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Edited by T. V. Evans and D. D. Obbink
THE LANGUAGE OF THE PAPYRI
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# The Language of the Papyri 

Edited by<br>T. V. EVANS<br>and<br>D. D. OBBINK

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## Preface

The linguistic significance of the Greek and Latin papyri and related sources has been recognized ever since they started to become available to scholars in large quantities in the late nineteenth century. Every scrap of papyrus and every ostracon or tablet unearthed has the potential to change some aspect of the way we think about these languages. Such texts have the capacity to modify our understanding of the classical forms of both languages and for their post-classical development provide evidence of the most direct kind we shall ever acquire. The richness of the resource can hardly be overstated.

Valuable studies of the material have been appearing since the work of pioneers like E. Mayser and A. Deissmann. In recent times significant progress has been made by James Adams and others in interpreting the remarkable new Latin finds (for example the Vindolanda Tablets). In general, however, the peculiar challenges of working with these texts have retarded progress. The abundant Greek evidence has been particularly neglected in the past. The papyri and related sources may be a rich resource, but at the beginning of the twenty-first century it remains barely tapped. Further work is an urgent desideratum. Meanwhile, new texts continue to be discovered, and technological advances greatly enhance our ability to assess the evidence.

This book aims to demonstrate the massive linguistic potential of the papyri and related sources. Their study demands the development of fresh methodologies and the careful reassessment of previous scholarship. A variety of approaches current in international research will be found here. Versions of most of the chapters included were presented at the conference 'Buried Linguistic Treasure: The Potential of Papyri and Related Sources for the Study of Greek and Latin', which the book's editors convened at Christ Church, Oxford from 30 June to 2 July 2006. The conference was generously supported by the British Academy, the Egypt Exploration Society, and three funding bodies associated with the University of Oxford: the Craven Committee, the Board of the Faculty of Classics, and the

Jowett Copyright Trustees. We gratefully express our thanks to these organizations, to Christ Church, to Brasenose College, and to the many individuals who offered advice and assistance of various kinds.
In the preparation of The Language of the Papyri we have derived support and valuable suggestions from a wide range of colleagues. These include the contributors to the volume, the participants at 'Buried Linguistic Treasure', many friends in Oxford and at Macquarie University in Sydney, and Oxford University Press's anonymous referees. Rachel Yuen-Collingridge has played a key role as research assistant in the preparation of the manuscript at Macquarie University. Her careful work, especially on the checking of bibliographical references, has greatly expedited the process. A DiscoveryProject grant from the Australian Research Council provided crucial financial assistance during this phase of the process. We are also grateful to Charles Crowther, Assistant Director of the University of Oxford's Centre for the Study of Ancient Documents, for expert assistance in handling images of papyri. Finally, it is a special pleasure to acknowledge the copy-editing and numerous valuable suggestions of Leofranc Holford-Strevens and the help and guidance of Hilary O'Shea, Jenny Wagstaffe, Dorothy McCarthy, Kathleen Fearn, and all others involved at Oxford University Press in the production of the book.
T.V.E.
D.D.O.

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## Abbreviations

| ANRW | Aufstieg und Niedergang der römischen Welt |
| :---: | :---: |
| Archiv | Archiv für Papyrusforschung |
| BDAG | A Greek-English Lexicon of the New Testament and Other Early Christian Literature, 3rd edn. rev. and augm. F. W. Danker, based on W. Bauer, Griechisch-deutsches Wörterbuch zu den Schriften des Neuen Testaments und der frühchristlichen Literatur, 6th edn., and on previous English editions by W. F. Arndt, F. W. Gingrich, and F. W. Danker (Chicago and London, 2000) |
| BDR, Grammatik | F. Blass and A. Debrunner, Grammatik des neutestamentlichen Griechisch, 18th edn., ed. <br> F. Rehkopf (Göttingen, 2001) |
| BIFAO | Bulletin de l'institut français d'archéologie orientale |
| Browning, Greek | R. Browning, Medieval and Modern Greek, 2nd edn. (Cambridge, 1983) |
| $C d E$ | Chronique d'Égypte |
| CEL | Corpus epistularum Latinarum papyris, ostracis, tabulis servatarum, ed. P. Cugusi, 2 vols. (Florence, 1992) |
| CEWAL | The Cambridge Encyclopedia of the World's Ancient Languages, ed. R. D. Woodard (Cambridge, 2004) |
| CIL | Corpus Inscriptionum Latinarum |
| Clarysse-Thompson | W. Clarysse and D. J. Thompson, Counting the People in Hellenistic Egypt, 2 vols. (Cambridge, 2006) |
| DDBDP | Duke Data Bank of Documentary Papyri (all material entered to June 1996 recorded on PHI Greek Documentary Texts, CD ROM 7 |

(Packard Humanities Institute, 1991-6); online version at http://scriptorium.lib. duke.edu/papyrus/texts/DDBDP.html)

| DGE | F. R. Adrados et al. (eds.), Diccionario <br> Griego-Español, 6 vols. so far (Madrid, |
| :--- | :--- |
|  | 1980-) |
| EtClass | Les Études Classiques |
| EtPap | Études de Papyrologie |
| Gignac, Grammar | F. T. Gignac, A Grammar of the Greek Papyri |
| of the Roman and Byzantine Periods. 2 vols. |  |
| (Milan, 1976-81) |  |


|  | ance of R. B. Smith and K. A. Munson, 2nd edn. (New York, 1989) |
| :---: | :---: |
| LS ${ }^{7}$ | H. G. Liddell and R. Scott, A Greek-English Lexicon, 7th edn. (Oxford, 1883) |
| LS ${ }^{8}$ | H. G. Liddell and R. Scott, A Greek-English Lexicon, 8th edn. (Oxford, 1897) |
| LSJ | H. G. Liddell, R. Scott, H. S. Jones, and R. McKenzie, A Greek-English Lexicon. With a Revised Supplement, ed. P. G. W. Glare (Oxford, 1996) |
| Mandilaras, Verb | B. G. Mandilaras, The Verb in the Greek Non-Literary Papyri (Athens, 1973) |
| Mayser, Grammatik | E. Mayser, Grammatik der griechischen Papyri aus der Ptolemäerzeit, 2 pts. in 6 vols. (Berlin and Leipzig, 1906-38; repr. Berlin, 1970) |
| Mayser-Schmoll | E. Mayser, Grammatik der griechischen Papyri aus der Ptolemäerzeit, vol. i, 2nd edn. by H. Schmoll (Berlin, 1970) |
| NovT | Novum Testamentum |
| $N P$ | H. Cancik, H. Schneider, and M. Landfester (eds.), Der neue Pauly: Enzyklopädie der Antike, 16 vols. (Stuttgart, 1996-2003) |
| $O C D$ | Oxford Classical Dictionary, ed. S. Hornblower and A. Spawforth, 3rd edn. (Oxford, 1999) |
| OLD | P. G. W. Glare (ed.), Oxford Latin Dictionary (Oxford, 1968-82) |
| Palmer, Grammar | L. R. Palmer, A Grammar of Post-Ptolemaic Papyri, I: Accidence and Word-Formation, i: The Suffixes (London, 1945) |
| PHI 7 | see DDBDP above |
| PIR ${ }^{2}$ | Prosopographia Imperii Romani saec. I. II. III, 2nd edn. (Berlin and Leipzig, 1933-) |
| $R E$ | A. F. von Pauly, Real-Enzyclopädie der classischen Altertumswissenschaft, rev. G. Wissowa et al. (Stuttgart, 1894-1980) |


| RSR | Recherches de science religieuse |
| :---: | :---: |
| Schwyzer, Grammatik | E. Schwyzer, Griechische Grammatik auf der Grundlage von Karl Brugmanns griechischer Grammatik, i: Allgemeiner Teil, Lautlehre, Wortbildung, Flexion (Munich, 1939) |
| Schwyzer-Debrunner | E. Schwyzer and A. Debrunner, Griechische Grammatik auf der Grundlage von Karl Brugmanns griechischer Grammatik, ii: Syntax und syntaktische Stilistik (Munich, 1950) |
| Sophocles, Lexicon | E.A. Sophocles, Greek Lexicon of the Roman and Byzantine Periods (From BC 146 to AD 1100). Memorial Edition, ed. J. H. Thayer with emendations by H. Drisler (New York, 1887) |
| StudPap | Studia Papyrologica |
| TLG | Thesaurus Linguae Graecae, CD-ROM E (University of California, 2000; online version at: http://www.tlg.uci.edu) |
| TLL | Thesaurus Linguae Latinae (Leipzig, 1900-) |
| Witkowski, Epistulae | S. Witkowski, Epistulae privatae Graecae quae in papyris aetatis Lagidarum servantur, 2nd edn. (Leipzig, 1911) |
| WNT ${ }^{6}$ | W. Bauer, Griechisch-deutsches Wörterbuch zu den Schriften des Neuen Testaments und der frühchristlichen Literatur, 6th edn. by K. and B. Aland (Berlin, 1988) |

Abbreviations of journal titles which are not given above follow the practice of L'Année philologique.

Papyrological publications are generally abbreviated as in J. F. Oates, R. S. Bagnall, S. J. Clackson, A. A. O’Brien, J. D. Sosin, T. G. Wilfong, and K. A. Worp, Checklist of Editions of Greek, Latin, Demotic and Coptic Papyri, Ostraca, and Tablets, 5th edn. (BASP, Suppl. 9, 2001) and the periodically updated electronic version of the Checklist available at http://scriptorium. lib.duke.edu/papyrus/texts/clist.html. An exception is our use of P. L. Bat. for the Checklist's Pap. Lugd. Bat., while the following provisional abbreviations have not yet been included in the electronic Checklist:

Cat. Brookl. Dem.
O. Taxes
G. R. Hughes, Catalog of Demotic Texts in the Brooklyn Museum (Chicago, 2005; available online at http://oi.chicago.edu/research/ pubs/catalog/electronic.html/)
B. Muhs, Tax Receipts, Taxpayers, and Taxes in Early Ptolemaic Thebes (Chicago, 2005); available online at <http://oi.chicago.edu/ research/pubs/catalog/electronic.html/)

Sigla representing inventory numbers appear in roman type, e.g. O. Bodl. Gr. Inscr. 2868 (in Chapter 11).

Abbreviations of Greek epigraphic publications follow G. H. R. Horsley and J. A. L. Lee, 'A Preliminary Checklist of Abbreviations of Greek Epigraphic Volumes', Epigraphica, 56 (1994), 129-69.

For ancient literary authors and works abbreviations generally follow, or are expanded from, those in LSJ and OLD.

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## 1

## Introduction

T. V. Evans and D. D. Obbink

## 1. THE LINGUISTIC SIGNIFICANCE OF THE PAPYRI

Although the Greek and Latin languages have been studied since antiquity, their analysis was for many centuries based on a limited range of linguistic material. Up until the late nineteenth century scholars were dealing essentially with classical literature, as preserved in late antique and medieval manuscripts, and with the formal language found in most kinds of inscriptions. The modern rediscovery of the papyri and related sources is therefore a highly significant development. ${ }^{1}$ The new texts have not only supplemented powerfully our knowledge within that relatively narrow range of long-known linguistic types and contexts, but have also greatly expanded upon it. We now have a vast and diverse body of evidence capable of providing fresh insights into the nature of the Greek language in the postclassical period (approximately $300 \mathrm{BC}-\mathrm{AD} 600$ ) and the Latin of the imperial and late periods (approximately $30 \mathrm{BC}-\mathrm{AD} 600$ ), as well as a number of other languages in the Mediterranean and related regions, and also into contact between these various languages.

The linguistic significance of the papyri was recognized as soon as they became available in large quantities. Pioneers like G. N. Hatzidakis, W. Crönert, K. Dieterich, A. Deissmann, and A. Thumb quickly began to exploit the new material. Yet analysis of the language of the

[^0]papyri has since lagged behind other spheres of investigation, despite the sporadic appearance of important articles and monographs and the major grammatical studies of E. Mayser, L. R. Palmer, B. G. Mandilaras, and F. T. Gignac. ${ }^{2}$ While the Greek and Latin papyri can fairly be said to have transformed our knowledge of the ancient world over the past century, one cannot make the same claim convincingly in the specific area of language study. In 1973 Mandilaras wrote of 'the difficulties and problems arising from the inadequate knowledge we have of the language of the papyri'. ${ }^{3}$ We are still dealing today with linguistic resources of extraordinary richness which have hardly begun to be explored.

The reasons for slow progress reside partly in the dauntingly immense size of the overall corpus and extent of the data, as well as the special problems of preservation and accessibility associated with these texts. The investigator must work with material in various (often very poor) states of preservation. Its analysis can be highly problematic for this reason alone. Objective assessment of missing contexts or fragmentary remains, for instance, is far from straightforward. In addition, up until recent times it was often a demanding exercise even to sight specific items or related groups of texts, either because of their wide dispersal in modern collections or because of other practical difficulties of access. ${ }^{4}$ As a result, language specialists have tended to depend on published editions. Some of these, especially the older ones, are incomplete, insufficient, or not entirely trustworthy. ${ }^{5}$

Within the last decade both these problems, of preservation and access, have been ameliorated to a significant degree by technological advances. Papyrologists have characteristically been alert to the potential of technology, as evidenced by the creation of electronic resources such as the DDBDP, the HGV, the Leuven Database of Ancient Books, ${ }^{6}$ and Trismegistos. ${ }^{7}$ Access to linguistic data has for

[^1]some time been enhanced through lexically based searching of PHI 7 (this can be a blunt instrument for linguistic analysis, but is unquestionably a major asset). Digital imaging has now engineered a revolution in the discipline. In theory at least it allows any researcher in any part of the world to study papyri in far distant collections. Internet sites such as the Advanced Papyrological Information System, ${ }^{8}$ POxy: Oxyrhynchus Online, ${ }^{9}$ and the Centre for the Study of Ancient Documents ${ }^{10}$ offer easy access to high-resolution images. Their analysis will rarely be a perfect substitute for examination of originals (except where those originals, faded or damaged, cannot actually be read with the naked eye), but it has allowed a powerful forward step for research. Exciting developments have also been achieved in addressing specific problems of preservation, for instance through multi-spectral imaging of carbonized papyri or digital scanning of the ink texts from Vindolanda. ${ }^{11}$ Linguistic research is particularly well placed to benefit from these breakthroughs. The time is at last ripe for newly comprehensive research into the language of the papyri, which will demonstrate the full significance of the material.

The purpose of this book is to show the potential of that material. It gathers together contributions from seventeen scholars, presenting a variety of perspectives and methodological approaches. Our objectives have been to indicate current directions of international research into the language of the papyri and to provide a stimulus for future work.

## 2. MATERIAL, MAJOR THEMES, AND ARRANGEMENT OF THIS COLLECTION

The terms language and papyri in the title of this volume each have a broad application. Language here takes in both strictly linguistic

[^2]subjects and also matters of style, which are the focus of several of the studies. ${ }^{12}$ The net is spread still more widely to include treatment of other topics relevant to linguistic study of the papyri: onomastics, palaeography, and the ancient lexicographical tradition. Papyri is principally used with its traditional restriction to Greek and Latin texts and contrastingly inclusive application to 'all materials carrying writing in ink done by a pen'. ${ }^{13}$ But some qualifications are necessary. No implication is intended that such documents written in Egyptian, which does receive limited attention in our collection, or in Arabic, ${ }^{14}$ Aramaic, Middle Persian, etc. lack linguistic interest. Nor are other types of evidence excluded where relevant, most obviously in the case of Peter Kruschwitz's study (Chapter 9) of the Latin wall-inscriptions from Pompeii (which offer epigraphic data distinct from the formal inscriptions mentioned above). From a linguistic and stylistic or literary perspective what is most important is not the material of the textual artefacts assessed, nor the tools used in writing, but the linguistic types preserved by these texts. The significance of the language of the papyri resides especially in the way its evidence relates to that from other sources, including classical literature.

Nevertheless, the focus of the chapters included in the volume is essentially Greek and Latin documents under the aspects described above. The core evidence addressed is that supplied by the Greek and Latin texts recovered since the golden age of papyrological rediscovery in the late nineteenth century. Many thousands of Greek papyri, ostraca, and tablets and a smaller corpus in Latin are now known. The papyri and ostraca were found mainly in Egypt, but also in various other Mediterranean locations. Much additional material, especially Latin, has now emerged from as far afield as Britain. The Greek documents treated in the book range from the third century BC to the seventh century AD , the Latin documents from the first century BC to the second century AD .

[^3]The linguistic and stylistic features addressed here relate to phonology, morphology, syntax, lexicon, and onomastics. Concepts of standard language, and the significance for analysis of genre and register are specifically treated. The material is highly conducive to sociolinguistic approaches, which are well represented. ${ }^{15}$ Chapter 17 lays heavy emphasis on current directions in corpus linguistics. Issues of language contact are also addressed in several chapters (mainly, but not exclusively, in relation to Greek, Latin, and Egyptian), including bilingual interference, code-switching, and lexical borrowing.

Diachronic change, linguistic diversity, and language contact are topics central to the study of ancient languages, especially in current research. The language of the papyri allows us important new perspectives on each of these topics, and they provide the framework for the arrangement of our collection. All the essays address one or more of them, while some could arguably be placed under more than one heading. Studies of change and diversity are gathered together in Part I. Studies of language contact form an important subcategory and are grouped in Part II. The ambitious project described by Stanley Porter and Matthew O'Donnell in Chapter 17 has equal application to analysis of change, diversity, and contact. This chapter is accordingly presented separately in Part III. The logic of arrangement of chapters within each part is based on rough chronological order, but this has not been followed strictly. Complementary studies on related topics tend to be placed together (e.g. Chapters 9 and 10 in Part I, and Chapters 13, 14, and 15 in Part II).

The contributions of Part I focus on various aspects of linguistic change and diversity in Greek and Latin. Diachronic change has always received its share of attention from linguists, but John Lee's study (Chapter 2) shows in an exemplary way how our new evidence can advance its analysis. This opening chapter in the collection is not specifically concerned with the language of papyri. Lee's focus is the grammaticalization of a particular lexical item and he draws on all available sources to investigate the process. In providing the first systematic study of the full range of evidence for auxiliary $\theta \epsilon \hat{\epsilon} \lambda \omega$ during the

[^4]classical and post-classical periods he shows, however, the special contribution to our knowledge offered by the types of Greek preserved in papyri and related sources. Examination of this material reveals a previously unobserved auxiliary function of $\theta \epsilon \lambda \lambda \omega$. This 'new' use, in the sense '(please) do/(please) don't', occurs only three times in literary or sub-literary sources (according to Lee's list of examples). Its infrequent occurrence has caused it to escape notice until now, but Lee has identified fifteen further examples in papyri to confirm the special usage.

Other studies with a diachronic cast are those of Mark Depauw (Chapter 7) and Patrick James (Chapter 8). Depauw traces the rise of the metronymic in onomastic practice in early Roman Egypt. His treatment, which links the development to the impact of fiscal and social changes in the Roman period, offers a model for judicious sifting of the complex mass of data one encounters in papyrological research. James examines variation in complementation to impersonal verba declarandi in the Roman and Byzantine periods. He sets out the papyrological evidence for the impersonal verbs of declaration $\delta \eta \lambda o \hat{\tau} \tau \alpha \iota$ and $\delta \hat{\eta} \lambda o ́ v \epsilon ́ \epsilon \tau \iota$ and offers an explanation for the decline that has resulted in their absence in modern Greek.

Linguistic diversity in Greek and Latin has, by contrast with diachronic change, tended to be ignored in the past (except in terms of literary style or bilingual interference). Yet this promising subject is now beginning to attract serious interest. ${ }^{16}$ The papyri offer a remarkable opportunity for investigation of the language of individuals, of social dialects, and of regional diversity. This kind of research can be expected to modify greatly our understanding of the patterns of evidence observed in the large-scale grammars of Mayser and Gignac. Its development has been specially facilitated by the revolutionary advances in access to images of documents written in ink as described above, since the capacity to identify handwriting and text-formats here becomes crucial.

This can be seen in the studies of Willy Clarysse, Trevor Evans, Raffaele Luiselli, and Martti Leiwo, which all deal with issues of social dialect and the habits of individual authors. Clarysse (Chapter 3) addresses the varieties of language to be found in the third-century BC archive of the Fayum-based engineers Kleon and Theodoros, bringing

[^5]to bear his mastery of the Petrie Papyri (and providing a foretaste of the improved access to this fascinating material which will come with Bart Van Beek's new edition of the engineers' archive). Evans (Chapter 4) deals with the contemporary Zenon papyri, and reassesses the means by which papyrologists identify autograph texts and the language of individuals, in order to establish a more secure basis for identifications. Both treatments exploit to some extent the value of erasures and corrections in these texts for linguistic and stylistic analysis. Clarysse, for instance, comments on the importance of corrected drafts in showing the process by which a papyrus letter developed into its final form. The topic becomes central to the next study, Luiselli's treatment of stylistically motivated authorial revisions in Greek papyri of the Roman period (Chapter 5). His meticulous investigation provides a platform for further development of this highly promising sphere of analysis. Leiwo, meanwhile, taps the exciting potential of the second-century-AD ostraca from Mons Claudianus in his examination of imperatives and other directive expressions (Chapter 6). His case study of spelling and phonology in the letters of Petenephotes provides a further exploration of the language of the individual.

These contributions all address Greek topics. Those of Peter Kruschwitz (Chapter 9) and Hilla Halla-aho (Chapter 10) focus on Latin material. Kruschwitz investigates the language of Latin wall inscriptions from Pompeii, but also contributes an acute assessment of the general theoretical and methodological issues involved in addressing linguistic diversity within the different kinds of evidence explored in the volume. His treatment is complemented by Hallaaho's study of linguistic diversity in non-literary letters from various imperial-period sites, from Oxyrhynchus to Vindolanda.

Linguistic diversity is frequently linked to issues of language contact and bilingualism (as here in Leiwo's discussion of the usage of Petenephotes the kibariates), and these topics form the theme of Part II. By contrast with questions of diversity, language contact in the ancient world has attracted intense interest in recent times. The language of documentary papyri has provided valuable fuel for the discussion, as seen, for instance, in James Adams's magisterial Bilingualism and the Latin Language (2003). The contributions collected
in the present volume show that many avenues for research remain to be pursued.

Brian Muhs's study (Chapter 11) addresses a fascinating process reflected in early Ptolemaic census lists and tax receipts, the largescale transliteration and translation of Egyptian personal names into Greek. Muhs observes the variety of methods of translation preserved in ostraca and papyri and the eventual effects of Greek education on the process. Ian Rutherford (Chapter 12) explores Egyptian-Greek bilingualism and bigraphism in the Narmuthis ostraca. He argues that these challenging texts represent 'a serious, though ultimately unsuccessful' (p. 207) experiment in creating a composite script for the bicultural environment of Roman Egypt.

