

**AUGUSTINE AND THE NUMBER SIX:
A LOOK TO THE ARITHMOLOGICAL ACCOUNT
IN DE GENESI AD LITTERAM IV.2-14**

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RESUMEN: El objetivo de este estudio es el de examinar la exposición aritmológica que Agustín expone en el libro IV de su escrito *De Genesi ad litteram* (2-6; 13-14), dentro de su interpretación de la creación por parte de Dios en seis días, y de reconstruir las posibles fuentes de dicho texto. Tres son las etapas principales de este estudio: en la primera parte evaluaremos el punto de vista de un conocido estudioso, Aimé Solignac, en relación a las fuentes aritmológicas de Agustín; luego, confrontaremos dicho texto de Agustín con un extracto paralelo de su pupilo Favonio Eulogio, autor de un comentario al *Somnium Sciopinis*; por último, resaltaremos las semejanzas y las aparentes diferencias entre los textos de Agustín y de Favonio y demostraremos que ambos comparten el mismo material aritmológico y las mismas fuentes.

Palabras clave: Agustín – Favonio Eulogio – Número 6 – Aritmología – Génesis

ABSTRACT: The aim of this research is to explore the arithmological account which Augustine exposes in the book IV of the writing *De Genesi ad litteram* (2-6; 13-14), in the course of his interpretation of the creation of God in six days, and to outline the possible sources of this text. Three are the main steps of this research: in the first section, we shall assess the view of a well-known scholar, Aimé Solignac, about the arithmological sources of

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Augustine; then, we shall compare the aforesaid text of Augustine with a parallel passage of his pupil Favonius Eulogius, author of a commentary on the *Somnium Scipionis*; finally, we shall underscore the similarities and the apparent differences between the texts of Augustine and Favonius and point out that they share the same arithmological material and the same sources.

Keywords: Augustine – Favonius Eulogius – Number 6 – Arithmology – Genesis

PREMISE AND GOAL OF THE RESEARCH

The book of *Genesis* drew the attention of Augustine so much that he devoted to the exegesis of this text not only the books XI-XIII of his *Confessions*, as it is well-known, but also three writings: *De Genesi contra Manichaeos*, in two books; *De Genesi ad litteram imperfectus*, incomplete, in one book; *De Genesi ad litteram*, in twelve books. With respect to the last one, namely, *De Genesi ad litteram* (henceforth: *Gn. litt.*), it was composed by Augustine in the first decades of the V century with the purpose to put forward a literal interpretation of the biblical creation narrative². As it results from the opening chapters of the *Gn. litt.*, the hermeneutical approach of

² The critical edition of the Latin text of the *Gn. litt.* is: *S. Aureli Augustini de Genesi ad litteram libri duodecim*, ed. J. Zycha, Academia Litterarum Caesareae Vindobonensis, Prague-Wien-Leipzig 1894 (CSEL 28). A comprehensive study of the *Gn. litt.* is found in the recent Italian edition of Augustine's commentaries on *Genesis*: *Agostino. Commenti alla Genesi*, eds. G. Catapano and E. Moro, Bompiani, Milan 2018, in particular pp. 323-1367; 1445-1626. Concerning the chronology of the *Gn. litt.* the views of P. Agaësse and P.-M. Hombert are worth being mentioned: the former dates it to the years 401-415, the latter from the years 403/404 onwards – see respectively: P. Agaësse, “Introduction générale”, in: *La Genèse au sens littéral (livres I-VII)*, eds. P. Agaësse and A. Solignac, Desclée de Brouwer, Paris 1972 (Œuvres de Saint Augustin 48), pp. 25-31; P.-M. Hombert, *Nouvelles recherches de chronologie augustiniennes*, Institut d'Études Augustiniennes, Paris 2000 (Collection des Études Augustiniennes: Série Antiquité 163), pp. 53-56; 139; 189-193. A detailed overview of the problems related to the datation of the *Gn. litt.* is offered by E. Moro in: *Agostino. Commenti alla Genesi*, pp. 325-335.

Augustine to the *Genesis* addresses two methodological criteria: on the one hand, a plurality of readings of the story of creation is acceptable, unless they are consistent with the rule of faith; on the other hand, the outcomes of these readings are to be subjected to a rational scrutiny and compared with the scientific theories of the encyclical and philosophical disciplines³.

This exegetical procedure leads Augustine to conflate the contents of Scripture and the teachings of the Church about the origin of the world with the doctrines of the Greco-Roman culture. An exemplification of this procedure in the *Gn. litt.*, which still needs to be explored in detail, is found in the book IV about *Gen.* 2,1-3, in particular in its first section which is hereinafter referred to as the “arithmological” section. As well-known, the book IV of the *Gn. litt.* consists of three main sections: after a prelude on the meaning of the days of creation (IV.1), the first section intends to face the question of why God created the world in six days, and attempts to give a response on the basis of arithmological material (IV.2-6; 13-14) – in the course of this section he also offers an expansive exegesis of *Sap.* 11,20: «You have disposed all things by measure and number and weight» (IV.7-12), which has already caught the attention of scholars⁴; the second section focuses on the notion of God resting, mentioned in *Gen.* 2,3: «God blessed the seventh day and made it holy, because on it he rested from all the work

³ On this see: Aug., *Gn. litt.* IV.37-41 (CSEL 28, 27.12-31.24); see also: *Gn. litt.* II.23 (CSEL 28, 47.22-48.20). See: T. Toom, “Augustine’s Case for the Multiplicity of Meanings”, *Augustinian Studies* 45.2 (2014), pp. 183-201.

⁴ Aug., *Gn. litt.* IV.1-14 (CSEL 28, 93.1-103.21). As it has already been evidenced by the scholars, *Sap.* 11,20 plays a key role in Augustine’s thought; on this: W.J. Roche, “Measure, Number and Weight in Saint Augustine”, *The New Scholasticism* 15.4 (1941), pp. 350-376; W. Beierwaltes, “Augustins Interpretation von *Sapientia* 11, 21”, *Revue des Études Augustiniennes* 15 (1969), pp. 51-61; *St. Augustine. The Literal Meaning of Genesis*. I, ed. J.H. Taylor, Paulist Press, New York-Mahwah 1982 (Ancient Christian Writers 41), pp. 248-249, n. 8; C. Harrison, “Measure, Number and Weight in Saint Augustine’s Aesthetics”, *Augustinianum* 28.3 (1988), pp. 591-602; M.T. Bettetini, *La misura delle cose. Struttura e modelli dell’universo secondo Agostino d’Ippona*, Rusconi, Milan 1994, pp. 127-222; A.-I. Bouton-Touboul, *L’ordre caché. La notion d’ordre chez saint Augustin*, Institut d’Études Augustiniennes, Paris 2004 (Collection des Études Augustiniennes: Série Antiquité 174), pp. 133-144; *Agostino. Commenti alla Genesi*, pp. 1487-1488, n. 19.

of creating that he had done» (IV.15-36)⁵; in the third and last section Augustine discusses the nature of the seventh day and expresses his conception of the sequence of the days of creation as progression of the angelic knowledge (IV.37-56)⁶.

