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Classical Musical Imagery in Eugenius Vulgarius' *Carmina Figurata*

Paola Dessì

Università di Padova

paola.dessi@unipd.it

Abstract

At the beginning of the tenth century, Vulgarius wrote some poems for Pope Sergius III. One of these is set out in the shape of a psaltery and is followed by a short explanatory essay. This article reconstructs the cultural context of this pattern poem and sheds light on the presence and significance of music in this text. First, I shall address the visual appearance of this poem, since the shape of the text imitates a musical instrument. Secondly, I shall examine the textual content of the poem, which sings the praises of the Pope and ultimately reveals the true meaning hidden in the name 'Sergius'. Subsequently, I shall examine the content of the explanatory essay, which clarifies the Boethian musical proportions on which the entire construction of the pattern poem is based. Finally, I shall address the political 'double meaning' of this poem, which seems to hide an invective against the Pope.

Keywords

Vulgarius – *carmina figurata* – psaltery – pattern poems – Boethius – musical proportions – hexameter – classical metre

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To my Parents and their first Boethian precept for numbers counting
Ut numerus, qui, cum a finita incipiat unitate, crescendi non habet finem

BOETH. *Mus.* 1.6

1 Biographical and Literary Sketch

The biographical information on Eugenius Vulgarius is rather scanty:¹ he lived between the second half of the ninth and the first half of the tenth century, probably in the south of Italy and, specifically, in Naples.² This view originates in the fact that Vulgarius dedicated many poems to well-known local personalities, including Bishop Peter of Salerno (887-914),³ Atenulf II, Prince of Capua and Benevento (900-910),⁴ and Bishop Athanasius III of Naples (ca. 907-960).⁵

With regard to Vulgarius' personal relationship with Pope Sergius III (904-911), the only reliable information we have is that the Pope wanted him in Rome. According to Dümmler⁶ (the first scholar who produced an edition of Vulgarius' works in 1866) and Winterfeld⁷ (editor of the second edition, published in 1899), the Pope requested Vulgarius' presence in Rome because he had supported the political views expressed by Pope Formosus, who would be declared illegitimate by his opponents and successors, including Sergius himself.⁸ Alternatively, according to Francesco Novati⁹ it is possible that the Pope wanted Vulgarius in Rome because of his excellent rhetorical skills and his high reputation as a grammarian.

The Pope's request is attested indirectly by Vulgarius' own reply.¹⁰ However, the meaning of the end of his letter is unclear, since the only manuscript that preserves it contains a lacuna right before the expression *cellulam meam*. According to Dümmler, Vulgarius was asking permission to stay in the cell he had occupied since taking refuge in a monastery; by contrast, Winterfeld maintains that Vulgarius asked to be set free from the cell in which Sergius had already imprisoned him. Finally, according to Novati, Vulgarius is asking permission

1 Cf. Braga 1993, 505-9.

2 Cf. Gnocchi 1995, 65-75.

3 Eugenius Vulgarius (hereafter EuV) 3.12. Cf. Valtorta 2006.

4 EuV 3.23.

5 EuV 3.13. The poem dedicated to him consists of ten lines borrowed from Boeth. *Cons.* 3.5.5. Boethius is not the only Classical author mentioned by Vulgarius. As noted by Braga, who summarises the results of Schramm's studies, Vulgarius' original approach depends on the fact that he does not hark back to the world of the Carolingian renaissance but rather refers to the spiritual and cultural tradition of Cassiodorus, Boethius and Gregory the Great: cf. Braga 1993, 508, especially with regard to the poem *Roma caput mundi* (EuV 3.38), dedicated to Pope Sergius III.

6 Cf. Dümmler 1866, 39-46, 117-56.

7 Cf. Winterfeld 1899, 406-12.

8 On Vulgarius' writings in defence of Formosus, cf. n. 14.

9 Cf. Novati 1926, 226, 233, 236 ff., 247, 264-70.

10 EuV 3.6.

not to go to Rome, in order to devote himself entirely to his studies in the solitude of his monastery cell.¹¹ In fact, in a letter sent by Vulgarius to Bishop Vitale, whom he called upon for help,¹² we read that he asked not to go to Rome out of love for his country and because he was afraid of the damaging influence of the questionable life of the Roman court. Therefore, Novati argues that Vulgarius' refusal did not depend on fear of political repercussions or outright revenge on the part of Sergius. Unfortunately, the complete lack of information about subsequent events does not allow us to know for sure whether Vulgarius ever went to Rome or rather stayed in his 'little cell'.

Luckily, however, we have more information about Vulgarius' poetic production. The whole corpus of his works has been transmitted in only one manuscript from the tenth century, which allegedly belonged to Emperor Otto III and is generally known as the Bamberg manuscript (Staatsbibliothek, Canon. 1 P.III.20).¹³ In addition to Vulgarius' texts,¹⁴ this composite codex contains Ausilius' writings in support of Pope Formosus' political views¹⁵ as well as a letter

11 Cf. Braga 1993, 506.

12 EuV 3.7.

13 For a description of the manuscript and a reconstruction of its history, cf. Gamberini 2005.

14 Vulgarius' literary production is quite varied and comprises a wide number of genres and topics: A) Writings in defence of Formosus' political views: *De causa Formosiana libellus*, ff. 88r-101v; *Explanatio sermonum*, f. 6rv; *In defensionem Formosi papae*, ff. 103v-114v, 2r-11r. B) Miscellaneous writings: *Sermones interpretati*, f. 7v; *Sermonum interpretatio*, f. 11v; *Species comice* (?), ff. 8r-10r; *Usque in quibus locis ante diluuium venerint*, f. 11r. C) Letters: *Ad Sergium papam (inc.: Videtur corporis huius scematis dispositio)*, ff. 110v-111r; *Ad Sergium papam (inc.: Lucida dum current annosi sidera mundi)*, ff. 111v-112v; *Ad Vitalem episcopum*, f. 113rv; *Ad Theodoram*, ff. 113v-114v. D) Poems: *Ad Sergium papam versus*, f. 111r; *Metrum pheregratum ad Sergium papam*, f. 111r; *Ad Sergium papam metrum saphicum*, f. 111rv; *Ad Sergium papam metrum parhemiaticum*, f. 111v; *Ad Vitalem episcopum versus*, f. 113v; *Ad Benedictum monachum*, f. 114v; *fragmenta carminis*, f. 114v; *Metrum iambicum tetrametrum ad Petrum Salerne urbis episcopum*, f. 114v; *Crux (ICL 2028)*, f. 2r; *Crux (ICL 2599)*, f. 2r; *Pyramida ad Leonem imperatorem*, ff. 2v-3v; *Ad Leonem imperatorem metrum anapesticum isosyllabum*, f. 3v; *Metrum asclepiadeum ad Leonem imperatorem*, ff. 3v-4r; *Metrum adonium ad Leonem imperatorem*, f. 4r; *De Deo omnipotente*, f. 4r; *De thesin et hypothesin*, f. 4v; *De syllogismis dialecticae ipothecaliter*, f. 4v; *Ad Atenolfum principem Beneventane urbis*, ff. 4v-5r; *Ad Iohannem levitam*, ff. 6v-7r; *Ad Gregorium consulem*, f. 7r; *Versus et interpretatio sermonum*, f. 7rv; *Ad Gregorium magistrum militum*, f. 7v; *Versus et explanatio*, ff. 7v-8r; *Metrum parhemiaticum tragicum*, f. 10rv; *In laudem filii Dei*, ff. 10v-11r; *Carmen*, f. 12r; *Carmen figuratum*, ff. 12v-13r; *Carmen*, f. 13r.

