
Review

Reviewed Work(s): Pythagoras Revived: Mathematics and Philosophy in Late Antiquity by Dominic J. O'Meara

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Porphyry's influence on the medieval West.

Evangelioiu presents the thesis of his book in seven points on pages 10–11, which I may condense as follows: Porphyry differed from Plotinus in his clear acceptance of the Aristotelian categories; he wanted to remain a Platonist in matters of ontology but to be an Aristotelian in logic; his work was important, for the question of the categories was important to the Neoplatonists and Porphyry determined how later Neoplatonists were to deal with it. Stated in such general terms, I think the thesis is true, but it just is not new or at all surprising.

On the whole, Evangelioiu's reading of the ancient texts seems sound, but his textual basis is too narrow to produce significant progress in the understanding of Porphyry's thought. The surviving commentary on *Categories* is brief, and most of Porphyry's remaining (and large) oeuvre has been lost; however, some relevant fragments can be gathered from, for example, Boethius' commentary on *Peri hermeneias*. It is surprising that this work is nowhere mentioned, while a footnote (p. 178) refers to the relation between Porphyry and Boethius to an article from 1923; more work has been done since that excellent paper (see Shiel's contribution to *Aristotle Transformed*, referred to above).

Evangelioiu's book does have merit, but it is not quite abreast of recent scholarship.

STEN EBBESEN

Dominic J. O'Meara. *Pythagoras Revived: Mathematics and Philosophy in Late Antiquity*. xii + 251 pp., apps., bibl., index. Oxford: Clarendon Press of Oxford University Press, 1989. \$49.95.

Between the death of Plotinus in A.D. 269 and the heyday of the Athenian school in the fifth century, Neoplatonism underwent many changes; but its course during this interval is difficult to chart because the writings of Plotinus's intellectual heirs, especially Porphyry and Iamblichus, are very sparsely preserved. *Pythagoras Revived* seeks to trace one aspect of Neoplatonism's early development, namely the infusion of Pythagorean elements and so-called mathematical concepts into what were regarded as Plato's teachings.

The leading figure in this movement is Iamblichus (early fourth century), pupil and

later rival of Porphyry. Iamblichus wrote a treatise *On the Pythagorean Sect* in (probably) ten books, of which only the first four have come down to us. These books lead the reader through a course of gradual initiation, embracing a biography of Pythagoras, an invitation to general philosophy and to Pythagorean "mathematical" philosophy, and an adaptation of Nicomachus's *Introduction to Arithmetic*. For Books 5 to 7, which concerned the application of arithmetic to physics, ethics, and theology, we mostly depend on excerpts discovered by O'Meara (following a tip by Paul Tannery) in the writings of the eleventh-century Byzantine Michael Psellus. We know only the titles of Books 8 and 9 (on Pythagorean geometry and harmonic theory), while the existence of a tenth book on Pythagorean astronomy is purely conjectural. Psellus's excerpts take up just five pages of Greek text, and are pretty sorry stuff. Nevertheless, O'Meara hopefully argues that these fragments give an indication of Iamblichus's plan in Books 5 to 7, and that the remaining books were relatively unimportant.

Iamblichus's work tended to subordinate Plato to Pythagoras, whom he portrays as a divine soul sent down to the material world on a mission of teaching. The distinctive elements of Pythagorean teaching concern eternal, immaterial realities: the objects of mathematics, and the divine. Although inferior to theology, Pythagorean mathematics provides a stepping stone between the material world of physics, for which it is a paradigm, and the true being of theology that it reflects. As the arrangement of his treatise shows, Iamblichus developed this theme most fully with respect to "arithmetic," an amalgam of elementary number theory and number mysticism.

After reconstructing the contents of *On the Pythagorean Sect*, O'Meara sets out to show that the work was important, not just within Iamblichus's philosophical production, but also in the subsequent development of the Neoplatonic school in Athens. The evidence (which is not copious) suggests that the early members of this school, Plutarch of Athens, Hierocles, and Syrianus, adopted and elaborated Iamblichus's Pythagoreanism with small modifications.

