

The invention of the Greek prosodic signs

PHILOMEN PROBERT
University of Oxford

STEPHANIE ROUSSOU
*University of Cyprus**

Abstract

Aristophanes of Byzantium is credited with inventing the signs for Greek accents, breathings and vowel lengths, according to a single source: a short text found in two 16th-century Paris manuscripts. The passage has a doubtful history, but the story it tells is of considerable interest. We first provide a new edition of this text, based on a new examination of both manuscripts, and a complete translation. Secondly we argue that the author consulted a source that was in Latin, and that dealt at least in part with the Latin accent. We conclude by considering the implications of our proposal for the text's date and circumstances of composition.

1 Introduction

Aristophanes of Byzantium is widely believed to have invented the Greek accent marks that we still use today, and possibly some other Greek diacritic marks too.¹ The only direct evidence that he did so consists of a short text preserved in two 16th-century Paris manuscripts: Parisinus Graecus 2603 (henceforth 'B'), folios 2^v–4^r, and Parisinus Graecus 2102 (henceforth 'C'), folios 231^v–235^v.² In manuscript C, this text has the heading Περὶ τῆς τῶν τόνων εὐρέσεως, καὶ τῶν σχημάτων αὐτῶν, καὶ περὶ χρόνων καὶ πνευμάτων 'On the invention of the accents, and their shapes, and on quantities and breathings'; we shall use 'Περὶ τῆς τῶν τόνων εὐρέσεως' as a succinct way of referring to the text in question.

Manuscript C presents the Περὶ τῆς τῶν τόνων εὐρέσεως as part of Book 20 of Pseudo-Arcadius' epitome of Herodian's Περὶ Καθολικῆς Προσφῳδίας, along with a second introduction to the prosodic marks (Περὶ προσφωδιῶν), a section on vowel quantities (Περὶ χρόνων), and a section on breathings (Περὶ πνευμάτων).³ All copies of Pseudo-Arcadius' epitome include a Table of Contents, where all except C include the following entry for Book 20: τὸ εἰκοστὸν περὶ χρόνων τῶν ἐν φωνήεσι καὶ πνευμάτων 'the twentieth book is about vowel quantities and breathings'. Material purporting to be Book 20 itself, however, appears in manuscript C and in no other copy of Pseudo-Arcadius' epitome. In manuscript B, the Περὶ τῆς τῶν τόνων εὐρέσεως appears separately from Pseudo-Arcadius' epitome of Herodian, although this manuscript also contains a text of Pseudo-Arcadius.⁴

The copies of Pseudo-Arcadius in manuscripts B and C both derive ultimately from the copy in Codex Matritensis 4575 = 32 ('M').⁵ In addition, manuscripts B and C are *codices*

* philomen.probert@wolfson.ox.ac.uk; stephanie.roussou@gmail.com. We would like to thank Eleanor Dickey, Nigel Wilson, the participants in the SCS panel on Greek and Latin language and linguistics in 2017 and two anonymous referees for helpful feedback, and the Bibliothèque Nationale de France for enabling Stephanie to examine codices Parisinus Graecus 2102 and Parisinus Graecus 2603 in person. Part of the work presented here arose out of an AHRC Leadership Fellowship held by Philomen in 2015–2017 (grant number AH/M011291/1), and part out of a Humboldt Postdoctoral Research Fellowship held by Stephanie in 2014–2016.

¹ See e.g. Laum (1928) 99–118; Schwyzer (1953) 374; Pfeiffer (1968) 180–81; Callanan (1987) 30–31; cautiously Prauscello (2006) 33–38 and Probert (2006) 21–22. Compare also Nagy (2000) 15–16, who argues that Aristophanes of Byzantium played a role in systematising a pre-existing system for marking accents.

² We adopt the sigla 'B' and 'C' used by M. Schmidt (1860) in his text of Pseudo-Arcadius, although Schmidt himself used the siglum 'T' rather than 'B' for the copy of the Περὶ τῆς τῶν τόνων εὐρέσεως and Περὶ προσφωδιῶν sections found in Parisinus Graecus 2603, to reflect this manuscript's inclusion of these sections among texts attributed to Theodosius, and separately from the text of Pseudo-Arcadius. For a partial transcription of the text in both manuscripts, see Lameere (1960) 90–92. For digital images of the relevant part of B, see <<https://gallica.bnf.fr/ark:/12148/btv1b10723382k/f10>>; and for the relevant part of C, see <<https://gallica.bnf.fr/ark:/12148/btv1b10723675n/f236>>.

³ See Roussou (2018) 52–57.

⁴ See Nauck (1848) 12 n. 2; Lentz (1867) xxxviii; Laum (1928) 99; Roussou (2018) 53.

⁵ See Roussou (2018) 83–100.

gemelli, that is to say they share an immediate common source, as far as their texts of Pseudo-Arcadius are concerned.⁶ Since only the copy of Pseudo-Arcadius in C includes a Book 20, it follows that either (i) the common source of B and C included a Book 20 in its text of Pseudo-Arcadius, and this was copied by C but omitted by B, or (ii) the common source did not include a Book 20 and this material was added by the scribe of C. The second possibility is by far the more likely, since manuscript B contains a marginal note at the end of Book 19 stating that Book 20 is missing. The scribe of C (folios 88^r–244^r) was a known forger of his time, Jacob Diassorinus;⁷ it is clear that he put the material purporting to be Book 20 together from a series of other sources,⁸ to repair the loss of the original Book 20. It follows that the sections that comprise Book 20 in manuscript C were not originally part of Pseudo-Arcadius' epitome of Herodian; for this reason Roussou excludes them from her edition of Pseudo-Arcadius (Roussou 2018).⁹

The *Περὶ τῆς τῶν τόνων εὐρέσεως* has a separate history from that of Pseudo-Arcadius, then, but this does not tell us where the material originated in the first place. Indeed, the point that the *Περὶ τῆς τῶν τόνων εὐρέσεως* has a separate history from that of Pseudo-Arcadius makes it worth asking when, where and by whom this text was written.

The copies of the *Περὶ τῆς τῶν τόνων εὐρέσεως* found in manuscripts B and C derive independently from a common source,¹⁰ in all likelihood the manuscript from which both manuscripts derive their copies of Pseudo-Arcadius. In the following section, we provide a new critical edition and translation of the *Περὶ τῆς τῶν τόνων εὐρέσεως*, based on a new examination of both manuscripts. Aspects of our text and translation will be defended in section 3, where we make a new proposal on the text's prehistory.

2. Critical edition and translation¹¹

⁶ For the point that this common source derives its copy of Pseudo-Arcadius from codex Matritensis 4575 ('M'), as first argued by Schneider (1887) 41–42, see now Roussou (2018) 95–98.

⁷ For the point that Diassorinus copied folios 88^r–244^r, but not the earlier part of the manuscript, see García Bueno (2017) 125, 184, 316. On Diassorinus' role as a forger, see Cohn (1888) 141–43; Galland (1882) 17; García Bueno (2017) 11.

⁸ On other witnesses to the material comprising the sections *Περὶ προσφιδίων*, *Περὶ χρόνων* and *Περὶ πνευμάτων*, see Roussou (2018) 53–54, 55–57.

⁹ See Roussou (2018) 52–57.

¹⁰ The text in B is clearly not derived from the one in C, not least because where manuscript B has the good reading *ἐκσταίη τῆς λέξεως* 'stands aside from the word' (before 'correction' to *ἐκσταίη τὴν λέξιν*), this is very unlikely to be derived from the reading *ἐνσταίη τὴν λέξιν* that we find in C (see section 2, text section I, with discussion in sections 3.2 and 3.3.4). The text in C is also not derived from the one in B. This point can be proved more decisively from the section *Περὶ πνευμάτων* than from the *Περὶ τῆς τῶν τόνων εὐρέσεως* itself. (In the *Περὶ τῆς τῶν τόνων εὐρέσεως*, although B has errors not shared by C, in no case can a correction by Diassorinus be completely ruled out.) For example, the material printed by M. Schmidt (1860) at p. 225, line 26–p. 226, line 13 appears in manuscript C but not in B. This material therefore cannot be derived from manuscript B, but it was also not composed from scratch by Diassorinus: related material appears in the *Lexicon de spiritibus* (214. 14–19 and 213. 34–214. 8 Valckenaer² = 240. 27–241. 2 and 240.11–21 Valckenaer¹), with manuscript evidence predating Diassorinus (e.g. the fifteenth-century manuscript Par. Gr. 1270, at f. 244r, line 20–244v, line 6: <<https://gallica.bnf.fr/ark:/12148/btv1b107228396/f259.image>>). Like the *Περὶ τῆς τῶν τόνων εὐρέσεως*, the *Περὶ πνευμάτων* is found in manuscript C as part of 'Book 20' of Pseudo-Arcadius, and in manuscript B among material attributed to Theodosius (see Roussou (2018) 53–54). Both sections (and others found in both places) are likely to have found their way into these two manuscripts by a similar route, so that if C's copy of the *Περὶ πνευμάτων* is not derived from B, C's copy of the *Περὶ τῆς τῶν τόνων εὐρέσεως* is almost certainly not derived from B either.

¹¹ The punctuation given in this edition is editorial, and we do not record variants pertaining only to accents, breathings, or iota subscripts, except where these are significant for the sense. Prauscello (2006) 34–35, 37 also offers translations for two portions of the text—the first comprising our section a and most of b, and the second comprising most of our section f.

Περὶ τῆς τῶν τόνων εὐρέσεως, καὶ τῶν
σημάτων αὐτῶν, καὶ περὶ χρόνων καὶ
πνευμάτων

On the invention of the accents, and their
shapes, and on quantities and breathings

**Signs for the accents, quantities and
breathings, and their names:**

a) Οἱ χρόνοι καὶ οἱ τόνοι καὶ τὰ πνεύματα,
Ἀριστοφάνους ἐκτυπώσαντος, γέγονε πρὸς
τε διάκρισιν τῆς ἀμφιβόλου λέξεως, καὶ πρὸς
τὸ μέλοςⁱⁱ τῆς φωνῆς συμπάσης καὶ τὴν
ἁρμονίαν, ὥς ἐὰν ἐπάδοιμενⁱⁱⁱ φθεγγόμενοι.
σκέψαι δ', ὥς ἕκαστον αὐτῶν φυσικῶς ἅμα
καὶ οἰκείως, καθάπερ τὰ ὄργανα,
ἐσχημάτισται καὶ ὠνόμασται^{iv}, ἐπειδὴ καὶ
ταῦτα ἔμελλε τῷ λόγῳ ὥσπερ ὄργανα
ἔσεσθαι.

a) The (signs for) quantities, accents and
breathings, which Aristophanes (of
Byzantium) created, were devised for the
purposes of disambiguating an ambiguous
word, and for the singing of the whole voice
and the melody, as if we were to sing along
to our speaking. Now consider how each of
them has naturally and suitably been shaped
and named, like musical instruments, since
these were in fact to be like musical
instruments for speech.