15 *De ordinationibus a Formoso papa factis*; *In defensionem sacrae ordinationis papae Formosi*; *Libellus in defensionem Stephani episcopi et praefatae ordinationis*.

by Guiseldardus (a deacon of Beneventus)¹⁶ and a poem entitled *Versus de Gregorio et Ottone Augusto*, written by Leo of Vercelli.¹⁷

2 The Role of Poem 37 in Vulgarius' Celebratory Poetry

Vulgarius' poems stand out because of his extensive use of classical metres, ranging from simpler verses like hexameters, anapaests, and iambic dimeters to much more refined forms such as Pherecrateans, Sapphics, Paroemiacs, Amoeboeans, Asclepiadeans, and Adonians. His poems had a largely celebratory function: they are dedicated to distinguished Neapolitan figures as well as more prominent individuals, such as the Byzantine Emperor Leo VI¹⁸ and Pope Sergius III, who is the addressee of two of Vulgarius' letters¹⁹ and six of his celebratory poems.²⁰ One of these, *Poem 37*, presents a *carmen figuratum* in hexameters and is followed by a short explanatory essay (cf. Figure 1).²¹ This composition as a whole lends itself to a variety of interpretations, which we will discuss in the following sections.

16 *Epistola Rodelgrimi et Guiseldardi*.

17 Roberto Gamberini (2005, 591) argues that Leo of Vercelli (965 ca.-1026) had access to this manuscript, which belonged to Otto III, and added his own text to the codex, most likely writing it himself on an empty leaf; alternatively, he could have supervised the person who copied it. Leo of Vercelli was the chaplain and a trusted confidant of Otto III: cf. Bisanti 2010, 93-5. The presence of a possible autograph by Leo of Vercelli in a manuscript containing Vulgarius and Ausilius' poems is very interesting in connection with the question of the relationship between Leo and Vulgarius. According to Gamberini (2005, 592), however, this examination is useful to shed some light on the history of a manuscript, but leads to a dead end if one tries to employ it to better understand the literary personality of the Bishop of Vercelli. Leo employs the collection of the Neapolitan poet only as a readily-accessible repertoire of poetic materials. In Leo's work there are some words borrowed from Vulgarius but there are no traces of his poetics. Leo of Vercelli did not need Vulgarius' speeches of praise, because he is actually interested in political polemics. A man of his temperament could not avoid taking a clear stance and he did so without reservations: with actions and with his writings. Later on we will see that Vulgarius' political polemic does not only characterise his writings in support of Formosus; it is even clearer in Poem 37, which is dedicated to Pope Sergius and seems to convey two different messages at the same time: flattering praise and a strongly critical attack.

18 Vulgarius dedicated four poems to the emperor (EuV 3.16-9), the most famous of which is a *carmen figuratum* in the shape of a pyramid (EuV 3.16).

19 EuV 3.2, 6.

20 EuV 3.2B, 3-5, 37-8.

21 EuV 3.37.

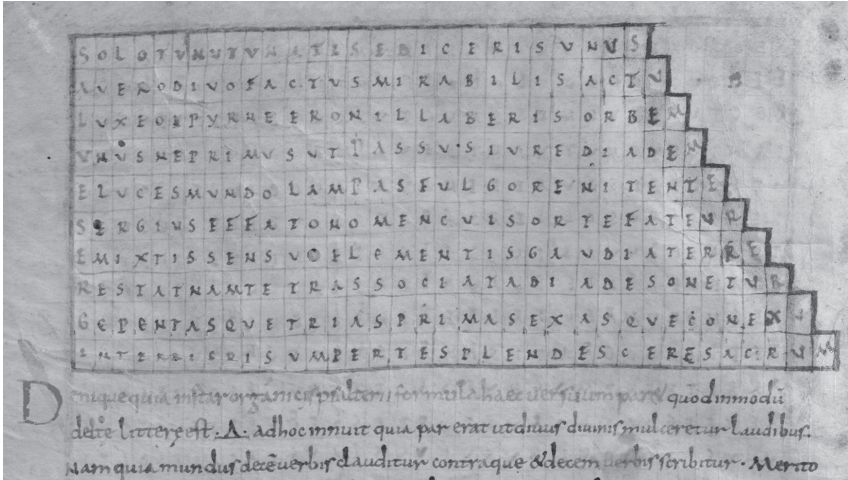


FIGURE 1 Staatsbibliothek Bamberg, Msc. Can. 1, folio 12v

2.1 *The Visual Meaning of Vulgarius' Poem: the Psaltery*

The visual image outlined by Vulgarius' verses resembles a ten-stringed psaltery, shaped like a right trapezium with one sloping side. Illustrations of this kind of psaltery are very hard to come by and appear only from the fourteenth century onwards, mostly in Catalan and Aragonese texts, as well as in French sources originating in the region of the Pyrenees.²² This leads us to believe that Vulgarius' reference to the psaltery must be interpreted as a musical image that belongs to the realm of exegesis and theological symbolism rather than reflecting musical practice.²³ At the beginning of his explanatory essay, Vulgarius himself points out that the poem 'resembles a psaltery, a musical instrument shaped like the letter delta'. Vulgarius speaks of 'resemblance' and not 'identity' between his poem and the musical instrument, as if the shape of the poem resulted purely from the requirements of the poetry and not from a desire to depict a real instrument. Therefore, the psaltery sketched by Vulgarius' verses seems to hint at the metaphorical overtones evoked by the musical image of this ten-stringed instrument, building upon the symbolic value it has in Augustine's Sermon 9 (*De decem chordis*) as well as on the definition of *psalterium* that Cassiodorus attributed to Jerome in the first Book of his *Institutiones Divinae* and in his *Expositio Psalmorum*; the same definition appears also in Isidorus' *Etymologiae*, in the Church Fathers and in the *Epistola ad Dardanum*.²⁴

22 Cf. Facchin 2000, 670-4.

23 Cf. Mocchi 2010, 1-8.

24 Vulgarius was certainly acquainted with the works of Augustine, Cassiodorus and Isidore: cf. n. 5 above.

Vulgarius' decision to compose a poem representing a musical instrument harks back to the late-antique tradition of the so-called *carmina figurata* and, especially, to Publilius Optatianus Porphyrius (fourth century AD), who wrote many pattern poems including one in the shape of a syrinx (Poem 27) and one in the shape of an organ (Poem 20).²⁵ The latter is particularly significant for our present purposes, since it presents many similarities to Vulgarius' poem.

First of all, Poem 20 is a celebratory ode that Optatian dedicated to the Emperor Constantine in an attempt to win his favour and be allowed to return to his home country, after being exiled. Perhaps Vulgarius was in a similar situation with Pope Sergius, because of the support he had previously lent to Pope Formosus and his politics, but we are not in a position to tell if he wrote the psaltery-shaped poem as an implicit bid for pardon. Be that as it may, we certainly know that both poems celebrate the highest political and religious authority of the time: the Emperor in the case of Optatian, the Pope in that of Vulgarius.

