From Poetics to Mathematics: Vicente Mariner's Latin Translation of Proclus' *In Euclidem*

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Abstract: This paper discusses the 17th-century Latin translation of Proclus' *Commentary on the First Book of Euclid's Elements*, preserved in Madrid, Biblioteca Nacional de España, MS 9871, produced by the Spaniard Vicente Mariner. The author examines the historical context, sources, and motivations behind Mariner's translation, his intellectual profile, and the potential reasons for translating a mathematical text given his background in literature. Via a comparison of Mariner's text with the original Greek, this paper delves into Mariner's translation choices and linguistic nuances to highlight the challenges he faced while translating it. Transcriptions of the collated passage both from Grynaeus' 1533 *editio princeps* of Proclus' text and Mariner's manuscript are provided in the Appendix. Overall, this paper attempts to shed light on Mariner's contribution to the Latin reception of Proclus' work in the early modern period.

Keywords: Vicente Mariner; Proclus; Euclid; mathematics in early modern Spain.

1. Introduction

The goal of this paper is to offer an introductory account to the Spaniard Hellenist and translator Vicente Mariner's (ob. 1642) Latin translation of Proclus' *Commentary on the First Book of Euclid's Elements* (= *In Euclidem*). Thus, this study intends to contribute to our understanding of the 16th- and 17th-century Latin reception of this text by examining a hitherto overlooked translation of Proclus' text. Mariner's rendering has been preserved in Madrid, Biblioteca Nacional de España, MS 9871, p. 45–299.[1]

1 Digitised at https://bdh-rd.bne.es/viewer.vm?id=0000050702&page=1 (accessed 15 March 2024).

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Recent scholarship has emphasised the remarkable role played by Proclus' text in 16th-century mathematical and philosophical culture and uncovered the ways its contents were transmitted.[2] Published by Simon Grynaeus in 1533 in the same volume as the *editio princeps* of Euclid's *Elementa*, *In Euclidem* was entirely translated into Latin at least three times in the 16th-century: by Bartolomeo Zamberti (1473–1543), by Giovanni Battista Gabia (c. 1500–1590), and by Francesco Barozzi (1537–1604). Of these three translations, only the last one knew a printed edition in 1560. Thus, the spreading of Proclus' *In Euclidem* through the printing-press occurred through these two editions: the deficient Greek text of Grynaeus (which takes as its source a single manuscript, Oxford, Corpus Christi College Library, MS 97), and the Latin version of Barozzi who, unsatisfied with the text of Grynaeus, undertook the endeavour of reconstructing Proclus' text by collating no fewer than five manuscripts,[3] and used the resulting, refined Greek version as the basis for his translation. Nevertheless, it must be emphasised that through Grynaeus' edition every scholar acquiring the Greek text of Euclid's *Elementa* would also have access to Proclus' commentary as a guiding text. Thus, Grynaeus' edition can be rightfully considered as the main 16th-century source in the spreading of the Greek *In Euclidem*, reaching figures such as Johannes Kepler.

Proclus' commentary permeated mathematical culture in a variety of ways: as a source of the history of mathematics, as a lexicon for the Euclidean terminology and, generally, as guide to read and question the *Elementa*, as an inventory of arguments for producing apologies and encomia on the epistemic value and usefulness of mathematical disciplines, and as the source of a rather unconventional (anti-subtractionist, innatist, projectionist) philosophy

2 Rose 1975, 46–105; Campillo Bo 2023, 193–278; Karfík, Adamson 2016, 290–332; Claessens 2018; Claessens 2011; Rabouin 2007, 217–235; Higashi 2007, 31–52; Higashi 2018; Helbing 1998, 173–193; Maieru 1999, 49–68; Oosterhoff 2018; De Pace 1993.

3 Rose 1977, 127–128.

of mathematics. Regarding its impact on mathematical texts, the editions of Euclid's *Elementa* such as those of Federico Commandino (1509–1575), and the influential editions (1574, 1589) of the Jesuit Christopher Clavius (1538–1612) incorporated insight gained from Proclus' text.[4] The presence of Proclus' commentary is also retreacable in the 16th-century tradition of commentary on the *Elementa*, in authors such as Oronce Fine (1494–1555), François de Foix-Candale (1512–1594), or Henry Billingsley (1538–1606).[5]

In Euclidem also had an impact in university teaching ever since the 16th-century: Barozzi himself lectured on Proclus' text as a professor of mathematics in the university of Padua in 1560 (arguably, the first case of a university course about *In Euclidem*), and figures from Jerónimo Muñoz (1520–1591) and Conrad Dasypodius (1532–1600) to Isaac Barrow (1630–1677) made use of Proclus' commentary as a source for their mathematical teachings.

In the following pages, I shall provide an account of Vicente Mariner's translation, paying attention to Mariner's life and intellectual profile (section 2), and to some traits of his Latin rendering of Proclus' *In Euclidem* (section 3 and subsection 3.1), including his Greek source, the translator's views on Proclus, as well as his possible motivations.

2. Vicente Mariner's life and intellectual profile

Vicente Mariner was born at the end of the 16th-century in the city of Valencia, from a family of Sicilian origin.[6] He studied at the local university, where he was already recognised for his mastery in ancient languages as well as his ease in both Latin and Greek composition. There is some evidence that he

4 De Risi 2018, 9–11.
5 Axworthy 2021.
6 García de Paso Carrasco, Rodríguez Herrera 1996, 11.

was ordained as a priest. As was common amongst the Spanish humanists, Mariner made a life mostly of private preceptorship. He became a teacher and librarian linked to the noble house of Sandoval, working for the dukes of Uceda and Cea. His connections to the Spanish nobility would lead him to Madrid by 1610/12, where he partook in the erudite circles surrounding the imperial court. There, Mariner rapidly became acquainted with kindred spirits who valued his expertise in translation and poetical composition. Amongst Mariner's literary friendships the renowned writers Francisco de Quevedo (1580–1645) and Lope de Vega (1562–1635) deserve to be mentioned. As we know from their dedicated poems, both Quevedo and Lope held in high regard Mariner's literary skills, and both deplored the misfortunes in the Valentinian's publishing attempts as well as his undeserved lack of recognition and patronage.[7]

Mariner was appointed as the librarian of the Royal Library of San Lorenzo de El Escorial, although the exact date of his appointment is unknown. This position provided him with access to one of the most extensive collections of Greek manuscripts in the Iberian Peninsula, a chance that Mariner used for producing an astonishing number of translations from the Greek both into Latin and his vernacular Spanish. In 1630 Mariner himself wrote an index of his works up to that date: a valuable source for obtaining some insight into his fields of interest and philological activities.[8] Some of the Greek works translated into Latin referenced in this list are Homer's *Ilias* (Madrid, Biblioteca Nacional, MSS 11514, 9859, and 9860) and the *Odyssea* (*ibid.* MSS 9861 and 9862), the *Batrachomyomachia* (*ibid.* MSS 9803 and 9972)

7 For Mariner's biographical information, I follow García de Paso Carrasco, Rodríguez Herrera 1996, 11–33.

8 For a transcription of Mariner's index see De Andrés Castellanos 1988, 272–281. For an updated catalogue of Mariner's works, see García de Paso Carrasco, Rodríguez Herrera 1996, 48–59.

and all the Homeric *Hymni*, all the works of Hesiod (*ibid.* MS 9865), all Pindar (*ibid.* MS 9866), all Theocritus (*ibid.* MS 9870), and all Lycophron (*ibid.* MS 9869), as well as many commentaries and scholia on Homer such as those of Eustathius of Thessalonica (*ibid.* MSS 11514, 9859, 9861, and 9862) Didymus (*ibid.* MSS 9863, 9864, and Salamanca, Biblioteca Universitaria, MS 2562), Johannes Tzetzes (*ibid.*, MS VII, A, 5). Amongst the philosophical and scientific works enumerated by Mariner we can find some works of Hippocrates (lost), Porphyry's *Quaestiones Homericae* (Madrid, Biblioteca Nacional, MSS 9807 and 9971) and *De antro nympharum* (*ibid.* MSS 9807 and 9971), Georgius Ghemistius Plethon's *De virtutibus*, and Emperor Iulian's *Encomium Solis* (both lost). Mariner also lists his translations into vernacular Spanish of Aristotle's works, a remarkable production in vernacular to be numbered amongst some of the first in the Western world to which scholarship has not been devoted as of yet. Mariner rendered into Spanish almost the entire *corpus Aristotelicum* including *Organon* (*ibid.* MS 9795), *Physica*, *Meteora*, *De anima*, *De generatione et corruptione* (*ibid.* MS 9872), *Historia animalium*, *De partibus animalium* (*ibid.* MS 9873), *Rhetorica*, and *Poetica* (*ibid.* MS 9973). In his index, he also refers to his own original poetical and historical production, including a *Historia de rebus gestis Ferdinandi et Isabellae regum catholicorum* and numerous panegyrics, hymns, and poems.