The aim of this study is to investigate the first section of the book IV of the *Gn. litt.*, namely, as previously stated, the arithmological section (IV. 2-6; 13-14), and to contribute to the understanding of Augustine’s reception of the arithmological tradition. In this regard, the research will be carried out as follows: the first part will reassess the hypothesis of a French scholar, Aimé Solignac, who has been very influential in the literature on Augustine, about his possible arithmological sources – the outputs of Solignac will be the starting point of the present inquiry; then, we shall examine the arithmological account of Augustine (IV.2-6; 13-14) and parallel it with the text of one of his pupils, Favonius Eulogius (IV century), which attests to an arithmological account similar to that of Augustine; finally, we shall consider the affinities and differences between the texts of Augustine and Favonius, and in light of them we shall formulate our view about the arithmological material of Augustine in the book IV of the *Gn. litt.*

As it will be evidenced in due course, the goal of this study is concomitantly to shed new light on the impact of the ancient arithmological tradition on the early Christian thought, specifically on Augustine, and on how Augustine himself incorporates the arithmological material in his protological perspective, in particular in his conception of the creation of the world.

⁵ Aug., *Gn. litt.* IV.15-36 (CSEL 28, 103.22-118.26).

⁶ Aug., *Gn. litt.* IV.37-56 (CSEL 28, 118.27-136.27). On this see: E. Moro, “Il ‘tempo’ degli angeli: simultaneità, successione e conoscenza angelica nei commenti alla *Genesi* di Agostino”, in: *Tempo di Dio, tempo dell’uomo. XLVI Incontro di studiosi dell’antichità cristiana (Roma, 10-12 maggio 2018)*, Institutum Patristicum Augustinianum/ Nerbini International, Rome-Lugano 2019 (Studia Ephemeridis Augustinianum 155), pp. 153-161.

THE ARITHMOLOGICAL SOURCES OF AUGUSTINE

As above-mentioned, the starting point of this research is the hypothesis formulated by a French scholar, Aimé Solignac, in an erudite article published in 1958 on the handbooks and the doxographies which might have been consulted by Augustine, and which might have played a key role in his philosophical education⁷. According to A. Solignac the broad repertoire of references to arithmological doctrines in the literary corpus of Augustine gives us a trail to two main sources: Varro and Nicomachus of Gerasa. A. Solignac supports his thesis with two arguments, which can be summarized as follows⁸.

With respect to the first argument, A. Solignac assumes two data: firstly, Favonius Eulogius, who attended the rhetoric courses of Augustine at Carthage and authored a commentary on the *Somnium Scipionis*⁹, derives

⁷ A. Solignac, "Doxographies et manuels dans la formation philosophique de saint Augustin", *Recherches Augustiniennes et Patristiques* 1 (1958), pp. 8-148. The outputs of this article are referred to in: Id., "Note complémentaire 17. La perfection du nombre six", in: *La Genèse au sens littéral (livres I-VII)*, pp. 633-635.

⁸ See in particular: A. Solignac, "Doxographies et manuels", pp. 129-137.

⁹ In the writing *De cura pro mortuis gerenda*, composed in around 420, Augustine reports the following episode: while he was in Milan (*apud Mediolanum*), Eulogius, in that time rhetorician at Carthage, who had attended the rhetoric courses of Augustine at Carthage, dreamed that Augustine gave him the explanation of an obscure passage of Cicero. On this see: Aug., *De cura pro mort.* XI 13 (CSEL 41, 642.12-643.6). For O. Perler and J.L. Maier, Augustine was informed about the content of this dream by Eulogius himself, as soon as he came back to Carthage from Italy, in around 388; on this: O. Perler, J.L. Maier, *Les voyages de saint Augustin*, Institut d'Études Augustiniennes, Paris 1969 (Collection des Études Augustiniennes: Série Antiquité 36), pp. 430-477. When Eulogius had the aforesaid dream is still controversial: R.E. Van Weddingen argues that the above-mentioned formula: *apud Mediolanum* stands for the sojourn of Augustine at Cassiciacum and, therefore, dates the dream to 386-387, whereas P. Courcelle regards it as denoting the stay of Augustine in Milan and, consequently, dates the dream earlier, that is, to 384-386 – on these views see respectively: *Favonii Eulogii Disputatio de somnio Scipionis*, ed. R.E. Van Weddingen, Latomus, Bruxelles 1957 (Collection Latomus 27), p. 5, and the review of P. Courcelle of R.E. Van Weddingen's edition in: *Revue d'Études Latines* 36 (1958), pp. 359-361. The identification of Eulogius, pupil of Augustine, with Favonius Eulogius, author of a commentary on the *Somnium Scipionis* (46.1-2 Marcellino), claimed for the first time by J.A. Fabricius in the first half of the XVIII century, finds nowadays the agreement between the

much of his scientific knowledge, in particular geometrical, astronomical and arithmological, from Varro¹⁰; secondly, a comparison between Augustine and Favonius proves that they both share the same arithmological material¹¹. On the basis of these data A. Solignac believes that the arithmological theories which are found in Augustine and Favonius originate from a common philosophical source, namely, Varro, of whom the writings *The Principles of Numbers (De principiis numerorum)* and *Arithmetic (De arithmetica)* have been lost.

In relation to the second argument, A. Solignac underscores a dissonance between the arithmological ideas which occur in Augustine's *Gn. litt.* IV.5 and the parallel material in Favonius and in other Latin writers who are in debt to Varro, as for instance Censorinus, Macrobius and Martianus Capella. In particular, according to A. Solignac, Augustine proves to be aware of the rule from which the perfect numbers are obtained, whereas the other Latin authors who depend upon Varro have no mention of it¹². Due to this discrepancy, without rejecting the influence of Varro on Augustine, as pointed out in his previous argument, A. Solignac argues that Augustine also conveys doctrines coming from another arithmological source, in particular Nicomachus of Gerasa, who treats extensively the aforesaid rule about the perfect numbers in the book I (chapter 16) of his *Introduction to Arithmetic*¹³. This hypothesis, that also Nicomachus is a source of Augustine, together with Varro, is reinforced by two further elements: firstly, both Cassiodorus and Isidore of Seville inform that the above-mentioned treatise of Nicomachus was translated from Greek into Latin in the II century by a Middle Platonist, Apuleius of Madaura¹⁴, and that

scholars, see: *Bibliotheca Latina sive Notitia Auctorum Veterum Latinorum*. I, ed. J.A. Fabricius, Coleti, Venice 1728, p. 8.

