

## Readings

For Wednesday Lecture  
Session 6  
(Michael Augros)

Excerpts from Descartes, Heraclitus, and Aristotle

### DESCARTES

I do not know whether I ought to touch upon my first meditations here, for they are so metaphysical and out of the ordinary that they might not be interesting to most people. Nevertheless, in order to show whether my fundamental notions are sufficiently sound, I find myself more or less constrained to speak of them. I had noticed for a long time that in practice it is sometimes necessary to follow opinions which we know to be very uncertain, just as though they were indubitable, as I stated before; but inasmuch as I desired to devote myself wholly to the search for truth, I thought that I should take a course precisely contrary, and reject as absolutely false anything of which I could have the least doubt, in order to see whether anything would be left after this procedure which could be called wholly certain. Thus, as our senses deceive us at times, I was ready to suppose that nothing was at all the way our senses represented them to be. As there are men who make mistakes in reasoning even on the simplest topics in geometry, I judged that I was as liable to error as any other, and rejected as false all the reasoning which I had previously accepted as valid demonstration. Finally, as the same percepts which we have when awake may come to us when asleep without their being true, I decided to suppose that nothing that had ever entered my mind was more real than the illusions of my dreams. But I soon noticed that while I thus wished to think everything false, it was necessarily true that I who thought so was something. Since this truth, *I think, therefore I am, or exist*, was so firm and assured that all the most extravagant suppositions of the sceptics were unable to

shake it, I judged that I could safely accept it as the first principle of the philosophy I was seeking. ...

Next, I considered in general what is required of a proposition for it to be true and certain, for since I had just discovered one to be such, I thought I ought also to know of what that certitude consisted. I saw that there was nothing at all in this statement, "I think, therefore I am," to assure me that I was saying the truth, unless it was that I saw very clearly that to think one must exist. So I judged that I could accept as a general rule that the things which we conceive very clearly and very distinctly are always true, but that there may well be some difficulty in deciding which are those which we conceive distinctly. ...

At this point I wished to seek for other truths, and proposed for consideration the object of the geometricians. ... I went through some of their simplest demonstrations and noticed that the great certainty which everyone attributes to them is only based on the fact that they are clearly and evidently conceived, following the rule previously established.

(Descartes, *Discourse on Method*, excerpts from Part Four; translation by Laurence J. Lafleur)

RULE 2 [of the *Rules for the Direction of the Mind*]: *We should be concerned only with those objects regarding which our minds seem capable of obtaining certain and indubitable knowledge.*

All science is certain, evident knowledge, and he who doubts many things is not more learned than he who has never thought about these things; on the contrary, he seems even less learned if he has conceived some false opinion about them. And therefore it is better never to study than to turn our attention to such difficult topics that, being unable to distinguish the true from the false, we are forced to accept doubtful conclusions as certain, since in such cases there is not as much hope of increasing our knowledge as there is danger of diminishing it. And so, in accordance with this rule, we reject all knowledge which is merely probable, and judge that only those things should be believed which are perfectly known, and about which we can have no doubts.

(Descartes, *Rules for the Direction of the Mind*, beginning of Rule 2; translation by Laurence J. Lafleur)

## HERACLITUS

We should not act and speak like those asleep. (DK 73)

For the waking there is one world, and it is common; but when men sleep, they turn aside each one into a world of his own. (DK 89)

Thinking is common to all. Those who speak with understanding must be strong in what is common to all, as much as a city is strong in its law, and even more so. (DK 113)

Therefore, we ought to follow what is common. Although reason is common to all, the many live as if they had each a wisdom of his own. (DK2)

## ARISTOTLE

In every science in which there are principles or causes or elements, understanding and knowing why result from knowing these. For we think we know each thing when we know its first causes and first principles and have reached its elements. It is clear, then, that in natural science as well one must try to determine first what concerns the principles.

And the natural path is to go from the things which are more known and more certain to us toward those which are more certain and more known by nature. For the more known to us, and [the more known] simply, are not the same. And so it is necessary to proceed in this way from the more uncertain by nature but more certain to us toward what is more certain and more known by nature.

But what is first obvious and certain for us is the more confused. Afterwards, by dividing it, the elements and the principles come to be known from it.

Hence, one should proceed from the general to the particulars.

For the whole is more known by sense. And the general is a kind of whole, since the general includes many things as parts.

In a way, the same thing happens with names compared to definitions. For they signify some kind of whole indistinctly—for example, “circle.” But the definition of it divides it into particulars.

And children first call all men father, and all women mother, but afterwards separate each of these.

*(Physics 1.1)*