

THE GREEK WORD-LISTS TO VERGIL AND CICERO¹

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INTRODUCTION

OUT of the thousands of papyri which have been recovered from the sands of Egypt, among the most interesting and unexpected are the ten Greek word-lists to Vergil and Cicero.² These bilingual texts are invaluable contributions to our knowledge of education in ancient Egypt and, since they contain contemporary Greek translations of classical Latin works, they are also important for the study of the Greek language in the time of the Late Roman Empire.

In their appearance these word-lists are virtually indistinguishable from each other, though we should point out that this similarity conceals the fact that while some contain a complete Latin text, others have varying percentages of selected words. At the left side of each sheet the Latin text stands in a column with not more than three words per line. To the right is found a similarly arranged word-for-word Greek translation. If, in our efforts to identify the purpose of these translations, we are reminded of the interlinear translation which students of Latin sometimes use today, it is to be regretted. For it will become clear from the discussion which follows that there was nothing illicit about these texts in antiquity. On the contrary, they seem to have occupied an official and integral place in the Latin school syllabus in Greek-speaking Egypt.

Their importance may be judged from the fact that only twenty-six other papyri bearing texts of classical Latin authors have been found in the East. These twenty-six are typical book

¹ The research for this article was done under a post-doctoral fellowship in Classics granted by the University of Cincinnati.

² Seven are to Vergil's *Aeneid*, one to the *Georgics*, and one to each of Cicero's first two speeches against Catiline. They are dated from the third to the sixth centuries after Christ.

copies of standard literary texts, the majority of which differ in no important respect from contemporary manuscripts from the West. But six of these literary texts also contain evidence that they were used by Greeks and they must, on that account, be associated with the Latin-Greek word-lists.¹ This presents us with the startling fact that almost half (sixteen out of thirty-six) of the Latin literary papyri found in the East were used by Greeks. If we carry our investigation further we find that the literary texts which were used by Greeks and the word-lists together represent only one facet of an important and varied group of papyri which were obviously developed for the purpose of teaching Latin to speakers of Greek. The other texts in this category are two Latin alphabets with Greek phonetic equivalents, a Latin Grammar for Greek speaking pupils, several Latin-Greek and Greek-Latin glossaries, a conversation manual in Latin, Greek, and Coptic, and model letters in Latin and Greek.² Although these school texts may differ in provenance and date, it is certainly not fortuitous that they represent a comparatively complete set of materials for teaching Latin as a foreign language to the natives of the eastern provinces of the Roman Empire.

Except for the fact that this class of papyri is bilingual, it is very similar to the sizeable collection of Greek school papyri which contribute greatly to our knowledge of the Hellenistic Greek system of education.³ But in contrast to these valuable school papyri used by easterners there is a noticeable scarcity of

¹ Pack² (= Roger A. Pack, *The Greek and Latin Literary Texts from Greco-Roman Egypt*, 2nd ed., 1965), 2925, *JEA*, xxi (1935), 199-209, Juvenal, *Sat.*, VII; 2934, P. Oxy. 24.2401, Terence, *Andria*; 2919, P. Ryl. 3.477, Cicero, *Div. in Caec.*; 2932, *PSI*, 1.110, Sallust, *Catilina*; 2945, P. Colt 2, Vergil, *Aeneid*; 2949, *PSI*, 1.21, Vergil, *Aeneid*. The first four contain Greek glosses, the last two Greek accents and/or quantity marks.

² Alphabets: Pack² 3012, P. Antin. 1, fourth-fifth century; 3013, P. Oxy. 10.1315, fifth-sixth century. Grammar: Pack² 2997, *Wiener St.*, 8 (1886), 218-221, fifth-sixth century. Glossaries: Pack² 3005, P. Lond 2.481, fourth century; 3006, *Mél. Ernout*, 61-74, third century; 3008, P. Sorb. 1.8, fifth century. Conversation Manual: Pack² 3009, *Klio* 13 (1913) 27-38, sixth century. Model Letters: P. Bonon. 5, third-fourth century. These texts will often be referred to as "school-texts".

³ H. I. Marrou, *A History of Education in Antiquity* (1956), Part II, chapter VI, pp. 210 ff.

similar texts for teaching Latin and its literature to the children of Roman administrators and soldiers residing in Egypt. We possess only a few texts from this latter environment and they are representative of a relatively advanced stage of learning. There exist portions of a Latin grammar which treats diphthongs and parts of speech in the fragments which survive, two papyri judged to be writing-exercises in which a verse or two of Vergil has been written several times, and perhaps most interesting of all, a seventeen-line revision, in Latin, of *Aeneid*, I. 477-93, in acceptable hexameters.¹ Those standard Latin literary papyri which show no traces of Greek influence may also be traceable to the Latin schools, but it is impossible to say to what extent. Many of them must have been personal copies which Romans living in Egypt brought with them from the West. Indeed, to judge by the script alone, several of these texts actually were produced outside Egypt.²

This disparity in numbers between the Greek and Latin school-texts may be due simply to circumstances, for we must be wary of placing too much importance on the absence of papyrological evidence. The character of the caches of papyrus finds which have come to light within the last one hundred years was determined by events and accidents over which contemporary scholars could exert no control. Consequently, the papyri which have survived often present a distorted picture of the times which produced them because they are an incomplete record. Positive evidence, on the other hand, must be accepted for what it is, irrespective of our preconceived attitudes, and in the Latin-Greek school texts we possess proof that from the third to the

¹ Grammar : Pack² 2996, J. E. Dunlap, "Fragments of a Latin Grammar from Egypt", *AJP*, lxi (1940), 330-44, second-third century. Dunlap suggests that this grammar, which was found at Karanis, is the product of a Latin school for the children of soldiers and administrators which was attached to the barracks there. Writing Exercises : Pack² 2938, P. Tebt. 2.686, Vergil, *Georgics*, IV. 1-2, written six times, second-third century ; 2947, P. Hawara 24, Vergil, *Aeneid*, II. 601, written seven times, first century ; Revision of *Aeneid*, I. 477-93 ; Pack² 2942, *PSI*, 2.142, third-fourth century.

² E.g. Pack² 2928, P. Lit. Lond. 42, Lucan *Bellum Civile* ; 2930, P. Lehmann, *Sitzb. Berl. Akad.* (1934), Abh. 4. 19-24, Sallust, *Bell. Jug.* ; 2944, P. Oxy. 8.1098, Vergil, *Aeneid*. See E. A. Lowe, *Codices Latini Antiquiores*, 2.175, 8.1054, 10.1569, for identification of the scripts.

sixth centuries after Christ, a sizeable number of the inhabitants of the eastern provinces were actively engaged in the study of Latin. Nevertheless, even in spite of this direct evidence, we are hard put to it to determine accurately the extent to which the Latin language was known and used in the East. This remains one of the most tantalizing problems facing students of the Late Roman Empire.¹

One further point must be made while on the subject of the Latin and Latin-Greek school texts and this concerns the remarkable degree of popularity which Vergil enjoyed in Egypt during the first six centuries of the Christian Era. Although seven authors in all are represented in the Latin literary papyri, the eighteen examples of Vergil constitute a full half of the total. Cicero is found on seven papyri, Sallust on five, Terence and Livy each on two, and Juvenal and Lucan each on one. This particular distribution does not appear to be completely without reason, since it is known from literary sources that Vergil, Cicero, Sallust, and Terence, who account for thirty-two of the thirty-six, comprised the "canonical" school syllabus in use throughout the Empire. Cassiodorus, for example, even described these four as the "Quadriga Messii" when referring to the *exempla elocutionum* of Arusianus Messius, a work which illustrated grammatical constructions with examples from the writings of these Latin authors.² What we are witnessing is, in fact, additional proof of Vergil's importance as a school text and the lasting strength of the classical tradition in antiquity.

Bearing in mind what has been said about the nature of

¹ The following works represent a selection of the relatively few studies of the question in all or some of its aspects: A. Budinsky, *Die Ausbreitung der lateinischen Sprache über Italien und die Provinzen des römischen Reiches* (1881); Ludwig Hahn, "Zum Sprachenkampf im römischen Reich", *Philologus Supplementband*, x (1907), 677-715; P. Jouguet, "Les Papyrus latins d'Égypte", *Revue des études latines*, iii (1925), 35-50; H. I. Marrou, *op. cit.*; Victor Reichmann, "Römische Literatur in Griechischen Uebersetzung", *Philologus Supplementband*, 34, Heft 3 (1943); Carl R. Trahman, *The Latin Language and Literature in the Greek World*, University of Cincinnati Dissertation (1942—unpublished); Ulrich Wilcken, "Ueber den Nutzen der lateinischen Papyri", *Atti del IV Congresso internazionale di Papirologia* (1936), pp. 101-22; H. Zilliacus, *Zum Kampf der Welt Sprachen im Oströmischen Reich* (1965—reprint of 1935 edition).

² *Institutiones*, 1.15.7.

papyrus finds we should not allow ourselves to be convinced by the overwhelming numerical superiority of the Greek papyri in general that Latin's role in the East was insignificant. The importance of a language is not to be determined solely by the number of individuals who speak and use it daily. The preponderance of Greek papyri was to be expected, for Greek had been the most important and widely used language in the eastern Mediterranean world for almost three centuries before the Roman conquest. Although Greek had not been able to rout Coptic and Syriac as the vernaculars of much of the countryside, it had asserted itself as the principal language of commerce, diplomacy, and literature. Nevertheless, in recognizing this fact we should be careful not to attach too much significance exclusively to the statistical disparity which exists between the Greek and Latin papyrus remains.¹ Statistics are often misleading and they seem to be so in this case too.