Mariner's list of his own works is neither exhaustive nor precise and many translations and original works of his are not included or specified. His translation of Proclus' *In Euclidem* is not numbered on the catalogue, for it would be finished later in Mariner's life (see below).

Amongst Mariner's few published works we can find a number of Latin and Spanish encomia to public figures such as *Panegyris ad serenissimum Carolum Stubardum* (Madrid, 1623); *Panegyris ad Ferdinandum ab Austria His-*

paniarum infantem (Madrid, 1624); *In varias virtutum dotes at thaumata B. Francisci Borgiadae ducis Gandiae* (Madrid, 1625); *Dicurso a Don Ivan Idiaques y de Isacio* (Madrid, 1636); a curious collection of philosophical poems entitled *Melodimata Platonica, Diogenica, Theophrastica, Aristotelica* (Madrid, 1635) and a lengthy (but yet incomplete) collection of his poems and discourses in his *Opera omnia poetica et oratoria in IX libros divisa* (Turnoy, 1633).[9]

Nonetheless, the greater part of his output remain unpublished: Mariner's life was marked by the unsuccessful search of a stable patron who would support him in editing his abundant corpus. The only known figure who financially aided the Valentinian in some of his publications is Francisco de Quevedo himself.

A great deal of Mariner's manuscripts has survived for us, though. At the end of his life, Mariner retired to the convent of Trinitarios descalzos in Madrid and brought with him his collection of volumes. After his death in 1642, the collection came into the possession of the friars. Upon the counsel of the prestigious humanist Juan de Iriarte (1702–1771), who re-discovered Mariner's almost forgotten manuscripts stored in the convent, the remains of the collection (33 codices) were acquired by the Royal Library of Madrid in 1768.[10] Amongst those unpublished works, Mariner's translation of Proclus' *In Euclidem* is to be found.

3. MS 9871 and the Latin translation of Proclus' *In Euclidem*

Mariner's translation of *In Euclidem* is preserved in Madrid, Biblioteca Nacional de España, MS 9871. This codex can be divided in four parts, each of

9 MARINER 1623; MARINER 1624; MARINER 1625; MARINER 1633; MARINER 1635; MARINER 1636.

10 DE ANDRÉS CASTELLANOS 1988, 273.

which has independent pagination. For simplicity's sake, I shall indicate this pagination instead of the manuscript folia. The first part (p. II–IIIv) consists of Mariner's dedicatory *Praefatio* and acknowledgments to a potential patron from whom he hoped to obtain financial support for editing Proclus; the second one (p. 1–37) is a Latin translation of Marinus Neapolitanus' *Vita Procli*; the third, and odd one (p. 38–43 within *Vita Procli*), contains a Latin rendition of Gorgias' *Helenes encomium*; the last one (p. 45–299) is the complete Latin translation (the two prologues and the two books) of Proclus' commentary with no diagrams. Arguably, the volume was intended to be published in a similar form (perhaps with the exception of the *Encomium*, which might be a later addition in the remaining blank folia): it would be a Latin rendering of *In Euclidem* preceded by the translator's preface and Marinus' biography of Proclus.

The preface offers some insight on Mariner's intended patronage for printing the work. There he opens as follows:

> Ad illustrissimum et doctissimum Abbatem Dominum Martinum Lafarinam Siculum, musarum decus et ornamentum, Vincentii Marinerii Valentini regii bibliothecarii praefatio.
>
> Non est tanta in hominum ingeniis facultas, non tantus dicendi lepor in linguis doctorum, ut facile nunc possint vel dicendo recensere laudes, vel enumerare laudando. Ubi namque te Sophiae virtus extollit et variis imbuit disciplinis, nequeunt mentis vires tantum prescribere lumen, nec vocibus effundere progressus quos semper felicissima indole tua, domine Martine, generosissime perfecisti, peregisti, complevisti.[11]

The dedication is directed to Martino Lafarina (ob. 1668), Archbishop of the prelature of Santa Lucia del Mela, renowned scholar and protector of the letters who was perhaps known to Mariner because of his family links to Si-

11 MS 9871, *Praefatio*, p. II, l. 1–14.

cily.[12] Also worthy to remember is that, at the time, the Kingdom Sicily was under the rule of the Spanish monarch and, thus, that Sicilian political and cultural personalities such as Lafarina might have had some presence at Philipp IV's (1605–1665) court.

Proclus himself is mentioned in the last part of the *Praefatio*:

> Hoc oro, Martine doctissime, ut non solum doctissimum Proclum accipias, quem ad te, alium nempe Proclum, emitto, sed ut me tuis doctissimis et vigilantibus intuearis oculis, pertingas manibus, favoribus evehas. Sic etenim vivet opus tuo fultum patrocinio, et tuo nomine illustratum extolletur, et his lit‹t›eris emendantibus exclarescet imbutum.[13]

Mariner praises here the erudition of Proclus, considering that comparing his potential patron to the Diadochus (whom he names 'another Proclus' – *alium Proclum*) is a flattering compliment.

Further tokens of the high esteem in which Mariner held Proclus can be found in p. 43 after *Vita Procli*. There Mariner closes this section with a short composition in hexameters dedicated to Proclus, touching upon the *loci communes* of immortality through wisdom (personified as *Sophiae*) as well as through the achievement of good-deserved fame:

> Vincentii Marinerii Valentini regii bibliothecarii carmina:
> Quae scripsit Proclus, quae et fecit, vixit, ut ipse
> Vivere perpetuo saecli sub tempore dico.
> Namque mori nequeunt Sophiae, quae termine vivunt,
> Et quae mentis habent viventia robora doctae.
> Auget enim doctam felix sapientia vitam,
> Sic ut non illam fatum corrumpere possit.
> Dente nequit mordere quidem insuperabile fatum
> Quos doctrina suo magno sub tegmine condit,
> Et quos vivaci famae vehit aura boatu.

12 SCIORTINO 2019(1); SCIORTINO 2019(2).
13 MS 9871, *Praefatio* p. IIIv, l. 7–13.

Nam non fama silet quos gesta ingentia tollunt,
Et quos digna sono iuris tuba continet alto,
Non cessare potest virtutis namque volatus.[14]

Mariner also provides the dates on which he finished the translation on p. 37 and p. 43: the 23/4 of June of 1639. The distance of one day between the two dates suggests that Mariner completed Marinus' translation and added the poem the next day. Thus, Mariner produced the translation of *Vita Procli* after translating *In Euclidem*, whose completion is indicated in p. 264 on the 12th of July 1638.

The most likely Greek sources for the Latin translation of *Vita Procli* are the manuscripts of this work preserved at Greek collection of El Escorial, namely MSS Γ. IV. 21; I. 10, and Φ. II. 12, easily available to Mariner as royal librarian.

Regarding Mariner's Latin translation of *In Euclidem*, evidence can be provided showing that the Valentinian used the 1533 text of Grynaeus' *editio princeps* as his sole Greek source.

Firstly, Mariner's Latin version inherited some of the *lacunae* present in Grynaeus' edition. When dating Euclid, Proclus cites the famous anecdote of King Ptolemy questioning Euclid for a more expedient way to acquire geometrical knowledge. Grynaeus' text shows a gap in this section; it reads:

[…] φασιν ὅτι Πτολεμαῖος ἤρετο ποτὲ αὐτὸν εἰ τίς ἐστι περὶ γεωμετρίαν [*lacuna*]. νεώτερος μὲν οὖν ἐστι τῶν περὶ Πλάτωνα, πρεσβύτερος δὲ Ἐρατοσθένους καὶ Ἀρχιμήδους.[15]

Friedlein's restored text has:

14 MS 9871, *Vita Procli*, p. 43, l. 17–30
15 EUCLID, PROCLUS 1533, *In Euclidem*, 20, l. 4–6.

> […] φασιν ὅτι Πτολεμαῖος ἤρετό ποτε αὐτόν, εἰ τίς ἐστιν περὶ γεωμετρίαν ὁδὸς συντομωτέρα τῆς στοιχειώσεως. ὁ δὲ ἀπεκρίνατο, μὴ εἶναι βασιλικὴν ἀτραπὸν ἐπὶ γεωμετρίαν. νεώτερος μὲν οὖν ἐστι τῶν περὶ Πλάτωνα, πρεσβύτερος δὲ Ἐρατοσθένους καὶ Ἀρχιμήδους.[16]

And Mariner translates as follows:

> Dicunt enim Ptolomaeum dixisse aliquando si se exerceret circa geometriam. Recentior igitur est ipso Platone et antiquior Eratosthene et Archimede.[17]

From this, it is clear that the Valentinian tried to make sense of the Grynaeus' passage adding the term *excerceret* without making reference to a corresponding Greek term.