ⁱ Περὶ – πνευμάτων om. **B**

ⁱⁱ μέλος dubitanter Villosion (1783) 116: μέλλον **BC**;

μελωδικὸν Jacobi apud Lentz (1867) xxxviii

ⁱⁱⁱ ἐπάδοιμεν Villosion (1783) 116: ἐπάδοιμεν **BC**

^{iv} ὠνόμασται **C**: ὠνόμακεν **B**

b) ἐώρακε γὰρ καὶ τὴν μουσικὴν οὕτωⁱ τὸ
μέλος καὶ τοὺς ἀριθμοὺςⁱⁱ σηματομένην, καὶ
πῇ μὲν ἀνιῆσαν, πῇ δ' ἐπιτείνουσιν, καὶ τὸ
μὲν βαρὺ, τὸ δὲ ὀξὺ ὀνομάζουσιν. εἰ δέ ποτε
ἐπάδοιμενⁱⁱⁱ, ἢ τέλεον ἐπιτείνοντες^{iv} ἢ πάλιν
ἀνιέντες, τοῦτο σκληρὸν καὶ^v μαλακὸν
ἐκάλει. οὕτω^{vi} καὶ ὁ Ἀριστοφάνης σημεία
ἔθετο τῷ λόγῳ πρῶτα ταῦτα, ἵν' ἅμα
συλλαβῆς καὶ λέξεως γενομένης κανὼν τις
ἔποιτο καὶ σημεῖον ὀρθότητος· ἔπειτα τρίχα
τεμὼν τὴν κίνησιν τῆς φωνῆς, τὸ μὲν εἰς
χρόνους^{vii}, τὸ δὲ εἰς τόνους, τὸ δὲ εἰς αὐτὸ τὸ
πνεῦμα, καὶ τοὺς μὲν χρόνους τοῖς ῥυθμοῖς
ἠκάσε^{viii}, τοὺς δὲ τόνους τοῖς τόνοις τῆς
μουσικῆς,

b) For he saw that music too indicates the
melody and the rhythms like this, and that it
slackens here and tightens there, and that it
calls the first of these 'grave' and the second
'acute'. And if ever we sang by either
tightening (the voice) completely or relaxing
it again, it¹² called this harsh and soft. In this
way Aristophanes too first established these
signs for speech, so that whenever there is a
syllable or word a rule and sign of correctness
would follow. Then dividing the movement
of the voice in three ways—into lengths,
pitches and the breath itself—he both likened
the lengths to the rhythms and the pitches to
the pitches of music,

ⁱ οὕτω **C**: οὕτως **B**

ⁱⁱ ἀριθμοὺς σηματομένην **C**: ἀριθμοὺς

σηματομένων **B**; ῥυθμοὺς σημαίνουσιν Nauck
(1848) 14

ⁱⁱⁱ ἐπάδοιμεν Villosion (1783) 116: ἐπάδοιμεν **BC**

¹² I.e. music. Alternatively, Aristophanes has been understood as the subject of the verb ἐκάλει (so Prauscello (2006) 35), but cf. the active participles ἐπιτείνουσιν and ὀνομάζουσιν just above, with (feminine) μουσικὴν as subject.

^{iv} ἐπιτείνοντες Nauck (1848) 12: ἀποτείνοντες **BC**

^v καὶ **B**: τὸ δὲ **C**

^{vi} οὕτω **B**: κατὰ τοῦτο **C**

^{vii} χρόνους **B^{p.c.}C**: τόνους **B^{a.c.}**

^{viii} ἤκασε M. Schmidt (1860) 212: εἵκασε **BC**

c) καὶ σημεία ἔθετο ἐφ’ ἐκάστῳ καὶ ὀνόματα, τοῖς μὲν χρόνοις τὸ βραχὺ καὶ τὸ μακρὸν ἐπονομάσας, καὶ σχήματα οἰκεῖα ποιησάμενος (τῷ μὲν μακρῷ τὴν εὐθεῖαν γραμμὴν καὶ ἀποτεταμένηνⁱ –, τῷⁱⁱ δὲ βραχεῖ τὴν συνεστραμμένην καὶ συνέχουσιν ὥσπερ ἐκατέρωθεν τὴν φωνήνⁱⁱⁱ ∪), τῶν δὲ τόνων τὴν μὲν ἄνω τείνουσαν καὶ εὐθεῖαν, καὶ εἰς ὀξὺ ἀπολήγουσαν, ἐοικυῖαν^{iv} τοῖς βέλεσι τοῖς ἐφιεμένοις,^v ὀξεῖαν ἐπονομάσας^{vi} ‘,’, τὴν δὲ^{vii} ἐναντίαν ταύτην βαρεῖαν [κάτω^{viii} φερομένην ὥσπερ ὑπὸ τινος ὀργάνου] ‘`’.

ⁱ ἀποτεταμένην **C**: ἀποτεταμμένην **B**

ⁱⁱ τῷ ... βραχεῖ **C**: τῷ ... βραχὺ **B**

ⁱⁱⁱ φωνὴν **B**: φωνήν, (sic) ἐσημειώσατο **C**

^{iv} ἐοικυῖαν Braune (1849) 357: οἰκεῖαν **BC**; ὁμοίαν dubitanter Nauck (1848) 15

^v ἐφιεμένοις **BC**; ἀφιεμένοις Jannaris (1897) 516

^{vi} ἐπονομάσας **B**: ἐπωνόμασε **C**

^{vii} δὲ ἐναντίαν **C**: δ’ ἐναντίαν **B^{p.c.} (m.1)**: δὲ βαρ **B^{a.c.}**

^{viii} κάτω φερομένην ὥσπερ ὑπὸ τινος ὀργάνου (ὀργάνου **B^{p.c.} (m. 2)**: ὀργάνον **B^{a.c.}**) del. Barker (1820) 187: om. **C**

d) ἐπεὶⁱ δὲ ἑώρα τὴν ἔξω τοῦ μέλους λέξιν οὐ κατὰ τὸ βαρὺ μόνον, οὐδ’ⁱⁱ ἐν τῷ ὀξεῖ καταμένουσιν, ἀλλὰ καὶ τρίτου τινὸς δεομένην τόνου, τούτου δὴ τοῦ περισπωμένουⁱⁱⁱ, πρότερον ταύτης^{iv} τῆς φωνῆς τὴν δύναμιν ἐσκοπεῖτο. καὶ ἐπεὶ συνέβαινε ταῖς περισπωμέναις λέξεσιν εὐθὺς ὑπ’^v ἀρχομένην τὴν φωνὴν ὀξὺ τι ὑπῆρχεῖν, καταρρέπειν^{vi} δὲ ὡς εἰς τὸ βαρὺ, οὐδὲν ἄλλο^{vii} ἢ μίξιν καὶ κρᾶσιν ἐξ ἀμφοῖν, τοῦ τε ὀξέος^{viii} καὶ τοῦ βαρέος, ἡγησάμενος εἶναι τὸ περισπώμενον, οὕτως αὐτῷ καὶ τὸ σχῆμα ἐποιήσατο <^>^{ix}. ἐφαρμοσάμενος^x γὰρ ἀλλήλαις τὰς εὐθείας ἐκατέρας, τὴν τε τοῦ ὀξέος καὶ τὴν τοῦ βαρέος, ταύτην εἶναι τὴν περισπωμένην ἔλεγεν, ὧδέ πως αὐτὴν ἐξ

c) and he established signs and names for each one, applying ‘short’ and ‘long’ as names for the lengths, and making suitable shapes (for the long the straight and extended line –, for the short the one that is curled up and (as it were) holds the voice in from each side ∪), and among the accents, calling the (line?) that tends upwards and is straight, and ends in a point, and resembles launched missiles, ‘acute’ ‘,’ and the opposite of this one [carried downwards as if by some instrument] ‘grave’ ‘`’.

d) And since he saw that speech independent of song does not just stay on the low pitch, nor on the high pitch, but needs a third pitch as well, namely the circumflex, he first considered the force of this sound. And since it turned out that for perispomenon words something sounds high right at the beginning of the (vowel) sound, and then inclines downwards as towards the low pitch, considering the circumflex to be nothing other than a mixture and mingling of both accents, the acute and the grave, this is also how he made its shape: ^. For after fitting together the two straight lines, the one of the acute accent and the one of the grave, he said this was the circumflex, thus calling it

ἀμφοῖν τοῖν τόνοις ἐξ ὧν ἐγένετο [^]^{xi}
‘ὄξυβαρεῖαν’ ὀνομάζων.

oxubareia from the two accents it was made out of.

ⁱ ἐπεὶ δὲ Nauck (1848) 13, 15; cf. Barker (1820) 187:

ἐπειδὴ **BC**

ⁱⁱ οὐδ’ ἐν τῷ ὄξει Nauck (1848) 13, 15; cf. Barker (1820) 187: οὐδ’ ἐν τῷ ὄξυ **BC**; οὐδὲ τὸ ὄξυ Jannaris (1897) 516

ⁱⁱⁱ περισπωμένου **C**: περισπομένου **B**

^{iv} ταύτης scripsimus: ἐαυτῆς **BC**; αὐτῆς Nauck (1848) 13, 15

^v ὑπ’ ἀρχομένην **BC**; ἀρχομένην Nauck (1848) 13, 15, sed cf. Braune (1849) 357; ἀπαρχομένην Jannaris (1897) 516

^{vi} καταρρέπειν scripsimus: κατατρέπειν **BC**

^{vii} ἄλλο Nauck (1848) 13, 15: ἄλλ’ **BC**

^{viii} ὄξέος ... βαρέος **C**: ὄξέως ... βαρέως **B**

^{ix} ^ addidimus

^x ἐφορμωσάμενος Nauck (1848) 13, 15:

ἐφορμησάμενος **C**: ἐφορμωσάμενος **B**

^{xi} ^ delevisimus: ^ **C**: ~ **B**

e) ἐπεὶ δὲ ὁμοιότητα αὐτὸⁱ τὸ σχῆμα τοῦ
τόνου πρὸς τῶνⁱⁱ γραμμάτων ἔμελλεν ἔξειν
τὸⁱⁱⁱ Λ, δεδοικὼς μὴ τι ἄρα ἐν τῇ παραθέσει
τῶν γραμμάτων παραμινύηται^{iv} τὴν^v
ἀνάγνωσιν, βραχύ τι τῶν^{vi} εὐθειῶν τὴν
γωνίαν κλάσας, καὶ περιτείνας αὐτὰς εἰς^{vii}
ἡμικύκλιον, ἅμα τῷ σχήματι τῆς
περισπωμένης καὶ τὸ^{viii} ὄνομα ἐπὶ τὸ
οἰκειότερόν τε καὶ εὐφρονότερον μετέβαλεν·^{ix}

e) And since this shape for the accent was likely to bear a similarity to Λ among the letters, fearing lest anything in the placing of letters side by side should mix up the reading, by bending the corner of the sides a little and stretching them round into a semi-circle, along with the shape of the circumflex he also changed its name to a more suitable and better-sounding one.