When the Romans gained political hegemony in the East, no attempt was made to alter the prevailing linguistic situation. There was no effort, for example, to force Latin upon the Empire's eastern subjects. In fact, from the earliest times Rome was content to publish her decrees in two languages and to allow Greek to be used in local judicial proceedings. As a result, not only for this reason, but also because of the sanctity of Greek in the Roman East and the incomparably rich literature in that language, Latin never became the universal medium in that part of the Empire. Aside from its use by the legions, and that is a special case which lies outside the present discussion, Latin was important primarily as the language of administration and of legal science. This explains why there are proportionately so few Latin counterparts to the numerous Greek private records and personal documents which have shed considerable light on the economic and social conditions of Egypt. The Latin papyri are understandably much richer in administrative, legal, and military documents, and in legal texts, such as legal codes or texts of the "classical" Roman jurists Gaius, Paulus, and Papinian. The ratio

¹ There are scarcely 500 Latin papyri in existence, whereas over 20,000 Greek papyri have already been published and many more lie in storage.

of Latin to Greek among these legal texts, for instance, is four to one.¹

In view of this situation, we would expect to find the greatest number of Latin papyri in the ruins of the great centres of administration such as Alexandria, Antioch, Berytus, etc. Unfortunately, these sites have yielded almost no papyri because of continuous human occupation and the harmful effects of adverse climatic conditions. As a result, the Latin papyri recovered to date come from the lesser, more provincial towns of Egypt, e.g. Oxyrhynchus, Antinoe, and Karanis. Greek would naturally have been more prominent than Latin in such locations and for that reason we cannot expect the relative numbers of Greek and Latin remains from these towns to provide an accurate reflection of the state of affairs in the East in general. On the other hand, had Alexandria, for example, preserved its share of papyri there might have been a tendency on the part of scholars to overestimate the influence of Latin.²

Exactly how deeply Latin penetrated into the countryside is unclear, but even on this point we should not be too sceptical. The need for an open-minded approach is demonstrated by the fact that two Vergilian texts, one of them a word-list, were recovered in the small garrison town of Nessana, the modern Auja, which lies on the caravan route between the Red Sea and the Mediterranean in southern Palestine.³ These papyri, which are judged to be local products, were found in the ruins of a Christian church and it is perhaps possible that they were associated with a church school. They are dated to the sixth century.

It is certain that the problem will never be settled until much more evidence is forthcoming. Nevertheless, it will be useful to introduce here a brief account of the historical position of Latin in the East in order to provide background and perspective for a detailed examination of the word-lists.

I. LATIN IN THE EAST

In the early centuries after the incorporation of the eastern

¹ Forty-one to ten. This count is taken from Pack². ² Jouguet, *op. cit.* p. 44.

³ P. Colt 1 and 2, L. Casson and E. L. Hettich, *Excavations at Nessana*, vol. ii: Literary Papyri (1950).

Mediterranean world into the Roman Empire knowledge of Latin there was restricted to soldiers and to administrators and merchants of Italian origin. It has already been mentioned that Rome neither attempted nor intended to introduce Latin into the East merely by virtue of her position as political master. Initially, Latin had little influence even in the area of law since Roman civil law pertained exclusively to Roman citizens. Local systems of law, both Egyptian and Greek, kept their own jurisdiction, which was determined to a great extent, at least in civil processes, by linguistic considerations. In Egypt, for example, disputes involving the interpretation of written documents drawn up between an Egyptian and a Greek were referred to Egyptian law for settlement if the document had been drawn up in Egyptian, and to Greek law if the language of the original were Greek. Correspondence between the provincial administration and Rome was carried on in Latin, but inside the province Greek seems to have been the rule for all business involving the lower administrative offices up to and including the officials who had charge of the *Nomes*, the *Strategoï*.¹ This may be accepted as a rule of thumb, but we are not to imagine that it applied without exception. Imperial decrees were necessarily promulgated in Greek, but since these translations were prepared in the Emperor's chancery in Rome they lie outside the natural limits of this discussion.²

We are able to detect little variation in this picture until the second century after Christ when papyri and wax tablets pertaining to naturalized Roman citizens make a more frequent appearance and natives of the eastern provinces begin to crop up in positions of importance.³ Of great significance to the development of Roman legal science were the writings of Gaius and Papinian, both of whom were probably of eastern origin. These

¹ Jouguet, *op. cit.* p. 43.

² Raphael Taubenschlag, "The Interpreters in the Papyri", *Charisteria Th. Sinko*, (1951), pp. 361 ff.

³ A possible exception has been reported by E. G. Turner, "An Augustan Document Recovered", *JRS*, xlv (1955), 119-20. The Greek papyrus here in question (*PSI*, 1160), dating to the time of Augustus, is judged to be a translation of a Latin original sent by the city of Alexandria to the Emperor. As such, it would be a startling addition to our knowledge of the application of Latin in the East at such an early date.

two scholars composed legal treatises in Latin which came to be accepted as "classical" texts for use in the law schools. Lucian, the Greek writer, who completed his life as an imperial official in Egypt, was also acquainted with Latin. He implies in his writings incidentally, that by no means all of the Greek-speaking Easterners who undertook the study of Latin inevitably mastered the language.¹

This nascent interest in Latin seems to have been the natural outgrowth of the granting of Roman citizenship to individuals as well as to communities in all parts of the Empire. As a result the number of Roman citizens in the East, although still a very small percentage of the total population, was gradually increasing. Indeed, there exists a papyrus from as early as A.D. 47-48 which contains a property declaration made by a Roman citizen of Egyptian birth.² The interest in Latin which some of these new citizens began to display resulted not so much from an attraction of the language itself as from the benefits which a knowledge of the ruler's language might bestow on those who chose to study it. Jobs in the imperial civil service may have been the principal inducement. Bureaucracy being what it is, there is little doubt that government offices steadily increased in size and as time passed more and more civil servants were recruited in the East. Those who had hopes of obtaining a position in the upper reaches of the administration studied Latin and even for those whose sights were not so high or whose abilities fell short of their expectations there were the positions of translators and interpreters which had to be filled. The need for bilingual law clerks or notaries, in particular, went hand in hand with the gradual increase in the number of Roman citizens. Of the latter, the majority did not bother to learn Latin, but they will have occasionally required the services of bilingual clerks to assist them with their newly acquired legal obligations. It was necessary, for example, to record in Latin the birth of children born to Roman citizens with the Prefect of Egypt at Alexandria. A number of wax tablets which record this *professio in albo* have been found in several places in Egypt outside Alexandria. These diptychs are all certified copies of

¹ *de mercede conductis*, 24.

² PSI, II.1185.

the *professio*—no original of which has survived—made up by professional scribes at the request of the parents.¹ For reasons which are not entirely clear no certified copies have been found which postdate A.D. 163. There are, however, three Latin documents (two on papyri, one on a wax tablet) pertaining to the declaration or registration of births from a later date, but they differ in some respects from the certified copies.² For one thing the maximum allowable limit of thirty days between the birth of a child and its registration is no longer observed. Perhaps these later documents reflect changes in the law of which we are ignorant. Also among the Latin documents are wills and requests for guardians.³ Since Alexander Severus gave Roman citizens in Egypt permission to write their wills in Greek, Latin examples of wills disappear after his reign (A.D. 222-35). Many of these Latin documents also contain some Greek, a situation which was inevitable where the new citizens were usually ignorant of Latin. Usually the text itself was in Latin, but often there was a Greek translation or résumé.⁴ Sometimes the statement of witnesses is found in Greek.⁵ In one declaration in which the main Latin text is in the third person narrative form a Greek version has been added in the first person as if it were the original statement of the subject of the document.⁶ Even the text of a document might be in Greek if it were a copy, made presumably for the individual's private records.⁷ Greek was also permissible for petitions sent to the Prefect and there survives a Greek request for permission to leave Egypt on which the Prefect's approval is recorded in Latin.⁸

¹ Cairo 29812, A.D. 62; P. Mich. 3.166, A.D. 128; BGU, 7.1694, A.D. 163.

² O. Gueraud, "Une déclaration de naissance du 17 mars 242 après J. C.", *Études de Papyrologie*, vi (1940), 21-35. P. Oxy. 6.894, A.D. 194-6; P. Oxy. 31.2565, A.D. 224.

³ Wills: P. Mich. 7.439, A.D. 147; BGU, 7.1696, second century; PSI, 9.1027, A.D. 151. Requests for guardians: London tablet (B.M. Add. MS. 40.723), A.D. 126-32; P. Mich. 3.165, A.D. 236.

⁴ P. Mich. 3.169, A.D. 145. Copy of a declaration of illegitimate birth. Greek résumés of *professiones* of legitimate births do not occur.

⁵ BGU, 7.1690, A.D. 131.

⁶ P. Amh. lat., A.D. 211.

⁷ P. Ryl. 4.610, petition to Prefect, A.D. 223; P. Oxy. 12.1466, request for Guardian, A.D. 245.

⁸ P. Oxy. 10.1271, A.D. 246.

We are very fortunate in that several documents bearing the signature of the clerks who prepared them have survived. These clerks, or scribes, were responsible for drafting private legal documents for their clients and it is clear that they possessed knowledge of both Greek and Latin. In Egypt they bore the title *νομικοί*, a term which seems to have described the functionaries designated in Latin by the word *tabelliones*. Documents exhibiting these signatures date from A.D. 169 to 291 and include several types of actions : e.g. *agnitiones bonorum possessionis*, mancipatory testaments, a document of *manumissio vindicta*, and a document on the appointment of a guardian. Two examples will show both that the *νομικός* was a translator and that his signature was formulaic.¹

(1) A mancipatory testament : BGU, 326, A.D. 189-98.

Γαῖος Λούκιος Γεμνι[ανός] νομικὸς Ῥωμαικὸς ἡρμήνευσα τὸ προκείμενον ἀντίγραφον καὶ ἔστιν σύμφωνον τῇ ἀνθεντικῇ διαθήκῃ

(2) *Agnitio bonorum possessionis* : P. Iand. Inv. 253, A.D. 249.

Αὐρήλιος Αἰγυπτος καὶ ὡς χρηματίζω νομικὸς Ῥωμαικὸς ἡρμήνευσα τὸ π[ροκ(είμενον) ἀντίγρ(αφον)] καὶ ἔστιν σύμφω[νον τοῖς] ἐν καταχωρισμῶ[ἀνθεντι]κοῖς καὶ δι' ἐμοῦ τετ[ελευτημένοις]

To judge by their names these *νομικοί* were native to the East.

In A.D. 212, with the issuance of Caracalla's "Citizenship Decree", Latin studies received indirect, yet significant encouragement.² As a result of this decree great numbers of new citizens were created who overnight became subject to Roman law. In addition, administrative positions in the imperial bureaucracy, a prerequisite for which was a knowledge of Roman law,³ were open to natives of the eastern provinces in increasing numbers. These factors combined to produce an increase in the study of both legal science and Latin.

Shortly after this decree was issued we find our first record of the existence of a law school in the East. St. Gregory the

¹ Taubenschlag, op. cit. p. 362.

² So far as I know, C. R. Trahman was the first to emphasize the importance of Caracalla's Citizenship Decree of A.D. 212 for the growth of the study of Latin in the Greek East. Its influence is discussed in his University of Cincinnati dissertation, op. cit. pp. 105-10.

