

Excerpts from Descartes's *Objections & Replies*
I. To the Illusion and Dream Arguments

From Third Objections (Hobbes, 195-6): **The dream doubt has not been resolved.**

Consider someone who dreams that he is in doubt as to whether he is dreaming or not. My question is whether such a man could not dream that his dream fits in with his ideas of a long series of past events. If this is possible, then what appear to the dreamer to be actions belonging to his past life could be judged to be true occurrences, just as if he were awake.

Moreover, as you yourself assert, the certainty and truth of all knowledge depends solely on our knowledge of the true God. But in that case an atheist cannot infer that he is awake on the basis of memory of his past life.

Descartes's Response:

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

An atheist can infer that he is awake on the basis of memory of his past life. But he cannot know that this criterion is sufficient to give him the certainty that he is not mistaken, if he does not know that he was created by a non-deceiving God.

From Fifth Objections (Gassendi, 282-3): **Ideas of external things come from external things.**

You call into doubt not only whether any ideas proceed from external things, but even whether there are any external things at all. Your reasoning appears to be as follows. Although you have within you ideas of things which are called external, the ideas do not establish that the things exist, since the ideas do not necessarily arise from the things, but could come from yourself or from some other unknown source. This, I think, is why you said earlier that you had not previously perceived the earth, the sky and the stars, but only the ideas of the earth, the sky, and the stars, which might give rise to a delusion. Now if you do not yet believe that the earth, sky, stars and so on exist, why, may I ask, do you walk on the earth and move your body to look at the sun? Why do you approach the fire to feel the warmth? Why do you go to the table for a meal to satisfy your hunger? Why do you move your tongue to speak or your hand to write down these meditations for us? Certainly your doubts can be uttered, they can be devised with great subtlety, but they do not further your enterprise. And since you are really in no doubt that the things outside you exist, let us be serious and straightforward and talk of things as they are. If, granting the existence of external objects, you think it cannot be satisfactorily demonstrated that the ideas which we have are derived from them, you will have to dispose not only of the objections raised by your arguments, but of further difficulties that can be raised.

You admit that we accept that our ideas come from external things, since, "Nature has apparently taught us this and we know by experience that they do not depend on us, or on our will." You should also have raised and answered, amongst other things, the question of why a man born blind has no idea of color, or a man born deaf has no idea of sound. Surely this is because external objects have not been able to transmit any images of themselves to the minds of such unfortunates, because the doors have been closed since birth and there have always been barriers in place which have prevented these images from entering.

Descartes's Response (363):

Here, aiming to destroy the arguments which 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 begs the question.

For you assume what had to be proved, namely that it is so certain that I walk on the earth that there can be no doubt of it.

In addition to the arguments which I put forward against myself and refuted, you suggest the following: Why is there no idea of color in a man born blind, and no idea of sound in a man born deaf? Here you show plainly that you have no telling arguments to produce. How do you know that there is no idea of color in a man born blind? From time to time we find in our own case that even though we close our eyes, sensations of light and color are nevertheless aroused. And even if we grant what you say, those who deny the existence of material things may just as well attribute the absence of ideas of color in the man born blind to the fact that his mind lacks the faculty for forming them; this is just as reasonable as your claim that he does not have the ideas because he is deprived of sight.

From Fifth Objections (Gassendi, 333-4): **We cannot doubt that we are awake, when we are awake.**

When deception occurs, we must not deny that it exists. The only difficulty is whether it occurs all the time, thus making it impossible for us ever to be sure of the truth of anything which we perceive by the senses.

Since during our lives we are alternately awake or dreaming, a dream may give rise to deception because things may appear to be present when they are not in fact present. But we do not dream all the time, and for as long as we are really awake we cannot doubt whether we are awake or dreaming.

Thus, although we think that our nature makes us liable to be deceived even in cases where the truth seems utterly certain, we can nonetheless think that we have a natural capacity for arriving at the truth.

Descartes's Response (385-6)

Here you show quite clearly that you are relying entirely on a preconceived opinion which you have never got rid of. You maintain that we never suspect any falsity in situations where we have never detected it. You maintain that when we are really awake, we cannot doubt whether we are awake or asleep, and so on. But you have no reason to think that you have previously noticed all the circumstances in which error can occur. Moreover, it is easy to prove that you are from time to time mistaken in matters which you accept as certain.

Excerpts from Descartes's *Objections & Replies*
II. To the Cogito

From Second Objections (Mersenne, 124-5): **Knowledge of the cogito depends on knowledge of God.**

In the Second Meditation, you are not yet certain of the existence of God, and you say that you are not certain of anything, and cannot know anything clearly and distinctly until you have achieved clear and certain knowledge of the existence of God. It follows from this that you do not yet clearly and distinctly know that you are a thinking thing, since, on your own admission, that knowledge depends on the clear knowledge of an existing God. This you have not yet proved in the passage where you draw the conclusion that you clearly know what you are.

Descartes's Response (140-1):

When I said that we can know nothing for certain until we are aware that God exists, I expressly declared that I was speaking only of knowledge of those conclusions which can be recalled when we are no longer attending to the arguments by means of which we deduced them. Now awareness of first principles is not normally called 'knowledge' by dialecticians. When we become aware that we are thinking things, this is a primary notion which is not derived by means of any syllogism. When someone says "I am thinking, therefore I am, or I exist," he does not deduce existence from thought by means of a syllogism, but recognizes it as something self-evident by a simple intuition of the mind. This is clear from the fact that if he were deducing it by means of a syllogism, he would have to have had previous knowledge of the major premise "Everything which thinks is, or exists." In fact he learns it from experiencing in his own case that it is impossible that he should think without existing.

From Fifth Objections (Gassendi, 291-2): **The mind can have no knowledge of the mind.**

I find it strange that you can claim that there is no problem about the idea you are said to have of yourself (an idea which is so fertile that it enables you to derive so many other ideas from it.) For in fact you either have no idea of yourself at all, or you have one which is very confused and imperfect. The inference which you yourself drew in the Second Meditation was that there was nothing which you could perceive more easily or evidently than yourself. But since you neither have nor are capable of having any idea of yourself, should we not rather say that you can perceive anything at all more easily and more evidently than yourself?

When I think about why it is that sight does not see itself and the intellect does not understand itself, it occurs to me that nothing acts on itself. Thus the hand or the tip of the finger does not strike itself and the foot does not kick itself. Now if we are to become aware of something, it is necessary for the thing to act on the cognitive faculty by transmitting its semblance to the faculty or by informing the faculty with its semblance. Hence it seems clear that the faculty itself, not being outside itself, cannot transmit a semblance of itself to itself, and hence cannot produce any awareness of itself or, in other words, cannot perceive itself. Why do you think that the eye can see itself in a mirror although it cannot see itself in itself? It is because there is a space between the eye and the mirror, and the eye acts on the mirror, transmitting a semblance of itself onto it, so that the mirror in turn acts on the eye by sending its own semblance back to it. Show me a mirror that you yourself can act on in this way, and I promise that, when it reflects your semblance back to you, you will finally manage to perceive yourself, though not by direct but by a reflexive kind of cognition. Since you cannot provide such a mirror, there is no hope of your knowing yourself.

Descartes's Response (367):

It is unusual for you to use arguments, but here you prove your case with the example of the finger which does not strike itself and the eye which does not see itself in itself but in a mirror. It is,

however, easy to answer this by saying that it is not the eye which sees the mirror rather than itself, but the mind alone which recognizes the mirror, the eye and itself. Other counter-examples can also be cited from the realm of corporeal things: when a top turns itself round in a circle, is not the turning an action which it performs on itself?

From Sixth Objections (Mersenne, 413): **You can not know that you are thinking unless you know that you know that you are thinking.**

From the fact that we are thinking it does not seem to be entirely certain that we exist. For in order to be certain that you are thinking you must know what thought or thinking is, and what your existence is. But since you do not yet know what these things are, how can you know that you are thinking or that you exist? Thus neither when you say, "I am thinking," nor when you add, "Therefore, I exist," do you really know what you are saying. Indeed, you do not even know that you are saying or thinking anything, since this seems to require that you should know that you know what you are saying. This in turn requires that you be aware of knowing that you know what you are saying. And so on ad infinitum. Hence it is clear that you cannot know whether you exist or even whether you are thinking.

Descartes's Response (422):

It is true that no one can be certain that he is thinking or that he exists unless he knows what thought is and what existence is. But this does not require reflective knowledge, or the kind of knowledge that is acquired by means of demonstrations. Still less does it require knowledge of reflective knowledge, i.e. knowing that we know, and knowing that we know that we know, and so on ad infinitum. This kind of knowledge cannot possibly be obtained about anything. It is quite sufficient that we should know it by that internal awareness which always precedes reflective knowledge. This inner awareness of one's thought and existence is so innate in all men that, although we may pretend that we do not have it if we are overwhelmed by preconceived opinions and pay more attention to words than to their meanings, we cannot in fact fail to have it. Thus when anyone notices that he is thinking and that it follows from this that he exists. Even though he may never before have asked what thought is or what existence is, he still cannot fail to have sufficient knowledge of them both to satisfy himself in this regard.

Excerpts from Descartes's *Objections & Replies*
III. To the Idea of God

From First Objections (Caterus, 96-7): **Can we have clear and distinct knowledge of God?**

Are you clearly and distinctly aware of an infinite being? What is the meaning of that well-worn maxim, 'the infinite qua infinite is unknown'? When I think of a chiliagon, and construct for myself a confused representation of some figure, I do not distinctly imagine the chiliagon itself, since I do not distinctly see the thousand sides. And if this is so, then the question obviously arises as to how the infinite can be thought of in a distinct as opposed to a confused manner, given that the infinite perfections that make it up cannot be seen clearly before the eyes, as it were.

This is perhaps what Aquinas meant when he denied that the proposition 'God exists' is self-evident. He says that the knowledge that God exists is naturally implanted in us only in a general sense, or in a "confused manner," as he puts it, that is, in so far as God is the ultimate felicity of man. But this, he says, is not straightforward knowledge of the existence of God, just as to know that someone is coming is not the same as to know Peter, even though it is Peter who is coming. He is in effect saying that God is known under some general conception, as an ultimate end or as the first and most perfect being, or even under the concept of that which includes all things in a confused and general manner. But he is not known in terms of the precise concept of his own proper essence, for in essence God is infinite and so unknown to us.

Descartes's Response:

First of all, the infinite *qua* infinite can in no way be grasped. But it can still be understood, in so far as we can clearly and distinctly understand that something is such that no limitations can be found in it, and this amounts to understanding clearly that it is infinite.

In the case of the thing itself which is infinite, our understanding is not adequate, that is to say, we do not have a complete grasp of everything in it that is capable of being understood. When we look at the sea, our vision does not encompass its entirety, nor do we measure out its enormous vastness, but we are still said to "see" it. In fact, if we look at a distance so that our vision almost covers the entire sea at one time, we see it only in a confused manner, just as we have a confused picture of a chiliagon when we take in all its sides at once. But if we fix our gaze on some part of the sea at close quarters, then our view can be clear and distinct, just as our picture of a chiliagon can be, if it is confined to one or two of the sides. In the same way, God cannot be taken in by the human mind, and I admit this, along with all theologians. Moreover, God cannot be distinctly known by those who look at a distance as it were, and try to make their minds encompass his entirety all at once. This is the sense in which Aquinas says, in the passage quoted, that the knowledge of God is within us, "in a somewhat confused manner." But those who try to attend to God's individual perfections and try not so much to take hold of them as to surrender to them, using all the strength of their intellect to contemplate them, will certainly find that God provides much more ample and straightforward subject-matter for clear and distinct knowledge than does any created thing.

From Third Objections (Hobbes, 179-180, 183): **We have no idea of God.**

You write, "Some of [our thoughts] are, as it were, the images of things, and it is only in these cases that the term 'idea' is strictly appropriate, for example when I think of a man, or a chimera, or the sky, or an angel, or God."

When I think of a man, I am aware of an idea or image made of a certain shape and color. I can doubt whether this image is the likeness of a man or not. The same applies when I think of the sky. When I think of a chimera, I am aware of an idea or an image. I can be in doubt as to whether it is the likeness of a non-existent animal which is capable of existing, or one which may or may not have existed

as some previous time.

But when I think of an angel, what comes to mind is an image, now of a flame, now of a beautiful child with wings. I feel sure that this image has no likeness to an angel, and hence that it is not the idea of an angel. But I believe that there are invisible and immaterial creatures who serve God. We give the name 'angel' to this thing which we believe in, or suppose to exist. But the idea by means of which I imagine an angel is composed of the ideas of visible things.

