditional notions of •final cause, •efficient cause, and •material cause. See explanatory note on page 6.] But no mere mortal can possibly understand—let alone *explain*—

- the agent that produces the form and arrangement we observe in the valves that serve as the openings to the vessels in the chambers of the heart.

Nor can we understand

- the source from which this agent gets the material from which the valves are fashioned, or
- how it makes them operate, or
- what organic structure it employs, or
- how it makes use of the valves, or
- what it requires to ensure that they are of the correct hardness, consistency, fit, flexibility, size, shape and position.

Since, I say, no physicist can discover and explain these and similar structures, why not at least admire their superb functioning and the indescribably great providence that has so neatly designed the valves for this function? Why not praise someone who comes to see that we *have to* acknowledge

some first cause that arranged these and all other things with such supreme wisdom and precise conformity with his purposes? [or 'with *its* purposes'—Latin doesn't distinguish these.]

It is rash to investigate God's purposes, you say. This may be true of purposes that God wanted to remain hidden or ordered us not to investigate; but surely it doesn't apply to the purposes that aren't much trouble to discover because God has left them on display, so to speak, especially since these are purposes that will lead us to offer great praise to God whose purposes they are.

You may say that our idea of God gives us true and authentic knowledge of God and his purposes, without bringing in the purposes of things. But not everyone has your good fortune of having such a perfect idea from birth and seeing it before him with such clarity. Since there are people to whom God hasn't granted such clear vision, you shouldn't frown on their coming to know and glorify the craftsman through an inspection of his works. I need hardly stress that this—I mean this attention to God's works, and thus to the world as given through the senses—doesn't rule out our making use of the idea of God, since this too appears to be entirely derived from our knowledge of things in the world. Own up! Don't you owe a great deal, if not everything, to empirical knowledge? Suppose that ever since being implanted in the body you had remained shut in with no external senses to enable you to perceive this universe of things or anything outside yourself, what progress do you think you would have made? Wouldn't you have been absorbed in private meditation, eternally turning thoughts over and over? Answer in all honesty and tell me what idea of God and yourself you think you would have acquired under such circumstances.

Reply

(1) I did explain quite adequately what sort of idea of nothingness we have, and how our nature involves non-being: the idea of nothingness I called a 'negative idea', and I said that 'being involved in non-being' simply means that we are not the supreme being and that there are very many things that we do not have. But you are always looking for flaws where none exist.

When you say that I 'observe that some of God's works are not wholly perfect', you are plainly inventing something that I neither wrote nor thought. What I did say was that if certain things are considered as separate wholes rather than as playing a part in the world as a whole, they can appear to be imperfect.

The things you say in defence of final causes should be applied to efficient causation. The workings of the various parts of plants and animals etc. make it appropriate to admire God as their efficient cause—to recognize and glorify the craftsman through examining his works; but we can't guess from this what *purpose* God had in creating any given thing. In ethics, where it is often legitimate to employ conjectures, it may sometimes be pious to try to guess what purpose God had in mind in his direction of the universe; but in natural science, where everything must be backed up by the strongest arguments, such conjectures are futile. Perhaps some of God's purposes are more out in the open than others? No! They are all equally hidden in the impenetrable depths of his wisdom. And don't tell stories about how none of us mortals can understand other kinds of cause. They are all much easier to discover than God's purposes, and the ones that you offer as examples of the difficulties involved are in fact ones that many people consider they *do* know about. Finally you put to me a frank question:

What sort of idea would my mind have had of God and of itself if, ever since being implanted in the body, it had remained shut in with none of the senses functioning?

Here is my frank and honest reply:

If you mean this to be a case where my body doesn't help *and doesn't interfere with* my mind, I have no doubt that in that case my mind would have exactly the same ideas of God and itself that it actually has, the only difference being that they would have been much purer and clearer.

The senses often get in the way of the mind's activities, and they never help in the perception of ideas. The only thing that prevents all of us being equally aware that we have these ideas is that we're too busy perceiving the images of corporeal things.

Objection

(2) The solution that you offer is this: a created thing that appears imperfect should be considered not as a ·free-standing· whole, but as a part of the universe, and from this point of view it will be perfect. That's an excellent distinction! But our present topic is not

•something's functioning imperfectly as a part, or being imperfect as compared with the whole,

but rather:

•something that has a special function just in itself, and performs that function imperfectly.

And even if you bring in the thing's relation to the universe, we can still ask: Wouldn't the universe be more perfect than it is now if all its parts were more perfect than they are now? Thus, a republic whose citizens are all good will be more perfect than one in which most or some of them are bad.

So when you go on to say later on that the universe would be worse than it actually is if all its parts were exactly alike in being immune from error, this is like saying that a republic has somewhat more perfection if some of its citizens are bad than it would have if they were all good. . . .

You say that you have no right to complain that the role God wanted you to play in the world isn't the most elevated or most perfect of all. But still we have a question: why wasn't God satisfied with assigning to you a role that was •the least elevated of the perfect roles, rather than giving you an •imperfect role? A ruler can't be blamed for not appointing all the citizens to the highest offices, keeping some in middling or low positions; but he would be open to criticism if he not only assigned some to the lowest positions but also assigned some to jobs that were downright bad.

You say that •you can't find any reason to prove that God ought to have given you a greater faculty of knowledge than he did; and that •you wouldn't expect a craftsman—even a very skillful one—to put into each of his works all the perfections that he is able to put into some of them. But that doesn't touch the objection that I have just raised. The problem doesn't concern God's reason for not giving you a greater faculty of knowledge, but his reason for giving you a faculty that is subject to error. I am not asking •'Why didn't the supreme craftsman bestow all the perfections on each of his works?' but rather •'Why did he bestow imperfections on some of them?'

You say that although you can't avoid error by making yourself have a clear perception of things, you *can* avoid it by sticking to the rule of not assenting to anything that you don't clearly perceive. Well, you *can* always keep this rule carefully in mind, but still isn't it an imperfection that you don't perceive clearly matters that you need to decide on, so that you are perpetually open to the risk of error?. . . .

[Gassendi then criticises two of Descartes's moves. **(a)** **Saying** that what is bad in my error comes from my misuse of the relevant faculty, not from the faculty itself, and thus not from God. **(b)** When I make a wrong judgment, there is nothing wrong with what is positive in what I do (and thus nothing wrong with anything that might involve God). My error is essentially negative—it consists in *something missing*—and negatives are not God's doing. Gassendi says that each of these evades the real problem, for reasons which he eventually sums up thus:] A locksmith isn't at fault for not making an enormous key to open a tiny box; but he is at fault if he makes a small key that won't—or won't easily—open the box. Similarly, God is not to be blamed for giving mere man a judging faculty that is too small to cope with everything, or even to cope with most things or with the most important things; but we can still wonder why he gave man a faculty that is uncertain, confused and inadequate even for the few matters that he did want us to decide on.

Reply

(2) All through this you assume, wrongly, that our being liable to error is a •positive imperfection, when really it is merely—in a God's-eye view—the •privation of some greater creaturely perfection. [See note on 'privation' on page 51.] And your comparison between the citizens of a republic and the parts of the universe doesn't work: the bad character of the citizens is indeed—in a republic's-eye view—something positive; but this doesn't carry over to man's liability to error, or his lack of all perfections, when this is seen from the standpoint of the good of the universe. Here is a better comparison to make: •someone who thinks that there oughtn't to have been any creatures in the world who were liable to error (i.e. who weren't wholly perfect) can be compared with •someone who wanted the whole of the human body to be

covered with eyes so as to look more beautiful (there being no part of the body more beautiful than the eye).

Your supposition that God has assigned bad roles to us, has given us imperfections, and so on, is flatly false. It is also just *false* that God 'gave man a faculty that is uncertain, confused and inadequate even for the few matters that he did want us to decide on'.

Objection

(3) You next ask what is the cause of error or falsity in you. ·I accept your view that making a judgment, whether true or false, involves both the •intellect and the •will. That is·, I don't question your thesis that

- the intellect is simply the faculty of being aware of ideas, or of apprehending things *simply*, without affirming or denying anything.

Nor do I dispute your view that

- the will (or freedom of choice) is a faculty whose function is to affirm or deny, to give or withhold assent.

