

PETER RIEDLBERGER, *Domninus of Larissa, Encheiridion and Spurious Works. Introduction, Critical Text, English Translation, and Commentary*, *Mathematica Graeca Antiqua* 2, Pisa/Rome: Fabrizio Serra Editore, 2013, pp. 285. ISBN 978-88-6227-567-5.

We, the classicists, usually have a tendency to accept the certainty of some ideas about ancient figures especially if our acquaintance to them is through our greatest predecessors. We promote such opinions as if they are facts by including them in some manuals and encyclopaedias thanks to our trust in our colleagues of the ancient times. Actually our attention to these illustrious individuals in antiquity is directed through others' lenses notwithstanding the fact that they mostly provide just an illusionary view. For instance, in the ancient world, Heraclitus was called *skoteinos* on account of his obscurity, while the renowned remark "Delian diver" indicates his deep reflections, so that until now we commonly assumed his discourse to have been "obscure" as well as being one of the "deepest" in his milieu. It is almost impossible to find the historical Socrates among the multiple images of him told by his followers and his ingrained adversaries, being fully frustrated by these perceptions of which some are totally different from one another. In the same manner, Domninus of Larissa, like many other notable intellectuals in antiquity has been perceived by views nourished by extant information, which could have been easily misinterpreted.

Domninus of Larissa was a student of Syrianus and a fellow disciple of Proclus according to the entry in Suda (Δ 1355 Δομνῖνος). The scholarly assessment about Domninus and his work was under the influence of this important fact that he was contemporaneous with Proclus. So Domninus' identity and his point of view on philosophical and mathematical issues in his own milieu have been evaluated within the determination of his relation with Proclus who was one of the heads of the Platonist school of Athens in Late Antiquity (412-485). The most prominent and effective diagnosis about Domninus was argued by Paul Tannery which said that he reacted to the arithmetic of Nicomachus of Gerasa and returned to the rigorous approaches of Euclid that is still considered valid by some of the members of the modern scholarly milieu. Riedlberger invites his readers to set this blurry and misleading lens aside to have a clearer view of the facts about the historical Domninus of Larissa.

This noteworthy book consists of a meticulous critical edition of three texts commonly attributed to Domninus of Larissa and a detailed commentary supported by exhaustive indices. The book includes critical

editions and translations of the following three relatively short texts: primarily (1) Domninus' *Encheiridion* of "Arithmetical Introduction" (Ἐγχειρίδιον ἀριθμητικῆς εἰσαγωγῆς), with two shorter works which Riedlberger convincingly argues should not be attributed to Domninus, (2) *How to Separate a Ratio from a Ratio* (Πῶς ἔστι λόγον ἐκ λόγου ἀφελεῖν) and (3) *Scholia on Nicomachus*. Comparing the compendiousness of these texts, Riedlberger presents a prolific commentary and an exceptional introduction to bring into some of the crucial questions on the apprehension of Domninus from Tannery's biased view into the recent scholarship¹.

By scrupulously following the extant evidence Riedlberger demonstrates that the entrenched view about Domninus that he is an "Euclidean maverick" who rejected the arithmetic of Nicomachus does not stand upon either firm ground or a scientific foundation. This accurate pursuit starts from the beginning of the book and extends to the end of the commentary.

The introduction has five separate, mutually complementary parts. These parts provide two main prerequisites both for the readers and for the author. Firstly, it is a proper prologue to make the reception of the texts easier both for the readers who are generally familiar with Greek literature but not with the ancient mathematics and those readers who are generally familiar with mathematics but not with Greek literature. Secondly, it also has a well-established discursive demonstration to expose Riedlberger's arguments on Domninus' aims as a mathematician/philosopher and his position in the *Encheiridion* step by step.

In the first part of the introduction which is on the "cultural backdrop" (19-41), Riedlberger focuses on the school of Athens and the philosophical curriculum as a background of the shadowy life of Domninus of Larissa which evidently shows that he was not only a "maverick mathematician" in his milieu but also an active philosopher in the philosophical school he belonged to. Riedlberger (34ff.) cogently shows that the mathematical interests of the late Platonic philosophers, an intellectual group that Domninus was also part of, have roots that go far back to their traditional philosophical points of view (especially on teaching practices among the students of late Platonic philosophy).

In the second part of the introduction, which is a close examination of *testimonia* on Domninus (43-64), Riedlberger argues that Domninus does not appear as an exceptional figure among the other late Platonist philosophers, specifically when compared to Proclus who is certainly one of the most brilliant intellectuals in Domninus' milieu. Due to this investigation

¹ Cf. P. Tannery, "Domninos de Larissa", *Mémoires scientifiques. II. Sciences exactes dans l'antiquité. 1883-1898*, ed. Johan Ludvig Heiberg, Toulouse 1912, 105-117; W.L. Gombocz, *Geschichte der Philosophie. IV. Die Philosophie der ausgehenden Antike und des frühen Mittelalters*, Munich 1997, 206; S. Cuomo, *Ancient Mathematics*, London 2001, 237.

of Riedlberger, if there was a “certain esteem” (40) for Euclid at the school of Athens in the 5th century A.D., Domninus might have had the same attitude as a member of the school, but there is no evidence that Domninus belonged to the Euclidean tradition any more than his fellow disciples.