Another important *lacuna* in Grynaeus' edition is in the passage that corresponds to the end of the second prologue and the beginning of the first book. When reaching what should be the end of the second prologue on p. 24, l. 5 (corresponding to p. 82, l. 23 in Friedlein's edition) there is a gap of 4 pages in the middle of the sentence: "τὸ οὖν ἰσόπλευρον [*lacuna*] μὴ εἰς ἄπειρον ἐκταθῇ μέγεθος […]." The second part of this sentence corresponds to p. 86, l. 17 in Friedlein's text. This means that Grynaeus' version leaps without any sort of discontinuity from Proclus' second prologue to the commentary on definition I (skipping the definition of the point itself) in the first book, providing thereby a continuous text up to the commentary on definition XXXV. Only at this point (Grynaeus' p. 49, Friedlein's p. 177, l. 25) the *editio princeps* begins its 'third book' – Proclus' two prologues were considered independent books and numbered as such. Mariner's Latin translation shows the same continuous structure. On p. 54, l.31–p. 55, l.1 he trans-

16 PROCLUS 1874, 68, l. 13–18.
17 MS 9871, *In Euclidem*, p. 88, l. 21–25.

lates: "Igitur isopleurum non in infinitam magnitudinem extensum est." Mariner then, preserving Grynaeus' expansion of Proclus' second prologue, goes on up to the last definition, after which (p. 116 in the manuscript) he also finishes the book.

Another hint is Mariner's inclusion of marginal titles in the manuscript. Grynaeus proposed marginal indications of the arguments contained in the text both in Latin and Greek as an aid to the reader, more abundantly found in the sections corresponding to the two prologues. Mariner preserved most of Grynaeus' titles in the margins all through his translation, transcribing them in the appropriate passages. Some examples are:

Grynaeus' marginal title	**Page in Grynaeus' editio princeps**	**Page in MS 9871**
Communia mathematicae principia	p. 2, l. 21	p. 3, l. 27
Quae vis animi iudicet mathematicen	p. 3, l. 18	p. 6, l. 12
Certitudo huic generi unde	p. 3, l. 48	p. 8, l. 8
Termini quales ἐν τοῖς νοητοῖς καὶ μεριστοῖς	p. 24, l.10	p. 55, l. 9

Regarding Mariner's Latin prose and ways of rendering the Greek text into Latin, I offer some notes based on the inspection of a selected sample: p. 51 to p. 56 of Mariner's manuscript (the reader will find a transcription in the Appendix), corresponding to p. 12, l. 2 to p. 18, l. 4 in Friedlein's edition and p. 3, l. 41 to 5, l. 23 (find transcription also in the Appendix). This is the pivotal passage also translated by Johannes Kepler in book III of his *Harmonice mundi* (1619) where Proclus sustains that mathematics is not learned through and, thus, posterior to and derivative from sensible quantitative traits, but that it is a prior knowledge inborne to the soul, which in no way is a blank slate. I of-

fer 65 *loci* from this passage for the collation (I indicate in the table whenever Friedlein's text differs from that of Grynaeus):

Numbered *loci*	***In Euclidem*, Friedlein's page**	**Proclus' Greek**	**MS 9871, *In Euclidem*'s page**	**Mariner's Latin**
1	p. 12, l. 3	οὐσίαν	p. 7, l. 26	naturam
2	p. 12, l. 6	ἀφαίρεσιν	p. 7, l. 28	apheresim et detractionem
3	p. 12, l. 5	ὑπόστασιν	p. 8, l. 1	suppositio
4	p. 12, l. 11	ὑποστῆναι	p. 8, l. 3	superesse et constitui
5	p. 12, l. 14	ἀκρίβεια	p. 8, l. 6	absoluta ratio
6	p. 12, l. 17	ἀκρίβεια	p. 8, l. 9	perfectionis
7	p. 12, l. 18	μὴ ἀκριβέσι	p. 8, l. 10	exactionem
8	p. 12, l. 19	τὸ ἀκριβές	p. 8, l. 11	exactionem
9	p. 12, l. 19	προστιθείσης	p. 8, l. 11	apponit et exhibet
10	p. 13, l. 1	οὐσίαν	p. 8, l. 21	naturam
11	p. 13, l. 2	οὐσιῶν	p. 8, l. 22	substantiis
12	p. 13, l. 2	ὑφιστάμενον	p. 8, l. 22	constitutum
13	p. 13, l. 2	ὕπαρξιν	p. 8, l. 22	subsistentiam
14	p. 13, l. 3	τοῖς ἀκριβέσιν	p. 8, l. 23	perfectis
15	p. 13, l. 5	ἀκρίβειαν	p. 8, l. 22–23	perfectionem
16	p. 13, l. 8–9	παραδείγματα	p. 8, l. 26–27	paradigmata et exemplaria
17	p. 13, l. 9	οὐσίαν	p. 8, l. 27	substantiam
18	p. 13, l. 11	προβολαί	p. 8, l. 28	obiecta
19	p. 13, l. 12	οὐσίαν	p. 8, l. 29–30	naturam
20	p. 13, l. 15	διακρίνειν	p. 9, l. 3	iudicare et discernere
21	p. 13, l. 16	γόνιμα	p. 9, l. 4	legitima et innata
22	p. 13, l. 19	οὐσίαν	p. 9, l. 6	naturam
23	p. 13, l. 20	ὑπόστασιν	p. 9, l. 8	supposition-em
24	p. 13, l. 22–23	ὑφίστησιν	p. 9, l. 11	constituit

25	p. 14, l. 10	οὐσία	p. 9, l. 23	natura
26	p. 14, l. 19	φύσει	p. 9, l. 31	natura
27	p. 14, l. 21	ὑστερογενῆ	p. 10, l. 1–2	ea quae posterius ingenerantur et educuntur
28	p. 14, l. 26	οὐσιώδη	p. 10, l. 4	substantialia
29	p. 14, l. 26	τὰ […] ὄντα	p. 10, l. 4	*quae* […] *subsistunt*
30	p. 14, l. 27	φύσεως	p. 10, l. 5	natura
31	p. 15, l. 1	ὑστερογενεῖς	p. 10, l. 6	postremo eductas et ingenitas
32	p. 15, l. 2	οὐσίαν (οὐσίας in Grynaeus)	p. 10, l. 7	naturas
33	p. 15, l. 3	φύσιν	p. 10, l. 8	naturam
34	p. 15, l. 8	ὑφισταμένων	p. 10, l. 12	subsistunt
35	p. 15, l. 9	οὐσίαν	p. 10, l. 13	natura
36	p. 15, l. 10	οὐσίας	p. 10, l. 20	naturae
37	p. 15, l. 12	ὑποδοχή	p. 10, l. 21	susceptio et receptaculum
38	p. 15, l. 13	τὸ εἶναι	p. 10, l. 22	susbtantiam
39	p. 15, l. 16	ἀφαίρεσιν	p. 10, l. 24	ablationem
40	p. 15, l. 18	ὑστερογενῆ	p. 10, l. 26–27	postremo genitae
41	p. 16, l. 2	ὑπόστασιν	p. 10, l. 35	suppositionem
42	p. 16, l. 7	ὑφισταμένων	p. 10, l. 40	subsistunt
43	p. 16, l. 9	γραμματεῖον	p. 10, l. 41	tabella et libellus
44	p. 16, l. 10	γράφον	p. 11, l. 1	inscribens et delineans
45	p. 16, l. 15	εἰκονικῶς	p. 11, l. 5–6	repraesentative et sub imaginibus
46	p. 16, l. 16–17	ὑφίστησι	p. 11, l. 7	constituit
47	p. 16, l. 20	σχημάτων	p. 11, l. 9	habituum
48	p. 16, l. 24	σχημάτων	p. 11, l. 12	habitus
49	p. 16, l. 26–27	δεδημιούργη	p. 11, l. 15	compingun-