¹⁰ A. Solignac restates the thesis of K. Fries: “De M. Varrone a Favonio Eulogio Expresso”, *Rheinisches Museum für Philologie* 58 (1903), pp. 115-125; see: A. Solignac, “Doxographies et manuels”, p. 133, n. 53.

¹¹ On this see *infra*, n. 18.

¹² Aug., *Gn. litt.* IV.5 (CSEL 28, 96.24-97.18). On this: A. Solignac, “Doxographies et manuels”, p. 133.

¹³ Nicom., *Introd. arith.* I 16, 1-10 (39.5-44.7 Hoche).

¹⁴ Cassiod., *De art. et disc.* IV (PL 70, 1208B); Isid., *Ethym.* III 2 (PL 82, 155A).

Augustine was so familiar with Apuleius' writings that he might have had access to this translation¹⁵; secondly, the texts of Augustine attest to many similarities not only with the *Introduction to Arithmetic*, but also with the so called *Theologoumena arithmenticae*, a Nicomachean treatise passed down to us in fragments in the homonymous work of Iamblichus¹⁶.

So far we have briefly summarized the two arguments of A. Solignac. Nevertheless, though we agree with him about the conclusions, we disagree with him about the premises. In regard to the former datum of his first argument, that is, Favonius owes his expertise in the arithmological field to Varro, in recent years an Italian scholar, Alberto Grilli, has further documented it and proved the existence of an arithmological source, probably originated with Antiochus of Ascalon and then transmitted by three major traditions: firstly, Varro and, in his wake, Favonius, Macrobius, Martianus Capella and Censorinus; secondly, Adrastus of Aphrodisias and, in line with him, Calcidius; finally, Philo of Alexandria¹⁷. Concerning the

¹⁵ As well-known, Augustine is acquainted with the philosophical writings of Apuleius, in particular the *De deo Socratis* and the *Apologia*, see: Aug., *De civ. Dei* VIII 14; VIII 19 (CCSL 47, 231; 236); see also: IV 2 (CCSL 47, 99), for a reference to the *De mundo*. An exploration of the relation of Augustine to Apuleius is offered by: C. Moerschini, "La polemica di Agostino contro la demonologia di Apuleio", *Annali della Scuola Normale Superiore di Pisa. Classe di Lettere e Filosofia* 2.2 (1972), pp. 583-596 (reprint in: Id., *Apuleio e il platonismo*, Olschki, Florence 1973 [Accademia Toscana di Scienze e Lettere "La Colombaria". Studi 51], pp. 240-254; this thesis has been recently restated in: Id., *Apuleius and the Metamorphoses of Platonism*, Turnhout, Brepols 2015 [Nutrix 10], pp. 348-363). See also: L. Karfiková, "Augustins Polemik gegen Apuleius", in: *Apuleius. De deo Socratis. Über den Gott des Sokrates*, ed. M. Baltes, Wissenschaftliche Buchgesellschaft, Darmstadt 2004 (Scripta Antiquitatis Posterioris ad Ethicam Religionemque Pertinentia 7), pp. 162-189, particularly pp. 172-189.

¹⁶ In this regard A. Solignac parallels the text in: Aug., *De lib. arbitr.* II 8, 22 (CSEL 74, 57.27-59.5) with: Iambl., *Theol. arith.* I 4 (1.4-8 De Falco), and is persuaded that Augustine's notion of number as sum of monades is anticipated by the Nicomachean formula of μονάδων σύστημα, as it is documented in: Iambl., *Theol. arith.* II 8; II 12; III 15 (9.3; 13.20-21; 17.15 De Falco); see also: Iambl., *In Nicom. Introd. arith.* 11; 13 (10.9; 12.8 Pistelli). On this: A. Solignac, "Doxographies et manuels", p. 136.

¹⁷ A. Grilli, "Sul numero sette", in: *Scritti in onore di Benedetto Riposati. Studi su Varrone, sulla retorica, storiografia e poesia latina*. I, Centro di Studi Varroniani, Rieti/ Università Cattolica del Sacro Cuore, Milan 1979, pp. 203-219. The hypothesis of A. Grilli is at odds with that of F.E. Robbins: "The Tradition of Greek Arithmology", *Classical Philology* 16.2

latter datum of the first argument of A. Solignac, that is, Augustine and Favonius are provided with the same arithmological material, A. Solignac does not use textual evidence, but highlights some doctrinal similarities¹⁸. Nonetheless, the fact that both Augustine and Favonius refer to arithmological theories, for example the Pythagorean tetraktys or the intelligible nature of numbers, which are widespread in the ancient philosophical literature, does not entail that they share the same arithmological source, but only that they are both familiar with the philosophical background of the late antiquity. In sum, in his first argument A. Solignac ends up with basing his thesis about an influence from Varro on Favonius and Augustine on a weak premise, namely, the doctrinal analogies

(1921), pp. 97-123, who considers Posidonius as the arithmological source of Varro; see also: Id., “Posidonius and the Source of Pythagorean Arithmology”, *Classical Philology* 15.4 (1920), pp. 309-322.