Three chapters treat the important topic of Latin influence on Greek, exploiting the evidence of non-literary papyri from the late Ptolemaic to Byzantine periods. Eleanor Dickey (Chapter 13) argues for the identification of two previously unidentified Latinisms manifesting themselves in Greek formulae of request. Panagiotis Filos (Chapter 14) traces the development of 'Latinate' hybrid compounds in Greek texts. Anastasia Maravela-Solbakk (Chapter 15) explores the transfer into Greek of a group of Latin technical terms describing vina fictitia. Together these studies cast fresh light on the complexity of processes of contact between the Greek and Latin languages.

Francesca Schironi's study (Chapter 16) has a different focus. She investigates the paraliterary papyrus P.Oxy. XV $1802,{ }^{17}$ which is a remarkable example of the ancient lexicographical tradition, a Greek glossary of rare, dialectal, and apparently foreign words. ${ }^{18}$ The ancient scholarly tradition reflected here has much to offer our understanding of lexicon, among other things. It deserves more attention from linguists than it has previously received, given that

[^6]lexicography, despite its fundamental importance, remains one of the more poorly developed areas in ancient-world studies.

Exploitation of new technology is a general feature of these studies, including highly effective use of electronic search tools. In Part III Stanley Porter and Matthew O'Donnell report on the development of a new electronically mounted tool, a representative corpus of documentary papyri. Its purpose is to support flexible linguistic analysis of non-literary papyri, applying the methodologies of corpus linguistics. The project is in the early stages of development and its ultimate success will depend on the effectiveness of the typology underlying its marking of data and the degree to which representativeness can be achieved. Its potential as a resource to support research on all the themes pursued in the earlier sections of this book will be clear from Porter and O'Donnell's discussion.

## 3. KEY ISSUES FOR FUTURE RESEARCH

There is much more work to be done on the major linguistic themes addressed in the present collection. We are dealing with a massive body of evidence, which has the capacity to transform our understanding of Greek and Latin on many levels. One need look no further than the advances in the study of Latin already achieved by James Adams and others to perceive how fruitful further investigation is likely to prove. ${ }^{19}$ It is therefore worth dwelling in conclusion on some of the key issues for future research which emerge from these studies.

The need to reassess our traditional terms and concepts will be central to further work. Many are in danger of collapse when approached from a linguistic perspective. This is hinted at by Leiwo when he observes that 'There is no clear-cut difference between private and public/official documents' in the letters from Mons Claudianus (Chapter 8 n. 1), while Porter and O'Donnell comment

[^7]on the classification of letter types into letters of recommendation and others, suggesting refinement is necessary (Chapter 17, §5.1.5).

That need arises on several different levels. Thus, the boundaries between literary, paraliterary, subliterary, and non-literary texts are not always clear. Text-types are classified both in terms of content (for example public/official vs. private) or of formal structure (for example letter vs. memorandum, letter vs. petition, or letter vs. account). But in various respects these distinctions frequently break down. ${ }^{20}$ Similarly, terms like 'standard', 'substandard', 'everyday', and 'vulgar' language are commonly used in the modern literature in more or less vague ways that invite further refinement.

Research into the language of the papyri has much to offer in sharpening the application of this established terminology. Kruschwitz's distinction in this volume, for instance, between what he terms 'everyday language' and 'vulgar Latin' offers a clear example of the improved basis for analysis which can thus be gained (Chapter 9 n. 6). This will allow significantly more accurate assessment of the character of a text, the complex relationship between standard and substandard language, and the educational level of its author than has previously been possible. An example of such assessment is Halla-aho's subtle conclusion on the different processes lying behind production of syntactic and morphological features of a single text (Chapter 10, §5).

The idea of 'substandard' language is another which requires development. We need to have a clear concept of what that standard is from which it diverges. In the case of Greek in particular this is yet to be worked out effectively. There has been a natural enough, but increasingly unsatisfactory tendency to interpret substandard material in relation to literary prose of the classical period. Teodorsson employs Attic inscriptions in The Phonology of Ptolemaic Koine (1977), but that material too, remote in genre and registers, has restricted value for analysing many linguistic categories. Far more apposite points of comparison can be found among the papyri and related sources themselves. An example is the Zenon Archive's letters from Apollonios, the finance minister of Ptolemy II Philadelphos,

[^8]and from Apollonios' circle, which provide a key sample of the standard Egyptian Koine of the time and a crucial 'control' for assessing substandard language in that corpus. ${ }^{21}$

Another topic deserving closer attention in future is the relationship between linguistic diversity and language contact. The language of the papyri is a fertile field for studies in language contact, as brought out by the relevant essays included in our collection. Depauw's comment on the 'tempting hypothesis' (p. 126) of Egyptian influence causing the rise of metronymics, however, brings out a crucial point for such work. As it happens, Depauw makes a convincing case that such influence is not a factor in the rise of metronymics. This should in turn make us think about other causes of change and diversity more generally.

Bilingual influence or interference has commonly been suspected to cause all kinds of change or unusual usage in the language of the papyri. It has always been the easy line of interpretation. This is particularly so where a feature similar to that being assessed can actually be identified in another language lurking in close proximity. Very often, though by no means exclusively, this will in papyrological contexts be Egyptian. Nevertheless, caution is necessary. ${ }^{22}$ Additional to bilingual issues several chapters in our collection bring out other potentially motivating factors, such as the effects of natural diachronic developments or of levels of education. Here again, sharpening of the distinction between standard and substandard varieties of language offers a basis for more accurate analysis.

Great scope exists for investigating syntactic developments in both Greek and Latin during the period of the papyri. James's study (Chapter 8) provides an excellent example of the possibilities. With regard to Greek the continuing lack of a syntax volume in Gignac's Grammar of the Greek Papyri of the Roman and Byzantine Periods is keenly felt, while Mayser's treatment of the Ptolemaic material is inevitably dated. The need for future work in this area is pressing. In fact syntactic, and indeed all spheres of research will now profit from our growing sensitivity to the process of linguistic change over the

[^9]millennium of the papyri, as seen in John Lee's recent suggestion that we 'recognize a division into Early (III-I вс), Middle (I-III AD), and Late Koine (IV-VI AD). ${ }^{23}$

Lastly, the need to exploit technological advances in order to develop fresh methodologies for linguistic research should be stressed. Evans's treatment of the language of the individual in Chapter 4, for instance, combines prosopographic, linguistic, and palaeographic analysis. It would not have been practically possible a decade ago, before the advent of digital imaging.

The essays collected in this volume demonstrate the major advances which new linguistic research on the papyri offers both specifically to papyrology and related disciplines and to the general study of ancient Greek and Latin. We can expect many familiar ideas about the language of the papyri to be overturned by future research, and new and perhaps surprising discoveries to be made. That is not to ignore, however, the deep debt we owe to the great scholars of a century ago like Deissmann and Mayser, who began the process in which we are engaged.

[^10]
## I

## Linguistic Change and Diversity

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## 2

# Auxiliary $\theta \epsilon \epsilon \lambda \omega$ 

John A. L. Lee

## 1. THE GRAMMATICALIZATION OF $\theta \epsilon ́ \lambda \omega$

The future tense in Modern Greek is formed with $\theta a+$ subjunctive, as for example, $\theta \alpha$ र $\rho \alpha \dot{\phi} \omega, \theta \alpha$ र $\rho \alpha ́ \psi \omega$. This form of expression has its origin in a periphrasis with $\theta \epsilon \epsilon \lambda \omega$. The ultimate base is $\theta \epsilon \in \lambda \omega+$ infinitive, with $\theta$ '́ $\lambda \omega$ in its original meaning 'wish to', which evolves into an expression of simple futurity. The development is parallel to that in many languages, among them of course English, in which futurity is expressed by an auxiliary that originally meant 'wish/want'; or to put it in terms of grammaticalization, the lexical item 'wish/want' has evolved along the cline of grammaticality to a grammatical function, namely, to express futurity. ${ }^{1}$

The detailed history of the development in the Byzantine period is not the concern of this paper and will be touched on only briefly. It is more complicated than one might have expected, and debate continues on the details. It is not simply a matter of a single line of
 + subjunctive $>\theta \alpha+$ subjunctive; there are more steps and variants involved, as shown especially by Brian Joseph's study, which is a warning against over-simplification. ${ }^{2}$ For our purposes, let us simply

[^11]note that when the ancestor of the Modern Greek particle first appears in the twelfth century, in the form $\theta \epsilon \nu \alpha$, it does so alongside $\theta \epsilon ́ \lambda \omega+$ infinitive as an expression of futurity: the latter was still in use and continued to be for some time before its final displacement by $\theta a+$ subjunctive.

By the Byzantine period the periphrasis with $\theta \epsilon \in \lambda \omega$ had clearly prevailed over the other, earlier contenders as the means of expressing the future. The other main contenders, at the end of the Koine period, were: the old monolectic form; the present with future sense; $\mu \epsilon \in \lambda \lambda \omega+$ infinitive; ${ }^{\epsilon} \chi \chi$ + infinitive; the aorist subjunctive. ${ }^{3}$ We know with hindsight that $\theta \in ́ \lambda \omega$ was to prevail, but the issue had not yet been decided.

## 2. A NEW ASSESSMENT OF THE EVIDENCE BEFORE AD 600

But where are the beginnings of this development of $\theta \dot{\epsilon} \lambda \omega$ ? When, in the period before ad 600 , does $\theta \epsilon \in \lambda \omega$ start to show signs of being a future auxiliary? Where are the examples, and how many are there? That is the question that I want to (and will) address in this chapter. ${ }^{4}$
thelô+infinitive futures and êthela + infinitive counterfactuals in Early Modern Greek', Diachronica, 18 (2001), 59-92; B. D. Joseph and P. A. Pappas, 'On Some Recent Views Concerning the Development of the Greek Future System’, BMGS 26 (2002), 247-73; D. W. Holton, 'The Formation of the Future in Modern Greek Literary Texts up to the 17th Century', in N. M. Panayotakis (ed.), A $\mathcal{\chi} \epsilon^{\prime} s ~ \tau \eta s$ $\nu \epsilon о є \lambda \lambda \eta \nu \iota \kappa$ и́s $\lambda о \gamma о \tau \epsilon \chi \nu$ ías/Origini della letteratura neogreca: atti del Secondo Congresso Internazionale 'Neograeca Medii Aevi' (Venezia, 7-10 Novembre 1991), i (Venice, 1993), 118-28 at 119-20, 127-8; H. H. Hock and B. D. Joseph, Language History, Language Change, and Language Relationship: An Introduction to Historical and Comparative Linguistics (Berlin, 1996), 402-5 (Balkan developments); earlier Jannaris, Grammar, 552-9; A. Thumb, Handbook of the Modern Greek Vernacular: Grammar, Texts, Glossary, trans. S. Angus (Edinburgh, 1912), §226; G. N. Hatzidakis,
 1989-90), i. 197.
${ }^{3}$ Cf. Browning, Greek, 33-5. Other less frequent future-equivalents are also noted there.
${ }^{4}$ I am well aware of the older usage of shall and will maintained by some, but as this is not my own practice and is artificial for me, it is not followed in this treatment.

It is commonly said that $\theta \epsilon \in \lambda \omega+$ infinitive appears as a futureequivalent in the Koine period. Browning is the most authoritative voice on the subject. He simply states it as a fact, adding the rider that it is not common till after 600, but gives no examples. ${ }^{5}$ Browning's book was intended as a general survey, without detailed references; but if we look elsewhere it is much the same. Gignac, in his generally thorough grammar of the papyri of the Roman and Byzantine periods, speaks of the 'increasingly frequent replacement of the future tense by periphrastic constructions in the later Koine, mainly by $\theta \epsilon \lambda \lambda \omega$ iva and the subjunctive', but offers only two examples (in the same text, and in fact of $\theta \epsilon \lambda \lambda \omega+$ infinitive). ${ }^{6}$ Mandilaras likewise asserts it, but gives no examples. ${ }^{7}$ Joseph simply refers to Browning. ${ }^{8}$ Horrocks takes it for granted and does not amplify. 9 Back in 1898 Karl Dieterich did much better: he noted some instances in late funerary inscriptions, a source which proves to be a rich one when modern searching techniques are applied; but his observations slipped out of sight. ${ }^{10}$

Besides these there are a number of specialized studies, notably those of Joüon, Riesenfeld, Rödiger, Schrenk, and Wifstrand, that offer useful collections of examples (for details see Appendix I below). But they all focus on their own area of interest; they do not connect with one another nor study the phenomenon across time. ${ }^{11}$

[^12]In the lexica there is a certain amount of material, very partial, but useful as far as it goes. LSJ offer a sense II.1. 'to express a future event, like our will or shall, with eight instances cited (plus an 'etc.'). The examples are all Classical, and only half seem to me to be right, but even so, this is a beginning. ${ }^{12}$ Lampe also recognizes this sense, but has only two examples, the same two (with three others) that had been noted by Sophocles back in 1887. ${ }^{13}$ The New Testament lexica, on the other hand, are not aware of the question at all; even the probable New Testament examples escape notice, let alone others. ${ }^{14}$ Most surprising is DGE, which has no instances of this sense and apparently does not recognize its existence. ${ }^{15}$

My purpose has been to gather as many examples of $\theta \epsilon$ ' $\lambda \omega$ as a future auxiliary as I can from all previous sources, as well as those I have found myself. It must be said at once that the collection is not exhaustive. While most of the papyrological and epigraphic evidence has been checked (via PHI 7), I have not done the full examination of Greek literature that would be possible-though forbidding-by means of the TLG and would be likely to yield further material. But what I have goes some way towards answering the question. My list of examples is presented below, in reverse chronological order. A name in square brackets after a reference indicates the scholar who proposed this example (see Appendix I for key to references); if there is no name, it is my own proposal. Needless to say, all the items in the list have been thoroughly vetted; I have rejected any suggestions that are open to

[^13]doubt. The list is therefore not a list of all the proposals but only of those that have a good chance of being what we are looking for.

What are we looking for? This needs to be clear at the outset. We are looking for cases where the usual or established senses of $\theta \epsilon^{\prime} \lambda \omega$ do not seem to work, where any such sense has faded away to the point where there is not much left but futurity. By the usual senses I mean 'wish/ want' and 'be willing'; I do not include among them a meaning 'intend', as I am not sure that it is clearly established for this word (as it is for $\mu \epsilon \quad \lambda \lambda \omega)$. This fading does not rule out the possibility, even likelihood, that $\theta \epsilon \in \lambda \omega$ retained some nuance that distinguished it from the monolectic future expressing simple futurity and from other future expressions. But it is difficult if not impossible for us at this distance to appreciate such a nuance; even to define the usual senses of $\theta \dot{\epsilon} \lambda \omega$ is notoriously difficult.

In a quest to find any new semantic development, one needs to be able to produce examples that are better than just possible, but highly probable (or as John Chadwick would have put it, 'incontrovertible'). It is a severe test in this case, because it is in the nature of the phenomenon that there is gradual shading from one meaning into another, and it is hard to know in a particular instance whether the meaning really has shifted from the lexical area into the grammatical. ${ }^{16}$ I cannot claim that my examples all pass this test, but there are certainly some.

Let us take some samples from the list to illustrate these points. In the
 hard to see how, with the inanimate subject 'sovereignty', the verb can continue to have its sense of 'wish' or any other distinct semantic content; we are left with futurity. The same can be said of no. 35 (Plato Rep. 423 в) $\mu \epsilon ́ \chi \rho \iota ~ o \hat{v} \ddot{\alpha} \nu{ }^{\dot{\epsilon}} \theta \dot{\epsilon} \lambda \eta \ldots \ldots \hat{i} \nu \alpha \iota \mu i a$, where the subject is 'the city'. These are just two items from the surprisingly extensive evidence in the Classical period, notably in Herodotus and Plato.

For good examples from much later, consider no. 21 (Aesopi Fab.

 particular seems to be a periphrasis for the future. The context, with its reported speech and time expression, makes it clear that the volition of the parties described as 'we' is not in the picture.

[^14]In no. 7 (MAMA I 160.4) $\dot{\alpha} \nu \tau \iota c \theta \epsilon \mid \lambda \eta \dot{c \iota} \dot{\alpha} \nu \hat{v} \xi \epsilon \nu$, it is not a question of someone merely wanting to open the tomb; the text envisages someone actually doing so in the future and suffering the penalty. All these funerary texts (nos. 7-10, with list) are similar and provide a strong bloc of examples. We note that the dates are not from the end of Koine Greek but from the fourth, third, and even second centuries AD (many are of course not precisely datable). Among them no. 10 (I. Prusa Olymp. I 83.9) is an interesting variation. The words $\epsilon \in \dot{e} \nu \delta \delta^{\prime} \tau \iota c$ $\theta[\epsilon] \mid \lambda \hat{\eta} \dot{c} \subset \iota$ stand without an infinitive expressed: it is to be supplied by
 to give the meaning 'if anyone shall/does (alienate it, take it over)'. The simple future-auxiliary function of $\theta$ '́ $\lambda \omega$ seems inescapable.

Included in the list are one or two examples where there is some doubt. Example no. 32 (P. Hib. I 65. 25) was proposed by Mayser. ${ }^{17}$ At first sight one would be inclined to take $\theta \epsilon ́ \lambda o \mu \in \nu$ as 'I want to', but a reading of the whole letter suggests that Mayser was right. The writer is explaining his plans and simply states what he will do to make up the deficit if he can get some help with the rest. It is not, then, an expression of a wish but a description of future action. If accepted, this would be contemporary with no. 31 (LXX Exod. 2. 14) $\mu \dot{\eta} \dot{\alpha} \nu \epsilon \lambda \epsilon \hat{i} \nu$ $\mu \epsilon \subset \grave{v} \theta \epsilon \dot{\epsilon} \lambda_{\epsilon \iota c}$, which I think is sound. ${ }^{18}$

In an example like no. 16 (Hermas, Vis. 3. 1. 9) $\theta \epsilon$ '́ $\lambda_{o v \tau o c ~ o v ̂ v ~}^{\mu o v}$
 transition. Is it 'wishing to' or 'being about to'? Either is possible. But the two clearer examples of 'be about to' in the same author (no. 17, and 3.3.1) tip the balance in favour of the latter.

Two general observations may be made at this point. Quite a number of the examples are of a past tense ( $\ddot{\eta} \theta \epsilon \lambda o \nu, \dot{\eta} \theta \dot{\epsilon} \lambda \eta<\alpha)$, where I have translated 'was going to', 'was about to'. Some overlap or competition with $\mu \epsilon \quad \lambda \lambda \omega$, the standard word for this from early Greek onwards, seems obvious. A full study is needed before any firm conclusions can be reached about $\mu \epsilon^{\prime} \lambda \lambda \omega$ in Koine Greek and its relation to $\theta \epsilon^{\prime} \lambda \omega$, but

[^15]one suggestion may be put forward here. If we take the New Testament, where $\mu$ é $\lambda \lambda \omega$ is common ( 109 occurrences), as a sample, we see that while $\mu \epsilon ́ \lambda \lambda \omega$ is sometimes used like $\theta \epsilon \in \lambda \omega$ (as Acts 16.27 с $\pi \alpha{ }^{\prime} \alpha ́ \mu \epsilon \nu$ oc $\tau \grave{\eta} \nu$ $\left.\mu \dot{\alpha} \chi \alpha \iota \rho a \nu \eta^{\eta} \mu \epsilon \lambda \lambda \epsilon \nu \dot{\epsilon} \alpha u \tau \grave{\partial} \nu \dot{\alpha} \nu \alpha \iota \rho \epsilon \hat{\imath} \nu\right)$, it most often refers to the more distant future (as John 6.71 ồ $\tau o c \gamma \grave{\alpha} \rho$ "̈ $\mu \epsilon \lambda \lambda \epsilon \nu \pi \alpha \rho \alpha \delta \iota \delta o ́ v a \iota ~ a v ̉ \tau o ́ v) . ~$ This loss of immediacy could be the reason for another contender to appear, to supply the meaning 'be on the point of'.

Secondly, I draw attention to a noteworthy fact: none of the examples in my collection shows $\theta$ é $\lambda \omega$ ivo + subjunctive; all are of $\theta$ é $\lambda \omega+$ infinitive. This is significant in the light of what came later. It is consistent with the evidence of the continuing use of $\theta \epsilon \hat{\epsilon} \lambda \omega+$ infinitive as a future expression in Byzantine Greek. A shift from infinitive to $i_{v a} v+$ subjunctive in this expression appears not to have been a feature of the Koine period at all.

## 3. A PREVIOUSLY UNOBSERVED AUXILIARY FUNCTION OF $\theta \epsilon \epsilon \lambda \omega$

Before I come to my conclusion on $\theta \epsilon \epsilon \lambda \omega$ as a future auxiliary, there is another use to be noticed. In the course of this investigation I came across what amounts to another auxiliary function of $\theta \epsilon \bar{\epsilon} \lambda \omega$, one that as far as I know has not been observed before. It was from the search of the papyri for $\theta \epsilon \in \lambda \omega$ that this discovery emerged; a connection could then be made to some literary examples not considered in this light before. A selection of examples is given below. What we see is $\theta$ é $\lambda \omega$ in positive and negative commands + infinitive (rarely imperative) in which the full semantic content of $\theta \epsilon \epsilon \lambda \omega$ has faded and the verb is simply a means of introducing or in some way nuancing the instruction contained in the infinitive. The combination appears to form a polite request, but the semantic value of $\theta \epsilon$ ' $\lambda \omega$ itself is hard to pin down. 'Please' or 'be so kind as to' are makeshifts and not true equivalents, though they give the general effect. The development would seem to come from $\theta \epsilon \in \lambda \omega$ in its sense of 'be willing'. The upshot is that we have an auxiliary reminiscent of the English auxiliary do in 'do say', 'do not say', etc.

## 4. CONCLUSION

Finally, a conclusion on $\theta \epsilon \lambda \lambda \omega$ as a future auxiliary. We have a large number of examples, over seventy, spread across a time span of more than 1000 years. How do we assess the significance of this evidence? What does it mean?

On the one hand, it seems clear that $\theta \epsilon \lambda \lambda \omega$ as a future auxiliary was more common than has been supposed. If we apply the argument that people write more carefully than they speak, and assuming that $\theta$ 白 $\omega \omega$ as future auxiliary was a vernacular feature, it could be concluded that it was in fact in frequent use in speech throughout the whole time, and has simply not surfaced much in our evidence. On that basis it might already have been the front-runner well before the end of Koine Greek. On the other hand, we find as late as the end of the Koine period, in reasonably vernacular texts, various other future expressions still competing with $\theta \epsilon \in \lambda \omega$. Moreover, some of these are not old but new contenders that had appeared in the middle and later Koine (present with future sense; $\epsilon^{\prime \prime} \chi \omega+$ infinitive; aorist subjunctive), thus showing that no one form had yet established itself. So one might conclude that $\theta$ $\epsilon$ ' $\lambda \omega$ as future auxiliary was never very common, and even by the end of the Koine period was still some way from establishing the dominance that it was to gain later. I incline to the latter view, that $\theta$ é $\lambda \omega$ was available as a future auxiliary for 1000 years, but was never more than sporadic until after Koine Greek. Though the timespan of $\theta \epsilon \bar{\epsilon} \lambda \omega$ as future auxiliary seems remarkably long, and one might be surprised that different, nearly synonymous ways of expressing the future could coexist for centuries, grammaticalization studies have shown that just such characteristics are part of the phenomenon. ${ }^{19}$

Obviously what would be helpful next is a statistical study, in as large a corpus as possible, of all the ways of expressing futurity up to the end of Koine Greek. But that is a task for the future. ${ }^{20}$

[^16]
## Examples

## $\theta \epsilon ́ \lambda \omega$ AS FUTURE AUXILIARY

1. John Moschos 19 (M 87. 2865 c-D) (c. AD 600) [Sophocles; Jannaris; Dieterich; Lampe]



For the sake of such pleasure look how much work you are going to destroy, see for what kind of sin you are going to deprive yourselves of the kingdom of heaven. Oh human nature! Are you willing to/going to forfeit all that toil for one hour [of pleasure]?