The reference to Optatian's poem is particularly relevant because of the special genre of poem he chose. In fact, both Optatian and Vulgarius resort to pattern poetry in order to represent a musical instrument: Optatian depicts an organ, the acoustic symbol of the highest political power in Imperial Rome, while Vulgarius sketches a ten-stringed psaltery, the biblical instrument *par excellence*.

2.2 *The Benevolent Message Offered in the Versus Intexti*

The comparison with Optatian's poems extends to the use of so-called *versus intexti*, i.e. verses that could be deciphered by following a specific path marked by a different colour in the text: while the poem as a whole was written in black ink, the letters that composed the *versus intexti* were written in red ink, which made them stand out against the background of the white parchment. The pattern of the rubricated letters reveals Vulgarius' use of different techniques of poetic composition, including not only acrostics but also mesostics and telestics.²⁶ These verses celebrated the dedicatee of the poem. For instance, in Poem 20 Optatian sent the Emperor the following message:

AUGUSTO VICTORE IU VAT RATA REDDERE VOTA

Since Augustus is victorious, it is a pleasure to offer him the appropriate congratulations

²⁵ Cf. Dessì 2008, 63-72; Polara 1973; 1991; 2004.

²⁶ Cf. Dessì 2008, 65-6.

On the other hand, Vulgarius employed the letters of the acrostic together with the mesostic produced in verses 4 and 5 and the final telestic in order to compose the following verse:

SALVE SERGI PAPA SUMME RERUM

Hail, Pope Sergius, the highest of all creatures

In this greeting, the Pope is defined as *summe rerum*, literally ‘the highest of all things’, an expression that is clearly appropriate for a ‘divine’ figure—a characterisation that Vulgarius explicitly applies to the Pope in the body of the poem.

2.3 *The Literal Meaning of the Poem: the Poetic Praise of Sergius*

Having perceived the visual meaning of the poem and the benevolent message spelled by the combination of acrostics, mesostics and telestics, the dedicatee of the poem would have read the text in full:

Because of a single gesture, you are said to be the one and only by your
children²⁷

You who have been made glorious by a truly divine act.

O light, fire of Dawn, may you sink down into the world of the dead²⁸

27 In keeping with the standard late-antique scansion of dactylic hexameters—according to which the verse must end with a dactylic dimeter catalectic, whose second foot is disyllabic and whose last syllable is anceps, and shows a correspondence between metrical ictus and grammatical accents—the verb *diceris* must be interpreted as present indicative (*dicēris*) and not as a future tense (*dicēris*). While the future tense would have supported an interpretation of the word *natis* as ‘successors’, the present tense rather suggests the meaning ‘children’. Is this an allusion to Sergius’ illegitimate offspring and his union with Marozia? Claudia Gnocchi (2000, 62) argues that the historian Liutprand talks about an illicit affair between Sergius, who was far from young at this stage, and Marozia, the daughter of the noble Roman Theophylact, who supported his election. This affair allegedly led to the birth of the future pope John IX. The relationship between Sergius and Marozia is substantiated by the evidence of some pontifical catalogues.

28 Stefano Pittaluga, whom I would like to thank for many useful suggestions about the interpretation of this text, takes *necron* to be a Greek genitive plural (*νεκρῶν*) and not an adjective that qualifies *orbem*. Perhaps Vulgarius is hinting at the deaths of John IX, Benedict IV, Leo V and Christophorus, since Sergius always considered their elections to be illegitimate? On the accusation levelled by Ausilius and Vulgarius that Sergius was implicated in the deaths of Leo V and Christophorus, see Longo 2000 and Loré 2000. As noted by Longo 2005, Duchesne, reminding us that no specific acts may be ascribed to this Pope, underlines how the term ‘emigrat’, employed by Flodoard, seems to indicate that Leo V died of natural causes. However, we know that he was imprisoned and most likely died in prison in 905, when Sergius had already been elected Pope; and Sergius condemned to the same fate also Leo’s adversary, Christophorus.

So that you, who are the one and the greatest, rightly should not bear
 being second [to anyone].²⁹
 You shine forth in the world like a torch with glistening brightness,
 'Sergius' is the name that the fate granted you and by chance
 the meaning of the combination of its letters is 'joys of the earth'.
 For it is clear that the fourth letter together with the second sounds
 'GE', and the fifth is to be connected with the third, first and sixth:
 Through you, divine laughter shines on the earth.³⁰

This poem begins by characterising Sergius as divine and continues by establishing an oxymoronic opposition between the divine world Sergius belongs to, which is full of light, and the dark world of the dead. He is the one and only Pope, he is the one who brings light and joy, and destiny marked him for this role through his name (*in nomen omen*): in fact, the anagram of his name contains in itself the auspicious expression *ge* (i.e. τῆ γῆ) *risus*, a depiction that is spelled out even more explicitly in the last verse of the poem: 'through you, divine laughter shines on the earth'.³¹

29 According to Pittaluga, *diadem* must be understood as the accusative singular form of *dias*. Therefore, this sentence would comprise an infinitive clause governed by an implied perfect subjunctive: *ne ... tu passus [sis te] diadem [esse]*. Also Roccaro (1999, 220) takes *diadem* as accusative of *dias*, which is used as a noun, while he underlines that in verses 8 and 9 the Greek numerals *dias*, *trias*, *tetras*, *pentas* and *exas* are used as adjectives. By contrast, the dictionary *Latinitas Italica* interprets *diadem* as a shortened substantive that stands for *diadema* (i.e. tiara). In this case, the translation of this verse would read as follows: '[you are] like a unique tiara, not the first merely by law'. According to this reading, it would not be necessary to emend *ut* into *tu*, as editors generally do in keeping with the previous interpretation. However, some metrical features of this verse cast doubt on this second reading. While *diādēm* (i.e. the accusative of *dias*) reflects the usual scansion of late-antique hexameters (including the fact that the grammatical accent and the metrical ictus fall on the same syllable, *dī/ādēm*), the contracted nominative of *diadema*, i.e. *dī/ādē* would not be compatible with the metrical structure of this verse and would violate the accent/ictus rule. In addition, the word *ne* would have to be taken as an adverb (*nē*) and not a conjunction (*nē*) and would produce a long syllable only because of the two consonants at the beginning of the following word; however, this type of lengthening by position is not allowed in poetry of this period. The same problem arises in the case of *ūt*: since this word is not emended into *tū*, the syllable would become long only by position (*ut passus*).

30 For Latin text cf. Appendix.

31 Vulgarius employs anagrams in two other poems: in *Ad Atenolfum principem Beneventane Urbis* (EuV 3.23.17-9) the name of Atenulf turns into *valetio* and *valet fons*, while in *Ad Gregorium consulem* (EuV 3.26) the name Gregorius becomes *Orgigerus*. The use of anagrams as a form of encomiastic onomancy was common already in the Hellenistic age, at the time of Ptolemy II Philadelphus (third century BC). For instance the poet Lycophron

2.4 *The Iconological Role of the Ten-Stringed Psaltery and the Psalmist*

The explanatory essay that follows the ode provides the reader with further clarifications and introduces a new level of interpretation that concerns the symbolic meaning of the shape outlined by verses. Vulgarius states this clearly at the beginning of his prose exposition:

Therefore, since the disposition of the verses resembles a psaltery, a musical instrument that is shaped like the letter delta, this letter Δ appropriately instructs us to appease the Lord with divine praise.

