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Article

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THE HISTORY OF BILINGUAL DICTIONARIES RECONSIDERED: AN ANCIENT FRAGMENT RELATED TO PSEUDO-PHILOXENUS (*P.VARS.* 6) AND ITS SIGNIFICANCE

Bilingual dictionaries have long been a vital tool for understanding and using foreign languages.¹ Whether pocket-sized or multi-volume, whether on paper, on screen or on papyrus, dictionaries are essential to language learners and scholars today and have been for thousands of years. But what were ancient bilingual dictionaries actually like? When Romans encountered an unfamiliar Greek word, or Greeks an unfamiliar Latin word, what kind of resource did they reach for, and how likely was it to contain the word they sought? Until recently a clear answer to that question was available, but the discovery of a new dictionary fragment on papyrus throws the current understanding into doubt.

Like other types of ancient literature, ancient bilingual dictionaries survive in two forms: as (largely) intact works via the medieval tradition and as small fragments of ancient copies. The dictionaries preserved in medieval manuscripts include two large works, the Latin–Greek glossary of pseudo-Philoxenus with c. 11,000 entries and the Greek–Latin

¹ I am grateful to Constantinos Balamoshev for allowing me to see the original papyrus and for help with reading it, to Philomen Probert and Daniela Colomo for help with this article, to Marco Fressura for allowing me to use his work before publication and to Maria Chiara Scappaticcio for encouraging me to re-edit this papyrus as part of the PLATINUM project and therefore prompting this discovery. Any mistakes that remain are my own. The research leading to these results has received funding from the European Research Council (ERC) under the European Union’s Horizon 2020 research and innovation program (Grant agreement n° 636983); ERC–PLATINUM project, University of Naples 'Federico II’.

glossary of pseudo-Cyrillus with c. 15,000 entries, as well as many smaller glossaries.² Both from internal evidence and from comparison with the ancient fragments, it had long seemed clear both that some of the small glossaries were very old and that they represented the only types of dictionaries in use for most of antiquity: Latin and Greek speakers using each other's languages would have relied on little glossaries containing at most a few thousand words, not normally arranged in alphabetical order. Only in late antiquity did large dictionaries in alphabetical order come into use, with the creation of the ancestors of pseudo-Philoxenus, pseudo-Cyrillus, and other dictionaries/glossaries now lost. It ought not to be possible to find

² Most of these are published in the *Corpus Glossariorum Latinorum* (henceforth *CGL*): the second volume (*CGL II = Glossae Latinograecae et Graecolatinae*, edited by G. Goetz and G. Gundermann, Leipzig, 1888) contains pseudo-Philoxenus (pp. 1–212), pseudo-Cyrillus (pp. 213–483) and many of the minor glossaries (pp. 485–597). The third volume (*CGL III = Hermeneumata Pseudodositheana*, edited by G. Goetz, Leipzig, 1892) contains the *Hermeneumata*, a huge collection of glossaries that individually are fairly short. Pseudo-Philoxenus has also been edited by M. Laistner as part of W.M. Lindsay's *Glossaria Latina* collection (volume II, Paris 1926, pp. 123–291); for some of the reasons why *CGL* remains the standard edition, see G. Goetz's review of this volume in *Gnomon* 2 (1926), 597–605. Some of the *Hermeneumata* glossaries also have other editions, and some have never been edited at all; for details see E. Dickey, *The Colloquia of the Hermeneumata Pseudodositheana I* (Cambridge, 2012), 17–20. Because the only practical way to find general information about attestation in the glossaries as a group is to use the corrected indices in *CGL* volumes VI and VII (*Thesaurus glossarum emendatarum*, edited by G. Goetz, Leipzig, 1899–1901), I have done so, and therefore throughout this article generalizations about such attestation do not take into account material not in *CGL*.

an early papyrus fragment closely related to pseudo-Philoxenus – but that is what has turned up.

1 PSEUDO-PHILOXENUS' GLOSSARY

Pseudo-Philoxenus³ is hardly a household name among Classicists, but his work is of great importance for our understanding of ancient vocabulary, since it preserves numerous rare and archaic words with their explanations. To quote Gustav Loewe, 'The work falsely attributed to Philoxenus is beyond doubt the best and as it were the most learned of all the bilingual glossaries that exist.'⁴ As often in the case of ancient glossaries, the interpretations of many readings are doubtful, and therefore the best edition of pseudo-Philoxenus prints not a corrected text but a transcript of the manuscript, with corrections in a separate volume.⁵ The

³ The Philoxenus to whom this glossary was once attributed is not the grammarian of the first century B.C. but Flavius Theodorus Philoxenus, consul in A.D. 525; the misattribution was based on a Renaissance confusion about the location of an ascription to him. No such ascription appears in the main manuscript of the glossary, the ninth-century Parisinus lat. 7651 (Regius 5479). See G. Goetz, 'Glossographie', in G. Wissowa and W. Kroll (edd.), *Pauly's Real-Encyclopädie der Classischen Altertumswissenschaft VII.1* (Stuttgart, 1910), 1433–66, at 1439.

⁴ 'Glossariorum bilinguium quotquot exstant omnium procul dubio optimum et ut ita dicam doctissimum illud est cui Philoxeni nomen falso inscribitur.' G. Loewe, *Prodromus corporis glossariorum Latinorum* (Leipzig, 1876), 180.

⁵ That is, uncorrected transcripts are normally given in *CGL* II–V, but in the *Thesaurus* (*CGL* VI–VII) Goetz listed all the words and forms that he thought occurred in the glossaries, with references to the pages and lines on which they occurred. For an insightful and sympathetic

extracts below, which present the transcript on the left and modern interpretations on the right, give a sense of what the glossary is like.⁶

1.1 Sample extracts

Dubingeniosus αφης	‘without talent’ (ἀφής)
Ducitur αγεται· ελκεται	‘he/she is led’ (ἄγεται, ἔλκεται)
Ductile ελκυστον	‘movable’, neuter (ἐλκυστόν)
Ducimus υπειλήφμεν	‘we consider’ (ὑπειλήφμεν ‘we have understood’)
Duellum πόλεμος· αρχαιος	‘war’ (πόλεμος, ἀρχαίως ‘war, in archaic language’)
Duellona πολεμική	‘Bellona’ (πολεμική ‘(goddess) of war’)
Dúint δοίεν δωσωσιν	‘may they give’ (δοίεν, δῶσιν)
Duit δοίη	‘may he/she give’
Dulce γλυκυ	‘sweet’, neuter (γλυκύ)

study of Goetz’s editing system see A.C. Dionisotti, ‘On the nature and transmission of Latin glossaries’, in J. Hamesse (ed.), *Les manuscrits des lexiques et glossaires de l’antiquité tardive à la fin du moyen âge* (Louvain-la-neuve, 1996), 205–52.

⁶ The first extract is *CGL* II 56.29–46 in Goetz’s edition (n. 2) and *DU* 35–52 (p. 177) in Laistner’s (n. 2); the second is *CGL* II 42.2–14 in Goetz’s edition and *DE* 244–56 (p. 167) in Laistner’s. In the right-hand column the corrected forms of both Latin and Greek words (and hence the interpretations) come from Goetz’s *Thesaurus*, but the translations are mine; translations and grammatical information apply to both Latin and Greek unless specified otherwise.

Dulcior γλυκυτερος	‘sweeter’ (γλυκύτερος)
Dulcium πλακουντα	‘cake’, accusative (πλακοῦντα)
Dulcissimus γλυκυτατος	‘sweetest’ (γλυκύτατος)
Dulcacidum οξυγλυκον	‘sweet and sour drink’ (όξύγλυκυ?)
Ducale αγωγευσστων· κτηνον	‘leading-rein’ (άγωγεύς ό τῶν κτηνῶν ‘leading-rein of animals’)
Ductus αγωγέυσδατος· υδραγώγιῶ	‘aqueduct’ (άγωγεύς ὕδατος, ὕδραγώγιον)
Duodecies δωδεκατον	‘twelve times’ (δωδέκατον ‘twelfth’); there is a variant reading δωδεκάκις ‘twelve times’, on which Goetz comments ‘quo non opus’
Duae αιδυο	‘two’, feminine nominative plural (αί δύο)
Duas τας δυο	‘two’, feminine accusative plural (τάς δύο)
Deliquit liquefecit ήμαρτεν	‘he/she dissolved’ (ήμαρτεν ‘he/she erred’); <i>delicuit</i> from <i>deliquesco</i> and/or <i>deliquit</i> from <i>delinquo</i>
Deliquium solis εκληψις ηλιου	‘eclipse of the sun’ (έκλειψις ήλίου)
Delfinus δελφιν	‘dolphin’ (<i>delphinus</i> , δελφίν)
Delubrum καθιδρυμα ξοανον ανάθημα	‘shrine’ (καθίδρυμα, ξόανον, ανάθημα ‘shrine, image, offering’)
Deliberandi τουσκεπτεσθαι	‘of considering’ (του σκέπτεσθαι)
Delegavit αφώρισεν	‘he/she delegated’ (άφώρισεν)
Delatio αναφορά	‘denunciation’ (άναφορά)
Lib ₇ de offō pro consulis	(the source of this word is the) <i>Liber de officio proconsulis</i>