My only question is this: why do you hold that our •will (or freedom of choice) is not restricted by any limits, while our •intellect *is* so restricted? It seems to me that these two faculties have an equally broad scope; certainly the scope of the intellect is at least as wide as that of the will, because the will never aims at anything that the intellect has not already perceived.

I said '•at least as wide', but really the intellect's scope seems to be •even wider than the will's. For the will (or choice or judgment), and hence our picking on something *x* to be pursued or avoided, never occurs unless we have previously apprehended *x*, i.e. unless the idea of *x* has already been set before us by the intellect. ·That guarantees 'at least as wide'; but we can strengthen it to 'even wider' because of two

kinds of case. **(a)** We understand something only obscurely, so that we make no judgment about it, and don't pursue or avoid it. **(b)** We understand something in such a way that there are reasons of equal weight on either side, or no reasons at all, so that no judgment follows.

You say that you can always understand the possibility that your faculties—including the intellect itself—could be increased more and more, so that you can form an infinite idea of intellect. But if the intellect can extend itself even to an infinite object, that alone shows that it is no more limited than the will. You say that you recognize your will to be equal to God's—not in its extent, of course, but in its essential intrinsic nature; but surely this holds for your intellect too, since you have defined the essential notion of the intellect in the same way as you have defined that of the will. Tell us, please: can the will extend to anything that escapes the intellect? Clearly the right answer is No.

So it seems that error doesn't arise in the way you say it does, from •the will's having a greater scope than the intellect, and •its judging concerning matters that the intellect doesn't perceive. The two faculties have equal scope; error arises from the will's judging badly in matters that the intellect perceives badly.

You compare the question of your own existence with that of the existence of other things. You are quite right about your judgment that *you* exist, but you seem to have gone wrong concerning the existence of other things. For you claim—just joking, perhaps?—to doubt something that you are really in no doubt about, namely that there exist things other than yourself. You already have a prior understanding of something apart from you and distinct from you, so you do judge that something apart from you and distinct from you exists. [Neither the Latin nor Clerselier's French version yields any clue as to why Gassendi should make that inference.] What you

suppose for purposes of argument, namely that you haven't yet found any convincing reason either way on this question, is indeed possible. But if it were actual, no judgment about the existence of other things would follow; rather, your will would always be indifferent [= 'evenly balanced'] and wouldn't come down on either side until the intellect found some plausible argument that broke the tie.

You go on to say that this indifference extends to cases where you don't have clear enough knowledge; for although probable conjectures may pull you one way, the mere knowledge that they *are* conjectures may push your assent the other way, so that there will be equilibrium and thus no judgment. But this seems quite wrong. If your conjectures are pulling you towards judging that P, your knowledge that they *are* merely conjectures may, rather than inclining you to judge that not-P, merely introduce reluctance and hesitancy into your judgment that P.

You add that your point is confirmed by your experience of the last few days, when you supposed that opinions you believed to be absolutely true were false. But remember that I don't accept that that's what happened. You can't *really* have felt or been convinced that you had never seen the sun or the earth or men and so on, or that you had never heard sounds or walked or eaten or written or spoken or performed similar activities involving the use of your body and its organs.

Finally, the essence of error seems to consist not in •the incorrect use of free will (as you maintain) but rather in •the disparity between our judgment and the thing that our judgment is about. And this seems to happen when our intellectual uptake of a thing doesn't match how the thing really is. So the blame seems to lie not with the will for not judging correctly but with the intellect for not displaying the object correctly. The will seems to depend on the intellect

in the following way: when the intellect perceives something clearly, or seems to do so, the will makes a judgment that is approved and settled, irrespective of whether it really true or only thought to be true. But when the intellect's perception is obscure, the will in this case will make a judgment that is doubtful and tentative, but is regarded for the time being as truer than its opposite, irrespective of whether it really accords with the truth of the matter or not. The upshot is that we have the power not so much to guard against •error as to guard against •persisting in error; and if we want to use our judgment correctly, we should not so much •restrain our will as •apply our intellect to develop clearer awareness, which our judgment will always then follow.

Reply

(3) You ask me to say briefly whether the will can extend to anything that escapes the intellect. Yes, this occurs whenever we happen to go wrong. Thus when you judge that *the mind is a kind of rarefied body*, you can understand •that the mind is the mind, i.e. a thinking thing, and •that a rarefied body is an extended thing; but you certainly *don't* understand the proposition that it is one and the same thing that thinks and is extended. You simply want to believe it because you have believed it before and don't want to change your view. It's the same when you judge that an apple, which may in fact be poisoned, is nutritious: you understand that •its smell, colour and so on are pleasant, but this doesn't mean that you *understand* that •it will be beneficial to eat; you *judge* that it will because you *want* to believe it. I do admit that when we direct our will towards something, we always have *some* sort of understanding of *some* aspect of it, but I deny that our understanding and our will are of equal scope. With any given object, we may have many desires but very little knowledge. And when we judge badly, it's not that we

exercise our will in a bad fashion, but that the object of our will is bad. There is no such thing as understanding in a bad fashion; when someone is said to '*understand* in a bad fashion', what is really going on is that he wrongly *judges* that his understanding is more extensive than it in fact is.

[In this paragraph, Descartes writes as though defending a view of free will as involving an indifferent (= evenly balanced) will. But Gassendi hasn't attacked any such general view.] You next deny certain propositions about the indifference of the will. But they are self-evidently true, and I'm not going to defend them by argument here. They are the sorts of things that each of us should to know by experience of his own case, rather than having to be convinced of them by rational argument. The trouble with you, Flesh, is that you apparently don't attend to the what the mind does within itself. Enjoy your unfreedom, if that's what you want. I am delighted with the *freedom* that I experience within myself. And you haven't produced any arguments against it—merely bald denials. I affirm what I have experienced and what anyone else can experience for himself, whereas the only basis for your denial, it seems, is your *not* having the appropriate experience; so my own view is probably entitled to receive more widespread acceptance.

[Now Descartes comes to a thesis that Gassendi *has* attacked, namely that our will is free to judge that P or to judge that not-P, whatever our understanding says about it.] Anyway, your own words show that you *have* in fact had the experience of freedom. We *can't* guard against •erring, you say, because the will can't be directed to anything that isn't determined by the intellect; but you admit that we *can* guard against •persisting in error, which we couldn't do unless the will had the freedom to direct itself either way without the determination of the intellect—which you have just denied! ·To see the inconsistency in your position, think about what *not-persisting-in-error*

must involve. Take a case where my intellect has already determined my will to make an error, i.e. to judge that P (where P is some false proposition). Now you want my will to ‘guard against persisting in error’, and I ask: what will determine my will to set up this guard?

- If the will is determined by itself to stand guard, then it *can* after all be directed towards something without being sent that way by the intellect,

which is what you say that it *can’t* do, this being what we are arguing about. On the other hand,

- If the will is determined by the intellect to stand guard, then it isn’t the will that is guarding against error; but the intellect.

The second case must be one where the intellect first directs the will towards a falsehood and then happens to undergo some change that results in its directing the will towards the truth. As between these two alternatives, I hold with the first: the will isn’t determined by the intellect to guard against error—and (I now add) wasn’t determined by the intellect to fall into error in the first place. What do you think that falsity *is*? and *how* do you think it can be an object of the intellect? I understand falsity to be merely a privation of the truth, so I am sure that it is flat-out impossible for the intellect to apprehend falsity under the guise of truth; which is what would have to happen if the intellect were to determine the will to accept something false.

Objection

(4) You then conclude by exaggerating the good that this Meditation can do, and as a prime example of that ‘good’ you lay down a rule for arriving at the truth: you will reach the truth, you say, if you attend closely enough to all the things that you perfectly understand, and separate these from everything that you apprehend only in a more confused

and obscure manner.

This is certainly true, but it could have been understood without any reference to the fourth Meditation, which seems to have been wholly superfluous. There is no problem about *accepting* the rule

- Don’t judge that P unless you vividly and clearly understand that P;

but there is a problem about *applying* that rule, i.e. about acquiring the skill or the method that will enable us to discover in a given case that our understanding *is* so vivid and clear as to be true and to make it impossible that we should be mistaken. As I objected at the beginning, we are often deceived even when we *think* we know something as vividly and clearly as anything can possibly be known. You also raised this objection against yourself, but we are still waiting for the skill or technique that I have asked for, and it is what you should be mainly working on.