So the main aim of Vulgarius' use of the musical symbol of the psaltery is singing the praises of Sergius with words that have to sound like 'a new song'. This point is developed further in the following lines, where Vulgarius refers to the content of Augustine's *Sermon 9*, entitled *Tractatus de decem chordis*:³²

In fact, since the world is enclosed in ten sentences³³ and, on the other hand, is also written in ten sentences,³⁴ a simple man like me presents you, divine by destiny, with ten sentences in verse as a token of his devotion.

The ten sentences Vulgarius refers to correspond to the Decalogue of Mosaic Law, which is written in the Ten Commandments. This point is clarified by Augustine, in Chapter 7 of this *Tractatus de decem chordis*:

On these two stone tablets were inscribed the ten commandments of the law—the harp of ten strings—three referring to God on one tablet, and seven referring to our neighbour on the other tablet. So on the second tablet the first commandment is *Honor your father and your mother*; the second, *You shall not commit adultery*; the third, *You shall not kill*; the fourth, *You shall not steal*; the fifth, *You shall not bear false witness*; the sixth, *You shall not covet your neighbour's wife*; the seventh, *You shall*

praised his patrons by rearranging the letters of their names: so *Ptolemaios* and *Arsinoe* respectively became *apò mélitos* ('made out of honey') and *Éras íon* ('Hera's violet'). Cf. Bartezzaghi 2010.

32 It is worth noting that the Bamberg manuscript that contains Vulgarius' works presents the expression 'De X Cordis' [*sic*] on the top of the first leaf (c. 1r.).

33 I.e. the Decalogue of Mosaic Law.

34 I.e. the Ten Commandments.

not covet anything of your neighbour's. Let us join these to those three that refer to love of God, if we wish to sing the new song to the harp of ten strings.³⁵

Augustine had already touched upon this matter in Chapter 6:

Suppose then I'm a citharode—what more could I sing to you? Here you are—I have brought a psaltery and it has ten strings. You were singing this yourselves a little earlier on, before I began to speak. You were my chorus. You were singing, weren't you, earlier on: *O God, I will sing you a new song, on a psaltery of ten strings I will play to you?* Now I am strumming these ten strings. Why is the sound of God's psaltery sour? Let us all play on the ten-stringed psaltery. I am not singing you something that you are not meant to do, for the Decalogue of the law has Ten Commandments. These Ten Commandments are arranged in such a way that three refer to God and seven refer to men and women. [...] This is the third string of this Decalogue, that is, of the ten-stringed psaltery. Commandments on three strings refer to God.³⁶

The ten-stringed psaltery, therefore, represents Moses' law and the same reference underlies Vulgarius' ten verses, which represent the covenant between men and God and the need to observe Mosaic Law. The poet exploits the content of Augustine's *Tractatus*, and specifically the symbolic meaning attributed to the ten-stringed psaltery, in order to show his faith in Sergius III; he wants to show that he is not the same person who wrote the pamphlets in support of Formosus: he is a new man who 'sings a new song'. Another passage from Chapter 8 of Augustine's *Tractatus* is particularly relevant in this connection:

They were carrying the harp, but they weren't singing. If you are singing, it's enjoyable; if you are fearing, it's burdensome. That's why the old man either doesn't do it, or does it out of fear, not out of love of holiness, not out of delight in chastity, not out of the calmness of charity, but out of fear. It's because he is the old man, and the old man can sing the old song but not the new one. In order to sing the new song, he must become the new man. How can you become the new man? Listen, not to me but to the apostle saying, *Put off the old man and put on the new*. And

35 Aug. *Serm.* 9.7 (CCSL 41, 121f.); Eng. transl. Rotelle 1990, 265f.

36 Aug. *Serm.* 9.6 (CCSL 41, 117); Eng. transl. Rotelle 1990, 264.

in case anyone should imagine, when he says *Put off the old man and put on the new*, that something has to be laid aside and something else taken up, where in fact he is giving instructions about changing the man, he goes on to say, *Therefore, putting aside lying, speak the truth*. That's what he means by *Put off the old man and put on the new*. What he is saying is: "Change your ways." You used to love the world; love God. You used to love the futilities of wickedness, you used to love passing, temporary pleasures; love your neighbor. If you do it out of love, you are singing the new song. If you do it out of fear but do it all the same, you are indeed carrying the harp but you are not yet singing. But if you don't do it at all, you are throwing the harp away. It's better at least to carry it than to throw it away. But again, it's better to sing with pleasure than to carry the thing as a burden. And you don't get to the new song at all unless you are already singing it with pleasure.³⁷

After referring to the covenant between God and Moses, which could reflect the new relationship between Sergius III and Vulgarius, the author introduces a new element, a tribute to the figure of the psalmist, which seems to stand for the author himself. In fact, he describes three different types of psalmists who deserve different treatments:

And similarly [*scil. I presented you with ten sentences etc.*] because the beginning of the psaltery shows what the psalmist's duty consists in: since he doubtless is a 'beatus vir',³⁸ the person who must surely be celebrated as a true psalmist is the one who has understood the divine law and applies it; and the person who responds to these divine words with good actions must be venerated as an excellent psalmist; in no lesser degree, the person who not only responds to these divine words with good deeds but also introduces into them other mystic meanings must be honoured and cherished as the greatest psalmist.

Here Vulgarius seems to be suggesting that the Pope should honour him as a 'true psalmist' because he observed the Law and he should venerate him as an 'excellent psalmist' because he turned God's words into good actions, i.e.

37 Aug. *Serm.* 9.8 (CCSL 41, 122f.); Eng. transl. Rotelle 1990, 266.

38 Cf. *Psalm* 1.1f.: 'Blessed is the man / who walks not in the counsel of the wicked, / nor stands in the way of sinners, / nor sits in the seat of scoffers; / but his delight is in the law of the Lord, / and on his law he meditates day and night'.

he sings in praise of the Lord and his representative on earth; finally, Vulgarius suggests that the Pope should welcome him into his arms as the 'greatest psalmist' because he found some new mystical meanings in the image of the ten-stringed psaltery.