In the same way we have no idea or image corresponding to the sacred name of God. And this is why we are forbidden to worship God in the form of an image. Otherwise we might think that we were conceiving of him who is incapable of being conceived.

It seems, then, that there is no idea of God in us. A man born blind, who has often approached fire and felt hot, recognizes that there is something which makes him hot. When he hears that this is called 'fire' he concludes that fire exists. But he does not know what shape or color fire has, and has absolutely no idea or image of fire that comes before his mind. The same applies to a man who recognizes that there must be some cause of his images or ideas, and that this cause must have a priori cause, and so on. He is finally led to the supposition of some eternal cause which never began to exist and hence cannot have a cause prior to itself, and he concludes that something eternal must necessarily exist. But he has no idea which he can say is the idea of that eternal being; he merely gives the name or label 'God' to the thing that he believes in, or acknowledges to exist.

You write, "I did not extract [the idea of God] from the senses; it never simply happened to me without my expecting it, as is normally the case with ideas of sensible things, when the things themselves impinge on, or seem to impinge on, our external senses; nor even did I construct it myself, since I am quite unable to take anything away from it, or add anything to it. So the only remaining alternative is that it is innate to me, just as the idea of my own self is also innate to me."

The whole of this inquiry collapses if there is no idea of God. It has not been proved that there is any such idea, and it does not seem that there is one.

Descartes's Response (181, 183):

You want the term 'idea' to be taken to refer simply to the images of material things which are depicted in the corporeal imagination. If this is granted, it is easy for you to prove that there can be no proper idea of an angel or of God. But I make it quite clear in several places throughout the book, and in this passage in particular, that I am taking the word 'idea' to refer to whatever is immediately perceived by the mind. For example, when I want something, or am afraid of something, I simultaneously perceive that I want, or am afraid. This is why I count volition and fear among my ideas. I used the word 'idea' because it was the standard philosophical term used to refer to the forms of perception belonging to the divine mind, even though we recognize that God does not possess any corporeal imagination. I cannot possibly satisfy those who prefer to attribute a different sense to my words than the one I intended.

The whole of this objection collapses if there is an idea of God. It is obvious that there is such an idea.

From Fifth Objections (Gassendi, 286, 294-5): **The idea of God is acquired.**

How do you know that God is represented by the idea you have of him as, “Supreme, eternal, infinite, omnipotent, and the creator of all things”? Do you not take this from your previously conceived knowledge of God, that is, from having heard these attributes ascribed to him? If you had not previously heard anything of this sort, would you still describe God in this way?

You say that the attributes which you understand to be in God could not have originated from you alone, and you hope to show from this that they must have originated from God. It is absolutely true that they did not originate from you alone, and that you did not acquire your understanding of them from yourself or through your own efforts. But this is because they in fact originated and were derived from things, parents, teachers, professors, and from the human society in which you have moved.

Tell me in good faith whether you do not in fact derive all the language which you use of God from the human society in which you live. And if this is true of the words, is it not also true of the underlying notions which these words express? Hence although these words do not come from you alone, it seems that they do not therefore come from God, but that they come from another source.

Furthermore, in the case of all these ideas, once you have obtained them by encountering things, can you not afterwards get them from yourself? Do you really therefore comprehend something which is beyond our human grasp?

Descartes’s Response (364):

You say that we have the idea of God merely as a result of having heard certain attributes being ascribed to him. Would you please explain where the first men who originally told us of these attributes got the self-same idea of God? If they got it from themselves, why cannot we also derive it from ourselves? If they got it by divine revelation, then God exists.

Excerpts from Descartes's *Objections & Replies*
IV. To the Causal Argument for God's Existence

From First Objections (Caterus, 94): **There is a shorter version of the causal argument.**

Can I not take a much shorter and more direct line of argument for the existence of God? I am thinking, therefore I exist. Indeed, I am thought itself, I am a mind. But this mind and thought derives its existence either from itself, or from another. If the latter, then we continue to repeat the question: where does this other being derive its existence from? And if the former, if it derives its existence from itself, it is God. For what derives existence from itself will without difficulty have endowed itself with all things.

Descartes's Response (106-107):

I did not base my argument on the fact that I observed there to be an order or succession of efficient causes among the objects perceived by the senses. For one thing, I regarded the existence of God as much more evident than the existence of anything that can be perceived by the senses. For another thing, I did not think that such a succession of causes could lead me anywhere except to a recognition of the imperfection of my intellect, since an infinite chain of such successive causes from eternity without any first cause is beyond my grasp. And my inability to grasp it certainly does not entail that there must be a first cause, any more than my inability to grasp the infinite number of divisions in a finite quantity entails that there is an ultimate division beyond which any further division is impossible. All that follows is that my intellect, which is finite, does not encompass the infinite. Hence I preferred to use my own existence as the basis of my argument, since it does not depend on any chain of causes and is better known to me than anything else could possibly be. And the question I asked concerning myself was not what was the cause that originally produced me, but what is the cause that preserves me at present. In this way I aimed to escape the whole issue of the succession of causes.

Next, in inquiring about what caused me, I was asking about myself, not in so far as I consist of mind and body, but only and precisely in so far as I am a thinking thing. This point is, I think, of considerable relevance. For such a procedure made it much easier for me to free myself from my preconceived opinions, to attend to the light of nature, to ask myself questions, and to affirm with certainty that there can be nothing within me of which I am not in some way aware. This is plainly quite a different approach from observing that my father begot me, inferring that my grandfather begot my father, and in view of the impossibility of going on ad infinitum in the search for parents of parents, bringing the inquiry to a close by deciding that there is a first cause.

From First Objections (Caterus, 95): **There is an ambiguity in 'from itself'.**

You say that if I derive my existence from some other, then if I trace the series back, I will eventually come to a being which derives its existence from itself. The phrase 'from itself' has two senses. In the first, positive, sense, it means 'from itself as from a cause'. What derives existence from itself in this sense bestows its own existence on itself. So if by an act of premeditated choice it were to give itself what it desired, it would undoubtedly give itself all things, and so would be God. But in the second, negative sense, 'from itself' simply means 'not from another'; and this, as far as I remember, is the way in which everyone takes the phrase.

But now, if something derives its existence from itself in the sense of 'not from another', how can we prove that this being embraces all things and is infinite? This time I shall not listen if you say, "If it derives its existence from itself it could easily have given itself all things." For it does not derive existence from itself as a cause, nor did it exist prior to itself so that it could choose in advance what it should subsequently be.

Descartes's Response (109-10):

There are some who attend only to the literal and strict meaning of the phrase 'efficient cause' and thus think it is impossible for anything to be the cause of itself. They do not see that there is any place for another

kind of cause analogous to an efficient cause, and hence when they say that something derives its existence from itself they normally mean simply that it has no cause. But if they would look at the facts rather than the words, they would readily observe that the negative sense of the phrase 'from itself' comes merely from the imperfection of the human intellect and has no basis in reality. But there is a positive sense of the phrase which is derived from the true nature of things, and it is this sense alone which is employed in my argument.

If we think that a given body derives its existence from itself, we may simply mean that it has no cause. But our claim here is not based on any positive reason, but merely arises in a negative way from our ignorance of any cause. Yet this is a kind of imperfection in us, as we will easily see if we consider the following. The separate divisions of time do not depend on each other. Hence the fact that the body in question is supposed to have existed up till now from itself, that is without a cause, is not sufficient to make it continue to exist in the future, unless there is some power in it that as it were recreates it continuously. But when we see that no such power is to be found in the idea of a body, and immediately conclude that the body does not derive its existence from itself, we shall then be taking the phrase 'from itself' in the positive sense.

Similarly, when we say that God derives his existence from himself, we can understand the phrase in the negative sense, in which case the meaning will simply be that he has no cause. But if we have previously inquired into the cause of God's existing or continuing to exist, and we attend to the immense and incomprehensible power that is contained within the idea of God, then we will have recognized that this power is so exceedingly great that it is plainly the cause of his continuing existence, and nothing but this can be the cause. And if we say as a result that God derives his existence from himself, we will not be using the phrase in its negative sense but in an absolutely positive sense. There is no need to say that God is the efficient cause of himself, for this might give rise to a verbal dispute. But the fact that God derives his existence from himself, or has no cause apart from himself, depends not on nothing but on the real immensity of his power. Hence when we perceive this, we are quite entitled to think that in a sense he stands in the same relation to himself as an efficient cause does to its effect, and hence that he derives his existence from himself in the positive sense.

Each one of us may ask himself whether he derives his existence from himself in this same sense. Since he will find no power within himself which suffices to preserve him even for one moment of time, he will be right to conclude that he derives his existence from another being, and indeed that this other being derives its existence from itself. The cause we arrive at cannot merely be a secondary cause; for a cause which possesses such great power that it can preserve something situated outside itself must, *a fortiori*, preserve itself by its own power, and hence derive its existence from itself.

From Fifth Objections (Gassendi, 302-3): **An infinite regress, instead of a first cause, is possible.**

You should not insist on the dictum that there must be at least as much in the cause as in the effect. You say that if the cause of your existence is something other than God, we may ask whether it derives its existence from itself or from some other cause. If from itself, it will be God. If from some other cause, we may repeat the question until we reach a cause which derives its existence from itself, and is God, since an infinite regress is not permissible.

If your parents were the cause of your existence, then that cause may have derived its existence not from itself, but from another cause. The same may be true of that prior cause. And so on, ad infinitum. You can not prove that such an infinite regress is absurd unless you also prove that the world began at some time, and hence that there must have been a first parent who had no parent.

An infinite regress seems to be absurd only in the case of causes which are so linked and subordinated to each other that a cause which is lower in the chain can not act without the motive power of one which is higher. This occurs when something is pushed by a stone, the stone by a stick, and the stick by a hand; or when the first link of a chain lifts a weight, and that link is pulled by the previous link; and so on. In such cases we must eventually reach one link in the chain which is the first to move. But an infinite series does not seem to be absurd when we have causes which are arranged in such a way that if the earlier cause is destroyed, the subsequent cause depending on it survives and can still act.

Hence, when you say, "It is clear enough that an infinite regress is impossible here," you must ask whether this was equally evident to Aristotle, who was strongly convinced that there was never any first parent.

Descartes's Response (370-1):

Your contention that it is not absurd that there should be an infinite regress is undermined by what you yourself say later on. For you admit that an infinite regress is absurd in the case of causes which are so linked that a cause which is lower in the chain cannot act without one which is higher. But it is causes of this sort, and only of this sort, that are at issue here, since we are dealing with causes of being, not causes of coming into being, such as parents. Hence you can not set the authority of Aristotle against me here.

Excerpts from Descartes's *Objections & Replies*
V. To the Ontological Argument

From First Objections (Caterus, 99-100): **The ontological argument only establishes conceptual existence.**

Even if it is granted that a supremely perfect being carries the implication of existence in virtue of its very title, it still does not follow that the existence in question is anything actual in the real world. All that follows is that the concept of existence is inseparably linked to the concept of a supreme being. So you cannot infer that the existence of God is anything actual unless you suppose that the supreme being actually exists. Then it will actually contain all perfections, including the perfection of real existence.

Pardon me, gentlemen: I am now rather tired and propose to have a little fun. The complex 'existing lion' includes both 'lion' and 'existence', and it includes them essentially, for if you take away either element it will not be the same complex. But now, has not God had clear and distinct knowledge of this composite from all eternity? And does not the idea of this composite, as a composite, involve both elements essentially? In other words, does not existence belong to the essence of the composite 'existing lion'? Nevertheless the distinct knowledge of God, the distinct knowledge he has from eternity, does not compel either element in the composite to exist, unless we assume that the composite itself exists (in which case it will contain all its essential perfections including actual existence). Similarly even if I have distinct knowledge of a supreme being, and even if the supremely perfect being includes existence as an essential part of the concept, it still does not follow that the existence in question is anything actual, unless we suppose that the supreme being exists (for in that case it will include actual existence along with all its other perfections). Accordingly we must look elsewhere for a proof that the supremely perfect being exists.

Descartes's Response (116-120):

In the first place we are so accustomed to distinguishing existence from essence in the case of all other things that we fail to notice how closely existence belongs to essence in the case of God as compared with that of other things. Next, we do not distinguish what belongs to the true and immutable essence of a thing from what is attributed to it merely by a fiction of the intellect. So, even if we observe clearly enough that existence belongs to the essence of God, we do not draw the conclusion that God exists, because we do not know whether his essence is immutable and true, or merely invented by us.