³ Hahn, op. cit. p. 684.

Thaumaturge, writing in A.D. 239, mentions the law school at Berytus in terms which suggest that it had already been in operation for some time.¹ During the next two centuries law schools of varying stature appeared in Constantinople, Alexandria, Caesarea in Palestine, Athens, and Antioch. The school at Berytus was pre-eminent until an earthquake destroyed the city in A.D. 551. There, in a setting that has been described as "a Latin island in a Greek sea",² it has been maintained that the classroom instruction itself was delivered in Latin until sometime late in the fourth century.³ Whatever the validity of this argument, it is clear that Latin texts were the rule in all of the law schools. This is an important point if we are to give Latin its due, because in the East—though perhaps not in the West—it was necessary for all advocates associated with the courts to possess a legal education.⁴ This was in addition to or, according to Libanius,⁵ to the partial exclusion of, rhetorical training. The significance of this requirement is obvious, as Schulz emphasizes,⁶ because the aspiring advocates had to acquire a working knowledge of Latin before they could competently make use of the texts in the law school. This practice eventually received statutory expression in A.D. 460 under the Emperor Leo, but was at that time no more than the legal recognition of a procedure of long standing.⁷ Literary support for this last statement comes from Macarius of Egypt (fourth century), who reports that men seeking careers in the civil service entered, upon completion of elementary school, the σχολή τῶν Ῥωραικῶν and the σχολή τῶν γραμμάτων before going on to law school.⁸

¹ *Panegyric to Origen*, 5.62.

² Baynes and Moss, *Byzantium* (1961), p. 202.

³ Paul Collinet, *Histoire de l'école de droit de Beyrouth* (1925), p. 211, believes that the instruction was given in Latin. H. F. Jolowicz, *Historical Introduction to the Study of Roman Law* (1952), p. 474, also favours this interpretation of the evidence, but Fritz Schulz, *History of Roman Legal Science* (1946), p. 276, believes that the use of Latin for lectures is "a priori improbable and unsupported by any evidence". The entire question revolves around the interpretation of two literary passages which are somewhat ambiguous. The one is in Libanius, *Orat.*, 2.44, and the other is in St. Gregory the Thaumaturge, *Paneg. to Origen*, 5.62.

⁴ Schulz, *op. cit.* p. 268.

⁵ *Epistle*, 1170 (ed. Foerster); *Orat.* 62.21, 2.44.

⁶ *Op. cit.* p. 268.

⁷ Schulz, *op. cit.* p. 270.

⁸ *Homilies*, 15.42.

Earlier, toward the end of the third century, the government's official policy on the question of language was altered somewhat by the Emperor Diocletian. As part of his much needed programme of reform he instituted a policy of Romanization, whereby he attempted to emphasize and strengthen some of the purely Roman aspects of the Empire which he regarded as fundamental. Foremost among these were Roman law and the Latin language. Specifically, Diocletian insisted on the maintenance of Latin as the universal language of administration and vigorously encouraged its study. The effects of his programme show up in the legal sphere in the appearance of Latin in the recordings of court proceedings which had heretofore been entirely in Greek.¹ Testimony continued to be put down in Greek, but Latin was consistently used for dates, the identification of witnesses, and all statements made by the judge.² The expansion of the civil service which accompanied Diocletian's administrative reforms also provided incentive for the study of Latin. The overall effect of this emphasis on Latin is difficult to estimate, yet it is unlikely that it had much influence on the mass of the Greek-speaking population of the East. Probably it was little felt outside the personnel of the administration itself and the numbers of ambitious easterners who sought careers in the civil service. Latin continued to be the official language until the early part of the seventh century when Heraclius (610-42) adopted Greek in its stead.³

In our concentration on the legal and administrative spheres we should not lose sight of the fact that two of the more important Latin literary figures of the fourth century were of eastern origin and presumably received some of their training in Latin in the East. The poet Claudian, whose early works were written in Greek, was a native of Alexandria, and Tacitus' self-proclaimed successor, the soldier-historian Ammianus Marcellinus, was a Greek from Antioch.

In the fifth century we are given a glimpse of the pre-legal school curriculum of the Museum at Alexandria by Zacharias the

¹ With one known exception, P. Ross. Georg. V.18, dated A.D. 213.

² P. Ryl. 4.653, A.D. 321 ; P. Bouriant 20, after A.D. 350.

³ Constantine Porphyrogenitus, *de thematibus*, 1.2.

Scholastic, who informs us that the programme of studies consisted of Grammar, Rhetoric, Philosophy, Greek, and Latin.¹ In the early part of the same century Theodosius II established a higher school at Constantinople in which both Greek and Latin were taught by professors supported by the state. The decree which the Emperor issued in A.D. 425 provided for three rhetors and ten grammarians who were to teach in Latin, and five rhetors or sophists, and ten grammarians to teach in Greek. In addition there were to be two professors of jurisprudence.² The importance of this decree for us lies in its expression of the government's judgement on the relative importance of the two languages in the early fifth century in the Capital. Some scholars have seen in the fifteen (Greek) to thirteen (Latin) ratio a beginning of the tipping of the balance toward Greek in Constantinople.³ But I think we must include the two professors of law on the Latin side and recognize that the government was observing a policy of equality with respect to the two languages. Otherwise, the date is of little significance since Latin had been taught in Constantinople before A.D. 425 and it would continue to be taught there at least another century until the time of the grammarian Priscian and probably throughout the reign of Justinian.

We must conclude, in view of the information just presented, that the use of Latin in the eastern half of the Empire was no isolated phenomenon, but an important, if necessarily restricted, aspect of Greco-Roman culture for approximately five centuries until the break between East and West became irrevocable and the Empire of the *Ῥωμαῖοι* became *de facto* a Greek Empire.

II. IDENTIFICATION AND DESCRIPTION OF THE WORD-LISTS

CICERO

Pack² 2922. *Wiener St.* lv (1937), 95-106, *CLA*, 10.1519: *In Cat.*, I, 6-8 (with lacunae). From a fourth or fifth-century papyrus codex from Egypt. Latin script is "early half-uncial".⁴ Two sheets, recto and verso, are extant.

¹ *Life of Severus*, 2.

² *Codex Theodosianus*, 14.9.3.

³ A. A. Vasiliev, *History of the Byzantine Empire* (1961), pp. 100-1.

⁴ For the descriptions of the scripts I have relied on Lowe's comments in the *CLA*, except for numbers 2936 and 2939, where the editors' opinions have been accepted.

- Pack² 2923. P. Ryl. 1.6, *CLA*, 2.224: *In Cat.*, II, 14, 15 (with lacunae). From a fifth-century papyrus codex of unknown origin. Latin script is "half-uncial". One sheet, recto and verso, is extant.

VERGIL

- Pack² 2936. *Studi in onore di A. Calderini e R. Paribeni*, ii. 453-9: *Georgics*, i. 229-37. From a fifth-century parchment codex found in Egypt. Latin script is a "small, neat uncial". One sheet, recto and verso, is extant.
- Pack² 2939. P. Colt I: *Aeneid*, I, II and IV (fragmentary). From a sixth-century papyrus codex found at Auja-el-Hafir, Palestine (ancient Nessana). Latin script is a "sloping uncial". Book IV contains selected words only. Thirty full pages and numerous fragments are extant. (Referred to as "P. Colt. I" or the "Colt papyrus".)
- Pack² 2940. P. Ryl. III, 478, P. Mil. 1, P. Caire 85644 A and B, *CLA*, 2.227, 3.367, 10.227: *Aeneid*, I. 235-719 (with lacunae). From a fourth-century papyrus codex from Egypt (?). Latin script is early "half-uncial". Ten pages are extant. (The three papyri now deposited in separate locations are part of the same codex, but they will be collectively referred to as the "Rylands Vergil" because the largest and most important fragment is in the John Rylands Library.)
- Pack² 2943. *Aevum*, i (1927), 49-70, *CLA*, 3.306: *Aeneid*, I. 588-748 (with lacunae). From a fourth or fifth-century parchment codex from Syria or Egypt. Latin script is "sloping uncial". Fourteen pages are extant. (Referred to as the "Ambrosian Vergil".)
- Pack² 2946. *PSI*, 7.756, *CLA*, 3.290: *Aeneid*, II. 443-537 (selected words only). From a fourth or fifth-century papyrus codex found at Oxyrhynchus. Latin script is "quarter uncial". Four pages are extant.
- Pack² 2948. P. Fuad 1.5, *CLA*, 10.1570: *Aeneid*, III. 444-68. From a fourth or fifth-century papyrus codex of unknown origin. Latin script is "irregular cursive". Four pages are extant.
- Pack² 2950. P. Oxy. 8.1099, *CLA*, 2.137: *Aeneid*, IV. 661-705, V. 1-6 (selected words only). From a fifth or sixth-century parchment codex found at Oxyrhynchus. Latin script is "uncial". Two pages are extant.
- Pack² 2951. E. A. Lowe, *Cl. Rev.*, xxxvi (1922), 154-55, *CLA*, 10.1522: *Aeneid*, V. 673-4, 683-4. From a fifth-century parchment codex found in the Fayum (?). Latin script is "broad uncial". One small fragment containing four Latin words is extant.

III. THE ORIGIN OF THE WORD-LISTS

For a thorough understanding of the origin of these texts it is a most fortunate circumstance that word-lists to four distinct

works of two different authors have been found. Otherwise it would be much less obvious that the fundamental concept inherent in this group of papyri is that of "word-list" rather than the more specific "Vergilian" or "Ciceronian" word-list. As a result, instead of seeking the origin of a word-list to the *Aeneid*, for example, we must first search for a prior instance of the use of any word-list made up for a literary work. With the acceptance of this consideration we have not far to seek, for there occur, also among the finds from Egypt, some eighteen word-lists or vocabularies to Homer's *Iliad*. The oldest of these Homeric texts (dated from the first century after Christ to the seventh) antedate the oldest of the word-lists to Vergil and Cicero by perhaps two centuries (dated from the third century to the sixth). It is therefore impossible to ignore the suggestion that the Homeric vocabularies provided both a ready made exemplar and a direct stimulus for the creation of the word-lists to Vergil and Cicero. Both groups of texts were prepared for Greek-speaking students who required help in reading or understanding the literary text in question.