¹⁸ From the list of doctrinal references collected by A. Solignac (“Doxographies et manuels”, p. 132, n. 52) we can single out twelve entries: 1) the incorruptible and intelligible nature of the number, see: Favon. Eulog., *In Somn. Scip.* III 1 (48.13-14 Marcellino); Aug., *De ord.* II 14, 41 (CSEL 63, 176.4-5); *Contr. Acad.* III 11, 25 (CSEL 63, 65.26); see also: *De lib. arbitr.* II 8, 20 (CSEL 74, 56.31-57.7); 2) interaction of numbers with sense and reason, see: Favon. Eulog., *In Somn. Scip.* III 1 (48.15-16 Marcellino); Aug., *De ord.* II 15, 43 (CSEL 63, 177.2); 3) the sequence of numbers from 2 to 10, see: Favon. Eulog., *In Somn. Scip.* IV 1 (48.23-25 Marcellino); Aug., *De mus.* I 11, 19; I 12, 20-21 (CSEL 102, 87; 87-88); 4) the indivisibility of the monade, see: Favon. Eulog., *In Somn. Scip.* IV 2 (48.25-29 Marcellino); Aug., *Gn. litt.* IV.3 (CSEL 28, 95.10-12); 5) the identification of the number with the soul and God: Favon. Eulog., *In Somn. Scip.* V 6 (50.23 Marcellino) = Xenocrat., Fr. 134 (168 Isnardi Parente – the comment on this text is found at pp. 313-315); Aug., *De ord.* II 15, 43 (CSEL 63, 177.1); 6) the properties of the number 3: Favon. Eulog., *In Somn. Scip.* VII 1 (52.22-23 Marcellino); Aug., *De mus.* I 12, 20 (CSEL 102, 87); 7) the series of numbers (units, tens, hundreds, etc.), see: Favon. Eulog., *In Somn. Scip.* VIII 3 (54.15-23 Marcellino); Aug., *De mus.* I 11, 19 (CSEL 102, 87); 8) a reference to the Pythagorean tetraktys, see: Favon. Eulog., *In Somn. Scip.* VIII 4 (54.23-25 Marcellino); Aug., *De mus.* I 12, 26 (CSEL 102, 93); 9) an analogy between the number 4, the four natural elements and the four seasons, see: Favon. Eulog., *In Somn. Scip.* VIII 5 (CSEL 102, 54.25-56.5 Marcellino); Aug., *Epist.* LV 15, 28 (CSEL 34/2, 201.9-20); 10) an analogy between the number 5 and the five senses, see: Favon. Eulog., *In Somn. Scip.* IX 3 (56.20-21); Aug., *En. in Ps.* 49 9 (CCSL 38, 582); 11) the perfection of the number 6, see: Favon. Eulog., *In Somn. Scip.* X 1 (56.23-25 Marcellino); Aug., *Gn. litt.* IV.2-3 (CSEL 28, 94.11-96.3); 12) the perfection of the number 7, see: Favon. Eulog., *In Somn. Scip.* XII 1 (60.11-16 Marcellino); Aug., *De civ. Dei* XI 31 (CCSL 48, 350).

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between Augustine and Favonius. In the course of this research, in particular in the following paragraphs, we shall attempt to demonstrate the thesis of A. Solignac, that is, Augustine and Favonius share the same arithmological material and depend upon Varro, through a textual evidence, particularly a comparison between the aforesaid arithmological account in *Gn. litt.* IV.2-6; 13-14 and the chapter X of Favonius' commentary.

With respect to the second argument of A. Solignac, as said above, it runs as follows: in *Gn. litt.* IV.5 Augustine gets away from the arithmological material which is found in Favonius and in the other Latin epigones of Varro and, therefore, Augustine might have been influenced by another arithmological source, probably the Latin translation of the Nicomachean *Introduction to Arithmetic*. This argument is worth a reconsideration: in contrast with A. Solignac, we shall attempt to underscore that the differences between what Augustine says in *Gn. litt.* IV.5 and the parallel passages in Favonius are not cogent enough to suppose a plurality of arithmological sources behind the Augustinian discourse. Additionally, the fact that the differences between Augustine and Favonius in the field of arithmology are not so relevant as A. Solignac claims does not exclude that Augustine might have consulted many arithmological sources, including the aforesaid Latin translation of Nicomachus. Once again, we agree with the conclusion of A. Solignac, but not with his premises: we assume both Varro and Nicomachus as sources of Augustine, but underestimate the discrepancy mentioned by A. Solignac.

AUGUSTINE AND FAVONIUS ON THE NUMBER SIX

As said above, this paragraph will be devoted to outline the contents of the arithmological account of Augustine in *Gn. litt.* IV.2-6; 13-14 and of the parallel text of Favonius in the chapter X of his commentary on the *Somnium Scipionis*. We shall stress out the similarities and the differences between the two texts of Augustine and Favonius in the following paragraph.

Concerning the text of Augustine, that is, *Gn. litt.* IV.2-6; 13-14¹⁹, two sections of it attract attention: one section is IV.2, is analysis of the number 6 and includes the definitions of perfect number, part («pars») and aliquot part («pars quota») of each number; the other section is IV.3-4 and contains the application of the definitions which are found in IV.2 to the numerical sequence from 1 to 12. In addition to these sections, the section in IV.5-6 divides the numbers in perfect, imperfect and pluperfect and associates the number 6 with the trigonum, whereas the section in IV.13-14 sums the view of Augustine on the number 6 and transmits a reference to the monade.

To begin, we shall focus on what Augustine says in the opening section, that is, IV.2. He regards 6 as a perfect number, and this leads him to mention the definition of perfect number and the rule from which the perfect numbers are obtained²⁰. He explains that the perfect number is that number which is equal to the sum of its proper divisors, namely, those numbers by which it is divisible, except itself, as for example $1+2+3=6$. Moreover, he proves to be aware of the rule from which the perfect numbers are obtained, that is, if in a numerical sequence which starts with 1 and proceeds through doubling the product of the sum of the previous numbers and of the last number is equal to the sum of its proper divisors, then we have a perfect number: for instance, given the numerical series 1, 2, if we multiply the sum $1+2=3$ with the last number of the series, namely, 2, we have the number 6, that is equal to $1+2+3$. Although both the definition of perfect number and the rule from which the perfect numbers are derived are documented in the *Elements* of Euclid²¹, they goes back earlier than Euclid, since the former is already exposed in Plato's *Theaetetus* (204A.7-205A.10)²² and the latter in the multiplication tables transmitted by the Rhind papyrus, which informs us about the arithmetic in Egypt until mid 1.600 BC²³. In synthesis, Augustine

¹⁹ Aug., *Gn. litt.* IV.2-6; 13-14 (CSEL 28, 94.11-98.22; 102.18-103.21).

²⁰ See in particular: Aug., *Gn. litt.* IV.2 (CSEL 28, 94.11-17).

²¹ Euclid., *Element.* VII, *def.* 23; IX, *prop.* 36 (105.5-6; 224.13-17 Heiberg/ Stamatias).

²² This has been extensively evidenced by: F. Acerbi, “A Reference to Perfect Numbers in Plato's *Theaetetus*”, *Archive for History of Exact Sciences* 59.4 (2005), pp. 319-348.

²³ On this see: C.M. Taisback, “Perfect Numbers: A Mathematical Pun? An Analysis of the Last Theorem in the Ninth Book of Euclid's *Elements*”, *Centaurus* 20.4 (1976), pp. 269-275 (quoted by F. Acerbi in: “A Reference to Perfect Numbers”, p. 338 and n. 88).

passes down to us a definition and a rule which must have been known in the ancient mathematics²⁴.

