

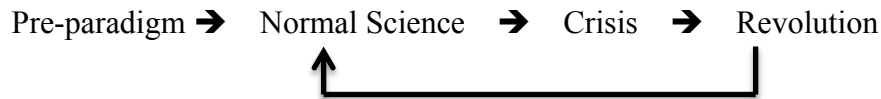
1: Aristarchus in the *Sand-Reckoner*, trans: Ivor Thomas:

A. *Sand-Reckoner* 1, Archim. ed. Heiberg ii. 218. 7–18:

Ἀρίσταρχος δὲ ὁ Σάμιος ὑποθεσίων τινῶν ἐξέδωκεν γραφάς, ἐν αἷς ἐκ τῶν ὑποκειμένων συμβαίνει τὸν κόσμον πολλαπλάσιον εἶμεν τοῦ νῦν εἰρημένου. ὑποτίθεται γὰρ τὰ μὲν ἀπλανέα τῶν ἄστρον καὶ τὸν ἄλιον μένειν ἀκίνητον, τὰν δὲ γᾶν περιφέρεσθαι περὶ τὸν ἄλιον κατὰ κύκλου περιφέρειαν, ὅς ἐστιν ἐν μέσῳ τῷ δρόμῳ κείμενος, τὰν δὲ τῶν ἀπλανέων ἄστρον σφαῖραν περὶ τὸ

But Aristarchus brought out a book consisting of some hypotheses, wherein it appears, as a consequence of the assumptions made, that the universe is many times greater than the “universe” just mentioned. His hypotheses are that fixed stars and the sun remain unmoved, that the earth revolves about the sun in the circumference of a circle, the sun lying in the middle of the orbit, and that the sphere of the fixed stars, situated about the same center as the sun, is so great that the circle in which he supposed the earth to revolve has such a proportion to the distance of the fixed stars as the center of the sphere bears to its surface.

2: An Outline of Kuhn’s Model:



3: References to Hegesias:

A: Diog Laert. *Aristippus* 2.82:

Ἡγησίας ὁ πεισιθάνατος

Hegesias the death-persuader

B. Cic. *Tusc.* 1.82, trans: J. E. King:

Et quidem hoc a Cyrenaico Hegesia sic copiose disputatur, ut is a rege Ptolemaeo prohibitus esse dicatur illa in scholis dicere, quod multi iis auditis mortem sibi ipsi consciscerent.

Indeed this thought is discussed by Hegesias the Cyrenaic with such wealth of illustration that the story goes that he was stopped from lecturing on the subject by King Ptolemy, because a number of his listeners afterwards committed suicide.

C. Val. Max. 8.9.3, trans: D. R. Shackleton Bailey:

Quantum eloquentia valuisse Hegesian Cyrenaicum philosophum arbitramur? qui sic mala vitae repraesentabat ut eorum miseranda imagine audientium pectoribus inserta multis voluntariae mortis oppetendae cupiditatem ingeneraret: ideoque a rege Ptolomaeo ulterius hac de re disserere prohibitus est.

What power do we imagine was in the eloquence of the Cyrenaic philosopher Hegesias? He made the evils of life so vivid that when their pitiful image was thrust into the hearts of his hearers he generated in many the desire for suicide. And on that account he was forbidden by king Ptolemy to discourse any further on the subject.

4. Cleanthes' Impiety Accusation:

A. Plut. *Mor. De fac.* 6 (923A), trans: Harold Cherniss, W.C. Helmbold:

καὶ ὁ Λεύκιος γελάσας “μόνον” εἶπεν “ὦ τάν, μὴ κρίσιν ἡμῖν ἀσεβείας ἐπαγγελίης, ὥσπερ Ἀρίσταρχον ὤετο δεῖν Κλεάνθης τὸν Σάμιον ἀσεβείας προσκαλεῖσθαι τοὺς Ἕλληνας ὡς κινουῦντα τοῦ κόσμου τὴν ἐστίαν ὅτι <τὰ>φαινόμενα σώζειν ἀνήρ ἐπειρᾶτο μένειν τὸν οὐρανὸν ὑποτιθέμενος ἐξελίττεσθαι δὲ κατὰ λοξοῦ κύκλου τὴν γῆν ἅμα καὶ περὶ τὸν αὐτῆς ἄξονα δινουμένην.

Thereupon Lucius laughed and said: “Oh, sir, just don't bring suit against us for impiety as Cleanthes thought that the Greeks ought to lay an action for impiety against Aristarchus the Samian on the ground that he was disturbing the hearth of the universe because he sought to save phenomena by assuming that the heaven is at rest while the earth is revolving along the ecliptic and at the same time is rotating about its own axis.”

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