To my knowledge this suggestion, which has not received the recognition it merits (perhaps because it was not widely published), was first expressed in print over thirty-five years ago by S. Eitrem and Leiv Amundsen when they published a papyrus of a Homeric vocabulary to *Iliad*, I. 5-24. Their comment then was: "Subsequently, under Roman domination, the Greek philologists worked on rather traditional lines in paraphrasing Vergil's *Aeneid* much in the same way as they formerly worked out vocabularies on Homer."¹ The attribution of the Vergil word-lists to Greek "philologists", however, seems gratuitous in light of the glaring inaccuracies which they contain. I am also inclined to think that it is still an open question whether the originators of these texts were more at home in Greek or Latin. At best they seem to be the work of ill-trained teachers or perhaps of the students themselves. If they should be representative of the best scholarship of their day then we must conclude that knowledge of Vergil in Egypt was feeble indeed.

¹ *Papyri Osloenses*, Fasc. II (1931), no. 12, pp. 12-15. See also Marrou, *op. cit.* p. 357.

Regarding format, there is no difference between the Greek/Greek and the Latin/Greek word-lists. Each sheet of papyrus, parchment, or as is often the case with the Homeric vocabularies, each wax tablet, displays two parallel columns of text ; that of Homer, Vergil, or Cicero appears on the left side, while to the right is a list of contemporary Greek equivalents. The word-order follows closely that of the literary text in question, although the number of entries in the word-lists varies from one or two from each line of the original to a reproduction of the complete Latin or Homeric text, repetitions not excepted. In addition to the Homeric vocabularies of the sort just described there are four exclusively Homeric dictionaries in which the words are arranged alphabetically and three other dictionaries which contain a mixture of Homeric and non-Homeric words. These, however, are the remains of true *lexica* and as such represent a different stage in the development of school texts. Although no independent evidence for Vergilian *lexica* survives, the possibility of their existence remains.

In the word-lists exhibiting the complete text there is no indication that the contemporary Greek was intended as an independent literary version. On the contrary, the word-for-word translation is sometimes so rudimentary and insensitive that it raises the question whether literary considerations, especially for the Vergilian texts, were given any thought. Although it is certainly true that most of the Greek equivalents for Latin words are acceptable in a literal sense, many of them are erroneous translations when judged solely in the Vergilian context. The discrepancy between the Greek and the Latin is so flagrant at times that it hardly seems likely that it is due solely to ignorance or carelessness. Perhaps the purpose of these word-lists was ultimately utilitarian rather than literary, in which event a Greek version of the Latin which was helpful in terms of everyday usage was of greater value than a purely literary version. V. Reichmann, however, thinks that the character of the Greek translation was determined by a desire to imitate Vergil's words and phrases as a means of giving the Greek students a "feeling for Vergil's language".¹ But a remark made by H. O. Taylor

¹ *Op. cit.* p. 33.

regarding literary studies in late antiquity in general seems more to the point : “ Vergil, for instance, was no longer Vergil, but incarnate grammar and authoritative history.”¹ Whatever their original purpose, it seems possible that the complete Vergilian word-lists were sometimes used merely as a source of Latin phrases to be studied out of context.²

One particularly revealing characteristic which both the Homeric and the Vergilian word-lists share is that of providing generalized contemporary Greek equivalents for specific archaic ethnic and regional names. The following examples show a similar approach to the problem if not direct influence.

Homeric Word-lists

Homeric Text—Iliad

Contemporary Greek Equivalent

Pack² 1162, P. Oxy. 24.2405, 2nd-3rd A.D., Oxyrhynchus :

I.79	<i>Αχαιοι</i>	<i>οι Ελλη[νες]</i>
117	<i>Αρχείων</i>	<i>Ελληνων</i>

Pack² 1163, *Hermes*, xxxv (1900), 611-21, 3rd A.D., Fayum :

I.254	<i>Αχ[αιδ]α γαιαν</i>	<i>την Πελοποννησον</i>
258	<i>Δαναων</i>	<i>των Ελληνων</i>

Vergilian Word-lists

Vergilian Text—Aeneid

Contemporary Greek Equivalent

Pack² 2939, P. Colt 1 :

II.45	<i>achivi</i>	<i>Ελληνες</i>
60	<i>achivis</i>	<i>Αχαιοις</i>
36, 44, 49, 71	<i>danai</i>	<i>Ελληνες</i>

Pack² 2940, The Rylands Vergil :

I.240	<i>achivis</i>	<i>των Αχεων</i>
650	<i>argivae (helenae)</i>	<i>της Ελλην[ικης]</i>

Pack² 2943, The Ambrosian Vergil :

I.597	<i>danaum</i>	<i>των Ελλην[ων]</i>
650	<i>argivae (helenae)</i>	<i>της Πελοποννησιας</i>

¹ Henry Osborn Taylor, *The Emergence of Christian Culture in the West* (1958), p. 3. See also Marrou, op. cit. p. 357 : “ Greek boys were taught to ‘ prepare word by word,’ and thus the method used in Hellenistic schools for studying Homer and the other poets was simply adapted to a foreign language.”

² A fuller discussion of this problem will be found in my dissertation : *A Study of the Greek Word-lists to Vergil’s Aeneid Appearing in Latin Literary Papyri*, University of Cincinnati Dissertation (1968—unpublished), chapter IV.

Perhaps not surprisingly, most of the speculation about the Latin-Greek word-lists has centred on the interrelationships of the existing specimens of the vocabularies to the *Aeneid*. From the first time that two of them were compared there has existed a tendency to derive all of them from a common source of one type or another. C. H. Roberts first expressed this thesis in the introduction to his description of the Rylands Vergil papyrus in 1938.¹ Other Vergilian word-lists had been known for years and on comparing them with his text, Roberts found that it and the Ambrosian Vergil had a passage in common. After collating the respective Greek texts he wrote: "This [i.e. the Ambrosian] is not identical with the version in 478 [the Rylands Vergil], but it is close enough to make one suspect a common origin." He concluded: "It is unlikely that our translation was the unaided production of an individual, with a merely local circulation; the most likely hypothesis is that there was in general use in the Near East a Virgilian dictionary similar to the Homeric lexicæ which we know existed. It has recently been announced [*JEA*, xxiii (1936), 214] that among the papyri discovered in 1936 at 'Aujā in Palestine was a fragment of Virgil with a Greek translation [i.e. P. Colt I]; it would not be surprising if the version was the same as that known from Egypt."² Later the editors of this Colt papyrus, finding more opportunity for the collation of passages common to their text and other extant word-lists, discovered further differences between the several Greek translations. Nevertheless, they made only guarded criticism of Roberts' statements in concluding: "Despite the apparently adverse implications of the evidence, however, we are inclined to agree with the editor of P. Ryl. that neither his piece nor ours, nor any of the extant glossaries is, as he puts it, 'the unaided production of an individual, with a merely local circulation;'. . . Whether, however, they all stem from a single archetype or, as is more probable, from several archetypes each with a wide regional distribution, or whether these hypothetical archetypes were themselves derived from or influenced by one or more alphabetical

¹ *Catalogue of the Greek Papyri in the John Rylands Library at Manchester*, iii (1938), 79.

² *Ibid.*

Vergilian dictionaries, as Roberts postulates, are matters that cannot be determined.”¹

A more recent statement, which seems to reflect the preceding thoughts, is that of E. G. Turner in his book *Greek Papyri*: “The Greek-Latin Vergil Glossaries seem to have been a standard edition too.”² His phrase “standard edition”, if strictly interpreted, would refer to several copies based on a single original.

It is apparent from these several references that there is a general reluctance to attribute the preparation of the word-lists to several individuals each working separately. Scholars seem to prefer, rather, the argument that only one or, at most, a few originals were drawn up. Roberts felt that one proof of common ancestry was the occurrence of the same incorrect translation in two separate word-lists. But this is applicable only in so far as Latin-Greek glossaries may have been a source of the Greek equivalents, as he himself stated, and is not necessarily relevant to a discussion of direct relationships between specific word-lists.³

Although the problem is complex and subtle, I prefer to believe—accepting the hypothesis that the Homeric vocabularies provided the model—that virtually any educated individual who was aware of the Homeric texts and who had access to a Latin-Greek glossary, such as are known to have existed, could have made up a Vergilian word-list. The word “educated” in this context refers to an individual whose knowledge of both Greek and Latin we have yet to determine accurately.

The evidence to be gleaned from the word-lists themselves, now that three of them may be compared in detail, virtually demands such a conclusion, for far from exhibiting great similarity—except for the identity of format which is superficial—they show quite singular characteristics which attain the importance, as it were, of fingerprints. A simple collation of all the passages which any two of the word-lists share betrays three fundamental aspects in which they differ: (1) the pattern of

¹ Casson and Hettich, *op. cit.* p. 15. R. Remondon, “A propos d’un papyrus de l’Énéide”, *Journal of Juristic Papyrology*, iv (1950), 246, traces them to a Vergilian glossary.

² *Greek Papyri* (1968), p. 124.

³ Roberts, *op. cit.* p. 79.

sub-dividing the verses (in the case of the complete texts); (2) the vocabulary of the Greek translation; and (3) the nature of the Latin text itself. Theoretically, if there were one archetype from which all are derived, or at most only a few models, one could expect many instances of identity of phrase patterns, Greek translation, and Latin text in two word-lists. Some discrepancies might have been anticipated if there were successive copyings, but a reasonably close relationship should exist. Examination of the following common passages, which are representative, shows that this is not the case.¹

P. Colt 1

418

corripuere συνηρπασαν
viam οδον
interea ἐν τω μεταξυ
qua[e] semita² δι ης η ατραπ[ος]

419

iamqu[e] και ηδη
ascend[eba]nt ανεβαινον
collem [β]ρυννον

qui plúrimus : οστις πλίστος
urbi πολει

420

inminet επικίται
adversasque και εναντίας
aspéctatⁿ Θεωρείσιν^{ov}
désuper ὑπερθεν
arces ακροπολεις

421

miratur Θαυμαζει
mole[m] aneas μεγεθος ο αιν[ι]ας
magalia καλυβας
[q]uondam παλα[ι]

422

[mi]ratur portas Θαυ[μα]ζει π[υ]λας

The Rylands Vergil

418

corripuere αφηρπα[σαν]
viam interea την οδον [εν τουτω]
qua semita δι ης η ατραπ[ος]

419

monstrat : iamque δηλοι λε[.]ω[.]το
ascendebant collem ανηρχογτο τον[]
qui plurimus urbi οστις πλιστα[ς τη
πολει]

420

imminet επικιται
adversasque και τας κατα[κειμενας]
as[pectan]t^t Θεωρουσειγ
[desupe]r a[rces] υπερθεν ακ[ροπολεις]
421

[miratur mole[m] Θαυμαζει το[]
[Aeneas] ο Αινιας

[magalia quo]ndam καλυβας πο[τε]

422

[miratur po]rtas Θαυμαζει τα[ς πυλας]

¹ The extant common passages are : Colt/Rylands—Book I, 418-24; Colt/Ambrosian—Book I, 598-9, 603-5, 662-4; Rylands/Ambrosian—Book I, 649-51, 702-7. No more than two word-lists are extant for any one passage.