See also 184 (M 87. 3057 a) [Mihevc-Gabrovec].
2-4. Apophthegmata Patrum (M 65. 76-440) (c. ad 500)
2. Arsenios 29


 Sє́o $\mu \alpha i ́$ cov, $\mu \grave{\eta}$ схíc $\eta$ с $\alpha v ̉ \tau \eta \eta^{\prime}$.
... once a magistrianus came to him bringing the will of a certain senator his kinsman, who had left him a very large inheritance. He took it and was going to tear it up. The magistrianus fell at his feet saying, 'I beg you, don't tear it up.'

## 3. Paphnoutios 1




[The robber chief] . . . filled a cup of wine and with his sword in his hand said to the elder, 'If you don't drink, I'll kill you'. The elder, knowing that he was about to perform a command from God, and wishing to win over the robber, took it and drank.

## 4. Silouanos 1




After they had set out, his disciple found water on the way and was going to take a drink. The elder said to him, 'Zacharias, fast-day today!'

See also Makarios 1; 11.
5. Acta Conc. Ephes. 1. 1. 2, p. 40 l. 19 ed. Schwartz (ad 431)


 $\theta \epsilon o \hat{v}$ 入ó $\gamma o \nu$ тòv $\pi \rho o ̀ ~ M \alpha \rho i ́ a c ~ к \alpha i ̀ ~ \pi \rho o ̀ ~ \alpha i ́ \omega ́ \nu \omega \nu ~ v i o ̀ v ~ o ̋ \nu \tau \alpha ~ \tau o ̂ ~ \pi \alpha \tau \rho o ́ c ; ~ ;$
Or how will they be called Christians who say that the Word came into a holy man as upon a prophet and that he did not become a man by taking his body from Maria, but that Christ is one thing and the Word of God, who was the Son of the Father before Maria and before the ages, is another?
6. P. Michael. 39. 10, 14 (v AD?) [Gignac]
 $\epsilon \iota \mu \iota \mid \tau \epsilon ́ \rho a c$ cov $\epsilon \hat{i} \pi \iota \dot{\alpha} \pi \sigma \theta \alpha \nu \hat{\iota} \nu \quad \theta \epsilon ́ \lambda \iota \nu$. [Punctuation and some accents added]
Your mother is sick, she is going to die. If you can, put ... Your mother said she is going to die.
7. MAMA I 160. 4 (iv AD?)
 $(=\alpha \dot{\alpha} \nu o \iota \xi \alpha \iota){ }^{\prime}|\xi[\omega \theta \epsilon] \nu \tau o \hat{v} \gamma \epsilon \in \nu| o\left[v c, \varepsilon^{\prime \prime} \xi\right] \eta \pi \rho o ̀ c \tau \grave{\eta} \mid \nu[T \rho \iota \alpha ́ \delta] \alpha \nu$.
I...-as Valentini while alive and in my right mind set up [this tomb] as a memorial. If anyone outside my family shall open it, he will have to face the Trinity.
8. IG XIV 1563. 2 (Rome) [Dieterich]
 $\mu \dot{\eta} \kappa \lambda \mid \eta \rho о \nu о \mu \eta$ ŋ́ $\tau$.

Eirena lived seven years. If anyone shall dig her up, may he not inherit the age to come.
9. TAM V 1. 213. 7 (ad 261/2)


If anyone shall foul this tomb, he will incur the wrath of Apollo and the lady Anais for his children's children, his descendants' descendants.
10. I. PrusaOlymp. I 83.9 (ii Ad)

 $\delta \omega ́ c \epsilon \iota \tau \hat{\eta} \pi o ́ \lambda \epsilon \iota \pi \rho o c \mid[\tau] \epsilon \epsilon i \mu o v(\delta \eta \nu.) \beta \phi^{\prime} . \chi \alpha i ́ \rho \epsilon \tau \epsilon$.
... the tomb, prepared by Marcella his wife and his sons, . . . not to be taken over by someone else, together with the garden around it. If anyone does [take it], he will give to the city a penalty worth 2500 denarii. Farewell.

Similarly (total 12): IG XIV 238. 10 [Dieterich]; 625. 6 [Dieterich]; MAMA VI 234a. 6 (c. ad 275); IGBulg. I 218. 7; III 1. 996. 2; I. Kios 100. 8; TAM II 3. 1086. 5; TAM V 1. 741.8 (ad 244/5); V 1. 776. 11 (ad 305/6); V 2. 1077. 10; V 2. 1083. 7; V 2. 1107. 6.
11. Acta Xanthippae et Polyxenae 7. 25 ed. James (iii AD) [Jannaris]


[Xanthippe has caught sight of Paul walking in the street outside her house and says:] If it were possible for me, I would take hold of the hem of his clothes, so that I might see/know his goodwill, and acceptance, and fragrance.
12. P. Oxy. XIV 1763. 10 (iii ad, after 222) [Costas; Joüon, 'Les verbes']

 $\vec{\epsilon} \xi \xi \in \lambda \theta \epsilon \hat{\imath} \nu$ cùv $\theta \epsilon \hat{\omega}$.
Up till today the grain-supply ships have not left so that we could leave, yet I have nothing to do here. They say that we will leave by the 15th with God's help.
13. P. Michael. 17. 3 (ii-iii AD)
 $\alpha u ̉ \tau \grave{\partial} \nu \mu \epsilon \tau \epsilon \nu \epsilon \prime \gamma \kappa \alpha \iota$.
If you know that you will transfer the grain to Pepsa, write [and tell me] how we are going to transfer it.
14. Xen. Eph. 2. 13.3 (ii-iii Ad)


It was necessary for Anthia to be sacrificed in that manner. When all was ready and they were about to hang the girl up, a rustling was heard in the bushes and the sound of men moving.
15. P. Oxy. X 1293. 18 (ad 117-38)
 $\dot{\alpha} \phi \epsilon i v a \iota \mu \epsilon ́ \rho o c \mid \mu \grave{\eta}$ є̇vє́vкас.
I am not doing this [i.e. asking for confirmation of receipt of a previous load of oil] on our account, but because of the camel-drivers, in case any of them leaves part [of the load] and does not bring it.
16-17. Hermas, Vis. (ii AD)
16.3.1. 9



She says to me, 'Sit here.' I say to her, 'Lady, let the elders sit first.' 'Do as I say', she says, 'Sit.' Then when I was about to sit on her right she stopped me and signalled to me with her hand to sit on her left.
17. 3. 2. 3


After she said this she was going to leave; but I fell at her feet and asked her by the Lord to show me the vision which she had promised.

See also 3. 3. 1.
18. Hypothesis of Euripides, Alexandros. P. Oxy. LII 3650. 29 (early ii ad) ${ }^{21}$



 $\eta_{\eta} \nu \alpha \kappa \alpha ́ c \theta \eta \lambda \epsilon ́ \gamma \epsilon \iota \nu \tau \grave{\eta} \nu \dot{\alpha} \lambda \dot{\eta} \theta \epsilon \iota \alpha \nu$.
... who, supposing they had been defeated by a slave, urged Hekabe to kill him. When Alexandros arrived, Kassandra in a raving state recognized him and prophesied what would happen; but Hekabe as she was about to kill him was prevented: the man who reared him arrived and because of the danger was compelled to tell the truth.

## 19-20. Vita Aesopi G ed. Perry; Ferrari (i ad)

19.99. 6




At the time when animals had the same speech as human beings, a poor man lacking sustenance caught grasshoppers called hummers, and pickled them, and offered them for sale at a certain price. He caught a certain grasshopper and was about to kill her, but she, seeing what was going to happen, said to the man....

[^17]20.91. 9



The interpretation of the sign is this: one of the reigning kings will for certain reduce you from freedom to slavery, nullify your laws, and put the stamp of his power on you.
21. Aesopi Fab. 142 ed. Chambry, " $I \pi \pi о с к \alpha i$ ст $\rho \alpha \tau \iota \omega ́ \tau \eta \subset$






When the war ended, the horse served at various tasks and carried heavy loads.... When war was declared again and the trumpet called, the master put the bridle on the horse, put his armour on and mounted. But the horse continually fell down because he had no strength. He said to his master: 'Go with the foot soldiers now. You turned me from a horse into a donkey; how will you get a horse again from a donkey?

## 22-26. New Testament (i Ad)

22. Matthew 26. 15


Then one of the Twelve called Judas Iscariot went to the chief priests and said, 'What will you give me and I will hand him over to you?'
23. Mark 6. 48 [Turner; Schrenk; Joüon, ‘ $\Theta \epsilon \in \lambda \epsilon \iota \nu$ '; Taylor; Bratcher and Nida; al.]




Seeing them struggling in their rowing, since the wind was against them, about the fourth watch of the night he came to them walking on the sea; and he was going to go past them, and when they saw him walking on the sea they thought it was a ghost, and cried out.

Cf. John 6. 21 [Riesenfeld; Schrenk]
24. John 1. 43 [Riesenfeld; Schrenk; Joüon, ' $\Theta \epsilon \in \lambda \epsilon \iota \nu$ ']


The next day he was about to go out into Galilee and he finds Philip. And Jesus says to him, 'Follow me'.
25. Acts 14. 13 [Riesenfeld; Schrenk]





 av̇тoî.

They called Barnabas Zeus and Paul Hermes, since he was the leader in the speeches. The priest of Zeus Before the City brought bulls and garlands to the gateway and together with the crowd was about to offer sacrifice. The apostles Barnabas and Paul, when they heard of it, tore their clothes and leapt into the crowd crying out and saying, 'Men, why are you doing this?...' With their words they barely stopped the crowd from offering sacrifice to them.
26. Acts 19.33




Some of the crowd instructed(?) Alexander, whom the Jews put forward. Alexander motioning with his hand was about to make a defence to the popular assembly. But when they realized he was a Jew, with one voice they all cried out for about two hours, 'Great is Artemis of the Ephesians!'
27. Test. XII Patr., TReub., 1.7 ed. De Jonge (c. ad 50?) [Sophocles; Jannaris; Lampe]

 $\eta \geqslant \theta \epsilon \lambda \epsilon$ Kúpıoс $\dot{\alpha} \nu \epsilon \lambda \epsilon \hat{\imath} v \mu \epsilon$.
I tell you that he struck me with a great affliction in my flanks over seven months, and if Jacob our father had not prayed for me to the Lord, [I tell you] that the Lord would have destroyed me. ${ }^{22}$

[^18]28. P. Oxy. LV 3806. 7 (ad 15)



 $\alpha \rho \epsilon ́ c \mid \kappa \epsilon \iota \alpha v ̉ \tau \hat{\eta} \iota \geqslant \geqslant$ ov̉.
Since... -onios is sailing up I decided I must greet you in writing and ask you to write to me about what you want, for I will gladly do it. I apply to/ attend on your brother every day in case he will send you letters. Show Philous the specimen of the wool and write and tell me if she likes it or not.
29. LXX Tobit 3. 10S (ii вс?) [Schrenk]

 $\lambda \epsilon ́ \gamma \epsilon \iota, \mu \dot{\eta} \pi о \tau \epsilon$ ỏvєıठícucıv тòv $\pi \alpha \tau \epsilon ́ \rho \alpha ~ \mu о v . . . . ~ \chi \rho \eta с \iota \mu \omega ́ \tau \epsilon \rho o ́ v ~ \mu о i ́ ~ \epsilon ́ c \tau \iota \nu ~ \mu \grave{\eta}$ $\dot{\alpha} \pi \alpha ́ \gamma \xi \alpha c \theta \alpha \iota, \dot{\alpha} \lambda \lambda \dot{\alpha} \delta \epsilon \eta \theta \hat{\eta} \nu \alpha \iota ~ \tau o \hat{v} K v \rho i ́ o v ~ o ̋ \pi \omega c ~ \dot{\alpha} \pi o \theta \alpha ́ \nu \omega . .$.
On that day she was grieved in her soul and wept, and she went up to her father's upper room and was going to hang herself. And she considered again and said, 'Never let them reproach my father.... Better for me not to hang myself but to pray to the Lord that I might die'.

## 30. LXX Tobit 6. 15S





I have heard that she has already been given in marriage to seven men and they died in their bridal chamber, on the night when they went in to her they would die. And I heard it said that a demon kills them. And now I am afraid, because [the demon] does not harm her, but whoever comes near/wants to come near her it kills.
 $\pi \rho о с а \gamma o ́ v \tau \omega \nu \alpha \hat{v} \tau \hat{\eta}$. Because a demon loves her, who does not harm anyone except those who approach her.
31. LXX Exod. 2. 14 (iii вс)



the öть clause, rendered 'because the Lord wanted to kill me'. Such a supplement is unnecessary if $\theta \epsilon$ ' $\lambda \omega$ has the auxiliary use (which they may not have considered).



He looked this way and that, and saw no one, so he struck the Egyptian and buried him in the sand. Going out the next day he saw two men, Hebrews, fighting. He said to the one who was doing harm, 'Why do you strike your neighbour?' He said, 'Who appointed you ruler and judge over us? Are you going to kill me the way you killed the Egyptian yesterday?'
32. P. Hib. I 65. 25 (c. 265 вс) [Mayser]


[The writer has asked the recipient for help in supplying part of the grain he owes and explains how he will obtain the rest:] I want to/am going to purchase the remainder of the grain from the state, so that there may be no arrears against me.

33-35. Plato (iv bc)
33. [Plato], Alkib. I 122 d [Wifstrand]



For in this matter, if you consider the wealth of the Lacedaemonians, you will recognize that things here are very much inferior to those there.
34. Protag. 334 в [Wifstrand]

 $\dot{\epsilon} \pi \iota \beta \dot{\alpha} \lambda \lambda \epsilon \iota \nu, \pi \alpha ́ \nu \tau \alpha \alpha$ a $\pi o ́ \lambda \lambda \nu c \iota \nu$.
$\ldots$...as for example dung, which when applied to the roots of any plants is a good thing, whereas if you were to put it on the young shoots and twigs it destroys all.
35. Rep. 423 в [LS $\left.{ }^{7}, \mathrm{LS}^{8}\right]$
 $\mu i \alpha, \mu \epsilon ́ \chi \rho \iota \tau o v ́ \tau o v ~ a \ddot{v} \xi \epsilon \iota \nu, \pi \epsilon ́ \rho \alpha$ $\delta \grave{\epsilon} \mu \eta^{\prime}$.
'What measure?' he said. 'In my opinion this one', I said: 'To the point where [the city], while increasing in size, will still be one, to that point will [the guardians] let it grow, and no further'.

See also Theaet. 162 e; Parm. 158 c; Alkib. I 122 b, c; Charm. 174 c; Lysis 217 a, c; Meno 71 A; Hipp. Mi. 373A; Rep. 581 с [all Wifstrand]; 436 в [LS7, $\left.L^{8}\right]$.
36. Aristophanes, Wasps 536 ( 422 вс) [LS ${ }^{7}$, LS ${ }^{8}$; Jannaris; LSJ] ${ }^{23}$

$\kappa \alpha i \begin{array}{ll}\pi \epsilon \rho i \\ \tau \omega & \pi \\ \pi \alpha \\ \nu & \tau \nu \\ \text {, }\end{array}$


[Chorus to Bdelykleon:] You see how great the contest is for you and how everything is at stake, if he wins now-which I hope won't happen.
37. Antiphon 4. 2. 7 (v вс) [Rödiger]


That I am unjustly accused I have demonstrated; but I will show that my accusers are themselves liable to all the accusations they bring against me.

## 38-40. Herodotus (v вс)

38. 39. 109. 4 [LSJ]

 $\mu$ е́ $\boldsymbol{\gamma}$ стос;
If on his death the sovereignty passes to this daughter, whose son he is now killing by my hand, am I not hereafter in extreme danger?
1. 2. 14. 1 [Waddell]



If, as I said before, the land below Memphis (this is the part that is increasing) should increase in height at the same rate as in the past, isn't it inevitable that the Egyptians who live there will go hungry...?
1. 9. 89. 2


Artabazos, realizing that if he were to tell them the whole truth about the battles, he and his army would be in danger of destruction,...

See also Hdt. 1. 32. 3; 2. 11.4 [LSJ]; 2. 99. 3; 3. 12. 1; 7. 10d. 2 [Rödiger]; 7. 49. 4 [LSJ].
${ }^{23}$ The source lies earlier: this example is noted in the Paris edn. (1831-65) of Stephanus' Thesaurus.
41. Sophocles, Ant. 1040 (v вс) [Rödiger]
$\tau \alpha ́ \phi \omega \delta^{\prime}$ є̇кєîvov oư $\chi i$ i к $\rho \dot{\psi} \psi \epsilon \tau \epsilon$,
 $\phi \epsilon ́ \rho \epsilon \iota \nu \nu \iota \nu \dot{\alpha} \rho \pi \alpha ́ \zeta o \nu \tau \epsilon c$ є́c $\Delta ı o ̀ c ~ \theta \rho o ́ v o v c, ~$
[Creon to Teiresias:] You shall not bury that man, not even if Zeus's eagles seize him as food and carry him to Zeus's throne.
42. Aeschylus, Cho. 851 ( 458 вс) [Rödiger]






Chorus: We heard the story; but you pass inside and learn [it] from the strangers. There is no strength in messengers' reports like learning in person from them.
Aegisthus: I will see and examine well the messenger, whether he himself was present close by when [Orestes] died, or tells by learning from an uncertain report.

Cf. also Sophocles, OC 1291 (end of v вс); Euripides, Or. 770 ( 408 вс); Aeschylus, Cho. 904 [all Rödiger].
$\theta \epsilon ́ \lambda \eta c o \nu, \theta \epsilon \lambda \eta^{\prime} \subset \alpha \tau \epsilon=$ '(Please) do '
P. Ant. III 197. 2 (vii AD) $\theta \epsilon \lambda \eta \eta^{\prime} c a \tau \epsilon \subset \tau \rho \hat{\omega} c \alpha \iota ~ \tau \hat{\varphi} \pi \alpha \rho o ́ v \tau(\iota) ~ \alpha ̉ \nu \theta(\rho \omega ́ \pi \omega) \mid$ $\dot{\alpha} \nu \in \rho \chi o(\mu \epsilon ́ v \omega)$ i $i \pi \pi \alpha ́ \rho(\iota \alpha) \tau \rho i ́ \alpha .$.
Please saddle three ponies for this man who comes up...
P. Cair. Masp. I 67061. 1 (vi AD) $\theta \epsilon \lambda \hat{\eta} \subset \alpha \tau \epsilon$ ô̂v $\pi \alpha \rho \alpha \chi \rho \hat{\eta} \mu[\alpha \tau o \hat{v} \tau o] \mid \pi o \iota \hat{\eta} \sigma \alpha \iota$.
P. Oxy. X 1300. 5, 8, 9 (v Ad) $\theta$ é $\lambda \eta c o \nu$ ov̂v, кú $\rho \alpha \mu \dot{\eta} \tau \eta \rho$, $\alpha \pi o c \tau i ̂ \lambda \epsilon \ldots \theta \epsilon ́ \lambda \eta c o v$ ov̂v, кv́pa $\mu \dot{\eta} \tau \eta \rho$, à $\gamma o \mid \rho \alpha ́ c \epsilon \ldots$ каi $\theta_{\epsilon} \lambda[\eta]$ cov $\lambda \alpha \beta \hat{\imath} \nu \tau o ̀ ~ к о v к \lambda \iota \nu . . . ~$
P. Oxy. XVI 1941. 5 (v AD) $\theta \epsilon ́ \lambda \eta|c o \nu ~ \dot{\alpha} \pi o c \tau \hat{\eta} \nu \alpha \iota ~ \tau \hat{\eta} \subset \gamma \epsilon \omega \rho| \gamma i ́ a c ~ \mu \eta \chi \alpha \nu \hat{\eta} c$ Cтúmovoc...


Do send the signet quickly without delay, mama: we don't have one to use.


 $\pi \alpha \rho a ́ c \chi o v ~ \alpha v ̇ \tau o i ̂ c . . . ~$


Just rest your front feet against the wall and hold your horns up, and I will run up [out of the well] and pull you up too.




Don't have any concern about our sister Maria, your wife. For we will not, God willing, allow her to want for anything.



If you are willing to hear, keep quiet and learn; do not obstruct what is being said, but be patient...


Don't stay away from us tomorrow, sir, on the pretext of the water, [but come] so that we can irrigate the large field.
P. Wisc. II 74. 5, 20 (iii-iv ad) кaì mávoı (= $=$ ávv) $\chi$ píav è $\chi \omega\{\imath \uparrow\} \mu \in \nu \tau \hat{\eta}$

 v̈ $\subset \tau \in \rho a \mu \epsilon \tau \alpha \mu \epsilon \lambda \dot{\eta}<c>\eta c$.





## Appendix I: Key to Short References in the List of Examples

The following expansions act as a key to the names given in square brackets in the list of examples (see also Abbreviations). Short references are given for works already cited in the footnotes.
Bratcher-Nida $=$ R. G. Bratcher and E. A. Nida, A Translator's Handbook on the Gospel of Mark (Leiden, 1961).
Costas $=$ P. S. Costas, An Outline of the History of the Greek Language: With Particular Emphasis on the Koine and the Subsequent Stages (Chicago, 1936).

Dieterich $=$ Dieterich, Untersuchungen (see n. 10).
Gignac $=$ Gignac, Grammar.

