



Descartes

Rules for the Direction of the Mind (I-III) *Discourse on Method Meditations (Synopsis)*

Rene Descartes was born to a family of prominent lawyers in Touraine, France on March 31, 1596. Educated at the Jesuit School at La Fleche, considered one of the finest schools in all of Europe, he nonetheless felt that his education had produced nothing more than a growing conviction of his own ignorance. He finished his formal education with a degree in law from the University of Poitiers in 1616. Of independent means, he spent the next few years traveling, determined "to seek no other science than the knowledge of myself or of the great book of the world." Mathematics had been the only area of his studies that had given him the certainty he was seeking, and his interest in it continued during his travels. In 1619 his studies in algebra and geometry led to the discovery of what he called a new method that he was prepared to apply to all knowledge. In 1629 he retired to Holland where he spent the next twenty years writing. The political climate kept him from publishing his work for some years, but his ideas became controversial nonetheless through friends who taught at the universities. He was accused of promoting thought that was subversive of religion, but having friends and devotees in high places, he was never prosecuted. In 1649 he left Holland to establish an academy of science at the court of Queen Christina of Sweden. He died there in the spring of 1650 after a short illness.

CONTEXT

Descartes stands as a major figure in the scientific revolution that began with Copernicus in the 16th century and then continued into the 17th century with Bacon and others. Setting aside all authorities of the past, he begins with his own mind and develops a system that depends not on the abstract reasoning of Aristotle and Aquinas but on the quantifiable, reproducible evidence of experimentation. Although he conceived of his Method as eventually leading to a certainty in all fields of knowledge, his skepticism towards the senses, his reliance on doubt, and his understanding of observations as basically subjective acts of interpretation have led to the modern recognition that absolute certainty is not attainable.

Descartes intended for Discourse to be an introduction to the examples of his Method in the three essays that accompanied its publication. Today the essays are only of historical rather than scientific value, but the Discourse continues to be read and to pose questions for modern psychologists and philosophers.

SUMMARY

Rules for the Direction of the Mind

Rule I: The end of study should be sound and correct judgments. Similarity is easily mistaken for equivalence. Sciences should not be studied in isolation but together as interdependent parts of wisdom.

Rule II: We should study only that for which our mental powers are adequate to the task of arriving at sure knowledge. The man who has many doubts about a subject may be less knowledgeable about it than someone who has never thought about it because the man with doubts is certain to have formed wrong opinions based on probability. All knowledge based on probability must be rejected, and only knowledge based on what is sure and beyond doubt should be accepted. Of all the sciences, only Arithmetic and Geometry can provide that certain knowledge. Our studies in other fields of science should seek a certitude equal to that of Mathematics.

Rule III: Our studies should not be directed to the thinking of others or to our own conjectures but rather to what we can see clearly and deduce with certainty. If we accept the thinking of others, we risk accepting their errors. The only two ways to arrive at sure knowledge are through intuition and deduction—the only exception being that knowledge that is divinely revealed and thus the most certain of all.

Discourse on Method

Part I: Descartes begins by finding all men equal in their natural rational abilities but asserts that how that ability is used is what is important. He describes himself as having been fortunate in certain paths that he has taken and thus arrived at a Method that has helped him to greatly increase his knowledge. He intends to set out the paths he has taken, not as a rule for all men to follow, but as a suggested path that helped him and may help others. In order to do this he describes his youth and how the best of educations left him with the experience of finding not an increase in his knowledge but rather a growing discovery of his own ignorance. When he completed his formal education, he determined to travel and let the world educate him.

Part II: Picking up his intellectual biography three years later in Germany where he was preparing to join the army, he relates a day in which he devoted himself entirely to considering what he had and had not learned both in school and in his travels. He decided that the best course he could now follow was to discard all the opinions he had held up to this point and begin to replace them with opinions that he had rationally arrived at himself. He sets for himself four laws to govern his new endeavor:

- 1) to accept nothing as true that he could not clearly recognize as true and could not find a reason to doubt;
- 2) to divide each problem into as many parts as possible;

3) to conduct his thinking by starting with the simplest question and then moving

gradually up to the more complex; and

4) to be so thorough as to be certain that nothing had been omitted.

These laws were all in keeping with the methods of geometric proofs, and he felt confident that he could apply them to other areas of study as well. Recognizing his own youthfulness (he was twenty-three at the time), he decided to spend considerable time practicing these laws and ridding himself of his wrong opinions before taking up the more serious business of actively addressing questions.