² *monstrat* is omitted in P. Colt 1.

The Rylands Vergil

649

et circum[te]xtum και περι[]

οιδι

croceō κροκ[ιω]

velamen περιπετασμ[α]

acantho ακανθινω

650

ornatus argiva[e] κοσμους της ελλην[ικης]

helenae ελενης

quos illa ους εκ[ει]ν[η]

651

my[c]e[n]is [pe]rgama μυκηνων τα
περχαμ[α]

[cum pete]ret οτε ὄρμα

[inconcesso]sq[ue] . . . και εις τους
ασυγχω[]*The Ambrosian Vergil*

649

et circumtextum και περιυφασμενον

croceo κροκοειδει

velamen acantho σκεπασμα ακανθω

650

ornatus argivae κοσμους της
πελοποννησιας

helenae quos illa ελενης ους εκεινη

mycenis απο των μυκηνων

651

pergama cum τα περγαμα οποτε

peteret μετεδιωκεν

inconcessosque hymen aeos και τους
ασυγχωρητους γαμους

The different manner in which the verses were divided in each word-list is clear enough but there is no discernible principle which dictated the procedure in individual cases. Only the Ambrosian exhibits a recognizable pattern, though it seems to represent no more than a desire for orderliness. Each verse in this text is invariably divided into three parts and thus every verse occupies three lines of the parchment. Individual phrases in all word-lists are usually limited to a maximum of three words.

P. Colt I is unique among the word-lists in that it exhibits continuous text in the surviving portions of Books I and II but only selected words in Book IV, a fact which I take as further indication of the individuality of these texts. A description of the division of the verses into phrases in the several word-lists will emphasize their dissimilarity even more.

We begin with the Colt papyrus. Sheet III verso contains five complete Vergilian verses (Bk. I, 413-17) in twenty-four lines of text.¹ Twelve of these lines, a comparatively high percentage, have only one word. Four of the verses occupy five lines each, while one occupies four lines. Sheet XIII verso contains five complete verses (Bk. II, 46-50) in twenty-three lines of text, ten of which have only one word. Three of these occupy five lines

¹ Partial lines at the top or bottom of the sheet are excluded.

each, while two take up four lines apiece. The originator of this text was generous with his papyrus for only in the word-list to the *Georgics* (Pack² 2936), where almost every verse occupies five lines of text and single-word entries are still more common, is his prodigality equalled.

A markedly different situation exists in the Rylands Vergil, where in addition recto and verso of the same sheet are surprisingly dissimilar. The recto of the fragment of this text which is still in Cairo contains seven full verses (Bk. I, 717-18) in twenty-three lines of text. One of these occupies four lines, three occupy three and one-half lines, two occupy three lines, and one occupies two and one-half lines. There are six one-line entries. The verso of this same fragment (Bk. I, 702-7), however, has fifteen one-word entries in twenty-eight lines of text. There are six complete verses, three of which are allotted four lines each, two occupy five lines, and one occupies six. The individual sheets also vary considerably. The recto of fragment *a* in Manchester (Bk. I, 247-55) has nine complete verses in twenty-six lines of text. Only two are one-line entries. Seven of the nine verses take up three lines each, while two verses occupy two and one-half lines each. Again in this papyrus we have an example of the rare instance in which parts of two verses are found on the same line of text. On the verso of this fragment (Bk. I, 235-42) there are seven single-word entries in twenty-six lines of text. Six of the eight full verses occupy three lines apiece, two occupy four lines.

In the case of P. Fuad 1.5 the scheme is similar to that of the Colt papyrus, but slightly more crowded. In column I of the verso¹ there are thirteen one-word entries in twenty-three lines of text. Of the five complete verses (Bk. III, 445-9), three take up five lines apiece, while two occupy four lines. In column II of the recto five complete verses (Bk. III, 463-7) occupy twenty-one lines. There are eleven one-line entries. Two verses occupy five lines apiece, two take up four lines, and one occupies three lines.

In tabular form this data appears as follows :

¹ This word-list alone contains two columns of Latin text with translation on each page.

Word-list	Sheet no.	No. of complete verses	No. of verses occupying the following no. of lines						Total no. of lines	Single word entries
			6	5	4	3½	3	2½		
Ambr.	117 r.	5						5	15	
	117 v.	5						5	15	
Colt	III v.	5		4	1				24	12
	XIII v.	5		3	2				23	10
Ryl.	Cair. b r.	7			1	3	2	1	23	6
	Cair b v.	6	1	2	3				28	15
	Man. a r.	9					7	2	26	2
	Man. a v.	8			2	2	2	2	26	7
Fuad	Col. I v.	5		3	2				23	13
	Col. II r.	5		2	2		1		21	11

It is also clear from a statistical comparison that a significant disparity exists among the fragments of those word-lists which consist of selected words only, although no direct collation of any two texts is possible. In these texts the ratio of words excerpted to the total number of words in each verse of the Vergilian text varies considerably.

Book IV of the Colt papyrus, for example, contains, on the average, 2.03 words from each verse of the *Aeneid* which is cited. Only twenty-six verses (10 per cent) in a run of 249 are not represented.

PSI, 7.756 averages 3.08 words per verse and only two verses (3.5 per cent) in a run of fifty-eight are not represented.

P. Oxy. 8.1099 has the lowest ratio of the three, excerpting only 1.34 words per verse. Fourteen verses (30.5 per cent) out of a run of forty-six are not represented.

Since Vergil's verses, on average, contain slightly over five words apiece, there exists a significant variation of 30 per cent between those two word-lists which excerpt respectively 3.08 and 1.34 words per verse.

Next we come to the question of the Greek translation, an area in which there is also considerable variety, especially with respect to choice of vocabulary. Once the words for numbers, proper names, pronouns, etc., have been eliminated because they offer little or no choice for the translator, the short passages available for direct collation contain only sixty-three words whose

Greek equivalents may be compared. The result is that twenty-six (42 per cent) of the sixty-three are found to have different Greek renderings, a fact which not only seems to rule out the possibility of a common archetype, but may also threaten the attempt to derive the Greek translations from a common Vergilian dictionary. A breakdown by pairs of word-lists follows :

Word-list	No. of Latin words	No. of times Greek translations	
		Agree	Disagree
Colt/Rylands	19	12	7
Colt/Ambrosian	16	9	7
Rylands/Ambrosian	28	16	12
Totals	63	37	26

Finally the Latin text itself must be examined. Now in all classical texts that may be termed normal—that is, reasonably complete and free of unusual difficulties or eccentricities in their tradition—variant readings are the exception rather than the rule. In the case of our poor examples, which offer woefully brief common passages for collation, it would be surprising indeed if there occurred a significant incidence of variants. Nevertheless, several variant readings do appear and these add additional weight to the general thesis that there was no single archetype. Five notable instances of variant readings were found :

P. Colt 1
I.668 iniquae (MRbcl)¹

The Ambrosian
acerbae (FPym)

P. Colt 1
I.413 possit (GPRγbcml)
418 quae
418 monstrat—omitted in *P. Colt*
420 aspectatⁿ (aspectat MPRγbc)

The Rylands
posset (M)
qua
monstrat
aspectant (γ², spectant F, adspec-
tant F²)

¹ The letters refer to the standard symbols used to designate the Vergilian manuscripts.

² This correction, in the opinion of the editors, is by a later hand.

The variant at I.668, *iniquae—acerbae*, is especially striking and the fact that the western manuscripts are evenly split there suggests that the word-lists are merely transmitting the variants of their individual archetypes. On the other hand, in every word-list we find indigenous errors (e.g. I.418 *quae/qua*) which clearly arose during the successive copyings which they underwent. A correction such as occurs in P. Colt 1-I.420, is probably due to collation in antiquity. As will be shown later there is good reason to suspect that the word-lists were regularly used in conjunction with an ordinary text of the *Aeneid*, thus making collation not only possible but unavoidable.

The reluctance displayed by Roberts and the editors of the Colt papyrus to emphasize the differences which exist among the word-lists is to some degree understandable. The word-lists are indeed similar in appearance and the overall resemblance in tone and quality among the individual Greek translations is certainly not purely accidental. The question actually resolves itself into one of reconciling two seemingly contradictory sets of observations, one suggesting close relationship, the other individuality. The evidence for the latter, I believe, is much the stronger. The likeness of format need be no more than evidence that the authors of the word-lists were familiar with the antecedent Homeric vocabularies. The similar nature of the Greek translations, however, is admittedly a different matter. In varying degrees all the Greek translations are literal, unimaginative, nonliterary, and very restricted in their choice of vocabulary. And yet I do not think that this is the result of direct lineal descent from a common archetype. The pronounced dissimilarity which they display in their common passages is proof of their independence. In part, the character of these translations may be traced to the lack of competence in either Greek or Latin on the part of their compilers. Furthermore, since these texts were probably intended for practical purposes it is not surprising that literary pretensions are absent. More important, however, is the evidence which points to the use of bilingual glossaries as a limiting factor on the vocabulary of the Greek translations.

There is first of all the curious anomaly that a single Greek word often does duty for two or more Latin words, whereas we

should have expected these translations to reflect the inherently more varied and subtle vocabulary of the Greek language. Reducing the evidence to usable figures, we find that there are 19 per cent fewer individual Greek words than Latin in the Ambrosian, 13 per cent fewer in the Colt papyrus, and 9 per cent fewer in the Rylands Vergil.

