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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. The fine translation and edition by John Cottingham (Cambridge University Press) is the basis from which this text was constructed. The seventh set of objections, by Bourdin, is omitted because it is so long and so bad. As first published, Hobbes's comments were divided into sixteen episodes, each immediately followed by Descartes's reply to it. That format is adopted here for all the sets of replies; it involves some strain with the replies to Caterus, but works smoothly for each of the others. 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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Objections to Descartes's *Meditations*, and his Replies

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 highly 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 write to you if I had 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 84.]

OBJECTIONS TO THE FIRST MEDITATION: 'What can be doubted'

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

[This page is kept short so that pagination will be uniform with that of the complete text.]

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 French, 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.

START OF OBJECTIONS TO THE SECOND MEDITATION: 'The nature of the human mind, and how it is better known than the body'

(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.

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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 attributes of this kind. But at that stage you are already regarding yourself not as a whole man but as an inner or hidden part of one - the kind of component that 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 something 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 vou? And if that is so, why shouldn't vou have the same shape as your whole body has, just as the air takes on 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 which 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 of yours 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 in the world - and thus no wind - while still •retaining everything that lets me recognize myself as a thinking thing. So the questions that you go on with - 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 55], 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 \cdot at work \cdot .' I agree. But \cdot 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 requires 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 clear and distinct thinkingsubstance 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 $\hat{a}me$ = 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 animater, 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 85] 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 \cdot 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 - \cdot 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 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 of the animals, not that he isn't an animal at all. 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 more impressive name doesn't mean that your nature is different, i.e. that you are radically different. To prove that - i.e. to prove your thesis 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 or other machine. This may be true for ·animal· functions like nutrition and the pulsing of the arteries, 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 \cdot you are radically different from the brutes in that \cdot you are *free*, and have the power to prevent yourself from running away and \cdot the power to prevent yourself from

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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! (f) 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 •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 think 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-it-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 please 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 his 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 clear and distinct, 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 clear and distinct 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 that 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 - 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-werechemical [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 81.]

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 osome 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 intellectual, 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 clear and distinct 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.

START OF OBJECTIONS TO THE THIRD MEDITATION: 'The existence of God'

(1) In the third Meditation you recognize that •your clear and distinct 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 clearly and distinctly is true'. Admittedly this may have been 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 clearly and distinctly, 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 \cdot of yours may be •deceptive? \cdot 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 clearly and distinctly perceived is this: *for anyone, what appears to be so is what appears to be so*! \cdot We can perhaps allow your 'general rule' a little content, by saying that

propositions about what appears to x at time t are themselves clearly and distinctly 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 clearly and distinctly 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 clearly and distinctly 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 clearly and distinctly perceived doesn't mean •that it is true in itself, but only •that *that* is how it is clearly and distinctly perceived? And what holds for tastes also holds for intellectual matters. Time was when I could have sworn that

•we can't go from a quantity less than Q to one greater than Q without passing through Q;

and that

• if two lines are extended to infinity they *must* eventually meet.

I thought I perceived these things so clearly and distinctly 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 clearly and distinctly. 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 clearly and distinctly 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 dving 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 clearly and distinctly 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 clearly and distinctly perceive is true' isn't reliable, and you say that great thinkers, who must surely have perceived many things clearly and distinctly, 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 clearly and distinctly 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 \cdot 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 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 \cdot stop this game, and \cdot 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 $us \dots$

Do you want to 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 \cdot than it looks to us \cdot , 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, \cdot 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 \bullet qualities under which - in the guise of which - we conceive of the \bullet substance...

Now for what you say about the idea of God: since \cdot at this stage in the third Meditationyou 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 \cdot of God \cdot 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 - \cdot these divine attributes - doesn't contain more representative reality than do \cdot the ideas of \cdot 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 \cdot divineattributes.

(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. \cdot And we don't *need* such an idea \cdot . 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 \cdot for our purposes \cdot .

