

Logical Fallacies Addressed In Epicurean Texts

Post by “Cassius” of October 4, 2024 at 4:39 PM

This is definitely a subject I'd like to see expanded as part of our studies of Epicurean canonic. Might be worth a subforum at some point, but more likely I will create an entry in the [Canonic](#) section of the Wiki here and list the separate fallacies there.

Today I came across this reference to a logical fallacy that is addressed in Lucretius. I am sure there are many more, but this will get the thread started:

The Fallacy Of Division / Composition

Here's the thrust of the fallacious reasoning, in an entry for [Fallacy of Division](#):

The **fallacy of division**^[1] is an [informal fallacy](#) that occurs when one reasons that something that is true for a whole must also be true of all or some of its parts.

An example:

1. The second grade in Jefferson Elementary eats a lot of ice cream
2. Carlos is a second-grader in Jefferson Elementary
3. Therefore, Carlos eats a lot of ice cream

The converse of this [fallacy](#) is called [fallacy of composition](#), which arises when one fallaciously attributes a property of some part of a thing to the thing as a whole.

If a system as a whole has some property that none of its constituents has (or perhaps, it has it but not as a *result* of some constituent's having that property), this is sometimes called an [emergent](#) property of the system.

The term *mereological fallacy* refers to approximately the same incorrect inference that properties of a whole are also properties of its parts.^{[2][3][4][5]}

Dealt With in Epicurean Texts

The same wikipedia article says:

Both the fallacy of division and the [fallacy of composition](#) were addressed by [Aristotle](#) in [Sophistical Refutations](#).

In the philosophy of the ancient Greek [Anaxagoras](#), as claimed by the Roman [atomist Lucretius](#), [6] it was assumed that the atoms constituting a substance must themselves have the salient observed properties of that substance: so atoms of water would be wet, atoms of iron would be hard, atoms of wool would be soft, etc. This doctrine is called [homoeomeria](#), and it depends on the fallacy of division.

This would be found at Lucretius Book 1, at 830, which begins as follows:

[830] Now let us also search into the homoeomeria of Anaxagoras, as the Greeks term it, though the poverty of our country's speech does not suffer us to name it in our own tongue; nevertheless the thing itself it is easy to set forth in words.

[834] First—what he calls the homoeomeria of things—you must know that he thinks that bones are made of very small and tiny bones, and flesh of small and tiny pieces of flesh, and blood is created of many drops of blood coming together in union, and that gold again can be built up of grains of gold, and the earth grow together out of little earths, that fire is made of fires, and water of water-drops, and all the rest he pictures and imagines in the same way. And yet he does not allow that there is void in things on any side, nor that there is a limit to the cutting up of bodies. Therefore in this point and that he seems to me to go astray just as they did, of whom I told above.