Jannaris $=$ Jannaris, Grammar.
Joüon, ‘ $\Theta \epsilon \in \lambda_{\epsilon \iota \nu}=\mathrm{P}$. Joüon, ‘ $\Theta \epsilon \in \lambda \epsilon \iota \nu$ au sens d’ "être sur le point de" dans Jean 1, 43', RSR 29 (1939), 620-1.
Joüon, 'Les verbes' $=\mathrm{P}$. Joüon, 'Les verbes $\beta$ ov́خo $\mu \alpha \iota$ et $\theta \epsilon ́ \lambda \omega$ dans le Nouveau Testament', RSR 30 (1940), 227-38.
Lampe $=$ Lampe, Lexicon.
Mayser $=$ Mayser, Grammatik.
Mihevc-Grabovec $=$ Mihevc-Grabovec, Études (see n. 5).
Riesenfeld $=$ H. Riesenfeld, Zum Gebrauch von $\theta \epsilon \in \lambda \omega$ im Neuen Testament (Uppsala, 1936).
Rödiger $=$ R. Rödiger, ' $\beta$ ov́خo $\mu a \iota$ und ${ }^{\epsilon} \theta$ '́ $\lambda \omega$ ', Glotta, 8 (1917), 1-24.
Schrenk $=$ G. Schrenk, ' $\theta \epsilon \in \lambda \omega, \theta \epsilon \epsilon \lambda \eta \mu \alpha, \theta \epsilon \in \lambda \eta c \iota c$ ', in G. Kittel (ed.), Theological
Dictionary of the New Testament, trans. and ed. G. W. Bromiley (Grand Rapids, 1964-76), iii. 44-62.
Sophocles $=$ Sophocles, Lexicon .
Turner = C.H. Turner, 'Marcan Usage: Notes, Critical and Exegetical, on the Second Gospel', JThS 28 (1927), 349-62.
Waddell = W.G. Waddell (ed.), Herodotus, Book II (London, 1939).
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## 3

# Linguistic Diversity in the Archive of the Engineers Kleon and Theodoros 

Willy Clarysse

## 1. INTRODUCTION

The archive of the architecton Kleon and his successor Theodoros was discovered in 1899 by Flinders Petrie in mummy cartonnages in the cemetery of Gurob at the entrance to the Fayum. It was published by Mahaffy in P. Petr. I (1891) and P. Petr. II (1893) and partly republished by Smyly in P. Petr. III (1905). ${ }^{1}$ Though the three Petrie volumes are rather unsatisfactory and extremely cumbersome to use, they have remained the standard edition until the present day. Within the Leuven project of re-edition of the Petrie Papyri, Bart Van Beek has now finished a re-edition of the archive. ${ }^{2}$ All originals have repeatedly been checked in Dublin, London, and Oxford. The final publication will appear in 2010 in Collectanea Hellenistica, a series sponsored by the Union Académique Internationale. ${ }^{3}$ When it comes out, P. Petr. III 42 and 43 , with their many subdivisions, will disappear, but the new edition will also incorporate texts that were thus far not considered part of the archive of Kleon, and a lot of unpublished fragments. The number of texts has nearly doubled to 120, but many of these are mere fragments and not useful for the present study, which will mainly

[^19]deal with syntactical features visible only in fully preserved sentences (see the Appendix below for the new numbers which texts discussed here will have in Van Beek's forthcoming edition).

The archive mainly deals with the engineering activities of Kleon and his successor Theodoros between 264 and 237 bc: works on the irrigation canals and in the stone quarries in the Fayum. I shall not consider the accounts, nor the contracts for repairing canals: the former hardly contain any material for the study of syntax, the latter are written by professional scribes according to fixed formulae and therefore too far away from the spoken word.

My source material is the following texts:
(i) the private letters from Kleon's wife Metrodora and his sons Polykrates and Philonides, who lived in Alexandria (15 letters);
(ii) the letters addressed to Kleon and Theodoros by official colleagues in the Arsinoites ( 75 letters);
(iii) the petitions addressed to Kleon and Theodoros by workmen, mainly quarrymen ( 5 petitions);
(iv) the letters written in the offices of the engineers ( 12 items, drafts and registers of outgoing correspondence).

I have compared the language of the family letters, most of which were commented upon in Witkowski, Epistulae nos. 1-10, with the papers Kleon and Theodoros gathered in their official function as engineers in the Arsinoites. Some of these are perfect examples of carefully worded officialese, whereas others come from lower-class Greeks and from Egyptian stonecutters and present a rather different kind of Greek. The drafts written in Kleon's offices allow us to see how a letter received its final form. I shall pay special attention to syntax and to the use of connecting particles, which may be a measure of the level of Hellenization, but sometimes also of the care which the writer spent on his product.

## 2. PRIVATE CORRESPONDENCE

First the private correspondence. There are about ten letters from Kleon's sons, Polykrates and Philonides, and two from his wife

Plate 3.1. P. Petr. I 30: Letter from Polykrates to his father (Kleon)

Metrodora. The family letters use the polite introductory phrase кад $\hat{\omega} с$
 Philonides end their letters with the respectful $\epsilon \dot{v} \tau \dot{\tau} \chi \epsilon \iota$, which is normally used for petitions to the king or to high officials, not for correspondence inside the family. ${ }^{4}$

Polykrates' handwriting is close to that of literary papyri and his letters have indeed often been included in palaeographic studies as examples of well-dated literary hands (Plate 3.1). His style is also careful and rhetorical. In a short letter (P. Petr. I 30, which was included by Wilamowitz in his Griechisches Lesebuch ${ }^{5}$ he twice uses the $\mu \dot{\epsilon} \nu . . . \delta \epsilon ́$ balance:




Similarly Philonides in Witkowski, Epistulae 8 (P. Petr. II 13. $19=$ III 42. H. 5) uses $\mu \grave{\epsilon} \nu \ldots \delta \epsilon$ twice. In between there is even a double anaphora of

[^20] $\dot{\alpha} \pi \epsilon \lambda \theta$ óv $\tau o c$, which gives his text a definite literary flavour.

In a short memo (hypomnema) to Phileas, thus far unpublished, ${ }^{6}$ Kleon excuses himself that for reasons of ill health he cannot be present and asks his correspondent to send somebody in his


$M \epsilon ̀ \nu . . \delta \epsilon \epsilon^{\prime}$ is common in rhetorical showcases, e.g. in legal texts, but rare in private letters. The examples above show a conscious effort to enhance the style of these private letters. ${ }^{7}$

Several other particles used in the correspondence of Kleon's family are quoted in Mayser's Grammatik among the papyrological survivals of the earlier extensive use of particles. In the Koine the classical abundance of particles is quickly diminishing, ${ }^{8}$ even with such authors as Aristotle and Polybius, and certainly in the papyri. But in the family correspondence of Kleon there are still a lot to be found.
$O \dot{v} \mu{ }_{\eta} \nu$ belongs to 'der höhere Stil' according to Mayser. ${ }^{9}$ Except for the expression ov $\mu \dot{\eta} \nu \dot{\alpha} \lambda \lambda \alpha$, a favourite of Aristotle and Polybius, ${ }^{10}$ used by Philonides in Witkowski, Epistulae 4 (P. Petr. II. $16=$ III 42. H. 3), l. 13 (there are about 20 instances of this combination in the Ptolemaic period, ${ }^{11}$ hardly any in the Roman period, quite a few in the late Roman and Byzantine period) the combination ov $\mu \eta^{\prime} \nu$ is very rare. The only example given by Mayser is in Philonides' letter

[^21]Table 3.1. Chronological distribution of $\gamma \epsilon$


Witkowski, Epistulae 8 (P. Petr. II 13. 19 = III 42. H. 5), 1. 3: $[o v ̉] \mu \grave{\eta} \nu$


The enclitic $\gamma \epsilon$, common in the classical language, all but disappears in the later Ptolemaic papyri, except for some fixed expressions such as $\epsilon i \delta \grave{\epsilon} \mu \dot{\eta} \gamma \epsilon$ and $\nu \hat{v} \nu \gamma \epsilon$. Out of a total of 43 examples for the whole third century вс two are found in that same letter of Philonides. Notice that $\gamma \epsilon$ and ${ }^{\prime} \rho \alpha$ return in the later Roman and early Byzantine period (see Tables 3.1-2), especially in combination with каíтoı and $\mu \epsilon \in \nu \tau o \iota$. This resurgence of classical usage is mainly found in the notarial and administrative documents, presumably a reflection of the Atticistic tendencies of later learned Greek.

For ${ }_{\alpha} \rho \alpha$ in conditional sentences, 5 examples are given by Mayser, one of them in Witkowski, Epistulae 8 ( $=$ P. Petr. II 13. 19), 1. 9: $\epsilon i \delta^{\prime}$

[^22]Table 3.2. Chronological distribution of $\gamma \epsilon$ and ${ }_{\alpha} \rho \alpha$

${ }_{\alpha} \rho \alpha \mu \dot{\eta}$ ’ ó $\rho \alpha \hat{\iota}$ cỏv $\delta v \nu \alpha \tau o ́ v$ 'if you see that it is not possible (but I do not think this will be the case)'. ${ }^{13}$

Mayser, Grammatik ii/3. 169 gives three examples of the particle каíтoь, ${ }^{14}$ one of which has been corrected in the meantime. The others are to be found in a Zenon papyrus (P. Cair.Zen. IV 59638, 1. 11) and in a letter by Philonides (P. Petr. III 146). Again this particle enjoys a revival in the Byzantine period.

Each of these particles or particle complexes is exceptional, but the combination of the four ( $\mu \epsilon \dot{\nu} \ldots \delta \epsilon^{\prime}, ~ o v \dot{v} \mu \dot{\eta}^{\prime} \nu,{ }_{\alpha} \rho \alpha$ and $\gamma \epsilon$ ) in a mere ten lines of text gives this letter of Philonides a literary flavour compared to contemporary letters in the Zenon archive.

For this reason a peculiar orthographic feature of Philonides' letters may also be significant. With a single exception, Philonides writes the verb $\pi o \iota \epsilon \in \omega$ as $\pi o \epsilon \in \omega$, omitting the iota:

[^23]Witkowski, Epistulae 1 (P. Petr. I 30. $1=$ III 42. H. 4), l. 1 (ка入へ̂с $\pi о є \hat{c})$;
Witkowski, Epistulae 8 (P. Petr. II 13. 19 = III 42. H. 5), l. 11 ( $\pi$ ô̂саı), but cf. l. 14 ( $\pi$ oı $\epsilon \hat{\imath})$ );
P. Petr. II 42. C (= III 42. H. 6), ll. 10 ( $\epsilon \pi o ́ \eta \subset \epsilon \nu), 23$ ( $\epsilon \pi \epsilon \pi о \eta$ ŋ́кє );

Witkowski, Epistulae 5 (P. Petr. III 42. H. 7), l. 5 ( $\pi[o] \eta{ }_{\eta} \in \iota \nu$, corrected here from the original in Dublin);
P. Petr. III 146, l. 6 ( $\pi o \eta$ र́coucıv).

On the basis of this peculiarity Edgar proposed to identify Philonides with the priest of Asklepios, who wrote a letter to Zenon (P. L. Bat. XX 42). Interchange between oı and o is well attested, especially with the verb $\pi o \iota \epsilon \epsilon \omega$ in its forms with $\pi o \iota \eta-$ and $\pi o \iota \epsilon \iota$. According to Mayser and Schmoll $\pi o$ - counts for about 15 per cent of the examples against 85 per cent for the regular form $\pi о \iota$ - in the third century вс. ${ }^{15}$ In the second and first centuries the phenomenon becomes even more widespread. But Philonides is exceptional in using $\pi o-$ systematically. Later grammarians consider $\pi o^{-}$for $\pi o \iota-$ an Atticism (oi
 679. 24). In Attica the orthography $\pi o$ - is especially popular in the period 400-300 вс and decreases after 300 вс. ${ }^{16}$ For Philonides the orthography without iota may indeed have been a conscious and somewhat pedantic imitation of Attic pronunciation or orthography.

In contrast, particles in the letters and petitions of ordinary people are far less diverse: $\delta \epsilon \in, \gamma \alpha ́ \rho$, ov̂v make up nearly the full repertoire. As I have shown elsewhere, letters by Egyptians often drop the particles altogether. ${ }^{17}$ An interesting example in our archives is the letter written by the quarrymen of Pastontis, P. Petr. II 4. 9. Though it has been sent to Kleon and bears a short docket from Kleon's offices on the back, it has the look of a draft (Plate 3.2). In ll. 6-7 $\epsilon^{\prime \prime} \omega c \tau \hat{\eta} c ~ c \eta ́ \eta \epsilon \rho o \nu \quad \dot{\eta} \mu \epsilon ́ \rho a c$ was changed into ${ }_{\epsilon}{ }^{\prime} \omega c^{`} \Theta \omega \grave{v} \theta^{\prime} \iota$, which is clearly a correction meant to give a more precise date (the letter was sent on the ninth of Thoth). But in 1.3 the writer added каí between the lines, and in 11.7 and 9 he added $\mu \epsilon v^{\prime}$ and ov̂v respectively. It is clear that at first the Egyptian scribe used asyndetic constructions, and added the conjunctions as an after-

[^24]

Plate 3.2. P. Petr. II 4. 9: Letter to Kleon from the quarrymen of Pastontis
thought, just as students do when they write a Greek prose composition. Notice also the addition of $\epsilon \subset \tau \iota \nu$ in 1. 9: in Egyptian a nominal sentence does not need a copula. ' $O$ то́тос $\not{\epsilon} \rho \eta \mu$ ос is a complete sentence, corresponding to Coptic птомос хшч or птомос хале (пе). The author realized that in ordinary Greek the adjective needs a verbal copula and added it before sending off the letter. A similar correction is introduced in ll. 7-8, where a word is added after $\tau \dot{\alpha} c \dot{\eta} \mu \dot{\epsilon} \rho a c$, äc
 But the whole sentence $\tau \dot{\alpha} c \dot{\eta} \mu \epsilon ́ \rho a c$, äc $\epsilon i \rho \gamma a c \mu \epsilon ́ v o \iota ~ \epsilon i c i ́ v, \delta \epsilon ́[\kappa \alpha \tau] \hat{\eta} \iota$ $\delta \iota \mu \eta \nu \omega \iota \epsilon \in \pi \epsilon$ ' $\tau \alpha \iota$, 'the days they have worked will be ten days over the two months' is awkward, because of the accusative $\tau \dot{\alpha} с \dot{\eta} \mu$ é $\rho a c$ and the
singular $\bar{\epsilon} \pi \epsilon \in \subset \tau \alpha a$. I have no solution, but I think $\delta \in \in[\kappa \alpha]$ is wrong and
 $\epsilon i \rho \gamma a c \mu \epsilon ́ v o \iota ~ \epsilon i c i v, \delta \epsilon[\hat{\imath} \tau] \hat{\eta} \iota \delta \mu \mu \eta_{\nu} \omega \iota \epsilon \pi \iota . . a \iota$, with a verb meaning 'to add' or 'subtract': e.g. 'the days that they have worked should be added to the two-month period'.

## 3. ${ }^{i v} \alpha \mathrm{AND}{ }_{o ̈}^{\circ} \pi \omega c$

As a transition to my second point, I should like to say a word about the use of the two conjunctions ${ }_{o}^{\circ} \pi \omega c$ and $i_{\nu v a}$ introducing final sentences, starting from P. Petr. II 13. 18a, a register of letters, written in cursive hand and including lots of corrections.

In the passage under discussion the writer, no doubt a clerk in the office of Kleon, made several authorial revisions when writing a note on works to be done at the landing stage of Ptolemais (El Lahun) for the imminent arrival of the king in 242 вс. ${ }^{18}$
 $\ddot{\alpha} \phi \iota \xi \iota \nu$, 'so that (it) would be raised and flattened for the arrival of the king' (ll. 5-6). He then corrected this into iv iva dे $\nu \alpha \chi \omega c \theta \hat{\eta} \iota ~ к \alpha i$
 13-14), adding the subject of the sentence and changing the abstract


Next he crossed out $i_{\nu} \nu \alpha$ and substituted for it $o \pi \omega \omega c$. Mayser noticed the change and concluded 'ein feineres Sprachgefühl auch zwischen iva und ${ }^{\circ} \pi \pi \omega$ s wohl zu unterscheiden wußte'. ${ }^{19}$ He distinguishes between ${ }^{i v} v a$, which renders a 'reinere, zielsichere Absicht des Subjects, "damit"', and ${ }^{\prime \prime} \pi \omega c$ which represents the 'Art und Weise der Erreichung des Ziels und die objective Folge . . "auf daß" '. 20

[^25]Table 3.3. Chronological distribution of $i v \alpha$ and ${ }_{\circ}^{\circ} \pi \omega c$


Mayser's subtle distinction between the two particles may apply to classical authors. Among these Thucydides and Xenophon have a preference for $o$ ö $\pi \omega c$, whereas Plato, the orators, and Polybius mostly use ${ }_{i v a}$. But in classical Attic inscriptions $i_{v a}$ is found only twice, against more than 100 attestations of ${ }^{\circ} \pi \omega \omega$, whereas in Hellenistic Athens ${ }_{i v} \nu \mathrm{comes}$ to the fore. ${ }^{21}$ In modern Greek final sentences are always introduced by $i^{i} \nu \alpha$, and ${ }_{o} \pi \pi \omega c$ has all but disappeared.

A search using the DDBDP gives a first idea of the chronological distribution of ${ }_{i}{ }^{\circ} \nu \alpha$ and ${ }_{o}^{\circ} \pi \omega c$ in the papyri (Table 3.3): ${ }_{o}^{\circ} \pi \omega c$ is still relatively frequent in the Ptolemaic period, but is eclipsed by ${ }_{i v a}^{i v}$ from the Roman period onwards. But this is only a very rough and general view of the phenomenon. The DDBDP presents hundreds of duplicates and some straightforward errors; it does not distinguish between $\stackrel{\circ}{\circ} \pi \omega c$ introducing adverbial final clauses and completive clauses after verba curandi and volendi like фроvтi'弓 $\omega$, таракалє́ $\omega$, and even $\gamma \rho \dot{\alpha} \phi \omega$. Moreover, the standard indexes, as for instance that in The Guide to the Zenon Archive (P. L. Bat. XXI), usually list the two

[^26]particles as 'passim' and are therefore not helpful in this case. It would certainly be interesting to look at this more closely. It was already noticed by Mayser that ${ }^{\circ} \pi \pi \omega c$ dominates in administrative texts and in petitions. ${ }^{22}$ In private letters, it is mainly found in the stereotypical expression $\grave{\epsilon} \pi \iota \mu \epsilon \lambda о \hat{v}$ cavтồ ö $\pi \omega c$ ט́vıaív $\eta \iota c$.
 have written to inform you'. It is found 17 times in the Ptolemaic period, but is absent in the Roman period. ${ }^{23}$ In Roman texts ${ }_{o}^{\circ} \pi \omega c$ is systematically replaced by $i_{v} \alpha$ ( 11 examples). This tendency, however, already starts in the third century вс: against the 38 instances of ö ${ }^{\circ} \pi \omega \boldsymbol{c}$ $\epsilon i \delta \bar{\eta} \iota c$ in Ptolemaic papyri are set 41 instances of $i v \alpha \alpha i \delta i \hat{\eta} \iota c$. It would be pointless to look for a subtle difference in meaning here, but it is worthwhile to draw the attention to P. Tebt. I 26, 1. 23, where the writer corrected original ${ }_{i v} \nu \alpha$ into ${ }_{\circ}^{\circ} \pi \omega c$. No doubt he felt that ${ }^{\circ} \pi \pi \omega c$ was the better word in an administrative context. As in the Kleon archive text, the correction goes from the everyday word to the formal style. ${ }^{24}$ Rather than a subtle semantic difference we should see the alternation $i_{\nu}{ }^{\prime \prime} /{ }^{\circ} \pi \omega c$ as a difference in language level: ordinary spoken language versus the official and literary style. I do not see a semantic difference between the two, but a full study of their use in the papyri, beyond the scope of the present treatment, could show in what context each of them was used.

Within the Kleon archive the preponderance of ó $\pi \omega \omega$ c in the private correspondence by both Philonides and Polykrates is rather striking, though they also use iva, even in formulaic expressions of the type
 P. Petr. II 16 (= III 42. H. 3), ll. 13-14). The use of ö ${ }^{\circ} \pi \omega c$ fits the rather formal character of their letters. The other examples of ${ }_{\circ} \pi \pi \omega c$ all come from official letters. The petitions by workmen use only ${ }_{i} \mathrm{i} a$, though ${ }^{\circ} \pi \omega c$ clauses are normally much in favour with writers of petitions.

[^27]
## 4．THIRD PERSON PLURAL IMPERATIVE

Official letters cannot only be recognized from their subject matter （taxes，public works，etc．）but also from their formatting（many letters are accompanied by an attachment，for instance），from their style，which is often rather cumbersome，with long sentences，and from typical expressions，such as oi $\dot{v} \pi о \gamma \epsilon \gamma \rho a \mu \mu \epsilon ́ v o \iota, ~ o v ̉ \kappa ~ \dot{\alpha} \gamma v о \epsilon i c$ ， $\dot{\omega} \subset a ⿱ ㇒ ⿻ 二 乚 力 \tau ~ \tau \omega c ~ \delta \grave{\epsilon} \kappa \alpha i ́, ~ e t c . ~ A ~ g o o d ~ e x a m p l e ~ i s ~ t h e ~ l e t t e r ~ f r o m ~ H e r m o g e n e s ~$ to Theodoros（P．Petr．III 43．3），in one long sentence（with a problematical supplement in 1．2：$\epsilon i l\left[\begin{array}{cc}c & o \\ \eta\end{array}\right] \tau \dot{\eta} \theta \eta<\alpha \nu \epsilon \dot{v} c v \nu \theta \epsilon \tau \hat{\eta}<\alpha \iota$ av̇roic）．One of the most striking grammatical peculiarities of the official style is the forms of the third person plural imperative，which was certainly limited to legal and administrative contexts and no longer used in daily speech（if it ever was）．Several examples are found in the official correspondence of Kleon and Theodoros．It is rather typical that Mayser has dutifully listed all the forms of the imperative third person in his grammar，but does not show any interest in the context where they appear．The instances are：

P．Petr．II 4．2；Apollonios writes to Kleon about problems with the quarry－


P．Petr．II 13．16；a letter from Philippos to Dionysios is attached to a fragmen－
 à $\rho \dot{\eta} \tau \omega c a \nu$ ai $\theta \hat{v} \rho a \iota$
P．Petr．II 13．20；a fragmentary letter from Alexandros to Kleon：$\delta o \theta \dot{\eta} \tau \omega c a \nu$
P．Petr．II 9．4；a fragmentary letter from Hermaphilos the oikonomos to Theodoros：cvv $\tau \epsilon \lambda \epsilon c \theta \dot{\eta} \tau \omega$ тò $\stackrel{\epsilon}{\epsilon} \rho \gamma o v$

## 5．UNORTHODOX GREEK

For those who are interested in the living language of Hellenistic Egypt texts written by non－professional scribes are often the most rewarding． In the archive of Kleon these are found in two places．The workmen in the quarries often stayed for long periods in the desert area and only at the end of their period were officials（ $\bar{\epsilon} \gamma \mu \epsilon \tau \rho \eta \tau \alpha i)$ sent to measure how
much stone had been worked. In the meantime they were left to themselves and sometimes they or their headmen complain to Kleon. On the whole their texts are well written, both in their handwriting and in their grammar, though they may be somewhat negligent in the use of particles, as we have seen above. The other place is the prison. Once in prison it was not easy to get out again and we know many cases of persons who stayed in preliminary detention for months. ${ }^{25}$ One person who combines quarries and prison is a certain Demetrios. He writes twice to Kleon: P. Petr. II 4.6 (henceforth termed A) is a letter written with an Egyptian rush, whereas P. Petr. II 4.7 (henceforth termed B) is a petition, written in a different hand with a Greek kalamos. The first message is written from the quarries, in the second Demetrios is in prison. Notwithstanding his Greek name he is closely involved with the Egyptian quarrymen and A is clearly the work of an Egyptian scribe. Both letters contain orthographic and syntactic peculiarities typical of a person who seems to have been more at ease in Egyptian than in Greek.
(a) Orthography: epsilon for eta. As I have shown in another study this is a typical feature of Egyptians writing Greek. ${ }^{26}$ In Demetrios' case it is only found in the text written with a rush, not in that written with a kalamos. The faulty orthography is therefore due to the scribe, not to the pronunciation of Demetrios. The second scribe in fact writes a lot of itacisms, which are absent in text A. These may well represent Demetrios' progressive pronunciation.
(b) Use of connecting particles:
 ßou入oútvov. Again the particle is introduced as an afterthought.