Reply

(4) As for the good these Meditations can do: I did point out, in the short Preface that I think you have read, that those who don’t attend to the proper order of my arguments and the connection between them, but merely pick quarrels with individual passages, won’t get much benefit from the book. As for a method enabling us to distinguish the things that we really perceive clearly from those that we merely think we perceive clearly, I think I have provided a fairly precise one; but I expect it to be overlooked by readers who spend so little effort on shedding their preconceived opinions that they complain that I have not dealt with them in a ‘simple and brief statement’.

Objections to the fifth meditation

The essence of material things, and the existence of God considered a second time' (1) You say that you distinctly imagine quantity (that is, extension in length, breadth and depth) and also number, shape, position, motion and duration. Out of all these ideas you claim to have, you select •shape, and out of all the shapes you select a •triangle, about which you say:

Even if there are not and never were any triangles outside my thought, still, when I imagine a triangle there is a determinate nature that isn't invented by me or dependent on my mind. Consider the things that I can prove about the triangle—that its three angles equal two right angles, that its longest side is opposite its greatest angle, and so on. I am forced to agree that the triangle has these properties, even if I didn't give them a thought when the triangle first came into my mind. So they can't have been invented by me.

That's all you have to say about the essence of material things; you add a few remarks, but they are part of the same argument. I shan't raise objections here, except to murmur that the label 'unchangeable and eternal nature'—which you give to the nature of the triangle, just before the passage I have quoted—doesn't clearly fit anything except •the nature of •almighty God.

You'll say that what you are proposing is the standard scholastic view that the natures or essences of things—not just of God—are eternal, and that eternally true propositions can be asserted of them. But it is very hard to swallow: there's no way to make sense of •there being human nature at a time when there are no human beings, or of •the rose's being a flower (•that great 'eternal truth'!) at a time when not even one rose exists.

They distinguish talk about things' •essences from talk about their •existence, and hold that although things don't •exist from eternity their •essences are eternal. But the most important element in things is their •essence, but •since those are eternal and therefore don't begin, all that God does is to produce their •existence; it isn't a very impressive feat, is it? Isn't it on a par with a tailor trying a suit of clothes on someone? How *can* people contend that the essence of man—which is in Plato, for example—is eternal and independent of God? 'Because it is •universal' will they say? But everything in Plato is •particular. •Talk about 'universals' isn't just nonsense: after seeing the nature of Plato and of Socrates and similar natures of other men, the intellect abstracts from them some common concept in respect of which they all agree, and this can be regarded as a 'universal'—the universal nature or essence of man—because it is understood to apply to every man. But it doesn't make sense to suppose that there was a universal nature •of man• before Plato and the others existed, and before the intellect did the abstraction.

You'll say that the proposition 'Man is an animal' is eternally true, and thus true even when no man exists. But it seems *not* to be true, unless it is taken to mean that whenever a man exists he will be an animal. Admittedly the proposition

•Man is

does seem to be different from the proposition

•Man is an animal.

...•But despite the superficial difference, they come down to the same thing. By the former we mean

•Man, the animal, is,

and by the latter we mean

•Man, while he exists, is an animal.

And another point: The proposition ‘Man is an animal’ is no more necessary than is the proposition ‘Plato is a man’, so—on the scholastic view I am now discussing—it follows that even ‘Plato is a man’ is eternally true, Plato’s individual essence being just as independent of God as the universal essence of man; and so on through boringly many other examples that could be given. [Gassendi further develops his view that natures/essences/universals are not free-standing components of the world, but only upshots of a certain way of thinking. ‘The ·universal· *triangle*’, he says, ‘is a kind of mental rule for us to use to find out whether something deserves the label ‘triangle’. Then:]

So we shouldn’t think that the properties demonstrated of material triangles—i.e. triangular bits of matter—are ones they have derived from the ideal ·or universal· *triangle*. The truth is the reverse of that. The material triangles have these properties in their own right, and it’s the ideal triangle that has them only because the intellect gives them to it (after inspecting the material triangles); and they then hand them back to the material triangles again in the course of the demonstration. [And the same applies, Gassendi says, to universal human nature in relation to Plato and Socrates and you and me.]

According to you, Mind, you have the idea of *triangle* and would have had it even if you had never seen bodies with a triangular shape, just as you have the idea of many other shapes that have never impinged on your senses. But (I have said this before) if you had been deprived of all your sensory functions, and had never seen or touched the various surfaces and edges of bodies, you couldn’t have acquired or formed within yourself the idea of *triangle* or of any other shape. You do indeed have many ideas that never entered your mind via the senses; but it’s easy for you to have *those*, because you made them—in ways I have listed—out of other

ideas that *did* come to you via the senses.

It would have been appropriate to say something here about the *false* nature of a triangle that is supposed to consist of lines that •have no breadth, •enclose an area with no depth, and •terminate in points that have no dimensions at all. But this would have taken me too far afield.

Reply

(1) You haven’t attended closely enough to how the parts of my work all fit together; I say this because you, after quoting one brief fragment, say that this is *all I have to say* on the topic under discussion! My own view is that the ‘fit’ of the parts is such that, for any given thesis P ·that I assert·, •everything I say before reaching that point and •most of what follows, contribute to the proof of P. So you can’t give a fair account of what I say on any topic unless you go into everything I wrote about all the other related issues.

It seems to you ‘very hard’ to accept that there is anything unchangeable and eternal apart from God. That is how it ought to seem if I was •talking about existing things, or was •proposing something as unchangeable in a way that made it independent of God. But. . . I do *not* think that the essences of things, and the mathematical truths we can know concerning them, are independent of God. Nevertheless I do think that they are unchangeable and eternal, because God willed and decreed that they should be so. Call this ‘hard’ or ‘easy’ to accept, as you will; all I need is that it is true.

The points you make against the universals of the dialecticians don’t touch me, because I don’t understand universals in the way they do. But as for the essences that we know vividly and clearly, such as the essence of a triangle or of any other geometrical figure, I can easily force you to admit that our ideas of *them* are not taken from particular instances, because you say here that they are false! (I suppose you

say that because they don't square with what you've always thought about the nature of things!) ·Your commitment to their falsity comes up· later on [start of objections to sixth Meditation, page 135], when you say that 'pure mathematics deals with items—including points, lines, surfaces. . . .—that can't exist in reality'. This implies that no triangle has ever existed, and nor has any property that we take to be essential to a triangle or to any other geometrical figure. . . . But unless you are maintaining that the whole of geometry is false, you can't deny that many truths about these essences can be demonstrated; and the fact that they never change makes it right to call them 'immutable and eternal'. Perhaps they don't square with your suppositions about the nature of things, or with the atomic view of reality invented by Democritus and Epicurus, but that is a purely relational property of them—·on a par with having-been-forgotten-by-Pierre and being-spoken-of-by-Yvette-last-Tuesday·—which implies nothing about the essences themselves. All right, so they don't fit ·your views, but they undoubtedly conform to ·the true nature of things established by God. I'm not saying that there exist substances with length but no breadth, or breadth but no depth; geometrical figures are being understood not as *substances* but as *boundaries* of substances.

Moving on now: I don't accept the common view that the ideas of geometrical figures entered our minds via the senses. The world undoubtedly *could* contain figures like the ones the geometers study, but I contend that there aren't any in our environment except perhaps ones that are too small to impinge on our senses. Most geometrical figures are composed of straight lines; but no really straight line ever affects our senses: when we examine the best candidates through a magnifying glass, we find they are irregular, with wavy curves the whole way along. Thus, when as children we first saw a triangular figure drawn on paper, *that* can't

have been what showed us how the true triangle studied by geometers should be conceived, because ·the pencilled figure contains ·the true triangle only in the way that ·a rough unpolished carving contains ·the finished statue of Mercury that it is going to become. Our seeing the pencilled triangle *did* give us the thought of a true triangle, but not in the way you think. What really happened was this: *We already had* the idea of the true triangle, which was easier for our mind to grasp than the more complex pencilled triangle; so when we saw the complex composite figure, what we took in was not ·the figure we saw but rather ·the true triangle. Compare what happens when we see a sheet of paper on which some lines have been drawn to represent a man's face: what this produces in us is not so much the idea of ·these lines as the idea of ·a man. But this wouldn't happen unless we already knew the human face from some other source, and we were more accustomed to thinking about the face than to thinking about the lines on paper. . . . Well, in the same way, we couldn't recognize the geometrical triangle from the diagram on the paper unless our mind already had the idea of it from some other source.