ⁱ αὐτὸ **C**: αὐτῷ **B**; αὐτὸ delere proposuit Nauck (1848) 15; αὖ τὸ pro αὐτὸ τὸ dubitanter K. E. A. Schmidt (1859) 596

ⁱⁱ ἔν ante τῶν γραμμάτων excidisse suspicatus est Jannaris (1897) 516; ἐν τι ante τῶν γραμμάτων excidisse suspicatus est K. E. A. Schmidt (1859) 596

ⁱⁱⁱ τὸ **BC**; τῷ Nauck (1848) 13, 15, sed cf. Braune (1849) 357, K. E. A. Schmidt (1859) 596, et Lentz (1867) xxxix

^{iv} παραμινύηται **BC**; παραμινύη dubitanter Nauck (1848) 15

^v τὴν ἀνάγνωσιν **BC**; ἡ ἀνάγνωσις Lentz (1867) xxxix

^{vi} τῶν εὐθειῶν τὴν γωνίαν Lentz (1867) xxxix: τὴν εὐθεῖαν τῶν γωνιῶν **BC**; τὴν γωνίαν τῶν εὐθειῶν Braune (1849) 357

^{vii} εἰς dubitanter Nauck (1848) 15: ἐν **BC**

^{viii} τὸ ὄνομα Braune (1849) 357: τῷ νοήματι **BC**

^{ix} μετέβαλεν Nauck (1848) 13, 15: μετέβαλλεν **B**:
μετέβαλλεν· ᾠ· **C**

f) ἀλλ' ⁱ ἐκάστω πνεύματι οὐκ ἀτέχνως οὐδ' ἀμούσως τὰ σημεῖα ⁱⁱ ἐπέθετο· καθάπερ οἱ τοῖς αὐλοῖς τὰ τρήματα εὐράμενοι, ἐπιφράττειν αὐτὰ καὶ ὑπανοίγειν ὅποτε βούλονται κέρασί τισιν ἢ βόμβυξιν ὑφολμίοις ⁱⁱⁱ ἐπετεχνάσαντο, ἄνω τε καὶ κάτω καὶ ἔνδον τε καὶ ἔξω στρέφοντες ^{iv} ταῦτα, ^v οὕτωςι κάκεῖνος ^{vi} ὥσπερ κέρατα τὰ σημεῖα ἐποίησατο τῷ πνεύματι, ἐν τι σχῆμα ἐκατέρω σημενόμενος [τοῦτο ^{vii} δὴ τὸ ἐν ὥσπερ ^{viii} αὐλῷ ἐοικός], ὅπερ ἔνδον ^{ix} τε καὶ ἔξω στρέφων ἐπιφράττειν τε καὶ ὑπανοίγειν ^x τὸ πνεῦμα διέταξεν ^{xi}. ἐπιφράττει ^{xii} μὲν γὰρ αὐτὸ καὶ ἐπέχει, ὅποτε ψιλοῦν ἐπιτάττοι ^{xiii}, ἀφίησι δὲ καὶ ὑπανοίγει, ἥνίκα ἀποπνέοντες ^{xiv} ἡμεῖς δασέως λέγειν ἀναγκαζόμεθα.

ⁱ ἀλλ' ἐκάστω **BC**; aut ἀλλὰ καὶ ἐκάστω legendum
esse aut verba nonnulla post μετέβαλεν excidisse
suspensus est M. Schmidt (1860) 213

ⁱⁱ σημεῖα **C**: σημεῖα ὅλα **B**; σημεῖα ὁ αὐτὸς dubitanter
Nauck (1848) 15

ⁱⁱⁱ ὑφολμίοις Nauck (1848) 13, 15: ὑφορκίοις **C**:
ὑφολκίοις **B**

^{iv} στρέφοντες **C**: στρέφοντας **B**

^v ταῦτα **BC**: αὐτά proposuit Nauck (1848) 15

^{vi} κάκεῖνος Nauck (1848) 13, 15: κάκεῖνοις **BC**

^{vii} τοῦτο δὴ τὸ ἐν ὥσπερ αὐλῷ ἐοικός del. M. Schmidt
(1860) 213; τοῦτο δὴ τὸ ἐν ὥσπερ αὐλοῦ ὄλμῳ
ἐοικός Lentz (1867) xxxix

^{viii} ὥσπερ αὐλῷ **BC**; ὡς κερατίῳ vel ὥσπερ ῥάβδῳ M.
Schmidt (1860) 213 in apparatu critico

^{ix} ἔνδον τε **B**: ἔνδον **C**

^x ὑπανοίγειν Villosion (1783) 116: ὑπανάγειν **BC**

^{xi} διέταξεν dubitanter Nauck (1848) 15: ἐδίδαξεν **BC**

^{xii} ἐπιφράττει ... ἐπέχει Nauck (1848) 13, 15:
ἐπιφράττειν ... ἐπέχειν **BC**

^{xiii} ἐπιτάττοι **C**: ἐπιτάτοι **B^{p.c.}**; ἐπιττάττοι **B^{a.c.}**

^{xiv} ἀποπνέοντες scripsimus: ἐπιπνέοντες **BC**

f) And he not unskilfully or unartfully assigned signs to each breathing. Just as those who invented the holes for *auloi* contrived to obstruct and open them whenever they wanted with some *kerata* or *bombūkes hypholmioi*, by turning these up and down and inwards and outwards, in this way Aristophanes too made the signs for the breath like *kerata*, providing a single shape for each [this one as if resembling an aulos], and by turning this inwards and outwards he set it up to obstruct and open the breath. For it obstructs and checks the breath whenever it commands us to pronounce an unaspirated sound, but it lets it out and opens its tap whenever we are made to breathe hard and speak with aspiration.

Signs for πύθη and for punctuation:

g) ἐποίησατο δὲ καὶ τῇ πεπονθυῖα λέξει σημεῖα, τὰ τε συναληλιμμένα ⁱ ἡμῖν διακρίνοντα καὶ τὰ συγκείμενα καὶ τὰ λελυμένα, οἷον τήν τε ἀπόστροφον νῦν καλουμένην ἐπὶ τοῖς συναληλιμμένοις ⁱⁱ

g) And he made signs for a word that has undergone a modification, and these distinguish for us elided words, and compounded and separate ones, for example setting up what is now called the apostrophe

τάξας, καὶ τὴν ὑποδιαστολὴν ἐπὶ τοῖς ἀπⁱⁱⁱ
ἀλλήλων λυομένοις, καὶ αὐτὴν^{iv}
ὑποτείνουσιν εὐθεῖαν^v τὰ συγκείμενα, ἣν
ὕφεν οὕτως ὀνομάζομεν, ἐπὶ τοῖς
συμπελεγμένοις. τὰ δὲ σχήματα τούτων
εἰδόσιν^{vi} οὐ γράφω.

ⁱ συναληλιμένα C^{p.c.}: συναληλιμένα C^{a.c.}:

συναληλιμένα B

ⁱⁱ συναληλιμένοις C: συναληλιμένοις B

ⁱⁱⁱ ἀπⁱⁱⁱ Nauck (1848) 14: ἐπⁱⁱⁱ BC

^{iv} αὐτὴν BC; αὐτὴν Lobeck (1853) 544n; τὴν

dubitanter Nauck (1848) 15

^v τὴν συνάπτουσιν post εὐθεῖαν excidisse suspicatus

est Lobeck (1853) 544n

^{vi} εἰδόσιν οὐ γράφω B: σὺν τοῖς ἄλλοις μετ' ὀλίγα

γραφθήσονται C

h) ἀλλὰ καὶ τὰς στιγμὰς σημεῖα εἶναι οὐ
μόνον τῇ λέξει ἀλλὰ δὴ καὶ τῷⁱ λόγῳ
διέταξεν, ἀνέσεις καὶ ἐποχὰς τῷ πνεύματι καὶ
τῇ φωνῇ παρεχόμενος. καὶ χώρας αὐταῖς καὶ
δυνάμεις ὀρισμένας διένειμεν,

ⁱ τῷ λόγῳ C: τοῦ λόγου B

i) [Τρεῖςⁱ μὲν τὰς πρώτας καὶ κυριωτάτας
μόνον νῦν λέξομεν ἐπιτομῆς χάριν· τὰ δὲ
αὐτῶν μέρη ἐν τῷ περὶ περιόδων καὶ κώλων
διείληπται, καὶ Νικάνοριⁱⁱ τῷ Ἑρμείου ἐν τῷ
περὶ καθόλου στιγμῆς γέγραπται.]

ⁱ Τρεῖς — γέγραπται del. Nauck (1848) 14: om. B

ⁱⁱ Νικάνορι Villosion (1783) 116: Νικάνωρι C

j) τὴνⁱ μὲν ἀπαρτίζειν ἀεὶ τὴν διάνοιαν
ὑποθέμενος, τὴν στιγμὴν ἣν καὶ τίθησιν ἄνω
κατὰ τὴν κεφαλὴν τοῦ στοιχείου, τὸ κῦρος
ὥσπερ ἔχουσιν τοῦ λόγου, καὶ βαρύνουσιν
τὴν φωνήν. τὴν δὲ ὑπὸⁱⁱ τῇ βάσει, ταύτηνⁱⁱⁱ ἣν
καὶ ὑποστιγμὴν καλοῦμεν, οὐκ ἀπαρτίζειν
μὲν τὴν διάνοιαν ὥρισεν, † πρόσθεν^{iv} δὲ τοῦ
μέλλοντος εἰρησθαι^v ὑφίεναι μὲν^{vi} ἡρέμα τοῦ
πνεύματος <τι>^{vii, viii} εἰς ὅζῳ τὸ λείπον
ὥσπερ^{ix} τοῦ λόγου τηροίη^x †. τὴν δὲ^{xi} μέσην
καλουμένην^{xii} ἀμφοτέρων, οὐδὲ αὐτὴν^{xiii} μὲν
ἀπαρτίζειν τὴν διάνοιαν ἔταξεν, ἀναπαύειν

for elided words, and the hypodistole for
those separated from one another, and the
straight line that extends under members of a
compound, which we thus call the ‘hyphen’,
for words joined together. But I refrain from
drawing the shapes of these for people
familiar with them.

h) And he also set up the punctuation marks
as signs not only for the word but also for the
utterance, providing pauses and stopping
points for the breath and the voice. And he
assigned distinct places and functions to
them,

i) [For the sake of brevity we shall mention
only the three first and most important ones
now. Their sub-parts have been treated in the
On periods and cola, and have been recorded
by Nicanor son of Hermeias in *On
Punctuation in General*.]

j) positing that the first one always finishes
off the thought—the στιγμή which he puts at
the top of the letter—, as if it has power over
the utterance and brings the voice down. And
he defined the one at the base, this one which
we also call the ὑποστιγμή, as not finishing
off the thought, † but as relaxing some of the
breath gently before what is about to be said,
as if it were to reserve what remains of the
utterance for a high pitch †. As for the one
called the middle of both, this too he did not
set up to finish off the thought, but to give a

δὲ ἐν καιρῷ τὸ πνεῦμα ἐπίσης τῇ φωνῇ
χρωμένων, ἐπειδὴν ἦ^{xiv} πολὺς^{xv} ὁ λόγος καὶ
μακρός.

ⁱ τὴν μὲν ἀπαρτίζειν αἰετὴν τὴν διάνοιαν ὑποθέμενος,
τὴν στιγμὴν **B**: τὴν μὲν ἀπαρτίζουσιν αἰετὴν
διάνοιαν τελείαν στιγμὴν ὑπέθετο **C**

ⁱⁱ ὑπὸ **C**: ὑπὸ ὑπὸ **B**

ⁱⁱⁱ ταύτην ἦν **B**: ἦν **C**

^{iv} πρόσθεν dubitanter in apparatu critico M. Schmidt
(1860) 215: πόθεν **BC**; πρὸ vel πρότερον
suspensus est Jacobi apud Lentz (1867) xxxx; pro
πρόσθεν...τηροίη Lentz (1867) xxxx scripsit πρὸ
δὲ τοῦ μέλλοντος εἰρήσεσθαι ὑφιέναι μὲν ἡρέμα
τοῦ πνεύματος τι, ἐπιτεῖναι δ' αὖ εἰς ὅζον, τὸ
λεῖπον ὅπως τοῦ λόγου πληροίη, consultis Sch. D.
Thr. (Σ^d) 27. 32–28. 8 and (Σ^v) 178. 8–11.

