

Descartes
"I think therefore I am"

The so-called "father of modern philosophy" is the Frenchman René Descartes (1596-1650). He is perhaps better called the "father of Rationalism or the Continental School of philosophy." Rationalism, the belief that knowledge comes purely from reason, battled with Empiricism or the British School of philosophy until the end of the 18th Century when the differences between the two were for a time resolved by Immanuel Kant.

Descartes major philosophical project was to sort out what we have good grounds for believing from that for which we have insufficient grounds. In all but matters of religious faith, he rejected authority as the basis of belief. Many historians believe that Descartes would have rejected authority as a basis for religious faith as well except for the power of the Counter Reformation at the time. Ultimately, Descartes taught that the correct grounds for belief are those characteristics shared by mathematical propositions, a certain clarity and distinctness. But before he could rest content with these grounds, Descartes believed he had to subject them to a severe test. Might we not be mistaken about those things which are most clear and distinct to us? Might, for example, there not be a powerful being intent on deceiving us on these matters? It seems as if there is nothing preventing this possibility.

Descartes's project was to validate the use of the human faculties in gaining knowledge of the world. In particular, he wished to examine the faculties of sense and reason. Sense presents the mind with images of sight, sound, touch, taste and smell. Throughout the history of philosophy, from the ancient Greeks onward, there has been suspicion about the ability of the senses to deliver true information about the world. The other faculty, reason, has been valued more highly, but it ran into the conflict with faith. Descartes was most concerned with showing how reason can be relied upon.

Following Plato, philosophers have distinguished two functions of reason. The most familiar is reasoning, the function of inference, where we draw conclusions from given premises. The other is rational intuition, whereby the mind directly "sees" the truth of propositions through a kind of "mental vision." Plato believed that the mind can have access to forms in this way. More important to Descartes was the intuition which apparently reveals the truth of simple mathematical propositions, such as that $2 + 3 = 5$, which need no demonstration or inference to be seen to be true.

To evaluate the reliability of his faculties, Descartes proposed an unusual method, that of hyperbolic (exaggerated) doubt. He attempted to set aside as unreliable any use of a faculty which has the slightest chance of failing to reach the truth. If something can go wrong with it, that use of the faculty will be regarded, though only provisionally, as being defective. On the other hand, if nothing can go wrong with that use, the use is known to be reliable.

It has always been recognized that many uses of the faculty of sense are subject to error. The sun looks like a body about the size of a dime, and it appears to move around the earth. We have images that we take to be of things before us, but nothing like it is there. Still, a defender of the senses will point out that these are errors in the details about the objects of the senses. How can one doubt the very modest claim that there are external objects corresponding to our sense images?

Here Descartes proposed that because images in dreams are often indistinguishable from external objects, there is no absolutely reliable way to determine whether any given image is a dream image. If so, he continued, there is no way to tell whether all our images are dream images, in which case there are no external objects causing them. If this is just possible, then the use of the senses to detect the existence of external objects is not absolutely reliable, and we must give up, for the time being, our trust in the senses for this use.

Even if the senses are temporarily discredited, there remains the faculty of reason, which might be reliable. How could I possibly be mistaken in my belief that $2 + 3 = 5$? The surprising answer is that I could be so mistaken if God, an all powerful being, set about to deceive me on this matter. Of course, there is no reason to think that God would do that, and some reason to think God would not, since it conflicts with God's goodness. But it remains possible that such a deception is going on, and it is the bare possibility of a breakdown in the faculty which is sufficient to discredit it.

Now things get confusing. Descartes retreated from the hypothesis that God is a deceiver to the hypothesis that there is a malignant genius (or evil demon) bent on deceiving him. This hypothesis accomplishes the same end as the dream argument, that is, casts doubt on our use of the senses to detect the existence of any external objects. And although Descartes does not say so, it seems that this malignant spirit is capable of casting doubt on the use of rational intuition. I say it seems so, because Descartes puts no limits on the power of this evil demon.

So is there any use of reason that is safe? Descartes replied that there is one: the detection of his own existence. So long as he is thinking about his own existence, he cannot doubt that he exists. Even a malignant genius cannot subvert this use of reason, since the very process of subversion requires the existence of the mind and the faculty which would be subverted. Descartes's use of this argument is not original. Augustine had used this argument many centuries before. "If I am mistaken, then I exist. Certainly one who does not exist cannot be mistaken; consequently, if I am mistaken I exist."

With the fact of his own existence in hand, Descartes set about to find out what he is, in what his essence consists. Aristotle had said that the essence of a human being is to be a rational animal. But Descartes rejected this definition, in part on the grounds that he is not an animal. He had proved

that he exists on the provisional assumption that no physical object, including his body, exists. So he is independent of his body. This doctrine is consistent with the Catholic doctrine of the soul. Many contemporary philosophers criticize it on the grounds that it leads to a degradation of the body and opens the way to abuse. For example, harsh punishments like burning at the stake can be justified if they destroy the body to save the soul. Considering animals to be mere automatons also leads to abuse.