Part III: As a final preparation for taking up this new approach to knowledge, he formulated for himself a moral code that would ensure his living his life in keeping with his plans. Faithful to his commitment to simplicity, he limited himself to four maxims:

- 1) to obey the laws and customs of God and his country and in all other things to conduct himself in moderation;
- 2) to be firm and resolute once he had made up his mind on a course of action;
- 3) to focus his energies and attention on doing his best with what was within his power rather than on the things of the world over which he had no control; and
- 4) to follow a profession that would allow him to cultivate his reason and offer him the contentment of wisdom and virtue.

After adopting this life for nine years, he found his reputation growing and determined to retire to a place where he was unknown and could continue his life in virtual solitude.

Part IV: He relates how his search for truth led him to the necessity of rejecting as false everything that he could find the least reason to doubt. The first thing he realized was that while he could doubt almost everything, it was impossible for him to doubt the existence of the person who had reached the conclusion to doubt. He had to first exist if he were going to doubt and thus he arrived at the very first principle of the philosophy he sought: the cogito, his "I think, therefore I am." He goes on to describe how his thinking of his own doubting and the realization that because he doubted he was not perfect led him to the immortality of the soul and the existence of a perfect God.

Part V: He claims that his Method has led him to the discovery of a great chain of many truths and that he had intended to make his findings available in a treatise. As certain considerations (the condemnation of Galileo's work) had prevented their publication, he offers a summary of them here. He explains that his original intent had been to include all that he had learned of the world beginning with his conceptions of light and proceeding through the heavenly bodies that reflect it and the ways it is received here on earth and ending with man, the spectator of it all. However, wanting to avoid controversy with the learned, he determined to speak about it all in terms of a new world created by God in an imaginary space and left to develop governed by the laws of nature. From the description of the development of nature, he goes on to animals and men. He spends considerable time examining the movement of the heart and of blood through the arteries and touches on the nerves and muscles and the workings of the brain. He identifies language and the ability to respond to contingencies as the primary methods for differentiating between men and either beasts or sophisticated machinery. He concludes by touching on the rational soul.

Part VI: After reviewing his reasons for not publishing his treatise, he traces the thinking

that has led him to publish this Discourse instead along with the three accompanying essays on Optics, Meteorology, and Geometry. He concludes by declaring no interest in public recognition and his gratitude for those who enable him to continue his pursuits in solitude and leisure.

Meditations: Synopsis

The First Meditation contains the reasons for doubting all things and the usefulness of such general doubt, namely that it protects against prejudice, helps the mind detach from the senses, and makes it impossible to doubt those things subsequently proven to be true.

The Second Meditation covers the principle "I think, therefore I am," and the distinction that it makes possible between the perishable body and the immortal soul.

The Third Meditation discusses the principle argument Descartes uses to prove the existence of God: he argues that the idea of a perfect, infinite being cannot originate in an imperfect finite creature ("what is more perfect...cannot proceed from the less perfect..."). Descartes becomes aware of his own imperfection from his doubting and concludes that if any idea of perfection exists in him, it had to come from some other source than him-self. The only way to account for man having such an idea is to posit that God put it there.

The Fourth Meditation considers the nature of error or falsity and the maxim that those things perceived clearly and distinctly are true.

The Fifth Meditation explains corporeal nature, presents another proof of the existence of God, and shows that the certainty of geometrical demonstrations is dependent on the knowledge of God.

The Sixth Meditation distinguishes the action of the understanding from that of the imagination, considers the relationship between the mind and the body of man, surveys the errors of the senses and how these may be avoided, and enumerates the reasons for deducing the existence of material things.



Things to Think About

1. Descartes sets out to find a method that will give man equal certainty in every field of knowledge. What are the implications of this desire? What are its motives? And what are the consequences of such an ambition? How at ease is Descartes with uncertainty? What comes to light when you set Descartes' approaches next to those of Aristotle or Thomas? One of Aristotle's more important contributions to our studies in metaphysics had to do with the mind's power of abstraction. He saw that in its work of abstraction, the mind is capable of uncovering three distinct degrees of immateriality hidden in the material world, one forming the basis of physics, another mathematics, a third metaphysics, and that to expect the same certainty from one that we find in another was foolish. According to Aristotle, the

natural arc of learning moves from what is least intelligible or knowable in itself (but easier to know for us; trees, animals, man, etc.) to what is most intelligible or knowable in itself (but harder for us to know: the first mover, being itself, act and potency, etc.), that is, being. To get to being, we have to pass from the whole material world in which being is hidden—in which its great variety and hierarchy is revealed according to its differentiated forms in matter—to Being itself, that which contains no matter at all. This process is natural because as corporeal creatures, we begin to learn through our senses and move up the Chain of Being through greater and greater degrees of abstraction. We go from physics, the study of the contingent world of nature, to mathematics, to metaphysics, the study of the underlying world of being that physics opens to us. Reflect on the differences between these two approaches, Descartes' and Aristotle's, the different character of their respective cognitive acts, the different termini or ends of each.