Delitum απογαλακτισθεν	‘weaned’, neuter (<i>delicum</i> , ἀπογαλακτισθέν)
Delituit έλαθεν	‘he/she hid’ (έλαθεν)
Deliberauite διασκεψασθαι	‘to have considered’ (<i>deliberauisse</i> , διασκέψασθαι)
Deliberantes λογιζομενον	‘considering’ (λογιζόμενοι?)
Delinquere αμαρτάνειν	‘to fail’ (άμαρτάνειν)
Deliciae σπατάλαι	‘delight’ (σπατάλαι ‘luxuries’)

These extracts illustrate many of the main characteristics of pseudo-Philoxenus: inclusion of rare words (*dubingeniosus* occurs only here, and *delicus*, *dulcium* and *ducale* are very rare),⁷ correct interpretation of archaic forms (even many native Latin speakers of Cicero’s day would have had trouble explaining *duint* and *duit*), accurate information on usage (*duellum* was indeed archaic language), occasional citation of sources (both mainstream authors like Horace and obscure ones: the *Liber de officio proconsulis* cited here is known only from references in pseudo-Philoxenus⁸), alphabetization by two or three letters only and a mixture of inflected forms with what we would think of as citation forms. Sometimes a single Latin word is given several Greek equivalents, either synonyms (as with *ductus*) or different from

⁷ See *Thesaurus Linguae Latinae s.vv.*

⁸ That is, this title occurs only in pseudo-Philoxenus; fragments found in other sources may belong to the same work, which in the nineteenth century was somewhat speculatively reconstructed as a ten-book work by the second/third century jurist Ulpian (H. Rudorff, ‘Über den Liber de officio proconsulis’, *Philologische und historische Abhandlungen der königlichen Akademie der Wissenschaften zu Berlin* (1865), 233–321). Some other scholars think it was a bilingual legal glossary; see the reference to it as ‘this Viceroy’s Conversation-manual’ in W. M. Lindsay, ‘The Philoxenus glossary’, *CR* 31 (1917) 158–63, at 161.

each other (as with *duint*); on the other hand where there are two Latin words they are not necessarily both equivalents of the Greek word (as with *deliquit*, where *liquefecit* and ἥμαρτον both appear to be glosses of *deliquit*, on which they offer different interpretations). The two languages normally match in form as well as meaning, and when Greek words are ambiguous articles may be added to make the form of the Latin clear (as with *duae* and *duas*). But the matches are not always exact and sometimes seem to represent the equivalent that might appear in a particular context rather than a literal translation of the lemma in isolation (as when the present *ducimus* is glossed with the perfect ὑπειλήφμεν).

1.2 Sources

Where does the information in this glossary come from? Scholars have devoted considerable energy to answering this question.⁹ The ultimate sources of many entries are clearly literary texts; literary sources are particularly likely for inflected forms such as *delituit* and *duint*, but citation forms can also appear in literary texts, as *dulcior* does at Virgil, *Eclogues* 7.37. In Laistner's edition of pseudo-Philoxenus *delituit* is marked as derived from Virgil, *Georgics* 3.417; *duint* as derived from Cicero, *Catilinarians* 1.22; and *dulcior* as perhaps derived from the *Eclogues* passage.¹⁰ At first glance such attributions seem arbitrary: all these forms are

⁹ See Loewe (n. 4), 186–9; A. Dammann, *De Festo Pseudo-Philoxeni auctore* (dissertation, Leipzig, 1892 = *Commentationes Ienenses* V); Goetz, 'Glossographie' (n. 3), 1439; Lindsay, 'Philoxenus' (n. 8), 161–2; G. Goetz, *De glossariorum Latinorum origine et fatiis* (= *CGL* I, Leipzig, 1923), 23–34; Laistner (n. 2), 130–5; Goetz, Laistner review (n. 2), 601–2; also earlier discussions cited in these works.

¹⁰ Laistner (n. 2), DE 251, DU 41, DU 44.

also found in numerous other passages,¹¹ and moreover *dulcior* in the *Eclogues* passage should be feminine, not masculine as pseudo-Philoxenus' gloss indicates. But there is a reason for the choice of these particular passages: words found in Cicero's *Catilinarians* and in Virgil appear far more frequently in pseudo-Philoxenus than words found in most other texts, and a number of entries preserve explicit references to Virgil, so it is thought that the compiler of the glossary used those texts as sources.¹² Hence a word found both in Plautus and in one of the *Catilinarians* probably comes from Cicero, but one found both in Virgil and in a work of Cicero other than the *Catilinarians* probably comes from Virgil. The reason the masculine form of the Greek equivalent of *dulcior* is not counter-evidence for Virgilian provenance is that scholars envision the initial collection and glossing to have been a Latin–Latin process, with Greek glosses later substituted for the Latin ones or simply added to them (as with *deliquit* above); any Latin gloss for *dulcior* would probably have been ambiguous as to gender and therefore would probably have been translated into Greek with a masculine. Indeed a few entries in pseudo-Philoxenus are still Latin–Latin, for example *detereret detraheret*,¹³ since the Latin–Latin entries are very often taken from Horace,¹⁴ the source of this entry could be the occurrence of *detereret* at Horace, *Satires* 1.4.112.

¹¹ E.g. *delituit* in Plautus, *Rudens* 465; Cicero, *Philippicae* 2.77, *Post reditum in senatu* 3; Livy 38.46.7, 45.6.6; Seneca, *Naturales quaestiones* 6.3.3, 7.30.4; Ovid, *Metamorphoses* 4.337; Columella 7.4; *duint* four times each in Plautus and Terence, also Cicero, *Philippicae* 10.13; *dulcior* in Plautus, *Asinaria* 614; Horace, *Sermones* 2.4.15; Propertius 3.8.29; eleven times in Cicero, four times in Ovid, etc.

¹² Goetz, *CGL* I (n. 9), 31–2; Laistner (n. 2), 133–5; Lindsay, 'Philoxenus' (n. 8), 161.

¹³ *CGL* II (n. 2), 47.26.

¹⁴ Dammann (n. 9), 17–25; Goetz, *CGL* I (n. 9), 25–7; Lindsay, 'Philoxenus' (n. 8), 161.

But not all entries were taken directly from literature. The *Liber de officio proconsulis* cited in one of the extracts above may have been a legal glossary, and many entries are thought to come from a Latin–Latin lexicon entitled *De uerborum significatu*, originally composed in the Augustan period by Marcus Verrius Flaccus and epitomized (probably in the second century A.D.) by Sextus Pompeius Festus. An explicit reference to Festus is probably concealed in the entry *Adoriosus* ενδοξος· ασπομπήϊος· αδορνικηας· πεμπιος (= *Adoriosus* ενδοξος ως Πομπήϊος, *Ador* νίκη ως Πομπήϊος).¹⁵ Verrius Flaccus’ version of this lexicon is lost, and only about a third of Festus’ version survives, meaning that for most of the lexicon we have only a further epitome made in the eighth century by Paul the Deacon. Despite this drawback it is notable that many of the lemmata in Festus/Paul also appear in pseudo-Philoxenus, often with glosses that could be derived from the longer, Latin explanations given by Festus/Paul.¹⁶

In the modern world Latin–English and English–Latin dictionaries tend to contain largely the same words; the difference is primarily one of organization. We might therefore expect pseudo-Philoxenus to contain mostly the same words as the large Greek–Latin dictionary, pseudo-Cyrillus, but this is not the case: only a minority of the words in each lexicon are found in both. For example, pseudo-Philoxenus includes 1011¹⁷ Latin words

¹⁵ *CGL* II (n. 2), 8.21; for the interpretation, which goes back to Scaliger, see Dammann (n. 9), 26 and *CGL* I 27 s.vv. *ador*, *adoriosus*.

¹⁶ See Dammann (n. 9), 26–47; Goetz, *CGL* I (n. 9), 28–31; Laistner (n. 2), 130–1; Lindsay, ‘Philoxenus’ (n. 8), 162; A.C. Dionisotti, ‘Greek grammars and dictionaries in Carolingian Europe’, in M.W. Herren (ed.), *The Sacred Nectar of the Greeks* (London, 1988), 1–56, at 6.

¹⁷ This is not the number of entries in the *D*- section of pseudo-Philoxenus (that figure would be 1,194, because some words appear more than once: see next section), but the number of Latin words in the *D*- section of the *Thesaurus* in *CGL* VI (n. 5) that contain references to

beginning with *D-* and pseudo-Cyrillus 978, but only 238 of those words occur in both dictionaries, and only 186 occur in both with the same Greek equivalents.¹⁸ This difference is part of a larger pattern: ancient bilingual glossaries do not typically share many entries with each other, unless they are historically related. Thus of the 2110 Latin words beginning with *D-* that appear in ancient bilingual glossaries, only 21% occur in more than one glossary; the remaining 79% include 33% occurring only in pseudo-Philoxenus, 29% only in pseudo-Cyrillus and 15% only in the Hermeneumata glossaries.¹⁹

Broadly speaking – though there are of course exceptions – pseudo-Cyrillus has more everyday vocabulary and pseudo-Philoxenus more obscure and archaic terminology. The two

pseudo-Philoxenus. As pseudo-Cyrillus is alphabetized by the Greek and therefore has no *D-* section, only by using the *Thesaurus* can one obtain strictly comparable results for both works.