^v εἰρήσθαι ὑφιέναι **BC**; εἰρήσεσθαι, ὑφιέντος
suspensus est Jacobi

^{vi} μὲν **C**: μὲν μὲν **B**

^{vii} τι add. Lentz (1867) xxxx

^{viii} nonnulla verba ante εἰς ὅζον excidisse suspensus
est M. Schmidt (1860) 215

^{ix} ὥσπερ **BC**; ὅπως suspensus est Jacobi

^x τηροίη **BC**; περαίνη suspensus est Jacobi

^{xi} δὲ om. **B**

^{xii} καλουμένην Nauck (1848) 14, 15: καλοῦμεν **BC**

^{xiii} αὐτὴν **C**^{p.c.}: αὐτῆς **C**^{a.c.}: αὐτοῖς **B**

^{xiv} ἦ Barker (1820) 190: ἦ **C**: ἦ **B**

^{xv} πολὺς ὁ λόγος **B**: ὁ λόγος πολὺς **C**

rest to the breath at the critical moment for
those using the voice in equal measures (i.e.
for those pausing between phrases of equal
length), when the utterance is copious and
long.

Places in the word where the various signs can go:

k) ὥρισε καὶ τοῖς τόνοις καὶ τοῖς πνεύμασι
τεταγμένως περιπολεῖν τὴν λέξιν, τὸν μὲν
ὅζον τόνον ἐν ἅπαντι μέρει καθαρῷ τόνου
ἅπαξ ἐμφαίνεσθαι δοκιμάσας, καὶ
μεμετρημένως ἐπὶ τοῦ πέρατος τῆς λέξεωςⁱ,
ὁπότεⁱⁱ καὶ κυριεύει τοῦ ὀνόματος, ἥⁱⁱⁱ παρὰ
τὸ πέρας^{iv}, ἥ τρίτον ἀπὸ τοῦ πέρατος: πόρρω
γὰρ τοῦδε οὐ πρόεισιν, οὐδ' ἂν ἐπιμήκιστον
εἴη τὸ ὄνομα.

ⁱ ἥ πρὸ τοῦ πέρατος post λέξεως inseruit Lentz (1867)
xxxx

ⁱⁱ ὁπότε — τρίτον **BC**: ἔσθ' ὅτε καὶ κυριεύει — ἥ ἢ
τρίτη dubitanter in apparatu critico M. Schmidt
(1860) 215

ⁱⁱⁱ ἥ Jannaris (1897) 516: ἥ **BC**

^{iv} post πέρας verba ἥ ἀπὰρ deleta leguntur in **C**

k) And he decreed that accents and
breathings should go about speech in an
orderly fashion, and sanctioned the
appearance of the acute accent once on every
word that was intact with respect to its accent,
and in a controlled manner on the final
syllable of the word—whenever that was
indeed the dominant syllable of the word—or
next to last, or third from the end. For it will
not proceed (i.e. go back) further than this,
not even if the word is very long.

l) ὁπότε δὲ αὐτὸς ἐκσταίῃⁱ τῆς λέξεως ὁ τόνος, τηνικαῦτα περισπώμενος γίνεται. ἄμφω γὰρ ἅμα ἀδύνατον, ὅτι ἐκ τοῦ ὀξέος καὶ τοῦ βαρέος ὁ περισπώμενος, ὥσπερ εἴρηται, γέγονεν. φαίνεται δὲ καὶ οὗτος τὰ πολλὰ ἐπὶ τοῦ πέρατος,ⁱⁱ ἢⁱⁱⁱ <παρὰ^{iv} τὸ πέρας>· ἐπιπόρρω^v δ' ^{vi} εὐρεῖν ἀδύνατον.

ⁱ ἐκσταίῃ τῆς λέξεως **B^{a.c.}**; ἐκσταίῃ τὴν λέξιν **B^{p.c.} (m.)**

¹⁾: ἐνσταίῃ τὴν λέξιν **C**

ⁱⁱ πέρατος **BC**; πέρατος ἢ πρὸ μιᾶς τοῦ τέλους **M**.
Schmidt (1860) 215 in apparatu critico, coll. Sch.
D. Thr. (Σ^v) 127. 28

ⁱⁱⁱ ἢ om. **C**

^{iv} παρὰ τὸ πέρας scripsimus; possis etiam πρὸ μιᾶς
τοῦ πέρατος; πρὸ μιᾶς τοῦ τέλους Jannaris (1897)
516

^v ἐπιπόρρω **BC**; ἐπεὶ πόρρω Jannaris (1897) 516

^{vi} δ' om. **B**

m) ὁⁱ δὲ βαρὺς τόνος, ἅτε καὶ ἀπλοῦς τις ὢν καὶ μικροτέραν ἔχων δύναμιν, ἀτάκτως καὶ ἀμέτρως περίεισι τὴν λέξιν ἀπανταχῇ, καὶ πολλάκι καὶ ὅπη τύχοιⁱⁱ φαινόμενος.

ⁱ ὁ om. **C**

ⁱⁱ τύχοι **C**: τύχη **B**

n) οὕτω καὶ ἐπὶ τῶν πνευμάτων τὸ μὲν δασὺ κατὰ τὴν ἀρχὴν ἀεὶ φαίνεται, καὶ μέσον ὀλιγάκις, εἰ συγκέοιτο τὸ ὄνομα· τὸⁱ δὲ ψιλόν, οἷά τε ἀέριονⁱⁱ καὶ κεχυμένον ἀπεριόριστον ὄνⁱⁱⁱ, ἀπανταχῇ. καὶ οἱ χρόνοι δὲ καὶ τὰ σημεῖα τῶν παθῶν τέτακται πῶς φυσικῶς.

ⁱ τὸ om. **B**

ⁱⁱ ἀέριον **M**. Schmidt (1860) 215: ἀέρεον **BC**; ἀραιόν dubitanter K. E. A. Schmidt (1859) 597

ⁱⁱⁱ ὄν **C**: ὄν **B**

l) When this accent stands aside from the word, then the accent becomes a circumflex. For both accents together is impossible, because the circumflex is made up of the acute and the grave, as has been said. And this too mostly appears on the final syllable or <the penultimate>; and it is impossible to find it further away (see section 3.5).

m) And the grave accent, insofar as it is simple and has less power, will spread itself all over the word in a disorderly and uncontrolled manner, appearing many times and wherever it happens to occur.

n) So in the case of the breathings too the rough one always appears at the beginning, and occasionally in the middle if the word is a compound. But the smooth breathing, intangible and all over the place as it is, being unbounded, (appears) everywhere. And the lengths and the signs for modifications have been arranged more or less as is natural.'

3 Circumstances of composition

For clues to the circumstances under which the *Περὶ τῆς τῶν τόνων εὐρέσεως* was composed we might consider its syntax, technical terminology and affinities with other known texts; in sections 3.1–3.3 we take these in turn. On the basis of our text's affinities with other known texts, in particular, we shall suggest that our author consulted a source that was in Latin. In sections 3.4 and 3.5 we consider two further features of our text which would be well

explained on the basis of a Latin source that dealt at least in part with the Latin accent: the use of ἐπάδω for ‘sing along to’ towards the beginning of the text, and (more tentatively) a confusing point in the presentation of possible positions for the circumflex accent towards the end.

3.1 Syntax

The language of the *Περὶ τῆς τῶν τόνων εὐρέσεως* is reminiscent of high-register Byzantine texts. Sentences are convoluted and full of conspicuously elegant features such as optatives,¹³ not all of them used as would be expected in Classical Greek;¹⁴ an ostentatious application of the rule that a neuter plural subject takes a singular verb (the subject consists of three co-ordinated nouns, and only the last is a neuter plural);¹⁵ a noun phrase in the dual;¹⁶ and copious instances of μέν...δέ.¹⁷ In addition, we find the following distinctly non-Classical features with parallels in Byzantine texts:

(i) The ‘learned’ use of middle forms where one would expect actives (see Böhlig (1956) 94–95; Browning (1978) 117, 120, 121):

- ἑώρακε γὰρ καὶ τὴν μουσικὴν οὕτω τὸ μέλος καὶ τοὺς ἀριθμοὺς σημαινομένην ‘For he saw that music too indicates the melody and the rhythms like this’ (section b)
- καὶ σημεία ἔθετο ἐφ’ ἑκάστῳ καὶ ὀνόματα, τοῖς μὲν χρόνοις τὸ βραχὺ καὶ τὸ μακρὸν ἐπονομάσας, καὶ σχήματα οἰκεῖα ποιησάμενος ‘And he established signs and names for each one, applying “short” and “long” as names for the lengths, and making suitable shapes’ (section c)
- οὕτως αὐτῷ καὶ τὸ σχῆμα ἐποίησατο ‘this is also how he made its shape’ (section d)
- δεδουκὼς μή τι ἄρα ἐν τῇ παραθέσει τῶν γραμμάτων παραμινύηται τὴν ἀνάγνωσιν ‘fearing lest anything in the placing of letters side by side should mix up the reading’ (section e)
- οὕτωςι κακεῖνος ὥσπερ κέρατα τὰ σημεία ἐποίησατο τῷ πνεύματι, ἓν τι σχῆμα ἑκατέρῳ σημηνάμενος ‘in this way he too made the signs for the breath like *kerata*, providing a single shape for each’ (section f)
- ἐποίησατο δὲ καὶ τῇ πεπονθυίᾳ λέξει σημεία ‘And he made signs for a word that has undergone a modification’ (section g)

(ii) forms of αὐτός where one might expect forms of οὗτος (see Horrocks (2010) 128–29, 148–49, 247, 250, 295):

- αὐτὸ τὸ σχῆμα τοῦ τόνου ‘this shape for the accent’ (section e)
- τὴν δὲ μέσην καλουμένην ἀμφοτέρων, οὐδὲ αὐτὴν μὲν ἀπαρτίζειν τὴν διάνοιαν ἔταξεν ‘As for the one called the middle of both, this too he did not set up to finish off the thought’ (section j)
- ὁπότε δὲ αὐτὸς ἐκσταίῃ τῆς λέξεως ὁ τόνος ‘When this accent stands aside from the word’ (section l)

¹³ ἐπάδοιμεν (sections a, b); ἔποιτο (section b); βούλοιντο (section f); ἐπιτάττοι (section f); τηροίη but in a corrupt context (section j), κυριεύοι (section k), εἶη (section k), ἐκσταίῃ (section l), τύχοι (section m), συγκέοιτο (section n).

¹⁴ Note ὁπότε ψιλοῦν ἐπιτάττοι for ὁπότεν ψιλοῦν ἐπιτάττη, if our readings and interpretation are correct at this point (section f); ἀν...εἶη for ἀν ἧ (section k); ὁπότε...ἐκσταίῃ for ὁπότεν...ἐκστῇ (section l), ὅπη τύχοι for ὅπη ἀν τύχη (section m); εἰ συγκέοιτο for ἐὰν συγκέηται (section n).

¹⁵ οἱ χρόνοι καὶ οἱ τόνοι καὶ τὰ πνεύματα...γένονε (section a).

¹⁶ ἀμφοῖν τοῖν τόνοιν (section d).

¹⁷ See section b (four times), section c (three times), section f (once), section j (three times, as well as an apparent stand-alone μέν in a corrupt context), section n (once). There is perhaps another instance spanning sections k–m, if τὸν μὲν ὁξὺν τόνον in section k is intended to make a pair with ὁ δὲ βαρὺς τόνος in section m. Section i, which we follow Nauck in deleting, also has one occurrence.