The fact that bilingual glossaries were in circulation during the centuries when our vocabularies were being compiled has already been noted.¹ Unfortunately, the fragmentary nature of these papyrus remains virtually reduces their value, for our purposes, to nil. We are not entirely without recourse, however, since extensive bilingual glossaries have come down to us from early medieval times.² These glossaries were prepared for a variety of purposes but there is reason to believe that the sum total of the contents of all of them represents a large reservoir of Latin-Greek equivalents which was theoretically available to the compilers of Vergilian and Ciceronian word-lists. This statement is supported by the fact that Greek marginalia to Horace, Juvenal, Persius, Vergil, and Cicero are listed among the sources of the most extensive Latin-Greek glossary, the ps.-Philoxenus.³ Furthermore, the largest surviving Greek-Latin glossary, the ps.-Cyrillus, either has the Latin-Greek ps.-Philoxenus as a partial source⁴ (with the entries reversed) or, to some extent, shares its archetype.⁵ Indirect support for our statement also comes from the results of recent research into the character of the fragments of exclusively Greek lexica found on papyrus. The investigator, in a discussion of the relationships between the papyrus entries and the entries known from other sources, states as his conclusion that: "a comparison of the individual glosses of all our papyri with those of the extant lexica and scholia shows that only a few of the former are completely or virtually new. Most of them have at least remote parallels to one or more of the

¹ See n. 2, p. 285.

² Reichmann, *op. cit.* p. 52.

³ W. M. Lindsay, *Classical Review*, xxxi (1917), 188.

⁴ *Ibid.* 190.

⁵ Paul Wessner, "Addenda", p. 337 in *Corpus Glossariorum Latinorum*, George Goetz, vol. i. I have discussed this question at some length in my dissertation, *op. cit.* chapter iv.

lexica on vellum, a fact which indicates that our lexicographic tradition has in one way or another preserved a good percentage of the glosses of lost lexica.”¹

My word by word comparison of the word-lists with the glossary entries—a comparison possible thanks to Goetz’s admirable index²—provided astonishing results. The percentage of Latin-Greek equivalents, from the three most extensive Vergilian word-lists, which also appear in the western glossaries is respectively 84.4 for the Colt papyrus, 81.8 for the Rylands, and 88.6 for the Ambrosian. The importance of these figures is enhanced further when one recalls that many of the glossary equivalents are automatically invalid in the Vergilian context. On the basis of this evidence I suggest that the coincidence in our Greek translations is largely a function of their authors’ excessive dependence on glossaries as a source of the Greek vocabulary.

There is little evidence on either side to settle the question whether these glossaries were of a general or strictly Vergilian nature. Naoumides found that “lexica of a general character are rare [i.e. among the Greek lexica], while those of a limited scope are the rule.”³

Latin-Greek glossaries, then, probably constitute the common source that Roberts was seeking. This solution to the problem goes a long way toward explaining the similarity which exists among the Greek translations without requiring us to postulate a single archetype or even a severely restricted number of originals, an argument which we have shown to be untenable.

IV. THE WORD-LISTS AS INSTRUCTIONAL TEXTS

As is readily apparent, the purpose in preparing Greek word-lists to the literary works of Latin authors was to provide the Greek-speaking students with a translation of the Latin and thereby to assist them in their efforts to learn that language. But, as has been previously implied, these texts exhibit an assortment

¹ Mark Naoumides, “The Fragments of Greek Lexicography in the Papyri”, *Classical Studies Presented to Ben Edwin Perry* (1969), pp. 199 f.

² Op. cit. vols. vi and vii.

³ Op. cit. p. 193.

of devices, foreign to ordinary literary texts, which, like the translation, were intended as a means of simplifying the learning process. These devices, which are perhaps best termed "learning aids", may be placed in three categories according to the individual techniques used, although in each case they had the same function : to clarify the Latin text. The three techniques are : (A) the addition of accents and vowel quantity marks, (B) the transposition of words, and (C) the addition and alteration of words. The last two may be traceable to the original word-lists, whereas the accent and quantity marks, which in many cases have been placed in the text by a person other than the copyist, may represent the immediate needs of the students. Since some of these practices also turn up in several of the standard Latin literary texts, obviously with the identical purpose, I have considered all such examples as belonging to a single group of phenomena.

The most prominent learning aids are the accents and marks of quantity which provided assistance in pronouncing the Latin. Five word-lists and six of the standard Latin literary texts exhibit one or more types of these marks. Since four of the standard literary texts also contain Greek glosses, there is no doubt that they were used by Greeks. These marks are especially noteworthy because they were not ordinarily used by professional scribes and consequently are rarely found in western manuscripts. The acute accent (´) and the macron (—) are found most frequently, but circumflexes (ˆ ˆ) also show up at times and even the grave (`) and the breve (˘) make a rare appearance.

A. Marks

The macron alone appears in all of the eleven school texts which bear marks. It was used for distinguishing long vowels, although in P. Colt 1 it also performed the function of marking initial *i*, both consonantal and vocalic.

Examples from the word-lists :

P. Colt 1 (In Book II the horizontal line is used both as a macron and as an

indication of initial *i*, whereas in the fragments of Books I and IV it is restricted to initial *i*.)

To mark initial *i*: I.418 *īamque*; II.57 *īnterea*

As a long mark: II.30 *solēbant*; 36 *dōna*; 77 *rēx*; 94 *mē*

The Rylands Vergil: I.240 *āctos*; 406 *ēst* (from *sum*)¹; 634 *taurōs*; 646 *ascaniō*

The Ambrosian: I.650 *quōs*; 652 *mirābile*, *dōnum*

P. Oxy. 8.1099: IV.659 *moriēmur* (once only)

P. Ryl. 1.61, Cicero, *In Cat.*, II: *dē spē* (twice only)

Examples from standard literary texts:

Pack² 2945, P. Colt 2, Vergil, *Aeneid*: III.560 *rēmīs*; IV.485 *sacrōs*; 650 *torō*; VI.431 *vēro*

Pack² 2949, PSI, 1.21, Vergil, *Aeneid*, IV: 66 *ēst* (from *edo*); 99 *pactōs*; 100 *tōta*

Pack² 2919, P. Ryl. 3.477, Cicero, *Div. in Caec.*: Sec. 40 *egō*; 48 *mē*; 56 *contrā mē*

Pack² 2925, JEA, 21 (1935), 199-209, Juvenal, *Sat.*, VII: 154 *magistrōs*; 160 *arcadicō*; 183 *cenātiō*

Pack² 2934, P. Oxy. 24.2401, Terence, *Andria*: 609 *mē*; 648 *spē*; 933 *aurē*

Pack² 2932, PSI, 1.110, Sallust, *Bell. Cat.*: *habēre*; *subēgit*; *habēre*; *militēs*; (four times only)

The horizontal line appears elsewhere as a macron only twice: on a non-literary document dated to the years A.D. 529-30—CPL² Annexe #18, p. 436, e.g. *siōnos*, *curō*, *apollōs*, *dioscurū*; and on several Latin words which precede a letter written in Greek—P. Oxy. 18.2194, fifth-sixth century, e.g. *imperatōrum*, *maximō* *dissertō*. It also appears once as an abbreviation mark for final *m*: P. Mich. 7.434, e.g. *matrimoniō*, *locō*.

In both of the Colt papyri the use of the macron is restricted to the vowels *e* and *o* (excluding its use over initial *i* in P. Colt 1). The editors of these papyri make the plausible suggestion that this curious restriction is due to a scribe who was used to the difference between ϵ and η , and o and ω .³

Next in order of frequency is the mark known as the acute accent ('). It was used as a guide to pronunciation of words in isolation or in a prose context, rather than as an aid to metrical reading. As such, it points to a utilitarian reading of Vergil as part of the process of learning Latin.

¹ Reichmann, op. cit. p. 35, takes this horizontal line as an indication of the transposition of *est* in this word-list, but since this transposition is intentional, the validity of his suggestion is doubtful.

² CPL = Robert Cavenaile, *Corpus Papyrorum Latinorum* (1958).

³ Casson and Hettich, op. cit. p. 67.

Examples from the word-lists :

P. Colt 1 : II. 39 scínditur incértum stúdia in contrária vúlguS

The Ambrosian : I. 654 máxima ; 653 gésserat

P. Oxy. 8.1099 : IV. 666 concússam ; 667 laméntis, ululáto

Examples from standard literary texts :

Pack² 2949, PSI, 1.21, *Aeneid* : IV. 66 móllis flámma medúllas ; 67 péctore ; 68 totáque

Pack² 2925, JEA, xxi, Juvenal, *Sat.*, VII : 157 sólvete némō ; 174 téssera ; 177 púeros ; 182 pártē ália lóngis

Pack² 2934, P. Oxy. 24.2401, Terence, *Andria* : 626 cuiquam ; 643 [s]olvísti ; 645 complácita

Among the non-literary papyri the acute is found only on a second-third century catalogue of works of art, possibly from Egypt,—Pack² 2994, P. Gen. Inv. Lat., e.g. hérculem, migratiónis, officiórū, respónsu.¹

Among the school-texts the application of this mark is not in agreement with the above findings in only one papyrus, the Rylands Vergil word-list. As one may observe from the following complete list of occurrences, it clearly is not an accent.

I.239 cóntraria ; 251 infandum ; 257 immotá

705 ministrí ; 713 tuendó ; 716 amorém ; 717 totó

These examples come from two separate fragments of the word-list, between which there is no relationship in respect to the use of the mark. There is no recognizable common denominator in the first three cases, but the four examples from the second fragment all have a mark on the last syllable of the final word in a verse. More will be said about this observation later.

Perhaps the single most telling circumstance observed in the use of the acute accent and the macron is that they appear together on six school-texts, three of them word-lists. In these cases we note that they provide the two requisite aids (after the alphabet itself) for the pronunciation of Latin, i.e. indication of normal word accent and of vowel quantity (perhaps quality at this late date).

The incidence of the other varieties of marks is rare compared

¹ Since all extant examples on this papyrus are over long vowels, it may be incorrect to identify the mark as an accent in this papyrus. See the remarks on apices below.

with that of the acute accent and the macron. The circumflex (˘ ˘) makes its appearance in one Vergilian word-list, and in a Cicero text. It too was used to indicate long vowels.

P. Colt 1 : II. 27 îre ; 28 vidêre ; 29 sâevus ; 42 insânia ; 43 hostîs
Pack² 2919, P. Ryl. 3.477, Cicero, *Div. in Caec.* : 44 ratiône, [acc]usatiônîs
(twice only)

The grave (') occurs twice in the Rylands word-list, where its purpose is unknown, and relatively often in the Antinoë fragment of Juvenal as a device for isolating monosyllables.