¹⁸ I.e. more or less the same Greek word appears as a gloss for more or less the same Latin word – but even then, the entries in one or both dictionaries often also contain other glosses that do not match.

¹⁹ These figures come from the *D-* section of the *Thesaurus* in *CGL* VI (n. 5). For the purpose of these calculations I treat as separate words anything that is listed there as a separate word: every inflected form of a noun or verb is counted separately (contrary to the usual practice today, but in keeping with the ancient practice), and so are identical forms that belong to different parts of speech. Occurrences in the Latin-Latin glossaries are ignored. The resulting sample contains 2,110 Latin words, of which 442 occur in more than one glossary, 694 occur only in pseudo-Philoxenus, 620 occur only in pseudo-Cyrillus and 322 occur only in Hermeneumata glossaries. The Hermeneumata glossaries are treated as a single glossary here because they are historically related to one another.

seem to be different selections of the Latin vocabulary, made with different goals in mind.²⁰ Yet some of the shared glosses are nevertheless identical, and in a few cases it is very unlikely that these agreements could have come about otherwise than from a shared source.²¹ Therefore it is generally agreed that both glossaries drew from a lost work that contained the shared material; this work must have been a bilingual glossary, since both lemmata and glosses match in the shared entries that survive.

1.3 Composition process and dating

The discovery of this shared source led scholars to ask whether it might have been the source of more than just the entries now shared between pseudo-Philoxenus and pseudo-Cyrillus. After all, if the compilers of one or both glossaries had taken more entries from the shared source, we would not be able to identify those entries by comparing the two surviving glossaries. In the end, scholars concluded that more entries had indeed been taken, and in fact that the shared source had probably been an enormous proto-glossary that contained all or most of the material now found in pseudo-Philoxenus as well as all or most of the material now in pseudo-Cyrillus: the two extant glossaries were thought to be simply (or at least mostly) extracts from the proto-glossary, with their different characteristics arising from the

²⁰ Although it cannot be completely ruled out that one of the sources was a work about Greek and therefore made a selection from the Greek vocabulary, scholars have always agreed that pseudo-Philoxenus is fundamentally a work about Latin, not about Greek. All the literary sources involved seem to be Latin ones, and Festus was a work about Latin.

²¹ E.g. *deuehitur* καταπλεεί in pseudo-Philoxenus (*CGL* II 47.35) and καταπλει *deuehitur* in pseudo-Cyrillus (*CGL* II 342.66); *domicorruptor* οικοφθορος in pseudo-Philoxenus (*CGL* II 55.1) and οικοφθορος *domicorruptor* in pseudo-Cyrillus (*CGL* II 380.41).

different selections made by their compilers.²² According to this theory, the other sources of pseudo-Philoxenus were actually sources of the proto-glossary. The proto-glossary was argued to have been in the order Latin–Greek, like pseudo-Philoxenus, since some of the Greek–Latin entries in pseudo-Cyrillus look like originally Latin–Greek entries that have been inverted.²³

Thus far both editors of pseudo-Philoxenus agreed, but they disagreed about the composition process of the proto-glossary. Goetz envisioned a gradual accretion of numerous different sources; in this he followed Loewe, Dammann and Rudorff, who had developed this theory as the composition process for pseudo-Philoxenus' glossary itself before the idea of the proto-glossary was suggested.²⁴ Lindsay and Laistner, however, saw a simpler two-step process taking place over a short period: first the compilation of the proto-glossary directly from sources available to its creator (not via earlier glossaries), and then the excerpting and partial re-arrangement of the material now in pseudo-Philoxenus and pseudo-Cyrillus.²⁵ The

²² Goetz, *CGL* I (n. 9), 33; Laistner (n. 2), 125–6; cf. W.M. Lindsay, 'The Affatim glossary and others', *CQ* 11 (1917), 185–200, at 200.

²³ E.g. the pseudo-Cyrillus entries θεοσαποτροπαιος *auruncus* (= θεὸς ἀποτρόπαιος *Auruncus*, *CGL* II 327.37) and σπροτησπαρεμβοληστοπος *procastrium* (= ὁ πρὸ τῆς παρεμβολῆς τόπος *procastrium*, *CGL* II 385.67) would make much more sense as Latin–Greek entries. See Goetz, *CGL* I (n. 9), 33 and Loewe (n. 4), 216.

²⁴ Goetz, *CGL* I (n. 9), 24–5; Loewe (n. 4), 190–1; Dammann (n. 9), 3–12; Rudorff, 'Über die Glossare des Philoxenus und Cyrillus', *Philologische und historische Abhandlungen der königlichen Akademie der Wissenschaften zu Berlin* (1865), 181–231, at 230.

²⁵ 'Denique te admoneo, lector, unam rem siquam aliam ex hoc uolumine discas, glossographorum priscorum doctrinam nullo modo in glossariis quae extant ... conseruari. Immo hae glossae collectae sunt ex marginali codicum adnotatione a monachorum magistris

nature of the composition process matters because pseudo-Philoxenus contains material from lost sources such as Festus: if Lindsay and Laistner were right about the simplicity of the composition process, modern scholars may be able to disentangle it and restore earlier phases of the glossary tradition, including the lost sources. If Goetz and Loewe were right, however, the glossaries have a history too long and too complex to make such restorations successful.

These differences affected how scholars approached specific problems in the text. For example, about 600 of the entries in pseudo-Philoxenus occur twice, either in exactly the same form or in closely related forms where one is likely to be a corruption of the other. Loewe and Goetz thought that this situation arose from the compiler's use of two historically related sources, both of which contained the entries that appear twice.²⁶ Lindsay and Laistner, on the other hand, thought that most of the double entries were deliberate cross-references, accidental repetitions or cases where a scribe added a corrected entry but failed to delete the original incorrect one.²⁷

Both the proto-glossary and the extant pseudo-Philoxenus and pseudo-Cyrillus glossaries are normally dated to late antiquity, most likely the sixth century. This dating has not been reconsidered since 1865, when Rudorff examined such evidence as was then available and tentatively suggested the early sixth century.²⁸ Loewe stated explicitly that he accepted Rudorff's dating;²⁹ later scholars largely avoided mentioning the dating issue directly, but an assumption of a sixth-century date runs through their work. Thus for example

satis indoctis adscripta.' (W.M. Lindsay, *Glossaria Latina II* (Paris, 1926), iii) Cf. Dionisotti, 'Nature and Transmission' (n. 5) 220–1.

²⁶ Goetz, 'Glossographie' (n. 3), 1439; Loewe (n. 4), 190–1; also Dammann (n. 9), 12–16.

²⁷ Laistner (n. 2), 129; Lindsay, 'Philoxenus' (n. 8), 159–60.

²⁸ H. Rudorff, 'Über die Glossare' (n. 24), 228–30.

²⁹ Loewe (n. 4), 182.

Laistner suggests that the proto-glossary was composed in a south Italian monastery not founded until the middle of the sixth century,³⁰ Goetz wonders whether the use of Festus was direct or indirect,³¹ and Lindsay, suggesting that the compilation took place in Italy and speculating about the use of papyrus, cites a sixth-century papyrus glossary as an example of what the glossary might once have looked like and remarks ‘The use of papyrus continued in Italy for a fairly long time.’³²

2 PAPYRUS FRAGMENTS OF BILINGUAL GLOSSARIES

Since Rudorff’s day the discovery of numerous fragments of ancient bilingual glossaries on papyrus has shed more light on what types of glossaries were in use at different periods and the extent to which the glossaries preserved in medieval manuscripts are related to ancient fragments.³³ These papyri are one of the reasons why Rudorff’s dating continues to be

³⁰ Laistner (n. 2), 136; but Goetz in his review of this volume (n. 2), 603, thinks the composition was ‘wohl schon etwas früher’.

³¹ Goetz, *CGL* I (n. 9), 31; the idea is that pseudo-Philoxenus’ use of Festus took place so long after Festus’ own time that Festus’ original text might no longer have been available.

³² Lindsay, ‘Philoxenus’ (n. 8), 163; note also his suggestion (p. 161) that the source of the Virgil entries is ‘a monastery MS. of Virgil’, and his assertion that the ultimate sources of most entries were glosses collected from the margins of manuscripts in monasteries (Lindsay, *Glossaria* (n. 25), iii).

³³ In the following sections abbreviations of papyrological publications follow the Checklist available at <http://www.papyri.info/docs/checklist>, and the abbreviation *LDAB* refers to the *Leuven Database of Ancient Books*, available at <https://www.trismegistos.org/ldab/>. New

accepted, since they have until now implied that the large bilingual glossaries are indeed products of late antiquity. They fall into four groups: glossaries ordered by topic (thirteen examples, including some that probably contained only a single topic), glossaries in alphabetical or alphabetical and grammatical order (five examples plus the newly-discovered fragment in *P.Vars.* 6),³⁴ running vocabulary lists for extracts from Virgil (three examples) and glossaries with no discernible ordering principle (three examples).

2.1 Non-alphabetical glossaries

The three unordered glossaries range in date from the first century B.C. to the fourth century A.D. and are thus all relatively early.³⁵ They show no signs of relationship with any of the editions of all the papyri mentioned will shortly be forthcoming in M.C. Scappaticcio (ed.), *Corpus of Latin Texts on Papyrus* (Cambridge).