Although he rejected the part of the Aristotelian formula declaring him to be an animal, he kept the rationality component. He is a being with understanding, as his carrying out of the method of hyperbolic doubt has shown. That is, he has been able to understand the propositions which he was then able to accept or reject. He also has images, which, though they might not represent anything external to him, remain as something of which he is aware.

The other aspect of the mind which is required to carry out the method of doubt is willing. Descartes was able to accept or reject various propositions, and accepting and rejecting are acts of will. In general, then, the method of doubt has produced this peculiar result: the essence of a being undertaking the method is identified with just those characteristics needed to carry out the method of doubt! Descartes had concluded that he could trust the use of rational intuition in establishing that he exists and that he is a thinking thing (*res cogitans*) with an understanding and will. The understanding furnishes the mind with ideas, some the object of rational intuition, others images of sense and imagination. (By "sense" Descartes does not mean the product of the use of sense organs such as eyes and ears, since he has provisionally given up believing they exist.)

At the end of **Meditation 2**, Descartes tries to show how the ideas of the understanding or intellect are more adequate for knowledge than are those of sense. Intellectual ideas such as figure (number) and extension (dimension) are stable and well-understood, while ideas of sense are ever-changing. A piece of wax, when heated, loses all its original sensible characteristics, but it is always figured and extended. We cannot imagine all the changes a thing might go through. Similarly, a chiliagon (thousand-sided plane figure) is comprehended by the intellect but not by sense, since it is too complex. He concludes that because he knows even alleged external things better through the understanding than through sense, he understands himself best of all.

Having established that his ability to know himself is unchallenged by any skeptical threat, Descartes sought to identify the character or mark of his self-knowledge that might apply to other potential items of knowledge. He found that his perception of himself is very clear and very distinct. Then he suggested this rule: that whatever is very clearly and very distinctly perceived is true. This would allow him to reclaim knowledge surrendered in the course of hyperbolic doubt.

It should be emphasized that Descartes did not believe clarity and distinctness to be relative qualities of ideas. That is, any person who meets the appropriate conditions will find the same ideas to be clear and distinct. The reason is that he defined clarity as what is "present and apparent to an attentive mind" (Principles of Philosophy, Part I, Principle XVI). He appealed to the metaphor of vision to illustrate this notion: "we see objects clearly when, being present to the regarding eye, they operate on it with sufficient strength." The objects of this mental vision are there to be "seen" by anyone taking appropriate care. In this he follows Plato. (Incidentally, to be distinct is to be "so precise and different from all other objects that it contains within itself nothing but what is clear.")

In **Meditation 1**, Descartes had held that God could deceive him about the truth of very simple matters, such as that $2 + 3 = 5$. Such ideas are perceived very clearly and very distinctly, if anything is. But before they can be affirmed in the context of the method of hyperbolic doubt, clear and distinct perceptions must be shown to be absolutely safe. To show this, Descartes said he had to prove that God exists and is no deceiver. (This also helped prevent him from being burned at the stake for heresy!)

There are two arguments in the **Meditations** for God's existence. The second, a version of the ontological argument like that of St. Anselm, is found in **Meditation 5** to be discussed later. The first is an argument that was unique to Descartes until the last few years when psychologists have begun to examine it. Let us say that this argument is from the idea of God. The idea of God is that of an infinite, perfect being.

It was Descartes's contention that we have such an idea, and that we can have it only if it was placed in our minds by God. In other words, only God could be the cause of the idea of God. To show this, Descartes ruled out himself or some lesser being as the cause. The reason, in a nutshell, is that the cause of an idea of infinite perfection must be an infinite perfection. There must be as much reality in the cause of the ideas as there is expressed in its content.

But what entitles Descartes to such an assertion? The only reason could be that it is clear and distinct, known by the "light of nature." But precisely what is at issue is whether we ought to affirm what is clear and distinct. Thus if the validation of clear and distinct ideas depends on God's existence, and the proof of God's existence depends on the affirmation of clear and distinct ideas, the argument goes around in a circle. Indeed, it is notorious as "the Cartesian circle." There have been attempts to show that the problem does not arise, but they have met with great difficulty.

Descartes, at any rate, was satisfied, and he proceeded to claim that an infinitely perfect being would not deceive us. Nonetheless, this assertion runs into a problem mentioned previously. We are often mistaken in what we accept. If God has made us in such a way that we are subject to deceit, is God

not a deceiver? Descartes's answer in the negative is based on his assignment of blame for any error to ourselves, not God.

We err because we assert what is not clear and distinct. Our will is infinite, Descartes claims, in that it is able to assert, deny or withhold judgment from any given idea of the understanding. The understanding, on the other hand, has its limitations. It does not have clear and distinct ideas of everything, but often issues unclear or indistinct ideas. This limitation of the understanding distinguishes us from God, for we are like God in the infinitude of our will. However, if we use our God-given faculties properly, we will assert only what we should, i.e., those ideas which are clear and distinct. Any blame for error falls on our own shoulders, and God is not, therefore, a deceiver.