The aforesaid definition of 6 as perfect number, namely, that number which is equal to the sum of its proper divisors, leads Augustine to digress on the notions of part and aliquot part²⁵. In particular, Augustine states that each number can be either part of another number, or that part of another number by which this number is divisible; in this case, we would properly name it “aliquot part”, or proper divisor. This distinction is implied by the examples which Augustine exposes in *Gn. litt.* IV.2: in the numbers 4, which is formed by 1 and 3, and 5, which is formed by 2 and 3, the number 3 is only part, specifically the major part, and it is not proper divisor; in the numbers 7, which is formed by 3 and 4, and 8, which is formed by 3 and 5, the number 3 is, once again, part, specifically the minor part, and it is not proper divisor as well; on the contrary, in the numbers 6, which is double of 3, and 9, which is triple of 3, the number 3 is not only part, but also aliquot part, namely, proper divisor²⁶.

As above-mentioned, the other key-section of the arithmological account of Augustine is found in IV.3-4. In this passage Augustine refers to

²⁴ It is worth noting that, while in the ancient mathematics the adjective “perfect” («τέλειος») is ascribed to those numbers which are equal to their proper divisors according to the above-mentioned rule, for the Pythagoreans it means the completeness in a generic sense and does not comply with a technical terminology: for instance, in a well-known fragment from Speusippus the decad is termed “perfect”, since it is equal to the sum of its parts (1+2+3+4), namely, the numbers of the tetraktys, see: Speusipp. *ap. Iambl., Theol. arith.* X 61-63 (82.10-85.23 De Falco) = Speusipp., Fr. 122 (113-116 Isnardi Parente – the comment on this text is found at pp. 368-377); see also: Aristot., *Metaph.* A 5, 986a.8-9; M 8, 1084a.31-34. The issue of the perfect numbers, and the aforesaid definition of perfect number, are resumed by the Neo-Pythagoreans, e.g. Theo Smyrn., *Exp. rer. math.* (45.9-46.19 Hiller); Nicom., *Introd. arith.* I 16 (36.6-44.7 Hoche); Iambl., *In Nicom. Introd. arith.* 43-47; 47-48 (31.22-34.26; 35.1-7 Pistelli). Later discussions about the perfect numbers do not expand what we can find in Euclid and in the Neo-Pythagoreans, see: David, *Prolegom.* 7 (CAG 18/2, 22.18-35), and: *Scholia in Euclid. Element. IX*, 44-47 (81.14-28 Heiberg/ Stamatis).

²⁵ On this see what G. Catapano says in: *Agostino. Commenti alla Genesi*, p. 1486, n. 8: he points out that “divisor” means, in a generic sense, each number by which another number is divisible, including the number itself, while “proper divisor” denotes, in a specific sense, each number by which another number is divisible, except the number itself.

²⁶ Aug., *Gn. litt.* IV.2 (CSEL 28, 94.17-95.2).

the division of numbers in perfect, imperfect and pluperfect, on which he returns more extensively in IV.5: as said above, in case a number is equal to the sum of its proper divisors, it is named “perfect”; nevertheless, it may happen that a number is more or less than the sum of its proper divisors. At this point, Augustine examines each of the numbers in the series from 1 to 12, in order to apply the division of numbers, just formulated, and verify which of the above categories of numbers –perfect, imperfect, pluperfect– each number of the series 1-12 belongs to. To begin, the number 1 has no parts, so it is out of classification; as for the number 2, its unique proper divisor is 1; with respect to the number 3, Augustine underlines that its unique proper divisor is 1, but also mentions that it is formed by 2, which is part, and by 1, which is aliquot part, namely, its proper divisor; the number 4 has as proper divisors 2 and 1, so it is more than the sum of them; regarding the number 5, Augustine attaches to it the same property of the number 3: he says that its unique proper divisor is 1, and adds that it is formed by 2 and 3, neither of both its aliquot part; the number 6 has as proper divisors 1, 2 and 3, it is equal to the sum of them and, then, it is a perfect number; about the number 7, its unique proper divisor is 1, so it is more than the sum of its proper divisors; the number 8 has as proper divisors 1, 2 and 4, so it is more than the sum of them, which is 7; as for the number 9, it has as proper divisors 1 and 3, so it is more than the sum of them; the number 10 is divisible by 1, 2 and 5, and it is therefore more than the sum of them; the number 11 has as unique proper divisor 1, so it is more than the sum of its divisors; finally, the number 12 is divisible by 1, 2, 3, 4 and 6, and therefore it is less than the sum of its proper divisors, which is 16²⁷.

In relation to the above exploration of Augustine two details are worth noting. On the one hand, in the series 1-12 the number 6 is perfect, the number 12 is less than the sum of its proper divisors, all the other numbers (2, 3, 4, 5, 7, 8, 9, 10, 11) are more than the sum of their proper divisors. On the other hand, in all cases Augustine considers the aliquot parts of the numbers, but only in two cases, the numbers 3 and 5, incorporates in his analysis also a reference to the parts.

²⁷ See: Aug., *Gn. litt.* IV.3-4 (CSEL 28, 95.3-96.23).

The arithmological account of Augustine ends with the passages in *Gn. litt.* IV.5-6 and IV.13-14²⁸. In *Gn. litt.* IV.5-6 he resumes the above outlined tripartition of the numbers: they are perfect, imperfect or pluperfect if they are respectively equal, less or more than the sum of their proper divisors, and he intends it as a triangular number²⁹. Additionally, he regards the number 28, which is equal to the sum of its proper divisors, $1+2+4+7+14=28$, as perfect, and he informs that, if we proceed in the series of natural numbers, both the intervals between perfect numbers and the values of perfect numbers themselves increase. In conclusion, in *Gn. litt.* IV.13-14 Augustine puts the one, which is indivisible, as opposed to the bodies, which are divisible, and responds to the opening problem of the book IV of the *Gn. litt.*, arguing that God created the world in six days due to the perfection of the number 6.

We shall now turn to the account of Favonius about the number 6 and the perfect numbers in the chapter X in the course of his interpretation of the *Somnium Scipionis*. Before exploring in detail this chapter, a couple of general premises are helpful.

First of all, it is worth recalling the literary cornice of Favonius' writings. Though there is still a matter of controversy among scholars, his commentary on the *Somnium Scipionis* is dated to the period from 388 until the first two decades of the V century³⁰. Regarding the contents of this

²⁸ See respectively: Aug., *Gn. litt.* IV.5-6; 13-14 (CSEL 28, 96.24-98.22; 102.18-103.21).