Rylands word-list : I. 235 revocatò . . . teucrî
Pack² 2125, *JEA*, 21, Juvenal, *Sat.*, VII : 160 nîl ; 194 èt sî

The Juvenal fragment is also the only text which contains the breve : e.g. 187 üt ; 193 quöque (twice only).

Happily it is not difficult to offer an explanation of the origin of these marks in the Latin school-texts. As is well known, they had been introduced into Greek texts as early as the second century B.C. by Aristophanes of Byzantium. By the time the earliest Latin school-texts appear these marks had become standard additions to Greek literary texts and it would have been natural for the Greek students to adopt them for their Latin studies. C. H. Roberts first made this suggestion in his introductory remarks to the Antinoë fragment of Juvenal when he published this text in 1935.¹ My own examination of the other ten school-texts which bear marks strongly confirms this suggestion. It is more difficult, however, to determine just who—scribes, teachers, or students—were responsible for their appearance in these papyri. Considering the inconsistent and careless manner in which they were used it is perhaps best to attribute the marks to students who applied them according to the inclination or need of the moment.

Although the identification of these marks and the interpretation of their use is considered certain (except for the ' in the Rylands text), the picture has been obscured somewhat by the existence in Latin papyri of apices, the form of which happens to be indistinguishable in practice from that of the acute accent ('). The apex seems to have been originally intended for use on

¹ *JEA*, xxi (1935), 202, n. 1.

inscriptions as a means of designating vowels long by nature. Although it is most common, in this context, from the beginning of the first to the middle of the second century after Christ, it appears as early as the time of Sulla and lasts until late in the third century. Its form shows a development from the symbols , 7 7 9 to the familiar mark ' common to the early Empire. The apex was used over the vowels *a e o u ei* and *i*, but not over *i-longa*.¹ It appeared sporadically and never marked every long vowel. In manuscripts the apex was usually restricted in use to certain long monosyllables to prevent their being associated with neighbouring words, an extremely helpful device in an age when there was no separation of words in written texts. Examples are : mé, té, sé.² There are exceptions, however, for in the Mediceus, a majuscule manuscript of Vergil of the fifth century, they appear on polysyllabic words as well as monosyllables : e.g. *Georgics* I.320 éruerent ; II.252 á ; III.168 é. Among the several hundred surviving Latin papyri apices have been found on eighteen. Their function was to indicate long vowels. Examples follow :

Pack² 2920, P. I and, 5.90, Cicero, *In Verr.*, II, 1st B.C./1st A.D. : manú, syracusás
 Pack² 2933, P. Ryl. 3.473, Sallust, *Hist.*, II (?), 2nd/3rd A.D. : []ós, hispanós,
 ingenió

Pack² 3000, P. Oxy. 1.30, *de Bellis Macedonicis*, 1st/2nd A.D. : praéfectí, pollérent,
 déspectí, aliénas

Fragmenta Herculanensia 817, *Carmen de Bello Augusti Aegyptiaco*, Ante A.D.
 79 : mós, ségnis, aciés, illúc, venéni

Pack² 3006, Mél. Ernout, pp. 61-74, Lat.-Gr. Gloss., 3rd A.D. : audió, vitió,
 valeó, valés

Pack² 3011, P. Hamb. II. 167, Declamation (?), 2nd/3rd A.D. : cógit, aegrótam,
 soceró, dé, parthenó, nón, [m]anús

CPL 77, P. Oxy. 17.2103, Gaius, *Inst.*, IV, 3rd A.D. : exercitór[ia], véró

CPL 125, P. Ryl. 2.79, List of soldiers, 2nd A.D. : []ó, Maximó, [Asia]ticó

CPL 140, P. Oxy. 12.1511, Military account, Ante A.D. 247 : marinó, emeritó,
 maxumó

CPL 202, *Aeg.*, i(1920), 139-53, Document of datio tutelae, A.D. 198 : terentió,
 méviae, dionusarió, iustó

CPL 236, BGU 2.611, "Orations" of Claudian, A.D. 41-54 : servitútis, suás,
 auxilió, hóc, prólatís

CPL 247, P. Rain., Vol. Litt. Accept., Letter, 1st B.C./1st A.D. : nón, té, dá,
 conlibertó, suó

¹ J. S. and A. E. Gordon, *Contributions to the Palaeography of Latin Inscriptions* (1957), pp. 148-9.

² W. M. Lindsay, "Collectanea Varia", *Palaeographia Latina*, ii (1923), 17.

- CPL 248, P. Ryl. 4.608, Letter of recommendation, 1st/2nd A.D. : cárum, favóre, tuó, nón, grátissimum, dómesticum (the o is short, an error?)
 CPL 257, P. Berlin 11.649, Letter, 3rd A.D. : príscus, petróniό, suό, salútem, commendó, rogó
 CPL 258, P. Berlin 6.101, Letter (?), 2nd/3rd A.D. : [desc]riptiόnem eόrum
 CPL 260, P. Hibeh 276, Letter of recommendation, 2nd/3rd A.D. : nidiό
 CPL 261, P. Strasb. 36, 3rd A.D. ; []riό
 CPL 318, P. Heid. 1001 ab, Cooking recipe, 2nd-4th A.D. : odoráti, guttás, vás, pónito, aquá

What may be said of this miscellany of papyri in which the apex appears? All of them, with the possible exception of the glossary, seem to be the products of a narrowly Roman ambience.¹ The literary texts cited in this list, which show no evidence of use by Greeks, were presumably personal copies brought to the East by Romans. The use of apices, though relatively common in inscriptions, is rare in the papyri and in manuscripts. The papyri which exhibit apices are all dated to the period of time during which these marks were also prominent on inscriptions. Therefore, we recognize the marking of Latin papyri with apices as a practice peculiar to the Roman residents of Egypt. This practice is consistent with the use to which apices were put in manuscripts and inscriptions.

On the other hand, the acute, used to indicate normal word accent, is of purely Greek origin and is usually found only in those Latin texts which are associated with the teaching of Latin to Greeks. Furthermore, these papyri date from the third to the sixth century after Christ, when the apex was no longer being used. Consequently, we are able to detect no recognizable relationship between the use of the two marks and we conclude that their similarity of appearance is simply fortuitous.

B. Transposition of Words

Earlier, in the introduction, the statement was made that these word-lists are more than mere translations. Indeed, in some

¹ Paul Collart, "Un Papyrus d'Oxyrhynchus", *Mélanges de Philologie, de Littérature et d'Histoire Ancienne offerts à Alfred Ernout*, p. 66. Collart believes that this glossary could have been used either for teaching Greek to Romans, or Latin to Greeks.

degree they incorporate the functions of the dictionary, the translation, and the equivalent of the modern annotated school edition, although the techniques and the format are not always identical. We have already seen how the teachers and students of antiquity approached the problem of learning vocabulary and correct pronunciation. Now we shall consider their efforts to explain and illustrate Latin grammar and syntax.

Their most prominent innovation in this respect is an infrequent (it is found in only two of the complete word-lists), yet very noticeable, transposition of the Vergilian word order which had as its purpose the intentional juxtaposition of syntactically related words. In the examples which follow, the numbers indicate the correct Vergilian word order and the symbol / shows the line breaks in the word-lists.

The Rylands Vergil : Book I

251 ¹navibus ³amissis / ²infandum

271 ¹longam ⁵albam / ²multa ³vi ⁴muniet /

272 ¹totos ³annos / ²regnabitur /

406 ²[voce] ³s]eççuþ ¹est

P. Fuad 1.5 : Book III

448 ¹verso ⁴cardine / ³cum ⁵ventus / ²tenuis

449 ¹teneras ⁴frondes / ²turbavit / ³ianua

450 ¹cavo ⁴saxo / ²volitantia / ³prendere /

453 ¹ne ²qua ⁵dispendia / ³morae ⁴fuerint / ⁶tanti

455 ¹sinus ³secundos / ²implere /

460 ¹cursusque ⁴secundos / ²dabit / ³venerata /

461 ¹quae ³liceat ⁴te / ²nostra ⁵voce / ⁶moneri /

463 ¹effatus ³est / ²amico

464 ¹dona ⁴gravia ²dehinc / ³auro / ⁵sectoque / ⁶elefanto /

The relationships emphasized in this complete list of examples are those which exist between a noun and its adjective modifier, a participle and its auxiliary verb, and a verb and its subject.

Several of the noun-adjective phrases are also examples of the ablative absolute construction. Since these are rendered by the genitive absolute in the Greek translation, it is possible that the emphasis lay on the ablative absolute itself.

The same interest in syntax is also evident in two of the selective word-lists. In these cases, two related words, often some distance from each other in the Vergilian text, are excerpted as a unit and placed on one line of the word-list. In addition to the points of syntax mentioned in the preceding paragraph, these two texts evince a surprising amount of interest in prepositional phrases. Words enclosed in parentheses in the examples below are either omitted or found elsewhere in the word-list. The colon is used here to show the Vergilian verse endings, which are not indicated in the word-list.

PSI, 7.756 : Book II

- 449 strictis mucronibus
 449/50 imas : (obsedere) fores
 455 a tergo
 457 ad soceros
 467/8 ullum : telorum (interea cessat) genus [*cessat* appears in the word-list one line below]
 473 positis (novus) exuviis [*novus* appears in the word-list one line above]
 474 lubrica (convolvit sublato pectore) terga [*sublato pectore* appears in the word-list one line below]
 477 omnes (scyria) pubes
 479 correpta dura bipenni
 480/1 postes (quae a cardine vellit) : eratos [for *aeratos*—*vellit* appears one line below]
 481/2 firma (cavavit) : robora
 482 lato (dedit) ore
 497 oppositasque (evicit gurgite) moles [*gurgite* appears one line above]
 499 cum stabulis
 504 barbarico (postes) auro [*postes* appears one line above]
 507/8 convolsaque (vidit) : limina
 527 per hostes
 536 si qua (est caelo) pietas

P. Oxy. 8.1099 : Book IV

- 665 ab alta
 671 per culmina [manuscripts read *culmina perque*]
 678 ad fata
 691 revoluta (toro) est [*toro* appears in the word-list one line above]

C. *Additions and Alterations*

Further evidence of the need to simplify the Latin is seen in the occasional alterations made with respect to individual words. There are three instances in which the auxiliary verb *sum* was added to a perfect passive participle in order to expand and thus to clarify the construction: e.g. in P. Colt 1, *est* was added at IV.322, to *extinctus*, and at 456 of the same book, to *effata*; in PSI 7.756, *sunt* was added to *instaurati* at 451 of Book II. Elsewhere in P. Colt 1 (IV.346), *iussere*, the archaic form of the third person plural of the perfect of *iubeo*, was replaced by the more common form *iusserunt*. Similarly, in PSI 7.756, II.450, Vergil's word *obsidere* is explained by the addition of *obsiderunt*, and at II.524 of this same text, a less common passive form *moriere* has been explained by the addition of *morieris*. The more familiar practice of introducing glosses into a text is probably responsible for the substitution of the more specific *mater* for Vergil's word *parens* in the Colt papyrus, IV.365, where the reference is to Aeneas' mother Venus.