(iii) a form of αὐτός where one might expect a form of ὁ/ή/τό (see Sophocles (1887), s.v. αὐτός):

- καὶ αὐτὴν ὑποτείνουσιν εὐθεῖαν ‘and the straight line that extends under’ (section g)

Some instances of these features have been emended away in the past, as our critical apparatus shows, and it is impossible to be sure that all instances go back to the author of the text. Even if we could be confident that they did, none of these features could be used to pinpoint the date of the text very precisely. Nevertheless, when taken together with the author’s highly convoluted style, they are more suggestive of a highly educated Byzantine writer than of errors introduced in transmission.

3.2 Technical terminology

The Περί τῆς τῶν τόνων εὐρέσεως is striking in its use of some non-standard grammatical terms, even where the concept denoted is found in other Greek grammatical texts too.

In section k, we are told that Aristophanes of Byzantium decreed that an acute accent should appear once on every word that was καθαρὸς τόνου. The point being made here is a standard one and can be explained as follows. Every word has exactly one κύριος τόνος, ἴδιος τόνος, or κατὰ φύσιν τόνος: an ‘accent of its own’ or ‘natural accent’.¹⁸ This accent is either an acute or a circumflex,¹⁹ but since the circumflex is considered to be made up of an acute and a grave on a single syllable,²⁰ every word can be treated as having an acute accent as its κύριος τόνος or as part of its κύριος τόνος.²¹ The κύριος τόνος is not necessarily the accent with which a word appears in an actual phrase, however, since the κύριος τόνος is subject to rules that may remove an accent or ‘put it to sleep’, shift the accent, or add another one. (Thus an enclitic is considered to throw its κύριος τόνος off under some circumstances; an oxytone word normally ‘puts its accent to sleep’ before another non-enclitic word; and under some circumstances a word acquires an extra accent from a following enclitic.) If no such rule has applied, a word has its unmodified natural accent: in the words of our text it is καθαρὸς τόνου, ‘intact with respect to its accent’. The concept of an unmodified accent is a standard one, and is often expressed using the verb ὀρθοτονεῖσθαι.²² To our knowledge, however, the word καθαρὸς is nowhere else used for an unmodified accent.

In section k, the accented syllable of a word is designated as the one that κυριεύει τοῦ ὀνόματος ‘dominates the word’. This phrase is reminiscent of the standard idea that every Greek word has a κύριος τόνος ‘accent of its own’, but we have been able to find no other instance of the verb κυριεύω being used in this connection.

In section l, we are told that when the acute accent ἐκσταίη τῆς λέξεως ‘stands aside from the word’, the accent becomes a circumflex. The point that every word has either an acute accent or a circumflex is a standard one,²³ but the use of an expression for ‘stand aside from the word’ appears to be unique. We shall return in section 3.3.4 to the idea that an acute accent can ‘stand aside from’ or vacate a word.

¹⁸ For the terms κύριος τόνος, ἴδιος τόνος and κατὰ φύσιν τόνος see e.g. (Ps.)-Dionysius Thrax, supplement Περί προσφθιῶν, 110. 6; Ap. Dysc., *Pron.* 35. 8, 23.

¹⁹ See e.g. the passages cited at n. 23 below.

²⁰ See e.g. John Philoponus, *Praecepta tonica* 21 Xenis; Sch. D. Thr. (Σ^v) (Πορφυρίου περὶ προσφθιάς) 136. 22–23; 138. 26–28.

²¹ So e.g. Sch. D. Thr. (Σ^v) (Πορφυρίου περὶ προσφθιάς) 139. 14–20.

²² For ‘to have its natural accent’ as a definition of ὀρθοτονεῖσθαι see Ap. Dysc., *Pron.* 35. 7–8: συμβέβηκε τῶν ἀντωνυμιῶν ἃς μὲν ὀρθοτονεῖσθαι, τουτέστι τὸν κατὰ φύσιν τόνον ἔχειν.... ‘It is characteristic of the pronouns that some are orthotonic, that is to say they have their natural accent...’.

²³ E.g. Ap. Dysc., *Pron.* 60. 13–14; John Philoponus, *Praecepta tonica* 20 Xenis.

In sections k and l we find a rare use of the expression τὸ πέρας to denote the final syllable of a word: in section k the acute accent is said to fall ἐπὶ τοῦ πέρατος τῆς λέξεως ‘on the end of the word’ (i.e. on the final syllable) or παρὰ τὸ πέρας ‘next to the end’ (i.e. on the penultimate syllable) or τρίτον ἀπὸ τοῦ πέρατος ‘third from the end’ (i.e. on the antepenultimate syllable). In section l, the information given on possible positions for the circumflex accent (to which we shall return to in section 3.5) is corrupt and confusing, but it is likely from the three-fold distinction between final, penultimate and antepenultimate syllable in section k that τὸ πέρας denotes the final syllable of the word in section l too. In Greek grammatical texts the usual terms for ‘word-final syllable’ are (τὸ) τέλος,²⁴ ἡ τελευταία (συλλαβή),²⁵ and ἡ λήγουσα (συλλαβή).²⁶ The usual terms for ‘penultimate syllable’ are ἡ πρὸ τέλους (συλλαβή)²⁷ and ἡ παραλήγουσα (συλλαβή),²⁸ and the usual terms for ‘antepenultimate syllable’ are ἡ τρίτη ἀπὸ τέλους (συλλαβή)²⁹ and ἡ προπαραλήγουσα (συλλαβή).³⁰ Occasional parallels or near-parallels for our text’s use of τὸ πέρας can be found in Byzantine authors:³¹ Eustathius suggests that one of the factors allowing metrical lengthening is that the syllable is τὸ πέρας...λέξεως, i.e. the last one in the word (passage (1)), and there are occasional instances of similar expressions as glosses for πτώσις in its broad Aristotelian use for any inflectional or derivational ending (e.g. passage (2)):³²

- (1) ἡ δὲ ἐφεξῆς PE συλλαβὴ ὁμοίως ἐκτεινομένη τριχῇ λόγῳ κοινῆς συλλαβῆς διὰ τὸ ὀξέως τονοῦσθαι καὶ διὰ τὸ πέρας εἶναι λέξεως καὶ διὰ τὸ προκεῖσθαι τοῦ δέλτα...σπονδεῖον ἀποτελεῖ.
And the next syllable **PE** (of φίλε ἔκυρέ, δεινός τε at Homer, *Iliad* 3. 172), being likewise lengthened on the principle of an anceps syllable in three ways, because it is oxytone and because it is the end of the word and because it precedes delta,...creates a spondee. (Eustathius, *In Iliadem* 399. 45–400. 2= 1. 629. 17–20 Van der Valk)
- (2) πτώσις δὲ παρὰ Ἀριστοτέλει τὸ πέρας τῆς λέξεως (Elias, *In Porphyrii Isagogen et Aristotelis Categorias commentaria* 143. 19–20 Busse)
πτώσις in Aristotle means the end of the word

Eustathius’ use may be motivated by the relevance to him of the boundary between one word and the next, and the use of πέρας as a gloss for πτώσις is apparently motivated by a perceived similarity between the meaning of πέρας and the literal meaning of πτώσις.³³ Yet although occasional parallels or near-parallels can be found, the usage of τὸ πέρας found in our text does not appear to have been widespread at any date.

3.3 Affinities with other known texts

²⁴ E.g. [Arcadius] 126. 14 Roussou; John Philoponus, *Praecepta tonica* 11 Xenis.

²⁵ E.g. [Arcadius] 297. 7, 300. 4 Roussou; John Philoponus, *Praecepta tonica* 6 Xenis.

²⁶ E.g. Herodian, Περὶ μονήρους λέξεως 909. 13–14; [Arcadius] 300. 3 Roussou.

²⁷ E.g. Ap. Dysc., *Adv.* 203. 27; [Arcadius] 115. 14, 124. 1 Roussou. Also ἡ πρὸ μιᾶς συλλαβῆς τοῦ τέλους, Sch. D. Thr. (Σ^v) 137. 8.

²⁸ E.g. Ap. Dysc., *Pron.* 55. 4; [Arcadius] 139. 20 Roussou; *Ep. Hom. alph.* ε 180. 5–6. Also ἡ παρατέλευτος (συλλαβή), e.g. Sch. D. Thr. (Σ^v) 137. 6.

²⁹ E.g. [Arcadius] 156. 12 Roussou; *Ep. Hom. alph.* α 271. 18–19.

³⁰ E.g. [Arcadius] 206. 1–2 Roussou; *Ep. Hom. alph.* κ 14. 9. Also ἡ πρὸ δύο συλλαβῶν, Sch. D. Thr. (Σ^v) 137. 6.

³¹ We are indebted to one of the journal’s anonymous referees for drawing our attention to these parallels.

³² Cf. Michael Psellus, *Oratoria minora* 37. 154–55 Littlewood (τὰς δὲ πτώσεις..., ὥσπερ δὲ πέρατα λέξεων ἢ συλλαβῶν ἀναλόγως ὀνομάζουσιν οἱ φιλόσοφοι ‘and the πτώσεις..., which is what the philosophers fittingly call the ends of words or syllables’); (Ps.?)-Michael Psellus, *Philosophica minora* i, 51. 156–57 Duffy (πτώσις γὰρ λέγεται τὸ πέρας τῆς τελευταίας συλλαβῆς ‘and the end consisting (?) of the final syllable is called the πτώσις’).

³³ This appears to be the thrust of Michael Psellus’ ἀναλόγως (‘fittingly’ or ‘logically’) at *Oratoria minora* 37. 154–55 Littlewood, quoted in n. 32.

Our text has been said to derive from the tradition of commentaries on the Τέχνη γραμματική attributed to Dionysius Thrax, along with the supplement Περί προσωδίων.³⁴ For the level of interest in the history of the prosodic signs, however, a Latin text has been compared: the ‘De accentibus’ section of a commentary on Donatus’ *Ars maior* whose author goes under the name of ‘Pseudo-Sergius’.³⁵ Certain points of contact between our text and Pseudo-Sergius could indeed be explained on the basis of a similar source. In particular, the term ὀξύβαρεῖα (or ὀξύβαρύς) for ‘circumflex’ occurs only in these two texts, and Pseudo-Sergius provides the best parallel for our text’s point that the grave accent is naturally capable of spreading itself out over more of the word than the acute or circumflex.³⁶ However, further features of content and terminology suggest that the author of our text himself consulted a Latin source. In sections 3.3.1–3.3.5 we discuss points that do not appear in Pseudo-Sergius’ section ‘De accentibus’, just mentioned, but whose best parallels again come from Latin rather than Greek sources.