2. As you are reading, think about the implications of a system of thought that begins with the mind of man. If man starts in his head—and the mind is immaterial in nature—how is he to get to the material world his senses deliver to him? For a contrast, recall that St. Thomas begins with his senses and the concrete world presented to them, goes on to reason and draw conclusions about that world, and finally considers the mind itself, its nature and scope, what it does and how. Recall, also, the principle of fittingness between things on the one hand, the senses and mind that grasps them on the other, and the hylomorphic character that supports this fittingness in both mind and things. What is lost by taking one without the other, by beginning with the mind or the world but not both in their fittingness together?

3. Descartes wished to give to all the sciences the kind and degree of precision found in geometry. What are some of the implications of such a wish? Geometry is a science that depends upon an abstraction from matter. It proceeds from axioms or starting points—i.e., a point is that which has no parts, a line a length that has no breadth—and from these, it goes on through the use of deduction to arrive at conclusions concerning certain propositions. Geometric systems are, by nature, intelligible, synthetic, and deductive: they require as a condition for their work an abstraction from matter, a leaving it behind. Recall what St. Thomas said about the definition of man (cf. Sum. theol. I,84,1 through I,85,2; but especially I,85,1): the mind can abstract from particular matter, this flesh and bone, but not common matter, flesh generally and bone generally, for this is to define man apart from his body, as if he were an angelic substance, when he's not. Reflect on the implications of any geometric approach to understand man, who is not just matter but has an intellect and a will. What are the implications of treating man in this way? What are some of the effects of evaluating, understanding, judging man purely in mathematical terms? Can tests that are statistically or mathematically driven adequately account for all there is that goes on in man? They may give teachers, graders, some certainty so they don't have to deal with questions or challenges—"Look, here are the numbers; they are indisputable"—but what's lost?

4. Reflect on Descartes' wish to make a plan that would ensure his living his life in keeping with his plans. It is interesting that Descartes' four maxims in Part III of the Discourse have points in common with Stoicism, such as an acceptance of moderation, simplicity and what life presents that is not in our control. What are the implications of such Stoical points for his will? Can a method or technique finally take the place or substitute for free acts of the will?

5. Because Descartes sees the body or matter as mere extension, the mind of man has no way of relating to matter except in mathematical terms. Man's mind becomes angelic, simply immaterial. What are some of the implications of this approach to knowing? How do angels, since they don't have bodies, understand? How do men? What happens when we

begin to conceive of man in angelic terms? Can you think of some ramifications of this for men today?

6. Descartes says in his Method that he begins with parts, not wholes. What are the implications or ramifications of such an approach? In his Politics (I, 2; 1252b 25-1253a 35), Aristotle says that "the polis is prior in the order of nature to the family and the individual. The reason for this is that the whole is necessarily prior [in nature] to the part. If the whole body is destroyed, there will not be a foot or a hand...." He makes clear that in terms of time or chronology, the individual is first—followed by a marriage, then a family, tribe, village, etc. But in terms of a Nature, the final cause or end precedes the individual or the beginning: one has to know his end first in order to get there. If one doesn't know his end is to attain a college degree or finish an essay, he'd have no way of finding the means of doing either. Man begins with a nature; his challenge is to perfect or complete it. What are the implications of these two understandings? One says the whole is simply the sum of the parts; the other that the part is greater than and prior to its sum. Consider this another way: if someone had never seen a house before (Descartes says he is going to start from the beginning with no prior knowledge), and all the "parts" were placed before him (boards, electrical wiring, appliances, etc.) would he know how to put them together? What about a person who understood the "nature" of a house before he began? How would he proceed? Would it matter whether they started with parts or some understanding of a "nature," a whole?

7. Descartes was influenced by a contemporary, William Harvey (1578-1657), who was the first to map the human circulatory system. Like Harvey, Descartes understands the human body and its internal and external functions in a mechanistic way. The body is an organic machine for Descartes, in, on and through which the spiritual soul (the mind) acts. This is why Descartes' view on the mind (soul)/body question is sometimes characterized as "The Ghost in the Machine".

8. Does Descartes' famous "Cogito ergo sum" argument truly prove that he exists as a real substantial being who is capable of thought. No, because the argument is actually fallacious: it is a circular argument because it presumes as true what it claims to prove as true. Consider this analysis of the argument: "I think, therefore I am" The premise "I think" Clearly presumes that there already is an "I", although the existence of this "I" is precisely what is to be deduced as necessarily certain in the conclusion, "I am". The argument is clearly circular and thereby fallacious, but there is another very important question which emerges: Why did Descartes, who was certainly one of the great minds of human history, not see that the argument was fallacious? A possible reason is that he uncritically, without doubting it, accepted the principle of causality (p.o.c.). The p.o.c. maintains in various versions that: Everything must come from (be caused by) something, so if there is something it could not have come from nothing. Or, something greater cannot come from something lesser. By uncritically accepting the p.o.c., Descartes merely assumes that because there is thinking, there must exist a thinker who is causing (having) the thoughts. He also assumes that because there are thoughts of which he is aware, he must exist as the cause (the thinker) of those thoughts. These assumptions are made because of his uncritical acceptance of the p.o.c., which should have been doubted along with everything else Descartes was doubting at that point.