To remove the first part of the difficulty we must distinguish between possible and necessary existence. It must be noted that possible existence is contained in the concept or idea of everything that we clearly and distinctly understand. But in no case is necessary existence so contained, except in the case of the idea of God. Those who carefully attend to this difference between the idea of God and every other idea will undoubtedly perceive that even though our understanding of other things always involves understanding them as if they were existing things, it does not follow that they do exist, but merely that they are capable of existing. For our understanding does not show us that it is necessary for actual existence to be conjoined with their other properties. But, from the fact that we understand that actual existence is necessarily and always conjoined with the other attributes of God, it certainly does follow that God exists.

To remove the second part of the difficulty, we must notice a point about ideas which do not contain true and immutable natures but merely ones which are invented and put together by the intellect. Such ideas can always be split up by the same intellect, not simply by an abstraction but by a clear and distinct intellectual operation. Any ideas which the intellect cannot split up in this way are clearly not put together by the intellect. When, for example, I think of a winged horse or an actually existing lion, or a triangle inscribed in a square, I readily understand that I am also able to think of a horse without wings, or a lion which does not exist, or a triangle apart from a square, and so on. Hence these things do not have true and immutable natures. But if I think of a triangle or a square, then whatever I apprehend as being contained in the idea of a triangle, for example that its three angles are equal to two right angles, I can with truth assert of the triangle. And the same applies to the square with respect to whatever I apprehend as being contained in the idea of a square. For even

if I can understand what a triangle is if I abstract the fact that its three angles are equal to two right angles, I cannot deny that this property applies to the triangle by a clear and distinct intellectual operation, that is, while at the same time understanding what I mean by my denial. Moreover, if I consider a triangle inscribed in a square, with a view not to attributing to the square properties that belong only to the triangle, or attributing to the triangle properties that belong to the square, but with a view to examining only the properties which arise out of the conjunction of the two, then the nature of this composite will be just as true and immutable as the nature of the triangle alone or the square alone. Hence it will be quite in order to maintain that the square is not less than double the area of the triangle inscribed within it, and to affirm other similar properties that belong to the nature of this composite figure.

Let us now take a thing, whatever this thing turns out to be, which possesses all the perfections which can exist together. If we ask whether existence should be included among these perfections, we will admittedly be in some doubt at first. For our mind, which is finite, normally thinks of these perfections only separately, and hence may not immediately notice the necessity of their being joined together. Yet if we attentively examine whether existence belongs to a supremely powerful being, and what sort of existence it is, we shall be able to perceive clearly and distinctly the following facts. First, possible existence, at the very least, belongs to such a being, just as it belongs to all the other things of which we have a distinct idea, even to those which are put together through a fiction of the intellect. Next, when we attend to the immense power of this being, we shall be unable to think of its existence as possible without also recognizing that it can exist by its own power. We shall infer from this that this being does really exist and has existed from eternity, since it is quite evident by the natural light that what can exist by its own power always exists. So we shall come to understand that necessary existence is contained in the idea of a supremely powerful being, not by any fiction of the intellect, but because it belongs to the true and immutable nature of such a being that it exists. And we shall also easily perceive that this supremely powerful being cannot but possess within it all the other perfections that are contained in the idea of God. Hence these perfections exist in God and are joined together not by any fiction of the intellect but by their very nature.

From Fifth Objections (Gassendi, 322-5): **Existence is not a property.**

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. You should have said that omnipotence can no more be separated from the essence of God than the fact that its angles equal two right angles can be separated from the essence of a triangle. Or, at any rate, you should have said that the existence of God can no more be separated from his essence than the existence of a triangle can be separated from its essence. If you had done this, both your comparisons would have been satisfactory, and I would have granted you not only the first one, but the second one as well. But you would not for all that have established that God necessarily exists, since a triangle does not necessarily exist either, even though its essence and existence can not in actual fact be 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.

You place existence among the divine perfections, but do not place it among the perfections of a triangle or mountain, 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 no perfections can be present.

For surely, what does not exist has no perfections or imperfection, and what does exist and has several perfections does not have existence as one of its individual perfections. Rather, its existence is that in virtue of which both the thing itself and its perfections are existent, and that without which we cannot say that the thing possesses the perfections or that the perfections are possessed by it. Hence we do not say that existence exists in a thing in the way perfections do. If a thing lacks existence, we do not say that it is imperfect, or deprived of a perfection, but say instead that it is nothing at all.

Thus, just as when you listed the perfections of the triangle you did not include existence or conclude that the triangle existed, so when you listed the perfections of God, you should not have included existence among them so as to reach the conclusion that God exists, unless you wanted to beg the question.

You say that existence is distinct from essence in the case of all other things, but not in the case of God. But how, may I ask, are we to distinguish the essence of Plato from his existence, except merely in our thought? Suppose that Plato no longer exists. Where now is his essence? Surely in the case of God the distinction between essence and existence is of just this kind. The distinction occurs in our thought.

You assert 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. If you had taken the mountain and the valley, 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 would have had to try 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 are free to think of a horse not having wings without thinking of the existence which would, according to you, be a perfection in the horse if it were present. In the same way, you are free to think of God as having knowledge and power and other perfections without thinking of him as having the existence which would complete his perfection.

Descartes's Response (382-3):

I do not see what sort of thing you want existence to be, nor why it cannot be said to be a property just like omnipotence, provided, of course, that we take the word 'property' to stand for any attribute, or for whatever can be predicated of a thing. This is exactly how it should be taken in this context. Moreover, in the case of God, necessary existence is in fact a property in the strictest sense of the term, since it applies to him alone and forms a part of his essence as it does of no other thing. Hence the existence of a triangle should not be compared with the existence of God, since the relation between existence and essence is manifestly quite different in the case of God from what it is in the case of the triangle.

To list existence among the properties which belong to the nature of God is no more begging the question than listing among the properties of a triangle the fact that its angles are equal to two right angles.

Excerpts from Descartes's *Objections & Replies*
VI. To the Nature of Knowledge and the Criteria for Certainty

From Second Objections (Mersenne, 126): **The criteria for certainty must themselves be ensured.**

It is not necessary to suppose that God is a deceiver in order to explain your being deceived about matters which you think you clearly and distinctly know. The cause of this deception could lie in you, though you are wholly unaware of it. Why should it not be in your nature to be subject to constant, or at least very frequent, deception? How can you establish with certainty that you are not deceived, or capable of being deceived, in matters which you think you know clearly and distinctly? Have we not often seen people turn out to have been deceived in matters where they thought their knowledge was as clear as the sunlight? Your principle of clear and distinct knowledge thus requires a clear and distinct explanation, in such a way as to rule out the possibility that anyone of sound mind may be deceived on matters which he thinks he knows clearly and distinctly. Failing this, we do not see that any degree of certainty can possibly be within your reach or that of mankind in general.

Descartes's Response (144-146):

As soon as we think that we correctly perceive something, we are spontaneously convinced. If this conviction is so firm that it is impossible for us ever to have any reason for doubting what we are convinced of, then there are no further questions for us to ask. We have everything that we could reasonably want. But it may be doubted whether any such certainty, or firm and immutable conviction, is in fact to be had.

We do not have this kind of certainty in cases where our perception is even the slightest bit obscure or confused. Such obscurity is quite sufficient to make us have doubts in such cases. Again, we do not have the required kind of certainty with regard to matters which we perceive solely by means of the senses, however clear such perception may be. For we have often noted that error can be detected in the senses, as when someone with dropsy feels thirsty or when someone with jaundice sees snow as yellow. When he sees it as yellow he sees it just as clearly and distinctly as we do when we see it as white. If there is any certainty to be had, the only remaining alternative is that it occurs in the clear perceptions of the intellect and nowhere else.

Now some of these perceptions are so transparently clear and at the same time so simple that we cannot ever think of them without believing them to be true. The fact that I exist so long as I am thinking, or that what is done cannot be undone, are examples of truths in respect of which we manifestly possess this kind of certainty. We cannot doubt them unless we think of them. But we cannot think of them without at the same time believing they are true.

It is no objection to this to say that we have often seen people, "Turn out to have been deceived in matters where they thought their knowledge was as clear as the sunlight." For we have never seen, indeed no one could possibly see, this happening to those who have relied solely on the intellect in their quest for clarity in their perceptions. We have seen it happen only to those who tried to derive such clarity from the senses or from some false preconceived opinion.

There are other truths which are perceived very clearly by our intellect so long as we attend to the arguments on which our knowledge of them depends. We are therefore incapable of doubting them during this time. But we may forget the arguments in question and later remember simply the conclusions which were deduced from them. The question will now arise as to whether we possess the same firm and immutable conviction concerning these conclusions, when we simply recollect that they were previously deduced from quite evident principles. My reply is that the required certainty is indeed possessed by those whose knowledge of God enables them to understand that the intellectual faculty which he gave them cannot but tend towards the truth. The required certainty is not possessed by others.

From Second Objections (Mersenne, 126-7): **The criteria are too strict.**

If this rule of yours that the will never goes astray or falls into sin so long as it is guided by the mind's

clear and distinct knowledge is true, then there is almost nothing that the will is going to be allowed to embrace, since there is almost nothing that we know with the clarity and distinctness which you require for that kind of certainty which is beyond any doubt. So, you see how, in your desire to champion the truth, you may end up proving too much, and thus overturn the truth rather than build it up.

Descartes's Response (149):

I should like you to remember that, in matters which may be embraced by the will, I made a very careful distinction between the conduct of life and the contemplation of the truth. As far as the conduct of life is concerned, I am very far from thinking that we should assent only to what is clearly perceived. On the contrary, I do not think that we should always wait even for probable truths. From time to time we will have to choose one of many alternatives about which we have no knowledge. Once we have made our choice, so long as no reasons against it can be produced, we must stick to it as firmly as if it had been chosen for transparently clear reasons. When we are dealing solely with the contemplation of the truth, surely no one has ever denied that we should refrain from giving assent in matters which we do not perceive with sufficient distinctness. In my *Meditations*, I was dealing solely with the contemplation of the truth. The whole enterprise shows this to be the case, as well as my express declaration at the end of the First Meditation where I said that I could not possibly go too far in my distrustful attitude, since the task in hand involved not action but merely the acquisition of knowledge.

From Third Objections (Hobbes, 191): **The "light in the intellect" is not explanatory.**

You write, "During these past few days I have been asking whether anything in the world exists, and I have realized that from the very fact of my raising this question it follows quite evidently that I exist. I could not but judge that something which I understood so clearly was true; but this was not because I was compelled so to judge by any external force, but because a great light in the intellect was followed by a great inclination in the will, and thus the spontaneity and freedom of my belief was all the greater in proportion to my lack of indifference."

The phrase "a great light in the intellect" is metaphorical, and so has no force in the argument. Moreover, anyone who is free from doubt claims he has such "great light" and has no less strong a propensity of the will to affirm what he has no doubt about than someone who possesses real knowledge. Hence this "light" can explain why someone obstinately defends or holds on to a given opinion, but it cannot explain his knowledge of its truth.

Further, it is not only knowing something to be true that is independent of the will, but also believing it or giving assent to it. If something is proved by valid arguments, or is reported as credible, we believe it whether we want to or not. It is true that affirmation and denial, defending and refuting propositions, are acts of will. But it does not follow that our inner assent depends on the will.

Descartes's Response (191-2):

It is quite irrelevant whether the phrase "a great light" has force in the argument or not. What matters is whether it helps to explain matters, and it does. As everyone knows, a "light in the intellect" means transparent clarity of cognition. While perhaps not everyone who thinks he possesses this does in fact possess it, this does not prevent its being quite different from a stubborn opinion which is formed in the absence of any evident perception.

As for the claim that we assent to things which we clearly perceive, whether we want to or not, this is like saying that we seek a clearly known good whether we want to or not. The qualification 'or not' is inappropriate in such contexts, since it implies that we both will and do not will the same thing.

Excerpts from Descartes's *Objections & Replies*
VII. To the Nature of Reason and the Classification Our Ideas

From Third Objections (Hobbes, 177-8, 193-4): **Reasoning is just the linking of names.**

You write, "I must therefore admit that the nature of this piece of wax is in no way revealed by my imagination, but is conceived by the mind alone." There is a great difference between imagining, having an idea, and conceiving in the mind, using a process of reasoning to infer that something is, or exists. But you have not explained how they differ. Even the peripatetics of classical times taught clearly enough that a substance is not perceived by the senses but is inferred by reasoning.

Now, what shall we say if it turns out that reasoning is simply the joining together and linking of names or labels by means of the verb 'is'? It would follow that the inferences in our reasoning tell us nothing at all about the nature of things. It merely tell us about the labels applied to them. All we can infer is whether or not we are combining the names of things in accordance with the arbitrary conventions which we have laid down in respect of their meaning.