A, ll. 13-14: a $\tau \epsilon$ solitarium is found in $\epsilon i$ ov̂y $\pi \epsilon \rho i$ $\tau o v i \tau \omega \nu$


B, 1. 1: a $\mu \epsilon ́ v$ solitarium is found in каі $\pi \rho o ́ \tau \epsilon \rho о \nu \mu \epsilon ́ \nu \operatorname{co\iota } \gamma[\epsilon \epsilon] \gamma \rho \alpha-$ [ $\phi$ ]...
(c) A double anacoluthon is found in A, ll. 1-3, where the participles which go with the subject are introduced by a genitive absolute and the accusative ov̂cav goes with the genitive $\lambda \alpha \tau o \mu i \delta o c:$



[^28](d) The omission of the article in A, 1. $1 \overline{\kappa \eta} \kappa \alpha \tau \alpha \beta \alpha{ }^{\nu} \nu \tau o c$ for $\tau \hat{\eta} \iota \overline{\kappa \eta}$ $\kappa \alpha \tau \alpha \beta \dot{\nu} \nu \tau о с$ is perhaps due to Egyptian influence.
(e) The same words are repeated over and again, especially in B:







I finish with one further feature, again in a text written with a rush and therefore by an Egyptian. P. Petr. II 4.12 is a short letter from Thamoys to Kleon, which starts as follows:
$1 \Theta \alpha \mu \hat{\omega} v c K \lambda \epsilon ́ \omega \nu \iota$
$\chi \alpha i ́ \rho \epsilon \iota \nu . \epsilon ’ \xi \epsilon \bar{\epsilon} \lambda \beta$ о⿱
$\tau o ̀ ~ \epsilon ’ \rho \gamma о \nu \tau o ̀ ~ \epsilon \nu o \lambda \nu \iota-~$
сиоь каі̀ 入аßо́vтос
5 тò сv́ $\beta$ ßодоv $\pi \alpha \rho \dot{\alpha}$

$\dot{\eta} \mu \hat{\omega} \nu \tau \grave{\eta} \nu<v \nu \gamma \rho \alpha-$

$\beta[o] \lambda_{o v}$ Пác̣! $\left.!\tau \iota\right] \ldots$. .[. .]
Thamoys starts off in 1. 4 with a genitive absolute in the singular ( $\lambda \alpha \beta$ óvzoc тò cú $\mu \beta o \lambda o v$-the subject $\mu o v$ is not expressed), then changes into a genitive plural ( $\dot{\eta} \mu \hat{\omega} \nu c v \nu \gamma \rho \alpha \alpha \dot{\alpha} \nu \tau \omega \nu$ ). Both seem to be attached to the subject of $\bar{\epsilon} \delta \dot{\omega} \kappa \alpha \mu \epsilon \nu$. He needlessly repeats the word cú $\beta \beta$ odov twice, but makes a fine distinction between cu $\gamma \gamma \rho a \phi \dot{\eta}$ (the contract) and cú $\beta \beta o \lambda_{o v}$ (the actual piece of paper). Then there is a difficult passage in the middle, which I have not been able to solve.
 єi $\delta \delta \hat{\eta} \iota c$. But the second crux of the text was in 1l. 3-4, where a place name is expected. Mahaffy rather desparately read $\epsilon v o \lambda \nu \iota c \mu o \iota$, but offered no interpretation. Nor did anybody else thus far, even though an excellent photograph is available in the British Museum microfilm. I think we should read $\epsilon^{\epsilon} v \operatorname{\theta avıc\mu ô\iota ,~with~omicron~for~}$ omega. The word $\theta a \nu ı c \mu o ́ c ~ I ~ c o n s i d e r ~ a ~ v a r i a n t ~ o f ~ \theta a \mu \nu ı c \mu o ́ c, ~ w h i c h ~$ is found in SB XXIV 16224, an account of funerary rituals. A verb
$\theta a \mu \nu i \zeta \omega$ is also attested (SB XIV 12089; meaning 'to hide'?). The meaning is still unclear, but the funerary context in the Sammelbuch texts has to do with burial and digging of tombs.

## 6. CONCLUDING REMARKS

The family of Kleon belonged to the upper class of Alexandrian society and had access to the royal court. In the Fayum Kleon held an important and well-paid job and he had a lively correspondence with other officials. Part of this has come down to us, both outgoing (mostly rolls with draft letters) and incoming correspondence. Here we can see the typical features of administrative language. But sometimes ordinary workmen in the quarries wrote to the head of the works as well and they did not always have the best scribes at their disposal: their letters and petitions do not follow the rules of the game and contain interesting peculiarities in orthography, use of connecting particles, and syntax. In this paper I have also tried to approach the world of Kleon and Theodoros as one stage in the long development of the Greek language. It was like looking through a keyhole, but the DDBDP offers the possibility of a long-term perspective, which would, however, demand much more time and effort than the present brief sketch.

## Appendix: New P. Petr. ${ }^{2}$ II Numbers for Papyri Discussed Above

P. Petr. ${ }^{2}$ II 38 will replace $S B$ VI 9440.
P. Petr. ${ }^{2}$ II 39 will replace P. Petr. I $30.1=$ III 42 . H. $4=$ Witkowski, Epistulae 1.
P. Petr. ${ }^{2}$ II 40 will replace P. Petr. III 42. H. $7=$ Witkowski, Epistulae 5.
P. Petr. ${ }^{2}$ II 41 will replace P. Petr. II 42. C $=$ III 42. H. 6.
P. Petr. ${ }^{2}$ II 42 will replace P. Petr. II 13. $19=$ III 42. H. $5=$ Witkowski, Epistulae 8.
P. Petr. ${ }^{2}$ II 44 will replace P. Petr. II 11. $1=$ III 42. H. 1.
P. Petr. ${ }^{2}$ II 45 will replace P. Petr. II $16=$ III 42 . H. $3=$ Witkowski, Epistulae 4.
P. Petr. ${ }^{2}$ II 46 will replace P. Petr. III 146.
P. Petr. ${ }^{2}$ II 59 will replace P. Petr. II 13. 20.
P. Petr. ${ }^{2}$ II 64 will replace P. Petr. II 4. 12.
P. Petr. ${ }^{2}$ II 70 will replace P. Petr. III 43. 3.
P. Petr. ${ }^{2}$ II 71 will replace P. Petr. II 9. 4.
P. Petr. ${ }^{2}$ II 75 will replace P. Petr. II 13. 16.
P. Petr. ${ }^{2}$ II 81 will replace P. Petr. II 4. 9.
P. Petr. ${ }^{2}$ II 85 will replace P. Petr. II 4. 6.
P. Petr. ${ }^{2}$ II 88 will replace P. Petr. II 4. 2.
P. Petr. ${ }^{2}$ II 89 will replace P. Petr. II 4.7.
P. Petr. ${ }^{2}$ II 119 will replace P. Petr. II 13. 18a.

## 4

# Identifying the Language of the Individual in the Zenon Archive 

T. V. Evans

$\dot{\alpha} \phi \epsilon \subset \tau \alpha \dot{\alpha} \lambda_{\kappa} \alpha \mu \epsilon \nu$ : Amyntas had a weakness for this aspirated form. C. C. Edgar, P. Cair. Zen. I 59047, n. to l. 1

## 1. INTRODUCTION

An ancient Greek or Latin letter on a papyrus, ostracon, or tablet potentially offers a remarkably direct connection with its author. We are not separated from that author by a long manuscript tradition, as with most literary texts, but can work from an autograph. Where we have several letters from a particular author, we have the opportunity to study personal written style in a manner unique for these languages. Such non-literary letters raise questions of the greatest interest from a linguistic and stylistic perspective.

Complications, however, instantly arise. By what process, it ought to be asked, does the named author's message reach the writing surface? It is frequently assumed by scholars (as in several places elsewhere in this volume) that that named author is directly responsible for the content, and even for wielding the pen. In some cases this assumption is no doubt accurate, but it would be cavalier to generalize. Where we have groups of documents sent in the name of a particular individual, they are very often written in a range of different hands. So we need to
approach every one of these ancient letters with awareness that more than a single person may have been involved in its composition. What, then, might be the linguistic and stylistic contribution of a scribe employed to write the letter? To imagine in all such cases verbatim copying from dictation or written draft seems naive. Either procedure may have involved more or less extensive development from more or less detailed directions. In addition, the process may very well have varied, not only from one named author to another, but also within the body of material attributed to a single author. And even where one hand is more common or palaeographically distinctive than others in multiple letters of an individual, how safely can we assume that this is the autograph of the named author and not the hand of a regular amanuensis? ${ }^{1}$

This short treatment will present a method for investigating these questions in early Greek papyri from Egypt. In order to reassess our common assumptions I shall analyse in detail a single case of perceived personal preference, Amyntas' 'weakness' for the aspirated perfect $\dot{\alpha} \phi \epsilon ́ \subset \tau \alpha \lambda \kappa \alpha$ (from the 'sending' verb $\dot{\alpha} \pi о с \tau \epsilon \bar{\lambda} \lambda \lambda \omega$ ) observed in the epigraph. The aims are to demonstrate the strong probability that autographs of individual authors can indeed be identified and to argue that these identifications allow significant progress in understanding processes of letter composition and isolating characteristic features of individual usage.

## 2. AMYNTAS' WEAKNESS

For at least a short time in and around the year 257 вс this man Amyntas was an important administrator in the Alexandrian household of Apollonios, the finance minister of Ptolemy II Philadelphos. We know Amyntas today from papyri preserved in the Zenon Archive. He is the named author of as many as 26 of its documents (see Appendix). One of them, P. Cair. Zen. I 59110, is transcribed and translated as (1) below, and also appears in Plate 4.1.

[^29]

Plate 4.1. P. Cair. Zen. I 59110: Letter from Amyntas to Zenon

1. P. Cair. Zen. I 59110 (26 November 257; docketed 2 December 257)









ВАск


 тv

Amyntas to Zenon greetings. I learn that Patron the captain of the fast boat is offering excuses, whenever he arrives late, that we delay him by not giving him letters. So we did not think it appropriate to write to Apollonios because of not knowing clearly...writing to no one what...to us, and he does not know on arrival. And we have sent to you also the list of the things which... we have sent to Apollonios: two jars of salted fish, six jars of Rhodian dried figs, five jars of Kaunian ones, Kythnian cheeses-two of the large ones, 20 Rhenaian cheeses, and from us a winter mantle, two [jars] of the aged wine, sweet Chian. Farewell. Year 29, Dios 1.
Back: (Address) To Zenon. (Docket) Year 29, Dios 7. From Amyntas... wine . . . that he has sent two jars of salted fish, five jars of Rhodian dried figs, five jars of Kaunian ones, two Kythnian cheeses, 20 Rhenaian ones, a winter mantle.

The first person plural of the aspirated perfect $\dot{\alpha}^{\prime} \phi \epsilon ́ \epsilon \tau \alpha \lambda \kappa \alpha$ is just discernible in ll. 18 and 19 of this letter. The element $\dot{\alpha} \phi \epsilon c-$ is preserved clearly enough at the end of 1.18 (the rest of the word, on 1.19 , is badly damaged, but there are good contextual reasons for confidence in the reading). The standard classical form of this perfect is the unaspirated $\alpha \pi \epsilon ́ c \tau \alpha \lambda \kappa \alpha$. That spelling appears at 1.33 , in the docket on the back of the papyrus (Plate 4.2). The docket, characteristic of the original filing system used for these documents, would have been written by a clerk of Zenon, the addressee, on receipt of the letter.
C. C. Edgar's assertion that Amyntas had a personal preference for the aspirated $\dot{\alpha} \phi \epsilon ́ c \tau \alpha \lambda \kappa \alpha$ (see again the epigraph) appears as a note to


Plate 4.2. P. Cair. Zen. I 59110: The docket on the back of the papyrus


Plate 4.3. P. Cair. Zen. I 59047: Letter from Amyntas to Zenon
another instance, P. Cair. Zen. I 59047, 1. 1: $\dot{\alpha} \phi \epsilon\{\epsilon\} \subset \tau \dot{\alpha} \lambda \kappa \alpha \mu \epsilon \nu$ (see Plate 4.3 and (2) below). ${ }^{2}$ The observation is based, as we shall see, on frequency of occurrence. But comparison of Plates 4.1 and 4.3 brings out an important point. These two documents are written in different hands. P. Cair. Zen. I 59110 is in a relatively informal, semi-cursive script, P. Cair. Zen. I 59047 in a more formal hand (though not the most polished to be found in the Archive) of a type associated with professional scribes. So we are faced here with a specific case of the general problems already introduced. How securely can we relate the feature to Amyntas himself? What is the role of the scribe? What is the process of

[^30]composition of these letters? Before attempting any answers, let us consider the relevant issues of methodology and context.
2. P. Cair. Zen. I 59047 (5 March-3 April 257; docketed 11 April 257), 1l. 1-3:



Amyntas to Zenon greetings. We have sent Dexilaos to Apollonios carrying a letter about [expenses]. So would you please ... deliver the letter and send him immediately.

## 3. A METHOD FOR ANALYSIS

It needs to be stressed at the outset that from our remote distance there is no secure means of recovering all the details of personal written style in these papyrus documents. Nor can we expect to find absolute proof regarding many plausible examples. We shall often have to settle for strong probabilities, and sometimes accept that more than one interpretation of a usage is possible.

Nevertheless, the papyri offer a wealth of promising material for analysis. And the basis for a viable method of exploring the possibilities has been pointed out in the past, in James Adams's 1977 treatment of the second-century-ad Latin letters of Claudius Terentianus (from Karanis in the Fayum). Terentianus' five Latin lettersthere are another six in Greek-appear to have been written by at least four different scribes over a period of some years. ${ }^{3}$ Adams's systematic linguistic analysis reveals unifying features which transcend the differences of writing hand. They suggest that Terentianus' scribes were indeed copying from direct dictation. ${ }^{4}$

[^31]If we want to understand the language of the individual in ancient documents as well as is now possible, work of this sort needs to be developed on a much larger scale. We need to investigate thoroughly the relationship between the prosopographic, linguistic, and palaeographic evidence. The requirement is to work, at least in the first instance, only from groups of documents which can be linked securely with a particular author, to isolate characteristic linguistic features of those documents, and to map the linguistic data onto the range of writing hands employed in those documents. The patterns of usage which emerge should demonstrate to what extent individual preferences of the named author can be identified. The combination of analyses is in my view crucial for a properly nuanced interpretation, and the method deserves to be tested on a large data sample.

## 4. THE EVIDENCE OF THE ZENON ARCHIVE

The Zenon Archive, one of the oldest and largest of Greek archives, preserves unusually rich evidence for such an investigation. It was accumulated by Zenon and others over a period of more than thirty years, from about 261 to 229 вс, ${ }^{5}$ and contains well over 1,700 texts. Among them are several sub-corpora from particular individuals. Apart from the documents of Amyntas, there are about forty from Zenon himself, over seventy from the finance minister Apollonios (for whom Zenon worked as an agent, private secretary, and later estate manager), and numerous smaller groups of texts from other persons.

Valuable evidence for the language of the individual ought to be recoverable from these sub-corpora. The largest of them, that of Apollonios, is actually not the most promising. His numerous communications are written in a variety of often elegant scripts, the so-called

[^32]

Plate 4.4. P. Cair. Zen. II 59155: Letter from Apollonios the finance minister to Zenon
'chancery' hands, doubtless by professional scribes (for an example see Plate 4.4, P. Cair. Zen. II 59155). We should be wary of assuming that these documents were all copied from Apollonios' personal dictation. It is possible that he had little direct involvement with many of them and that they were composed instead by members of his staff. Yet as a body they do provide a valuable example of educated Greek usage and thus an important 'control' for assessing the usage of the Archive's other authors. Meanwhile, it is reasonable to expect an advanced level of education (and thus literacy and at least capacity to write letters) from the finance minister's senior agents and their circle of colleagues, who are well represented in the material. ${ }^{6}$ It is the documents of this group which need to be the primary focus of investigation. They have not previously been studied systematically for the purpose, but intriguing comments about personal linguistic tendencies, such as Edgar's remark

[^33]concerning Amyntas, do appear here and there in the published editions. They cry out for pursuit.

It is important to note, however, that until very recent years the method of assessment advocated here would have been impossible in practice. The Archive was rediscovered in the 1910s. Many of its constituent texts had been published by the 1930s, and most by 1974, when T. C. Skeat's fine edition of items held in London appeared (P. Lond. VII). So the raw linguistic material has been available for a long time. Since the publication of Willy Clarysse's 'Prosopography' in 1981 (in Pestman's Guide to the Zenon Archive), an excellent foundation for the work of identifying documents from individual authors has existed. But the palaeography of the Archive has been unavoidably neglected.

## 5. PALAEOGRAPHIC ISSUES AND <br> SOME PRESUMED AUTOGRAPHS

These papyri were found in circumstances which remain almost completely obscure. We can only say that they were most probably turned up by local people digging on the site of the ancient village of Philadelphia in the Fayum. The diggers would have been looking for sebakh, the nitrate-rich soil of such sites which was used as fertilizer, or perhaps deliberately for antiquities. ${ }^{7}$ The papyri were subsequently split up and sold piecemeal, and have found their way into a number of separate collections in different parts of the world. About half of them are now held in Cairo, but there are also significant groups in Ann Arbor, Florence, London, and New York, and smaller numbers and isolated pieces in other locations. ${ }^{8}$

Until very recent times the dispersal has greatly inhibited palaeographic analysis. ${ }^{9}$ It is only the creation and increasing accessibility of

[^34]digital images of papyri that has improved this situation. One result is that work on the language of the individual in the Archive has at last become fully viable. The study of ancient writing hands is a difficult, often uncertain exercise, even for the experts, digital images cannot always substitute effectively for the original papyri, and we are yet to reach the (perhaps unattainable) point where images of all published Zenon papyri in all collections are necessarily available. Nevertheless, the hands employed in documents from particular persons can now be assessed on a much more comprehensive scale.

That is not to suggest that the palaeographic facet of Zenon Archive studies has been ignored in the past. New work on the writing hands can in fact be built on long-established foundations. Already in Edgar's editions of the 1920s the presumed autographs of several of the Archive's authors are identified. Perhaps the most immediately persuasive is that of Zenon himself, the 'commonest and most characteristic' used in his personal documents (shown in Plate 4.5, P. Cair. Zen. I 59129). ${ }^{10}$ The fact that it is used in some of his draft-documents (e.g. P. Cair. Zen. III 59341c and 59341d) and private notes (e.g. the agenda-lists P. Col. Zen. I 58 and 59) strongly supports the identification. ${ }^{11}$

Attempts to isolate the autographs of other authors are essentially based on frequency and distinctiveness (contrasted with the comparative regularity of professional hands). A generally accepted example is the 'angular, individualistic script' of Hierokles, ${ }^{12}$ who managed a $\pi \alpha \lambda a i c \tau \rho a$ associated with Apollonios' household in Alexandria (Plate 4.6, P. Cair. Zen. II 59148). This hand occurs in ten of Hierokles' fourteen letters, which were written over a period of about seven years.

The twenty-six documents attributed to Amyntas are written in several different hands. Most of these are of professional type, but

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Plate 4.5. P. Cair. Zen. I 59129: Letter from Zenon to Panakestor


Plate 4.6. P. Cair. Zen. II 59148: Letter from Hierokles to Zenon
here too an autograph has been cautiously identified. ${ }^{13}$ This is the informal, semi-cursive hand of Plate 4.1 above, which occurs in a set of at least seven documents (P. Lond. VII 1935, P. Cair. Zen. I 59038, I 59044, I 59046, I 59053, I 59066, I 59110). ${ }^{14}$ Richard Seider plausibly suggests a contextual motivation in support of the identification. Some of the documents in the presumed autograph (including P. Cair. Zen. I 59110, my text (1) above) refer to sensitive and potentially embarrassing subjects, which Amyntas may have preferred to keep as confidential as possible. ${ }^{15}$ The case of Hierokles (P. L. Bat. XX 51) nevertheless shows that the idea cannot safely be applied as a general criterion. That document is a letter dealing with a scandal concerning the $\pi \alpha \lambda \alpha i c \tau \rho a$, in which Hierokles felt himself dangerously implicated, but is written in a 'chancery hand, no doubt by one of the regular scribes in Apollonios' establishment at Alexandria. ${ }^{16}$

[^36]

Plate 4.7. P. Cair. Zen. I 59044, ll. 38-42: Detail from letter of Amyntas to Zenon

It is also tempting to identify with Amyntas' presumed autograph the correcting hand in P. Cair. Zen. I 59047 (see again Plate 4.3 and text (2) above). There the scribe has written $\dot{\alpha} \pi о с т \epsilon i ́ \lambda a c ~ c u v \tau o ́ \mu \omega c, ~$ 'sending immediately', leaving out the object aùróv, 'him'. The correction is made in a second hand, and the idea that Amyntas personally checked the fair copy and corrected it is attractive. The match to instances of aủzóv in the presumed autograph (see e.g. Plate 4.7, a detail from P. Cair. Zen. I 59044, ll. 38-42: oủ $\gamma \dot{\alpha} \rho \stackrel{\alpha}{ } \nu|\dot{\eta} \lambda \lambda \pi i c a \mu \epsilon \nu| \dot{\epsilon} \nu$
 enough to secure the identification.

Where, then, we find a common or characteristic hand in one author's documents, it has become standard to assume that we are dealing with that author's autograph. This approach is provisionally accepted here. We have to bear in mind that the assumption will usually remain a matter of probability rather than proof, and that there are other possible explanations. But the idea of Apollonios' subordinates' using regular amanuenses who do not write in hands of professional type seems inherently unlikely.

## 6. THE CASE STUDY

Let us now return to the case of Amyntas' aspirated perfect $\dot{\alpha} \phi ́ \epsilon \subset \tau \alpha \lambda \kappa \alpha$. The form $\dot{\alpha} \phi \dot{\epsilon} с \tau \alpha \lambda \kappa \alpha$ could conceivably reflect more than one linguistic development, but most probably results from the analogy of $\dot{\alpha} \phi \dot{\epsilon} с \tau \eta \kappa \alpha$ (perfect from $\dot{\alpha} \phi \dot{\prime} с \tau \eta \mu)$ ). ${ }^{17}$ For the present purpose the important point is that it is rare in third-century вс papyri, and specifically in the environment of the Zenon Archive.