3.3.1 οὐδ’ ἂν ἐπιμήκιστον εἴη τὸ ὄνομα ‘even if the word is very long’

In section k, our text has it that the accent cannot fall further from the end of a word than the antepenultimate syllable, ‘even if the word is very long’. While this point may seem unremarkable, it is in Latin grammatical texts on the Latin accent that we otherwise find allusions to possible word length used to emphasise the limits on where the word accent can fall:

- (3) circumflexus autem, quotlibet syllabarum sit dictio, non tenebit nisi paenultimum locum. And the circumflex—no matter how many syllables a word consists of—will only occupy the penultimate position. (Donatus, *Ars maior* 609. 8–9 Holtz = *GL* iv. 371. 5–6)
- (4) in Graecis itaque dictionibus cum acutus tria loca teneat, ultimum paenultimum antepaenultimum, ultra numquam (neque enim refert plurium syllabarum esse partem orationis), apud Latinos duo tantum loca tenet, paenultimum et antepaenultimum; circumflexus autem, quotlibet syllabarum sit dictio, non tenebit nisi paenultimum locum. (Diomedes, *Ars*, *GL* i. 431. 10–14)
Whereas the acute occupies three places in Greek words—the final syllable, the penultimate and the antepenultimate, but never beyond that (nor does it matter if the word consists of more syllables)—for Latin speakers it occupies two places only, the penultimate and antepenultimate. And the circumflex will not occupy any place but the penultimate, no matter how many syllables the word consists of.
- (5) nam si quantarumvis sermo sit syllabarum, circumflexus non tenebit ultra nisi paenultimum locum. ([Sergius], *De littera, de syllaba, de pedibus, de accentibus, de distinctione*, *GL* iv 482. 20–21)
For if a word consists of any number of syllables, the circumflex will not occupy any place further back apart from the penultimate.
- (6) circumflexus accentus in disyllabis uel in trisyllabis uel in quantouis numero syllabarum paenultimum sibi tantum uindicat locum... ([Sergius], *De littera, de syllaba, de pedibus, de accentibus, de distinctione*, *GL* iv 483. 11–12)
In disyllabic or trisyllabic words, or in any number of syllables, the circumflex claims for itself only the penultimate place.

³⁴ M. Schmidt (1860) 211; cf. Villoison (1783) 117; Pfeiffer (1968) 179.

³⁵ For the ‘De accentibus’ section see [Sergius], *In Donati Artem maiorem*, *GL* iv, pp. 524–33. For the comparison with our text see Lentz (1867) xxxviii.

³⁶ [Sergius], *In Donati Artem maiorem*, *GL* iv. 532. 12–14 Keil.

Occasional comments on possible word length are found in Greek discussions of the Greek accent, but the contexts are quite different. In passage (7), Dionysius of Halicarnassus is not discussing possible positions for the accent but noting that no matter how long a word is, only one of its syllables has an acute accent.³⁷ In passage (8), and in similar discussions in Choeroboscus,³⁸ the author is not emphasising the limits to where the word accent can fall but offering an explanation for the existence of these limits in the first place.

- (7) καὶ ταῖς μὲν δισυσλλάβοις οὐδὲν τὸ διὰ μέσου χωρίον βαρύτητός τε καὶ ὀξύτητος. ταῖς δὲ πολυσυσλλάβοις, ἡλίκαι ποτ' ἂν ὦσιν, ἢ τὸν ὀξὺν τόνον ἔχουσα μία ἐν πολλαῖς βαρεῖαις ἔνεστιν. (Dionysius of Halicarnassus, *De compositione verborum* 11. 17)
Now in words of two syllables (i.e. of which one has an acute and one a grave) there is no space between the high pitch and the low pitch. But in polysyllables, however many syllables there are, the one with the high pitch is among many low-pitched ones.
- (8) ἀπορήσειε δ' ἂν τις, διὰ τί μὴ ἔστι τάσις πρὸ τριῶν συλλαβῶν. λέγομεν οὖν πρῶτον μὲν, ὅτι ἀδύνατόν ἐστιν ἐκταθῆναι τὴν φωνὴν πέραν τοῦ τοιοῦτου μέτρου, ἥτοι πρὸ τριῶν συλλαβῶν ὀξυνθῆναι· ἔπειτα οὐδὲ λέξις Ἑλληνικὴ θεματικὴ ἀπλὴ πρωτότυπος ὑπερβαίνει ποτε τὴν τρισυσλλαβίαν. (Sch. D. Thr. (Σ') 137. 25–29)
And someone might ask why there is no accent more than three syllables back. We say firstly that it is impossible for the voice to be stretched out beyond this measure, that is to say to be made acute more than three syllables back. Secondly, no simplex Greek word that is a base form and underived ever exceeds the compass of three syllables.

3.3.2 πόρρω γὰρ τοῦδε οὐ πρόεισιν ‘for it will not proceed further than this’

The sentence of section k that ends with οὐδ' ἂν ἐπιμήκιστον εἴη τὸ ὄνομα ‘even if the word is very long’ also begins with a striking expression, πόρρω γὰρ τοῦδε οὐ πρόεισιν ‘for it will not proceed (i.e. go back) further than this’. The point that an accent cannot fall further from the end of the word than the antepenultimate syllable is widespread in Greek grammatical texts, but the best parallels for the wording πόρρω ... τοῦδε οὐ πρόεισιν, with a verb of motion and an adverb meaning ‘further’, come from Latin grammatical texts:

- (9) et hoc plus non ascendit accentus, sed aut in finali est aut in paenultima aut in tertia a fine. (Pompeius, *Commentum artis Donati*, GL v. 127. 21)³⁹
And the accent does not go up further than this, but is either on the final syllable or on the penultimate or on the third from the end.
- (10) accentus autem computantur non a prioribus syllabis, sed ab ultimis, id est retrorsum, nec possunt ascendere nisi usque ad tertiam syllabam a fine. (Servius, *Comm. in Donatum*, GL iv. 426. 20–22)
And accents are calculated not from initial syllables but from final ones, that is to say backwards, nor can they go up except as far as the third syllable from the end.
- (11) ...necesse est ut trisyllaborum rationem omnia posasyllaba sequantur, eo quod usque ad tres syllabas a fine ascendit accentus... (Servius, *Comm. in Donatum*, GL iv. 426. 38–427. 1)
It is necessary for all words of however many syllables to follow the principles of trisyllabic words, because the accent goes up to three syllables from the end.

³⁷ In context, the notion of a syllable with an acute accent includes that of a syllable with a circumflex accent, with the circumflex considered to consist of an acute and a grave on a single vowel (cf. the passages cited in n. 20).

³⁸ Passage (15) and the passages cited in n. 40.

³⁹ This passage also contains several further instances of the verb *ascendere*. Compare also Donatus Ortigraphus, paraphrasing Pompeius in medieval Ireland (*Ars grammatica*, §*De accentu* 70–71 Chittenden): plus non ascendit accentus nec apud Grecos nec apud Latinos ‘The accent does not go up further, neither for Greeks nor for Latin speakers’.

- (12) ab ea enim quae est a fine tertia ulterius non potest acutus ascendere. (Audax, *De Scauri et Palladii libris excerpta*, GL vii. 359. 21–22)
For the acute cannot go up further beyond the syllable that is third from the end.

In Greek texts we occasionally find a different adverb meaning ‘further’, περαιτέρω, used without a verb of motion to convey that the accent cannot fall further from the end of the word than the antepenultimate syllable (passages (13) and (14)). When explaining why there are limits to the distance from the end of the word where the Greek accent can fall, Choeroboscus (e.g. passage (15)) uses the verb ὑπερβαίνω in its widespread metaphorical sense ‘exceed’, both for words exceeding a certain compass and for accents exceeding or going beyond the same limits.⁴⁰

- (13) τῆς ὀξείας μεμαθήκαμεν τρεῖς εἶναι τόπους, τὸν τε ἐπὶ τῆς τελευταίας συλλαβῆς καὶ τὸν παρατέλευτον καὶ τὸν πρὸ δύο συλλαβῶν τοῦ τέλους· καὶ περαιτέρω τούτων οὐ δέδωκεν ἡμῖν ἡ φύσις, οὐδ’ ἐὰν θελήσωμεν ἐπαρκεῖ τὸ πνεῦμα· (Sch. D. Thr. (Σ^d) 39. 8–11)
We have learnt that there are three places for the acute accent: the one on the final syllable, the penultimate one and the one two syllables before the end. And nature has not granted to us (the placement of an accent) further (back) than these (places).
- (14) ὥσπερ γὰρ τόνος οὐ τίθεται περαιτέρω τῶν τριῶν συλλαβῶν, οὔτε ποὺς μετρικὸς ὑπερβαίνει τὰς τρεῖς συλλαβὰς, οὕτω οὔτε λέξις σύνθετος θέλει εἶναι περαιτέρω τῶν τριῶν λέξεων (*Etymologicum magnum* 459. 9–12)
For just as the accent is not placed further (back) than three syllables, nor does a metrical foot go beyond three syllables, so a compound word does not tend to be beyond three words (i.e. a compound word is not usually composed of more than three simplex words).
- (15) καὶ ἄξιόν ἐστι ζητῆσαι, διὰ ποίαν αἰτίαν πρὸ τριῶν συλλαβῶν οὐ τίθεται τόνος. καὶ ἔστιν εἰπεῖν τὴν αἰτίαν ταύτην· οὐδέποτε ἀπλῇ λέξις πρωτότυπος ἀκίνητος ὑπερβαίνει τὴν τρισυλλαβίαν· τοῦτου χάριν οὐδὲ τόνος ὑπερβαίνει τὰς τρεῖς συλλαβὰς. (Choeroboscus, *Th.* i. 363. 20–23)
And it is worth investigating the reason why an accent is not placed more than three syllables back. And it is possible to give the following reason: a simplex word that is underived and uninflected never exceeds the compass of three syllables. For this reason the accent too does not go beyond three syllables.

The Latin texts quoted above provide the closest parallels we have found for the more striking metaphor πόρρω...οὐ πρόεισιν, used when laying out basic information on possible positions of the accent.

3.3.3 κυριέοι τοῦ ὀνόματος ‘dominates the word’

We noted in section 3.2 that the phrase κυριέοι τοῦ ὀνόματος (section k) appears to be a unique way of designating the accented syllable in Greek. In Latin grammatical texts, however, we find the idea that the accent ‘rules the word’ and the idea that the accented syllable ‘has more power’ than other syllables.⁴¹

⁴⁰ So also Choeroboscus, *Th.* i. 363. 33, 363. 37, 386. 2, 386. 3.

⁴¹ Compare also the following expressions, from Sedulius Scottus in medieval Ireland: *ipsa syllaba quae accentu regitur* ‘the syllable that is ruled by the accent’ (*In Donati Artem maiorem* 40. 5–6 Löfstedt); *in quacumque syllaba uel acutus uel circumflexus regnat* ‘in whatever syllable the acute or circumflex reigns’ (41. 66–67 Löfstedt); *in eadem dictione in quacumque syllaba nec acutus nec circumflexus regnat grauis ponatur* ‘(that) a grave is placed on any syllable of the same word in which neither an acute nor a circumflex reigns’ (42. 82–84 Löfstedt); *non solum grauis ultimam et paenultimam, sed et acutus antepaenultimam regit* ‘not only does the grave rule the final and penultimate syllables (of the word *anima*), but the acute also (rules) the antepenultimate’ (42. 96–98 Löfstedt); *nam in paenultima huius nominis syllaba circumflexus accentus regnat* ‘For in the penultimate syllable of this word (i.e. *malesānus*) the circumflex accent reigns’ (46. 25–27 Löfstedt). Compare

- (16) Accentus est acutus uel grauis uel inflexa elatio orationis uocisue intentio uel inclinatio acuto aut inflexo sono regens uerba. (Diomedes, *Ars*, *GL* i. 430. 29–30)
Accent is an acute, grave, or circumflex elevation of speech or tension or inclination of the voice, ruling words with an acute or circumflex sound.
- (17) et quem ad modum anima nostra in toto corpore ipsa plus potest, sic etiam illa syllaba plus sonat in toto uerbo, quae accentum habet. ergo illa syllaba, quae accentum habet, plus sonat, quasi ipsa habet maiorem potestatem. (Pompeius, *Commentum artis Donati*, *GL* v. 126. 30–33)
And in the way that our soul has the most power in the whole body, so too the syllable that has the accent gives the most sound in the whole word. Thus the syllable that has the accent gives more sound, as if it has greater power.