³⁴ The comparative rarity of alphabetically-ordered glossaries may seem surprising, since that order is so prevalent today, but it makes sense in a world where written texts did not normally indicate word division. Today's language students can use an alphabetically-ordered dictionary to decipher a text even early in their studies, but ancient learners could not do so until they knew enough vocabulary to work out where the words began and ended. That is why systematic vocabulary building was prioritized in ancient language-learning contexts – and why the glossaries designed to help with such vocabulary building, the ones ordered by topic, were the most common. Cf. J. Debut, 'De l'usage des listes de mots comme fondement de la pédagogie dans l'antiquité', *Revue des Études Anciennes* 85 (1983), 261–74.

³⁵ *BKT* IX.150 (= J. Kramer, *Glossaria bilingua in papyris et membranis reperta* (Bonn, 1983), no. 1 = *LDAB* 6764, from the first century B.C.), *P.Lond.* II.187 (= E. Dickey, *The Colloquia of the Hermeneumata Pseudodositheana II* (Cambridge, 2015), 284–7 = *LDAB*

glossaries preserved in medieval manuscripts, and they must all have been fairly small, since a glossary with thousands of entries is largely useless if not organized in some fashion. The three running glossaries to Virgil, which all date to the fifth or sixth century A.D., are also unrelated to glossaries surviving via the medieval manuscript tradition and also likely to have been fairly small, since they seem to provide vocabulary for particular passages rather than for entire texts.³⁶

The thirteen glossaries ordered by topic (known as classified glossaries or *capitula*), on the other hand, often do show a relationship to the classified glossaries found in medieval manuscripts. These papyri tend to be early in date, with eleven datable to the first through fourth centuries.³⁷ The medieval manuscripts to which they are related all belong to the

5678, from the fourth century A.D.), *P.Berol.* inv. 21860 (= Dickey, *Colloquia II*, 280–3 = *LDAB* 8897, from the fourth century A.D.).

³⁶ *PSI VII.756* (= M. Fressura, *Vergilius Latinograecus: corpus dei manoscritti bilingui dell'Eneide: parte prima* (Pisa, 2017), no. 3 = *LDAB* 4155, from the fifth century A.D.), *P.Oxy.* 1099 (= Fressura no. 7 = *LDAB* 4162, from the fifth or sixth century A.D.), portions of *P.Ness.* II.1 (= *P.Colt* 1 = M.C. Scappaticcio, *Papyri Vergiliana* (Liège, 2013), no. 6 = *LDAB* 4166, from the sixth century A.D.). Numerous other papyri contain the full text of extracts from Virgil with a running Greek translation in a 'columnar' format that allows them to be used like glossaries; see the corpora edited by Fressura and by Scappaticcio. For similar bilingual papyri of Cicero's *Catilinarians*, see D. Internullo, 'Cicerone latinogreco: corpus dei papiri bilingui delle Catilinarie di Cicerone', *Papyrologica Lupiensia* 20–21 (2011–12), 25–150.

³⁷ *P.Oxy.* 2660 = *LDAB* 4497, *P.Oxy.* 3315 = *LDAB* 4498, *P.Oxy.* 5162 = *LDAB* 171907, *P.Oxy.* 5163 = *LDAB* 171908, all from the first or second century A.D.; *P.Lund* I.5 = Kramer, *Glossaria Bilinguia I* (n. 35), no. 9 = *LDAB* 4741, from the second century A.D.; *P.Mich.* inv. 2458 = Kramer, *Glossaria bilinguia I* (n. 35), no. 12 = *LDAB* 5062, from the second or third

Hermeneumata Pseudodositheana, a collection of bilingual materials preserved in nine different versions that range in date from the Carolingian period to the Renaissance and are all to some extent interrelated.³⁸ Most of the thirteen papyri containing classified glossaries reveal a relationship to the Hermeneumata, or even to a particular Hermeneumata version, by a high percentage of matching word pairs, strings of entries in the same order, and identically-phrased section headings.³⁹ The glossaries in these papyri are therefore likely to be ancestors of the Hermeneumata classified glossaries surviving in medieval manuscripts, and hence they were probably not larger than the surviving Hermeneumata classified glossaries. These surviving glossaries range in size from a few hundred entries to a few thousand; they are not tiny, but nothing approaching the size of pseudo-Philoxenus.⁴⁰ It is

century A.D.; *P.Oxy.* 2660a = LDAB 5382 and *P.Laur.* IV.147 = LDAB 4675, both from the third century A.D.; *P.Strasb.* inv. G 1173 = J. Kramer, *Glossaria Bilinguia Altera* (Munich, 2001), no. 6 = LDAB 9218, from the third or fourth century A.D.; *P.Fay.* 135v descr. = Kramer, *Glossaria bilinguia I* (n. 35), no. 11 = LDAB 7680 and *PSI* inv. 1734 = Kramer, *Glossaria bilinguia I* (n. 35), no. 10 = LDAB 5631, both from the fourth century A.D.; *P.Vindob.* inv. L 150 = Kramer, *Glossaria bilinguia II* (above), no. 5 = LDAB 6053, from the fifth century A.D.; *P.Paris* 4 bis = LDAB 6486, from the sixth or seventh century A.D.

³⁸ See Dickey, *Colloquia I* (n. 2), 16–20.

³⁹ For example, compare the section on winds in the Bruxellensia version of the Hermeneumata (*CGL* III 395.66–396.6) to *P.Oxy.* 5162 lines 32–42. More details on these relationships are provided in my forthcoming re-editions of the papyri concerned, in Scappaticcio, *Corpus* (n. 33).

⁴⁰ The classified glossary of the Hermeneumata Leidensia has c. 1,300 entries, that of the Amploniana c. 700, Monacensia and Einsidlensia c. 2,700 each, Montepessulana c. 2,900, Stephani c. 1,800, Bruxellensia c. 400 and Vaticana c. 1,000.

therefore likely that in antiquity none of the classified glossaries was ever anywhere near as large as pseudo-Philoxenus.

2.2 *Alphabetical glossaries*

The five ancient fragments in alphabetical or partially alphabetical order represent the closest parallels to pseudo-Philoxenus.⁴¹ The earliest of these, *P.Oxy.* 3452, dates to the second century A.D. and is alphabetized by two letters; thus the section for words beginning with σ- begins Σάραπισ, σάρξ, σαλπιστής, σάρων, σάλπιγξ, σανδάλια, σείγα.⁴² This alphabetization allows one to calculate (by assuming that the percentage of words beginning with particular letter pairs was the same as in the *Oxford Latin Dictionary*) that the complete

⁴¹ In this section I have calculated relationship between different glossaries by means of word pairs, i.e. lemma + gloss. Entries containing multiple glosses are considered not as units but in terms of their component word pairs: for example the papyrus-glossary entry παραχιμαζει *hibernat hiemat* (Cologne fragment, line W1) has no exact match in the intact glossaries, but it is counted as two pairs that between them have three matches: in pseudo-Philoxenus *hiemat παραχιμαζει* (*CGL* II 68.40) and *hibernat παραχειμαζει* (*CGL* II 68.43), and in the *Hermeneumata parachimazi hibernat* (*CGL* III 157.4). This procedure is justified because extra glosses could be added to entries over time: the entry in the papyrus might have started life as one of those in the intact glossaries. When only one language is preserved on the papyrus, I have counted it as matching all the places in the intact glossaries where that Latin word appears, on the grounds that we simply cannot know which (if any) it actually matched. This method therefore may overestimate relationship in the case of poorly-preserved papyri.

⁴² J. Kramer, *Glossaria bilinguia altera* (Munich, 2001), no. 7 = *LDAB* 4812.

glossary probably had c. 1,400 entries. This papyrus shows no signs of relationship to any other known glossaries.⁴³

From the third century A.D. come two fragments, *P.Sorb.* I.8 and *P.Sorb.* inv. 2069, that are alphabetized by the first letter only; these glossaries simply group together all words beginning with the same letter.⁴⁴ This system makes their original size harder to calculate, but enough survives to make it likely that neither glossary was originally very extensive; each

⁴³ 85% of its word pairs occur in the *CGL* glossaries, but this is largely because of the inclusion of words that occur in multiple glossaries rather than because of a relationship to a particular glossary: 77% of the word pairs in this papyrus are shared with pseudo-Cyrillus, 62% with the *Hermeneumata* and 38% with pseudo-Philoxenus, but at most one of those words is unique to a particular glossary (line 13 *πυρρος ρουβρους* resembles, though it is not identical to, pseudo-Cyrillus' *πυρρος ruseus rubricus rufus* at *CGL* II 426.45). These calculations, based on 7 intact entries and 6 Greek words whose Latin is lost, use the methods described in n. 41.