In the documents of Amyntas the perfect active of $\dot{\alpha} \pi \sigma \subset \tau \dot{\epsilon} \lambda \lambda \omega$ occurs at least five times (omitting the instance in the docket of $P$. Cair. Zen. I 59110). Two of these cases have the unaspirated classical spelling ( $\dot{\alpha} \pi \epsilon c \tau \alpha ́ \lambda \kappa \alpha \mu \epsilon \nu$ at $P$. Lond. VII 1935, 1. 9; $\dot{\alpha} \pi \epsilon \subset \tau \alpha \dot{\alpha} \lambda \mid \kappa \alpha \mu \epsilon \nu$ at $P$. Cair. Zen. I 59066, 1l. 9-10), three have the aspirated form ( $\dot{\alpha} \phi \epsilon\{\epsilon\} \subset \tau \alpha ́ \lambda \kappa \alpha \mu \epsilon \nu$ at P. Cair. Zen. I 59047, 1. 1; $\dot{\alpha} \phi \epsilon \subset \tau \alpha ́ \lambda \kappa \alpha \mid \mu \epsilon \nu$ at $P$.
 18-19). There is one instance of the perfect passive and this too has the aspirated form ( $\dot{\phi} \phi \epsilon ́ \subset \tau \alpha \lambda \tau \alpha \iota$ at P. Cair. Zen. V 59805, l. 2). In addition, there are three restored instances, all of the perfect active. One of them is a fairly secure restoration of the aspirated form ( $\dot{\alpha} \phi[\epsilon \subset \tau \dot{\alpha} \lambda \kappa \alpha \mu \epsilon \nu]$ at P. Cair. Zen. IV 59547, l. 1). In the other two cases the relevant portion of the word is lost $\left(\left[\dot{\alpha} \pi \epsilon \subset \tau \alpha \dot{\alpha} \lambda_{\kappa \alpha}\right] \mu \epsilon \nu\right.$ at $P$. Cair. Zen. I 59030, l. 2; [ $\alpha \pi]$ द́ćc $\tau \lambda \boldsymbol{\lambda} \kappa \alpha$ at P. Cair. Zen. IV 59574, 1. 3Edgar restores the classical form in both places, despite his views about Amyntas' tendencies), but these in any case come from documents less certainly attributed to Amyntas. If we omit all three

[^37]restored examples, we are left with two instances of the unaspirated form and four of the aspirated.

So Amyntas appears to use the aspirated form twice as frequently as the classical spelling. Not much can be made of so small a data sample, but the relationship of these frequencies to the general usage of the Archive must be significant. When we consider the overall distribution of the two forms, Amyntas' 'weakness' becomes much more obvious. There are approximately 146 examples of the unaspirated classical spelling, and only 11 of the aspirated form. Apart from the four in documents from Amyntas, there are two from Zenon's commercial agent Charmos (P. Cair. Zen. I 59078, 1. 2; II 59144, 1. 2-in his three letters Charmos only uses the aspirated spelling), but no other such concentration in the documents of a particular individual. And although it has to be acknowledged that more material from Amyntas has been preserved than from most of the Archive's other authors, we may note that in Zenon's personal documents of letter type (as opposed to his accounts and lists), which offer the nearest quantitative comparison, the classical spelling occurs twice and the aspirated form is never used.

The aspirated form of our word has, therefore, a high relative frequency in Amyntas' documents. Yet the usage of Amyntas assumes a further and more complex dimension when we compare the linguistic data with the palaeographic evidence. Four of the six relevant documents employ the presumed autograph. The other two (P. Cair. Zen. I 59047 and V 59805) are professionally written, very probably by the one scribe. ${ }^{18}$ Both spellings of $\dot{\alpha} \pi \epsilon ́ c \tau \alpha \lambda \kappa \alpha$ occur in the autograph, twice each, but only the aspirated spelling in the professional hand (or hands).

How are we to interpret this distribution? The most economical solution in my view is that the aspirated $\dot{\alpha} \phi \epsilon ́ c \tau \alpha \lambda \kappa \alpha$ is indeed a feature of Amyntas' Greek which is distinctively manifested in his documents. The concentration of examples there seems a compelling indicator to this end. The general usage of the Archive suggests that

[^38]the 'default' form would be the classical spelling, regardless of a particular individual's pronunciation. The scribes used by Apollonios and his subordinates generally display standard orthography reflecting a high level of competence. This implies that they had the capacity to produce the form they had learned as correct, whatever the pronunciation heard in dictation ${ }^{19}$ (similar to that shown in a later period by the military scribes writing Latin at Vindolanda). ${ }^{20}$ Nevertheless, aspirated $\alpha^{\phi} \phi$ éc $\tau \alpha \lambda_{\kappa \alpha}$ tends to appear in Amyntas' letters.

If one accepts the identification of Amyntas' autograph, it follows that he sometimes wrote the word as he pronounced it, with aspiration, and at least one of his scribes, copying from dictation, reproduced the form heard. ${ }^{21}$ But Amyntas sometimes wrote the standard classical spelling, which he would so commonly have encountered in letters from other people. ${ }^{22}$ This interpretation needs to be advanced with due caution, but would account for the appearance of both spellings in the presumed autograph. It also agrees with Edgar's view, though the palaeographic evidence shows that more than frequency of occurrence needs to be considered.

## 7. CONCLUSIONS

The importance of combining prosopographic, linguistic, and palaeographic analysis will be clear from this study. The method
same scribe (the dittography of epsilon in $\dot{\alpha} \phi \epsilon\{\epsilon\} \subset \tau \alpha ́ \lambda \kappa \alpha \mu \epsilon \nu$ may be remembered in this connection). I am inclined also to identify the hand of P. Lond. VII 1942 (original papyrus examined) at least with that of P. Cair. Zen. I 59047.

19 On the limited orthographical variation to be expected from professional scribes cf. S.-T. Teodorsson, The Phonology of Ptolemaic Koine (Göteborg, 1977), esp. 41-2.
${ }^{20}$ Cf. J. N. Adams, 'The Language of the Vindolanda Writing Tablets: An Interim Report', JRS 85 (1995), 86-134 at 89-90, especially on the case of the correction etiam at Tab.Vindol. II 234. ii, l. 2.
${ }^{21}$ One might also speculate that, if the scribe of P. Cair. Zen. I 59047 and V 59805 is the same person, we have another individual here with the same tendency toward the aspirated form. This seems to me a less persuasive idea. How likely would such a tendency be for a professional scribe?
${ }^{22}$ For another possible example of this type of influence see T. V. Evans, 'Valedictory $E P P \Omega C O$ in Zenon Archive Letters from Hierokles', ZPE 153 (2005), 155-8 at 157-8.
provides the key to productive investigation of the language of the individual in the Zenon Archive. Identifying probable autographs and marrying the linguistic and palaeographic data are crucial steps.

As a test case, Amyntas' $\dot{\alpha} \phi \dot{\epsilon} \subset \tau \alpha \lambda_{\kappa} \alpha$ cannot lead us very far in itself. The evidence of the writing hands demands modification of Edgar's original statement, a nuanced explanation for the distribution of the aspirated forms, and a more cautious conclusion. It is also simply a single feature of one author's written language. Taken in isolation it could create an inaccurate impression of Amyntas' usage. ${ }^{23}$ His documents are generally marked by their linguistic and stylistic regularity. Consider the orthography of text (1) above, which (apart from aspirated $\dot{\alpha} \phi \epsilon ́ c \tau \alpha \lambda_{\kappa \alpha}$ ) is typical of educated Alexandrian productions of its period. To give another brief illustration, if we take into account particle usage (discussed in this volume by Willy Clarysse as a mark of 'literary' style), Amyntas provides six examples of the $\mu \dot{\epsilon} \nu \ldots \delta \epsilon$ ' complex, of positive stylistic value, ${ }^{24}$ in 'autograph' letters. ${ }^{25}$ One atypical or substandard feature in an author's work should not characterize a whole style.

The example of aspirated $\dot{\alpha} \phi \dot{\epsilon} \subset \tau \alpha \lambda_{\kappa \alpha}$ is, however, suggestive in that it fits within an emerging pattern of features indicative of personal preferences which are observable in Zenon Archive documents. I have discussed elsewhere the evidence which can be extracted from extended greeting formulae, with specific reference to the usage of Hierokles and Artemidoros the doctor. ${ }^{26}$ Variations within these formulae seem to me very persuasive in revealing individual

[^39]tendencies. Also illustrative are Hierokles' tendencies regarding valedictory ${ }^{\epsilon \prime} \rho \rho \omega$ со at letter-closure. ${ }^{27}$

The documents of letter type from the finance minister Apollonios' senior agents and their colleagues reward systematic linguistic analysis, revealing contrasts both within this circle of authors and with general tendencies within the Archive. Comprehensive study of the writing hands in the sub-corpora from these individuals, rendered practically possible by recent technological developments, allows the identification of likely autographs. These cannot usually be established beyond doubt, but can plausibly be isolated according to the criteria of frequency, formality, and internal distinctiveness. If, to present the clearest type of instance, an informal, semi-cursive script is well represented in any sub-corpus of the Archive, it is a reasonable assumption that this is the autograph of the named author. Contextual data may also support the identification to some extent (though they must not be forced). It seems inherently unlikely that such a hand, as opposed to hands of 'professional', more typically uncial type, would be that of a regular amanuensis. Establishing the relationship of presumed autographs to apparently characteristic linguistic features of the individual authors is the crucial component of the method, offering us the clearest possible evidence for personal preferences and the process of composition. The provisional results presented above indicate the potential of the technique. ${ }^{28}$

The limitations of the proposed method need to be acknowledged, along with its strengths. Where a data sample is sufficiently large from a particular individual, we can expect with reasonable confidence to identify features of personal style. We can also establish evidence of authorial literacy and verbatim copying from dictation. That is, if a particular feature can be linked closely to the letters written in the name of one individual, and can further be linked to that author's presumed autograph, then the presence of the same feature in non-autograph documents within the author's sub-corpus suggests copying from dictation.

Should non-autograph documents not show the feature in question, however, that does not necessarily indicate a different method

[^40]of composition from verbatim copying. The scribe may be correcting non-standard elements in the dictation. Nor can we expect the varying styles of different scribes to emerge from the letters of a single author. The data samples are all too small to reveal this sort of evidence. So we may be able to discover signs indicating verbatim copying in specific cases, but cannot necessarily expect to formulate clear general conclusions on processes of letter composition.

What should be possible is to isolate unifying features within each sub-corpus and to identify different practices within different subcorpora. Many of the identifications of personal written style which we meet in the modern literature seem to be based more on assumptions than evidence. I hope to have shown here a means by which we can move beyond supposition and gain a more precise understanding of this facet of linguistic usage in the Zenon Archive. The work is painstaking, but the potential considerable, ultimately bearing implications for more general study of ancient Greek.

## Appendix: Documents from Amyntas

## Certain Identifications

1. P. Lond. VII 1935: letter to Zenon, 2 January 257.
2. P. Cair. Zen. I 59038: letter to Zenon, docketed 29 February 257.
3. P. Cair. Zen. I 59039: letter to Zenon, docketed 29 February 257.
4. PSI V 483: letter to Zenon, docketed 29 February 257.
5. P. Cair. Zen. I 59040: letter to Zenon, docketed 3 March 257.
6. P. Cair. Zen. V 59805: letter to Kriton the boat-captain, docketed 9 March 257.
7. P. L. Bat. XX 23: letter to Zenon, docketed 16 March 257.
8. P. Cair. Zen. I 59042: letter to Zenon, docketed 19 March 257.
9. P. Cair. Zen. I 59043: letter to Zenon, docketed 24 March 257.
10. P. Cair. Zen. I 59044: letter to Zenon, docketed 26 March 257.
11. P. Cair. Zen. I 59045: letter to Zenon, docketed 26 March 257.
12. P. Cair. Zen. I 59046: letter to Apollonios the finance minister, not dated by the author or in the docket; probably early 257.
13. P. Cair. Zen. I 59047: letter to Zenon, 5 March-3 April 257; docketed 11 April 257.
14. P. L. Bat. XX 24: letter to Zenon, dated, but only indication of regnal year preserved; docketed 11 April 257.
15. P. Cair. Zen. I 59053: letter to Zenon, 19 April 257.
16. P. Cair. Zen. I 59054: list of items, found attached to P. Cair. Zen. I 59053 and clearly the list referred to in that letter; c. 19 April 257.
17. PSI V 533: memorandum to Zenon; the author's name is restored by Edgar as Amyntas and the document is associated with P. Cair. Zen. I 59053 and 59054; not dated, probably 258-257.
18. P. Lond. VII 1942: letter to Zenon, docketed 5 May 257.
19. P. Cair. Zen. I 59066: letter to Zenon, not dated; ?257.
20. P. Cair. Zen. I 59110: letter to Zenon, 26 November 257.
21. P. Cair. Zen. IV 59547: letter, probably to Apollonios-the name of the recipient is restored; the author's name is lost, but the document can safely be linked through its subject-matter with P. Cair. Zen. I 59110; c. 26 November 257.
22. PSI VI 585: letter to Zenon, date not preserved if included.

## Uncertain Identifications

1. P. Cair. Zen. I 59030: the beginning of this letter is lost; Edgar assumes that Amyntas is the author, the recipient is probably, but not necessarily Zenon; tentatively dated 4 November 258.
2. P. Ryl. IV 555: to Apollonios (address on back preserved), ?9 February 257; the opening of the letter is lost; it is plausibly but speculatively attributed to Amyntas by Edgar.
3. P. Cair. Zen. IV 59574: a fragment lacking author's and recipient's names, doubtfully associated with Amyntas on palaeographic grounds; not dated.
4. PSI VI 612: to Kriton, author's name speculatively restored as Amyntas; date not preserved.

## Previously Rejected Identification

1. P. Cair. Zen. I 59032: to Zenon, 16 January 257; author's name lost except for ] ac termination; originally attributed by Edgar to Amyntas on the basis of the handwriting (similar to that of P. Cair. Zen. I 59030 and 59039), but he soon expressed doubt because of the elaborate greeting formula used, which would be unique from Amyntas to Zenon ( $P$. Cair. Zen. I, p. 181).

## 5

# Authorial Revision of Linguistic Style in Greek Papyrus Letters and Petitions (AD i-iv) 

R. Luiselli

## 1. INTRODUCTION

'No utterance is such that its author cannot care what it sounds like.' ${ }^{1}$ In the written language such care is primarily a feature of literary composition but may also affect the linguistic form of ephemeral texts relating to daily life. In petitioning government officials and other authorities, as well as in writing letters on private affairs, Greek-speaking individuals within the Roman empire seem on occasion to have been no less willing than modern westerners to subject their own written compositions to stylistic revision. Drawing on letters and drafts of petitions penned on papyrus in the first four centuries of the Christian era, this essay sets out to discuss the phenomenon of self-correction in Greek documentary prose as evidence for awareness of style among the educated élites in Egypt. ${ }^{2}$

[^41]This general proposition requires qualification. As my chosen title suggests, I shall concentrate on linguistic style as a specific category of compositional activity, distinct from other spheres of stylistic practice which pertain to generic composition. ${ }^{3}$ Theoretically any element on any linguistic level may be targeted for self-correction, and the nonliterary papyri do provide evidence of textual revision affecting orthography, morphology, syntax, vocabulary, and other realms of language. It is beyond the scope of this study, and indeed the allotment of space within it, to produce a comprehensive list of occurrences of undesired units of utterance and their replacements; nor does it survey the impact of self-censoring attitudes on all levels of language. Rather, I offer some insights into the writers' repertoires and language practices in everyday life by focusing on select linguistic ingredients which contribute to the shaping of essential components of letter-writing and petitioning such as the relations between the writer and the reader, the narrative flow, and register. In other words, my main concern will be to comment on the role of the individual in the process whereby utterances are selected. The influence of socially recognized norms and expectations upon this process will nevertheless be highlighted for consideration whenever this seems worthy of attention.

Intervention of correction and self-correction may be caused by both rational and non-rational factors. Whereas textual alterations made in scribendo usually affect short sequences of letters, and are likely to reflect an instinctive and immediate reaction to one's own lapses in writing and unwanted choices, interlinear changes may well betray varying degrees of consciousness since they often involve thoughtful revision of extensive units of utterance. Although the importance of non-rational determinants of language use is undeniable, it seems more fruitful to focus on premeditated linguistic behaviour. I shall thus concentrate on interlinear corrections and other evidence of textual reworking in order to emphasize the impact of awareness on non-literary linguistic performance. An approach of

[^42]this kind widens the traditional perspective of scholarship on the language of papyrus letters, since these have predominantly been viewed as written records of casual utterance. On a smaller scale it offers unique opportunities to assess the effects of premeditation on the language of a single text as it facilitates determination of the extent and quality of conscious acts of (self-) corrective intervention when this intervention has not obliterated the traces of what would have been expressed without it.

A word must also be added on the notion of 'self-correction', which is related to the complex question of authorship. ${ }^{4}$ In principle, a distinction must be drawn between penmanship and composition. In the documentary genres under consideration, the former may result from either the petitioner/letter-writer or a clerk who writes on his or her behalf. But a scribe may either be taking down dictation or freely composing for himself, and there is no reason to doubt that in addition to doing the writing he may also change anything which he regards as needing improvement or has been instructed to emend. It is far from simple to determine what is owed to whom in each individual case, and the fragmentary nature of papyrus evidence often makes things even more difficult to handle. Since, however, a dictated text which is read and approved by its author is comparable with an autograph copy, ${ }^{5}$ I shall reckon as authorial the task of revision undertaken at the draft stage. First-hand changes will be treated as evidence of self-correction, whether actually self-inflicted or not. In order to minimize the risk of misconception, I shall adopt non-committal terms such as 'writer' and 'drafter' throughout, unless firm evidence of authorship is available.

Evidence of extensive textual reworking is usually treated as an indicator of a draft, whether the text is a literary composition, a contract, a private letter, or a petition. ${ }^{6}$ But fair copies of letters are

[^43]more likely than the vast majority of petitions to display a reasonable number of corrections, so that it may not be easy to distinguish a draft of a letter from a fair copy. ${ }^{7}$ I thus take account of epistolary texts that exhibit corrections, irrespective of whether they are to be taken as drafts or fair copies; and I concentrate on drafts of petitions.

## 2. TERMS OF ADDRESS

'Because speech events regularly include both a speaker-writer and a listener-reader, it is not surprising that language is particularly sensitive, in the rules for speech use, to the relations between the two parties. ${ }^{\prime 8}$ An educated user of language between the first and fourth centuries was every bit as receptive to the requirements of social convention in selecting utterances for adoption in his or her ephemeral compositions as is any educated individual in present-day England. ${ }^{9}$ Today we are prepared to adjust the message form to the addressee in spite of the increasing relaxation of societal norms constraining language behaviour as a result of the growing informality of modern life. Despite their undeniable differences of form, structure, and scope, Greek letters and petitions are related in terms of communicative function as they involve a mutual relationship between a

Le Stylet et la tablette: dans le secret des auteurs antiques (Paris, 2000), 53-60; cf. also J. Lundon, 'Il nuovo testo lirico nel nuovo papiro di Saffo', in G. Bastianini and A. Casanova (eds.), I papiri di Saffo e di Alceo: Atti del convegno internazionale di studi, Firenze, 8-9 giugno 2006 (Florence, 2007), 149-66 at 159-60. On drafts of notarial deeds from Byzantine Egypt see E. von Druffel, Papyrologische Studien zum byzantinischen Urkundenwesen im Anschluß an P. Heidelberg 311 (Munich, 1915), 14-23, who deals with texts showing corrections at 21-2. Drafts of private letters include P. Köln VI 264 and 265.

7 The same problem may also arise when no textual reworking is in evidence; see e.g. M. Salvo, 'A New Letter from the Heroninos Archive: Heroninos to Alypios', ZPE 122 (1998), 131-4 at 133-4.
${ }^{8}$ B. Spolsky, Sociolinguistics (Oxford, 1998), 19.
${ }^{9}$ On accommodatio in Greek and Latin rhetorical theories of letter-writing see R. Luiselli, 'Un nuovo manuale di epistolografia di epoca bizantina (P. Berol. inv. 21190): presentazione e considerazioni preliminari', in B. Kramer, W. Luppe, H. Maehler, and G. Poethke (eds.), Akten des 21. internationalen Papyrologenkongresses, Berlin, 13.-19. 8. 1995 (Stuttgart and Leipzig, 1997), 643-51 at 647-51.
writer and a reader. ${ }^{10}$ In particular, the recognition of the addressee and his rights in the situation in which the writer is engaged is essential in petitions, where deference is crucial to secure a favourable response. ${ }^{11}$ Inasmuch as the adoption of politeness formulae and address terms contributes to the enhancement of respect, the presence or absence of a vocative may constitute a matter for concern. Good examples of this are provided by two papyri of the third century ad. Lollianus alias Homoeus, public grammaticus ( $\delta \eta \mu$ ócıoc $\gamma \rho \alpha \mu \mu \alpha \tau$ гко́с) of Oxyrhynchus, ${ }^{12}$ took care to revise in his own hand a draft of a petition to the emperors Valerian and Gallienus (ad 25360 ), which had previously been written in a large, clear cursive, ${ }^{13}$ presumably at his dictation. ${ }^{14}$ The corrected version of a sentence whereby the emperors are addressed encompasses a vocative, 'most divine Emperors' ( $\theta \epsilon$ єóтатоь айтокра́торєс), which is not found in the dictated version. ${ }^{15}$ A short time previously, Aurelius Dio[- - -] alias Callinicus, former exegetes of Heracleopolis, ${ }^{16}$ gymnasiarch, ${ }^{17}$ and

[^44]superintendent of the stemmata at Antinoopolis, drafted, or had a clerk draft, a petition in which he addressed the prefect of Egypt, probably L. Lucretius Annianus, in the following words: ${ }^{18}$

## $\pi \epsilon \pi o \iota \theta \dot{\omega} \mathrm{c}$

 $\grave{\eta} \gamma \in \mu \circ \nu \iota \kappa[\hat{\eta} \subset]$
$\mu \alpha ́ \lambda \iota c \tau \alpha \delta \dot{\epsilon} \epsilon \dot{\epsilon} \pi \imath^{\prime}, \mu \dot{\epsilon} \gamma \iota c \tau[\epsilon \dot{\eta} \gamma \epsilon \mu \dot{\omega} \nu$
 $\llbracket \tau o \hat{v} \pi \underset{\rightarrow}{\pi}$. . ${ }_{[ }[$

## trusting

【Believing】that this supplication of mine, most glorious prefect, will with the prefectural
and especially because, most eminent prefect, assistance arrive at your sagacity more quickly than thought, . . .

The first hand appended the vocative $\mu \dot{\epsilon} \dot{\epsilon} \gamma c \tau[\epsilon \hat{\eta} \gamma \epsilon \mu \dot{\omega} \nu$ to a suprascript in smaller and somewhat more cursive script.