According to Descartes, this assignment of responsibility for our own errors assumes that we are free. He claims that we are able to recognize that when we will to assert, deny, etc., there is no external constrain. This claim has become very controversial, since it is not evident why we should be able to detect a controlling influence on our will. Even if none is apparent, there may be one which is hidden beneath the surface, perhaps in an unconscious state of mind.

We left Descartes in possession of a criterion for assent, namely, that whatever he clearly and distinctly perceives is true. God guarantees that he will not go wrong when his reason is used in this way. So far, Descartes has established only that he himself exists, as a thinking thing, and that God exists. The next task is to discover what else has the degree of clarity and distinctness that would warrant assent.

Descartes made a start by recognizing that he clearly and distinctly perceives objects of mathematics. (He can now be sure that he is not deceived in this respect, thus overturning the doubt of **Meditation 1**.) The objects of geometry are particularly important, because they are dimensional. What is known about them is knowledge about material objects, if they exist. Descartes identified the essence of material objects as extension, which, roughly, is being diffused over space.

But before investigating whether material objects exist, Descartes offered up another proof of the existence of God. His reason for doing so when the need had already passed was that he had just shown that we can gain knowledge of things through ideas. The second proof (a version of the ontological argument first proposed by Anselm) moves from the idea of God as a supremely perfect being to God's existence.

As with Anselm, the key claim is that a non-existent being would not be supremely perfect. But Aquinas had argued that all this shows is that the idea of a supremely perfect being is the same as the idea of an existing supremely perfect being. We cannot think of such a being without thinking of it as existing, but this is just a fact about what we can and cannot think.

Descartes thought he had a way out. He claimed that the idea of God corresponds to a true and immutable nature, just as does the idea of a triangle. But whereas the nature of a triangle does not carry existence with it, and so there may be no triangle, the nature of God does carry existence with it, and so God cannot fail to exist. This variation of the argument is an improvement over Anselm's original, but it will still face problems.

In the meantime, we return to the question of the existence of material things. Descartes recounts that he had believed they exist because he seemed to have a special relation with one, his body. The mind's access to the body gives rise to sensation and thereby provides information about it and other physical objects. He had distinguished sensation from mere imagination by his apparent lack of control over the production of ideas of sensation and their superior intensity.

However, **Meditation 1** had raised doubts about his former beliefs. In particular, there is the problem of the unreliability of sensory information in general, the possibility that he is always dreaming and the possibility of systematic deception. This also seems to cast doubt on his being able to tell that he did not produce these ideas on his own, by some "secret faculty."

Descartes then discounted the possibility that he produces them on his own. One reason is that since he is a thinking thing, he would not have a passive power of sense perception unless there were an active being capable of impressing ideas on it. But he observed that these ideas come against his will, or at least without his co-operation, so he concluded that they come from another being.

The question has been asked how he could tell that they come without his co-operation. When in a dream, he receives ideas that also seem to come to him without his co-operation. One response would be that later he will show how to tell the difference between dreaming and waking, namely, that the latter is generally coherent while the former is not. The other response would be to appeal to the reason why God is not the source of his ideas of sense, to be discussed next.

That God or some other lesser spirit is not the active being which is the source of his ideas of sense is based on God's not being a deceiver. Descartes asserted that he was created with the very strong inclination to believe that material things are the cause of his ideas of sense. That God would so create him to be strongly inclined to believe a falsehood would be a deception. [Note how this applies to his being the cause of his own ideas as well.] Basing our knowledge of material things on the knowledge of God seems to be a precarious procedure, given the notorious difficulties in proving God's existence. Kant remarked that it was a scandal to philosophy that there are no satisfactory proofs of the existence of the material world, belief in which must as a consequence be based on faith.

A final topic in the Meditations is the relation between mind and body. In **Meditation 6**, Descartes had asserted that the mind is a thinking,

unextended thing, while the body is an extended, unthinking thing. How can the two interact with each other when they share nothing in common? In one place he rejected the analogy which makes the mind as a pilot in a ship, on the grounds that we are more intimately connected with our bodies. He stated that there is a "union, and, as it were ... intermingling of mind and body." But the union cannot be an actual intermingling, for then the mind would have to be extended to be mingled with the extended parts of the body.

A possible solution is that the mind has a single point of contact with the body. Descartes in another book had located this point in the pineal gland, in the brain. Here, the mind redirects motions in the gland and thus affects the body. But the choice of the pineal gland is really arbitrary, and the means by which the redirection occurs is utterly mysterious.

Many philosophers posed ingenious solutions to the mind-body problem (as it is called). George Berkeley (1685-1753) proposed that God produces the ideas of sense in our minds, and that what we call bodies are only collections of ideas. G. W. Leibniz (1646-1716) offered the theory of parallel action: mind and body have no effect on each other, but unfold their histories in harmony, like two clocks that have been synchronized. Nicholas Malebranche (1638-1715) told an equally fantastic story that God causes changes in our bodies on the occasion of our acts of will. Finally, Baruch Spinoza (1632-1677) declared that mind and body are not distinct substances but rather modes of a single substance, which he called God. Against all this, John Locke (1632-1704) declared that he had no idea what is going on and left it at that.