A triangle in the mind arises from a triangle we have seen, or else it is constructed out of things we have seen. But once we use the label 'triangle' to apply to the thing which we think gave rise to the idea of a triangle, then the name remains even if the triangle itself is destroyed. Similarly, once we have conceived in our thought that all the angles of a triangle add up to two right angles, and we bestow on the triangle this second label 'having its angles equal to two right angles' then the label would remain even if no angles existed in the world. And thus eternal truth will belong to the proposition 'a triangle is that which has its three angles equal to two right angles'. But the nature of a triangle will not be eternal, for it might be that every single triangle ceased to exist. Similarly, the proposition 'man is an animal' will be eternally true because the names are eternal. But when the human race ceases to be, there will be no human nature any more.

It is clear from this that essence, in so far as it is distinct from existence, is nothing more than a linking of terms by means of the verb 'is'. And hence essence without existence is a mental fiction. It seems that essence is to existence as the mental image of a man is to a man. The essence of Socrates is to the existence of Socrates as the proposition 'Socrates is a man' is to the proposition 'Socrates is, or exists'. Now when Socrates does not exist, the proposition 'Socrates is a man' signifies merely a linking of terms; and 'is' or 'to be' carries the image of the unity of a thing to which two terms are applied.

If this is so, as may well be the case, reasoning will depend on names, names will depend on the imagination, and imagination will depend (as I believe it does) merely on the motions of our bodily organs. So, the mind will be nothing more than motion occurring in various parts of an organic body.

Descartes's Response:

I did explain the difference between imagination and a purely mental conception in the example where I listed the features of the wax which we imagine and those which we conceive by using the mind alone. And I also explained elsewhere how one and the same thing, say a pentagon, is understood in one way and imagined in another. As for the linking together that occurs when we reason, this is not a linking of names but of the things that are signified by the names, and I am surprised that the opposite view should occur to anyone. Who doubts that a Frenchman and a German can reason about the same things, despite the fact that the words that they think of are completely different? Surely you refute your own position when you talk of the arbitrary conventions that we have laid down concerning the meaning of words. For if you admit that the words signify something, why will you not allow that our reasoning deals with this something which is signified, rather than merely with the words? And surely on your account, when you conclude that the mind is a motion you might just as well conclude that the earth is the sky, or anything else you like.

From Fifth Objections (Gassendi, 279-280): **Made-up ideas are really adventitious.**

You distinguish ideas into three classes: innate, adventitious, and made-up. In the first class you put,

“Your understanding of what a thing is, what truth is, and what thought is.” In the second class you put, “Your hearing a noise, seeing the sun, and feeling a fire.” And in the third class you put, “Your invented idea of sirens and hippogriffs.” You add that all your ideas may perhaps be adventitious or they may all be innate or all made up, since you have not as yet clearly perceived their origin. But in case some fallacy should creep in before you have managed to perceive the origin of your ideas, I should like to go further and note that all ideas seem to be adventitious, to proceed from things which exist outside the mind and come under one of our senses. The mind has the faculty (or rather is itself the faculty) of perceiving adventitious ideas, those which it receives through the senses and which are transmitted by things. These ideas, I say, are quite unadorned and distinct, and are received just exactly as they are. In addition to this, the mind has the faculty of putting these ideas together and separating them in various ways, of enlarging them and diminishing them, of comparing them, and so on.

Hence the third class of ideas, at any rate, is not distinct from the second. For the idea of a chimera is simply the idea of the head of a lion, the body of a goat, and the tail of a serpent, out of which the mind puts together one idea, although the individual elements are adventitious. Similarly the idea of a giant, or a man supposed to be as big as a mountain or the whole world, is merely adventitious. It is the idea of a man of ordinary size which the mind enlarges at will, although the more the idea is enlarged the more confused the conception becomes. Again the idea of a pyramid, or of a town, or of something else which we have not so far seen, is simply the adventitious idea of a pyramid or town or something else which we have seen, with the form somewhat modified so that the idea is repeated and rearranged in a fairly confused way.

Descartes's Response (362):

I am amazed at the line of argument by which you try to prove that all our ideas are adventitious and that none of them are constructed by us. You say that the mind has the faculty not just of perceiving adventitious ideas but also, “Of putting them together and separating them in various ways, of enlarging them and diminishing them, of comparing them, and so on.” Hence you conclude that the ideas of chimeras, which the mind makes up by the process of putting together and separating, etc., are not constructed by the mind, but are adventitious. By this argument, you could prove that Praxiteles never made any statues on the grounds that he did not get from within himself the marble from which he sculpted them. Or you could prove that you did not produce these objections on the grounds that you composed them out of words which you acquired from others rather than inventing them yourself. But in fact the form of a chimera does not consist in the individual words you have used. They both consist simply in the fact that the elements are put together in a certain way.

From Fifth Objections (Gassendi, 279-281): **Innate ideas are really adventitious.**

You distinguish ideas into three classes: innate, adventitious, and made up. In the first class you put, "Your understanding of what a thing is, what truth is, and what thought is." In the second class you put, "Your hearing a noise, seeing the sun, and feeling a fire." And in the third class you put, "Your invented idea of sirens and hippogriffs." You add that all your ideas may perhaps be adventitious or they may all be innate or all made up, since you have not as yet clearly perceived their origin. But in case some fallacy should creep in before you have managed to perceive the origin of your ideas, I should like to go further and note that all ideas seem to be adventitious, to proceed from things which exist outside the mind and come under one of our senses.

As for the forms which you say are innate, there do not seem to be any. Whatever ideas are said to belong to this category also appear to have an external origin. You say, "I derive from my own nature my understanding of what a thing is." I do not think you here mean the actual power of understanding, which we undoubtedly have and which is not in question. You are talking about the idea of a thing. Moreover, you are not talking of the idea of some particular thing, for the sun, this stone, and all individual items are things, and yet you do not say that our ideas of them are innate. So you must be talking of the idea of a thing considered in general, which is virtually synonymous with 'entity', and has a similarly wide extension. But how, I ask you, can this idea be in the mind unless all the individual things exist, together with all the kinds of things from which the mind abstracts so as to form the concept which is not peculiar to any individual item but nonetheless fits them all? For surely if the idea of a thing is innate, the idea of an animal, or a plant, or a stone, or of any universal will also be innate. We shall not need to bother separating out all the particulars which lead us, after setting aside the various distinguishing characteristics, to arrive at the one element which seems common to all.

Descartes's Response (362):

It is surprising that you maintain that the idea of a thing cannot be in the mind unless the ideas of an animal, a plant, a stone, and all the universals are there. This is like saying that if I am to recognize myself to be a thinking thing, I must also recognize animals and plants, since I must recognize a thing or the nature of a thing.

Excerpts from Descartes's *Objections & Replies*
VIII. To Innate Ideas and Necessary Truths

From Fifth Objections (Gassendi, 318-22): **There are no necessary truths, besides God's existence.**

In the Fifth Meditation, you say first of all that you distinctly imagine quantity (that is extension in length, breadth, and depth) and also number, shape, position, motion, and duration. From among all these ideas, you select a triangle, which you discuss as follows:

Even if no such figure exists, or has ever existed, anywhere outside my thought, there is still a determinate nature which is not invented by me or dependent on my mind. This is clear from the fact that various properties can be demonstrated of the triangle, for example that its three angles equal two right angles and that its greatest side subtends its greatest angle, and so on. And since these properties are ones which I now clearly recognize, whether I want to or not, even if I never thought of them at all when I first imagined the triangle, it follows that they cannot have been invented by me.

I suggest that it seems very hard to propose that there is any immutable and eternal nature apart from almighty God.

You will say that all that you are proposing is the scholastic point that the natures or essences of things are eternal, and that eternally true propositions can be asserted of them. But this is just as hard to accept, and in any case it is impossible to grasp how there can be a human nature if no human being exists, or how we can say a rose is a flower when not even one rose exists.

The schoolmen say that talking of the essence of things is one thing and talking of their existence is another, and that although things do not exist from eternity, their essences are eternal. But, in that case, since the most important element in things is their essence, does God do anything very impressive when he produces their existence? Is he doing any more than a tailor does when he tries a suit of clothes on someone? How can people defend the thesis that the essence of man, which is in Plato, say, is eternal and independent of God? Is this supposed to be because it is universal? But everything to be found in Plato is particular. It is true that after seeing the nature of Plato and Socrates, and similar natures of other men, the intellect habitually abstracts from them some common concept in respect of which they all agree, and which can then be regarded as the universal nature or essence of man. But it is surely inexplicable that there should have been a universal nature before Plato and the others existed, and before the intellect performed the abstraction.

You will say that the proposition 'man is an animal' is true even if no man exists, and hence that it is eternally true. But it seems not to be true except in the sense that whenever a man exists he will be an animal. Admittedly there does seem to be a distinction between the two propositions 'man is' and 'man is an animal', in that existence is more expressly signified by the former and essence by the latter. But nevertheless the former does not rule out essence, nor does the latter rule out existence. On the contrary, when we say 'man is' we mean *man the animal*. And when we say 'man is an animal' we mean *man while he exists*.

Besides, since the proposition 'man is an animal' has no greater necessity than the proposition 'Plato is a man', it follows that even the latter proposition will have eternal truth, and the individual essence of Plato will be just as independent of God as the universal essence of man. The same follows in similar cases which it would be tiresome to pursue.

I must add, however, that although man is said to be of such a nature that he cannot exist without being an animal, we should not therefore imagine that such a nature is something which exists anywhere outside the intellect. All that is meant is that if anything is a man, it must resemble other things to which we apply the same label, 'man', in virtue of their mutual similarity. This similarity, I maintain, belongs to the individual natures, and it is from this that the intellect takes its cue in forming the concept, or idea, or form of a common nature to which everything that will count as a man must conform.

Thus, I maintain that the same thing applies to your triangle and its nature. The triangle is a kind of

mental rule which you use to find out whether something deserves to be called a triangle. But we should not therefore say that such a triangle is something real, or that it is a true nature distinct from the intellect. For it is the intellect alone which, after seeing material triangles, has formed this nature and made it a common nature, as we have explained in the case of the nature of man.

It follows that we should not suppose that the properties demonstrated of material triangles belong to them because they derive them from the ideal triangle. Rather, they themselves possess these properties in their own right, and it is the ideal triangle which does not possess them except in so far as the intellect, after inspecting the material triangles, has attributed such properties to it, only to give them back to the material triangles again in the course of the demonstration. In the same way, the properties of human nature are not in Plato and Socrates in the sense that Plato and Socrates have received them from the universal nature. Rather, the universal nature has the properties only because the intellect gave them to it after observing them in Plato, Socrates, and others. And it will give them back to those individuals again when it is called on to produce the appropriate arguments.

We know that the intellect, after seeing Plato and Socrates and others, all of whom are rational, constructed the universal proposition 'every man is rational'. Subsequently, when it wishes to prove that Plato is rational, it uses the universal proposition as a premise in a syllogism. And yet, you claim that you have the idea of a 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 figures which have never impinged on your senses.

If you had until now been deprived of all your sensory functions, so that you had never either seen or touched the various surfaces or extremities of bodies, do you think you would have been able to acquire or form within yourself the idea of a triangle or other figure? You say that you have many ideas in you which never came into your mind via the senses. But of course it is easy for you to have these ideas, since you fashioned them from ideas which did come to you via the senses, and you formed them into various other ideas.

Descartes's Response (380-2):

You would be right to think this if I was talking about existing things, or if I was proposing something as immutable in the sense that its immutability was independent of God. But just as the poets suppose that the Fates were originally established by Jupiter, but that after they were established he bound himself to abide by them, so I do not think that the essences of things, and the mathematical truths which we can know concerning them, are independent of God. Nevertheless I do think that they are immutable and eternal, since the will and decree of God willed and decreed that they should be so. Whether you think this is hard or easy to accept, it is enough for me that it is true.

The points you go on to make against the universals of the schoolmen do not touch me, since my understanding is not the same as theirs. But as for the essences we know clearly and distinctly, such as the essence of a triangle or of any other geometrical figure, I can easily make you admit that the ideas of them which we have are not taken from particular instances. For you say here that they are false, presumably because they do not accord with your previously held view of the nature of things.

You cannot deny that many truths can be demonstrated of the essences of geometric figures. Since they are always the same, it is right to call them immutable and eternal. The fact that they may not accord with your suppositions about the nature of things, or with the atomic conception of reality invented by Democritus and Epicurus, is merely an extraneous feature which changes nothing. In spite of this, they undoubtedly conform to the true nature of things established by God. Not that there are in the world substances which have length but no breadth, or breadth but no depth. It is rather that the geometrical figures are considered not as substances but as boundaries within which a substance is contained.