In antiquity, as in modern societies, the selection of the address form appropriate for the person to whom the message was directed was also important to the success of communication. ${ }^{19}$ It is thus hardly surprising that titles played a crucial role in address usage in the Greek-speaking communities of Roman Egypt, especially from the third century onwards when increasingly elaborate address patterns took the place of the personal pronoun 'you' in the address

[^45]system. ${ }^{20}$ These patterns not only consist of an abstract title, but often include one or more accompanying adjectives as well. Each of these constituent elements may attract attention in the revision process. In a fragmentary draft of a petition of the third century AD the writer addressed the reigning emperors, whose names are not indicated in the extant portion of the text, with the title 'Your Liberality' ([ả] $\underset{\alpha}{ } \tau \hat{\eta} \subset \dot{v} \mu \hat{\varphi} \nu \epsilon \dot{v} \epsilon \rho \gamma \epsilon \subset i ́ a c)$ ). At a later stage he expanded it into the more elaborate and unusual address form 'Your most
 $\epsilon \dot{v} \epsilon \rho \gamma \epsilon \subset i ́ a c)$ by adding the adjective 'most divinely beloved' in the space above the line. ${ }^{21}$ Similarly, in an official letter written in Greek in the time of the Arab administration of Egypt under the Umayyad

[^46]caliphs, the drafter substituted 'Your divinely protected, magnificent
 for 'Your magnificent Authority' ( $\epsilon \kappa \kappa \tau \hat{\eta} \subset ~ \dot{v} \mu \epsilon \tau \epsilon$ 'िас $\mu \epsilon \gamma \alpha \lambda о \pi \rho \epsilon \pi о \hat{\imath} \subset$ $\delta \in \subset \pi о \tau \epsilon i ́ a c)$ by entering 'divinely protected' above the line. ${ }^{22}$

## 3. WORD-ORDER

The placing of the vocative in relation to the other elements of the sentence is also relevant to address usage and may be targeted for (self-)correction. BGU XI 2012, a draft petition addressed by C. Iulius Agrippinus, a soldier of the legio II Traiana fortis, to the prefect of Egypt in about the mid-second century, ${ }^{23}$ displays several firsthand corrections, two of which are stylistic in nature. ${ }^{24}$ In ll. 7-8
$[\dot{\eta} \gamma \epsilon \mu \dot{\omega} \nu] \kappa$ ќ́ $\rho \iota$,

the message to be conveyed is a simple one: 'I have appealed to you by petition in the current year, on 4 Phaophi ( $=1$ October)'. The point at issue is whether the vocative 'lord prefect', by which Agrippinus wishes to address his high-ranking recipient, should be placed (a) prominently at the very beginning of the sentence, or (b) after a unit of utterance consisting of a mobile element (viz. the main verb) and a postpositive (viz. the enclitic form of the personal pronoun), thus:


(b) $\frac{\epsilon}{\nu} \epsilon \in \tau \tau \chi$ о́v coı, $\dot{\eta} \gamma \epsilon \mu \grave{\omega} \nu \kappa$ ќ́pıє,

The drafter wrote (a) down first but replaced it with $(b)$ at a later stage, thus showing a preference for the collocation of the vocative

[^47]within the sentence. Another individual, Pharion son of Eutyches, sent out two petitions to Marcus Sempronius Liberalis, the prefect of Egypt in ad 154-9. ${ }^{25}$ His later composition has (at P. Fouad 26, ${ }^{26} \mathrm{ll}$. 23-4):

My lord prefect, I showed you the stubbornness of my adversary.
This compares well with Agrippinus' original choice. But in Pharion's earlier complaint the vocative is placed within a genitive absolute (at P. Fouad 26, ll. 30-4):



Since your ingrained kindness, lord prefect, is extended to everyone, I too, having been treated with violence and wronged, have recourse to you.

This choice conforms to a formula that appears to have been in use for several decades, as is suggested by the following examples: ${ }^{27}$


P. Oxy. XVII 2131, ll. 7-8 (ad 207) $\tau \hat{\eta} c ~ \epsilon ́ \mu \phi v ́ \tau o v ~ c o v, ~ \dot{\eta} \gamma \epsilon \mu \grave{\omega} \nu ~ \delta \epsilon ́ c \pi o \tau \alpha$,
 $\kappa \alpha \tau \alpha \phi \epsilon v^{\prime} \mid \gamma[\omega] \dot{\alpha} \xi \iota \omega \hat{\nu} \dot{\epsilon} \kappa \delta \iota \kappa i \alpha c \tau v \chi \epsilon i \hat{\nu}$.

In fact, a number of texts, mainly datable to between the 130 s and 180s, show that the vocative 'lord prefect' ( $\dot{\eta} \gamma \epsilon \mu \dot{\omega} \nu \kappa \dot{v} \rho \iota \epsilon$ ) was usually placed within the sentence in second-century petitions:
(i) P. Oxy. III 486, ll. 33-4 (ad 131; Oxyrhynchus): $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ cє, $\dot{\eta} \gamma \epsilon \mu \dot{\omega} \nu$


[^48]（ii）P．Ryl．II 113，ll．6－14（ad 133；Letopolis）：$\epsilon \pi \epsilon \epsilon(=\epsilon \in i) \mid \tau \hat{\varphi} \pi \rho o \tau \epsilon ́ \rho \varphi$


（iii）P．Oxy．VII 1032，ll．36－7（ad 161；Oxyrhynchus）：$\alpha \nu \alpha \gamma \kappa \alpha i ́ \omega[$［ oûv，］

（iv）P．Oxy．VIII 1117，ll．2－3（c．Ad 178；Oxyrhynchus）：${ }^{\epsilon \prime \nu} \alpha \gamma \chi \circ \subset$ ，$\grave{\eta} \gamma \epsilon \mu \dot{\omega}$

（v）SBXVI 12678，ll．19－20（before 27 July ad 179；28 Karanis）：$\pi \rho o c \phi \epsilon \epsilon_{\rho} \rho[\omega]$ coı，

（vi）P．Amh．II 79，l． 46 （c．ad 186；Hermopolis）：$] v \pi \rho[\hat{\omega}] \tau o \nu, \dot{\eta} \gamma \epsilon \mu ⿳ 亠 \omega \nu \kappa v ́ \rho \epsilon \iota \epsilon$ （ $=\kappa$ र́ $\rho \iota \epsilon$ ），$\pi \rho о с \phi \epsilon v_{\gamma}[\omega$ ．
（vii）$B G U$ XV 2460，ll．2－3（ii AD；Arsinoite？）：$\nu] \hat{v} \nu$ ov̂v，$\hat{\eta} \gamma \epsilon \mu ⿳ 亠 \omega 匕 \nu ~ \kappa v ́ \rho \iota ~[\epsilon, ~$ $\kappa \alpha \tau \epsilon \phi \dot{\gamma} \gamma \sigma \mu \epsilon \nu(?)] \mid[\epsilon ่ \pi i \quad c \grave{\epsilon}] \tau o ̀ \nu \pi \alpha ́ \nu \tau \omega \nu c \omega \tau \hat{\eta} \rho \alpha$ ．

Although the two positions of the vocative are identical in com－ municative function，they are likely to entail different logical rela－ tions to the nearby units of utterance．For example，the writer＇s focus of attention in Agrippinus＇formulation（b）is arguably set on Є่vย́ $\tau v \chi o ́ v$ coı，whereas the vocative seems to receive secondary stress， since it is logically dispensable because predictable by virtue of cor．${ }^{29}$ A similar status may be assigned to the vocatives in（i），and（v），as well as in（ii），（iii），（iv），and（vii）above．Instead，it looks as if in Agrippinus＇formulation（a）the treatment of $\epsilon^{\prime} \mathcal{V}^{\prime} \tau v \chi o ́ v$ coı is equiva－ lent to that in $(b)$ ，while the vocative，which is given precedence，is brought into greater relief than as compared in（b），possibly with the purpose of attracting the reader＇s attention．${ }^{30}$ But the motivating force behind the composer＇s consciously performed repudiation of one logical pattern in favour of the other in this specific language situation is beyond retrieval．We must also resort to speculation if we want to explain the second－century preferential treatment of the

[^49]vocative as a concomitant element of utterances directed to the prefect of Egypt, even when such utterances are not formulaic.

Authorial changes may also affect the word-order within a wordgroup. Let us consider the position of the possessive genitive of the personal pronoun in relation to the articular noun. The draft of a petition addressed by Lollianus, the Oxyrhynchite grammarian, to the emperors Valerian and Gallienus displays the following text ( $P$. Oxy. XLVII 3366, ll. 60-1 = P. Coll.Youtie II 66, ll. 60-1, text C):31




Two different versions of one and the same sentence are in evidence, thus:

I find myself compelled to bring this supplication to your feet.
 айтокра́торєє.
I bring this supplication to your feet, most divine Emperors.
$T_{2}$ differs from $T_{1}$ in several respects: the supplication is no longer said to be handed in under constraint; a vocative is added at the end of
 The latter change is prompted by an aborted plan to write $\dot{v} \mu \hat{v}$. In Hellenistic and later Greek the possessive genitive of the personal pronoun may stand either after the articular noun, as in $\mathrm{T}_{1}$, or before its article, as in $T_{2} .{ }^{32}$ Since $T_{1}$ and $T_{2}$ (with the single exception of $\mu \underline{\varphi} \varphi \underline{y}$ ) are undeleted, it looks as if they were both regarded as worthy of consideration. There is no knowing which of the two alternative formulations was eventually adopted in the fair copy of the petition.

A more striking case of hesitation between different options is provided by a set of documentary texts of fourth-century date. In December ad 348 Aurelius Ammon, the scholasticus, brother of

[^50]Aurelius Harpocration the panegyrist from Panopolis, ${ }^{33}$ wrote a petition to a high-ranking authority, viz. the catholicus (rationalis) or the prefect of Egypt. ${ }^{34}$ He made several attempts at revising his composition or select parts thereof in his practised and skilled hand. In particular, he is known to have produced no fewer than six successive versions of the following simple utterance, essentially 'because of these slaves (of ours) who dwell here':
(a) P. Ammon II 32, ll. 10-11: $\delta \iota \dot{\alpha} \mid \tau \grave{\alpha}$ 人̀ $\nu \delta \rho \alpha ́ \pi o \delta \alpha ~ \tau \alpha \hat{v} \tau \underset{\sim}{\alpha} \tau[\dot{\alpha} \dot{\epsilon} \nu \tau \alpha v \theta o \hat{\imath}$ $\left.\delta_{\text {ı }} \tau \tau{ }^{\prime}{ }^{\prime} \beta o \nu \tau\right] \alpha$
 $\delta_{\text {цa } \alpha \rho}{ }^{\prime} \beta o[\nu]_{\tau} \alpha$

$$
\begin{aligned}
& \dot{\eta} \mu[\hat{\omega} \nu] \\
& \text { (c) P. Ammon II 39c, ll. 8-9: } \delta \iota \grave{\alpha} \tau \dot{\alpha} \mid \stackrel{\alpha}{\alpha}[\nu \delta] \rho \underset{̣}{a} \pi o \delta \alpha \underset{\sim}{\tau} \alpha[\hat{v} \tau \alpha \tau] \dot{\alpha} \llbracket \dot{\eta} \mu \epsilon ́ \tau \epsilon \rho \alpha \rrbracket
\end{aligned}
$$

$$
\begin{aligned}
& \text { (d) P. Ammon II 40, l. 18: } \delta]_{\varrho} \dot{\alpha} \tau \alpha \hat{v} \tau \alpha \tau \dot{\alpha} \alpha \dot{\alpha} \nu \delta \rho[\alpha ́ \pi o \delta \alpha
\end{aligned}
$$


Afterthought accounts for the interlinear $\dot{\eta} \mu \hat{\omega} \nu$ in $(c)$ and ( $f$ ). The pronoun is placed after $\tau \grave{\alpha} \dot{\alpha} v \delta \rho \alpha ́ \pi o \delta \alpha$ in (c) as well as in (b) but before it in ( $f$ ). In addition, if we consider the collocation of the articular noun $(\mathrm{N})$ and the possessive genitive of the personal pronoun (P) in relation to the position of the demonstrative (D), we encounter the patterns NPD in $(c)$, DNP in (e), and DPN in $(f)$. This variety of formulation is remarkable. Since Ammon penned each of the six passages in his own hand, he is also accountable for each one of those formulations. His wavering conduct illustrates nicely how an individual of advanced education in law, grammar, rhetoric, philosophy, and literature may vary the word-order within complex word-groups in relation to unpredictable and undetectable factors.

[^51]
## 4. RECURRENCE AND VARIETY

One of the main characteristics of the documentary language is its propensity to embrace a great deal of verbal repetition at short intervals. Recurrent terminology is to be expected when referential accuracy is important to the success of communication, as in business correspondence, or when it is in keeping with legal jargon. Where no such constraint or influence from context is in evidence, the intensive use of specific units of utterance calls for stylistic assessment. There is no question, though, that evaluation of this phenomenon often constitutes an intractable problem, since the determinants of use can no longer be recovered on objective grounds. Thus carelessness, insensitivity, or bad judgement may be invoked to explain the following way of expressing the charge of failing to reciprocate one's own
 often ${ }_{\epsilon}^{\epsilon} \gamma \rho \alpha \nless \alpha$ to you; $\gamma \rho \alpha ́ \phi \epsilon$ to me about what you want' (CPR VII 57. $15-19$; iii/iv AD). ${ }^{35}$ Variation by synonymy could have been exploited had the writer wished or been able to do so. For example, in the simple utterance 'write a letter' the lexical repertoire of fourth-century Greek would have allowed the substitution of the verb 'send', and even 'produce', for 'write'. ${ }^{36} \mathrm{~A}$ correction motivated by a desire for variation in a similar situation occurs in a draft of a letter which Lollianus the grammarian addressed to an unnamed friend at court (at P. Oxy. XLVII 3366, ll. 23-4 = P. Coll.Youtie II 66, ll. 23-4, text B): ${ }^{37}$

## 23

à $\epsilon i \gamma \rho a ́ \phi$

[^52]I send you, ... brother, this third letter, so that continually writ
you may perpetually rejoice me by $\llbracket$ send $\rrbracket$ ing about your state of health. (Trans. P. J. Parsons, adapted.)

The first-hand correction in 1. 24, which aims at substituting $\gamma \rho a ́ \phi \omega \nu$ for $\dot{\epsilon} \pi \iota c \tau \epsilon \in \lambda \lambda \omega \nu$, obviates the impression of naïveté entailed by the sequence $\dot{\epsilon} \pi \iota c \tau \epsilon \in \lambda \lambda \omega \ldots \hat{\epsilon} \pi \iota c \tau o \lambda \eta_{\eta} \nu . . \dot{\epsilon} \pi \iota c \tau \hat{\epsilon} \hat{\lambda} \lambda \omega \nu$. The unemended utterance $\bar{\epsilon} \pi \iota c \tau \epsilon \dot{\epsilon} \lambda \lambda \omega \ldots \dot{\epsilon} \pi \iota c \tau o \lambda \dot{\eta} \nu$ may be given two different interpretations. By virtue of its literary pedigree it might be treated as a choice expression. ${ }^{38}$ (In third-century epistolary usage, the insertion of such a figure of expression in a passage of rather confidential tone would remind one of $\phi_{i}^{\prime}[\lambda \tau \alpha \tau] \epsilon, \phi \imath \lambda \eta \tau \alpha \dot{\alpha}$ coı $\phi_{i} \lambda \alpha$ in PSI XII 1246,
 second-century letter $S B$ VIII 9826 , ll. 5-6 it might be regarded as having a somewhat informal character. It must be borne in mind, however, that in the standard language of coeval letters on papyrus the verbs $\dot{\alpha} \pi о с \tau \dot{\epsilon} \lambda \lambda \omega$ and especially $\pi \epsilon ́ \mu \pi \omega$ are used in preference to $\epsilon$ ' $\pi \iota c \tau \epsilon ́ \lambda \lambda \omega$ to express 'send' in the utterance 'send an $\epsilon \pi \iota c \tau o \lambda \dot{\eta} \nu^{\prime} .{ }^{40}$

[^53]Where repetition of words or cognate words in contiguity or close proximity has no rhetorical force but retains (or may retain) a perceptible level of effectiveness, it may engender a variety of reactions from writers. Classical prose, for example, welcomes the reiteration of the same word at the close and opening of successive clauses or sentences. ${ }^{41}$ So does literary prose of the Roman period. ${ }^{42}$ But there is evidence to show that a desire for variation may arise out of phonaesthetic aversion to two adjacent forms of one and the same word. In a letter to Apion, gymnasiarch and former strategus of the Antaeopolite nome at the very end of the second century ad, Philosarapis, the sacrificial magistrate at Antaeopolis, writes: $\tau 0 \hat{v} \tau o \mid \delta \hat{\eta} \lambda o v$
 ('this is manifest to all; for all our young men carry you in their
 Plato in Phlb. 63 A adopts $\stackrel{\alpha}{\alpha} \pi \alpha c \iota$, $\pi \alpha ́ c a c$ at the point of junction between two clauses; and the pause-undivided sequence $\alpha \not \approx a c \iota$ $\pi a c-/ \pi \alpha \nu-$ is characteristic of Greek literary prose from classical Attic down to late antiquity. ${ }^{44}$ There are indeed occasional occurences of $\ddot{\alpha} \pi \alpha a c \iota \nu \dot{\alpha} \pi \alpha$ - in literary texts of the Roman period, ${ }^{45}$ but they admit of no obvious interpretation. Do they point to a different
at 315-17; A. H. Salonius, Zur Sprache der griechischen Papyrusbriefe, i: Die Quellen (Helsinki, 1927), 34-5; F. Blass, 'Ein Curiosum aus Oxyrhynchos', Hermes, 34 (1899), 312-15 at 313-15.
${ }^{41}$ J. D. Denniston, Greek Prose Style (Oxford, 1952), 4, 92-5.

 Єóac $\delta$ è $\hat{\eta} v$ ov̂̃oc.
${ }^{43}$ P. Oxy. XIV 1664, ll. 5-7, republished as Sel. Pap. I 148, ll. 5-7, and also by W. Döllstädt, Griechische Papyrusprivatbriefe in gebildeter Sprache aus den ersten vier Jahrhunderten nach Christus (Borna-Leipzig, 1934), no. 2, ll. 5-7. On the question of undeleted movable $n u$ see ibid. pp. 18-19. For Apion see Whitehorne, Strategi, 4; P. J. Sijpesteijn, Nouvelle Liste des gymnasiarques des métropoles de l'Égypte romaine (Zutphen, 1986), 22 no. 245. On the date of the letter see P. Mertens, 'Un demi-siècle de stratégie oxyrhynchite', CdÉ 31 (1956), 341-55 at 344, who argued that this Apion should be identified with the man mentioned in P. Oxy. I 57, l. 2 (also listed by Whitehorne, Strategi, 4); P. Amh. II 136, 1. 28; and P. Oxy. VI 908, ll. 3-4 (Sijpesteijn, Nouvelle liste, 23 nos. 248-9 respectively).

[^54]perception of repetition in contiguity? Or should they be treated as unemended lapses? Or alternatively are they errors made by scribes in copying? Be that as it may, Philosarapis shows himself both sensitive to the phonic effects of recurrence and alert in revising his composition.

Sometimes it so happens that even though two forms of one and the same word are separated by a relatively sizeable interval, selfcorrective intervention prompts the replacement of either of them. Let us consider a letter addressed by Anatolius, the archiprophetes, to his brother Nilus in the late 310 s or the early 320 s. ${ }^{46}$ Lines $8-13$ run as follows:

$$
\begin{aligned}
& \tau \hat{\eta}]<\alpha u ̉ \tau \hat{\eta} \subset \pi \rho o[\theta] \hat{c} \subset \epsilon \omega \subset
\end{aligned}
$$

$$
\begin{aligned}
& \alpha \nu \alpha[\hat{v} \tau] \hat{\eta} \subset \eta \eta^{\eta} \xi \epsilon \text {. }
\end{aligned}
$$

10
(my father?) holds to his original intention in wanting to come to you but was prevented by the fact that his elder sister met the fate of all humanity. arrive
But he will come after her obsequies. (Trans. B. R. Rees, adapted.)
The first-hand suprascript above 1.13 aims at obviating the repetition ${ }_{\eta} \boldsymbol{\eta} \kappa \epsilon \tau \nu . . \eta^{\eta} \xi \in \iota($ ll. 9, 13). Excluding prepositives and postpositives

[^55]from calculation, ${ }^{47}$ we can observe that the interval between the first occurrence of the verb $\eta^{\prime} \kappa \epsilon \iota \nu$ and the next consists of seven mobile elements. This size can hardly be taken as an indicator of close recurrence. ${ }^{48}$ Furthermore, intervals ranging from six to ten mobiles are quite common in literary prose, ${ }^{49}$ but unusual in the language of papyrus letters from Graeco-Roman Egypt. Variation by synonymy in Anatolius' letter may thus be treated as a marker of sensitivity to recurrence as well as of careful composition. ${ }^{50}$

Another interesting case is found in the petition which Ammon the scholasticus wrote a quarter of a century later, in AD 348. Two of the extant versions of his composition exhibit the following passage:
(a) P. Ammon II 35, II. 2-7

 $\pi[0 ́] \backslash \epsilon \epsilon, \quad \dot{\epsilon} \pi \epsilon \chi \chi \theta \hat{\eta} \quad \dot{a} \pi a y[\tau \hat{a} \nu \quad \epsilon i c$ $\left.\not{ }^{A} \lambda \epsilon \xi \dot{\xi} \alpha \nu \delta \rho \epsilon \epsilon a \nu\right] \quad \mid \quad \delta \iota a ̀ ~ \tau a \hat{u} \tau a \quad \tau \grave{\alpha}$





 ${ }^{2} \lambda \lambda \epsilon \xi \alpha \alpha \nu \delta \rho \epsilon a \varphi$.
(b) P. Ammon II 40, ll. 30-5


 $\dot{A} \lambda \epsilon \xi \dot{\xi} \alpha \nu] \mid \delta \rho \epsilon \epsilon a \nu \quad \delta i \grave{a} \quad[\tau] a \underline{u} \uparrow \tau a \quad[\tau \grave{\alpha}$







so that, should one Ammon, brother of Harpocration, be found in the city of the Panopolitans, he may hasten to come/sail down to Alexandria because of these slaves. But the praeses, having sent a message to the Panopolitans... the letter of my lord Sisinnius, received from these a report showing that Ammon, brother of Harpocration, had come to Alexandria together with Eugenius.

[^56]Three elements of utterance must be singled out for consideration: (i) 'Ammon, brother of Harpocration', (ii) the verb 'come' ( $\dot{\alpha} \pi \alpha \nu \tau \hat{\alpha} \nu)$, and (iii) 'to Alexandria'. Text (a) exhibits repetitions of each of them: the sequence (i), (ii), (iii) occurs twice. In (b) the repetitions of (i) and (iii) are retained, while that of (ii) is removed: 'come' ( $\dot{\alpha} \pi \alpha \nu \tau \hat{\alpha} \nu)$ is replaced by an equivalent verb, viz. 'sail down' $(\kappa[\alpha] \tau \alpha \pi \underset{~}{~}[\epsilon \hat{\epsilon} \subset \alpha \iota)$. In (a) the interval between the two occurrences of (ii) exceeds the limit of sixteen mobiles; and over eleven mobiles separate the first occurrence of (iii) from the second attestation of (i). In the presence of an interval of $11-15$ or even 16-20, an act of self-corrective intervention aiming at variation by synonymy constitutes a marker of over-sensitivity to recurrence.