3.3.4 αὐτὸς ἐκσταίῃ τῆς λέξεως ὁ τόνος ‘this accent stands aside from the word’

In section 3.2 we saw that the idea of a word that does not have an acute accent (and therefore has a circumflex) is expressed with the help of a unique use of one of the intransitive forms of ἐξίστημι: ὁπότε δὲ αὐτὸς ἐκσταίῃ τῆς λέξεως ὁ τόνος ‘whenever this accent stands aside from the word’ (section 1). The idea that an accent vacates a syllable, allowing another accent to take possession, is found in the Latin tradition in Cledonius’ commentary on Donatus:

- (18) ... loca quae circumflexus aut acutus dimiserit, grauis possidet...non sibi uindicat locum, sed dimissum ab aliis possidet
... the grave occupies the places that the circumflex or acute has abandoned...(the grave) does not claim a place for itself, but occupies the one abandoned by others (Cledonius, 37. 12–13, 14–15 Bernetti = *GL* v. 32. 8–9, 10)

While this is the only close parallel we are aware of up to late antiquity, in the Latin tradition we find further late antique instances of the metaphor that an acute or circumflex ‘occupies’ or ‘lays claim to’ a word or syllable⁴²—a metaphor that does not appear explicitly in our Greek text but is implicit in the idea that one accent ‘stands aside’ for another. The idea that an accent may ‘abandon’ a particular syllable appears again in medieval Ireland, in Donatus Ortigraphus (passage (19)), and was perhaps available in principle wherever the metaphor of accents ‘occupying’ syllables was familiar.

- (19) DISCIPULUS: cur accentus ascendit aliquando usque ad antepenultimam, deserens⁴³ penultimam, cum secundum regulam utramque syllabam potest habere?
PUPIL: Why does the accent sometimes go up as far as the antepenultimate syllable, abandoning the penultimate, when according to the rule either syllable can have it? (Donatus Ortigraphus, *Ars grammatica*, §De accentu 72–74 Chittenden)

also, with a verb of a different meaning, ‘*interealoci*’, cuius antepaenultimam syllabam acutus fastigiat accentus ‘(the word) *interealoci*, whose antepenultimate syllable the acute accent tops’ (46. 31–32 Löfstedt).

⁴² *Omnis sermo necesse est ut aut acutum habeat aut circumflexum: nullus est sermo, qui sine istis sit: si non habet acutum, circumflexum habet; si non habet circumflexum, acutum habet. et grauis ubi erit, si uel ille uel ille sibi sermonem uindicat?* ‘It is necessary for every word to have either an acute or a circumflex. There is no word without these. If it does not have an acute, it has a circumflex; if it does not have a circumflex, it has an acute. And where will the grave be, if either that accent or that one claims the word for itself?’ (Pompeius, *Commentum artis Donati*, *GL* v. 126. 13–16); ...non sibi specialem uindicat partem, non habet propriam ‘(the grave accent) does not claim a special part (of the word) for itself, it does not have its own’ (Pompeius, *Commentum artis Donati*, *GL* v. 126. 25–26); circumflexus accentus in disyllabis uel in trisyllabis uel in quantouis numero syllabarum paenultimum sibi tantum uindicat locum... ‘In disyllabic or trisyllabic words, or in any number of syllables, the circumflex claims for itself only the penultimate place’ ([Sergius], *De littera, de syllaba, de pedibus, de accentibus, de distinctione*, *GL* iv 483. 11–12).

⁴³ Chittenden prints *deferens*, but the correction to *deserens* is incorporated into the electronic version of the *Brepols Library of Latin Texts* (<http://www.brepols.net>).

Passage (20) shows the closest parallel we have been able to find in Greek, but the context here is quite different. In a discussion of the relationship between ἄφνω ‘unawares, suddenly’ and ἀφανῶς ‘obscurely’, Apollonius Dyscolus has said that an adverb in -ς keeps the accent of the genitive plural of the word from which it is considered derived: hence ἀφανῶς beside ἀφανῶν, genitive plural of ἀφανής (‘obscure’). But we learn that the adverb may come to differ from the genitive plural through a change such as the loss of a vowel, and such a change prompts both the accent and the -ς to ‘depart’:

- (20) ἀποστάντος δὲ τοῦ τόνου ἦν ἔνδεκτον συναποστῆναι καὶ τὸ ς (Ap. Dysc., *Constr.* 495. 11)
For with the accent departing, it was admissible for the ς to depart as well.

In this context the use of one of the intransitive forms of ἀφίστημι (ἀποστάντος ‘departing’) appears to be prompted by the parallel being drawn between the ‘departure’ of the accent of the base word and the departure of the final -ς. What we do not have here is the idea that an acute, circumflex, or grave accent claims a word or syllable for itself, or leaves a word or syllable free for a different accent (acute, circumflex, or grave) to occupy.

3.3.5 στιγμή, ὑποστιγμή, μέση

Our text operates with a system of three punctuation marks called στιγμή, ὑποστιγμή and μέση (section j). This system is the one laid out in the Τέχνη γραμματική attributed to Dionysius Thrax, but there the three marks are presented in the order στιγμή (or τελεία στιγμή), μέση, ὑποστιγμή.⁴⁴ Commentaries on the Τέχνη γραμματική provide the main further discussions of this system in the Greek tradition, and they too use the order στιγμή (or τελεία στιγμή), μέση, ὑποστιγμή.⁴⁵

In the Latin grammatical tradition, on the other hand, the same three punctuation marks are often presented in the order *distinctio*, *subdistinctio*, *media distinctio* (or *mora*), the Latin equivalent of the sequence στιγμή, ὑποστιγμή, μέση found in our text.⁴⁶ In Latin texts we also find the order *distinctio*, *media distinctio*, *subdistinctio* (corresponding to the standard Greek order),⁴⁷ and Isidore of Seville even has the reverse order *subdistinctio*, *media distinctio*, *distinctio*.⁴⁸ As far as we can discover, however, only Latin texts provide parallels for our text’s στιγμή, ὑποστιγμή, μέση.

3.4. ‘Singing along to our speech’

Our text begins with a statement of the purposes for which Aristophanes of Byzantium created the signs for quantities, accents and breathings: to resolve ambiguities and convey the

⁴⁴ (Ps.)-Dionysius Thrax, Τέχνη γραμματική 7. 3–7.

⁴⁵ Sch. D. Thr. (Σ^d) 24. 8–25. 22; (Σ^v) 176. 16–177. 18; (Σ^m) 312. 5–32, 314. 13–14; (Σ^l) 479. 19–480. 2.

⁴⁶ See Diomedes, *Ars*, *GL* i. 437. 9–439. 9; Donatus, *Ars maior* 612. 1–7 Holtz = *GL* iv. 372. 14–22; Servius, *Comm. in Donatum*, *GL* iv. 427. 36–428. 4; [Sergius], *De littera, de syllaba, de pedibus, de accentibus, de distinctione*, *GL* iv. 484. 22–30 (but the first mention of the three signs here follows the order *distinctio*, *media distinctio*, *subdistinctio*), and from the Middle Ages see the *Excerpta Vaticana de positura, de chria, de poemate, de versu, de accentibus*, *GL* vi. 273. 1–6; Julian of Toledo, *Ars grammatica* II. 13. 1–4; Sedulius Scottus, *In Donati Artem maiorem*, 51. 16–52. 49 Löfstedt; Murethach, *In Donati Artem maiorem* I. 43. 1–45. 38 Holtz. For explicit comments on Donatus’ order see Cassiodorus, *De orthographia*, *GL* vii. 145. 30–146. 16; Sedulius Scottus, *In Donati Artem maiorem*, 52. 50–59 Löfstedt; Murethach, *In Donati Artem maiorem* I. 44. 12–19 Holtz.

⁴⁷ See [Sergius], *In Donati Artem maiorem*, *GL* iv. 533. 28–534. 4; Pompeius, *Commentum artis Donati*, *GL* v. 133. 3–11; Audax, *De Scauri et Palladii libris excerpta*, *GL* vii. 324. 12–18; Dositheus, *Grammatica* 5 Bonnet = *GL* vii. 380. 6/7–13/17; [Victorinus], *De arte grammatica*, *GL* vi. 192. 7–13. Cf. also Diomedes, *Ars*, *GL* i. 437. 15–19 (where the order *distinctio*, *media distinctio*, *subdistinctio* appears briefly within a discussion that otherwise follows the order *distinctio*, *subdistinctio*, *media distinctio*).

⁴⁸ Isidore of Seville, *Etymologiae* 1. 20. 1.

melody of the voice, ὥς ἐὰν ἐπάδοιμεν φθεγγόμενοι ‘as if we were to sing along to our speaking’.

The idea that quantities, accents and breathings are sung along to syllables is implicit in the Greek word προσῳδία ‘prosody’, an abstract noun derived from προσάδω ‘sing to’. Occasional discussions of the connection between προσῳδία and προσάδω (or ᾄδω πρὸς) are found in Greek, in Byzantine commentaries on Aristotle’s *Sophistici elenchi* and in commentaries on Dionysius Thrax.⁴⁹ But our text is unique in using the verb ἐπάδω in a discussion of prosody rather than προσάδω, although the noun προσῳδία would make προσάδω the more obvious verb.

If we are right to suggest that the author of our text consulted a source that was in Latin, his use of ἐπάδω may be a further reflection of this history. Discussion of the origins and meaning of the word *accentus* plays a much more central role in the Latin grammatical tradition than discussions of the word προσῳδία do in the Greek grammatical tradition. In several texts we are told that *ad-* is the equivalent of Greek προσ-, and *-centus* (from *cano* ‘sing’) is the equivalent of -ῳδία (from ᾄδω ‘sing’),⁵⁰ a point that already focusses the attention on the component parts of each word and their meanings. Passages (21)–(23) go further in bringing out the idea that *accentus* is a melody to which syllables or speech are sung:

- (21) ‘*accentus*’ est dictus ab ‘*accinendo*’, quod sit quasi quidam cuiusque syllabae cantus. apud Graecos quoque ideo προσῳδία dicitur, quia προσάδεται ταῖς συλλαβαῖς. (Diomedes, *Ars*, GL i. 431. 1–3)
accentus comes from *accino*, which is (as it were) a certain melody for each syllable. Among the Greeks too it is called προσῳδία because it προσάδεται ταῖς συλλαβαῖς (is sung along to the syllables).
- (22) ‘*accentus*’ autem est quasi ‘*adcantus*’ dictus, quod ad cantilenam uocis nos facit agnoscere syllabas. (Servius, *de finalibus*, GL iv. 451. 10–12)
And *accentus* is called (as it were) *adcantus*, because it makes us recognise syllables to the song of the voice.
- (23) et est *accentus*, ut quidam putauerunt, anima uocis et seminarium musices, quod omnis modulatio ex fastigiis grauitateque componitur, ideoque *accentus* quasi *adcantus* dictus est. (Martianus Capella, *De nuptiis* iii. 268)
And accent, as some have thought, is the soul of speech and the nursery of music, because every melody is composed of high points and low, and hence accent is called (as it were) *adcantus*.

