Handout for M Americo paper
"Astronomical Instrumentation and Sociopolitical Philosophy in the *De re publica* and *De natura deorum* of Cicero"
Wednesday May 27, 2020 2:30 PM Central Time (US and Canada)
Topic: 7D: Ancient Philosophy 2

Hello, fellow CAMWS-ers! If you have some time and are planning to attend my presentation on Wednesday 5/27 during the Ancient Philosophy 2 panel starting at 2:30 Central, please take a look at these passages from Cicero, which I'll be talking about in my session!

Thanks, and hope you are well!

Valeo si valetis,
Maria

Quote 1

Cicero, *De re publica* 1.19: An tu ad domos nostras non censes pertinere scire quid agatur et quid fiat domi? Quae non ea est quam parietes nostri cingunt, sed mundus hic totus.

English translation[1]: But don't you think that it pertains to our homes to know what is done and what happens at home? That is not only what our walls enclose, but it is this whole world.

Passage 1

Cicero, *De re publica* 1.22-23: Nihil novi vobis adferam, neque quod a me sit excogitatum aut inventum; nam memoria teneo C. Sulpicium Gallum, doctissimum ut scitis hominem, cum idem hoc visum diceretur et esset casu apud M. Marcellum, qui cum eo consul fuerat, sphaeram quam M. Marcelli avus captis Syracusis ex urbe locupletissima atque ornatissima sustulisset, cum aliud nihil ex tanta praeda domum suam deportavisset, iussisse proferri; cuius ego sphaerae cum persaepe propter Archimedi gloriam nomen audissem, speciem ipsam non sum tanto opere admiratus; erat enim illa venustior et nobilior in volgus, quam ab eodem Archimede factam posuerat in templo Virtutis Marcellus idem. Sed posteaquam coepit rationem huius operis scientissime Gallus exponere, plus in illo Siculo ingenii quam videretur natura humana ferre potuisse iudicabam fuisse. dicebat enim Gallus sphaerae illius alterius solidae atque plenae vetus esse inventum, et eam a Thalete Milesio primum esse tornatam, post autem ab Eudoxo Cnidio, discipulo ut ferebat Platonis, eandem illam astris quae caelo inhaererent esse descriptam; cuius omnem ornatum et descriptionem sumptam ab Eudoxo multis annis post non astrologiae scientia sed poetica quadam facultate versibus Aratum extulisse. Hoc autem sphaerae genus, in quo solis et lunae motus inessent et earum quinque stellarum quae errantes et quasi vagae nominarentur, in illa sphaera solida non potuisse finiri, atque in eo admirandum esse inventum Archimedi, quod excogitasset quem ad modum in dissimillimis motibus inaequabiles et varios cursus servaret una conversio. Hanc sphaeram Gallus cum moveret, fiebat ut soli luna totidem conversionibus in aere illo quot diebus in ipso caelo succederet, ex quo et in [caelo][2] sphaera solis fieret eadem illa defectio, et incideret luna tum in eam metam quae esset umbra terrae, cum sol e regione…[3]

[1] Translation mine. All translations mine unless otherwise noted.

[2] Brackets not mine. All brackets mine unless otherwise noted.

[3] According to Zetzel's edition, there are four leaves missing after this.

English Translation: I will tell you nothing new, nothing thought up or discovered by me; for I remember Gaius Sulpicius Gallus, an extremely learned man, as you know. When this very same sight was reported and he happened to be at the house of Marcus Marcellus, who had been consul along with him, he ordered that the sphere which Marcus Marcellus' grandfather had taken as booty from captured Syracuse, an extremely wealthy and lavish city, to be brought out, since he had taken nothing else back to his home out of so much plunder. I had heard the word 'sphere' very often because of the fame of Archimedes, but I wasn't terribly impressed by the appearance of this particular sphere. For there was another one, more attractive and more famous among the people than this one, which had been made by this same Archimedes and which Marcellus himself had placed in the temple to Virtue. But when, after this, Gallus started to explain the workings of this device very knowledgeably, I decided that this Sicilian [Archimedes] had had more genius than it seemed possible for human nature to have. For Gallus said that the invention of the other sphere, the solid and filled-in one, was old, and it had first been made by Thales the Milesian, and then afterwards it was marked with the stars which hang in the sky by Eudoxus from Cnidus, a student of Plato, as he said. Many years later, Aratus described in verse its entire embellishment and workings, drawn from Eudoxus, not with any knowledge of astronomy but with his poetic talent. However, this type of sphere shows the movements of the sun and moon and of the five stars which stray and so are called wanderers, something which could not have been achieved on a solid sphere. The discovery of Archimedes was remarkable, since he figured out how a single turn could preserve different and unequal orbits at dissimilar speeds. When Gallus moved this sphere, it so happened that the moon followed the sun by as many revolutions in this bronze [device] as it does by days in the sky itself; as a result, the same eclipse of the sun occurred on the sphere as in the sky, and the moon then fell into that space which is in the shadow of the earth, when the sun from the region…

Passage 2

Cicero, *De Natura Deorum*, 2.87-8: Si igitur meliora sunt ea quae natura quam illa quae arte perfecta sunt nec ars efficit quicquam sine ratione, ne natura quidem rationis expers est habenda. Qui igitur convenit, signum aut tabulam pictam cum aspexeris, scire adhibitam esse artem, cumque procul cursum navigii videris, non dubitare quin id ratione atque arte moveatur, aut cum solarium vel descriptum vel ex aqua contemplere, intellegere declarari horas arte non casu, mundum autem, qui et has ipsas artes et earum artifices et cuncta conplectatur, consilii et rationis esse expertem putare. quod si in Scythiam aut in Brittanniam sphaeram aliquis tulerit hanc quam nuper familiaris noster effecit Posidonius, cuius singulae conversiones idem efficiunt in sole et in luna et in quinque stellis errantibus quod efficitur in caelo singulis diebus et noctibus, quis in illa barbaria dubitet quin ea sphaera sit perfecta ratione?

English Translation: If, therefore, the things achieved by nature are better than those achieved by art, and if art does not create anything without intelligence, nature certainly must not be considered to be devoid of intelligence. Therefore, if you come to understand, after having gazed upon a statue or a painted picture, that art has been employed; and if, after having seen the course of a ship in the distance, you do not doubt that it is made to move by intelligence and art; or if you consider a sundial, either marked or working by means of water, and understand that the hours are indicated by art and not by chance, how can you think that the world, on the other hand, which embraces these very arts and their creators and everything, is devoid of purpose and intelligence? For if someone were to bring to Scythia or Britannia the sphere which our friend Posidonius has recently made, whose every turn brings about the same [movement] in the sun and moon and five planets that are performed in the sky each day and night, who in those barbarian places would doubt that this sphere had been made with intelligence?

Selected Bibliography & Further Reading

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