I do not concede that the ideas of these figures ever came into the mind via the senses, as everyone commonly believes. For although the world could undoubtedly contain figures such as those the geometers study, I nonetheless maintain that there are no such figures in our environment except perhaps ones so small that they cannot in any way impinge on our senses. Geometrical figures are composed for the most part of straight lines. Yet no part of a line that was really straight could ever affect our senses, since when we examine through a magnifying glass those lines which appear most straight, we find they are quite irregular

and always form wavy curves.

When in our childhood we first happened to see a triangular figure drawn on paper, it cannot have been this figure that showed us how we should conceive of the true triangle studied by geometers, since the true triangle is contained in the figure only in the way in which a statue of Mercury is contained in a rough block of wood. But since the idea of the true triangle was already in us, and could be conceived by our mind more easily than the more composite figure of the triangle drawn on paper, when we saw the composite figure we did not apprehend the figure we saw, but rather the true triangle.

It is just the same as when we look at a piece of paper on which some lines have been drawn in ink to represent a man's face. The idea that this produces in us is not so much the idea of these lines as the idea of a man. Yet this would certainly not happen unless the human face were already known to us from some other source, and we were more accustomed to think of the face than the lines drawn in ink. Indeed, we are often unable to distinguish the lines from one another when they are moved a short distance away from us. Thus, we could not recognize the geometrical triangle from the diagram on paper unless our mind already possessed the idea of it from some other source.

From Sixth Objections (Mersenne, 417-8): **How can the necessary truths depend on God?**

How can the truths of geometry or metaphysics, such as those you refer to, be immutable and eternal and yet not be independent of God? What sort of causal dependence on God do they have? Could he have brought it about that there has never been any such thing as the nature of a triangle? And how could he have made it untrue from eternity that twice four makes eight, or that a triangle has three angles? Either these truths depend solely on the intellect that is thinking of them, or on existing things, or else they are independent, since it seems that God could not have brought it about that any of these essences or truths were not as they were from all eternity

Descartes's Response (435-6):

If anyone attends to the immeasurable greatness of God he will find it manifestly clear that there can be nothing whatsoever which does not depend on him. This applies not just to everything that subsists, but to all order, every law, and every reason for anything's being true or good. If this were not so, then, as noted a little earlier, God would not have been completely indifferent with respect to the creation of what he did in fact create. If some reason for something's being good had existed prior to his preordination, this would have determined God to prefer those things which it was best to do. But on the contrary, just because he resolved to prefer those things which are now to be done, for this very reason, in the words of Genesis, "they are very good." In other words, the reason for their goodness depends on the fact that he exercised his will to make them so. There is no need to ask how God could have brought it about from eternity that it was not true that twice four make eight, and so on. I admit this is unintelligible to us.

On the other hand I do understand, quite correctly, that there cannot be any class of entity that does not depend on God. I also understand that it would have been easy for God to ordain certain things such that we men cannot understand the possibility of their being otherwise than they are. Therefore it would be irrational for us to doubt what we do understand correctly just because there is something which we do not understand and which, so far as we can see, there is no reason why we should understand. Hence we should not suppose that eternal truths "depend on the human intellect or on other existing things." They depend on God alone, who, as the supreme legislator, has ordained them from eternity.

Excerpts from Descartes's *Objections & Replies*
IX. To the Account of Error and Free Will

From Third Objections (Hobbes, 190): **We need a positive faculty in order to err.**

You write, "I understand, then, that error as such is not something real but is merely a defect. Hence my going wrong does not require me to have a faculty specially bestowed on me by God."

It is certain that ignorance is merely a defect, so we do not need any positive faculty in order to be ignorant. But the point is not so obvious in the case of error. It seems that stones and inanimate objects are incapable of making mistakes simply because they lack the power of reasoning and imagining. So the obvious inference is that in order to go wrong one needs the power of reasoning, or at least the power of imagining, and these are both positive faculties which have been given to all those, and only to those, who go wrong.

Descartes's Response (190-1):

It is true that in order to go wrong we need the faculty of reasoning, or rather of judging (that is, affirming or denying) since error is a defect in this faculty. But it does not follow that this defect is something real, any more than blindness is something real, although the mere fact that stones are incapable of vision does not make us call them blind.

From Fifth Objections (Gassendi, 308): **God could have made us without the ability to err.**

You reason that it is impossible that God should deceive you. In order to make excuses for the deceptive and error-prone faculty which God gave you, you suggest that the fault lies in nothingness, which you say you have some idea of, and which you say you participate in, since you take yourself to be something intermediate between nothingness and God. This is a splendid argument! I will pass over the impossibility of explaining how we have an idea of nothingness, and so on. I will simply point out that this distinction does not obviate the fact that God could have given man a faculty of judgment that was immune from error. Without giving him a faculty of infinite scope, he could have given him the kind of faculty which would never lead him to assent to falsehood, so that he would clearly perceive anything he did know, and would avoid making any definite assertion on one side or the other in cases where he was ignorant.

When you discuss this objection, you state that it is no cause for surprise if you do not understand the reason for some of God's actions. This is correct, but it is still surprising that you should have a true idea which represents God as omniscient, omnipotent, and wholly good, and yet that you should nonetheless observe that some of his works are not wholly perfect. For given that he could have made things more perfect but did not do so, this seems to show that he must have lacked either the knowledge or the power or the will to do so. He was certainly imperfect if, despite having the knowledge and the power, he lacked the will and preferred imperfection to perfection.

Descartes's Response (374):

I did explain quite adequately what sort of idea of nothingness we have, and how we participate in non-being. The idea of nothingness I called a negative idea, and I said that participating in non-being simply means that we are not the supreme being and that we lack very many things. 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 I neither wrote nor thought. I simply said that if certain things are considered not from the point of view of the part they play in the world but as separate wholes, then they can appear to be imperfect.

From Sixth Objections (Mersenne, 418): **The senses, not the intellect, correct errors.**

Our most worrying difficulty is your assertion that we ought to mistrust the operations of the senses

and that the reliability of the intellect is much greater than that of the senses. But how can the intellect enjoy any certainty unless it has previously derived it from the senses when they are working as they should? How can it correct a mistake made by one of the senses unless some other sense first corrects the mistake? Owing to refraction, a stick which is in fact straight appears bent in water. What corrects the error? The intellect? Not at all. It is the sense of touch. And the same sort of thing must be taken to occur in other cases. Hence if you have recourse to all your senses when they are in good working order, and they all give the same report, you will achieve the greatest certainty of which man is naturally capable. But you will often fail to achieve it if you trust the operations of the mind. The mind often goes astray in just those areas where it had previously supposed doubt to be impossible.

Descartes's Response (436-9):

If we are to get a clear view of what sort of certainty attaches to the senses, we must distinguish three grades of sensory response. The first is limited to the immediate stimulation of the bodily organs by external objects. This can consist in nothing but the motion of the particles of the organs, and any change of shape and position resulting from this motion. The second grade comprises all the immediate effects produced in the mind as a result of its being united with a bodily organ which is affected in this way. Such effects include the perceptions of pain, pleasure, thirst, hunger, colors, sound, taste, smell, heat, cold and the like, which arise from the union and as it were the intermingling of mind and body, as explained in the Sixth Meditation. The third grade includes all the judgements about things outside us which we have been accustomed to make from our earliest years, judgements which are occasioned by the movements of these bodily organs.

For example, when I see a stick, it should not be supposed that certain intentional forms fly off the stick towards the eye, but simply that rays of light are reflected off the stick and set up certain movements in the optic nerve and, via the optic nerve, in the brain, as I have explained at some length in the *Optics*. This movement in the brain, which is common to us and the brutes, is the first grade of sensory response.

The second grade extends to the mere perception of the color and light reflected from the stick. It arises from the fact that the mind is so intimately conjoined with the body that it is affected by the movements which occur in it. Nothing more than this should be referred to the sensory faculty, if we wish to distinguish it carefully from the intellect.

But suppose that, as a result of being affected by this sensation of color, I judge that a stick, located outside me, is colored. Suppose that on the basis of the extension of the color and its boundaries together with its position in relation to the parts of the brain, I make a rational calculation about the size, shape and distance of the stick. Although such reasoning is commonly assigned to the senses (which is why I have here referred it to the third grade of sensory response), it is clear that it depends solely on the intellect.

I demonstrated in the *Optics* how size, distance and shape can be perceived by reasoning alone, which works out any one feature from the other features. The only difference is that when we now make a judgement for the first time because of some new observation, then we attribute it to the intellect. When from our earliest years we have made judgements, or even rational inferences, about the things which affect our senses, then, even though these judgements were made in exactly the same way as those we make now, we refer them to the senses. The reason for this is that we make the calculation and judgement at great speed because of habit, or rather we remember the judgements we have long made about similar objects. So, we do not distinguish these operations from simple sense perception.

It is clear from this that when we say "The reliability of the intellect is much greater than that of the senses," this means merely that when we are grown up the judgements which we make as a result of various new observations are more reliable than those which we formed without any reflection in our early childhood. This is undoubtedly true. It is clear that we are not here dealing with the first and second grades of sensory response, because no falsity can occur in them. Hence when people say that a stick in water "appears bent because of refraction," this is the same as saying that it appears to us in a way which would lead a child to judge that it was bent, and which may even lead us to make the same judgement, following the preconceived opinions which we have become accustomed to accept from our earliest years. But I cannot grant my critic's further comment that this error is corrected "not by the intellect but by the sense of touch." As a result of touching it, we may judge that the stick is straight. The kind of judgement involved may be the kind we have

been accustomed to make since childhood, and which is therefore referred to as the “sense” of touch. But the sense alone does not suffice to correct the visual error. In addition we need to have some degree of reason which tells us that in this case we should believe the judgement based on touch rather than that elicited by vision. And since we did not have this power of reasoning in our infancy, it must be attributed not to the senses but to the intellect. Thus even in the very example my critics produce, it is the intellect alone which corrects the error of the senses. It is not possible to produce any case in which error results from our trusting the operation of the mind more than the senses.

Excerpts from Descartes's *Objections & Replies*
X. To the Nature of the External World

From Fifth Objections (Gassendi, 283-4): **We have one, not two, ideas of the sun.**

You press the example of the sun, of which you have two ideas: one is derived from the senses, and this makes the sun appear small; the other is based on astronomical reasoning and gives us a conception of the sun as huge. The latter idea, you say, is truer and more closely resembles the sun, and it is not drawn from the senses but derived from innate notions or produced in some other way. But both these ideas of the sun resemble the sun and are true, or conform to the sun, though one does so more than the other. In just the same way, if we have two ideas of the same man, one transmitted from ten feet away and the other from a hundred or a thousand feet, both ideas resemble the man and are true, or conform to him, but the former idea does so more than the latter. The idea which comes from nearby is not so weakened as the one which comes from farther away.

Although the second, vast idea of the sun is perceived by the mind alone, it does not follow that the idea is derived from some innate notion. Since experience establishes, and reasoning based on experience confirms, that objects when distant appear smaller than they do when they are near us, the idea of the sun which comes to us through sense perception is so amplified by the mind's own power as to correspond exactly with the agreed distance of the sun from us, so that its diameter equals so many radii of the earth.

If you want to grasp the fact that no part of this idea has been implanted in us by nature, you should inquire about the idea which a man born blind has. You will find first of all that the idea in his mind has no color or luminosity. Next you will find that it 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 lastly you will find that the idea is not nearly so large, unless he has amplified his previously accepted idea as a result of reasoning or the influence of some authority.

Do we, who have looked at the sun so often and have so often seen its apparent diameter and reasoned about its true diameter, have any other than the ordinary image of the sun? Reasoning tells us that the sun is more than a hundred and sixty times bigger than the earth, but do we therefore have 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 we can. But despite this, all we succeed in constructing for ourselves is darkness and obscurity. If we wish to have a distinct idea of the sun, then our mind must always return to the image which it has received via the eye. It is enough if the mind accepts that the sun is in reality bigger, and that it would have a larger idea if the eye could move closer to the sun. But in the meantime the idea that the mind attends to is nevertheless no larger than the one it actually takes in.

Descartes's Response (363-4):

Your point about the sun proves nothing. Your taking the two ideas as one on the grounds that they are referred to only one sun is like saying that a true statement does not differ from a false one because it is asserted of the same subject. In saying that the idea we arrive at by 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.