Objection

(2) The next thing you tackle is demonstrating the existence of God. The thrust of your argument is in this passage:

On careful reflection it becomes quite evident that, just as having-internal-angles-equal-to- 180° can't be separated from the essence of a triangle, and as the idea of highlands can't be separated from the idea of lowlands, so existence can't be separated from the essence of God. Just as it is self-contradictory to think of *highlands in a world where there are no lowlands* [see note at page 10], so it is self-contradictory to think of *God as not existing*—that is, to think of

a supremely perfect being as lacking a perfection, namely the perfection of existence.

But the kind of comparison you are making isn't wholly fair. It is quite all right for you to compare essence with essence, but instead of going on to compare existence with existence or a property with a property, you compare •existence with a •property. What you should have said, it seems, is that

•just as having-internal-angles-equal-to-180° can't be separated from the essence of a triangle, so *omnipotence* can't be separated from the essence of God.

Or that

•just as the *existence* of a triangle can't be separated from its essence, so the existence of God can't be separated from his essence.

If you had done this, both your comparisons would have been satisfactory, and I would have accepted both. But you wouldn't have been showing that God necessarily exists; for a triangle doesn't necessarily exist either, although its essence and existence can't be actually separated. Real separation is impossible no matter how much the mind may separate them or think of them apart from each other—as indeed it can even in the case of *God's* essence and existence.

I notice also you count existence as one of God's perfections, but don't treat it as one of the perfections of a triangle or a highland, though it could be said that in its own way it is just as much a perfection of each of these things. In fact, however, existence is not a perfection either in God or in anything else; it is that without which there are no perfections.

What doesn't exist has no perfections or imperfections; what does exist may have various perfections, but existence won't be one of them. . . . We don't say that existence 'exists in a thing' as perfections do. And if a thing lacks existence, we don't say that it is imperfect or lacks a perfection; rather,

we say instead that it is nothing at all.

When you listed the triangle's perfections you rightly didn't put existence on the list and infer from this that the triangle exists. Similarly, when you listed God's perfections you shouldn't have included existence among them so as to reach the conclusion that God exists, unless you wanted to beg the question [= 'assume the thing you were trying to prove'].

You say that existence is •distinct from essence in the case of everything else but not in the case of God. But how can we •distinguish Plato's essence from his existence, except merely in our thought? Suppose he no longer exists: where now is his essence? Surely in the case of God the distinction between essence and existence is also just like that: it is a distinction in our thought.

You then raise an objection against your argument: From the fact that you think of highlands with lowlands, or of a horse with wings, it doesn't follow that those highlands or that horse exists; and similarly from the fact that you think of God as existing it doesn't follow that he exists. You argue that this involves a logical mistake. It can't have been hard to pinpoint the mistake, given that you constructed it to be a mistake! But you pinpoint it by saying that it is a manifest contradiction that an existing God should not exist, while omitting to point out that the same applies in the case of a man or a horse!

But if you had taken the highlands and their lowlands, or the horse and its wings, as comparable to God and his knowledge (or his power or other attributes), then the objection would still have stood, and you'd have had to explain how it is possible for us to think of a sloping mountain or a winged horse without thinking of them as existing, yet impossible to think of a wise and powerful God without thinking of him as existing.

You say that you aren't free to think of God without existence (that is, a supremely perfect being without a supreme perfection), in the way you *are* free to imagine a horse without wings. I have to add to this only the following comment. You are free

- to think of a wingless horse without thinking of the existence

that would, according to you, be a perfection in the horse if it were present; and you are also free

- to think of God as having knowledge and power and other perfections without thinking of the existence

that would complete his perfection, if he had it. Just as the horse that is thought of as having the perfection of wings isn't therefore taken to have the existence that is (you say) a principal perfection, so thinking of God as having knowledge and other perfections doesn't imply that he has existence. This—i.e. the proposition that he exists—remains to be proved. You say that existence and all the other perfections are included in the idea of a supremely perfect being, but saying that is simply asserting what should be proved, and assuming the conclusion as a premise. Otherwise—i.e. unless you show what the relevant difference is between the idea or essence of the winged horse Pegasus and the idea or essence of God—I can say that the idea of a perfect Pegasus contains not just the perfection of his having wings but also the perfection of existence. . . . Any point that you make about God in this area will be an equally good point about Pegasus, and vice versa.

You say that one can think of a triangle without thinking that it has three angles equal to two right angles, though it *does*, as appears afterwards when one attends to the matter; and similarly, one can think of the other perfections of God without thinking of his existence, though he *does* exist, as becomes clear when one attends to the fact that existence

is a perfection. But look at the reply you have laid yourself open to: when we afterwards recognize that the triangle has that property, it is because it is proved by a demonstration; similarly, if we are to recognize that existence belongs to God, this too must be demonstrated. Otherwise it will be easy to 'establish' that anything has any property at all!

You say that the thought

- (a) God has all perfections
- is not on a par with the thought
- (b) Within a circle all four-sided figures can be inscribed;

because (b) is false, and we can afterwards learn that a rhombus can't be inscribed in a circle, whereas (a) is not wrong because we afterwards find that existence belongs to God. It seems to me that (a) and (b) are entirely on a par; or if they aren't, you must *show* that *existent God* isn't a self-contradictory concept in the way that *rhombus inscribed in a circle* is. I'll pass over your other assertions, which are either •unexplained or •unproved or •disposed of by things I have already said. These include the statements that

- God is the only thinkable thing whose essence includes existence;
- It doesn't make sense to suppose that there are two or more Gods of this kind;
- Such a God has existed from eternity and will last through eternity;
- You perceive many other attributes in God, none of which can be removed or altered.

These assertions should be looked at more closely and investigated more carefully if their truth is to be uncovered and they are to be regarded as certain, etc.

Reply

(2) I don't see what sort of thing you want existence to be, or why it can't be said to be a property just like omnipotence—provided we take 'property' to stand for any attribute, or anything that can be predicated of a thing, which is just how it should be taken in this context. (In the case of God, indeed, necessary existence really is a 'property' in the strictest sense of the term, since God is the only thing whose essence includes it. [The Latin and French words for 'property' could express the idea of what something *exclusively* has—a meaning that lingers on in English in the phrase 'proper name'.]) So a triangle's existence isn't comparable with God's, because existence relates differently to God's essence from how it relates to the triangle's.

In listing •existence among the properties belonging to the •essence of God I don't 'beg the question' any more than I do when I list •having-angles-equal-to-two-right-angles among the properties belonging to the •essence of the triangle.

And it's not true that with God as with the triangle, existence and essence can be thought of apart from one another; for God is his own existence, which isn't so for the triangle. I don't deny that, just as •necessary existence is a perfection in the idea of God, •possible existence is a perfection in the idea of a triangle; and in saying this I mean 'perfection' quite strictly, for the triangle's having this makes the idea of it *superior to* the ideas of chimeras, which can't possibly be supposed to have existence. So you haven't even slightly weakened the force of my argument at any point; you remain trapped by the logical mistake that you say I could have exposed so easily.

I have already dealt with the other points that you raise. And you are quite mistaken when you say that **(a)** the demonstration of God's existence is not like **(b)** the demonstration that the three angles of a triangle are equal to two right angles. The reasoning is the same in both cases, except

that the demonstration in **(a)** is much simpler and clearer than the corresponding demonstration **(b)**. I pass over your remaining points: when you say that I explain nothing, you yourself are explaining and proving nothing—except that you are incapable of proving anything.