⁴⁴ *P.Sorb.* I.8 = Kramer, *Glossaria bilingua I* (n. 35), no. 3 = *LDAB* 5439; *P.Sorb.* inv. 2069 = E. Dickey and R. Ferri, 'A new edition of the Latin–Greek glossary on *P.Sorb.* inv. 2069 (verso)', *ZPE* 175 (2010), 177–87 = *LDAB* 5438. Kramer claims that *P.Sorb.* I.8 is arranged in alphabetical order by the first letter and reverse alphabetical order by the second and third, but this is unlikely; see discussion in the forthcoming re-edition in Scappaticcio, *Corpus* (n. 33).

may have had fewer than 1,000 entries.⁴⁵ These glossaries are both unrelated to other known glossaries.⁴⁶

From the sixth century A.D. come a pair of fragments, one now in Cologne and the other now in Göttingen, that are believed to have belonged originally to different halves of the same work.⁴⁷ The Cologne fragment, a Greek–Latin glossary, is alphabetized by four or five letters, but the Göttingen one, a Latin–Greek glossary, is arranged first by ending (we have the end of the section for Latin nouns and adjectives in *-is* and the beginning of the section for ones in *-tas*), and within each section is alphabetized on the Latin by one or two letters. The original size of the glossary represented by the Cologne fragment was very large, perhaps 16,000 entries; the original size of the one represented by the Göttingen fragment is

⁴⁵ *P.Sorb. inv. 2069* was nevertheless a long text, because it provided a lot of information about each entry.

⁴⁶ 50% of the word pairs in *P.Sorb. I.8* and 22% of those in *P.Sorb. inv. 2069* do not occur in any of the intact glossaries; 39% of the pairs in I.8 and 53% of those in 2069 are shared with pseudo-Cyrillus, 33% and 45% with pseudo-Philoxenus, 33% and 37% with the Hermeneumata. Words unique to particular glossaries rarely appear in these papyri: 6% of the word pairs in I.8 and 17% of those in 2069 are unique to pseudo-Cyrillus, 11% and 13% are unique to pseudo-Philoxenus, 0% and 5% are unique to the Hermeneumata. For *P.Sorb. inv. 2069* these figures are calculated on the basis of all 60 surviving word pairs; for *P.Sorb. I.8*, a much smaller fragment, the calculations are based on 12 surviving word pairs and 6 Latin words whose Greek is lost, using the methods described in n. 41.

⁴⁷ Folium Wallraffianum (Cologne, Historisches Archiv inv. W* 351) and Fragmenta Helmstadiensia (Göttingen, inv. Diplomatischer Apparat 8C + 8D), which are edited together in Kramer, *Glossaria bilinguia I* (n. 35), no. 4 = LDAB 6279.

harder to calculate but was probably not very small.⁴⁸ There has been considerable debate about whether these fragments are related to surviving glossaries; current thinking is that they are related to pseudo-Cyrillus, but only distantly.⁴⁹

⁴⁸ See Kramer, *Glossaria bilingua I* (n. 35), 45–6; Dickey, *Colloquia II* (n. 35), 145 n. 8; R. Ferri, ‘I frammenti lessicografici bilingui di Colonia e Gottinga e la tradizione dei dizionari greco-latini nell’antichità’, in G. Albanese, C. Ciociola, M. Cortesi and C. Villa (edd.), *Il ritorno dei classici nell’umanesimo: Studi in memoria di Gianvito Resta* (Florence, 2015), 257–78, at 262–3.

⁴⁹ Kramer proposed that they were part of the Celtis version of the Hermeneumata (J. Kramer, ‘Lateinisch–griechisches Glossar: Celtis’ Abschrift aus einem Papyruskodex’, in J.M.S. Cowey and B. Kramer (edd.), *Paramone: Editionen und Aufsätze von Mitgliedern des Heidelberger Instituts für Papyrologie zwischen 1982 und 2004* (Munich, 2004), 43–62, at 43–7), but Ferri disproved this (R. Ferri, ‘Hermeneumata Celtis: the making of a late-antique bilingual glossary’, in R. Ferri (ed.), *The Latin of Roman Lexicography* (Pisa, 2011) 141–69, at 143–6; cf. Dickey, *Colloquia II* (n. 35), 144–8) and argued that they were instead associated with pseudo-Cyrillus (Ferri, ‘I frammenti’ (n. 48), 270–5. But the relationship cannot be close, for 35% of the word pairs in the Cologne and Göttingen fragments do not occur in the intact glossaries at all, and the ones that do occur are fairly evenly distributed and tend to be found in more than one of those glossaries: 50% of the pairs are shared with pseudo-Cyrillus, 37% with the Hermeneumata glossaries, 32% with pseudo-Philoxenus. The word pairs unique to particular glossaries are poorly represented: only 8% of the words on these fragments are unique to pseudo-Philoxenus, 8% unique to pseudo-Cyrillus, 3% unique to the Hermeneumata. These figures are calculated on the basis of a sample of 60 word pairs, 30 from each fragment; in 29 of these only one language survives.

Thus far the papyrus glossaries have suggested that until late antiquity bilingual lexica were fairly small and completely unrelated to the alphabetical glossaries surviving via the manuscript tradition: the only papyrus fragment so far discussed that might approach pseudo-Philoxenus in size or that might be related to a surviving alphabetical glossary dates to the sixth century. But another alphabetical glossary, only recently discovered, complicates that picture. This papyrus, P.Vindob. inv. L 27, dates to the fourth century A.D. and was previously thought to be a classified glossary; it has recently been reinterpreted as a partly alphabetical glossary like the Göttingen fragment.⁵⁰ It contains Latin neuter nouns and adjectives that begin with *co-* and end with *-um*, with their Greek glosses; the original glossary must have contained at least thirty such entries. Such a scale suggests that the original could have been very large.⁵¹ It also seems to be distantly related to several of the glossaries surviving via the manuscript tradition, though not to pseudo-Philoxenus or pseudo-Cyrillus.⁵²

⁵⁰ LDAB 5755, originally edited by Kramer (e.g. in *Glossaria bilinguia II* (n. 42), no. 4); re-edition with useful discussion by Marco Fressura in N. Carlig, M. de Haro Sanchez, G. Nocchi Macedo, and A. Ricciardetto (edd.), *Le médecin et le livre: Hommages à Marie-Hélène Marganne* (Lecce, 2020) [pages to be added at proof stage].

⁵¹ Words beginning with *co-* make up 5.4% of all Latin words (calculated from the *Oxford Latin Dictionary*); therefore this glossary probably contained more than 500 neuters ending in *-um*. When one considers that originally there were probably more than 30 entries beginning with *co-* and that neuters in *-um* are not a large percentage of the Latin language, it becomes likely that the original glossary had more than a few thousand entries.

⁵² Fressura (n. 50) suggests a relationship to the *Glossae nominum* (CGL II 563–97), the *Idiomata codicis Harleiani* (CGL II 487–506), and the *Glossae Servii grammatici* (CGL II 507–33).

3 *P.VARS.* 6

3.1 *Evidence for identification and reconstruction*

In 1935 a small papyrus fragment bearing a list of Greek words was published as *P.Vars.* 6.⁵³ The editor, Jerzy (Georgius) Manteuffel, remarked that traces of another column were visible to the left of the Greek words, and those traces were subsequently identified as the ends of Latin words.⁵⁴ Closer investigation reveals a striking correspondence between the text on this papyrus and pseudo-Philoxenus' glossary. Twelve of the Greek words on the papyrus are either completely legible or sufficiently legible that only one reading is likely: ἕως, ἐκδέρει, ἐργώδης, ἐξουσία, εὐμέριστος, ἐπαύσατο, εὐδίδακτος, ἔκλειψις, ἐγκοίμητρον (spelled ενκοιμητρον), Ἐνυώ (spelled Ενοιω), ἐκπύρωσις and ἐξῆς. These all occur in pseudo-Philoxenus, and six of them – ἐκδέρει, ἐργώδης, εὐμέριστος, ἐπαύσατο, ἐκπύρωσις and ἐξῆς – do not occur in any other bilingual glossaries. This makes it very likely that the missing Latin words should be supplemented from pseudo-Philoxenus.

The *P.Vars.* glossary must have been alphabetically ordered by the Latin, which was in the first column, and it is clear that in the section covered by this papyrus the Latin words began with *D*-. Of the twelve Greek words just mentioned, eight appear in pseudo-Philoxenus only with (an) equivalent(s) beginning with *D*-.: *dum*, *donec* and *donicum* for ἕως; *deglubat* for ἐκδέρει, *diuiduus* for εὐμέριστος, *destitit* and *desiit* for ἐπαύσατο, *docibilis* for

⁵³ G. (= J.) Manteuffel, *Papyri Varsovienses* (Warsaw, 1935), 13 = *LDAB* 5454. A photograph is available at <http://www.papyrology.uw.edu.pl/papyri/pvars6v.htm>.

⁵⁴ This observation, whose source I have been unable to trace, can be found in the *LDAB* entry.

εὐδίδακτος, *defectio* for ἔκλειψις, *dormitorium* for ἐγκοίμητρον and *deflagratio* for ἐκπύρωσις. Two appear with multiple Latin equivalents including at least one beginning with *D-*: *dicio*, *arbitrium*, *licentia* and *potestas* for ἐξουσία and *deinceps* and *porro* for ἐξῆς. The remaining two Greek words appear in pseudo-Philoxenus only with Latin equivalents that do not begin with *D-*, but they both have an obvious equivalent beginning with *D-* that also appears in pseudo-Philoxenus with a different Greek gloss: *difficilis* for ἐργώδης and *Duellona* for Ἐνυώ.

