

THE GENESIS OF GREEK PHILOSOPHICO-SCIENTIFIC THOUGHT IN LIGHT OF WORLD SYSTEM THEORY*

'Adi Setia Muhammad Dom

*...ancient Greece was less the beginning of 'Western'
than the continuation of 'eastern' civilization and culture.*

A. G. Frank and B. K. Gills¹

Part 1: Analogies from the Rise of Islamic and Western Science

In the words of Benjamin Schwartz, the world-historical point of view shows that:

...in many of the high civilizations of the ancient world—the civilizations of the ancient Near East, Greece, India and China—we witness over the period of our first millennium BC the emergence of certain creative minorities who relate themselves in reflective, critical and what one might even call 'transcendental ways' to civilizations from which they emerge....one finds a kind of standing back and looking beyond; of questioning and reflectivity as

* This article is a slightly revised version of Chapters 6 ("Analogies from the Rise of Islamic and Western Science: World System Approaches") and 7 ("The World System Model as a Scientific Hypothesis") of my M.A. thesis "The Genesis of Greek Philosophy and Science: An Outline of the Case for the Revisionist Viewpoint" (Kuala Lumpur: ISTAC, July 1999), and it builds upon my preceding article, "The Genesis of Greek Science in the Intellectual of Ancient Man," *Al-Shajarah*, vol. 4 no. 2 (1999), 125–73, henceforth "Genesis." The classical datings given here mostly follows Simon Hornblower and Antony Spawforth, eds., *The Oxford Classical Dictionary*, 3rd ed. (Oxford & New York: Oxford University Press, 1996), henceforth *OCD*.

¹ Andre Gunder Frank and Barry K. Gills, "The 5,000-Year World System: An Interdisciplinary Introduction," in A. G. Frank and B. K. Gills, eds., *The World System: Five Hundred Years or Five Thousand?* (London: Routledge, 1993), 21, henceforth "5,000-Year World System," and *World System* respectively.

well as of new positive perspectives and vision.²

...the universal human trait of disinterested curiosity concerning the natural world which surrounds us, which can be found everywhere even when it does not become a central concern of every culture, was as much present in China as elsewhere. If by the use of the term 'science' we refer to the incremental accumulation of accurate observations of the natural world, China falls behind no other civilization, as has been amply demonstrated in Needham's many works...³

From a (narrow, non-comparativist) Eurocentric perspective, these features of creativity, reflectivity, criticism, and questioning would only be recognised as "peculiar"⁴ to Hellenic thinkers, and to their successors in the Hellenistic period (and to their successors' successors in the Italian Renaissance—the intervening long centuries of the dark, moribund medieval period notwithstanding).⁵ But as outlined in the previous article,⁶ the disposition for abstract theoretical reasoning did not arise in Greek thought for

² Benjamin Schwartz, *The World of Thought in Ancient China* (Cambridge, MA: Harvard University Press, 1985), 2–3, henceforth *World of Thought*.

³ Ibid., 361–62.

⁴ Henri and H. A. Frankfort, "The Emancipation of Thought from Myth," in Henri and H. A. Frankfort et al., *The Intellectual Adventure of Ancient Man: An Essay on Speculative Thought in the Ancient Near East* (Chicago and London: University of Chicago Press, 1977), 373, henceforth *Intellectual Adventure*.

⁵ A concise yet insightful account of the the continuity debate is David C. Lindberg, *The Beginnings of Western Science: The European Scientific Tradition in Philosophical, Religious, and Institutional Context, 600 B.C. to A.D. 1450* (Chicago and London: University of Chicago Press, 1991), 355–68 passim, especially 363–68, where he argues for continuity within discontinuity; henceforth *Beginnings*.

⁶ "Genesis."