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 75].) 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 *our*selves? 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 \cdot reality \cdot 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 on 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 - \cdot 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 mirrose ourr. 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 anything 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 clear and distinct 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 \cdot you are wrong about *why* this is so \cdot . 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 \bullet coming into existence and not the causes of existence itself - i.e. the causes of \bullet 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 (\cdot the house built, the child born \cdot) 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 \bullet God is innate in me, just as the idea of \bullet 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 pages 110-111]: 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 unmatchable 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 - \cdot 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.

(f) 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 81.]

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 108 - 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, \cdot 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.

START OF OBJECTIONS TO THE FOURTH MEDITATION: 'Truth and Falsity'

(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 for 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 \cdot 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 in such 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 \cdot free-standing \cdot 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 still have the question: Wouldn't the universe really 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' low on page 49.] 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 \bullet intellect and the \bullet 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. \cdot 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 \cdot 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 clearly and distinctly 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 clear and distinct 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 clearly and distinctly 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'.

START OF 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 - \cdot not just of God \cdot - 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 \cdot there being human nature at a time when there are no human beings, or of \cdot the rose's being a flower (\cdot that great 'eternal truth'! \cdot) 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.

 \dots .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 - \cdot 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 \cdot universal \cdot 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 - \cdot i.e. triangular bits of matter - are ones they have derived from the ideal \cdot or universal *triangle*. The truth is the reverse of that \cdot . 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 is 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 clearly and distinctly, 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 130], when 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 havingbeen-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 are in the world substances that have 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 widespread 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 such figures 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 quite 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 in what way 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 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 the middle of 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' in the way perfections do. And if a thing lacks existence, we don't express that by saying 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 \cdot rightly \cdot didn't put existence on the list and infer from this that the triangle exists. Well, 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 [= 'to 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 \cdot to *be* a mistake \cdot ! 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 proved by a demonstration. 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, nor 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 be used to express the idea of what something *exclusively* has - a sense of the words that linger on in English in the phrase 'proper name'.]) So a triangle's existence shouldn't be compared with God's, because existence relates quite 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 clearly and distinctly perceive must be true*. So even

when I am no longer attending to the arguments that led me to accept this - \cdot i.e. to accept the proposition about triangles - as long as I remember that I *did* clearly and distinctly 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.

START OF OBJECTIONS TO THE SIXTH MEDITATION: 'The existence of material things and the real distinction between mind and body'

(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' 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 clearly and distinctly 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 quasicorporeal, 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 \cdot of deception \cdot . With regard to the cases that you put forward as problematic, all I have to say is that it seems to be quite uncontroversial \cdot and *un*problematic \cdot 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 clear and distinct thought of something, God could have created it in a way that exactly corresponds to my thought. So the fact that I can clearly and distinctly 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 \cdot your understanding of the second? \cdot 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 clear and distinct 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 \cdot slow down a little and \cdot try to see how you manage to establish it. The crucial thing is the distinction between \bullet you and \bullet body. What body are you talking about? Obviously, \cdot you are referring to \cdot this solid body made up of limbs \cdot and bones and organs etc. \cdot 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, and 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 pages 84-5] 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 have 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 noone 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 clear and distinct idea of myself as a thinking, nonextended 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 to 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 clear and distinct 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 clear and distinct 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

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 clear and distinct 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 clear and distinct 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 clear and distinct idea of Bucephalus if all he knew about Bucephalus was that he *wasn't* a fly? [Bucephalus was the horse of Alexander the Great.]

I'll drop that point now, and ask you something else. You say you are an *un*extended 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 un*extended 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 difference 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 ·bonesand-organs· body.

You add that therefore you 'can exist apart from the body'. Well, yes of course you canjust 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 doesn't receive 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 clear and distinct 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 \cdot 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 81.]

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 those who admit the existence of real accidents such as -individual instances of heat, weight and so on [see note on page 75] 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.