		ται		tur et confi-ciuntur
50	p. 16, l. 27	πλήρωμα	p. 11, l. 15	complement-um
51	p. 17, l. 1	παράγων	p. 11, l. 16–17	agitans et de-ducens
52	p. 17, l. 3	πληρούμενος	p. 11, l. 18	completus et plenus
53	p. 17, l. 4	ἀδιαστάτως	p. 11, l. 18–19	sine intervallo et distantia
54	p. 17, l. 4	προβάλλῃ	p. 11, l. 19	proiecerit
55	p. 17, l. 5	προφαίνει	p. 11, l. 20	manifestat et praemunit
56	p. 17, l. 6	οὐσίωται (οὐσιοῦται in Grynaeus)	p. 11, l. 22	substantiatur
57	p. 17, l. 7	τὸν ἀριθμόν	p. 11, l. 20	*omnia* (Mari-ner probably misread [Grynaeus, p. 5 l. 20] and took πάντα in the next line, l. 21)
58	p. 17, l. 12–13	δημιουργίαν	p. 11, l. 27–28	opificium et fabricam
59	p. 17, l. 14	ἱδρύσαντι	p. 11, l. 29	constituit et collocat
60	p. 17, l. 18	προϋφεστήκασι	p. 11, l. 30–31	proponunt et subsistunt
61	p. 17, l. 18	σχημάτων	p. 11, l. 31	habituum
62	p. 17, l. 24	προβάλλουσα	p. 11, l. 36	profert
63	p. 17, l. 25–26	ὑφίστησι	p. 12, l. 2	substituens
64	p. 18, l. 3	ἐκ τῶν	p. 12, l. 5	*extrinsecus* (Mariner read ἐκτός)
65	p. 18, l 4	προβολάς	p. 12, l. 6	obiecta

Firstly, we find that Mariner's choice of Latin terms is not always consistent: he uses various Latin terms for translating the same Greek terms or the same Latin term for different Greek words. This promiscuity notably blurs philosophical terminology. For instance, οὐσία is mostly rendered as *natura* (*loci* 1, 10, 19, 22, 25, 32, 35, 36), but in other occasions as *substantia* (11, 17). Nevertheless, φύσις is also (and in every case) translated as *natura* (26, 30, 33), whereas οὐσιώδη (28) is rendered as *substantialia*, the verbal form οὐσιοῦται as *substantiatur* (56), and τὸ εἶναι also as *substantia* (38). This causes a terminological imprecision that makes it difficult to pick up the exact philosophical meaning of Proclus' text from Mariner's Latin.

Another case is that of ἀφαίρεσις: it is rendered as *apheresis et detractio* (2) and as *ablatio* (39). The term ἀκρίβεια (and related) is translated in three ways: *absoluta ratio* (5), *perfectio/perfectum* (6, 14, 15), *exactio* (7, 8). Additionally, the same term is referred to as *certitudo* in the marginal note (see above), making a total of four Latin different translations for the same Greek root ἀκριβ-. The different conjugated forms of ὑφίστημι are also rendered as *constituere* (12, 24, 46), *subsistere* (34, 42), and *substituere* (63). ὑπόστασις, in its behalf, is rendered as *suppositio* (3, 23, 42) whereas its origin verb ὑποστῆναι is translated as *superesse et constitui* (4).

Following the Latin tradition of rendering complex Greek terms (or perhaps those without equivalents in Latin), Mariner abundantly adopts hendiadys for translating single Greek terms. Some examples of this duplication are 2, 4, 9, 16, 20, 21, 27, 31, 37, 43, 44, 45, 49, 51, 52, 53, 55, 59, and 60. Sometimes he firstly writes the transliterated Greek followed by a Latin translation, such as *apheresis et detractio* (2) and *paradigmata et exemplaria* (16). The use of hendiadys is not to be in itself considered a defect in the Valentian's translation; as said above, Mariner's inaccuracies have their cause in his Latin

word choice and inconsistency rather than in his style.

For instance, Mariner engages in some misleadings translations of technical terms. One clear example of this is his rendition of the noun σχῆμα. In the context of Proclus' commentary, σχῆμα possesses a clear geometrical meaning: it could be easily translated as *figura* or *deliniamentum*. Nevertheless, this original geometrical sense is lost in Mariner's text. Attending to its etymology (coming from the aorist form of the verb ἔχειν, sc., σχεῖν) Mariner renders it quite literally as *habitus* (47, 48, 61). This choice, which is not unusual outside the mathematical jargon,[18] greatly obscures the general sense of the passage, where Proclus sustains that pre-empirical geometrical shapes (σχήματα) are pre-contained in the soul.

Some small errors can be detected in Mariner's translation. For instance, in *locus* 57 he puts ἀριθμόν as *omnia*. A likely explanation for this is that the Valentinian leapt from Grynaeus' p. 5, l. 20, to l. 21, and translated the word πάντα located below, before returning to l. 20. In *locus* 64 he seems to have read ἐκ τῶν as ἐκτός, introducing thereby the adverb *extrinsecus* in his Latin.

Overall, Mariner's translation of *In Euclidem* is that of a well-educated Latinist and Hellenist (also open to lexical innovation) who, arguably because of his mostly literary and poetic background and lack of a technical knowledge of the subtleties of Proclus' philosophy, is hesitant and various in rendering the Diadochus' highly technical terminology.

4. Why Proclus' *In Euclidem*?

So far, I have attempted to account for the 'how' of Mariner's translation of *In Euclidem*. In this section, I will attempt to address the 'why'.

18 SCHREVELIUS 1832, see σχῆμα.

It is indeed an odd fact that, after a life mostly devoted to the *litterae humaniores* and the translations into vernacular of Aristotle, Mariner translated *In Euclidem*. Proclus' commentary is the only geometrical (or even mathematically related) work in his vast production as well as the only work by Proclus translated by the Valentinian. Why would Mariner dedicate time, effort, and resources to a commentary so far away from his main interests and better-known fields? I propose here a conjectural explanation:

Judging by his poem to Proclus and his laudatory mention of him in the *Praefatio*, it could be alleged that Mariner was inspired by Marinus' sanctified image of Proclus. It is therefore plausible that Mariner genuinely believed in the significance of Proclus' works, a persuasion which motivated him to undertake the task of translating them. Nevertheless, this leaves unexplained why *In Euclidem* was the text chosen by Mariner: the manuscripts the *Theologia Platonica* (San Lorenzo de El Escorial, Real Biblioteca, MSS Σ. III. 04; Σ. III. 08, f. 1–47; Σ. III. 12; Σ. III. 15; T. III. 15, f. 30–66v; Φ. II. 12), *In Cratylum* (*ibid.* MS Σ. III. 08, f. 50–102), and *In Timaeum* (*ibid.* MS T. III. 15), amongst other works, were also at his disposal. Furthermore, given his literary and humanistic background (not to mention his inexperience in translating mathematical texts) Mariner might have encountered less difficulty in translating other of Proclus' works. Because of this a would-be fascination exerted by Proclus on Mariner is insufficient to explain his translation of the commentary: it must be therefore that there is a further reason prompting Mariner to translate precisely *In Euclidem*.

I find that Mariner's choice may be accounted for by attending to both his person and his intellectual context. As noted below, Mariner was a highly productive translator and writer who, despite his recognised talents, was unable to obtain financial support for printing his works. Secondly, Mariner

moved within a cultural environment in which mathematical knowledge was highly praised and institutionally sought.

Ever since Philipp II (1527–1598), the Spanish crown had sought to heighten the mathematical knowledge of sailors, explorers, tacticians, and, generally, of the Spanish nobility charged with the administration of an ever-growing territory. The imperial goals were eminently pragmatic: accurate mathematical techniques were required for efficient navigation and transatlantic cartography as well as for architecture and warfare (mostly ballistics and fortification). The crown's urge for applied mathematical knowledge found expression in the fostering of mathematical education at the Casa de Contratación in Seville: there the significant roles of Piloto Mayor, Maestro, and the establishment of a Cosmography chair were introduced in 1508, 1519, and 1563, respectively. In addition to this, the Academia Real de Matemáticas was founded by the emperor in 1582 under the presidency of the renowned mathematician and architect Juan de Herrera (1530–1597). The goal of this school was to offer free mathematical education to the nobility at the court of Madrid.[19] Philipp II also appointed the eminent mathematician and cosmographer Jerónimo Muñoz to the professorship of mathematics in Salamanca – who (as said) lectured on Euclid's *Elementa* using Proclus' *In Euclidem* as his guiding text.[20]

The crown's efforts for improving the mathematical knowledge were perpetuated in the 17th-century: Philip IV(Mariner's king) founded between 1621 and 1625 the Royal Studies of San Isidro, an extension of the already existing Imperial academy of Madrid. There, well-known mathematicians such

19 DORCE 2017, 235–250.

20 CAMPILLO BO 2023, 193–278. On Jerónimo Muñoz and the late 16th-century mathematical context in Spain see NAVARRO-BROTONS, RODRÍGUEZ GALDEANO 1998; NAVARRO-BROTONS 2006; NAVARRO-BROTONS 2014; NAVARRO-BROTONS 2019.

as the Jesuit Johann Baptist Cysat (1588–1657), Claude Richard (1589–1664), or Hugo Sempil (c. 1590–1654) were charged with the mathematical education of the future administrators of the empire. Overall, this public investment in mathematics stimulated a boom in mathematical texts in the Spanish context, both in Latin and in vernacular.[21] Therefore, Mariner inhabited an institutional and scientific environment marked by an inveterate effort of improving and fostering mathematical skills amongst the governing elite.