In the third part of the introduction which is on Domninus’ works (65–90), Riedlberger tries to reconstruct Domninus’ image by examining “his” works closely, not only the extant ones, but also the works of which we have only the titles. After discussing these lost works (*Commentary on Plato’s Timaeus*, *Commentary on Aristotle’s Sophistical Refutations*), he goes on to *Arithmetical Stoicheiosis*, which is mentioned by Domninus himself at the end of the *Encheiridion*. At the end of this discussion Riedlberger concludes that we cannot even be sure whether *Arithmetical Stoicheiosis* was actually composed by Domninus himself.

The subsection on *Encheiridion* in the third part of the introduction (72–77) places this important source about Domninus in question: “what can the *Encheiridion* tell us about Domninus the mathematician? Virtually nothing, actually” (77). Because of the common approaches in opposition to Domninus, Riedlberger indicates that Euclid was only one of the main sources of Domninus’ mathematical demonstration, while Nicomachus’ *Introductio Arithmetica* must have been the most important of these sources. Putting aside the prevailing claim that Domninus’ *Encheiridion* is a rebuttal of Nicomachus’ mathematical approaches, he even suggests that it was an *epitoma* of Nicomachus’ *Introductio*. Riedlberger testifies to this argument with the full title of the *Encheiridion*: Ἐγχειρίδιον ἀριθμητικῆς εἰσαγωγῆς. As argued by Riedlberger (73–74), if the word ἐγχειρίδιον denotes a “booklet” or “pocketbook”, instead of a “manual, handbook”, it would be “a very condensed introduction to the basic notions of ancient Greek arithmetic” based on Nicomachus’ popular work in Domninus’ milieu, namely ἀριθμητικὴ εἰσαγωγή. In the subsection on *How to* of the third part of the introduction (77–83), Riedlberger examines closely the references of the scholars that argue *How to* can be attributed to Domninus of Larissa. He concludes that the extant evidence is not sufficient to assume that this work belongs to Domninus, although authors of both *How to* and Domninus seem to cherish Euclid in some way. The following subsection which is on *Scholia on Nicomachus*, a title devised by Riedlberger himself, has no basis in the manuscript (83–88). He emphasizes the reason for publishing these two texts with the *Encheiridion*: “proving their spuriousness was only possible on the basis of a careful study” (83). In this “careful study” Riedlberger not only tries to examine the origins of these spurious texts, but also challenges us to find a more reliable basis for evaluating scientifically Domninus of Larissa and his work *Encheiridion*. In the last subsection of the third part of the introduction, which is on a transmitted ancient text that is entitled κεφάλαια τῶν ὀπτικῶν

ὑποθέσεων (88-90), Riedlberger states his sceptical approaches concerning the authorship of the text. Riedlberger does not present a critical edition of this text; namely *Summaries of the Principles of Optics*, for two reasons: (1) this work was not linked by scholarly tradition to Domninus of Larissa, (2) a new edition of the *Summaries* is to be published soon by Fabio Acerbi.

In the fourth part of the introduction, which is a general “appraisal” (91-2), Riedlberger presents the inferences of his research on Domninus. His picture of Domninus is quite different from the common scholarly assumptions that he was “a scientifically-minded, possibly Jewish, maverick philosopher” who implied that “serious science brought him into conflict with his colleagues” (91). On the contrary, Riedlberger states that there is “no evidence for a Jewish extraction” (91; cf. 53-55), Domninus represented a “typical picture of a late Platonic philosopher,” not of a maverick not one, who prefers Euclidean definitions to those found in Nicomachus except in a few cases only but following Nicomachus rather than Euclid. These scholarly challenging conclusions enable the readers to readily and thoroughly encounter the critical editions, that is with the right questions in mind about Domninus and his work.

In the fifth part of the introduction, which is a *prolegomena* to the editions (93-106), Riedlberger presents the history of the critical editions of the *Encheiridion* from the *editio princeps* of Boissonade², and criticises the previous editions. He clearly criticises Romano’s edition (see fn. 6) in particular because of his “unusual rules of enclitic accentuation,” and “unfortunate mistakes” in his apparatus (94)³. As he himself declares, Riedlberger’s studies on Πῶς ἔστι λόγον ἐκ λόγου ἀφελεῖν ensue one single edition published in 1883 by Ruelle with a French translation, and the more recent English translation of Knorr in 1989⁴. The third text is a part of the *scholia* on Nicomachus of Gerasa that comes after *How to* in the manuscript Paris. gr. 2531. This text does not even have a title and Riedlberger’s edition is an *editio princeps* of this short *scholia*.

