

"Epicurean Philosophy: An Introduction from the 'Garden of Athens'" edited by Christos Yapijakis

Post by "Eikadistes" of January 11, 2023 at 3:49 PM

[Quote from Godfrey](#)

The topics of particular interest here are:

1) The principles of atomic physics. Not 12, not 10, but 18 principles are listed. I didn't notice how this number was derived. Given some of the recent discussion on the forum, however, this might be fuel for a post or two 😊

Starting on Pages 58 and 59 of *An Introduction From the "Garden of Athens"*, a chapter titled "The Epicurean Philosophy: Kanonikon – Physikon – Ethikon" by Giorgos Bakogiannis:

"A. Physikon (Physics)

First, I must stress that this presentation completes my previous short one on atomic physics at the Second Panhellenic Symposium of Philosophy, so I will deal with issues that I did not have the time to present back then.

The principles of atomic physics. Although the atom-based cosmology of Epicurus of Athens corresponds to a certain degree to the physics of Democritus of Abdera, it has its own principles. It is important to emphasize that these principles do not need prerequisites or a priori proposals. On the contrary, they can be subjected to intensive scrutiny through the use of Epicurean Kanon (Canon, Criterion). Epicurus proved each principle's validity using analogical thought and Aristotelian reasoning.

Based my argument on the method of the French academic J.M. Gabaude, I will refer to each one of these principles and their corresponding forms of proof:

1. There are bodies. Our senses confirm it.
2. Everything that happens has one or more causes of happening. The opposite cannot be confirmed through our senses.
3. Nothing is born out of nothing. The opposite cannot be confirmed.
4. Nothing is annihilated. The opposite argument is unconfirmed.
5. The whole consists of bodies. Our senses can confirm it.

6. The whole also consists of the void. The opposite can be ruled out through reductio ad absurdum (proof by contradiction).
7. Atoms possess a complete state of existence which is unchanged and unbroken. The opposite argument is refuted.
8. Each atom is impenetrable. No space can be simultaneously occupied by two different bodies. The opposite is invalid.
9. The whole is infinite. The opposite argument is invalid.
10. Void is infinite. The opposite argument is invalid.
11. The number of atoms is infinite. The opposite argument is invalid.
12. Atoms move ceaselessly. The opposite argument is invalid.
13. Each composite body possesses properties that the particles comprising it do not possess (principle of emergence-the basis of Chemistry)
14. There is no expediency in nature. There is no divine intervention. The opposite argument is invalid.
15. What is considered as necessary integrates the element of probability. There is a random or 'by chance' element occurring in nature. The opposite is not valid.
16. The birth of a compound body is achieved through the union of atoms. The opposite is invalid.
17. Every composite body is temporary, and when it is destroyed, it is divided into the atoms that comprised it. The opposite is invalid.
18. There are two levels of reality, the level of atoms within the void that is timeless and the level of the sensible world set in time. The opposite holds no validity."