These equivalents fit well with the scanty remains of the Latin column on the papyrus. *Duellona*, *dormitorium*, *deflagratio*, and *diuiduus* fit the traces before their respective Greek equivalents, and *dicio* and *desiit* are short enough to fit in front of ἐξουσία and ἐπάύσατο, where short Latin words must have stood. One set of Latin traces allows us to decide between two possible supplements: εὐδίδακτος occurs in pseudo-Philoxenus with *docibilis* and in pseudo-Cyrillus with *docilis*, but the latter is too short to be restored on this papyrus, effectively bringing to seven the number of entries in this papyrus that cannot match any surviving glossary except pseudo-Philoxenus.

In addition to the twelve securely identifiable Greek words, the papyrus also has some whose readings are less certain. Two of these can be read as words occurring in pseudo-Philoxenus with Latin equivalents in *D-*: ἐλαττοῖ with *deminuit* and καταδρομή with *decursus*. One line can be read as containing variants of a word that occurs in pseudo-Philoxenus with a Latin equivalent in *D-*: ἐκκλίνειν and an erroneous εκκλειει, both probably with *declinare* (which pseudo-Philoxenus pairs with the aorist infinitive ἐκκλῖναι). One seems to be a misspelling of a word that does not occur in pseudo-Philoxenus but appears in pseudo-Cyrillus with a Latin equivalent in *D-*: εἰσαγγελεύς (here apparently spelled ισανγελευς) with *delator* (which appears in pseudo-Philoxenus with other Greek

equivalents). Finally, one cannot easily be read to match any entry in the glossaries. Accordingly the papyrus text can be restored as follows.

3.2 Text, translation and notes

1	[dum ?]	ἕως	while
	[deglubat]	ἐκδερει	he/she peels, strips off skin
	[deminuit]	ἐλαττοῖ	he/she diminishes/diminished
	[difficilis ?]	ἐργώδη[ς]	difficult
5	[dicio]	ἐξουσία	power
	[diuiduu]s	εὐμέριστος	easily divisible
	[declinare]	εκκλιει ἐκκλ[ίν]ειν	to turn away
	[desiit ?]	ἐπαύσατ[ο]	he/she ceased
	[docibi]lis	εὐδίδακτος	teachable
10	[defectio]	ἔκλειψις	failing, omission
	[dormit]orium	ἐνκοίμηθρον	nightgown
	[Duell]ona	Ἐνοιώ . . .ς	war-goddess
	[deflagra]tio	ἐκπύρωσις	conflagration
	[deinceps]	ἐξῆς	one after another
15	[decursus ?]	καταδρ[ομή ?]	attack
	[delator ?]	ἰσανγ[ελεύς ?]	accuser

Notes (references to *CGL* II are to pseudo-Philoxenus unless otherwise specified):

1 Cf. *dum* ἕως (*CGL* II 57.23), *donec* εως (*CGL* II 55.52), *donicum* εως (*CGL* II 55.53).

Any of these might have stood here.

2 Cf. *deglubat* εκδέρει (CGL II 41.24); Manteuffel read [ἐκ]δερε, but the right-hand edge of κ and bottom tip of ι are both visible.

3 Cf. *deminuit* ελαπτοί· ηλάπτωσεν (CGL II 42.38). Manteuffel read [ε . .]ποι, but the first intact letter is too wide for π, and its crossbar extends too far to the right; ττ is much more likely.

4 Cf. *difficile* δυσχαιρές· δυσκολον (CGL II 49.16), *operosus* εργώδης· περιεργός (CGL II 138.53). The latter is the only appearance of ἐργώδης in the glossary tradition, but it does not offer an ideal match: ἐργώδης means ‘difficult’ (cf. LSJ), while *operosus* means ‘diligent’, ‘active’, ‘toilsome’, ‘busy’, and ‘ornate’ (cf. OLD). The pair *difficilis* ἐργώδης is a better match and therefore very likely to have been deployed by an ancient lexicographer at some point.

5 Cf. *dicio* εξουσια (CGL II 49.5) and *diciones* εξουσιαι (CGL II 48.36); ἐξουσία also appears with *arbitrium* (CGL II 19.4), *licentia* (CGL II 123.1) and *potestas* (CGL II 154.54).

6 Cf. *diuiduus* ευδιαίρετος· αυθαιρετος· ευμέριστος· διαμε μερισμενος (CGL II 53.26), *diuidulum* ευμεριστο̄ (CGL II 53.34). In Latin, only the long horizontal top of *s* is visible.

7 Cf. *declinare* εκκλιναι (CGL 38.44). The traces at the end of the second word are well preserved, but the handwriting at that point is notably more cursive than elsewhere in the papyrus, making their meaning doubtful. If this reading is right, the scribe wanted to write the present infinitive, accidentally omitted the first ν, and then stopped rewrote the whole word (leaving a space after the end of the first attempt) without crossing out the first attempt. Manteuffel read ἔκτανε ἐκκλ[η]σία, which is incompatible with the traces of the first word.

8 Cf. *desiit* απαύσατο· επικλασμός (CGL II 45.25), *destitit* απέστη· επαυσατο (CGL II 46.9).

9 Cf. *docibilis* ευδιδακτος· ευμαθής (CGL II 54.15), *dociuilis* ευδιδακτος· ευμαθής (CGL II 55.44); εὐδίδακτος appears in pseudo-Cyrillus (CGL II 316.41) with *docilis*, which is too

short to fit the Latin traces here. The *L* is visible only in its long tail stretching below the other letters, and the *l* in a horizontal top stroke that seems to be a serif. Admittedly the *l* in line 11 has no serif, and one could argue that the visible stroke has to come from *S* or *T* (*E* is implausible since its lower strokes would have also been visible), but in that case the Latin word would have to be very severely misspelled: no Latin words end in *-SS* or *-TS*.

10 Cf. *defectio* εκλιψις· απουνηθεις· αφορισθεις (CGL II 40.26).

11 Cf. *dormitorium* ενκοίμητρον (CGL II 55.23). For the meaning see *Colloquia Monacensia-Einsidlensia* 2c with commentary.⁵⁵ Manteuffel read ἐνκοίμητρον, but the vertical is too far to the right for τ.

12 I.e. *Bellona*, Ἐνυώ. Cf. *Duellona* πολεμική (CGL II 56.34, the only attestation of *Duellona* in CGL), *Bellona* ενυώ· ερινυς· θεα πολεμική (CGL II 28.52). There is probably a blank space after Ἐνοιώ, and then traces that look like γλς. Possible supplements include [E]ρ[ι]ν[ύ]ς, which fits well with pseudo-Philoxenus but less well with the papyrus (the surface after Ἐνοιώ does not seem sufficiently damaged that an entire letter could have been lost, and there is inadequate space for υ); Μᾶς, which fits much better with the papyrus but is not in CGL at all (Μᾶ is a Cappadocian name for Enyo (Strabo 12.2.3) and therefore attractive here, but Μᾶς would apparently be a genitive); and options that do not seem to make any sense, such as πᾶς, γᾶς or perhaps ἰάς. Manteuffel read ἐνοικί[δ]ι[ο]ς, but the ω is certain.

13 Cf. *deflagratio* εκπυρωσις (CGL II 40.34). Manteuffel read ἐκπύρω[σι]ς.

14 Cf. *deinceps* τελευταῖο επιταεξης (CGL II 38.14 with reading of manuscript *c*: see apparatus and CGL VI 316, which interprets the Greek as τελευταῖον, ἔπειτα, ἐξῆς), *deinceps* εξήσαναρχαιεκ του λοιπου (CGL II 41.37, Greek interpreted CGL VI 316 as ἐξῆς, ἀπ' ἀρχῆς, ἐκ τοῦ λοιποῦ). Ἐξῆς also appears with *porro* (CGL II 153.58).

⁵⁵ Dickey, *Colloquia I* (n. 2), 141.

15–16 Manteuffel read καὶ ἄδη[λα οἷα μηδέπω] ἴσαν ἰ[ς τὸ μάθημα?], with a note ‘ἴσαν l. ἦσαν?’; I think this is intended to mean ‘and obscure things such as were not yet in learning’ and that the rationale for restoring continuous text rather than single words here was that these lines do not begin with *E-* and therefore did not fit with Manteuffel’s concept of the text as a list of Greek words beginning with *E-*. But if the text is in fact pseudo-Philoxenus there is no reason not to restore individual words here; moreover the third letter of line 15 is clearly not ι but τ.

15 The sixth letter is probably ρ or η, and there is only one entry in pseudo-Philoxenus whose Latin begins with *d-* and whose Greek begins with καταδρ- or καταδη-: *decursus* καταδρομή (CGL II 39.42).

16 I.e. εἰσαγγελεύς; cf. εἰσαγγελευς *delator* (CGL II 286.42), though this is in pseudo-Cyrillus rather than pseudo-Philoxenus. *Delator* does appear in pseudo-Philoxenus, but only with other Greek equivalents, including καταγγελεύς (CGL II 41.41) and κατήγορος (CGL II 41.58); see CGL VI 317 *s.v.* *delator*.