²⁹ See also: Aug., *Epist.* LV 17, 31 (CSEL 34/2, 205.15-207.5); *En. in Ps. 150* 1 (CCSL 40, 2190-2192). On this see the comment of G. Catapano in: *Agostino. Commenti alla Genesi*, p. 1487, n. 14.

³⁰ According to P. Courcelle, the *terminus post quem* is 388, that is, the return of Augustine to Carthage, and the *terminus ante quem* is 426, that is, the composition of the book XXII of *The City of God*, in which Augustine seems to follow Favonius, rather than Macrobius; on this hypothesis see: P. Courcelle, "La postérité chrétienne du Songe de Scipion", *Revue d'Études Latines* 36 (1958), p. 213, and: Aug., *De civ. Dei* XXII 28 (CCSL 48, 855). Some criticisms against the view of P. Courcelle are found in: *Favonii Eulogii Disputatio de Somnio Scipionis*, ed. G. Marcellino, M. D'Auria, Naples 2012 (Storie e Testi 21), p. 18, nn. 25-26. The scholars include towards the datation 380-420, see: L.J. Dorfbauer, "Zwei wenig beachtete Aspekte eines wenig beachteten Texts: Überlieferung und historischer Kontext der *Disputatio de Somnio Scipionis* des Favonius Eulogius", *Latomus* 70 (2011), pp. 504-505, and: G. Marcellino, "Introduzione", in: *Favonii Eulogii Disputatio*, p. 26. This belief, which is today

writing, it is a commentary on the *Somnium Scipionis*, extracted from *On the State of Cicero* (= *De re publ.* VI 9-29), in which Scipio Africanus appears to Scipio Aemilianus in a dream. The commentary of Favonius is the reading of the Ciceronian text in two main sections: the former (chapters I-XX) is an exegesis on the basis of mathematical theories; the latter (chapters XXI-XXVIII) understands the text in light of astronomical and music theories.³¹ As it is evident, the chapter X about the number 6 and the perfect numbers belongs to the former section.

Furthermore, the former section of Favonius' text, from which we extract the chapter X, is properly an arithmological investigation of the numbers of the decade. The scholars who have studied the reception of the Pythagorean arithmology in the ancient thought and the different stages of this reception have speculated about the existence of a handbook of Pythagorean arithmology: dated to around II century BC and for long time ascribed to Posidonius,³² but recently attributed to Antiochus of Ascalon, as above said, it might have consisted of an introduction and ten chapters, each

prevailing, rejects the idea that Favonius employs the material of Macrobius' commentary on the *Somnium Scipionis* and, therefore, it is written in the first half of the V century; on this belief see: M. Sicherl, "Beiträge zur Kritik und Erklärung des Favonius Eulogius", *Akademie der Wissenschaften und der Literatur in Mainz: Abhandlungen der Geistes- und Sozialwissenschaftlichen Klasse* 10 (1959), p. 668.

³¹ Favon. Eulog., *In Somn. Scip.* I-XX; XXI-XXVIII (46.6-76.6; 76.8-92-5 Marcellino).

³² This view has been put forward by many scholars, for instance: F. Skutsch, "Zu Favonius Eulogius und Chalcidius", *Philologus* 61 (1902), pp. 193-200; B.W. Switalski in: *Des Chalcidius Kommentar zu Platos Timaeus: Eine historisch-kritische Untersuchung*, ed. B.W. Switalski, Aschendorff, Münster 1902; K. Fries (see *supra*, n. 10); G. Altmann, *De Posidonio Timaei Platonis commentatore*, Ebering, Berlin 1906; K. Praechter, "Eine Stelle Varros zur Zahlentheorie", *Hermes* 46.3 (1911), pp. 407-413. This view is underestimated by F.E. Robbins (see *supra*, n. 17), who assumes the existence of an arithmological source earlier than Posidonius, that is, the so named "S", but considers Posidonius as the main source of Varro. For some criticisms against the thesis of F.E. Robbins see the study of A. Grilli (see *supra*, n. 17), who thinks that Varro was influenced by Antiochus of Ascalon. In recent years the scholars have inclined to be more cautious about the identification of an archetypal arithmological source, and have preferred to postulate that Favonius resumed the arithmological material from his philosophical context, see: P. Courcelle, *Les Lettres grecques en Occident. De Macrobe à Cassiodore*, Boccard, Paris 1943, p. 25, and: S. Gersh, *Middle Platonism and Neoplatonism: The Latin Tradition*. II, University of Notre Dame Press, Notre Dame 1986, p. 738.

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of them concerned with a number of the decade. Given that, the former section of Favonius' commentary would summarize the arithmological material which might have been treated more extensively in the archetypal Hellenistic handbook. In addition, it is Favonius himself who assures the reader of his faithfulness to the Pythagorean arithmology, since in *In Somn. Scip.* II 1 he evokes Pythagoras as the father of his own doctrines³³.

In regard to the theories exposed in *In Somn. Scip.* X, as aforesaid, this paragraph is devoted to the number 6, which Favonius defines «τέλειος», perfect, as it is further *documented* by his reference to the mathematicians³⁴. He notes that a number is perfect if it is equal to the sum of its submultiples, as for instance the number 6 (=1+2+3), but he also underscores that it may happen that a number is more or less than the sum of its submultiples. To this point the arithmological material of Favonius does not diverge from that of Augustine. Moreover, as Augustine so Favonius applies the definition of perfect number to the numerical sequence 1-12, with the purpose to see which of these numbers falls under the category of perfect number. Nevertheless, here Favonius attests to a difference from Augustine: only the even numbers can be perfect numbers³⁵. This notion allows us to understand why, on the one hand, Favonius begins the sequence with the number 4 – in fact, the number 1 is excluded, since the monade is indivisible; the unique proper divisor of the number 2 is 1, so we can not sum its proper divisors – and, on the other hand, he takes into account only the numbers 4, 6, 8, 10 and 12. With respect to these numbers the analysis of Favonius is the same as that of Augustine: the number 4 has as proper divisors 1 and 2, so it is more than the sum of its submultiples; the number 6 has as proper divisors 1, 2 and 3, so it is a perfect number; the number 8 is divisible by 1, 2 and 4, so it is more than its proper divisors; the number 10 is divisible by 1, 2 and 5, so it exceeds the sum of its proper divisors; finally, the number 12 has as

³³ Favon. Eulog., *In Somn. Scip.* II 1 (48.5-11 Marcellino).