2.5 *The Mystical Meaning of Numbers and Proportions in Poem 37*

In the following lines of the explanatory essay, Vulgarius depicts himself as the 'greatest psalmist', who was able to go beyond the symbolic values identified by Augustine. Specifically, he found some new mystical meanings in the image of the ten-stringed psaltery on the basis of the specific variety of neo-Pythagorean numerology discussed in Boethius' *De institutione arithmetica*. Here is what he says in the relevant section of the explanatory essay:

In fact here are ten verses and the decad³⁹ contains in itself all other numbers with their own virtues and perfections; for the decad is the end of the first verse,⁴⁰ which embraces the rules and the analogies proper to numbers,⁴¹ their genera, species, differences, perfect and imperfect features. Therefore the decad is 'equally unequal' (*pariter impar*), because it is generated by odd numbers,⁴² and its shape corresponds to the third one proper to the triangle in operation and act, while each individual side has four units.⁴³

39 Vulgarius employs the term *decas* to indicate a set comprising ten units.

40 I.e. it is the end of the basic series comprising the first ten numbers. The same notion is attested in Mart. Cap. *Nupt.* 7.742. Cf. Grion 2011-2012, 58f., 151-3; here is the passage that comments on the terms that appear also in Vulgarius, providing useful translations and further observations: "Chiara risulta il riferimento alle virtù (*perfectiones*) e ai difetti (*imperfecta*) illustrati per ciascun numero, in accordo con il carattere aritmológico della prima sezione del libro. Corretta inoltre l'interpretazione di Remigio [di Auxerre] che intende per *analogia* il rapporto che intercorre tra due numeri, per *genera* il pari e il dispari, per *species* le sottocategorie di pari e di dispari, per *differentiae* gli intervalli ovvero le distanze tra entità numeriche".

41 I.e. the numbers that belong to the series comprising the first ten positive integers.

42 Cf. Boeth. *Arithm.* 1.10.1. Vulgarius refers to the 'second' species of even numbers: the concept of '*pariter impar*' corresponds to an even number whose division into two produces an odd number. For instance, 10 can be divided by two but the result of this operation cannot be further divided by two ($10 : 2 = 5$). Boethius himself includes the number 10 in the series of numbers he provides to exemplify the concept of '*pariter impar*': 6, 10, 14, 18, 22 (*Arithm.* 1.10.3).

43 Cf. Boeth. *Arithm.* 2.7-9. Vulgarius refers to the fact that the sum of the first four integers is ten ($1 + 2 + 3 + 4$). Boethius arranged these numbers in the shape of a triangle which is 'third in act' (*tertius actu triangulus*), i.e. the result of the combination of three

After discussing the features of the decad, Vulgarius continues by examining the verses that make up the specific decad of the ten-stringed psaltery:

In this figure we can observe two terms, 1 and 10.⁴⁴ So, if the beginning of the computation is identified in the monad,⁴⁵ there will be an increase both in the number of the lines and in that of the letters; by contrast, if the beginning of the computation is the decad,⁴⁶ the number of the letters decreases as much as that of the lines increases. In turn, if the verses are observed in the order in which they are distributed, all the 'sesquiterial' ratios⁴⁷ will be found by mutual correspondence.

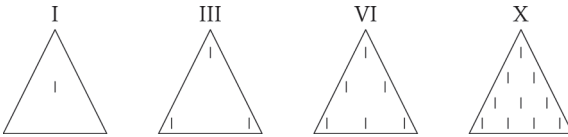
The 'mutual correspondence' between the 'sesquiterial' ratios to which Vulgarius refers concerns the relationship between the numbers 4-3 and 8-6. They stand to one another in the following proportion:

$$4:3 = 8:6.$$

Vulgarius ends his analysis of the relation between the verses of his poem with the following remark:

But if the movement went from the last verses to the first, the ratio will be either 'sesquiterial' or 'sesquiquartal', following the nature of the ratio between the numbers 4 and 3.

real triangles (*actu et opere*) that are placed above a theoretical triangle, whose centre is the unit.



44 Vulgarius says *monas et decas*, i.e. the unit and the decad.

45 I.e. starting from the first line of the text.

46 I.e. starting from the last line of the text.

47 Boeth. *Arithm.* 1.24.1-2.7f. With the term *sesquitercius*, Boethius indicates the ratio 4:3, in which the larger term exceeds the smaller by a third of the smaller term. Following the same rationale, he employs the term *sesquialter* to define a ratio in which the larger term contains the smaller one plus its half (3:2), while the term *sesquiquartus* indicates a ratio in which the larger number contains the smaller plus a fourth of the smaller term (5:4). On the musical usage of these terms to define ratios between different notes, cf. Boeth. *Mus.* 1.4; cf. also Mart. Cap. *Nupt.* 9.930 and 933 in Grion 2011-2012, 176.

Vulgarius clarifies this statement by providing some examples, but his verses are not regarded anymore as numeric units that correspond to a specific line; now each verse is regarded as the sum of the letters it contains:

Therefore the first verse [starting from the bottom] is a multiple number and stands in a superparticular ratio to the first: their ratio is called *diatessaron*⁴⁸ and the difference between them is nine.

This passage means that verse 10, which consists of 36 letters (i.e. a multiple of 4),⁴⁹ stands in a superparticular ratio to the first verse because it contains the number of letters presented in verse 1 (27) plus a fraction of this number,⁵⁰ namely a third (9). For this reason, Vulgarius defines the ratio as *diatessaron*, i.e. 4:3, just like the musical interval of a fourth. If we follow the approach outlined by Vulgarius in the previous lines, we can say that the relationship between these two verses is 'sesquitercial':

48 Boeth. *Arithm.* 1.1.10. On the fact that the names of musical consonances derive from their ratios, cf. Boeth. *Mus.* 1.7.

49 As Boethius states at *Arithm.* 2.2.11, 36 is a multiple of 4 in the series of triple numbers. He puts it even more clearly at *De Institutione Musica* 2.8: 'triple numbers produce sesquitercial ratios. In fact, if we look at a series of triple numbers.

1	3	9	27	81
	4	12	36	108
		16	48	144
			64	192
				256

we can see that sesquitercial ratios are created as follows: the first triple number comes before a single sesquitercial ratio (4:3), the second before two (12:9, 16:12), and the third before three (36:27, 48:36, 64:48). If we arrange these numbers into a triangle, we can see that the numbers comprised in each line present a geometric progression based on the number three, while the numbers at the beginning of each line, which outline the hypotenuse of the triangle, form a geometric pattern based on the number four.

50 Boeth. *Arithm.* 1.24.1: *superparticularis vero est numerus ad alterum comparatus, quotiens habet in se totum minorem et eius aliquam partem*. A similar definition is provided at Boeth. *Mus.* 1.4. The translation provided above does not accept Winterfeld's reading, which associated the word *multiplex* with *superparticularis* and therefore argued that Vulgarius made a mistake. In fact, if the term *multiplex* referred to the word *superparticularis*, then the result would not be consistent with the definition given at Boeth. *Arithm.* 1.29.4: *multiplex superparticularis est quotiens numerus ad numerum comparatus habet eum plus quam semel et eius unam partem*—i.e. the larger term contains the smaller several times plus a fraction of the smaller number. However, in the following lines Vulgarius gives the correct definition of *multiplex superparticularis*, showing that he was familiar with Boethius' theory also with regard to this specific matter.

Verse 10 i.e. 36 letters

Verse 1 i.e. 27 letters

36:27 = a 'sesquiterial' ratio, since $36 = 27 + (27 * 1/3) = 27+9$

This mathematical identity is expressed by the arithmetical proportion 36:27 = 4:3. Moreover, *Vulgarius* specifies that the difference between the two numbers is 9. This is an important detail because both 36 and 27 can be divided by the difference between them and, therefore, they 'stand in the same ratio as their quotients'⁵¹—i.e. 36:27 = 4:3 because 9 is their common divisor and corresponds also to the difference between them:

$$36-27 = 9$$

$$36:9 = 4$$

$$27:9 = 3$$

The same logic is followed in examining the relationship between v. 9 and v. 2:

By contrast, the second verse [from the bottom] stands in a 'sesquiquartal' superparticular ratio to the second verse, just like 5:4; the difference between them is seven.

