

# Episode Twenty-Eight - The Number of Shapes of Atoms Is Not Infinite, But Innumerable

Post by "Cassius" of July 17, 2020 at 12:14 PM

Also in this episode, let's plan to revisit some of the key "epistemology" issues that are underlying the entire discussion, such as:

Diogenes Laertius:

It [the philosophy] is divided into three parts, the Canonicon (or Procedure), the Physics and the Ethics. The Canonicon gives the method of approach to the system, and is contained in the work called The Canon. The Physics contains all the investigation into nature, and is contained in the thirty-seven books On Nature and in an abridged form in the letters. The Ethics deals with choice and avoidance, and is contained in the books On Lives and the letters and the book on The End. The Epicureans usually group the Canonicon with the Physics and state that it deals with the criterion of truth and the fundamental principles and contains the elements of the system. The Physics deals with creation and dissolution and with nature; the Ethics with things to be chosen or avoided, with the conduct of life and its purpose.

**Logic they reject as misleading.** For they say it is sufficient for physicists to be guided by what things say of themselves. Thus in The Canon Epicurus says that **the tests of truth are the sensations and concepts and the feelings; the Epicureans add to these the intuitive apprehensions of the mind.** And this he says himself too in the summary addressed to Herodotus and in the [Principal Doctrines](#). For, he says, all sensation is irrational and does not admit of memory; for it is not set in motion by itself, nor when it is set in motion by something else, can it add to it or take from it. Nor is there anything which can refute the sensations. For a similar sensation cannot refute a similar because it is equivalent in validity, nor a dissimilar a dissimilar, for the objects of which they are the criteria are not the same; nor again can reason, **for all reason is dependent upon sensations; nor can one sensation refute another, for we attend to them all alike.** Again, the fact of apperception confirms the truth of the sensations. And seeing and hearing are as much facts as feeling pain. **From this it follows that as regards the imperceptible we must draw inferences from phenomena. For all thoughts have their origin in sensations by means of coincidence and analogy and similarity and combination, reasoning too contributing something.** And the visions of the insane and those in dreams are true, for they cause movement, and that which does not exist cannot cause movement.

The concept they speak of as an apprehension or right opinion or thought or general idea stored within the mind, that is to say a recollection of what has often been presented from without, as for instance 'Such and such a thing is a man,' for the moment the word 'man' is

spoken, immediately by means of the concept his form too is thought of, as the senses give us the information. Therefore the first signification of every name is immediate and clear evidence. And we could not look for the object of our search, unless we have first known it. For instance, we ask, 'Is that standing yonder a horse or a cow?' To do this we must know by means of a concept the shape of horse and of cow. Otherwise we could not have named them, unless we previously knew their appearance by means of a concept. So the concepts are clear and immediate evidence. **Further, the decision of opinion depends on some previous clear and immediate evidence, to which we refer when we express it: for instance, 'How do we know whether this is a man?' Opinion they also call supposition, and say that it may be true or false: if it is confirmed or not contradicted, it is true ; if it is not confirmed or is contradicted, it is false. For this reason was introduced the notion of the problem awaiting confirmation: for example, waiting to come near the tower and see how it looks to the near view.**

Also from the [Principal Doctrines](#):

22. We must consider both the real purpose, and all the evidence of direct perception, to which we always refer the conclusions of opinion; otherwise, all will be full of doubt and confusion.

23. If you fight against all sensations, you will have no standard by which to judge even those of them which you say are false.

24. If you reject any single sensation, and fail to distinguish between the conclusion of opinion, as to the appearance awaiting confirmation, and that which is actually given by the sensation or feeling, or each intuitive apprehension of the mind, you will confound all other sensations, as well, with the same groundless opinion, so that you will reject every standard of judgment. And if among the mental images created by your opinion you affirm both that which awaits confirmation, and that which does not, you will not escape error, since you will have preserved the whole cause of doubt in every judgment between what is right and what is wrong.

25. If on each occasion, instead of referring your actions to the end of nature, you turn to some other, nearer, standard, when you are making a choice or an avoidance, your actions will not be consistent with your principles.

Principles we previously discussed in Book One:

- [line 423] All truth must be grounded on sensation - we must have confidence in what is immediately in front of us before we can understand things that are not visible.
- [line 700] And what can be more sure than our senses to us, by which we fully know falsehood and truth?