I have not checked the text against all manuscripts, but benefiting from the fact that I am living in Istanbul, I had the opportunity to examine

² J. F. Boissonade [de Fontarabie], “Δομνίνου φιλοσόφου Λαρισσαίου ἐγχειρίδιον ἀριθμητικῆς εἰσαγωγῆς”, *Anecdota Graeca e codicibus regiis*, Vol. IV, Paris 1832, 413-429.

³ While Romano for his mistakes in the critical edition and some omissions in his arguments (for example see p. 141, fn. 245, p. 147-149, p. 161, p. 175 fn. 325, p. 177-178, p. 186) criticized or his preferences are suspected (for example see p. 195) by Riedlberger, while he objectively gives credit to Romano where it is due in the commentary on *Encheiridion* (for example see p. 140, p. 157 fn. 290, p. 165).

⁴ C.-É. Ruelle, “Texte inédit de Domninus de Larisse sur l’arithmétique avec traduction et commentaire”, *Revue des philologie, de littérature et d’histoire anciennes* 7, 1883, 82-94; W. R. Knorr, “On Eutocius: a thesis of J. Mogenet”, *Textual studies in ancient and medieval geometry*, Boston 1989, 155-211.

the original manuscript Chalcensis Panagia 157 (abbreviated K)⁵. According to the results of this examination, I should admit that Riedlberger's edition and *apparatus criticus* are clinically accurate. This modest proof is just one of the indicators displaying the preciseness of the critical editions of the book.

Riedlberger's translation of the *Encheiridion* is the fourth modern translation of Domninus' work into Western languages, the first published in 1906, the other two in 2000⁶. Riedlberger's translation is evidence of his exacting point of view in reconstructing the texts scientifically, and for this reason it evidently has a literal disposition. He often corrects the ambiguous phrases in the translations of Tannery, Romano, as well as that of Brown himself accepted these corrections⁷. As he reflects, this book is hardly "perused by non-specialists" and the translations of the Domninus' works are "intended for readers familiar with basic concepts of ancient Greek mathematics" (105). Although this fact is still in force, the fully developed commentary, which follows the edited texts, provides "non-specialists" with the essential information concerning ancient number theory to make them feel at home. In this detailed running commentary, Riedlberger consolidates his general judgements of Domninus and his work by comprehensively comparing Nicomachus of Gerasa, Euclid, Theon of Smyrna, and other eminent ancient mathematicians to one another. Presenting philological and lexical notes to explain both the philosophical and mathematical aspects of basic concepts of ancient number theory he also clarifies some essential distinctions in this field of study. He strengthens his main arguments with evidence from the other two editions of spurious works. His comments on these two spurious works pave the way for grasping the intellectual environment of Domninus. So it is well formulated by Riedlberger as to why the readers need to work through these two

⁵ I would like to express my gratitude to the librarian Georgios Benlisoy, the supervisor of the library Archimandrite Agathangelos Siskos for his kind help, and His All Holiness Bartholomew for his grand beneficence in the Library of the Οἰκουµενικὸν Πατριαρχεῖον.

⁶ The first translation was published by Tannery in French in 1906: P. Tannery, "The manuel d'introduction arithmétique de philosophe Domninos de Larissa. Traduction par Paul Tannery", *Mémoires scientifiques. III. Sciences exactes dans l'antiquité. 1899-1913*, ed. Johan Ludvig Heiberg, Toulouse 1915, 255-88. In the nearer past, one of the translations in Italian appeared in a monograph on Domninus with an edition of the *Encheiridion*: F. Romano, *Domnino di Larissa. La svolta impossibile della filosofia matematica neoplatonica*, Catania 2000. The other was an English translation of the same work with an introduction and notes published in the same year: P. Brown, "The *Manual* of Domninus", *Harv. Rev. Philos.* 8, 2000, 82-100.

⁷ P. G. Brown, "Peter Riedlberger, *Domninus of Larissa. Encheiridion and spurious works. Introduction, critical text, English translation, and commentary*. *Mathematica Graeca Antiqua Bd. 2*. Pisa/Roma: Fabrizio Serra 2013, 279 S." *GFA* 16, 2013, 1253.

other texts to grasp the inner significance of Domninus' philosophical and mathematical points of view through cutting loose from the biased scholarly views of this late Platonic philosopher.

At the end, the book has a full bibliography and three very functional indices: two of them in Greek; an *index locorum*, and an *index verborum*, the last is a general index in English. These indices facilitate following the editions as well as Riedlberger's commentary with ease. Consequently, Dr. Dr. Riedlberger presents a complete and authoritative edition of the *Encheiridion* of Domninus which most probably will become the standard edition of these texts for many years to come.

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