The more complicated case of Proclus (410–485) takes up the last part of *Pythagoras Revived*. Out of the large corpus of Proclus's writings that survive, O'Meara

chooses the *Elements of Physics* and the commentaries on Book 1 of Euclid's *Elements* and on Plato's *Timaeus* for detailed consideration. Crucial to O'Meara's appraisal of Proclus's relationship to Iamblichus is his convincing argument that the "first prologue" of the Euclid commentary is closely adapted from Iamblichus's Book 3, and not from an earlier common source (the prevailing view). Given this, it would seem that Proclus deliberately replaced the focus on arithmetic that followed Iamblichus's treatment of general mathematical science with a new focus on geometry. In pursuing this thesis, however, O'Meara obscures it by characterizing as "geometry" any quasi-mathematical deductive argumentation from axioms, such as Proclus applies to Aristotle's *Physics* in the *Elements of Physics*. This is misleading, first because Proclus's so-called mathematical physics makes little use of geometrical objects, and secondly because (as Euclid's *Elements* 7-9 shows) deductive proof is just as applicable to arithmetic as to geometry. Proclus's contribution to the Pythagorean movement in Neoplatonism is, to this extent, negative: he reinstates Plato in place of the usurper Pythagoras, and for Nicomachus he substitutes Euclid. Yet the effect of this retrenchment may have been a strengthening of the pivotal position of mathematics in later Neoplatonism. The coherent account of this episode that O'Meara has deduced from the meager testimony is a useful contribution to the history of philosophy in late antiquity.

ALEXANDER JONES

Charles Lichtenthaeler. *Das Prognosticon wurde nicht vor, sondern nach den Epidemienbüchern III und I verfasst: Zweiter Beitrag zur Chronologie der echten Hippokratischen Schriften.* (Etudes d'Histoire de la Médecine, 7; Hippokratische Studie, 13.) xvi + 134 pp., bibl., indexes. Stuttgart: Franz Steiner Verlag, 1989. DM 58 (paper).

Bernard Vitrac. *Médecine et philosophie au temps d'Hippocrate.* (Histoires de science.) 187 pp., illus., figs., apps., bibl., indexes. Saint-Denis: Presses Universitaires de Vincennes, 1989. Fr 80 (paper).

Charles Lichtenthaeler has been working on the Hippocratic corpus for more than forty years; and clearly he knows a great

deal about it. Nonetheless, this is a deeply irritating work, combining in peculiarly Teutonic fashion an arrogant contempt for the work of others with an exaggerated deferential respect for the "Master of Göttingen" (p. 32), his "teacher and master" (p. 45) Karl Deichgräber (Bruno Snell is his other great intellectual hero). Its *probandum* is that, contrary to the generally held view (and that of the Great Master Deichgräber himself), *On Prognosis* was written after the first and third *Epidemics*.

After a comprehensive, but largely redundant, rundown of the opinions of authorities from Galen to Fridolf Kudlien, which occupies the first two chapters, Lichtenthaeler turns to the establishment of his thesis. This takes the form of trying to show that the doctrine of *Prognosis* represents a significant advance on that of the *Epidemics*. In the third chapter, Lichtenthaeler examines three related instances of prognostic doctrine to be found in both texts (*Epid.* 1.12, *Prog.* 24). That they are related has long been noted—but of course that fact alone will not establish chronological priority. The *Prognosis* texts are more detailed (as Galen remarked), but that in itself shows nothing (the works are written with different aims in mind); and they assert a slightly different, and arguably more complex, relation between the various prognostic signs. The claim is that increasing complexity connotes a later date—but that is of course a dangerous assumption, particularly given the quite different natures of the texts. This consideration seems to me also to render evidentially null Lichtenthaeler's discernment of a greater care in construction in *Prognosis*, both in overall structure and in individual sentences: *Prognosis* "completes and improves upon the text of *Epidemics* I and has by far the prettier form" (p. 37). The first claim is suspect, the second worthless.

Equally, when Lichtenthaeler tries to buttress the thesis in Chapter 4, similar objections may be raised. He discerns the gradual emergence and increasing sophistication of what he calls, rather portentously, the "hippokratische 'Kongruenzprinzip'" from *Epidemics* 3 (where it is not really in evidence at all) through *Epidemics* 1 where it makes a crude first appearance) to its fully fledged form in *Prognosis*. The *Kongruenzprinzip* is simply the injunction to pay attention to all signs and to their interrelations. Lichtenthaeler is clearly right as