Hence, one possible explanation of Mariner's choice to translate *In Euclidem* could be straightforwardly put as follows: he thought that by providing a Latin rendition of a mathematically related text the chances of getting financial support for publication in his immediate context would considerably increase, given the mainstream interest in mathematics at the capital. It is unclear whether the Valentinian was aware of Francesco Barozzi's 1560 translation; he certainly did not use the Venetian's restored Latin text for producing his own version. But his decision to translate it notwithstanding a previous Latin version may indicate that Barozzi's rendering, published 78 years before at Padua, was not easily accessible in Mariner's immediate intellectual milieu at Madrid. Therefore, Mariner might have found in Proclus' *In Euclidem* a mathematically related text not widely available in Latin that, due to its blend of philosophical, mathematical, and historical prose rather than strict demonstrative sequences, he could successfully translate.

Why was then Mariner's attempt unsuccessful? Why did his *In Euclidem* and his *Vita Procli* remained unpublished? This could be accounted for, I find, through two facts:

Firstly (1) the highly speculative and deeply philosophical character of many sections of Proclus' text was not attractive to the immediate, practically

21 DORCE 2017, 280–288.

oriented purposes of mathematical schools surrounding the imperial court at Madrid: the public interest in mathematics (motivating all the appointments and funding) was predominantly driven by practical goals involving the application and refinement and successful implementation of mathematical techniques in the State's affairs.

Secondly, (2) the terminological and technical aspects of Proclus' *In Euclidem* that could have been of interest in the Madrid mathematical circles were to a great extent already incorporated into the mathematical culture in the form of picked pieces and selected fragments (see the Introduction above). In general, many of the pieces of mathematical insight and history of mathematics coming from Proclus' text were already accessible to practically oriented mathematicians via selective, specialised secondary literature or though the *Elementa* commentary and teaching tradition without the need to dwell on the philosophical intricacies of the original source.

5. Conclusions

Vicente Mariner's choice of Proclus' *In Euclidem* may seem unusual considering his literary and humanistic background, however several factors shed light on his motivations. Despite its terminological inconsistencies, Mariner's translation provides some valuable insights into the early modern Latin reception of Proclus' commentary.

Produced from the unique source of the 1533 defective *editio princeps*, Mariner's translation of Proclus' work can be seen as a strategic move of the Valentinian to secure financial support for his publication in the intellectual milieu of his time. By translating a mathematically related text like Proclus' commentary, Mariner may have believed that he could attract the attention

and patronage of individuals and institutions interested in promoting mathematical education. His choice may also be deemed as an indicator of a felt unviability of a Latin version of Proclus' text in the Spanish context.

Mariner's translation was likely unsuccessful for two reasons. Firstly, the deeply philosophical and speculative nature of Proclus' commentary may not have aligned with the practical mathematics that was the primary focus of the Spanish court and its surrounding educational institutions. Secondly, many of the technical insights of Proclus' work had already been integrated into the common mathematical culture through other publications, reducing thereby the novelty and appeal of Mariner's translation.

It is possible that, following several unsuccessful attempts to garner support from the mainland, Mariner entertained the idea of dispatching his translation to the erudite Archbishop Lafarina in the Kingdom of Sicily, under Spanish rule during that period. A dedicatory letter was eventually composed for him, yet it ultimately languished within the unsubmitted manuscript.

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PROCLUS, *Εἰς τοῦ ἑαυτοῦ τὸ πρῶτον ἐξηγημάτων Πρόκλου βιβλία* 4, ed. SIMON GRYNAEUS, Basel, I. Hervagium, 1533, 3–5.[22]

/p. 3/ ἔπεται[23] δέ που κατιδεῖν ἡμᾶς, τίνα τὴν οὐσίαν προσήκει λέγειν τῶν μαθηματικῶν εἰδῶν τε καὶ γενῶν, καὶ πότερον ἀπὸ τῶν αἰσθητῶν αὐτὴν ὑφιστάνειν συγχωρητέον εἴτε κατὰ ἀφαίρεσιν, ὥς που λέγειν εἰώθασιν, εἴτε κατὰ ἄθροισιν τῶν μερικῶν εἰς ἕνα τὸν κοινὸν λόγον, ἢ καὶ πρὸ τούτων αὐτῇ τὴν ὑπόστασιν δοτέον, ὥστε Πλάτων ἀξιοῖ καὶ ἡ τῶν ὅλων δεικνύει πρόοδος.

πρῶτον μὲν οὖν εἰ, ἀπὸ τῶν αἰσθητῶν τὰ μαθηματικὰ εἴδη λέγομεν ὑποστῆναι, τῆς ψυχῆς ἀπὸ τῶν ἐν ὕλῃ τριγώνων ἢ κύκλων τὸ εἶδος τὸ κυκλικὸν ἢ τριγωνικὸν ὑστερογενῶς ἐν ἑαυτῇ μορφούσης, πόθεν ἡ ἀκρίβεια καὶ τὸ ἀνέλεγκτον ὑπάρχοι τοῖς λόγοις; Ἀνάγκη γάρ, ἢ ἀπὸ τῶν αἰσθητῶν ἢ ἀπὸ ψυχῆς. Ἀλλὰ[24] μήν, ἀπό γε τῶν αἰσθητῶν ἀδύνατον, πολλῷ γὰρ ἂν μᾶλλον ἀκριβείας τούτοις μέτεσ‹τ›ιν. ἀπὸ τῆς /p. 4/ ψυχῆς ἄρα, τοῖς μὲν ἀτελέσι τὸ τέλειον, τοῖς δὲ μὴ ἀκριβέσι τὸ ἀκριβὲς προστιθείσης. ποῦ γὰρ ἐν τοῖς αἰσθητοῖς τὸ ἀμερ[όν]‹ὲς› ἢ τὸ ἀπλατὲς ἢ τὸ ἀβα[τ]‹θ›ές, ποῦ δὲ ἡ τῶν ἐκ τοῦ κέντρου γραμμῶν ἰσότης, ποῦ δὲ οἱ ἑστῶτες ἀεὶ λόγοι τῶν πλευρῶν, ποῦ δὲ αἱ τῶν γωνιῶν ὀρθότητες; οὐχ ὁρῶ μέν, ὡς ἐν ἀλλήλοις πάντα τὰ μεριστὰ συμμέμικται καὶ οὐδὲν ἐν τούτοις εἰλικρινὲς οὐδὲ τοῦ ἐναντίου καθαρεῦον, ἀλλὰ μεριστὰ πάντα καὶ διαστατὰ καὶ ἑνούμενα; πῶς οὖν τοῖς ἀκινήτοις ἐκ τῶν κινουμένων καὶ ἄλλοτε ἄλλως ἐχόντων αὐτὴν τὴν μόνιμον οὐσίαν δ[ό]‹ώ›σομεν; πᾶν γὰρ τὸ ἀπὸ κινουμένων οὐσιῶν ὑφιστάμενον καὶ ὕπαρξιν μεταβλητὴν ἔχειν ὡμολόγηται παρ' αὐτῶν. πῶς δὲ τοῖς ἀκριβέσι καὶ ἀνελέγκτοις εἴδεσιν ἀπὸ τῶν μὲν ἀκριβῶν τὴν ἀκρίβειαν προσ[τ]‹θ›ήσομεν; πᾶν γὰρ τὸ τῆς

22 The *conspectus siglorum* in the transcriptions includes: < > - *addenda censeo*; [ ] - *delenda censeo*. I want to thank the anonymous reviewer for his/her suggestion of adding the transcription of Grynaeus' text to the paper and for his/her valuable aid and comments through the reviewing process.