Verse 9 contains 35 letters, a number that stands in a 'sesquiquartal' ratio to the number of letters contained in verse 2, i.e. 28. This means that the larger number (35) contains the smaller plus a fourth, leading to the ratio 5:4:

Verse 9 i.e. 35 letters

Verse 2 i.e. 28 letters

35:28 = a 'sesquiquartal' ratio, since $35 = 28 + (28 * 1/4) = 28+7$

This mathematical identity is expressed by the arithmetical proportion 35:28 = 5:4.

Also in this case, the difference between the first two numbers corresponds to a figure by which both of these numbers can be divided; in other words, 7 is their common divisor:

$$35-28 = 7$$

$$35:7 = 5$$

$$28:7 = 4$$

⁵¹ Boeth. *Mus.* 2.9.

In both of these ratios (36:27 and 35:28), the difference between the two pairs of numbers (36-27 and 35-28) coincides with their *mensura communis*,⁵² i.e. their Greatest Common Divisors.

Following the same approach, verse 7 (33 letters) and verse 6 (32 letters) are superparticulars in connection with verses 4 (30 letters) and 5 (31 letters) and the difference between them defines their *mensura communis*:

Verse 7 i.e. 33 letters

Verse 4 i.e. 30 letters

33:30 = 11:10 (i.e. a 'sesquidecimal' ratio)⁵³

33-30 = 3, which is both the difference between them and their *mensura communis*

33:3 = 11

30:3 = 10

Verse 6 i.e. 32 letters

Verse 5 i.e. 31 letters

32-31 = 1 and the unit is both the difference between them and their *mensura communis*.⁵⁴

Now Vulgarius adds the following remark:

Except for the sixth verse, which is *pariter par*, all the other 'superparticulars' are *impariter pares*⁵⁵ by nature.

Therefore, according to Vulgarius, only verse 6 (which consists of 32 letters) is 'evenly even', i.e. can be divided by two several times until it reaches the indivisible unity; all the other superparticular verses are even numbers that can be divided by two more than once before resulting in an odd number. However, even though it is true that 32 is 'evenly even' (because it can be divided by two

52 For some examples of this *mensura communis*, cf. Boeth. *Arithm.* 1.18.5 and *Mus.* 1.29.

53 Other examples of 'sesquidecimal' ratios are given at Boeth. *Mus.* 2.9.1.

54 Boeth. *Arithm.* 1.16.1: *unitas ... omnium numerorum mensura communis est.*

55 Here Vulgarius refers to the two other species of even numbers described by Boethius in addition to the *pariter impar* (cf. n. 42 above). A number can be defined as *pariter par* if its repeated division into two leads eventually to 1 (e.g. if two can be divided into 64 six times: 32, 16, 8, 4, 2, 1); cf. Boeth. *Arithm.* 1.9.1. By contrast, the expression *impariter par* denotes a number whose division into 2 eventually leads to an odd number—e.g. 24 (which can be divided by two three times = 12, 6, 3) and 28 (which can be divided by two twice: 14, 7); cf. Boeth. *Arithm.* 1.11.

five times), the second part of Vulgarius' statement is incorrect. In fact, only verse 10 (36 letters) and verse 2 (28 letters) can be defined as *impariter pares*, while verse 8 (34 letters) and verse 4 (30 letters) are *pariter impar*, since their division by two gives an odd number:

TABLE 1

Verse	Number of letters	Odd/Even	Species of the number	Mathematical analysis
1	27	Odd	Second and composite ^a	$3 \times 3 \times 3$
2	28	Even	<i>Impariter par</i>	$28:2 = 14$ $14:2 = 7$
3	29	Odd	First and incomposite ^b	1×29
4	30	Even	<i>Pariter impar</i>	$30:2=15$
5	31	Odd	First and incomposite	1×31
6	32	Even	<i>Pariter par</i>	$32:2 = 16$ $16: 2=8$ $8:2=4$ $4:2=2$ $2:2=1$
7	33	Odd	Second and composite	3×11
8	34	Even	<i>Pariter impar</i>	$34:2 = 17$
9	35	Odd	Second and composite	5×7
10	36	Even	<i>Impariter par</i>	$36:2=18$ $18:2=9$

a I.e. it is an odd number that results from the multiplication of two or more odd numbers.

b I.e. it is a prime number, which can be divided evenly only by 1 or itself.

Further arithmetic properties characterise the poem as a whole:

After all, the complex of the complete body of this figure consists of 315 letters, which are combined into 135 syllables. Their relation⁵⁶ is *multiplex superparticularis*, because the larger term exceeds the smaller, containing it twice together with its third part (i.e. 45).⁵⁷

56 Vulgarius' term *proportio* does not indicate a mathematical ratio but a looser idea of a relationship between numbers.

57 On the concept of *multiplex superparticularis*, cf. n. 50 above and Boeth. *Mus.* 1.4.

So the poem reflects the following mathematical identity:

$$315 = 135 * 2 + 135 * 1/3 = 270 + 45$$

Finally, the explanatory essay refers to the theory of harmonic overtones:

Moreover, all the harmonic intervals⁵⁸ may be found in the division of [verse number] 10, provided that one divides it into single units as in the following series: 3-4-6; 2-3-6; 6-8-[9]-12.

If the 36 letters of verse 10 are divided into groups of three, the result is 12 sets of three letters; all the basic musical intervals can be defined on the basis of these groups, provided that they are regarded as unities and are arranged into the three series of numbers that Vulgarius mentioned in the previous lines. He describes them more clearly in the following passage:

From this harmonic arrangement of the different parts of the division of [verse] 10⁵⁹ we get the following result: 3 [stands] to 6 [in a ratio called] *diapason*;⁶⁰ the ratio between 4 and 6 is *diapente*;⁶¹ moreover, the ratio between 2 and 6 is triple *diapason*,⁶² that between 2 and 3 is *diapente*.⁶³ And again 6 stands to 8⁶⁴ and 9 to 12 in a ratio called *bis diatessaron*;⁶⁵ 6 stands to 9⁶⁶ and 8 to 12⁶⁷ in a ratio called *bis diatessaron* and, finally, the ratio 8 to 9 is called *epogdous*.⁶⁸

The harmonic relations between the numbers of these series can be represented as follows:

58 Literally *omnes armoniorum sinphoniae* [sic].

59 I.e. the relationships established between the subdivisions of the 36 letters of verse 10.

60 6:3 = 2:1, which corresponds to the musical interval of an octave (*diapason*).

61 6:4 = 3:2, which corresponds to the musical interval of a fifth (*diatessaron*).

62 6:2 = 3:1, which corresponds to the musical interval of a triple octave.

63 3:2.

64 8:6 = 4:3, which corresponds to the musical interval of a fourth (*diatessaron*).

65 12:9 = 4:3, which corresponds to the musical interval of a double fourth (*bis diatessaron*).

