

1. Plutarch, *Marcellus* 14:

Archimedes had designed and contrived these machines (*mêchanêmata*), not as matters of any importance, but as mere amusements in geometry; in compliance with King Hiero's desire and request, some little time before, that he should turn something of his art (*technê*) from intelligible to bodily things, and by combining theory (*logos*) with use (*chreia*) through sense perception (*aisthêsis*), bring it more within the appreciation of the people in general. Eudoxus and Archytas had been the first originators of this far-famed and highly-prized art of mechanics (*organikê*), which they employed as an elegant adornment of geometry, and as means of giving support, through perceptible and mechanical examples (*di' aisthêtôn kai organikôn paradeigmatôn*), to problems that were not amenable to demonstration by words and diagrams.

As, for example, to solve the problem, so often required in constructing geometrical figures, given the two extremes, to find the two mean lines of a proportion, both these mathematicians had recourse to mechanical arrangements (*organikai kataskeuai*), adapting to their purpose certain medial lines (*mesographoi*) from curved lines and segments. But when Plato grew vexed and brought it against them that they were corrupting and annihilating the one good of geometry, which was thus shamefully running away from the incorporeal objects of pure intelligence to perceptible things, and making use of bodies that were in need of much mean banausic work; so it was that mechanics (*mêchanikê*) came to be separated from geometry, and, repudiated and neglected by philosophers, became one of the military arts (*technai*).

2. Pappus, *Mathematical Collection* 8, pp. 1026.5-1028.3 Hultsch:

Some say that Archimedes the Syracusan grasped the cause and the reasoning (*logos*) underlying all these [branches of mechanics]. For this man alone among those in this world of ours was endowed with a nature and an inventiveness (*epinoia*) that was varied for every purpose, as Geminus the mathematician also says in his work on the order of mathematical subjects.

But Carpus of Antioch says somewhere that Archimedes the Syracusan composed only one book on mechanics (*mêchanikon*), the one on sphere-making, and did not think it worth writing about any of the other [branches]. And yet that wondrous and great-natured man, with such a reputation for mechanics (*mêchanikê*) among many that he continues to be exceedingly praised by all people, wrote down zealously even things that seemed to be very trivial concerning anything connected with the principal

subjects of geometry and arithmetic. Clearly, he so loved the aforementioned sciences that he did not suffer anything external to be brought into them.

But Carpus himself and some others made use of geometry also for some crafts (*technai*), with reason: for geometry is not harmed at all by associating with them, as it is naturally suited to give body to them. Accordingly, being as it were mother of the crafts, it is not harmed by giving thought to the building of instruments [of war] (*organikê*) and architecture, nor is it harmed at all by associating with land-measurement and gnomonics and scene-painting; on the contrary it clearly causes these to advance, while being honored and adorned (*kosmoumenê*) by them.