Since this is a complete list of examples from all of the word-lists, it is evident that such alterations were not standard procedure. Except for the supplementary *est* at IV.456 in the Colt papyrus, none of these alterations or additions is known from the Vergilian text tradition.

It is appropriate here, during the discussion of textual alterations, to take notice of a probably intentional orthographic peculiarity occurring quite uniformly throughout these school papyri. This is the practice of regularly using the *-es* inflection of the third declension accusative plural of the consonant stems for that of the *i*-stems, the original accusative plural ending of which was *-is*.¹ Although this does indeed reflect the normal development and simplification of the language, it is nonetheless a change which was only inconsistently applied in contemporary manuscripts of Vergil and therefore it cannot be assigned a purely palaeographic origin. Since such a change would simplify the learning of the paradigms of the third declension (both nominative and accusative plural of all third declension nouns would thereby become

¹ Reichmann, *op. cit.* p. 43, also noticed this characteristic.

identical, and the genitive singular *-is* could be more easily recognized) it seems quite possible that it is a conscious adaptation which may also have originated in the schools. In the following examples the lack of agreement exhibited by the western manuscripts is conspicuous.¹

P. Colt 1 :

II	40	omnes b	omnis MPR
	43	hostis (an exception)	hostis MSS
	49	ferentes Mbc	ferentis PR
	81	auris Vbc	auris M
IV	399	frondentes	frondentis MSS
	401	migrantes ab	migrantis MP
	427	manesq(ue)	manisve MSS
	454	laticis (an error, <i>latex</i> is a consonant stem)	latices MSS
	470	duplicis (an exception)	duplices MSS

The Ambrosian :

I	656	naves FR	navis M
	657	artes	artis MSS
	661	bilingues bc	bilinguis FMR

P. Colt 2 :

VI	572	angues c	anguis MPR
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PSI 7.756 :

II	445	turrens, ² turres b	turris FMP
	480	postes Mbc	postis Pa
	498	omnes ab	omnis M
	527	hostes bc	hostis MP

P. Fuad 1.5 :

III	465	naves G	navis MP
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After this rather detailed description of the character and content of the Latin-Greek literary papyri, let us now try to determine what might have been the practical application of these texts in the learning of Latin. There can be no doubt that the selective

¹ MSS stands for a consensus of the western manuscripts of Vergil. The other letters are the standard symbols for the Vergilian manuscripts. The reading of the school texts is always on the left.

² Probably a hypercorrection similar to the *Herculens* for *Hercules* in the *Appendix Probi*.

word-lists were used as supplementary texts, the function of which was to assist the students to read from a standard text of Vergil. Whether the six word-lists which contain continuous text were used alone, i.e. without an accompanying copy of Vergil, is an open question, although I am inclined to think not. Only two of these clearly identified the beginnings of verses, an important contribution to ease of reading since no single verse is ever written as a single line unit in the papyrus. The different techniques which each of the two texts resorted to for marking verses are worth examining because they appear as additional evidence for the separate origin of the word-lists. In P. Colt 1 the first word of each verse projects one or two letter spaces to the left of the remainder of the column, e.g. :

- II. 68 ⁱconstitt
 atq(ue) oculus
 frygia
 agmina
 circumspexit
 69 heu quae nunc

Seldom did the scribe depart from this practice. In the Ambrosian there appears the simple addition of a horizontal line to the left of each word beginning a verse :

- I. 649 — et circumtextum
 croceo
 velamen acantho
 650 — ornatus argivae
 helenae quos illa
 mycenis
 651 — pergama cum

Scholars who have personally examined this text do not state whether these marks used to indicate verse beginnings are due to the original scribe or to a subsequent hand. Two of the remaining four word-lists clearly fail to set off the verse beginnings (Pack² 2936, 2948), and one is too brief in its existing state to be put to the test (Pack² 2951). On this question the Rylands Vergil is ambiguous, for it shows an odd and infrequent assortment of marks, none very common, and apparently the work of

several scribes, which may have been intended as verse separators. In all they number only eight, e.g. :

- | | | |
|----|--------|-------------------------|
| I. | 418/19 | monstrat : iamque |
| | 646/47 | parentis . mu[nera] |
| | 647/48 | ruinis . ferre iub[et] |
| | 651/52 | my[c]e[n]is . [pe]rgama |
| | 705 | ministrí |
| | 713/14 | tuendó foenissa |
| | 716/17 | amorém regina petit |
| | 717/18 | totó haeret |

Although the identification of these marks is by no means certain, it can readily be observed that each falls on or after the final word of a verse. Furthermore, both the point (.) and the oblique line (/) were applied with consistency within a small cluster of verses as if two individuals at different times responded to an identical problem with different solutions. Unfortunately, the dreadful condition of the writing on this particular papyrus does not permit our making positive conclusions concerning the origin and purpose of these marks.

The fact that all of the word-lists are in codex form is not without importance. Had they been written on rolls they would have been too inconvenient for easy use with a second text. Although the published accounts of the Homeric vocabularies are difficult to interpret it seems that they too rarely if ever have been found on rolls. Individual sheets and wax tablets predominate.

Even though Vergil is found on the majority of the papyri which formed part of the Latin-school syllabus, there is no evidence to suggest that the *Aeneid* was read metrically by the Greek-speaking school boys. In fact it would have been impossible to do so using word-lists alone, for their texts were often rearranged, altered by omissions and additions, or without means of distinguishing between verses. Furthermore, since the acute accent marks, indicating the normal accent for prose, are in many cases attributed to several different and not necessarily contemporaneous hands, we are forced to conclude that they reflect the use to which these texts were put. Even if metrical reading did form a part of the proposed instruction, it is clear that it soon lost ground to the more immediate practical needs of learning the

Latin language rather than Latin literature. This does not absolutely preclude the possibility of reading metrically from the plain texts (some of which also bear accents normal for prose) but it definitely implies that it would have been a secondary consideration.

The essentially utilitarian purpose of the word-lists is nowhere more apparent than in their complete lack of scholia such as are to be found in contemporary manuscripts providing explanations of literary and historical allusions. This is all the more remarkable in view of the fact that Servius' great commentary to Vergil antedates several of the Vergilian word-lists by many decades. Even the Greek translations fail to reflect the use of his observations in places where misinterpretation of the Latin could have been avoided.¹

In like manner, the few papyri containing Latin literary works which possess commentary betray no appreciable literary interest. The Juvenal text contains frequent scholia and glosses, but these are completely independent of western scholia and do little more than attempt to paraphrase the Latin.² There are a few scholia appended to a papyrus of Cicero's *Divinatio in Caecilium* which do show relationship with pseudo-Asconius, but the bulk of the Greek annotation in this text consists of translations and adaptations of the Latin.³ What commentary exists suggests an interest in legal studies rather than literature. This is not surprising considering the utilitarian character of the study of Latin in the Greek East. For this purpose Cicero was an excellent choice.

In order to receive a better impression of what may justifiably be called a decidedly unsystematic approach to the explanation of school-texts, a table showing the incidence of the several types of learning aids follows :

Type of Aid	No. of Papyri	Identity of Papyri by Pack No. Word-lists	Literary Texts ⁴
1. Macron	11	2939, 2940, 2943, 2950, 2923	2945, 2949, *2919 *2925, *2932, *2934
2. Accent	6	2939, 2943, 2950	2949, *2925, *2934

¹ Examples may be found in my dissertation, op. cit. p. 71.

² *JEA*, xxi (1935), 206-7.

³ P. Ryl. 3.477, p. 72.

⁴ The asterisk identifies literary texts which have Greek glosses.

3. Verse indicat.	2	2939, 2943, (2940?)	
4. Syntact. arrang.	4	a. 2940, 2948 (complete word-lists) b. 2946, 2950 (selective word-lists)	
5. Alterat. to words	2	2939, 2946	
6. -es infl.	5	2939, 2943, 2946, 2948	2945

It is clear from this table that the word-lists were more liable to the introduction of learning-aids than the standard literary texts. This fact suggests that the word-lists were the more elementary text.

This brief discussion of the word-lists which served the eastern Latin schools is certainly not complete.¹ Yet it does provide information about the materials and procedures of Latin instruction in the eastern half of the Empire from the third to the sixth century after Christ. Furthermore, the practical necessity of providing this instruction spawned a variety of texts and practices not dissimilar to those still in use today.

This variety and at times even the subtlety of the learning aids which these texts afford might raise the question whether they represent a change in the essentially calloused and unimaginative approach to education for which antiquity has been so often taken to task. The answer is probably not. The question itself is something of a red herring, for aside from the Greek translation—the *raison d'être* of the word-lists—none of the aids is necessarily an essential feature of the original concept of word-list. The most common aid, for instance, the macron, appears in only five of the ten word-lists. Furthermore, many of the marks and additions are obviously due to users subsequent to the original copyist. Since these texts were recopied again and again there is no way of telling when these practices first appeared. Consequently, it is perhaps best to assume that most of these aids were introduced by students responding to their personal needs and deficiencies. Indeed, even today, how often must teachers

¹ Although a study of the Greek translations has been started, much more remains to be done before it will be possible to identify more clearly the authors of these texts and to ascertain the value of the word-lists as instructional texts relative to their original purpose.

warn students against this very practice? It is for this reason that the phrase "learning aids" rather than "teaching aids" has been used to describe these practices.

The carelessness which the word-lists exhibit, their evident lack of scholarly influence, and the low estimate we must give of the Greek translation do not suggest a very competent level of Latin instruction. Nevertheless, they must have served the purpose inasmuch as several appear to be the end products of a long tradition of copying. From the contemporary point of view, their appearance among the papyrus remains from the Near East provides a considerable amount of interesting and valuable information on methods of instruction in a foreign language in antiquity.