23 Ἔπεται … αἰσθητῶν] quae substantia totius mathematici generis *add. in marg.*

24 Ἀνάγκη … μέτεσιν] certitudo huic generi unde *add. in marg.*

ἀεὶ κιν[ί]‹ή›του γνώσεως αἴτιον μειζόνως ἐστὶν αὐτὸ τοιοῦτον. ψυχὴν ἄρα τὴν γενν[ι]‹η›τικὴν ὑπο[τ]‹θ›ετέον τῶν μαθηματικῶν εἰδῶν καὶ λόγων. Ἀλλ᾽ εἰ μὲν ἔχουσα τὰ παραδείγματα κατ᾽ οὐσίαν ὑφίστησιν αὐτά, καὶ εἰσὶν αἱ γενν[έ]‹ή›σεις προβολαὶ τῶν ἐν αὐτῇ προϋπαρχόντων εἰδῶν, τῷ τε Πλάτωνι συνεσόμεθα ταὐτὰ λέγοντες καὶ τὴν ἀληθῆ οὐσίαν τῶν μαθημάτων εὑρηκότες ἂν εἴημεν. εἰ δὲ μὴ ἔχουσα μηδὲ προειληφυῖα τοὺς λόγους τοσοῦτον ὑφαίνει διάκοσμον ἄϋλον καὶ τοσαύτην ἀπογεννᾷ θεωρίαν, πῶς τὰ γεννηθέντα δύναται διακρίνειν, εἴτε γόνιμα τυγχάνει ὄντα εἴτε ἀνεμιαῖα καὶ εἴδωλα ἀντ᾽ ἀληθῶν; ποίοις δὲ κανόσι χρωμένη τὴν ἐν τούτοις ἀλήθειαν παραμετρεῖ; πῶς δὲ καὶ μὴ ἔχουσα τὴν οὐσίαν αὐτῶν ἀπογεννᾷ τοσαύτην ποικιλίαν λόγων; ηὐτοματισμένην γὰρ οὕτω τὴν ὑπόστασιν αὐτῶν ποιήσομεν καὶ πρὸς οὐδένα ὅρον ἀναφερομένην. εἰ ἄρα ψυχῆς ἐστιν ἔκγονα τὰ μαθηματικὰ εἴδη καὶ οὐκ ἀπὸ τῶν αἰσθητῶν ἔχει τοὺς λόγους, ὡς ὑφίστησιν ἡ ψυχή, καὶ ἀπ᾽ ἐκείνων ταῦτα προβάλλεται καὶ αἱ ὠδῖνες αὐτῆς καὶ οἱ τόκοι μενόντων εἰσὶ καὶ ἀϊδίων ἐκφανεῖς εἰδῶν.

Δεύτερον τοίνυν εἰ κάτωθεν καὶ ἀπὸ τῶν αἰσθητῶν ἀθροίζομεν τοὺς τῶν μαθημάτων λόγους, πῶς οὐκ ἀνάγκη τὰς ἀποδείξεις ἀμείνους λέγειν, ὅσαι ἀπὸ τῶν αἰσθητῶν συνίστανται, καὶ οὐ τὰς ἀπὸ καθολικωτέρων ἀεὶ καὶ ἁπλουστέρων εἰδῶν; τὰ γὰρ αἴτια πανταχοῦ ταῖς ἀποδείξεσιν οἰκεῖα πρὸς τὴν τοῦ ζητουμένου θήραν εἶναι φαμέν. εἰ οὖν τὰ μερικὰ τῶν καθόλου καὶ τὰ αἰσθητὰ τῶν διανοητῶν αἴτια, τίς μηχανὴ τὸν ὅρον τῆς ἀποδείξεως ἐπὶ τὰ καθόλου μᾶλλον ἀναφέρειν ἀντὶ τῶν μεριστῶν καὶ τῶν διανοητῶν τὴν οὐσίαν πρὸ τῶν αἰσθητῶν ταῖς ἀποδείξεσι συγγενεστέραν ἀποφαίνειν; οὐδὲ γὰρ εἴ τις φασὶν ἀποδείξειεν, ὅτι τὸ ἰσοσκελὲς δυοῖν ὀρθαῖς ἴσας ἔχει τὰς γωνίας, καὶ ὅτι τὸ ἰσόπλευρον ὠ[σ]‹δ›ὶ καὶ τὸ σκαληνὸν ἐπίσταται κατὰ τρόπον, ἀλλὰ πᾶν τρίγωνον καὶ ἁπλῶς ἀποδείξας ἔχει τὴν ἐπιστήμην καθ᾽ αὐτό. καὶ πάλιν ὅτι τὸ καθόλου βέλτιον τοῦ κατὰ μέρος πρὸς ἀπόδειξιν καὶ ἐξ‹εῖ›[ῆ]ς ὅτι αἱ ἀπο-

δείξεις αὐτῶν καθόλου μᾶλλον, ἐξ ὧν δὲ αἱ ἀποδείξεις ταῦτα πρότερα καὶ τῇ φύσει προηγούμενα τῶν καθ' ἕκαστα καὶ αἴτια τῶν δεικνυμένων. πολλοῦ ἄρα δέουσιν αἱ ἀποδεικτικαὶ τῶν ἐπιστημῶν περὶ τὰ ὑστερογενῆ καὶ τὰ ἀμυδρότερα τῶν αἰσθητῶν ἀθρ[ο]‹ε›ῖν.

Ἔτι δὲ τὸ τρίτον λέγομεν, ὅτι καὶ τὴν ψυχὴν ἀτιμοτέραν ποιοῦσι τῶν εἰδῶν οἱ ταῦτα λέγοντες. εἰ γὰρ ἡ μὲν ὕλη τὰ οὐσιώδη καὶ μᾶλλον ὄντα καὶ τρανέστερα παρὰ τῆς φύσεως δέχεται, ἡ δὲ ψυχὴ δευτέρα ἀπ' ἐκείνων καὶ εἴδωλα καὶ εἰκόνας ὑστερογενεῖς ἐν ἑαυτῇ διαπλάττει πρὸς οὐσίας ἀτιμοτέρας ἀφαιροῦσα τῆς ὕλης τὰ κατὰ φύσιν αὐτῆς ἀχώριστα, πῶς οὐχὶ τὴν ψυχὴν ἀδρανεστέραν τῆς ὕλης καὶ καταδεεστέραν ἀποφαίνουσι; τόπος μὲν γὰρ καὶ ὕλη τῶν ἀνύλων λόγων καὶ ἡ ψυχὴ τῶν εἰδῶν. Ἀλλ' ἡ μὲν τῶν πρώτων, ἡ δὲ τῶν δευτέρων, καὶ ἡ μὲν τῶν προηγουμένως ὄντων, ἡ δὲ τῶν ἐκεῖθεν ὑφισταμένων, καὶ ἡ μὲν τῶν κατ' οὐσίαν γενομένων, ἡ δὲ τῶν κατ' ἐπίνοιαν λεγομένων.[25] πῶς οὖν ἡ νοῦ καὶ τῆς νοερᾶς οὐσίας πρώτης μετέχουσα καὶ πληρουμένη τῆς γνώσεως ἐκεῖθεν καὶ τῆς ὅλης ζωῆς ἀμυδροτέραν εἰδῶν ἐστιν ὑποδοχὴ τῆς ἐσχάτης ἐν τοῖς οὖσιν ἕδρας καὶ πρὸς τὸ εἶναι πάντων ἀτελεστέρας; Ἀλλὰ πρὸς μὲν ταύτην ἀπαντᾶν τὴν δόξαν πολλοῖς πολλάκις εὐθύνας δεδωκυῖαν περίεργον.