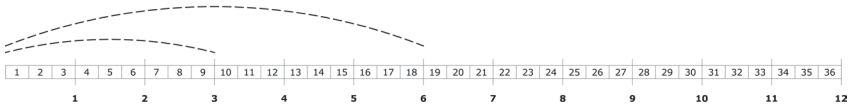
66 9:6 = 3:2.

67 12:8 = 3:2, *bis diapente*.

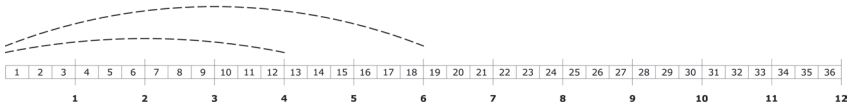
68 9:8, which indicates the musical interval of a tone. Cf. Mart. Cap. *Nupt.* 2.108, where the ratio that defines a tone is called *epogdous* (*novem vero ad octo ἐπογδῶου numeri efficiunt iunctionem [tantumque pensat in numeris quantum symphonia diapason in melicis], quae facit tonon, qui est consonae unitatis continua modulation*); cf. also 9.953 (*est autem tonus in epogdoi ratione*), with Grion 2011-2012, 150.

A) Ratios belonging to the first triad 3-4-6

6:3 = 2:1

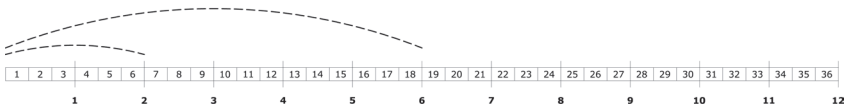


6:4 = 3:2

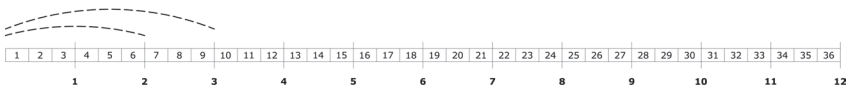


B) Ratios belonging to the second triad 2-3-6

6:2 = 3:1

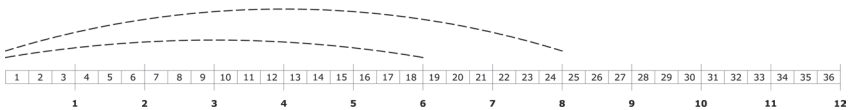


3:2

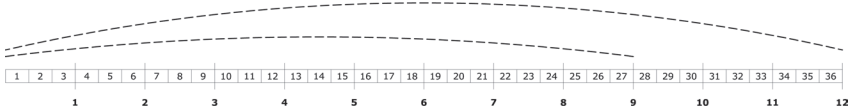


C) Ratios belonging to the third group of numbers 6-8-9-12

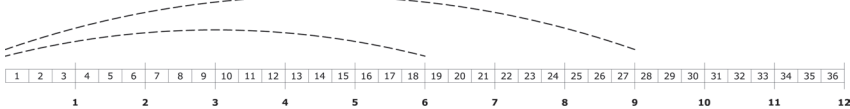
8:6 = 4:3



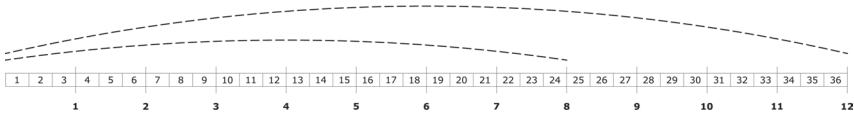
12:9 = 4:3



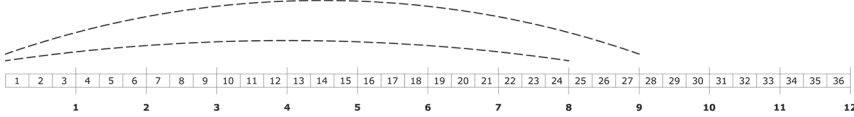
9:6 = 3:2



12:8 = 3:2



9:8



The ratios between the numbers of the first two triads (3-4-6 and 2-3-6) define the basic consonances: *diapason*, *diatessaron* and *diapente*, i.e. the octave (2:1), the fourth (4:3) and the fifth (3:2).⁶⁹ The ratios between the numbers of the last group (6-8-9-12) outline the *maxima et perfecta simphonia* [sic], in that it contains all the basic consonances: *diapason* (2:1), *diatessaron* (4:3), *diapente* (3:2) as well as the tone (9:8).⁷⁰

The explanatory essay ends with the following remark:

The image sketched above⁷¹ clarifies this point.

Therefore, Vulgarius’ ten-stringed psaltery aims to provide a visual representation of Boethius’ theory of numerical ratios, emphasising its arithmetic and musical implications.⁷²

69 This corresponds to the *armonica* [sic] *medietas* described by Boeth. *Arithm.* 2.48.1-13. “La *medietas armonica* (o *musica*), paragonata al governo dei migliori, è costituita da tutte e tre le *consonantiae* primarie (*diapason*, *diatessaron* e *diapente*), ed è quindi la più completa da un punto di vista musicale” (Papparelli 2011, 109).

70 Boeth. *Arithm.* 2.54.6-9 and *Mus.* 1.29.

71 I.e. the ten-stringed psaltery.

72 The closing remark of the explanatory essay could be also interpreted in the light of codicological and musicological considerations concerning the proportions of the codex itself: for this interpretative approach, see the detailed examination offered by Marchesin 2000. In fact, the most important features of the image drawn in the codex reflect not only mathematical but also musical proportions; for instance, the relationships established between the measures of the two bases of the trapezium and its sloping side define precisely the ratios of the basic consonances:

Major Base A	A:B = 4:3
Minor Base B	A:C = 2:1
Sloping side C	B:C = 3:2
Perpendicular side D	E:D = 2:1
Minor Diagonal E	

2.6 *The Political Message of the Poem: the 'Double Meaning' of Poem 37 and Vulgarius' Quarrel with Sergius III*

The image outlined by the arrangement of Vulgarius' verses and his following analysis provide a learned and erudite synthesis of the mathematical/musical lore of his period. Therefore, the poem celebrates a person (the Pope) who must have been able to understand all the mystical symbols that Vulgarius used in his unique present. However, it seems likely that the poem celebrates the Pope only on the surface, while a very disrespectful characterisation hides between the lines.

In the Nineties, Stefano Pittaluga first hypothesised the presence of 'double meanings' in Vulgarius' celebratory poems.⁷³ He advanced a very promising hypothesis, namely the idea that many texts which celebrate Sergius III skilfully hide a double meaning and two different interpretative levels: in fact, whenever Vulgarius introduces quotations from Seneca into his celebratory poem, he invariably adapts passages taken from completely different contexts, namely passages that have a critical or explicitly polemical tone. Therefore, according to Pittaluga, Vulgarius aimed at expressing his polemical verve against the Pope in a veiled manner through these *double entendres*.

Even though Vulgarius does not quote any passages from Seneca in Poem 37, his use of other authoritative texts in this poem—including treatises by Augustine, Cassiodorus, Martianus Capella and Boethius—seems to support a similar double reading. In fact, in verses 8 and 9 he comments on the anagram of Sergius' name with the following words:

*Restat nam tetras sociata diade sonetur
GE pentasque trias primas exasque conexu.*

For it is clear that the fourth letter together with the second sounds 'GE', and the fifth is to be connected with the third, first and sixth.