Objection

(3) Finally, you say that the certainty and truth of all knowledge depends uniquely on knowledge of the true God, without which there can be no true certainty or knowledge about anything. You illustrate this point as follows:

When I think hard about triangles, it seems quite obvious to me—steeped as I am in the principles of geometry—that a triangle's three angles are equal to 180°; and while I am attending to the proof of this I can't help believing it. But as soon as I turn my mind's eye away from the demonstration, then although I remember that I perceived it very clearly I can easily fall into doubt about its truth, if I am without knowledge of God. For I could convince myself that I am naturally disposed to go wrong from time to time concerning matters that I think I perceive as evidently as can be. This seems even more likely when I remember that I have often regarded as certainly true some propositions that other arguments have later led me to think false. But now I have seen that God exists, and have understood that everything else depends on him and that he isn't a deceiver; from which I have inferred that *everything that I vividly and clearly perceive must be true*. So even when I am no longer attending to the arguments that led me to accept this—i.e. to accept the proposition about triangles—as long as I remember that I *did* vividly and clearly perceive it no counter-arguments can make

me doubt it. It is something that I know for certain to be true. That applies not only to this one proposition, but to anything that I remember ever having proved in geometry and the like.

Here, Sir, I accept that you are speaking seriously; and there's nothing I can say except that I think you'll find it hard to convince anyone that •before you had established the above conclusion about God you were less certain of these geometrical demonstrations than you were •afterwards. These proofs seem to be so evident and certain that they force us to assent to them, and once we have perceived them they don't let the intellect remain in further doubt. So, indeed, when faced with these proofs, the mind may very well tell the evil demon to go hang himself, just as you yourself emphatically asserted that you couldn't possibly be deceived about the proposition or inference 'I am thinking, hence I exist', even though you hadn't yet arrived at knowledge of God. Of course it is quite **true**—as true as anything can be—that God exists, is the author of all things, and is not a deceiver; but these truths seem less **evident** than the geometrical proofs, as is shown by the fact that many people dispute the existence of God, the creation of the world, and so on, whereas no-one challenges the demonstrations of geometry. Will you, then, be able to convince *anyone* that the geometrical proofs depend for their evidence and certainty on the proofs concerning God? That would imply that such atheists as Diagoras or Theodorus can't be made completely certain of these geometrical proofs—how are you going to convince anyone of *that*? And how often do you find a believer who, when asked why he is certain that the square on the hypotenuse of a right-angled triangle is equal to the squares on the other sides, will answer: 'Because I know that God exists and cannot deceive, and that he is the source of this geometrical truth and of all other things'? Won't

such a person answer 'Because I know and am convinced of it by an indubitable demonstration'? And how likely is it that Pythagoras, Plato, Archimedes and Euclid and the other mathematicians will answer in the God-invoking way? None of them seems to have thought about God as a way of becoming completely certain of his demonstrations! But since you are assuring us only of your own views (·so that your position doesn't involve a *large* falsehood·), and since your position is in any case a pious one (·and so its falsity won't do any harm·), there is really no reason why I should dispute what you say

Reply

(3) To set against the point you make here about Diagoras, Theodorus, Pythagoras and others, I cite the case of the sceptics who *did* have doubts about these very geometrical demonstrations. And I insist that they couldn't have had such doubts if they had known the true nature of God. Moreover, you can't show that P is better known than Q by pointing out that more people think P is true than think Q is true. What is needed to show that P is better known than Q is that people who know the true nature of both P and Q see that P is prior in the order of knowledge and more evident and more certain.

Objections to the sixth meditation

(1) I have no objection to what you say at the beginning of the sixth Meditation, namely that 'material things, insofar as they are the subject-matter of pure mathematics, *can* exist'. In fact, however, material things are the topic of *applied*, not *pure*, mathematics, and pure mathematics deals with items—including points, lines, surfaces—. . . that *can't* exist in reality. The only point that gave me pause is that here

again you distinguish between imagining and understanding. But surely, Mind, these two appear to be acts of one and the same faculty, as I have suggested above, and at most there is between them a difference of degree.

And now—take note of this!—that can be inferred from things that you yourself have said. You said earlier that ‘imagining is simply contemplating the shape or image of a bodily thing’. But in the present passage you don’t deny that *understanding* consists of contemplating triangles, pentagons, chiliagons, myriagons and so on; and these are shapes of corporeal things. Now comes your distinction:

Imagination involves •applying the cognitive faculty to a body.

Understanding doesn’t require this kind of •application or effort.

Thus, when you effortlessly perceive a triangle as a figure consisting of three angles, you say that you ‘understand’ it; but when you have to strain a bit to •make the figure become present to you, so to speak, to •contemplate and examine it and to •pick out the three angles distinctly and in detail, *then* you say you ‘imagine’ it. For example, you perceive without effort that a chiliagon is a figure with a thousand angles, but no amount of mental application or effort suffices for you to •pick its angles out or make them become present before you, so to speak, or to •see them all in detail. You are in a confused state, just as you are when dealing with a myriagon or any other shape of this sort; so you think that in the case of the chiliagon or myriagon you have understanding, not imagination.

But •this isn’t a *deep* difference, as is shown by the fact that •there’s nothing to prevent you from extending your imagination to take in the chiliagon as it already takes in the triangle; and then both chiliagon and triangle would come within the scope of the understanding *and* of the

imagination. For you do make an effort to get some sort of picture of the chiliagon with all its many angles, even though the number of angles is so large that you can’t grasp it distinctly. •Don’t resist this line of thought by taking your understanding’s grasp of the chiliagon to be more of an achievement than it really is. You do perceive •or understand •that ‘chiliagon’ signifies a figure with a thousand angles, but that’s just the meaning of the word; it doesn’t follow that you •understand the thousand angles of the figure any better than you •imagine them.

•Nor is the difference between understanding and imagination a difference of *kind*. As we move from triangle to quadrilateral to pentagon to hexagon . . . and so on through figures with more and more sides, our perception loses distinctness and gains confusedness *gradually*; •which means that the difference we are considering is a difference of *degree*. . . . When the number of sides is large enough, we can no longer clearly visualize the figure, and we don’t bother to make the mental effort to do so.

[Gassendi continues to hammer home the claim that the difference is a relatively shallow difference of degree, not a deep different of kind. In doing this, he faces Descartes with the difference between

(a) with great effort perceiving something distinctly
and

(b) easily perceiving something confusedly.

He says that Descartes has tied the understanding/imagination line to the easy/effortful distinction, so that he would have say that of the above two perceptions it is **(b)**, the *confused* one, that counts as understanding. Gassendi goes on to say that Descartes’s account libels the understanding while praising the imagination; his reason for this is peculiar, and Descartes doesn’t reply to it.]

You say later on that the power of imagining, being

distinct from the power of understanding, is not a part of your essence. But how can that be, if they are one and the same power, functioning in ways that differ merely in degree?

You add that when the mind imagines, it turns towards the body, whereas when it understands, it turns towards itself and its own ideas. But what if it *can't* turn onto itself or one of its ideas without at the same time turning to something corporeal or something represented by a corporeal idea? For triangles, pentagons, chiliagons, myriagons, and the other shapes or their ideas are wholly corporeal; and when the mind understands them it has to attend to them as corporeal or quasi-corporeal objects. As for the ideas of supposedly immaterial things—God, an angel, the human soul or mind—our ideas even of *these* are corporeal or quasi-corporeal, because (I repeat) those ideas are derived from the human form and from other things that are very rarefied and simple and hard to perceive with the senses, such as air or ether. There is no need to spend time on your statement that it is only *probable* that bodies exist, because you can't have meant this seriously.

Reply

(1) I have already dealt with your denial of the statement that material things exist in so far as they are the subject-matter of pure mathematics.

It is false that our understanding of a •chiliagon is confused. Many properties can be very vividly and clearly demonstrated of it, and this couldn't happen if we perceived •it only confusedly or (as you claim) only in a verbal way. We have in fact a clear •understanding of the whole figure, although we can't •imagine all of it all at once. And this shows clearly that understanding doesn't differ merely in *degree* from imagining; they are two quite different *kinds* of mental operation: in understanding the mind employs

only itself, while in imagination it contemplates a bodily form. And although geometrical figures are wholly corporeal, this doesn't entail that the ideas through which we understand them count as corporeal (unless they fall under the imagination).