εἰ δὲ μή ἐστι κατὰ ἀφαίρεσιν τῶν ἐνύλων τὰ μαθηματικὰ εἴδη μήτε κατὰ συναθροισμὸν τῶν ἐν τοῖς καθ' ἕκαστα κοινῶν, μηθ' ὅλως ὑστερογενῆ καὶ ἀπὸ τῶν αἰσθητῶν, ἀνάγκη δήπου τὴν ψυχὴν ἢ ἀφ' αὐτῆς, ἢ παρὰ νοῦ λαμβάνειν αὐτά, ἢ καὶ παρ' αὐτῆς καὶ παρ' ἐκείνου. Ἀλλ' εἰ μὲν παρ' αὐτῆς μόνον, πῶς εἰκόνες ταῦτα τῶν νοερῶν εἰδῶν; πῶς δὲ μεταξὺ τῆς ἀμερίστου φύσεως καὶ τῆς μεριστῆς μηδεμίαν ἀπὸ τῶν πρώτων εἰς τὸ εἶναι συμπλήρωσιν λαχόντα; πῶς δὲ πρωτουργὰ παραδείγματα τῶν ὅλων τὰ ἐν ᾧ προέστηκεν; εἰ /p.5/ δὲ παρ' ἐκείνου μόνον, πῶς τὸ αὐτενέργητον τῆς ψυχῆς καὶ αὐτοκί-

25 γενομένων *add. marg.*

νητον δύναται μένειν, εἴπερ οἱ ἐν αὐτῇ λόγοι κατὰ τὴν τῶν ἑτεροκινήτων ὑπόστασιν ἀλλαχόθεν εἰς αὐτὴν ἔρρευσαν; καὶ τί διοίσει τῆς ὕλης τῇ δυνάμει μόνον οὔσης πάντα, γεννώσης δὲ οὐδὲν τῶν ἐνύλων εἰδῶν; λείπεται δὴ οὖν καὶ παρ' αὐτῆς καὶ παρὰ νοῦ ταῦτα παράγειν καὶ εἶναι πλήρωμα τῶν εἰδῶν αὐτήν, ἀπὸ μὲν τῶν νοερῶν παραδειγμάτων ὑφισταμένων, αὐτογόνων καὶ τὴν εἰς τὸ εἶναι πάροδον λα‹γ›χανόντων. καὶ οὐκ ἄρα ἦν ἡ ψυχὴ γραμματεῖον καὶ τῶν λόγων κενόν, ἀλλὰ γεγραμμένον ἀεὶ καὶ γράφον ἑαυτὸ καὶ ὑπὸ νοῦ γραφόμενον. νοῦς γάρ ἐστι καὶ ἡ ψυχὴ κατὰ τὸν πρὸ αὐτοῦ νοῦ ἀνελίττων ἑαυτὸν καὶ εἰκὼν ἐκείνου καὶ τύπος ἔξω γενόμενος. εἰ οὖν ἐκεῖνος πάντα νοερῶς, καὶ ἡ ψυχὴ τὰ πάντα ψυχικῶς, καὶ εἰ παραδειγματικῶς ἐκεῖνος, ἡ ψυχὴ εἰκονικῶς, καὶ εἰ συνῃρημένως ἐκεῖνος, ἡ ψυχὴ διῃρημένως.

῞Ο δὴ καὶ ὁ Πλάτων ἰδὼν ἐκ πάντων ὑφίστησι τὴν ψυχὴν καὶ κατ' ἀριθμοὺς αὐτὴν διαιρεῖ καὶ συνδεῖ ταῖς ἀναλο‹ί›γ[ι]αις καὶ τοῖς ἁρμονικοῖς λόγοις, καὶ τὰς πρωτουργοὺς ἀρχὰς τῶν σχημάτων ἐν αὐτῇ καταβάλλεται, τό τε εὐθὺ καὶ τὸ περιφερές, καὶ κινεῖ τοὺς ἐν αὐτῇ κύκλους νοερῶς. πάντα ἄρα τὰ μαθηματικὰ πρῶτόν ἐστιν ἐν τῇ ψυχῇ καὶ πρὸ τῶν ἀριθμῶν οἱ αὐτοκίνητοι καὶ πρὸ τῶν φαινομένων σχημάτων τὰ ζωδιακὰ σχήματα καὶ πρὸ τῶν ἡρμοσμένων οἱ ἁρμονικοὶ λόγοι καὶ πρὸ τῶν κύκλῳ κινουμένων σωμάτων οἱ ἀφανεῖς κύκλοι δεδημιούργηνται καὶ πλήρωμα πάντων ἡ ψυχή· καὶ διάκοσμος οὗτος ἄλλος αὐτὸς ἑαυτὸν παράγων καὶ ἀπὸ τῆς οἰκείας ἀρχῆς παραγόμενος ζωῆς τε πληρῶν ἑαυτὸν καὶ ἀπὸ τοῦ δημιουργοῦ πληρούμενος ἀσωμάτως καὶ ἀδιαστάτως, καὶ ὅτ' ἂν προβάλλῃ τοὺς αὐτοῦ λόγους, τότε καὶ ἐπιστήμας προφαίνει πάσας καὶ ἀρετάς. οὐσιοῦται οὖν ἐν τούτοις ἡ ψυχὴ τοῖς εἴδεσι καὶ οὔτε τὸν ἀριθμὸν ἐπ' αὐτῆς μονάδων πλῆθος ὑποληπτέον οὔτε τὴν τῶν διαστατῶν ἰδέαν σωματικῶς ἀκουστέον, ἀλλὰ πάντα ζωτικῶς καὶ νοερῶς τὰ παραδείγματα τῶν φαινομένων ἀριθμῶν καὶ σχημάτων καὶ λόγων καὶ κινήσεων ὑποθετέον ἑπομένους τῷ Τιμαίῳ πᾶσαν αὐτῆς τὴν γένεσιν καὶ τὴν δημιουργίαν

ἀπὸ τῶν μαθηματικῶν εἰδῶν συμπληρώσαντι καὶ πάντων ἐν αὐτῇ τὰς αἰτίας ἱδρύσαντι. τῶν μὲν γὰρ ἀριθμῶν πάντων οἱ ἑπτὰ[26] ὅροι κατ᾽ αἰτίαν ἐν αὐτῇ προϋφεστήκασι, τῶν δ᾽ αὖ σχημάτων αἱ ἀρχαὶ δ[ι]‹η›μιουργικῶς ἱδρύσθησαν ἐν αὐτῇ, τῶν δὲ κινήσεων ἡ πρωτίστη καὶ τὰς ἄλλας ἁπάσας περιέχουσα καὶ κινοῦσα συνυφέστηκεν αὐτῇ. πάντων γὰρ τῶν κινουμένων ὁ κύκλος ἀρχὴ καὶ ἡ κύκλῳ κίνησις. οὐσιώδεις ἄρα καὶ αὐτοκίνητοι τῶν μαθηματικῶν εἰσὶν οἱ λόγοι συμπληροῦντες τὰς ψυχάς, οὓς δὴ καὶ προβάλλουσα ἡ διάνοια καὶ ἐξελίττουσα πᾶσαν τὴν ποικιλίαν ὑφίστησι τῶν μαθηματικῶν ἐπιστημῶν. καὶ οὐ μή ποτε παύσηται, γεννῶσα μὲν ἀεὶ καὶ ἀνευρίσκουσα ἄλλα ἐπ᾽ ἄλλοις, τοὺς δὲ ἀμερεῖς αὐτῆς λόγους ἐξαπλοῦσα. πάντα γὰρ προείληφεν ἀρχοειδῶς καὶ κατὰ τὴν ἄπειρον ἑαυτῆς δύναμιν ἐκ τῶν προειλημμένων ἀρχῶν παντοδαπῶν θεωρημάτων ποιεῖται προβολάς.

26 λόγοι *add. marg.*

VICENTE MARINER transl. *Procli Diadochi in primum Euclidis de Elementis librum*, Madrid, Biblioteca Nacional, MS 9871, p. 7, l. 25–12, l. 6.

/p. I/ Procli diadochi in primum Euclidis de Elementis librum, liber primus, Vincentio Marinerio Valentino regio bibliothecario et interprete

/p. 7/ Sequitur ergo quodam modo nos inspicire quam conveniat[27] naturam mathematicarum specierum appellare et generum. Nimirum utrum a sensibilibus sit concedendum illam constituere, sive secundum apheresim et detractionem, ut quodam pacto consueverunt dicere, sive secundum quamdam congregationem rerum partibilium in unam communem rationem, aut iam ante has aliquo pacto dan/p. 8/da sit suppositio, quemadmodum Plato sentit et omnium quidem ostendit progressus.