³⁴ See: Favon. Eulog., *In Somn. Scip.* X 1 (56.23-58.1 Marcellino). This definition is parallel to: Macrob., *In Somn. Scip.* I 6, 12-13 (20.22-28 Willis); Martian. Capell., *De Nupt.* VII 753 (274.17-23 Willis); Chalcid., *In Tim.* XXXVIII, 104 (87.15-19 Waszink); Censor., *De die natal.* 11, 4 (19.8-11 Sallamann). For the similarity between this passage and the parallel in Macrobius see: J. Fries, "De M. Varrone", pp. 115-116.

³⁵ As it is expressed by: Favon. Eulog., *In Somn. Scip.* X 2-3 (58.5-6 Marcellino).

submultiples 1, 2, 3, 4 and 6, so it is less than the sum of its proper divisors³⁶.

In addition to the above exposition we can mention two further data passed down to us by Favonius. First, in *In Somn. Scip.* XVIII 4 Favonius says that also the number 28 is a perfect number, since it is equal to the sum of its proper divisors (1, 2, 4, 7 and 14), and he highlights that the number 6 is the only perfect number in the first series, that is, in the series of the units, while the number 28 is the only number in the second series, that is, the series of the tens³⁷. Secondly, at the opening lines of his discourse around the monade, he distinguishes the indivisible unity, that is, the «unum», from the unity of a multiplicity, that is, the «unum solum»³⁸.

GN. LITT. IV.2-14 AND IN SOMN. SCIP. X: A COMPARISON

If we compare the texts of Augustine, *Gn. Litt.* IV.2-6; 13-14, and of Favonius, *In Somn. Scip.* X, which above we have presented in detail, we see that they both share the same arithmological material. In particular, six issues are common to their accounts: 1) the definition of the number 6 as perfect number; 2) the conception of the perfect number as that number which is equal to the sum of its proper divisors, or submultiples; 3) the differentiation of the numbers which can be equal, more or less than the sum of their proper divisors, or submultiples; 4) the notion of monade as indivisible; 5) the identification of the numbers 6 and 28 as perfect numbers; 6) the examination of the numerical sequence 1-12³⁹. With respect to the

³⁶ See: Favon. Eulog., *In Somn. Scip.* X 4-7 (58.8-60.4 Marcellino).

³⁷ Favon. Eulog., *In Somn. Scip.* XVIII 4 (72.11-22 Marcellino).

³⁸ Favon. Eulog., *In Somn. Scip.* V 1 (50.4-5 Marcellino).

³⁹ See in detail: 1) Aug., *Gn. litt.* IV.2 (CSEL 28, 94.11-12); Favon. Eulog., *In Somn. Scip.* X 1 (56.23-25 Marcellino); 2) Aug., *Gn. litt.* IV.2 (CSEL 28, 94.13-17); Favon. Eulog., *In Somn. Scip.* X 56.25-58.1 Marcellino); 3) Aug., *Gn. litt.* IV.5 (CSEL 28, 97.12-18); Favon. Eulog., *In Somn. Scip.* X 3 (58.6-8 Marcellino); 4) Aug., *Gn. litt.* IV.3; 13 (CSEL 28, 95.11-13; 103.2-8); Favon. Eulog., *In Somn. Scip.* X 4 (58.9 Marcellino) – see also *supra*, n. 38; 5) Aug., *Gn. litt.* IV.5 (CSEL 28, 97.6-12); Favon. Eulog., *In Somn. Scip.* XVIII 4 (72.11-22 Marcellino); 6) Aug., *Gn. litt.* IV.3-4 (CSEL 28, 95.10-96.23); Favon. Eulog., *In Somn. Scip.* X 4-7 (58.8-60.4 Marcellino).

issue 5), namely, the view of the numbers 6 and 28 as perfect numbers, both Augustine and Favonius are aware of the existence of other perfect numbers besides these: in fact, in *Gn. litt.* IV.5 Augustine states that the longer we go on in the series of the natural numbers, the greater are the values of the perfect numbers and the numerical intervals which are between the perfect numbers; in *In Somn. Scip.* XVIII Favonius regards the number 6 as the only perfect number in the series of units and the number 28 as the only perfect number in the series of tens and, thus, implies that there are other perfect numbers in the series of hundreds and of thousands⁴⁰. These assumptions of Augustine and Favonius are corroborated by what Nicomachus says in the book I (chapter 16) of his *Introduction*: in the series of units the only perfect number is 6, in the series of tens is 28, in the series of hundreds is 496, in the series of thousands is 8.128⁴¹.

It is worth focusing on two apparent differences between the above texts of Augustine and Favonius. The former difference, already emphasized by A. Solignac, as aforesaid⁴², is that Augustine mentions not only the definition of perfect number, but also the rule from which the perfect numbers are obtained, namely, the product of sum of the numbers in a sequence 1-n, which proceeds through doubling, and the last number of this sequence, whereas Favonius makes no mention of that. In the book I (chapter XVI) of the *Introduction* Nicomachus speaks at length about that mathematical rule: as already said, on the basis of this evidence A. Solignac argues that Augustine is influenced not only by Varro, but also by Nicomachus⁴³, particularly by the Latin translation of the *Introduction*. We do not believe that the argument *ex silentio* is enough to admit a plurality of arithmological sources behind the Augustinian text and a Nicomachean impact on him: the fact that Favonius does not quote the rule from which the perfect numbers are obtained does not entail that he is unaware of it; indeed, his text on the perfect numbers employs a terminology more “technical” than

⁴⁰ See: Aug., *Gn. litt.* IV.5 (CSEL 28, 97.6-15); Favon. Eulog., *In Somn. Scip.* X 1; XVIII 4 (56.23-25; 72.11-22 Marcellino).

⁴¹ Nicom., *Introd. arith.* I 16, 3 (40.16-20 Hoche).

⁴² See *supra*, n. 12.

⁴³ See *supra*, nn. 15-16.

that of Augustine, as it results from his reference to the mathematicians, so it is unlikely that Favonius does not know the aforesaid mathematical rule. At the same time, the fact that Augustine quotes a detail which is omitted in the account of Favonius does not signify that it originates from an arithmological source unknown to Augustine: they might share the same arithmological source, without conveying the same information; obviously, this does not exclude that Augustine might have had access also to the Latin version of Nicomachus, as A. Solignac evidences on the basis of the analogies between Augustine and Nicomachus.