Lastly you say that the ideas of God, an angel, and the human mind 'are corporeal or quasi-corporeal, because they are derived from the human form and from other things that are very rarefied and simple and hard to perceive with the senses, such as air or ether'. Only you, Flesh, would say such a thing! In fact, if anyone represents God or the •human• mind to himself in *that* way, he's trying to imagine something unimaginable; all he will succeed in doing is to form a corporeal idea to which he falsely assigns the name 'God' or 'the mind'. A true idea of the mind contains only thought and its attributes, none of which is corporeal.

Objection

(2) You next discuss the senses, starting with a fine survey of the things you had previously taken in through the senses and, with nature alone as your judge and guide, believed to be true. Then you report the experiences that so shook your faith in the senses that you backed off into the position we saw you take up in the first Meditation. I don't want to start an argument here about the truthfulness of the senses. There is deception or falsity, but it's not to be found in the senses: they are quite passive, and report only appearances that have to appear in the way their causes make them appear. Any error or falsity is in the judgment, in the mind, which •isn't cautious enough and •doesn't notice such facts as that things at a distance... appear smaller and more blurred than when they are nearby. Still, deception does occur, and we mustn't deny it. The only tough question is this: Does deception occur all the time, making it impossible

for us ever to be sure of the truth of anything we perceive by the senses?

We don't have to look far for obvious examples of deception. With regard to the cases that you put forward as problematic, all I have to say is that it seems to be quite uncontroversial and *unproblematic* that when we look at a tower from nearby, and touch it, we are sure that it is square, although when we were further off we judged it to be round or at least weren't sure what its shape was.

Similarly the feeling of pain that seems to occur in the foot or hand after it has been amputated may sometimes give rise to deception, because the spirits responsible for sensation have been accustomed to pass into the limbs and produce a sensation in them. [Gassendi says that there is nothing deceptive about pain-location for people who are not amputees. He then turns to dreaming, and says that *while we are awake* we can't wonder whether we are awake or asleep. He continues:] Thus, although we can see ourselves as naturally open to deception even when the truth seems utterly certain, we can nonetheless see ourselves as having a natural capacity for arriving at the truth. We *are* sometimes deceived—we don't spot the logical fallacy, we don't realize that the stick is partially immersed in water—but we also sometimes have an understanding of the truth: a geometrical demonstration comes clear, the stick is taken out of the water; and in these cases there can be no doubt about the truth. And even in cases where there is room for doubt, at least there is *no* room for doubt that things appear to us in such and such a way: it has to be wholly true that they *appear* as they do.

Reason may persuade us not to accept much of what nature pushes us into believing, but it can't take away the truth of the appearances or of what the Greeks called 'the phenomena'. Is •reason's relation to sensory impulses

analogous to •the right hand's holding up the left when it is failing through fatigue? or is some other analogy more appropriate? We don't have to go into that!

Reply

(2) This clearly shows that you are relying entirely on your view (long held and never cured) that we suspect falsity only in situations where we have previously found it, so that if a tower *appears* square when we look at it from close up and touch it, we are sure that it *is* square. You also maintain that when we are awake, we can't wonder whether we are awake or asleep, and so on. But why should you think that you have already noticed *all* the circumstances in which error can occur? Anyway, it is easy to prove that you are sometimes mistaken about something that you accept as certain. But when you come round to saying that at least there is no room for doubt that things appear to us as they do, you are back on the right road: I said exactly this in the second Meditation. But our present topic is the truth about the things located outside us, and you haven't said anything true about this.

Objection

(3) You next come to the task you have set yourself, though your approach to it looks like a light skirmish rather than a weighty intellectual battle. You say: 'But now, when I am beginning to know myself and my maker better, although I don't think I should recklessly accept everything I seem to have acquired from the senses, neither do I think it should all be called into doubt.' That's quite right, but it's not a new thought: you must have had it before starting to know yourself and your maker better. You continue:

First, I know that if I have a vivid and clear thought of something, God could have created it in a way that exactly corresponds to my thought. So the fact that I

can vividly and clearly think of one thing apart from another assures me that the two things are distinct from one another, since they can be separated by God. Never mind *how* they could be separated; that doesn't affect the judgment that they are distinct

One could complain that you should first have shown that •God exists and •how powerful he is, on the way to showing that he can bring about anything that you are capable of understanding; but I shan't linger on that. The one thing that *has* to be said about the above passage is that in it you are using something •obscure to prove something •clear (I'm not suggesting that the inference itself contains any obscurity). Consider these two properties of the triangle:

- its longest side is opposite its biggest angle;
- its three angles are equal to two right angles.

Do you understand the first of those properties separately from •your understanding of• the second? •Presumably you do•. And do you infer from this that God could separate the two properties, enabling the triangle to have one of them not the other. . . .?

But I shan't press this point, because the separation •of mind from body that you insist on• really doesn't matter much. . . . Here is the conclusion you come to:

I know that I exist and that nothing else belongs to my nature or essence except that I am a thinking thing; from this it follows that my essence consists solely in my being a thinking thing, even though there may be—and we'll see soon that there certainly *is*—a body that is very closely joined to me. I have a vivid and clear idea of •myself as something that thinks and isn't extended, and one of •body as something that is extended and doesn't think. So it is certain that •I am really distinct from •my body and can exist without it.

So *this* is the conclusion you were rushing towards? [In

accusing Descartes of 'rushing', Gassendi may be joking at his own expense. His comments on the *Meditations* are 20% longer than the work itself; and he has recently pointed to three places (one in a passage omitted from this version) where he could, but chooses not to, make them longer still by raising further problems.] It is the source of our main difficulties here, so we should •slow down a little and• try to see how you manage to establish it. The crucial thing is the distinction between •you and •body. What body are you talking about? Obviously, •you are referring to• this solid body made up of limbs •and bones and organs etc.—the one you are no doubt referring to when you say 'I have a body that is joined to me' and 'It is certain that I am distinct from my body' and so on.

But, Mind, there's no difficulty about this body. There would be a problem if. . . [and then he gives some details of views philosophers have held according to which the mind is somehow adjectival on the body, i.e. is a state or condition of the body. None of this is relevant to Descartes, he remarks. Then:] The difficulty that arises for you is not about whether you are separable from *this* body (which is why I have suggested that you didn't need to appeal to God's power to establish that things which you understand apart from each other are separate). Rather, the difficulty concerns *the body that you are*: •for all you have said to the contrary, perhaps it isn't the bones-and-organs body of which I have just spoken•; it may instead be a rarefied body [see note on page 88] that is spread all through this solid •lumpy• one, or is segregated within some part of it. Anyway, you haven't yet convinced us that you are something wholly incorporeal, •something that has none of the features of a body•. When in the second Meditation you declared that you are not a wind, fire, air or breath, I *warned* you that you had asserted this without any proof.

You said there that you weren't arguing about these things at that stage; but you never went on to discuss them, and you never gave any sort of proof that you aren't a body of this ·rarefied· sort. I had hoped that you would now offer one; but what discussion and proof you do offer simply establishes that you are not this solid ·bones-and-organs·body, and I repeat that there is no difficulty about *that*.

Reply

(3) I shan't stop to deal with your tedious and repetitious assertions, such as that I didn't prove various truths that in fact I had demonstrated, that I discussed only this solid body when in fact I dealt with every kind—even the most rarefied kind of body. Faced with assertions like those, offered without supporting argument, all I can do is to offer a flat denial. But just in passing, I would like to know your basis for saying that I dealt with this solid ·bones-and-organs· body and not with rarefied ones. You seem to base it on my saying 'I have a body that is joined to me' and 'It is certain that I am distinct from my body'; but I don't see why these remarks shouldn't apply to a rarefied body just as well as to a solid one. Your understanding of the remarks is one that no-one else will share. Anyway, in the second Meditation I did show that the mind can be •understood as an existing substance even on the •supposition that no body exists—including no wind or fire or vapour or breath or any other body, however thin and rarefied. But whether this substance (·the mind·) is actually distinct from any body whatsoever is something that I said I wasn't arguing about at that point; I discussed and demonstrated this claim in the sixth Meditation. But evidently you have altogether failed to understand any of this, since you run together •the question of what we can understand this substance to be and •the question of what it really is.