Primum igitur si a[28] sensibilibus mathematicas species dicimus superesse et constitui, con<s>pectu animae vero a triangulis et circulis, qui sunt in materia, postremo in se ipsa efformantis circularem speciem aut triangularem, unde absoluta ratio et irreprehensibilis ipsis rationibus et modis subsisteret? Nam necesse est aut a sensibilibus, aut[29] ab anima. Sed a[30] sensibilibus impossibile est, nam multo magis perfectionis in his inest. Ab anima ergo, quae imperfecti quidem perfectionem, et his quae nullam exactionem habent, ipsam apponit et exhibet exactionem. Quodam modo enim in sensibilibus quod partibus caret, aut quod caret latitudine, aut quod caret profunditate? Et quodam modo vero aequalitas linearum, quae sunt in centro, et quodam modo rationes quae semper sunt ad latera, et quodam modo angulorum rectitudines? Non enim video quo pacto in se invicem omnia divisibilia commisceantur, et nihil in his, quod distinctum sit, et quod contrario purum est, sed

27 conveniat … illam] quae substantia totius mathematici generis *add. in marg.*
28 a] ab
29 aut… magis] certitudo huic generi unde *add. in marg.*
30 a] ab

divisibilia omnia, et quae distantiam habent, et quae unita sunt. Quomodo igitur[31] immobilibus ex motis et quae aliquo alio modo se habent, ipsam constantem dabimus naturam? Nam omne quod constitutum est ex substantiis motis, subsistentiam habere mutabilem ab ipsis affirmatur. Quomodo etiam perfectis et irreprehensibilibus speciebus a perfectis ipsam perfectionem constituemus? Quoniam omne quod est causa cognitionis semper motae magis est hoc huiusmodi. Igitur constituere decet animam generativam mathematicarum specierum et rationum. Si vero habet paradigmata et exemplaria, secundum substantiam constituit ipsa, et sunt ipsae generationes obiecta specierum, quae in ipsa praeexistunt, Platoni vero consentiemus haec dicentes, et sic veram naturam mathematum inveniemus. Si autem non habens neque /p. 9/ praeassumens rationes huiusmodi intertexit immaterialem ordinem et huiusmodi ingenerat speculationem, quo modo potest, quae genita sunt, iudicare et discernere, sive illa assequitur legitima et innata, sive aerea ut[32] simulachra pro veris? Quibus autem regulis utens veritatem, quae in his est, dimetitur? Et quomodo, cum non habeat naturam ipsorum, ingenerat talem varietatem rationum? Nam ita quidem suppositionem ipsorum sponte sua productam faciemus, et in nullum delatam terminum. Si igitur animae sunt proles hae mathematicae species, ac non a sensibilibus habent rationes, ut constituit natura, et ab illis haec proficiscuntur, et dolores ipsius et partus manentium sunt specierum manifesti.

Secundo ergo nunc, si inferius et ab infimo loco a sensibilibus mathematum rationes collegimus, quo modo non necesse[33] erit ipsas demonstrationes meliores appellare, quaecumque a[34] sensibilibus constituantur, et non quae ab universalioribus semper et simplicioribus speciebus efficiuntur?

31 Ex *del.*
32 ut *post corr. ex* sicut
33 necesse *post corr. ex* nesse
34 a] ab

Nam causas quae omnino demonstrationibus sunt propiae, ad venationem earum rerum, quae quaeruntur, esse dicimus. Si igitur rerum universalium divisibiles et sensibiles cogitabilium[35] sunt causae, quae difficultas erit terminum demonstrationis in universalia referre potius pro particularibus et rerum cogitabilium naturam ante sensibilia demonstrationibus congenitam manifestare? Non enim si aliquis, dicunt, demonstraverit isoscele[s]<n> duos habere rectos angulos aequales, et isopleuron, et similiter scalenon constitui secundum locum, certe omnem triangulum et simpliciter, demonstrabit habere scientiam in se ipsum, et rursus quod universale est melius illo quod est particulare ad ipsam demonstrationem, et deinceps demonstrationes ipsorum universaliter magis ex quibus demonstrationes causae priores sunt et ipsa natura praecedentes ipsi singularibus, et causae sunt rerum demonstratarum. Plurimum igitur indigent /p. 10/ quae demonstrativae sunt ipsis scientiis ad ea quae posterius ingenerantur et educuntur, et obscuriora sunt, sensibilibus consertis.

Etiam et tertio dicimus, eos, qui haec dicunt, ignobiliorem facere animam ipsis speciebus. Nam si materia, quae substantialia sunt et maxime subs<is>tunt et manifestiora patent, a natura suscipit, anima vero secunda ab ipsis, et simulachra et imagines, postremo eductas et ingenitas, in se ipsa effingit, afferens ad ignobiliores naturas quae ab ipsa materia secundum naturam inseparabilia sunt, quomodo non animam, quae infirmior est ipsa materia, et quam indigentiorem ostendunt? Nam locus est materia immaterialium rationum et anima specierum. Sed illa priorum, haec vero secundarum; et illa quidem earum quae sub quadam praecedentia sunt, haec earum quae inde subsistunt; et illa quidem earum quae secundum naturam sunt, haec autem earum quae sub quadam solertia enascuntur. Quomodo igitur quae particeps

35 cogitabilium *post corr. ex illig*.

et mentis et intelligibilis naturae primae, et abundat cognitione, quae inde fluit, et tota vita est obscurior, specierum est susceptio et receptaculum ultimae sedis in his, quae existunt, quae imperfectior est omnibus ad inferendam substantiam. Sed in hanc occurrere opinionem, quae multos saepe in disquisitionem vocat, curiosum est.

Si autem non sunt secundum ablationem materialium mathematicae species, neque secundum congregationem eorum, quae communia sunt singularibus, neque prorsus postremo genitae, et a[36] sensibilibus eductae, necesse est igitur animam aut ab ipsa, aut a[37] mente sumere haec, aut ab ipsa et ab illa. Si vero ab ipsa solum, quomodo imagines haec intelligibilium specierum sunt? Quomodo inter indivisibilem naturam et divisibilem, nullum complementum primarum ad hoc[38] quod esse sortiuntur? Quomodo etiam paradigmata primo effecta universalium, quae in hoc sunt, praestituit? Si autem ab illa solum, quomodo ipsa per se efficacia animae et spontanea motio potest manere? Si ergo rationes quae in ipsa sunt secundum suppositionem eorum, quae aliter moventur, aliunde in ipsam effluxerunt, et quid different a materia, quae potentia est omnia, cum nihil generet earum, quae in materia sunt, specierum? Restat igitur et ab ipsa, et a[39] mente haec adducere, et ipsam esse complementum specierum, etiam ab intelligibilibus paradigmatis, quae per se genita subsistunt, et transitum et viam ad esse suscipiunt. Non igitur fuit anima tabella[s] et libellus rationibus vacuus, /p. 11/ sed descriptus semper et se ipsum inscribens et delineans, et ab ipsa mente exaratus. Nam mens est et ipsa anima secundum id quod ante ipsam mentem involvit se ipsum et est imago illius, et typus extrinsecus effectus. Si igitur illa omnia intellegibiliter, etiam anima omnia ipsa spiritualiter; et si paradigmatice illa, etiam anima re-

36 a] ab
37 a] ab
38 hoc *sup*.
39 a] ab

praesentative et sub imaginibus; et si illa coniunctim, anima divisim.

Quod cum Plato videret, ex omnibus constituit animam et secundum numeros ipsam dividit, et colligat cum analog<i>is et harmonicis rationibus, et principia habituum, quae primo educta sunt, in ipsa conicit, et quod rectum est, et circulare, et quod in ipsos circulos movet intellegibiliter. Omnia igitur mathematica primum sunt in anima et ante numeros, qui per se moventur; et ante habitus qui apparent, habitus animales; et ante hos qui adaptantur, ipsae harmonicae rationes; et ante corpora, quae in circulum moventur, circuli qui non apparent conpinguntur et conficiuntur. Et est complementum omnium anima, et ordo hic alius ipse se ipsam agitans et deducens, et est a[40] proprio principio deductus, et se ipsum vita complet, et completus est et plenus ab ipso artifice sine corpore et sine intervallo et distantia, et quando proiecerit suas ipsius rationes, hinc manifestat et praemunit scientias et omnes virtutes. Igitur anima in his speciebus quasi substantiatur. Neque affirmare oportet omnia in ipsa unitatum multitudinem esse, neque audiendum est esse ideam rerum quae distant corporaliter, sed supponendum est omnia animaliter et intellegibiliter esse paradigmata apparentium numerorum, et habituum, et rationum, et motuum. Ab his qui sequuntur Timaeum, qui omnem ipsius generationem et opificium et fabricam mathematicis speciebus adimplet, et omnia in ipsa principia constituit et collocat. Omnium enim numerorum septem rationes secundum causam in ipsa praeponunt et substituunt. Principia autem habituum opificum more in ipsa collocata sunt et motuum etiam primus, et qui alios omnes continet, etiam movens cum ipsa constituitur. Nam omnium quae moventur circulus principium est, et motus qui in circulum fit. Ergo mathematicarum rationes substantiales sunt et per se mobiles et animas ipsas complent, quas cum cogitatio profert, /p. 12/ et involvit

40 a] ab

omnem varietatem mathematicarum scientiarum illam substituens, nequaquam aliquando cessat generare et semper invenire alia in alia, sed explicans indivisibiliter ipsius rationes. Omnia enim praeassumpsit more principis, et iuxta infinitam ipsius potentiam ex praeassumptis extrinsecus[41] principiis diversorum theorematum facit obiecta.

41 extrinsecus *sup*.

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