

Euclid / Euclidian Influences On Epicurus

Post by "Cassius" of December 23, 2024 at 2:04 PM

At present we don't have a forum dedicated to [Euclid](#) - we may eventually set one up later. In the meantime we can use this thread to get started as needed. It does not appear that Euclid was an influence on the ethics of pleasure, but that Euclid's approach to deductive reasoning was influential.

Google says (my underlining)

"Euclid is considered the "father of geometry" because his work, particularly his book "Elements," **established the foundation for deductive reasoning in mathematics by presenting geometric principles through a system of axioms and postulates, where theorems are logically derived from these basic truths, setting a standard for rigorous proofs in mathematics**; essentially, he demonstrated how to build complex geometric concepts through a step-by-step process of logical deduction."

Here are some of the references to Euclid in DeWitt, followed by other references and links:

Chapter 1 - "As an educator Epicurus adopted the procedures of Euclid, parting company with both Plato and the Ionian scientists. The chief mistake in this instance is to foist upon him the method of inductive reasoning; his chief reliance was upon deduction. As for the influence of Euclid, it is regularly overlooked."

"Isocrates, a great teacher, had inaugurated a shift of emphasis from artistic speech for the benefit of listeners to artistic writing for the benefit of readers and his example was followed up by his admirer Praxiphanes, who became the teacher of Epicurus. The young man seems to have fallen under this spell for a time, and his extant letter to Menoeceus is artfully composed in the Isocratean manner. This fashion, however, was subsequently abandoned in favor of the bald style of Euclid, of which the sole merit was clarity. Along with this unadorned style came the adoption of the textbook form and the deductive procedures. Euclid himself, of course, was merely bringing to perfection a technique of book-making which had gradually taken shape in the circle of geometers. His name is here used to stand for a trend which Epicurus manifestly followed. The school textbook was just beginning to emerge as a distinct type."

Chapter 2 - "It should also be remembered that this study during the youth of Epicurus was enjoying a vogue not incomparable to that of Newtonian physics in the eighteenth century and nuclear physics at the present time. Euclid himself was a contemporary and his influence upon Epicurus is manifest. It should be observed that his work on geometry is really an epitome and is entitled *Elements*. Similarly, Epicurus produced among other epitomes a syllabus of his books

on physics, which he called *The Twelve Elementary Principles*. Moreover, as will be shown later, his method of procedure, like that of Euclid, is from first principles to particulars. He states each principle as a theorem and then adduces the proof. Lastly, it was the geometers who quite properly, although surrounded by rhetoricians, developed a style of writing unsurpassed for its baldness. Epicurus, again, though partial to rhetoric in his earlier years and capable of writing artfully, reversed himself and turned to the style of the geometers, abjuring all figures of speech.⁴⁰ It was his mature view that clearness was the only requisite and that the study of physics, "physiology" to him, would show men how they should write."

- Thanks to Don for this link to "[Some Thoughts on the Epicurean Critique of Mathematics](#)"

- Also - Diskin Clay in "Epicurus' Last Will and Testament" -

"Each of the terms of Epicurus' philosophical testament requires careful interpretation, but taken massively the first paragraphs of the Letter to Herodotus show that Epicurus in ordering, condensing and refining his earlier thought, fashioned a stoicheiosis whose aim is elegantly, if not completely expressed by the requirements Proclus found perfectly fulfilled in Euclid's Elements. A passage from Proclus' introduction to the first book of Euclid does not set out all that Epicurus required of his own stoicheiosis, but it deserves study for bringing Epicurus closer to his contemporaries, especially the geometers of the IV century who were at work securing and refining the work of their predecessors. Such an alignment might well seem odd, if not bizarre. A Stoic claimed that the Epicureans never stirred up the "learned dust" (emditus pulver) of geometry", which goes too far. Such an alignment will not make Epicurus seem a physiologist among geometers. But in his concern for the methodic ordering and presentation of his thought, it does make him a geometer among physiologists."

Post by "Joshua" of December 26, 2024 at 12:12 PM

I found an interesting reference to Vitruvius' *de Architectura* in an essay by Montesquieu. Here is the passage from Vitruvius;

Quote

1. Aristippus, the Socratic philosopher, shipwrecked on the coast of Rhodes, perceiving some diagrams [*geometrica schemata*] thereon, is reported to have exclaimed to his companions, "Be of good courage, I see marks of civilization": and straightaway making for the city of Rhodes, he arrived at the Gymnasium; where, disputing on philosophical subjects, he obtained such honours, that he not only provided for himself, but furnished clothing and food to his companions. When his companions had completed their

arrangements for returning home, and asked what message he wished to send to his friends, he desired them to say: that the possessions and provision to be made for children should be those which can be preserved in case of shipwreck;

Reminds me of a scene in Robinson Crusoe when the title character finds a single human footprint on what he thought was a desert island.