From Fifth Objections (Gassendi, 284-6): **We have no real idea of a substance.**

You recognize the inequality and diversity to be found among our ideas. I am not bothered by what you call objective reality. It is commonly said that external things exist subjectively or formally in themselves, but exist objectively or ideally in the intellect; and it is enough that you appear to follow this usage and mean simply that an idea must conform to the thing of which it is an idea. Thus an idea contains representatively nothing which is not in fact in the thing itself, and the more reality the thing represented has in itself, the more representative reality the idea possesses. You do in fact immediately afterwards distinguish between objective

and formal reality, where formal reality, as I understand it, applies to the idea itself not as it represents something but as an entity in its own right. But we agree that the idea, or its objective reality, is not to be measured by the total formal reality of the thing (i.e. the reality which the thing has in itself) but merely by that part of the thing of which the intellect has acquired knowledge (i.e. by the knowledge that the intellect has of the thing). Thus you will be said to have a perfect idea of a man if you have looked at him carefully and often from all sides. But your idea will be imperfect if you have merely seen him in passing and on one occasion and from one side. If you have not seen the man himself, but only a mask covering his face and a set of clothes which completely cover his body, then we must say either that you do not have an idea of him at all or, if you do have one, that it is very imperfect and utterly confused.

In the light of this I claim that we do have a distinct and genuine idea of accidents, but that our idea of the unseen substance beneath them is confused and utterly fictitious. So when you say that there is more objective reality in the idea of a substance than in the idea of its accidents, first of all it has to be denied that we have a true idea or representation of a substance, and hence that this idea possesses any objective reality. And next, even if we grant that it has some objective reality, we must still deny that this is greater than the reality to be found in the idea of the accidents, since whatever reality of this sort it possesses it gets from the ideas of the accidents under which, or in the guise of which, we conceive of the substance (as I said above when I stated that a substance cannot be conceived except as something extended and having shape and color).

Descartes's Response (364):

You repeat a mistake when you deny that we have a true idea of a substance on the grounds that a substance is perceived not by the imagination but by the intellect alone. I have already made it clear that I will have nothing to do with those who are prepared to use only their imagination and not their intellect.

You next say, "Whatever reality the idea of a substance possesses, it gets from the ideas of the accidents under which, or in the guise of which, we conceive of the substance." Here you prove that in fact you have no distinct idea of a substance. For a substance can never be conceived in the guise of its accidents, nor can it derive its reality from them. (On the contrary, philosophers commonly conceive of accidents in the guise of substances, since they often say that they are real.) In fact, no reality, i.e. no being apart from a purely moral one, can be attributed to accidents unless it is taken from the idea of a substance.

From Fifth Objections (Gassendi, 291-4): **Our ideas of bodies arise from sense perception.**

From what you have already said, you are not the cause of the reality of your ideas. The cause is, rather, the things themselves which are represented through the ideas, and which send images of themselves to you as if to a mirror (though you may sometimes take these images as the basis for constructing pictures of chimeras). But whether or not you yourself are the cause, does that make you uncertain about whether anything besides you exists in the world?

You make a survey of the ideas which are in you, and, besides the idea of yourself, you list the ideas of God, corporeal and inanimate things, angels, animals, and men. Since you say there is no problem about the idea of yourself, you are then able to infer that the ideas of men, animals, and angels can be put together from the ideas which you have of yourself, of God, and of corporeal things; you also infer that the ideas of corporeal things could have come from yourself.

I could be awkward and ask how you are supposed to have an idea of God, unless it is the kind of idea that is acquired. And how can you have an idea of the angels, since I take it you would never have thought of them if you had not been told about them? What about animals and other things? If they had not impinged on your senses I am practically certain you would never have had any ideas of them, just as you have no idea of countless things which you have never seen or heard of.

There is a considerable difficulty about how you can derive the ideas of corporeal things from yourself or simply from the idea of yourself, when you claim to be incorporeal and consider yourself as such. For if you have knowledge only of an incorporeal substance, how can it be that you also have some grasp of corporeal substance? Is there any analogy between the latter and the former? You may say they have it in common that they are capable of existing, but this point of agreement cannot be understood unless we have some prior understanding of each of the two things which have this in common. Before we can form the common notion you make use of here, we must understand the particular items to which it applies. If the intellect can form the idea of corporeal substance from its understanding of an incorporeal substance, then there is surely no reason to doubt that a blind man, or one who has been confined in utter darkness since birth, can form in his mind the idea of light and colors. You say that you can go on to acquire the ideas of extension, shape and motion and other properties common to the things which can be perceived by the senses, which is easy enough for you to say. What surprises me is why you do not find it just as easy to derive light and colors and so on.

Descartes's Response (367):

None of your discussion concerning ideas needs to be answered, since you restrict the term 'idea' to images depicted in the imagination, whereas I extend it to cover any object of thought.

I did not assert that the ideas of material things are derived from the mind, as you somewhat disingenuously make out. Later on I explicitly showed that these ideas often come to us from bodies, and that it is this that enables us to prove the existence of bodies. In the passage under discussion I simply explained that we never find so much reality in these ideas as to oblige us to conclude (given the premise that there is nothing in the effect which did not previously exist in the cause, either formally or eminently) that they could not have originated in the mind alone. And this claim you do not attack at all.

Excerpts from Descartes's *Objections & Replies*
XI. To the Arguments for the Mind-Body Distinction

From First Objections (Caterus): **Our ability to conceive two things distinctly does not entail that they are really distinct.**

Your proof of the supposed distinction between the soul and the body appears to be based on the fact that the two can be distinctly conceived apart from each other. Here I refer you, learned gentleman, to Scotus, who says that for one object to be distinctly conceived apart from another, there need only be what he calls a *formal and objective* distinction between them (such a distinction is, he maintains, intermediate between a *real* distinction and a *conceptual* distinction). The distinction between God's justice and his mercy is of this kind. For, says Scotus, "The formal concepts of the two are distinct prior to any operation of the intellect, so that one is not the same as the other. Yet it does not follow that because justice and mercy can be conceived apart from one another they can therefore exist apart."

Descartes's Response:

The *formal* distinction applies only to incomplete entities, which I have carefully distinguished from complete entities. It is sufficient for this kind of distinction that one thing be conceived distinctly and separately from another by an abstraction of the intellect which conceives the thing inadequately. It is not necessary to understand it as an entity in its own right, different from everything else; for this to be the case the distinction involved must be a real one. For example, the distinction between the motion and the shape of a given body is a formal distinction. I can very well understand the motion apart from the shape, and vice versa, and I can understand either in abstraction from the body. But I cannot have a complete understanding of the motion apart from the thing in which motion occurs, or of the shape apart from the thing which has the shape. I cannot imagine there to be motion in something which is incapable of possessing shape, or shape in something which is incapable of motion.

In the same way, I cannot understand justice apart from the person who is just, or mercy apart from the person who is merciful. I am not at liberty to imagine that the same person who is just is incapable of mercy.

By contrast, I have a complete understanding of what a body is when I think that it is merely something having extension, shape and motion. I deny that it has anything which belongs to the nature of a mind. Conversely, I understand the mind to be a complete thing, which doubts, understands, wills and so on, even though I deny that it has any of the attributes which are contained in the idea of a body. This would be quite impossible if there were not a real distinction between the mind and the body.

From Fourth Objections (Arnauld, 201-3): **Our clear and distinct idea of ourselves might not be complete.**

Suppose someone knows for certain that the angle in a semi-circle is a right angle, and hence that the triangle formed by this angle and the diameter of the circle is right-angled. In spite of this, he may doubt, or not yet have grasped for certain, that the square on the hypotenuse is equal to the squares on the other two sides. Indeed he may even deny this if he is misled by some fallacy. But now, if he uses the same argument as that proposed by our illustrious author, he may appear to have confirmation of his false belief, as follows: "I clearly and distinctly perceive," he may say, "that the triangle is right-angled. But I doubt that the square on the hypotenuse is equal to the squares on the other two sides. Therefore it does not belong to the essence of the triangle that the square on its hypotenuse is equal to the squares on the other sides."

Even if I deny that the square on the hypotenuse is equal to the square on the other two sides, I still remain sure that the triangle is right-angled, and my mind retains the clear and distinct knowledge that one of its angles is a right angle. I clearly and distinctly understand that this triangle is right-angled, without understanding that the square on the hypotenuse is equal to the squares on the other sides.

I do not see any possible reply here, except that the person in this example does not clearly and

distinctly perceive that the triangle is right-angled. But how is my perception of the nature of my mind any clearer than his perception of the nature of the triangle? He is just as certain that the triangle in the semi-circle has one right angle as I am certain that I exist because I am thinking.

Now although the man in the example clearly and distinctly knows that the triangle is right angled, he is wrong in thinking that the aforesaid relationship between the squares on the sides does not belong to the nature of the triangle. Similarly, although I clearly and distinctly know my nature to be something that thinks, may I, too, not perhaps be wrong in thinking that nothing else belongs to my nature apart from the fact that I am a thinking thing? Perhaps the fact that I am an extended thing may also belong to my nature.

Descartes's Response (224-225, 227):

First of all, though a triangle can perhaps be taken concretely as a substance having a triangular shape, it is certain that the property of having the square on the hypotenuse equal to the squares on the other sides is not a substance. So neither the triangle nor the property can be understood as a complete thing in the way in which mind and body can be so understood. Nor can either item be called a 'thing' in the sense in which I said, "It is enough that I can understand one thing (that is, a complete thing) apart from another," etc. This is clear from the passage which comes next: "Besides I find in myself faculties," etc. I did not say that these faculties were *things*, but carefully distinguished them from things or substances.

Secondly, although we can clearly and distinctly understand that a triangle in a semi-circle is right-angled without being aware that the square on the hypotenuse is equal to the squares on the other two sides, we cannot have a clear understanding of a triangle having the square on its hypotenuse equal to the squares on the other sides without at the same time being aware that it is right-angled. And yet we can clearly and distinctly perceive the mind without the body and the body without the mind.

Thirdly, although it is possible to have a concept of a triangle inscribed in a semi-circle which does not include the fact that the square on the hypotenuse is equal to the squares on the other sides, it is not possible to have a concept of the triangle such that no ratio at all is understood to hold between the square on the hypotenuse and the squares on the other sides. Hence, though we may be unaware of what that ratio is, we cannot say that any given ratio does not hold unless we clearly understand that it does not belong to the triangle; and where the ratio is one of equality, this can never be understood. Yet the concept of body includes nothing at all which belongs to the mind, and the concept of mind includes nothing at all which belongs to the body.

So although I said, "It is enough that I can clearly and distinctly understand one thing apart from another," etc., one cannot go on to argue, "Yet I clearly and distinctly understand that this triangle is right-angled without understanding that the square on the hypotenuse," etc. There are three reasons for this. First, the ratio between the square on the hypotenuse and the squares on the other sides is not a complete thing. Secondly, we do not clearly understand the ratio to be equal except in the case of a right-angled triangle. And thirdly, there is no way in which the triangle can be distinctly understood if the ratio which obtains between the square on the hypotenuse and the squares on the other sides is said not to hold.

It is true that the triangle is intelligible even though we do not think of the ratio which obtains between the square on the hypotenuse and the squares on the other sides. But it is not intelligible that this ratio should be denied of the triangle. In the case of the mind, by contrast, not only do we understand it to exist without the body, but, what is more, all the attributes which belong to a body can be denied of it. For it is of the nature of substances that they should mutually exclude one another.

From Fourth Objections (Arnauld, 203): **The argument proves that the body is a mere vehicle for a distinct mind.**

It seems that the argument proves too much, and takes us back to the Platonic view (which you reject) that nothing corporeal belongs to our essence, so that man is merely a rational soul and the body merely a vehicle for the soul, a view which gives rise to the definition of man as a soul which makes use of a body.

Descartes's Response (227-8):

I do not see why this argument proves too much. For the fact that one thing can be separated from another by the power of God is the very least that can be asserted in order to establish that there is a real distinction between the two. Also, I though I was very careful to guard against anyone inferring from this that man was simply a soul which makes use of a body. For in the Sixth Meditation, where I dealt with the distinction between the mind and the body, I also proved at the same time that the mind is substantially united with the body. And the arguments which I used to prove this are as strong as any I can remember ever having read. Now someone who says that a man's arm is a substance that is really distinct from the rest of his body does not thereby deny that the arm belongs to the nature of the whole man. And saying that the arm belongs to the nature of the whole man does not give rise to the suspicion that it cannot subsist in its own right. In the same way, I do not think I proved too much in showing that the mind can exist apart from the body. Nor do I think I proved too little in saying that the mind is substantially united with the body, since that substantial union does not prevent our having a clear and distinct concept of the mind on its own, as a complete thing. The concept is thus very different from that of a surface or a line, which cannot be understood as complete things unless we attribute to them not just length and breadth, but also depth.