⁴⁹ See *Paraphrasis in Sophisticos elenchos* 8. 16 Hayduck; [*Alexandri*] in *Sophisticos elenchos commentarium* 32. 22–23 Wallies; *Scholia ex Commentario I in Sophisticos elenchos extracta* 18. 5–8 Ebbesen; Sch. D. Thr. (Σ^l) 454. 12–13; Sch. D. Thr. (Σ^v) 136. 3–4, 8–11. (Cf. also Sch. D. Thr. (Σ^v) 150. 33–34, 151. 8, where ῥῥή is interpreted as ‘word’.) In the partial Greek translation of his grammar of Latin, Dositheus (*Grammatica* 2 Bonnet = GL vii. 377.7/6–7) translates *accentus quasi accantus* with προσῳδία παρὰ τὸ προσάδεσθαι, but this example belongs with the Latin texts cited in n. 50.

⁵⁰ See Servius, *Comm. in Donatum*, GL iv. 426. 7–9: ‘*accentus*’ dictus est quasi *adcantus secundum Graecos*, qui προσῳδίαν uocant. nam apud Graecos πρὸς dicitur ‘*ad*’, *cantus uero ῥῥή uocatur* ‘*accentus* is called (as it were) *adcantus* following the Greeks, who call it προσῳδία. For among the Greeks *ad* is πρὸς, and *cantus* is called ῥῥή’; [Sergius], *De littera, de syllaba, de pedibus, de accentibus, de distinctione*, GL iv. 482. 7–9: dictus autem ‘*accentus*’ est quasi ‘*adcantus*’ iuxta Graeci nominis interpretationem, quod ‘*prosodia*’ dicitur Latine ‘*adcantus*’. And *accentus* is called (as it were) *adcantus*, according to the meaning of the Greek word, because προσῳδία is *adcantus* in Latin’; Pompeius, *Commentum artis Donati*, GL v. 125. 35–126. 2: *Graeci ‘prosodias’ dicunt accentus hac ratione: ‘pros’ dicunt ‘ad’, ‘cantum’ dicunt ‘oden’. uerbum de uerbo Latini expresserunt, ut dicerent ‘prosodias’ ‘accentus’* ‘The Greeks call accents προσῳδία on the following basis: they say πρὸς for *ad*, and they call *cantus* ῥῥή. Latin speakers have rendered it literally, to that they call προσῳδία *accentus*’.

With the appearance of ἐπάδω in our text, the notion of ‘singing along to our speaking’ has been de-coupled from the noun προσῳδία, which does not make an appearance in this text. If we are right to suggest that the author of our text consulted a source that was in Latin, this de-coupling may have happened under the influence of Latin discussions that focus on the Latin word *accentus*, from *ad-cantus*, derived from *ad-cano* or *accino*, which the author of our text rendered in Greek as ἐπάδω.

3.5. The circumflex ‘mostly’ occurs on the final syllable

For the last sentence of section I, on the circumflex accent, manuscript C reads φαίνεται δὲ καὶ οὗτος τὰ πολλὰ ἐπὶ τοῦ πέρατος, ἐπιπόρρω δ’ εὐρεῖν ἀδύνατον, while B has φαίνεται δὲ καὶ οὗτος τὰ πολλὰ ἐπὶ τοῦ πέρατος ἢ ἐπιπόρρω εὐρεῖν ἀδύνατον. Manuscript C’s text is the more comprehensible, but it makes a surprising statement: ‘And this too (i.e. the circumflex) mostly appears on the final syllable, and it is impossible to find it further away’. We seem to be missing the possibility that the circumflex can appear on the penultimate syllable, and some corruption has evidently occurred where the texts of the two manuscripts differ. We tentatively read φαίνεται δὲ καὶ οὗτος τὰ πολλὰ ἐπὶ τοῦ πέρατος, ἢ <παρὰ τὸ πέρας>· ἐπιπόρρω δ’ εὐρεῖν ἀδύνατον ‘And this too mostly appears on the final syllable or <the penultimate>; and it is impossible to find it further away’.⁵¹ While this statement is less surprising, τὰ πολλὰ ‘mostly’ remains peculiar. Is τὰ πολλὰ meant to modify ἐπὶ τοῦ πέρατος alone, or the whole phrase ἐπὶ τοῦ πέρατος ἢ <παρὰ τὸ πέρας>? Is the idea that the circumflex ‘mostly’ falls on the final syllable (and occasionally on the penultimate), or that the circumflex mostly falls on the final or penultimate syllable (and occasionally somewhere else)? The second possibility can probably be ruled out, since the Greek circumflex only ever appears on the final or penultimate syllable: τὰ πολλὰ would be an odd way to say ‘always’. In favour of the first possibility it can be said that the Greek circumflex does indeed appear more often on the final syllable than the penultimate, not least owing to forms of the definite article like τῆς or τῶν (in our text itself there are 103 circumflexes on final syllables and 45 on penultimate syllables)—but φαίνεται δὲ καὶ οὗτος τὰ πολλὰ ἐπὶ τοῦ πέρατος should imply that the circumflex is rather rare on penultimate syllables, which is hardly the case.

One response would be to bracket τὰ πολλὰ as spurious, but given the other indications of a Latin source that we have seen, another possibility may be worth contemplating. Does the expression τὰ πολλὰ reflect a comment in a Latin source to the effect that in Greek, unlike in Latin, the circumflex can often be found on the final syllable? Accents do not usually occur on final syllables in Latin, and Latin authors show themselves aware that Greek is different in this respect:

- (24) Graeca nomina si isdem litteris proferuntur, Graecos accentus habebunt. nam et cum dicimus ‘Thyias’, ‘Nais’, acutum habebit posterior accentum, et cum ‘Themisto’, ‘Callisto’, ultima circumflectitur; quod utrumque Latinus sermo non patitur, nisi raro ... ([Sergius], in *Donati Artem Maiorem*, GL iv. 525. 8–11) Greek words, if they are produced with the same letters, will have Greek accents. For example, when we say ‘Thyiaĩs’, ‘Naiĩs’, the last syllable will have an acute accent, and when (we say) ‘Themistō’, ‘Callistō’, the last syllable gets a circumflex—each of which is something that Latin speech does not allow, except rarely ...⁵²

⁵¹ Our insertion is along the lines of M. Schmidt’s conjecture ἢ πρὸ μιᾶς τοῦ τέλους, but ἢ παρὰ τὸ πέρας would be in keeping with the way we take the expression ἢ παρὰ τὸ πέρας to be used in section k (reading Jannaris’ ἢ for the manuscripts’ ἦ).

⁵² For closely related parallel passages see Dositheus, *Grammatica* 3 Bonnet/GL vii. 379. 1/1–4/5; [Victorinus], *De arte grammatica*, GL vi. 193. 14–18; Audax, *De Scauri et Palladii libris excerpta*, GL vii. 330. 13–17. On the point that *Themistō* and *Callistō* are considered to have a circumflex on the final syllable when pronounced in Latin ‘with Greek accents’, not the acute that one would expect from Greek Θεμιστώ and Καλλιστώ, see Probert (2019) 212–21, 240–42.

In the *Ars Laureshamensis* from medieval Ireland, the point that accents (in this instance the acute) can fall on the final syllable in Greek is made more emphatically with the word *frequenter*: in Greek, unlike Latin, the accent ‘often’ falls on the final syllable. The author is commenting here on Donatus’ point that among Latin speakers (*apud Latinos*) the acute accent can fall on the penultimate or antepenultimate syllable but never on the final syllable:⁵³

- (25) ideo addidit ‘apud Latinos’, quia apud Graecos frequenter acutus accentus ultimum locum tenet in dictione (*Ars Laureshamensis* 178. 25–26 Löfstedt)
He (i.e. Donatus) added ‘among Latin speakers’ because among the Greeks the acute accent often occupies the last place in the word.

From some such comment it would be a small step to our text’s claim that the Greek circumflex ‘mostly’ appears on the final syllable. This explanation of τὰ πολλά must remain tentative, but an explanation along these lines would fit well with the other evidence that the author of our text consulted a Latin source.

3.6. Conclusion and further questions

The case that the author of our text consulted a Latin source rests mainly on the points laid out in sections 3.3.1–3.3.5, for which the best parallels come from Latin rather than Greek grammatical texts. But a Latin source would also help to explain the use of unusual grammatical terminology, even where there is nothing obviously latinate about the terminology itself. If our author knew the standard Greek grammatical terms relating to prosody, they were not the Greek terms he reached for to render ideas he found in a Latin text, and the process of transferring Latin terms into Greek can be envisaged particularly clearly in relation to the use of ἐπῳδῶ for ‘sing along to’ (section 3.4). We have also suggested, albeit tentatively, that a confusing point in the presentation of possible accent positions found towards the end of our text may be due to the slightly clumsy adaptation of material from a text that dealt mainly with the Latin accent and offered some side comments about Greek.

It remains to ask who consulted a Latin text in order to write about Greek prosodic signs, and when, and why. Both of the manuscripts containing our text date to the sixteenth century AD, which therefore provides a secure *terminus ante quem*, but this does not narrow the possibilities down very much. As we saw in section 3.1, the language of our text is reminiscent of high-register Byzantine texts, and we have found no linguistic features suggestive of someone whose first language was Latin or a Romance language rather than Greek. Our text is likely then to have been produced by a Greek speaker, at a time when it was not too unusual for Greek speakers to know Latin. From this point of view the most likely periods are either fairly early or fairly late in the Byzantine period—or after the Fall of Constantinople in 1453, when the text could have been produced by a Greek speaker who had made his way to the west.⁵⁴ This last possibility is attractive because it would help to explain why a Greek speaker resorted to a Latin text as his model for a Greek text on Greek prosodic signs.

It may be somewhat relevant that not only the copies of our text in manuscripts B and C, but their common (and presumably at least slightly earlier) source too appears to have been found in the west. In her recent study of Diassorinus, García Bueno concludes that he copied manuscript C (folios 88^r–244^r) in the Paris area around 1549–1550, while he was employed as

⁵³ Donatus, *Ars maior* 609. 7 Holtz = *GL* iv. 371. 4.

⁵⁴ On the Byzantine world’s extensive (although never complete) loss of contact with western culture from the seventh century AD onwards, and on the gradual re-establishment of contact from the eleventh century onwards, see Ciccolella (2008) 229–36.

a scriptor at the library at Fontainebleau.⁵⁵ In other words, the common source of B and C appears to have been in the Paris area around this date, even if it need not have been produced in this area. Be this as it may, the style of our text suggests to us a late rather than early date for the composition of our text.

This conclusion does not necessarily entail that the unique information to be found in our text, on the subject of Aristophanes of Byzantium and his activities, can be dismissed out of hand as very late. Our author's Latin source must have been composed at least slightly earlier than our text itself, and could have been composed much earlier. As noted in section 3.3, our text contains some information that is otherwise found only in a late antique text known as Pseudo-Sergius' commentary on Donatus' *Ars maior*. Our author may have drawn other information too from the long tradition of commentaries on Donatus, and the ultimate source of the information remains obscure.

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⁵⁵ García Bueno (2017) 184, 316. For Diassorinus' activities in the Paris area see also Cohn (1888) 140–43; Vogel and Gardthausen (1909) 152 n. 4; García Bueno (2017) 11, 125.

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⁵⁶ Keil presents GL iv, pp. 486–565 as a single work divided into two books ('*Explanationum in Artem Donati Liber I*' and '*Explanationum in Artem Donati Liber II*'), with the second beginning at GL iv, p. 534, line 13. For the point that two distinct works are involved, with the second beginning at GL iv, p. 518, line 30, see De Paolis (2000) 191–99; Zetzel (2018) 321–22.

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