3.3 Date

Manteuffel dated *P.Vars.* 6 to the third century A.D. on the grounds that it is written on the back of a documentary text (*P.Vars.* 16, a list of names and numbers) which he dated by its handwriting to the late second or early third century.⁵⁶ But all the comparanda he cites for the

⁵⁶ Manteuffel is somewhat inconsistent here; in the introduction to *P.Vars.* 16 he dates that text to the second/third century, but in the introduction to *P.Vars.* 6 he dates *P.Vars.* 16 to the late second century. Likewise in the introduction to *P.Vars.* 6 he says that *P.Vars.* 16 is the recto, but in the introduction to *P.Vars.* 16 he says that *P.Vars.* 6 is the recto. Inspection of the papyrus shows that *P.Vars.* 16 is the recto.

script of *P.Vars.* 16 are in fact from the second century, and it looks as though the possibility of a third-century date for that text may have arisen from confusion rather than deliberate decision.⁵⁷ Using a more modern collection of comparanda one arrives at a mid-second-century date for *P.Vars.* 16.⁵⁸

The Greek handwriting of *P.Vars.* 6 itself is neat and very roughly bilinear, partly literary but with a few ligatures and cursive forms. The κ is open, shaped similarly to a modern cursive *U*, and the long ξ is made in a single stroke. Good parallels for both the κ and the ξ, as well as most of the other letters, can be found on the first hand of *P.Oxy.* 2192, dated to the end of the second century. *P.Tebt.* 2.318, dated to A.D. 166, is similar in overall appearance but has different shapes for κ and ξ. A κ similar to the one in *P.Vars.* 6 appears in *P.Oxy.* 3593, which is dated to A.D. 238–44; many of the other letters on this papyrus also look similar to *P.Vars.* 6, but there is no ξ. *P.Ryl.* II 176, dated to the very beginning of the third century, has both κ and ξ similar to *P.Vars.* 6, though many other letters look different and overall the writing is more cursive.

⁵⁷ As comparanda for the recto Manteuffel cites W. Schubart, *Papyri Graecae Berolinenses* (Bonn, 1911), numbers 25 and 26. Number 25 (*BGU* I.86 = *Chr.Mitt.* 306) is securely dated to A.D. 155. Number 26 contains two plates; in the introduction to *P.Vars.* 16 Manteuffel refers to 26^a (*BGU* I.16, dated to A.D. 159/160), but in the introduction to *P.Vars.* 6 he refers to 26^b (*BGU* III.807, dated to A.D. 185). The two have distinctly different scripts, and that in 26^a is a better match for *P.Vars.* 16. I therefore suspect that Manteuffel really intended to date *P.Vars.* 16 to the middle of the second century.

⁵⁸ In R. Seider, *Paläographie der griechischen Papyri I* (Stuttgart, 1967) the best match is number 35 (*P.Bad.* IV.75b), which is dated to A.D. 147. A photograph of *P.Vars.* 16 can be found online at <http://www.papyrology.uw.edu.pl/papyri/pvars6r.htm>.

The Latin script of *P.Vars.* 6 is of course very difficult to date, because so little of it remains; an analysis of its overall appearance is impossible. Nevertheless there is one complete example each of *A* (without crossbar), *I*, *M*, *N*, *R* (open), *S* and *V*, and a striking long diagonal tail of an *L*. All these letters except *L* (which has a similar but shorter tail) are matched in *P.Oxy.* 894, dated to A.D. 195–6; the long-tailed *L* can be found in *P.Oxy.* 1114, dated to A.D. 237, which also shares the forms of *A*, *I*, *M*, *N* and *V* (but not *R* or *S*) with *P.Vars.* 6. The *R*, *S* and *N* (but not *A*, *I*, *M* or *V*) are paralleled in *P.Mich.* III 166, dated to A.D. 128.⁵⁹

The copying of *P.Vars.* 6 can thus be located in a narrow window at the end of the second and beginning of the third century.

4 THE IMPLICATIONS OF THIS DISCOVERY

4.1 *The papyrus, pseudo-Philoxenus, and the proto-glossary*

This discovery necessitates a re-evaluation of the history of the pseudo-Philoxenus glossary. For one thing, *P.Vars.* 6 is not at all closely related to pseudo-Cyrillus.⁶⁰ Therefore pseudo-

⁵⁹ In R. Seider, *Paläographie der lateinischen Papyri I* (Stuttgart, 1972) *P.Oxy.* 894 is number 24, the relevant part of *P.Mich.* III.166 is number 25b, *P.Oxy.* 1114 is number 42.

⁶⁰ Although line 16 seems to fit pseudo-Cyrillus better than pseudo-Philoxenus, that line is the only example of such a fit, and it is very fragmentary. As noted above (section 3.1), six of the legible Greek words (ἐκδέρει, ἐργώδης, εὐμέριστος, ἐπαύσατο, ἐκπύρωσις and ἐξῆς) do not occur in pseudo-Cyrillus at all, and a seventh (εὐδίδακτος) occurs in pseudo-Cyrillus only with a Latin equivalent that does not fit the traces on the papyrus. Thus only five of the papyrus' securely reconstructible Greek words occur in pseudo-Cyrillus with the same Latin equivalents as in pseudo-Philoxenus or with others that would fit the papyrus equally well:

Philoxenus and pseudo-Cyrillus, or their sources, were already distinct by c. A.D. 200: those two glossaries cannot have been separately excerpted from a huge proto-glossary in late antiquity (cf. 1.3 above). In theory they could have been separately excerpted from the proto-glossary sometime before the late second/early third century, but that would require the existence, in the second century A.D. or earlier, of an enormous bilingual proto-glossary in alphabetical order. This would require an even more radical shift in our understanding of the history of bilingual glossaries than abandoning the idea of the proto-glossary, which therefore now needs to be abandoned. The only concrete evidence in favour of the proto-glossary was the existence of some entries in pseudo-Philoxenus and pseudo-Cyrillus that seemed to come from a common source; a more plausible and economical explanation for that evidence is that the shared source was a small Latin–Greek glossary containing only (or primarily) the shared entries rather than an enormous one containing everything now found in both glossaries. If the proportion of shared entries in the *D*- section of pseudo-Philoxenus is typical of the work as a whole, there are c. 2000 shared entries in total, so the shared source may have been about that length.

Another implication, of course, is for the date of pseudo-Philoxenus' glossary. If that glossary is really in this papyrus, then it must have been composed three or four centuries earlier than has long been thought. But before concluding that that is the case, further investigation is needed to determine the exact relationship between the glossary in *P. Vars. 6* and the work we know as pseudo-Philoxenus. Though evidently closely related they are not identical, since the entries are in a different order and there are several significant differences

εως *donec dum usque* (CGL II 321.50), εξουσια *maiestas dicio potestas* (CGL II 304.28), εκλιψις *defectus* (CGL II 291.30), εγκοιμηθρον *dormitorium* (CGL II 284.3), Ενυτω *Bellona* (CGL II 301.5; this one of course does not fit unless *Bellona* has been changed from an original *Duellona*).

in the readings. Three possibilities exist: 1) the glossary in the papyrus basically is pseudo-Philoxenus, but it underwent some changes during the six or seven centuries between the papyrus and our ninth-century manuscript of pseudo-Philoxenus. 2) The glossary in the papyrus was smaller than pseudo-Philoxenus and is only one of a number of different sources that were later combined to make the pseudo-Philoxenus we know. 3) The glossary in the papyrus is not a direct ancestor of our pseudo-Philoxenus at all, but stands in the position of a great-aunt rather than a grandmother; some of the entries that differ from pseudo-Philoxenus were originally as pseudo-Philoxenus has them and have been changed in the papyrus version.

4.2 Order of entries

The order of the entries in the papyrus is not only different from that in the manuscripts of pseudo-Philoxenus but also striking in itself, for although the main alphabetization is clearly by first letter of the Latin, there is a secondary alphabetization on the Greek: fourteen entries in a row have glosses beginning with E-. Such secondary alphabetization on the glosses probably arises out of realphabetization from Greek–Latin to Latin–Greek, a process that periodically occurred with ancient glossaries and has left traces on a number of them. To realphabetize a Greek–Latin glossary, an ancient scribe would have taken a and a fresh roll of papyrus and gone through the entire glossary repeatedly, first copying out all the entries for Latin words beginning with *A*-, then all the entries for Latin words beginning with *B*-, etc. This procedure naturally resulted in a dictionary in which, within each section for Latin words beginning with a particular letter, the individual entries were alphabetized on the Greek.

But what about lines 15 and 16, in which the Greek words begin with K- and I- respectively? These cannot simply represent the next section after E-, both because I- should

precede K- and because it is inconceivable that a glossary section large enough to have at least fourteen Greek words beginning with E- had none beginning with H-, Θ-, or Z-. The best explanation for lines 15 and 16 is that they were added after the glossary had been realphabetized on the Latin; if someone had then wanted to insert an additional entry for a Latin word beginning with *D-*, he or she would not have felt any need to consider where it fell in the Greek alphabetization but would only have been looking for a place in the *D-* section with room for another entry, such as the top or bottom of a column.⁶¹

The pseudo-Philoxenus glossary as preserved in medieval manuscripts also has an unusual order: the Latin words are arranged in Greek alphabetical order, ABGDEFICLMNOPQRSTV. This Greek ordering applies only to the first letter of each word, however; alphabetization of subsequent letters (almost always the second, usually the third, and sometimes the fourth⁶²) follows the Latin alphabetical order. It therefore seems likely that the glossary's original Greek-speaking author alphabetized entries by only one letter, and a Latin speaker later in the tradition introduced further alphabetization within each section.⁶³ If the glossary in the papyrus is pseudo-Philoxenus, therefore, the difference in the order of the entries is probably caused by that further alphabetization, which would have eliminated the secondary alphabetization on the Greek visible in the papyrus.