Excerpts from Descartes's *Objections & Replies*

XII. To the Nature of the Self, and the Faculties of the Mind

From Fourth Objections (Arnauld, 214): **There are thoughts of which we are not aware.**

You lay it down as certain that there can be nothing in you, in so far as you are a thinking thing, of which you are not aware. It seems to me that this is false. For by yourself, in so far as you are a thinking thing, you mean simply your mind, in so far as it is distinct from the body. But all of us can surely see that there may be many things in our mind of which the mind is not aware. The mind of an infant in its mother's womb has the power of thought, but is not aware of it. And there are countless similar examples, which I will pass over.

Descartes's Response (246-7):

As to the fact that there can be nothing in the mind, in so far as it is a thinking thing, of which it is not aware, this seems to me to be self-evident. For there is nothing that we can understand to be in the mind, regarded in this way, that is not a thought or dependent on a thought. If it were not a thought or dependent on a thought it would not belong to the mind qua thinking thing. And we cannot have any thought of which we are not aware at the very moment when it is in us. In view of this, I do not doubt that the mind begins to think as soon as it is implanted in the body of an infant, and that it is immediately aware of its thoughts, even though it does not remember this afterwards because the impressions of these thoughts do not remain in the memory.

But it must be noted that although we are always actually aware of the acts or operations of our minds, we are not always aware of the mind's faculties or powers, except potentially. By this I mean that when we concentrate on employing one of our faculties, then immediately, if the faculty in question resides in our mind, we become actually aware of it, and hence we may deny that it is in the mind if we are not capable of becoming aware of it.

From Fifth Objections (Gassendi, 274-7): **The nature of the mind is not known better than the nature of the body.**

You do indeed distinctly know that you exist because of the fact that you distinctly see and know that the wax and its accidents exist. But it does not prove that you therefore know, either distinctly or indistinctly, what you are or what your nature is. Such a proof would have been well worthwhile, since your existence is not in doubt.

Your aim was not to prove that the human mind exists, or that its existence is better known than the existence of the body, since its existence, is something which no one questions. Your intention was surely to establish that its nature is better known than the nature of the body, and this you have not managed to do. As regards the nature of the body, you have, O Mind, listed all the things we know: extension, shape, occupation of space, and so on. But what, after all your efforts, have you told us about yourself? You are not a bodily structure, you are not air, not a wind, not a thing which walks or senses, you are not this and not that. Even if we grant these results (though some of them you did in fact reject) they are not what we are waiting for. They are simply negative results. The question is not what you are not, 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.

To say first of all that you are a thing is not to give any information. this is a general, imprecise and vague word which applies no more to you than it does to anything in the entire world that is not simply a nothing. You are a thing, that is you are not nothing, or, what comes to the same thing, you are something. But a stone is something and not nothing, and so is a fly, and so is everything else.

When you go on to say that you are a thinking thing, then we know what you are saying; but we knew it already, and it was not what we were asking you to tell us. Who doubts that you are thinking? What we are unclear about, what we are looking for, is that inner substance of yours whose property is to think. Your

conclusion should be related to this inquiry, and should tell us not that you are a thinking thing, but what sort of thing this you who thinks really is.

If we are asking about wine, and looking for the kind of knowledge which is superior to common knowledge, it will hardly be enough for you to say, "Wine is a liquid thing, which is compressed from grapes, white or red, sweet, intoxicating" and so on. You will have to attempt to investigate and somehow explain its internal substance, showing how it can be seen to be manufactured from spirits, tartar, the distillate, and other ingredients mixed together in such and such quantities and proportions. Similarly, given that you are looking for knowledge of yourself which is superior to common knowledge (that is, the kind of knowledge we have had up till now) you must see that it is certainly not enough for you to announce that you are a thing that thinks and doubts and understands, etc. You should carefully scrutinize yourself and conduct a kind of chemical investigation of yourself, if you are to succeed in uncovering and explaining to us your internal substance. If you provide such an explanation, we shall ourselves doubtless be able to investigate whether or not you are better known than the body, whose nature we know so much about through anatomy, chemistry, so many other sciences, so many senses, and so many experiments.

Descartes's Response (359-61):

I am surprised that you should say here that all my considerations about the wax demonstrate that I distinctly know that I exist, but not that I know what I am or what my nature is. For one thing cannot be demonstrated without the other. Nor do I see what more you expect here, unless it is to be told what color 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 of the mind, as we would of wine. This is indeed worthy of you, O Flesh, and of all those who have only a very confused conception of everything, and so do not know the proper questions to ask about each thing. But as for me, I have never thought that anything more is required to reveal a substance than its various attributes. Thus the more attributes of a given substance we know, the more perfectly we understand its nature. Now we can distinguish many different attributes in the wax: one, that it is white; two, that it is hard; three, that it can be melted; and so on. And there are correspondingly many attributes in the mind: one, that it has the power of knowing the whiteness of the wax; two, that it has the power of knowing its hardness; three, that it has the power of knowing that it can lose its hardness (i.e. melt), and so on. (Someone can have knowledge of the hardness without thereby having knowledge of the whiteness, e.g. a man born blind; and so in other cases.) The clear inference from this is that we know more attributes in the case of our mind than we do in the case of anything else. For no matter how many attributes we recognize in any given thing, we can always list a corresponding number of attributes in the mind which it has in virtue of knowing the attributes of the thing. Hence the nature of the mind is the one we know best of all.

From Fifth Objections (Gassendi, 337-41; 343-5): **The mind must be extended in order to communicate with the body.**

I do not so much dispute that you have an idea of your body, as insist that you could not have such an idea if you were really an unextended thing. How do you think that you, an unextended subject, could receive the semblance or idea of a body that is extended? If such a semblance comes from a body then it is undoubtedly corporeal, and has a number of parts or layers, and so is extended. If it is imprinted in you from some other source, since it must still represent an extended body, it must still have parts and hence be extended. For if it lacks parts, how will it manage to represent parts? If it lacks extension, how will it represent an extended thing? If it lacks shape, how will it represent a thing that has a shape? If it has no position, how will it represent a thing which has upper and lower parts, parts on the right and parts on the left, and parts in the middle? If it lacks all variation, how will it represent various colors and so on? It seems, then, that the idea does not wholly lack extension. Yet if it is extended, how can you, if you are unextended, have become its subject? How will you adapt it to yourself or make use of it? And how will you gradually experience its fading and disappearing?

Are you not diffused throughout the body? You say, "The whole mind seems to be united to the whole body." Let me assume to begin with that you are diffused throughout the entire body. Are you really unextended, given that you stretch from head to foot, are coextensive with the body, and have parts corresponding to all its parts?

Let us now assume instead that you are in the brain alone, or simply in a small part of it. However small the part in question is, it is still extended, and since you are coextensive with it, you too are therefore extended and have particular parts corresponding to its parts. Will you say that you take the relevant part of the brain to be a point? This is surely incredible; but let it be a point. If it is a physical point, the difficulty still stands, since such a point is extended and does not wholly lack parts. If it is a mathematical point then such a point, as you are aware, is purely imaginary.

Let us grant this imaginary point, or rather let us pretend that there is in the brain a mathematical point to which you are joined and in which you exist. Look what a useless fiction this will turn out to be. For if we adopt it, we shall have to imagine that you exist at the conjunction of the nerves by means of which all the regions informed by the soul transmit to the brain the ideas or images of the things perceived by the senses. But first, all the nerves do not meet at one point. For one thing, the brain joins up with the spinal column and many nerves from all over the back terminate there. For another thing, the nerves which do go into the middle of the head are not found to terminate in the same part of the brain. But even if we grant that all the nerves do meet, they cannot meet at a mathematical point, since they are corporeal things, not mathematical lines, and so cannot come together at a mathematical point. Even if we grant that they do come together, the spirits which pass through the nerves cannot enter or leave the nerves, since they are bodies, and a body cannot exist in a non-place or pass through a non-place, which is what a mathematical point is. And even if we grant that they can exist in and pass through a non-place, if you exist in a point which has no right-hand, or left-hand, or upper or lower regions, etc., you cannot possibly judge where the spirits come from or what messages they bring.

The same problem arises concerning the spirits which you must transmit in order to communicate feelings or instructions, or to initiate movement. I will pass over the fact that we cannot grasp how, if you exist in a point, you can set up motions in the spirits without being a body or having a body that would allow you to be in contact with them and make them move. If you say they move by themselves and you merely direct their movements, remember that you elsewhere denied that a body can move by itself, which implies that you are the cause of the movement. Then you must explain to us how this directing of movement can occur without some effort, and therefore motion, on your part. How can there be effort directed against anything, or motion set up in it, unless there is a mutual contact between what moves and what is moved? and how can there be contact without a body when, as is transparently clear by the natural light, "Naught apart from body, can touch or yet be touched."

You still have to explain how the joining, intermingling, or confusion can apply to you if you are incorporeal, unextended, and indivisible. If you are no larger than a point, how are you joined to the entire body, which is so large? How can you be joined even to the brain, or a tiny part of it, since, no matter how small it is, it still has size or extension? If you wholly lack parts, how are you intermingled with the particles

of this region? There can be no intermingling between things unless the parts of each of them can be intermingled. And if you are something separate, how are you compounded with matter so as to make up a unity?

Moreover, since all compounding, conjunction, or union takes place between the component parts, must there not be some relationship between these parts? Yet what relationship can possibly be understood to exist between corporeal and incorporeal parts? Can we grasp how stone and air are compressed together, e.g. in a pumice stone, so as to make a genuine compound? Yet there is a much closer relationship between a stone and air, which is also a body, than there is between the body and a soul, or wholly incorporeal mind. Must not every union occur by means of close contact? How can contact occur without a body? How can something corporeal take hold of something incorporeal so as to keep it joined to itself? And, how can the incorporeal grasp the corporeal to keep it reciprocally bound to itself, if it has nothing at all to enable it to grasp or be grasped.

Hence, since you admit that you feel pain, how, may I ask, do you think you are capable of having this sensation if you are incorporeal and unextended? Pain involves being acted upon and cannot be understood as occurring except as a result of something pushing in and separating the components and thus interfering with their continuity. The state of pain is an unnatural state, but if something is by its nature homogeneous, simple, indivisible, and immutable, how can it get into an unnatural state or be acted upon unnaturally? Again, since pain either is an alteration, or involves an alteration, how can something be altered if it has no more parts than a point, and hence cannot change or alter its nature without being reduced to nothing? I may add that pain comes from the foot and the arm and other regions at the same time, and hence surely you would have to have various parts enabling you to receive pain in various ways if you are not to have a confused sensation which seems to come from only one part. In a word, the general difficulty still remains of how the corporeal can communicate with the incorporeal and of what relationship may be established between the two.

Descartes's Response (387-90):

You ask how I think that I, an unextended subject, could receive the semblance or idea of a body that is extended. The mind does not receive any corporeal semblance. The pure understanding both of corporeal and incorporeal things occurs without any corporeal semblance. In the case of the imagination, however, which can have only corporeal things as its object, we do indeed require a semblance which is a real body. The mind applies itself to this semblance but does not receive it.

Even though the mind is united to the whole body, it does not follow that it is extended throughout the body, since it is not in its nature to be extended, but only to think. Nor does it understand extension by means of an extended semblance which is present within it, although it does imagine extension by turning to a corporeal semblance which is extended. Finally, it is not necessary for the mind itself to be a body, although it has the power of moving the body.

At no point do you produce objections to my arguments. You merely put forward doubts that you think follow from my conclusions, though in fact they merely arise from your desire to call in the imagination to examine matters which are not within its proper province. Thus, when you try to compare the intermingling of mind and body with the intermingling of two bodies, it is enough for me to reply that we should not set up any comparison between such things, because they are quite different in kind. We should not imagine that the mind has parts on the grounds that it has an understanding of parts in the body. How do you arrive at the conclusion that everything the mind understands must be in the mind? If this were so, then, since the mind has an understanding of the magnitude of the terrestrial globe, it would surely have to possess this magnitude within itself, and hence not just be extended but have a greater extension than the earth.

Excerpts from Descartes's *Objections & Replies*
XIII. To the Immortality of the Soul

From Second Objections (Mersenne, 128): **The immortality of the soul has not be shown.**

It does not seem to follow from the fact that the mind is distinct from the body that it is incorruptible or immortal. What if its nature were limited by the duration of the life and the body, and God had endowed it with just so much strength and existence as to ensure that it came to an end with the death of the body?