Objection

(4) 'But', you say, 'on the one hand I have a vivid and clear idea of myself as a thinking, non-extended thing; and on the other hand I have a distinct idea of body as an extended, non-thinking thing.' I don't think that the 'body' part of this need give us much trouble. If you are referring to the idea of 'body' in its broadest sense, then I say again that you haven't yet proved that no body (·in that most general sense·) can be capable of thought. . . .

But ·I don't think that that is what you are saying·. I am pretty sure that what you are claiming to be distinct and separable from is only this solid ·bones-and-organs· body, ·so that you aren't committed to the view that *rarefied* matter can't think·. What I question in this is not *whether* you have an idea of this body so much as *how* you could have it if you really were an unextended thing. Tell me, how do you think that you, an unextended subject, could receive the image or idea of a body, which is something extended? Whether the image comes from a body or from some other source, it can't represent a body unless it is itself extended, having parts located beside other parts. If it doesn't *have* parts, how will it *represent* parts? [Gassendi repeats this challenge with 'extension', 'shape', 'spatial orientation', and 'various colours and so on'. Then:] It seems, then, that your idea of body is in some way extended. But if that is so, how can you, if you are unextended, have become its subject? ·That is, how can an unextended substance *have* an idea that is extended·. How will you adapt it to yourself? make use of it? gradually experience its fading and disappearing?

Regarding your idea of yourself, I have nothing to add to what I have already said, especially concerning the second Meditation. What came out of that was the point that you, far from having a vivid and clear idea of yourself, have *no* idea of yourself. Why? Because although you recognize that

you are thinking, you don't know what kind of thing you, who are thinking, are. You are aware of this operation of thinking, but the most important element is still hidden from you, namely the substance that does the thinking. This prompts the thought that you're like a blind man who, on feeling heat and being told that it comes from the sun, thinks he has a vivid and clear idea of the sun because if he is asked what the sun is he can reply 'It is a thing that heats'.

But I should add that you have something else to say about yourself. You say that

•you *are* a thinking thing

and also that

•you *are not* extended.

This is still open to question because you haven't proved it, but I'll let that pass. Just tell me: does *this* give you a vivid and clear idea of yourself? You say that you aren't extended—that is, you say what you are *not*, not what you *are*. To have a vivid and clear idea (i.e. a true and authentic idea) of something, doesn't one have to know the thing positively, to know something one could *affirm* concerning it? Or is it enough to know that it is *not* some other thing? Would someone have a vivid and clear idea of Bucephalus if all he knew about Bucephalus was that he *wasn't* a fly? [Bucephalus was Alexander the Great's horse.]

I'll drop that point now, and ask you something else. You say you are an *unextended* thing, but aren't you diffused all through the body? I don't know how you will answer this. From the start I gathered that you were in the brain, but I •didn't find you saying this explicitly, and •arrived at it by inference from something you did say, namely that you are 'not affected by all parts of the body, but only by the brain—or only one small part of it'. But this didn't really settle the question. You could have meant that you are *present* only in the brain (or a part of it), but you instead

have meant that although *present* all through the body you are *affected* only in one part of it—just as we commonly say that the soul is diffused throughout the whole body but sees only in the eye.

A similar doubt was raised when I read 'the whole mind *seems to be* united to the whole body'. In that remark you don't outright say that you *are* united to the whole body, but you don't deny it either. Whatever you meant to be saying, let's see where we get if we take it that you *are* diffused all through the entire body. Now I ask: given that you •stretch from head to foot, •have the same extent as the body and •have parts corresponding to all its parts, are you really unextended? (This question doesn't presuppose any view about *what* you are—i.e. whether you are a soul, or something else.) If you reply—as a scholastic might—that you are *unextended* because you are wholly in the whole body and wholly in every part of it, I ask What do you *mean* by that? Can one thing exist in its entirety in several places at the same time? Our faith tells us that this is true in the case of the sacred mystery of the Eucharist [see pages 74–7 above]. But •we aren't invoking •faith in discussing •a sacred mystery.; we are using •the natural light in discussing •a natural object, namely *you*. [Gassendi spells out somewhat the impossibility of a thing's being wholly in one place and at the same time wholly in another. Then:]

So let us now explore instead the thesis that you are in the brain alone, or just in one small part of it. You'll see that the same awkwardness arises. For any *part*, however small, is still extended, and since *your* extent is the same as *its* extent, you are extended too. Will you say that you take the 'part' in question to be a *point*? This is surely incredible, but never mind—let's run with it. If it is a •physical point, the difficulty remains, because a physical point is extended and has parts. Then is it a •mathematical point? Well, as

you know, mathematical points aren't real things; they are purely imaginary. But I'll go along with—and explore—the fiction that you are joined to and exist in a mathematical point in the brain. See what a useless fiction *this* turns out to be! [Gassendi easily finds problems for this 'fiction'. **(a)** Information from nerves requires that different nerves intersect, and they intersect at different places and never at a mathematical point. **(b)** A mind tied to mathematical point couldn't get any sense of where a given signal comes from. And on the output side he mentions several problems that all rely on his assumption that only a body can make a body move, so that an unextended mind couldn't initiate or even steer movements of the body, and nor could a non-part of the brain that was a mathematical point. Then:]

But why should I spend time on this when really it is up to you to prove that you *are* an unextended and hence incorporeal thing? Here is something you might say (though I think you won't):

Man is commonly said to consist of 'a body and a rational soul', and thus to have two parts, of which one is a body, so the other isn't.

If you do say that, I'll offer the following reply:

Man consists of two kinds of body, a solid ·bones-and-organs· one and a rarefied one. The common name 'body' is used for the former of these, while the latter is called the 'soul'.

... So, you see, I *agree* with your confident conclusion that

•you are really distinct from •your body;

but I don't infer from this that you are incorporeal, because I take it to mean that

you (•the rarefied body that is your mind) is really distinct from •your more solid ·bones-and-organs· body.

You add that therefore you 'can exist apart from the body'.

Well, yes of course you can—just as the vapour carrying the smell of an apple can exist outside the apple!—but what makes *that* interesting? Well, it isn't entirely trivial, because it gives you a position different from the philosophers who think that you will wholly perish when you die [what follows expands Gassendi's wording in ways that small dots can't easily convey]:

Your mind is 'the form of your body; that is, it is adjectival upon your body; for you to have a mind of such and such a kind is for your body to be disposed to behave thus and so. So when your body dies, *you*—i.e. your mind—will go out of existence, becoming nothing. In the same way, when a spherical object is squashed flat its sphericalness goes right out of existence, becomes nothing.

But on your view (as I am supposing it to be) that you (your mind) is some rarefied matter, the death of your solid ·bones-and-organs· body doesn't imply the immediate annihilation of your mind. Your bodily death might bring with it a *dispersal* of your mind—like a gust of wind dispersing smoke—but your mind will still exist in a scattered form, i.e. will still exist because all its parts would still exist. Because of its dispersal it couldn't still count as being a thinking thing, a mind, or a soul, but wouldn't be outright annihilated.

In raising all these objections I am not casting doubt on your intended conclusion, merely expressing reservations about your argument for it.

Reply

(4) You ask how, in my view, an unextended subject like me could receive the image or idea of an extended body. I answer that the mind doesn't receive any corporeal image; no such image is involved in the •pure understanding of corporeal or incorporeal things. It's true that •imagination—which

can only have corporeal things as its object—does need an image that is a real body. The mind applies itself to this image—turns its attention towards it—but it into itself.

I can easily answer your point about the idea of the sun that a congenitally blind man gets merely from the sun's heat. The blind man can have a vivid and clear idea of the sun as something that gives heat, without having any idea of it as something that gives light. Your comparison between me and the blind man fails in two ways.

(a) We know ever so much more about a thinking thing than the blind man knows about a 'heating thing'—indeed we know more about that than we do about anything else whatsoever, as I showed in the appropriate place.

(b) The only people who can prove that the blind man's idea of the sun doesn't contain everything that can be perceived regarding the sun are those who have eyesight and can detect the sun's light and shape as well as its heat. But you, far from knowing more of the mind than I do, know less; so in this respect you are more like the blind man, while the worst that can be said of me is that my vision is somewhat impaired—like that of the rest of the human race!