⁶¹ Both words come at the bottom of a column on this papyrus, but that is probably coincidental since they do not appear to be later additions to the papyrus itself. The Greek word in line 16 seems to be a misspelling of one that should have begun with *E-*, so for that entry another possibility might be that the Greek was in fact originally written with *E-* and alphabetized with the other *E-* words, and the misspelling arose later.

⁶² Alphabetization by four letters occurs e.g. in *CGL* II 38.27–39.3.

⁶³ Goetz, *CGL* I (n. 9), 23–5.

Therefore the order of the entries on the papyrus does not indicate that the glossary in the papyrus is not pseudo-Philoxenus. What it does indicate is that the glossary itself is older than the copy in this papyrus: a Greek–Latin glossary was first realphabetized and then expanded with additional entries before this copy was made.

4.3 *Duellona*

Duellona, an archaic variant of *Bellona*, was already obsolete by the first century B.C.⁶⁴ As a lemma in a Latin–Greek glossary an obsolete word is unproblematic, but in a Greek–Latin glossary *Duellona* would have to be a gloss, and the use of an obsolete word as a gloss is very unlikely. Does the inclusion of this word suggest that the glossary goes back to a time when it was not yet obsolete, i.e. to the second century B.C.? If the glossary is that old, it is much older than any other language-learning materials of which we have direct or even indirect evidence. Perhaps such an age cannot be completely ruled out, since some second-century B.C. Latin speakers evidently learned Greek, but it is by no means certain. Another possibility is that the glossary could have been realphabetized more than once, going through an earlier Latin–Greek phase before the Greek–Latin phase. It might seem unlikely that anyone would go to the effort of realphabetizing a work into an order it had previously had, rather than simply using a copy of the older version, but there might have been a good reason to do so. Perhaps the person who did the second realphabetization was unaware of the glossary’s history and/or did not have access to a copy of the older version, or perhaps the glossary had been expanded since the first realphabetization and the later scribe wanted a Latin–Greek version of the newer, larger glossary.

⁶⁴ Varro, *De Lingua Latina* 5.73 *Bellona ab bello nunc, quae Duellona a duello*; cf. *Thesaurus Linguae Latinae* s.v. *Bellona*.

We cannot be sure exactly what happened, but in either case the glossary in the papyrus must have even more of a history than is evident from its ordering alone. It must either have been realphabetized twice (with enough of an interval between the two to cause a second realphabetization to be plausible) before being expanded, or it must go back to the second century B.C. The glossary must therefore be substantially older than the papyrus copy we have; this means that instead of being three or four centuries earlier than the assumed date of pseudo-Philoxenus, it is at least four or five centuries earlier.

4.4 Words from identifiable sources of pseudo-Philoxenus

The papyrus seems to have contained a number of entries that previous studies of pseudo-Philoxenus have assigned to particular sources. Laistner's edition of pseudo-Philoxenus specifies the sources of many glosses, including for *deflagratio* Cicero.⁶⁵ If that attribution is correct, at least some of the material that the pseudo-Philoxenus glossary took from literary sources was already in the papyrus glossary. (And given the shorter time frame now available between the composition of the literary texts themselves and their incorporation into the glossary, the intermediate Latin–Latin phase now seems much less likely.⁶⁶)

⁶⁵ Laistner (n. 2), DE 161.

⁶⁶ Clearly there was a Latin–Latin source involved at some point, as some Latin–Latin glosses remain in our version of pseudo-Philoxenus. But as noted above (section 1.2) those glosses seem to come primary from Horace; it is surely more economical to argue that the Horace material was separately added in a Latin–Latin form than that all the other entries were also originally Latin–Latin and that someone who replaced the Latin glosses with Greek ones systematically skipped the Horace entries.

The papyrus also contains three entries that Laistner traced to Festus: *deglubat*, *deinceps* and *Duellona*.⁶⁷ These attributions suggest that the Festus material was also already in the papyrus glossary – and they call into question the idea that Festus himself was the source of all the material that Laistner ascribes to him. If the compiler of the glossary had been working in late antiquity, Festus would have been a special treasury of material difficult to access in other ways. But someone compiling a bilingual glossary in (or before) the early second century A.D. would have had access to many other sources of rare and archaic Latin vocabulary.⁶⁸ Regardless of whether the actual source of the ‘Festus’ material is Festus himself or (an)other work(s) of Latin philology or both, however, that source had already been used by the time of the papyrus glossary.

The papyrus also contains some of the material that pseudo-Philoxenus shares with pseudo-Cyrrillus: line 11 matches both pseudo-Philoxenus’ *dormitorium* ενκοίμηθρον and

⁶⁷ In Laistner’s numeration *deglubat* (marked ‘Fest.’), perhaps because one would have expected Festus to prefer Classical *deglubere* to *deglubare*) is DE 206, *deinceps* (marked ‘Fest. 62.7?’) is DE 219, *Duellona* is DU 40; *Duellona* is marked ‘Fest. 30.19?’), but that seems to be a typographical error for Fest. 30.14, the *Bellona* entry. Festus references are to the page and line of Lindsay’s Teubner edition.

⁶⁸ Some scholars had long suspected that Festus himself was not the source of all the ‘Festus’ glosses in pseudo-Philoxenus. C. Theander (‘Studia glossographica’, *Eranos* 26 (1928), 243–52, at 243–6) pointed out that many of the Plautine entries attributed by Lindsay to Festus either do not appear at all in our versions of Festus or appear only with glosses very different from those in pseudo-Philoxenus; Theander argued that at least some of these come instead from Varro. And Goetz’s list of pseudo-Philoxenus glosses derived from Festus at *CGL* I (n. 9), 28–31 is far more modest than Laistner’s attributions; it does not include any entries related to *P.Vars.* 6.

pseudo-Cyrillus' εγκοιμηθρον *dormitorium*.⁶⁹ Both the words in this entry are extremely rare, so the match is unlikely to be coincidental: this entry was taken from the shared source, which therefore had already been used by the compiler of the papyrus glossary. As observed above (section 4.1), the shared source is likely to have been a Latin–Greek glossary of c. 2,000 entries.

The rest of the entries on the papyrus cannot easily be assigned to any of these three sources, a fact that implies the existence of additional sources for the papyrus glossary. The overall picture of this glossary that emerges, therefore, is of something very similar to pseudo-Philoxenus itself in terms of sources; the papyrus glossary does not look like just one of the sources of pseudo-Philoxenus.

4.5 Size of the papyrus glossary

The original size of the papyrus glossary is of course also crucial to the question of whether it is pseudo-Philoxenus or merely one of the sources of pseudo-Philoxenus. The glossary is written on the back of a document; that position might suggest a short text, but copies of short documents were sometimes kept together on a longer roll, so a long text is not impossible. The preserved part of another Latin–Greek alphabetical glossary, *P.Sorb. inv.* 2069, is also on the back of a document, but nevertheless that glossary was clearly much longer than the document itself.

The multiple sources suggest a large glossary. It is unlikely that an individual source was used more than once in the history of the same glossary, so once any source can be identified as having been used by the compiler of the papyrus glossary, it is reasonable to

⁶⁹ *Dormitorium* εγκοίμηθρον appears at *CGL* II 55.23 and εγκοιμηθρον *dormitorium* at *CGL* II 284.3.

suppose that all the pseudo-Philoxenus entries from that source were already in the papyrus glossary. Therefore, if all the ‘Festus’ entries really do come from Festus, then those entries must all have been in the papyrus glossary – but, as we have seen, those entries may have several sources, and therefore it is possible that only some were already in the papyrus glossary. The source shared with pseudo-Cyrillus, however, is very likely to have been a single source, and therefore it is probable that all the c. 2,000 entries pseudo-Philoxenus has from that source were already in the papyrus glossary. And those entries formed a relatively small percentage of the whole glossary, since most of the entries in the papyrus are not in pseudo-Cyrillus. Therefore the glossary in the papyrus must originally have been very large; in fact it cannot have been much smaller than the pseudo-Philoxenus glossary as we now have it. It cannot have been just one of a number of sources of pseudo-Philoxenus; it can only have been that glossary or a close relative of similar size and composition.

4.6 Conclusion

Because the glossary in *P. Vars.* 6 is either pseudo-Philoxenus or a close relative of similar size and composition, and is substantially earlier than A.D. 200, the pseudo-Philoxenus glossary must go back at least to the second century A.D. and probably earlier. It is not a creation of late antiquity, but of the early empire or perhaps even the Republic. Therefore large bilingual glossaries in alphabetical order already existed at that early period, and other bilingual glossaries surviving via the medieval manuscript tradition may also be much earlier than previously thought. These glossaries are the product of a long, complex creation process that does not allow for the confident reconstruction of specific sources but that nevertheless preserves a large body of very old lexicographical material in fairly good condition.

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