9. Some philosophers claim that Descartes' "cogito" argument should not be interpreted as a deductive argument in which a premise (evidence) leads to a necessary conclusion. Their interpretation is that the "Cogito ergo sum" expresses a self-evident truth. A self-evident truth does not have to be proven because it is immediately evident as a truth as soon as one attends to and understands it. Consider that from the very fact, the very act, of my thinking, questioning, or doubting, it is immediately apparent that there is a conscious thinking

subject, or center of conscious activity, which I designate by "I". I might not know all that this "I" includes, like its deeper nature, but at least I know that there is a conscious subject or I. It is impossible to deny this fact without at the same time implicitly reaffirming it: If I assert, consciously knowing what I am saying, "There is no I," then I know that I am contradicting my own assertion.



Study Questions

1. What does Descartes think about the individual studies he pursued in school, history, literature, rhetoric, etc., especially mathematics (Rule II and Discourse Part 1)?
2. In Part III, Descartes, having decided to discard all of his own opinions as false, resolves to base his behavior on the most moderate opinions of those whom he admires. What test did he set to determine that the opinions they gave him were their true opinions?
3. In your own words, trace Descartes reasoning from his own doubts to the existence of God in Part IV.
4. Reflect on the implications of beginning all that you did with a doubt. What kind of a life would you have in relationship to things or with other people if you began by doubting? How would it affect your trust, your ways of knowing?
5. In Part V of the Discourse, Descartes speaks of taking a special pleasure in describing a particular process of nature. What is that process?
6. Descartes goes into considerable detail in his discussion of the heart and the flow of blood. What is the purpose of the detail (Part V)?
7. In his Second Meditation, Descartes runs through what is now referred to as his famous *cogito*, "I think, therefore I am." What are the ramifications, both on a personal level and at a level of philosophy, for making being (I am) conditioned upon thought? Compare Descartes' gambit with Thomas' in the beginning of the Summa. What is the difference? How does this opening gambit color the end each arrives at? Which one, or is either one, more conducive to fruitful philosophic thinking? Why? What is the fundamental problem with the skeptical position?
8. The Third Meditation offers Descartes' proof of the existence of God. He argues that the idea of a perfect, infinite being cannot originate in an imperfect finite creature ("what is more perfect...cannot proceed from the less perfect"). Descartes becomes aware of his own imperfection from his doubting and concludes that if any idea of perfection exists in him, it had to come from some other source than himself. The only way to account for man having such an idea is to posit that God put it there. Are there any fallacies to Descartes' arguments? Recall that Thomas found perfection implied in the gradation in nature. What light does his argument throw on Descartes and his reasoning?

9. Descartes asserts as one of the principles of his epistemology that truth will take the form of "clear and distinct ideas." What are the inherent difficulties to this position?
10. For centuries the Catholic Church was the center of learning. It preserved the best of the ancients and fostered such great thinkers as Aquinas and Thomas More. Today the role of the Church from the 17th century on is often viewed as having been repressive of learning—Galileo was condemned, Descartes was afraid to publish because of possible consequences. Think about the scientific challenges of today on which the Church has taken a stand—for example, embryonic stem cell research, cloning, invitrofertilization—and Pope John Paul's call for the cooperation of faith and reason, his support of higher education and of the advancement of learning. How do you see the role of the Church? What do you think it should be? What is at stake that she is trying to protect?



Questions on Language and Form

1. In Part II of the Discourse, Descartes makes two analogies to his act of sweeping away all of his previously held opinions in order to begin replacing them with a knowledge whose truth he could arrive at rationally. What are those two analogies and how do they illustrate his point?
2. What are some of the difficulties implied in Descartes' thinking above?



Reflection Questions

1. According to Thomas, angels know truth immediately and certainly; men must come to the truth through a sequential action combining the information supplied by their senses and reason. Descartes is seeking certitude, which he intends to arrive at through innate ideas or intuitive recognition of what is true. What are the implications of Descartes' theory of knowledge for the nature of man and his place in the universe?
2. How would you answer Descartes comment on the drawbacks to the study of literature in Part I of the Discourse? Relate your answer to his understanding of the word "truth."