When I added that the mind is not extended, I didn't mean to be explaining what the mind is, merely pointing out that those who think it is extended are wrong. [This next bit is peculiar. Cottingham is surely right: when Gassendi wrote that Bucephalus wasn't a fly (*musca*), Descartes misread this as *musica* = 'music'.] In the same way, if anyone said that Bucephalus was music, it would be perfectly worthwhile for someone else to say that this was false. You go on to argue that the mind makes use of an extended body and is therefore extended itself. That is no better than arguing that Bucephalus neighs and whinnies, thus producing sounds related to music, and is therefore himself music! The mind's being united to the whole body doesn't require it to be extended; it's not in

its nature to be extended, only to think. And the mind doesn't understand extension by containing an extended image, though it does imagine extension (as I have explained) by turning its attention to a corporeal image. Finally, it just isn't true that the mind couldn't move a body without itself being a body.

Objection

(5) As your discussion continues, you make many points that are relevant to your main thesis, and I won't stop to deal with all of them. One passage that strikes me is this:

Nature also teaches me, through these sensations of pain, hunger, thirst and so on, that I am not merely in my body as a sailor is in a ship. Rather, I am closely joined to it—intermingled with it, so to speak—so that it and I form a unit. If this were not so, I—who am nothing but a thinking thing—wouldn't feel pain when the body was hurt but would perceive the damage in an intellectual way, like a sailor seeing that his ship needs repairs. And when the body needed food or drink I would intellectually understand this fact instead of (as I do) having confused sensations of hunger and thirst. These sensations are confused mental events that arise from the union—the intermingling, as it were—of the mind with the body.

All this is quite right, but you still have to explain. . . [and Gassendi launches into a series of challenges, centring on these two: (a) an unextended mind couldn't be 'intermingled' with an extended body; (b) an unextended mind and an extended body couldn't combine to form a 'unit'. Union requires contact, Gassendi says, and an unextended mind can't be in contact with anything else. Then:]

You admit that you feel pain—how do you think it's possible for you to have this sensation if you are incorporeal

and unextended? The only understanding we have of pain is this: pain comes from the action of something that pushes into the body and separates its components, breaking up their continuity. Pain is an unnatural state; but how can something that is by its nature homogeneous, simple, indivisible and unchangeable get into an unnatural state or be acted on unnaturally? And another point: pain either is an alteration or *involves* an alteration, but something can't be altered if it has no more parts than a point, and hence can't change. Why not? Because if something that has no parts alters its nature, it is thereby reduced to nothing. [Gassendi then adds a final point: if the mind didn't have parts, it couldn't sense pains as coming from different parts of the body.]

Reply

(5) Your remarks about the union of the mind with the body are like some of your earlier ones. You don't come up with *any* objections to my arguments; you merely air some doubts that you think arise from my conclusions, though their real source is your own desire to bring the imagination in on matters that aren't within its proper province. An example is your attempt to compare the intermingling of mind and body with the intermingling of two bodies; I need only say that we oughtn't to make such a comparison, because mind/body is quite different in kind from body/body. And we shouldn't imagine that the mind •has parts on the grounds that it •understands parts in the body. Whatever the mind understands must be in the mind—where did you get *that* from? If it were right, a mind that *understands* the size of the earth must *have* that size—so far from being unextended!

Objection

(6) I'll pass over the remainder of your long and elegant discussion, where you set about showing that something

exists besides yourself and God. You deduce that your body and bodily faculties exist, and that there are other bodies that •pass their image along to your senses and to yourself, and •produce the feelings of pleasure and pain that give rise to your desires and aversions.

Here is the result you get from all this: 'So far as bodily well-being is concerned, my senses usually tell the truth.' And you infer from this that you 'should have no more fears about the falsity of what my senses tell me every day'. And you go on to say that 'dreams are never linked by memory with all the other actions of life as waking experiences are'; and you thus establish that you are encountering real objects and are not asleep but awake. You then say that 'From the fact that God isn't a deceiver it follows that in cases like this I am completely free from error'. This is a very pious statement, and your final conclusion that human life is subject to error and we must 'acknowledge the weakness of our nature' is certainly an excellent one.

These, sir, are the thoughts that came into my mind when studying your *Meditations*. As I said at the outset, you have no reason to worry about them, because my powers of judgment aren't strong enough for my views to have any value for you. When some dish pleases my palate but I see others don't like it, I don't defend my taste as being more perfect than theirs; and similarly, when an opinion appeals to me but not to others, I don't conclude that I have come closer to the truth than they have. I agree with the common saying that 'Everyone regards his own opinions as more than adequate!' Wanting everyone to have the same opinion is no more reasonable than wanting everyone's tastes to coincide. I say this to assure you that so far as I'm concerned you should feel free to brush off all my comments as worthless. I'll be sufficiently rewarded if you recognize my strong affection for you, and accept that I have great respect

for your powers. When expressing disagreements one tends to say things too bluntly; if any of my comments are like that, I wholly retract them and ask you to blot them out. My chief aim has been to do you some service and to keep my friendship with you safe and in good repair.

Reply

(6) Here you don't contradict me on any point, although you still have a great deal to say! This shows the reader that he shouldn't judge how many arguments you have from how many words you produce.

In this long discussion between Mind and Flesh, Mind has disagreed with Flesh on many points, as was only to be expected. But now, as I come to an end, I recognize the true Gassendi, admire him as an outstanding philosopher, and embrace him as a man of intellectual honesty and moral integrity whose friendship I'll always try to deserve by any acts of kindness I can perform. Please don't take it hard that I have used a philosopher's licence in refuting his objections, since everything he has said has given me great satisfaction. Among other things, I have been delighted that such a celebrated writer hasn't been able, in the whole course of his long and careful essay, to produce a single reasoned objection to my arguments (or even my conclusions) that I haven't been able to answer with great ease.

[Now follows material from Descartes's letter to Clerselier, mainly answering Gassendi's book; see note on page 85.] At the end my critics—your friends—add a thought that I don't think Gassendi included in his book, though it is very similar to his objections. They say that many very able people think they clearly see that mathematical extension, which I lay down as the fundamental principle of my physics, is merely my thought—that it doesn't and can't exist outside my mind, being merely something I achieve by abstraction from

physical bodies. From this they infer that the whole of my physics 'must be imaginary and fictitious, as indeed must be the whole of pure mathematics, whereas real physics, dealing with things created by God, requires the kind of matter that is real, solid and not imaginary'. Here is the objection of objections! The doctrine of those 'very able people', in a nutshell! All the things that we can understand and conceive are, according to them, only imaginings and fictions of our mind that can't really exist, which implies that nothing that we can in any way understand, conceive, or imagine should be accepted as true. So if we are to deserve a place among these great minds, we must slam the door on reason, and content ourselves with being monkeys or parrots rather than men. For if the things we can conceive must be rejected as false merely because *we can conceive them*, our only remaining option is to accept as true only things that we *don't* conceive; so we'll have to construct our doctrines out of *those* things,

- imitating others without knowing why, like monkeys, and
- uttering words whose sense we don't in the least understand, like parrots.

But I have some consolation: my critics here link my physics with pure mathematics, which I desire above all that it should resemble. They add two further questions at the end:

- How can the soul move the body if it isn't itself in any way material?
- How can the soul receive the image of corporeal objects?

These questions provide an occasion for me to point out that Gassendi was being quite unfair when, pretending to object to my views, he asked many such questions that don't need to be answered in order to prove what I asserted in my

writings. Ignorant people can in fifteen minutes ask more questions of *this* kind than a wise man could answer in a lifetime; and that's why I am not answering either of them. To answer them would require, amongst other things, an account of how the soul is united with the body, which I haven't yet dealt with at all. But I will say—just to you and without thinking of my critics—that those two questions are pointers to a 'problem' that doesn't exist because it assumes something that is false and can't in any way be defended, namely that two substances whose natures are different (like

the soul and the body) can't act on each other. To see how silly it is to assume this as something to be taken for granted, consider the fact that those who admit the existence of real accidents such as individual instances of heat, weight and so on [see note on page 78] have no doubt that these accidents can act on the body; yet there is much more of a difference between them and it, i.e. between accidents and a substance, than there is between two substances such as mind and body.