Of course, the basic value of the word 'GE' in this passage reflects its Greek meaning, 'earth'. However, if we interpret the letters GE in the light of the theories developed by Boethius in his *De Institutione Musica*, we can identify a reference to the so-called 'Boethian notation'.⁷⁴ From this perspective, the word 'GE' would not mean 'earth' but would *sound* as the sequence of two notes G-E, as Vulgarius himself says (*sonetur*). These two notes produce an interval of a third or a sixth, that is to say two intervals which are 'dissonant' according

73 Pittaluga 1991, 383-91; 2006, 491-500; 2010, 25-32.

74 Boeth. *Mus.* 4.14.17.

to Boethius and do not correspond to simple ratios based on the numbers 1, 2, 3, 4. Therefore, this learned text seems to say between the lines that ‘Sergius sounds like a dissonance’, because the anagram of his name means ‘a dissonant laugh’ (GE RISUS).

This hypothesis is supported also by an anomaly in the metrical scansion of this hexameter. In fact the ten verses of this poem present the following scansions (which must be completed with the addition of their common ending, a dactylic dimeter catalectic):

TABLE 2

Verse Number	Metre	Syllables
1.	SSSS	13
2.	SSSS	13
3.	SSSS	13
4.	SSSS	13
5.	SSSS	13
6.	DSSS	14
7.	SSDS	14
8.	SSDD	15
9.	SDSS	14
10.	SSSS	13

The poem is mostly characterised by a spondaic rhythm, which is slow and solemn and therefore suitable for this ode of praise. The few dactyls which appear in this poem highlight words that underscore the celebratory character of the anagram: the first dactyl corresponds to the name *Sergius*, the *sensus elementis*—i.e. the new meaning that arises from the combination of the letters; the second and third underline some key aspects of the anagram, including *tetras sociata diade* and *pentasque trias*. However, the hexameter presents an irregular structure precisely in the case of verse 9, where the expression ‘GE RISU’ is given in full:

GE PENTASQUE TRIAS PRIMAS EXASQUE CONEXU
 GE PEN- | TAS-que tri- | AS PRI- |MAS EX- |AS-que CO- |NE-XU.⁷⁵

75 Long syllables are marked with capital letters, short ones in lower-case letters.

The penultimate foot of this line is neither a dactyl nor a rare spondee but a cretic, which consists of a long syllable followed by a short and a long one.

It seems unlikely that this is a simple oversight, since Vulgarius was well acquainted with classical metre: he composed many poems based on the most complex forms, demonstrating skill and familiarity with all sorts of metrical feet and verses. By contrast, it seems much more likely that this is the result of a deliberate choice on Vulgarius' part: he introduced a sudden and unexpected variation exactly in the part of the verse that traditionally comprised only one foot, the dactyl; and this abrupt change takes place precisely in the verse that seems to reflect a polemical intent, expressed by the double entendre of the word GE. Therefore, the dissonance created by the sounds G and E is reinforced by the appearance of an irregular metrical foot, which breaks the normal correspondence between grammatical accents and metrical ictus that is attested in late-antique hexameters and, therefore, disorients the reader.

The mathematical/musical dissonance and the metrical limp that Vulgarius inserts into the structure of his poetic psaltery suggest that the Pope does not fit into the harmonic relationships that characterise the ten-stringed psaltery: like a dissonant note, he is incompatible with the divine alliance and, therefore, does not belong to the realm of the Ten Commandments and Moses' Decalogue.

The Pope was probably unable to decipher the violent invective hidden in Vulgarius' verses, but the message would have been clear to the most learned and erudite readers, who were familiar with the musical lore discussed in Boethius' text and in the subsequent tradition.⁷⁶

Appendix

*Solo tu nutu natis e diceris unus
A vero divo factus mirabilis actu;
Lux eoi pyr necron illaberis orbem
Unus ne primus tu passus iure diadem
E luces mundo lampas fulgore nitente,
Sergius e fato nomen cui sorte fatetur
E mixtis sensus elementis 'gaudia terre'.
Restat nam, tetras sociata diade sonetur*

⁷⁶ I would like to thank Dr. Giancarlo Dessì, my father, who was my first teacher of mathematics and physics and shared with me his knowledge into Boethius' mathematical writings.

*GE, pentasque tria, prima sexasque conexu
In terris risum per te splendescere sacrum.*

Denique quia instar organici psalterii formula haec versuum paret, quod in modum delte littere est, Δ ad hoc innuit, quia par erat, ut divus divinis mulceretur laudibus. Nam quia mundus decem verbis clauditur contraque et decem verbis scribitur, merito homine fato deo cultus faventis decem verbis versuum attribuitur. Quia itaque officium psaltrie exhibet caput psalterii: procul dubio, ut 'beatus vir', optinet his profecto ut verus psalta, qui divinam intellegit et perficit legem, honorandus et ut egregius psaltes qui per acta bona divinis respondet verbis venerandus; nihilo minus et ut summus psaltades, qui non solum cum operibus bonis divinis respondet verbis, sed in ipsis verbis alios mysticos sensus introducit, summopere est colendus et amplectendus. Ecce etenim decem sunt versus et dacas omnes numeros diverse virtutis et perfectionis intra se habet, est enim primi versus finis, numerorum regulas analogiasque, genera, species, differentias, perfecta et imperfecta concludens; unde ab imparibus procreatus pariter est impar, figura etiam actu et opere trianguli tertia quattuor habens per singula.

In hac figura duo termini speculantur, monas et decas. Ubi si a monade supputandi exordium fuerit, tam linearum quam litterarum incrementum erit; si vero a decade, quantum numerus linearum crescit, tantum litterarum aufugit. Rursus si, ut sunt distributi, despiciantur, omnes sesquitercii alterutra vicissitudine invenientur; sin ab ultimis, ad primos fuerit progressus, erit aut sesquitercia aut sesquiquarta proportio iuxta naturam quattuor ad tria. Primus igitur ad primum multiplex superparticularis, proportio diatesaron; differentia novenaria. Secundus vero ad secundum sesquiquarta id est U ad quattuor; differentia septenaria. Reliqui omnes superparticulares atque praeter sextum, qui est pariter par, omnes sunt impariter paris naturae. Ceterum totius huius formae corporis moles trecentis quindecim constat litteris, que in centum triginta quinque glutinantur sillabis. Cuius proportio multiplex superparticularis, quia maior minorem superat, habens eum bis et eius tertiam partem, id est XLV. Preterea omnes armoniarum simphoniae in distributione huius decadis ita constant, si tamen per singulas unitates ut est ordo portendatur taliter: III · IV · VI ; II · III · VI ; VI · VIII · (VIII ·) XII. In hac igitur dena distributionis proportionalitate fit III ad VI diapason, VIII ad VI diapente; rursus duo ad VI tripla diapason, duo ad tres diapente; iterumque sex ad octo et novem ad duodecim bis diateseron, sex autem ad VIII et VIII ad duodecim bis diapente, VIII quin etiam ad VIII est epogdous. Quod supra scripta forma clarius monstrat.

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