Descartes's Response (153-4):

I do not take it upon myself to try to use the power of human reason to settle any of those matters which depend on the free will of God. Our natural knowledge tells us that the mind is distinct from the body, and that it is a substance. But in the case of the human body, the difference between it and other bodies consists merely in the arrangement of the limbs and other accidents of this sort. The final death of the body depends solely on a division or change of shape. Now we have no convincing evidence or precedent to suggest that the death or annihilation of a substance like the mind must result from such a trivial cause as a change in shape. This is simply a mode, not a mode of the mind, but a mode of the body which is really distinct from the mind. Indeed, we do not even have any convincing evidence of precedent to suggest that any substance can perish. And this entitles us to conclude that the mind, in so far as it can be known by natural philosophy, is immortal.

From Fourth Objections (Arnauld, 204): **The immortality of the soul does not follow from the mind/body distinction.**

It may be asked whether the immortality of the soul evidently follows from the fact that the soul is distinct from the body. According to the principles of commonly accepted philosophy, this by no means follows, since people ordinarily take it that the souls of brute animals are distinct from their bodies, but nevertheless perish along with them.

Descartes's Response (229-231):

Both in our bodies and those of the brutes, no movements can occur without the presence of all the organs or instruments which would enable the same movements to be produced in a machine. So even in our own case the mind does not directly move the external limbs, but simply controls the animal spirits which flow from the heart via the brain into the muscles, and sets up certain motions in them; for the spirits are by their nature adapted with equal facility to a great variety of actions. Now a very large number of the motions occurring inside us do not depend in any way on the mind. These include heartbeat, digestion, nutrition, respiration when we are asleep, and also such waking actions as walking, singing and the like, when these occur without the mind attending to them. When people take a fall, and stick out their hands so as to protect their head, it is not reason that instructs them to do this. It is simply that the sight of the impending fall reaches the brain and sends the animal spirits into the nerves in the manner necessary to produce this movement even without any mental volition, just as it would be produced in a machine.

But if we wish to determine by the use of reason whether any of the movements of the brutes are similar to those which are performed in us with the help of the mind, or whether they resemble those which depend merely on the flow of the animal spirits and the disposition of the organs, then we should consider the differences that can be found between men and beasts. If we do this, it will readily be apparent that all the actions of the brutes resemble only those which occur in us without any assistance from the mind. And we shall be forced to conclude from this that we know of absolutely no principle of movement in animals apart from the disposition of their organs and the continual flow of the spirits which are produced by the heat of the heart as it rarefies the blood. We shall also see that there was no excuse for our imagining that any other

principle of motion was to be found in the brutes. We made this mistake because we failed to distinguish the two principles of motion just described; and on seeing that the principle depending solely on the animal spirits and organs exists in the brutes just as it does in us, we jumped to the conclusion that the other principle, which consists in mind or thought, also exists in them.

Excerpts from Descartes's *Objections & Replies*
XIV. To the Differences between Humans and Animals

From Fourth Objections (Arnauld, 204-5): **Animals have souls, as well as bodies.**

As far as the souls of the brutes are concerned, you elsewhere suggest clearly enough that they have none. All they have is a body which is constructed in a particular manner, made up of various organs in such a way that all the operations which we observe can be produced in it and by means of it.

But I fear that this view will not succeed in finding acceptance in people's minds unless it is supported by very solid arguments. For at first sight it seems incredible that it can come about, without the assistance of any soul, that the light reflected from the body of a wolf onto the eyes of a sheep should move the minute fibers of the optic nerves, and that on reaching the brain this motion should spread the animal spirits throughout the nerves in the manner necessary to precipitate the sheep's flight.

Descartes's Response (229-231):

Both in our bodies and those of the brutes, no movements can occur without the presence of all the organs or instruments which would enable the same movements to be produced in a machine. So even in our own case the mind does not directly move the external limbs, but simply controls the animal spirits which flow from the heart via the brain into the muscles, and sets up certain motions in them; for the spirits are by their nature adapted with equal facility to a great variety of actions. Now a very large number of the motions occurring inside us do not depend in any way on the mind. These include heartbeat, digestion, nutrition, respiration when we are asleep, and also such waking actions as walking, singing and the like, when these occur without the mind attending to them. When people take a fall, and stick out their hands so as to protect their head, it is not reason that instructs them to do this; it is simply that the sight of the impending fall reaches the brain and sends the animal spirits into the nerves in the manner necessary to produce this movement even without any mental volition, just as it would be produced in a machine. And since our own experience reliably informs us that this is so, why should we be so amazed that the "light reflected from the body of a wolf onto the eyes of a sheep" should equally be capable of arousing the movements of flight in the sheep?

But if we wish to determine by the use of reason whether any of the movements of the brutes are similar to those which are performed in us with the help of the mind, or whether they resemble those which depend merely on the flow of the animal spirits and the disposition of the organs, then we should consider the differences that can be found between men and beasts. I mean the differences which I set out in Part Five of the *Discourse on Method*, for I think these are the only differences to be found. If we do this, it will readily be apparent that all the actions of the brutes resemble only those which occur in us without any assistance from the mind. And we shall be forced to conclude from this that we know of absolutely no principle of movement in animals apart from the disposition of their organs and the continual flow of the spirits which are produced by the heat of the heart as it rarefies the blood. We shall also see that there was no excuse for our imagining that any other principle of motion was to be found in the brutes. We made this mistake because we failed to distinguish the two principles of motion just described; and on seeing that the principle depending solely on the animal spirits and organs exists in the brutes just as it does in us, we jumped to the conclusion that the other principle, which consists in mind or thought, also exists in them.

From Sixth Objections (Mersenne, 414): **The souls of animals differ from those of humans only by degree.**

The thinking of monkeys, dogs, and other animals seems to confirm the view that thought could be effected by corporeal motions, or was even identical with those very corporeal motions. For dogs bark in their sleep, as if they were chasing hares or rushing at robbers. They are aware when awake that they run, and when dreaming, that they bark. With you, I recognize that there is nothing in them distinct from their bodies. But if you deny that the dog knows that it is running or thinking, besides the fact that this is an unproved assertion,

the dog himself might perhaps pass a similar judgment with respect to us, that we are also unaware that we run and think, when we run or when we think. For you do not behold the dog's internal mode of operation, just as he is not directly aware of yours. There is no lack of men of great attainments who at the present day concede reason to the animals or have in previous ages done so. So far am I from believing that all these operations can be satisfactorily explained by mechanism, without imputing to them sensation, life, and soul, that I am ready to stake anything in proving that that is both an impossibility and an absurdity. Finally, there are plenty of people who will say that man himself lacks sensation and intellect, and can do everything by means of mechanical structures, without any mind, given that apes, dogs, and elephants can perform all their operations by mechanical means. If the limited reasoning power to be found in animals differs from human reason, the difference is merely one of degree, and does not imply any essential difference.

Descartes's Response (426-7):

Even were I to concede that dogs and apes have thought, it would not in any way follow from this that the human mind is not distinct from the body. The conclusion would rather be that in other animals, too, the mind is distinct from the body. In fact, the brutes possess no thought whatsoever. I not only stated this, but proved it by very strong arguments, which no one has refuted. Yet those who assert, as if they were present in the animals' hearts, that dogs when awake know that they are running, and in their dreams know that they are barking, are simply saying something without proving it.

You go on to say that you do not believe that the ways in which the beasts operate can be explained by means of mechanics without invoking any sensation, life, or soul. (I take this to mean, "without invoking thought", for I accept that the brutes have what is commonly called life, and a corporeal soul and organic sensation.) Moreover, you are ready to wager any amount that this is an impossible and ridiculous claim. But these remarks should not be taken to constitute an argument, for the same could be said of any other claim, however true it might be. Indeed, the use of wagers in debate is generally resorted to only when there is a lack of arguments to prove the case. And since once upon a time distinguished people used to laugh at claims about the antipodes in such a fashion, I do not think that a claim should be immediately dismissed as false just because some people laugh at it.

You add in conclusion, "There are plenty of people who will say that man himself lacks sensation and intellect, and can do everything by means of mechanical structures, without any mind, given that apes, dogs, and elephants can perform all their operations by mechanical means." This is surely not an argument that proves anything, except perhaps that some people have such a confused conception of everything and cling so tenaciously to their preconceived opinions (which they understand only in a verbal way) that rather than change them they will deny of themselves what they cannot fail to experience within themselves all the time. We cannot fail constantly to experience within ourselves that we are thinking. It may be shown that animate brutes can perform all their operations without any thought. But this does not entitle anyone to infer that he does not himself think. Such an inference would be made only by someone who has previously been convinced that he operates in exactly the same way as the brutes, simply because he has attributed thought to them. He then remains so stubbornly attached to the sentence, 'men and brutes operate in the same way', that when it is pointed out to him that the brutes do not think, he actually prefers to deny his own thought, of which he cannot fail to be aware, rather than change his opinion that he operates in the same way as the brutes.

But I find it hard to accept that there are many people of this sort. It will be found that the great majority, given the premise that thought is not distinct from corporeal motion, take a much more rational line and maintain that thought is the same in the brutes as it is in us, since they observe all kinds of corporeal motions in them, just as in us. And they will add that the difference, which is merely one of degree, does not imply any essential difference. From this they will be quite justified in concluding that, although there may be a smaller degree of reason in the beasts than there is in us, the beasts possess minds which are exactly the same type as ours.

Excerpts from Descartes's *Objections & Replies*
XV. To the Method

From Third Objections (Hobbes, 171): **The doubts are not new.**

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

Descartes's Response:

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

From Fourth Objections (Arnauld, 215): **The doubts may cause offense.**

I am afraid that your somewhat free style of philosophizing, which calls everything into doubt, may cause offense to some people. I rather think that the First Meditation should be furnished with a brief preface which explains that there is no serious doubt cast on these matters but that the purpose is to isolate temporarily those matters which leave room for even the slightest and most exaggerated doubt, as you yourself put it elsewhere. It should be explained that this is to facilitate the discovery of something so firm and stable that not even the most perverse skeptic will have even the slightest scope for doubt.

Following on from this point, where we find the clause 'since I did not know the author of my being', I would suggest a substitution of the clause, 'since I was pretending that I did not know...'

Descartes's Response (247)

I completely concede that the contents of the First Meditation, and indeed the others, are not suitable to be grasped by every mind. I have stated this whenever the opportunity arose, and I shall continue to do so. This was the sole reason why I did not deal with these matters in the *Discourse on Method*, which was written in French, but reserved them instead for the *Meditations*, which I warned should be studied only by very intelligent and well-educated readers. No one should object that I would have done better to avoid writing on matters which a large number of people ought to avoid reading about. For I regard these matters as so crucial that I am convinced that without them no firm or stable results can ever be established in philosophy. Although fire and knives cannot safely be handled by careless people or children, no one thinks that this is a reason for doing without them altogether, since they are so useful for human life.

From Fifth Objections (Gassendi, 257-8): **The extreme doubts are unnecessary.**

Why did you not make a simple and brief statement to the effect that 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 consider everything as false, which seems more like adopting a new prejudice than relinquishing an old one? This strategy made it necessary for you to convince yourself by imagining a deceiving God, or some evil demon who tricks us, whereas it would surely have been sufficient to cite the darkness of the human mind or the weakness of our nature. Whatever you say, no one will believe that you have really convinced yourself that not one thing you formerly knew is true, or that your senses, or God, or an evil demon, have managed to deceive you all the time.

Descartes's Response (348-350)

You would have preferred me to have carried out my project by making a simple and brief statement, that is, only in a perfunctory fashion. Is it really so easy to free ourselves from all of the errors which we have soaked up since our infancy? Can we really be too careful in carrying out a project which everyone agrees should be performed?

When you say that there is no need to imagine that God is a deceiver or that we are dreaming and so on, a philosopher would have supposed that he had to supply a reason why these matters should not be called into doubt. Or if he had no such reason, and in fact none exists, then he would not have made the remark.

It is no help in correcting our errors to say that we make mistakes because our mind is in darkness or our nature is weak. This is just like saying that we make mistakes because we are prone to error.

A philosopher would not have said that considering everything as false is more like adopting a new prejudice than relinquishing an old one. Or at least he would have first tried to prove that such a supposition might give rise to the risk of some deception. But you, on the contrary, assert a little later that I cannot compel myself to regard what I supposed to be false as being in fact uncertain and false, i.e. to adopt the new prejudice which you feared I might adopt.

A philosopher would be no more surprised at such suppositions of falsity than he would be if, in order to straighten out a curved stick, we bent it round in the opposite direction. The philosopher knows that it is often useful to assume falsehoods instead of truths in this way in order to shed light on the truth, e.g. when astronomers imagine the equator, the zodiac, or other circles in the sky, or when geometers add new lines to given figures.