Another difference between the texts of Augustine and Favonius is the following. In *Gn. litt.* IV.3-4, after dividing the numbers in equal, more and less than the sum of their proper divisors, Augustine applies this division to the numerical sequence 1-12 and states that, in relation to the sum of their proper divisors, the number 6 is equal, the number 12 is less, all the others (2, 3, 4, 5, 7, 8, 9, 10 and 11) are more⁴⁴. On the contrary, Favonius, after defining the perfect number as that number which is equal to the sum of its submultiples, and after clarifying that only the even numbers can be perfect numbers, explores the numerical sequence 1-12, as Augustine, but he focuses on the even numbers (4, 6, 8, 10, 12) and, as afore-mentioned, he does not examine the number 2, of which we can not sum the proper divisors⁴⁵. As it is evident, both Augustine and Favonius are interested in the same numerical series, 1-12; nevertheless, the former considers all the numbers in the series, the latter only the even numbers. We are persuaded that also this difference is to be underestimated. They both share the same numerical sequence 1-12, but they approach it in light of different criteria: Augustine analyses the numbers 1-12 with the aim to verify which of them are perfect, imperfect or pluperfect, whereas Favonius treats the numbers 1-12 with the objective to single out only the perfect numbers and, as only the even numbers can be perfect numbers, he excludes the odd numbers. To sum up, the fact that Augustine does not regard the perfect numbers as a specification of the even numbers does not mean that he ignores that, nor that he is in contradiction with Favonius. Additionally, in the book I (chapter

⁴⁴ See *supra*, n. 27.

⁴⁵ See *supra*, n. 36.

16) of the *Introduction* Nicomachus expressly declares that the perfect numbers end either with 6, or with 8, and thus are always even: therefore, if the combination of perfect numbers and even numbers is found in Varro and Nicomachus, it is unlikely that it was unknown to Augustine.

In conclusion of this paragraph, it is worth mentioning a detail, which does not imply a difference between the texts of Augustine and Favonius. In *Gn. litt.* IV.3, in light of the division of each number in parts and aliquot parts, and of the partition of the numbers in perfect, imperfect and pluperfect, Augustine considers each number of the series 1-12 in relation to its proper divisors, that is, its aliquot parts; nonetheless, only in two cases, the numbers 3 and 5, he also mentions the parts and gets away from the method of the whole paragraph. In sum, concerning the numbers 3 and 5, he conflates the distinction of parts and aliquot parts of each number with the tripartition of the numbers. This strategy is carried out by Augustine also in the book XI of his *The City of God*, in particular in a passage in which he speaks about the perfection of the number 6 and which K. Praechter, in an article in 1911, compared with *In Somn. Scip.* X 1, with the purpose to identify Varro as their common source⁴⁶.

Actually, this passage is a shortened version of the above-mentioned text *Gn. litt.* IV.3, not a duplication of the same arithmological source of Favonius, as K. Praechter thinks. In this passage, after referring to the perfection of the number 6 and explaining that it is perfect since it is equal to the sum of its aliquot parts, Augustine illustrates the notions of aliquot part and perfect number through the examples of the numbers 9, 10 and 12: in the number 9, which is formed by 4+5, the number 4 is part, not aliquot part, since the proper divisors of 9 are 1 and 3, of which the sum is less than 9; in the number 10, which is formed by 1+2+3+4, the number 4 is part, not aliquot part, since the proper divisors of 10 are 1, 2 and 5, of which the sum is less than 10; finally, in the number 12 the number 4 is not only part, but also aliquot part, since 12 is divisible by 1, 2, 3, 4 and 6, of which the sum is more than 12.

Thus, if we read the text in *Gn. litt.* IV.3 in comparison with the text in *The City of God* (XI 30), we are led to assume that the latter is a selection

⁴⁶ Aug., *De civ. Dei* XI 30 (CCSL 48, 350). The article of K. Praechter is quoted *supra*, n. 32.

of the arithmological material exposed in the former. However, the conflation between the division of each number in parts and aliquot parts and the partition of the numbers in perfect, imperfect and pluperfect, which we see in the passages from *Gn. litt.* and *The City of God*, are found neither in Favonius nor in any other Latin writer influenced by Varro. This element encourages us to suspect that we have to do with an alteration of Augustine himself to pre-existent arithmological material.

CONCLUSIVE REMARKS

On the basis of the above research, we can now formulate the following two main conclusions.

First, the comparison between the text of Augustine in *Gn. litt.* IV.2-6; 13-14 and that of Favonius in *In Somn. Scip.* X has pointed out that they both share the same arithmological material and they both expose it in the course of their discussions on the number 6 as perfect number. Therefore, we are able to support the afore-mentioned thesis of A. Solignac with the textual evidence.

Secondly, we have attempted to underestimate the differences between the accounts of Augustine and Favonius and, consequently, to emphasize their similarities. Nevertheless, the fact that Augustine and Favonius share the same arithmological material and therefore draw it from the same source does not exclude that Augustine might have also been influenced by a source unknown to Favonius, for instance the Latin translation of Nicomachus by Apuleius, as already conjectured by A. Solignac on the basis of the analogies between Augustine and Nicomachus. As we have said at the beginning, we agree with A. Solignac about his conclusion, but not with his premise: we accept that Nicomachus might have been a source of Augustine, together with Varro, but we reject the presumed discrepancy between the arithmological accounts of Augustine and Favonius.

EDITIONS

- Aug., *Contr. Acad.* = Augustinus, *Contra Academicos* (1922), ed. P. Knöll. Wien-Leipzig: Hoelder/ Pichler/ Tempsky (Corpus Scriptorum Ecclesiasticorum Latinorum 63)
- Id., *De civ. Dei* = Augustinus, *De civitate Dei libri I-X; XI-XXII* (1955), eds. B. Dombart and A. Kalb. Brepols: Turnhout (Corpus Christianorum Series Latina 47; 48)
- Id., *De cura pro mort.* = Augustinus, *De cura pro mortuis* (1900), ed. J. Zycha. Prague-Wien-Leipzig: Academia Litterarum Caesareae Vindobonensis (Corpus Scriptorum Ecclesiasticorum Latinorum 41)
- Id., *De lib. arbitr.* = Augustinus, *De libero arbitrio* (1956), ed. W.M. Green. Wien: Hoelder/ Pichler/ Tempsky (Corpus Scriptorum Ecclesiasticorum Latinorum 74)
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- Censor., *De die natal.* = Censorinus, *De die natali* (1983), ed. N. Sallmann. Leipzig: Teubner

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- David, *Prolegom.* = David, *Prolegomena* (1904), ed. A. Busse. Berlin: Reimer (Commentaria in Aristotelem Graeca 18/2)
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- Favon. Eulog., *In Somn. Scip.* = Favonius Eulogius, *Disputatio de Somnio Scipionis* (2012), ed. G. Marcellino. Naples: M. D’Auria (Storie e Testi 21)
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