## 5. PARTICLES

The extensive use of parataxis is a prominent feature of unsophisticated prose. The Greek documentary language of the Roman period which organizes narrative as a continuous series of finite-verb sentences, occasionally interspersed with participial and other clauses, may or may not introduce each sentence with a word meaning 'and', 'then', and so forth. ${ }^{51}$ Unconnected sentences are characteristic of lower styles but are not confined to them, for even literary prose occasionally welcomes accumulated asyndeta in narrative. ${ }^{52}$ When this phenomenon features in a draft of a document where reliable indicators of textual reworking are in evidence, it may be problematic to detect the determinants of use. For instance, diverse factors such as a desire for stylistic effect, a lack of control over performance, or unaccomplished revision might arguably be invoked to explain the accumulation of asyndeta in the narrative part of a draft of a petition of AD 102 to the prefect of Egypt, where four

[^57]consecutive sentences, encompassing sixteen lines, start without a

 $\delta \iota \delta \alpha \chi \theta \epsilon i c a \ldots$. ('She is under pressure... We went before Dius the strategus; she said...Having seen that she was lying, he asked for... She was instructed...'). ${ }^{53}$

Unlike the composer of this petition, other individuals undertook self-correction in order to dispense with asyndeton in a variety of language situations and stylistic contexts. In a letter exchanged between military officers the writer removed the lack of connectives in the transition from one sentence to another by adding $\delta \epsilon$ after the finite verb starting the new sentence. ${ }^{54}$ Similarly, in one draft of a petition of the first half of the third century AD the composer cleared away the asyndetic linking of two consecutive finite verbs by entering $\delta \epsilon$ above the line. ${ }^{55}$

There is in addition evidence to show that educated writers focused their attention on the function of particles as establishing relationships between thoughts. For example, the use of каi to string two sentences together seems to have triggered self-corrective intervention in both private and official performance. A passage from a third-century letter runs as follows: ${ }^{56}$

8
ö $\pi \omega c$

${ }^{53}$ P. Oxy. XXII 2342, ll. 11-26, reedited by P. van Minnen, 'Berenice, a Business Woman from Oxyrhynchus: Appearance and Reality', in A. M. F. W. Verhoogt and S. P. Vleeming (eds.), The Two Faces of Graeco-Roman Egypt: Greek and Demotic and Greek-Demotic Texts and Studies Presented to P. W. Pestman (Leiden, 1998), 59-70 at 65-6. Credit for raising the issue of asyndeton in this papyrus must be given to B. A. van Groningen, 'Quelques notes sur le papyrus d'Oxyrhynchus XXII, 2342', CdÉ 32 (1957), 348-51 at 351.
 where $\delta \epsilon$ is written in the margin to the left of co九, which is placed at the beginning of the line. The editors assigned the letter to the late 3 rd or 4th c., but palaeography suggests an earlier date.
${ }^{55}$ P. Vind. Tand. 2, 1. 21: $\eta^{\prime} \nu \epsilon \in \subset \chi \epsilon \tau o, \delta \epsilon \delta \dot{v} \nu \eta \tau \alpha \iota ` \delta \epsilon^{\prime} . .$. On the date of the petition see n. 18 above.

56 BGU IV 1080, reprinted as Chrest.Wilck. 478 and Hengstl, Griechische Papyri, no. 75 .
$\pi \lambda \hat{\eta} \nu \epsilon[i] \lambda a \pi i v \eta \nu \tau \epsilon \theta a \lambda v i ̂ a y . \llbracket \kappa \alpha i \rrbracket \kappa \alpha \theta \dot{\omega} \subset$



．．．in order that，while being at your place，we may celebrate together a double sumptuous banquet．【And】Just as，therefore，your brother Ammonas has said，conversing with me about you and your business，so it will take place as it is needful．

The writer，whose good level of education in literature is revealed by the Homeric echo in $1.10,{ }^{57}$ substituted oûv for кaí．He may have resolved to give a logical（inferential）turn to the relationship be－ tween the two sentences or to provide variety for utterance．Another interesting case of initial каí being cancelled and replaced by a substitute occurs in P．Col．X 266，a draft of a petition from an Antinoite woman，Heracleia alias Rufina，to Claudius Xenophon， the epistrategus of the Heptanomia．${ }^{58}$ Lines 11－15 run as follows：

$$
\epsilon \in \nu \in ́ \tau v \chi o v \delta \iota-
$$

$\lambda$ еі́c $\tau \omega \nu$
 $\delta \epsilon ́$

 asking to be heard．And Valens，finding that my request belonged to the office of the epistrategus，accepted it， rendering judgement through all his subscriptions．
（Trans．D．D．Obbink，revised．）

57 Cf．Od．xi． 415 єỉa $\alpha i v \eta \tau \epsilon \theta a \lambda v^{i} \eta$ ．On the impact of a literary echo or quotation on the nearby verbal context in non－literary linguistic performance see Horsley， ＇Papyrology＇，63－4．
${ }^{58}$ The petition is undated．Xenophon＇s tenure of office seems to have had its inception some time before 27 July Ad 179 （cf．SB XVI 12678，on which see n． 28 above），and ceased before 26 Dec．181；see Thomas，P．Oxy．LXV，pp．159－69 at 167； Obbink，P．Col．X，pp．68－71 at 70－1；J．D．Thomas，The Epistrategos in Ptolemaic and Roman Egypt．Part 2：The Roman Epistrategos（Opladen，1982），189，201－2 no． 52.

Having to express the link between two sentences within the narra－ tive（l．13），the drafter（no matter whether Heracleia or a scribe writing on her behalf）adopted an inceptive каí，but later changed it into каi．．．．$\delta \epsilon$＇by adding $\delta \epsilon \in$ in the interlinear space．（Apparently каí was not cancelled．）This use of $\kappa \alpha i . . . \delta \epsilon$ with the repetition of a name can be paralleled in a variety of prose writings，both classical and post－classical．It compares with Xen．Smp．8． $42 \kappa \alpha \tau \epsilon \theta \epsilon \hat{\alpha} \tau o ~ \tau \grave{\nu} v$ Kad入íav．кaì o Ka入入íac $\delta \grave{\epsilon} . .$. ，which is just one example of Xeno－ phon＇s well－known fondness of adopting каi．．．$\delta \epsilon$ with a repeated word；${ }^{59}$ and it is in evidence in other non－literary papyri from pre－ Roman and Roman Egypt．See BGU VI 1285 （i вс），ll．6－7：є́к Múcтac．．．｜．．．каí av̉ $\tau \hat{\eta} \delta \grave{\epsilon} \tau \hat{\eta}$ Múctậ，P．Oxy．Hels． 35 （ad 151），ll．

 Giss．Univ．III 20 （ii Ad），ll．9－11（＝Sel．Pap．I 117，ll．9－11）：oü $\tau \underset{\eta}{\eta}$

 which involve the personal pronoun．$)^{60}$

[^58]The subtleties of meaning as conveyed by connecting particles are such that two individuals may obviously happen to choose two different particles in relation to one and the same sequence of thoughts．This is exemplified by the ways of joining two activities such as speaking and writing（cf．English＇not only said but written＇）． Demosthenes in Third Philippic connects them with $\kappa \alpha i . . . \delta \epsilon-\bar{\epsilon} \epsilon \bar{\omega}$ $\nu \grave{\eta} \Delta \hat{\iota} \epsilon \hat{\epsilon} \rho \hat{\omega}$ ，каi $\gamma \rho \alpha ́ \alpha \beta \omega \delta \epsilon ́(i x .70)$ ．Aurelius Demareus，an Oxyrhynch－ ite of the third century AD，made a similar choice in a seemingly autograph letter to his wife，but then changed his mind while revising his composition：${ }^{61}$
$\tau o ̀ ~ \mu \epsilon ̀ v ~ o u ̂ v ~ \gamma \rho a ́ \phi \epsilon \iota \nu ~ c o ı ~ \pi \epsilon \rho i ̀ ~$
$\tau \hat{\omega} \nu \pi \rho \alpha \gamma \mu \alpha ́ \tau \omega \nu \quad \dot{\eta} \mu \hat{\omega} \nu \geqslant \ddot{\eta} \kappa \alpha i \tau \hat{\omega} \nu{ }_{\epsilon \prime}^{\epsilon} \rho \gamma \omega \nu$
öт $\pi \rho$ каі ф $\theta \dot{\alpha} \nu \omega$ тод入а́кıс coı $\gamma \rho \alpha ́ \psi \alpha с$
oủX $\hat{\eta} \tau \tau o v ~ \delta \epsilon ̀$
$15 \delta \iota \dot{\alpha} \epsilon \pi \pi \iota \tau \tau о \lambda \hat{\omega} \nu \pi о \lambda \lambda \hat{\omega} \nu$ ，каi кат’ ${ }^{\circ} \psi \iota \nu$ $\llbracket \delta \epsilon \rrbracket \subset о \iota \stackrel{\epsilon}{\epsilon} \nu \epsilon \epsilon \epsilon \iota \lambda \alpha ́ \mu \eta \nu, \pi \epsilon \rho \iota \tau \tau o ̀ \nu \nu \hat{v} \nu$ $\dot{\eta} \gamma \eta \subset \alpha ́ \mu \eta \nu$ ．
Therefore，I think it superfluous to write to you about our business，or even our affairs，concerning which I have just as much
written to you often before in many letters，and have
【also】 given you instructions in person．（Trans．A．S．Hunt，revised．）
He substituted＇just as much＇（oư犭 $\hat{\eta} \tau \tau o v ~ \delta \grave{\epsilon} \kappa \alpha i)$ for＇and also＇ （ $\kappa \alpha i \ldots \delta \epsilon$ ）before＇in person＇（ $\left.\kappa \alpha \tau^{\prime}{ }^{\prime}{ }^{\prime} \psi \iota \nu\right)$ by entering the sequence oúx $\hat{\eta} \tau \tau o \nu \delta \epsilon ́$ above $\kappa \alpha i ́$ ，and by deleting $\delta \epsilon$ in 1．16．This change alters the nuance of utterance in that，if two items are linked by oủ $\hat{\eta} \tau \tau o v ~ \delta \grave{\epsilon}$ （ $\kappa \alpha i)$ ），the second is set on an equal or superior level．${ }^{62}$ Themistius has




[^59]Demareus also laid much emphasis on the interrelation of the constituent elements of the sentence. In normal written performance, both literary and non-literary, two articular nouns $\left(\mathrm{A}_{1} \mathrm{~N}_{1}, \mathrm{~A}_{2} \mathrm{~N}_{2}\right)$ after a preposition (P) may be connected by either $\tau \epsilon \ldots \kappa \alpha i$ or a simple $\kappa$ á, according to the following patterns:
(a) $\mathrm{P}_{1} \mathrm{~N}_{1}$ каi $\mathrm{A}_{2} \mathrm{~N}_{2}$ (каі...),
( $b_{1}$ ) $\mathrm{P} \tau \epsilon \mathrm{A}_{1} \mathrm{~N}_{1} \kappa \alpha i \mathrm{~A}_{2} \mathrm{~N}_{2}$ (каi...), and
(b2) $\mathrm{P}_{1} \tau \epsilon \mathrm{~N}_{1} \kappa \alpha i \mathrm{~A}_{2} \mathrm{~N}_{2}$ (каі...).
Demareus' letter displays (i) one example of $\left(b_{1}\right)$ along with a case of $\tau \epsilon$ intervening between the preposition and a name, (ii) two instances of (a), and (iii) a case of first-hand correction of (a) to $\left(b_{1}\right)$, viz. $\pi \epsilon \rho i{ }^{\prime} \tau \epsilon \epsilon^{\prime} \tau \hat{\eta} \subset ~ с \omega \tau \eta \rho i ́ \mid \alpha c ~ c o v ~ к \alpha i ̀ ~ \tau o v ̂ ~ \tau \epsilon ́ \kappa \nu о v ~ \dot{\eta} \mu \hat{\omega} \nu .{ }^{64}$ The combined presence of (i) and (iii) reveals a liking for correlated structure in preference to strung-up units of utterance, for $\tau \epsilon \ldots \kappa \alpha i$ provides a closer connection than simple каi. His propensity for orderliness is paralleled in other papyrus texts, where a desire for corresponsive structure appears to have prompted the insertion of forward-pointing particles such as $\tau \epsilon$ and especially $\mu \epsilon \in \nu$. Evidence of the former is found in a contract of the early Roman period, where the particle $\tau \epsilon$ is added above the line by the main scribe ( $B G U$ IV $1149,1.25 ; 13 \mathrm{Bc}$ ). The latter is exemplified by Lollianus' carefullycomposed draft of a petition to the emperors Valerian and Gallienus. At an early stage of composition he described his supplication as
 $\lambda v c i \tau \epsilon \lambda(0 \hat{v} \subset a v$, 'not damaging to the city fund, yet in all justice beneficial to me. ${ }^{65}$ At a later stage he inserted $\mu \epsilon^{\prime} \nu$ above the line after $\ddot{\alpha}^{\prime} \lambda v \pi o \nu$. By virtue of its preparatory function, $\mu \in \in \rho$ weakens the impact of the $\delta \epsilon$-clause as a novelty on the reader. ${ }^{66}$

Whereas such interlinear insertions of $\tau \epsilon$ and $\mu \epsilon \in \nu$ involve some degree of premeditation, misuse of corresponsive particles may prompt immediate intervention of (self-)correction regardless of

[^60]the function of the text and the occasion for which it is written. A good example of this is provided by the erasure of $\kappa \alpha i ́$ in $\dot{\alpha} \pi \grave{o} \mu \dot{\epsilon} \nu$ $\mid \ldots \llbracket \kappa \alpha i \rrbracket \dot{\alpha} \pi \grave{o} \delta \dot{\epsilon} \ldots$ in an official account of sums collected for crown-tax in the reign of Elagabalus (ad 218-21). ${ }^{67}$

## 6. REGISTER

I have already touched on questions of register. ${ }^{68}$ Purism has a special bearing on this topic inasmuch as it is a constituent of higher styles. ${ }^{69}$ Yet it is not restricted to them. In the time of the Roman empire, when the emergence and development of linguistic Atticism were closely linked with cultural history, educated individuals were prepared to open up the language of their ephemeral writings to the influence of linguistic features which are, or may be regarded as, puristic in character. ${ }^{70}$ As a result, it is not surprising that the nonliterary papyri also exhibit evidence of puristically motivated selfcensorship. ${ }^{71}$ For instance, in a private letter of the late third or early fourth century, $i v a$ is cancelled and replaced by ${ }_{o}^{\circ} \pi \omega c$ above the line

[^61](P. Got. 12, l. 4). The latter is less common, ${ }^{72}$ and its use as a substitute for the former may be treated as puristic in nature, ${ }^{73}$ although corrections of the same kind occur in the Ptolemaic period as well. ${ }^{74}$

This example nicely illustrates the two poles of the activity most often associated with puristic practice, viz. the removal of units of utterance identified as undesirable and the provision of an acceptable alternative to such undesirable elements. It also shows how forms of self-censorship of arguably puristic nature affected informal performance. Similarly Lollianus in his letter to a friend at court appears to be practising self-censorship when he writes (P. Oxy. XLVII 3366, ll. $30-1=$ P. Coll.Youtie II 66, ll. 30-1, text B):

$$
\begin{aligned}
& \text { act(ac) }
\end{aligned}
$$


So it will be in your power, you who have so much (?) influence, to give me too some assistance, to obtain for me one of the orchards here. (Trans. P. J. Parsons.)

In literary prose style, both classical and post-classical, the purpose of the act denoted by сон $\beta \dot{\alpha} \lambda \lambda о \mu \alpha \iota$, 'contribute' (and the like), is expressed by $\pi \rho o ́ c$ (or $\epsilon i c$ ) with the articular infinitive. ${ }^{75}$ Final iva with the subjunctive would have been an excellent substitute for this construction; but Lollianus removed it. I suspect that although the simple infinitive after $\operatorname{c\nu \mu \beta \alpha ́\lambda \lambda о\mu \alpha \iota ,~'be~helpful'~(or~'contribute'),~is~}$ unclassical, it may have had a classicizing flavour as a consequence of íva's tendency to develop considerably at the expense of the infinitive in post-classical Greek, especially in unpretentious, non-classicizing

[^62]prose. ${ }^{76}$ As a recent investigator of purism has put it, 'most cases of syntactic purism constitute a negative reaction to innovation. ${ }^{77}$ Lollianus' act of self-correction is likely to be an example of this attitude.

## 7. ONE FINAL OBSERVATION

To draw general conclusions from the evidence discussed thus far would be unwise in principle, since I have focused my attention on a selection from published material, which in turn constitutes a tiny fraction of what was written in antiquity. But one point must be emphasized. Because self-corrective intervention at the level of linguistic style is found not only in draft petitions but also in private letters, even in contexts of rather informal tone, it seems as though premeditated language behaviour can hardly be regarded as merely dependent on the private/official (or formal/informal) character of performance. Other factors must also be taken into consideration. The writer's degree of education is among them.

[^63]
## 6

# Imperatives and Other Directives in the Greek Letters from Mons Claudianus* 

Martti Leiwo

## 1. INTRODUCTION

Approximately 6,000 ostraca have been found at Mons Claudianus in the eastern desert of Egypt. Of these 631 have so far been published, as O. Claud. I-III. The number of letters is not precise, as there is not always a difference between a letter and, for example, a receipt, but 170-80 of these texts can be defined as letters. ${ }^{1}$ All ostraca can be dated to the period between the emperors Trajan and Antoninus Pius. My focus is on the imperatives and other directive expressions found in the letters. The definition of a directive is: A orders, commands, or requests $B$ to do $X$ by expressing a desire (want, wish) that B do X. First I give a brief outline of the different types of directives, ${ }^{2}$ then I analyse

[^64]their morphosyntactic, phonological, and graphic variation, laying emphasis especially on the imperatives. Sometimes this variation leads to permanent changes in the language. I suggest that we may have evidence for such change in process as regards the imperatives.

In getting somebody to do something it is possible to use various lexical and grammatical constructions. ${ }^{3}$ These may have a different degree of force or politeness, and the rank and attitude of the speaker together with the presumption of the fulfilment of the request all have an effect on the choice of the directive type. For example utterances like My tea is getting cold!, Aren't you freezing?, Shut the window, please!, and Window! can be directives, though they have different linguistic compositions. Their intent is the same, but linguistically they are not similar.

## 2. DIRECTIVES

Roughly taken there are at least seven different types of directive speech acts: 1. Imperatives (Gimme a beer or an elliptic a beer); 2. Expressions of necessity ( $I$ need a beer; I must have a beer); 3. Embedded imperatives, which usually consist of a modal verb of some kind (Could you give me a beer; May I have a beer); ${ }^{4} 4$. Declarative directives (You will give me a beer); 5 . Question directives (Got a beer?); 6. Precatives (Have a good day, Farewell) expressing a wish rather than a command ('[may you] have a good day', '[may you] fare well')—precatives are also directives that seek to make the world conform with a human agent's desires for it, but perhaps without the agent specified as in the imperative; and 7. Hints (I'm out of beer). ${ }^{5}$ Hints seem to be very common among peers (You make

[^65]a fine door, Sam [i.e. let me through]), but seldom used in incompatible groups (Excuse me!). ${ }^{6}$ Sometimes the same verb can have more than one illocutionary point, for example, 'I advise you to leave' (directive) and 'The passengers are hereby advised that the train will be late' (information). ${ }^{7}$ This modification had different syntactic consequences, which is important also in Greek. Thus, by studying speech acts, we can actually get linguistic information which is otherwise difficult or even impossible to obtain because different clause types have traditionally been studied separately, under their own labels (e.g. commands, questions, causal clauses, conditional clauses, concessive clauses).

## 3. DIRECTIVES IN THE LETTERS

The letters at Mons Claudianus usually had only two goals: (i) to inform the recipient of something; (ii) to ask him to do something. Because of this they are naturally filled with directive expressions, and precision and clarity have a special value. If there are hints, it means that the earlier details are known, and the correspondence is going on between equals. Directive expressions are as follows:

## 3.1. ка入ف̂c ( $\epsilon \hat{v}$ ) $\pi о \circ \eta$ ŋ́cєı

This is the standard polite request in letters (1), ${ }^{8}$ and, although it was quite seldom used in literary sources, ${ }^{9}$ it clearly had its later meaning

[^66]of polite request or an expression of farewell already in the classical age besides the usual word-for-word meaning.

## 1. 3. John 6



They have testified about your love before the assembly. You will do well to send them forward on their journey in a manner worthy of God (World English Bible). ${ }^{10}$
2. Ar. Eccl. 803-4

(Chor.) You could break down! (Ant.) And if I do, so what? (Chor.) Good riddance to you!
3. And. 1. 40.9

 $\delta \epsilon \hat{i}$.
Euphemus thanked Diocleides for confiding in him. 'And now', he added, 'be good enough to come to Leogoras' house, so that you and I can see Andocides and the others who must be consulted' (trans. K. J. Maidment).
4. Dem. 20. 133
 oủxi ка入ิิс $\pi о \iota \eta ́ c o v c ı \nu$.
The men in question have not received it; I defy the defendants to prove it. If they have the effrontery to assert it, they will be acting dishonourably (trans. C. A. Vince).

As we can see from the above examples (1) and (3), in the standard grammatical structure $\kappa \alpha \lambda \hat{\omega} \subset \pi о \iota \bar{\eta} \subset \epsilon \iota$ took the aorist participle as its verbal complement. In the Mons Claudianus letters a more or less standard request or order usually has the same structure
5. O. Claud. III 492 (ad 141), ll. 1-6




[^67]Ptolemaios son of Eirenaios to Petronas the kibariates, ${ }^{11}$ greetings. Please give fourteen drachmas of my wages to Florus, for I have borrowed that amount from him on account of sustaining myself through the months Mecheir and Phamenoth (or '...fourteen drachmas .... which he has given me in advance to be paid off from my rations for the months Mecheir and Phamenoth').
6. O. Claud. I 128, ll. 2-5
 Please exchange the four water-skins and send me two baskets.
7. O. Claud. I 121, ll. 2-4
$\kappa \alpha \lambda o ̂ c \pi о \iota \eta ́ c \iota c$ סoùc $|\tau \alpha \phi \hat{\eta} \alpha \bar{\gamma} \tau \hat{\eta} \subset \tau \alpha \chi i ́| с \tau \eta c$.
Please supply 3 coffins (?) as quickly as possible.
As the above examples clearly show, even at Mons Claudianus the standard structure was frequently used, and $\kappa \alpha \lambda \hat{\omega} с \pi о \iota \eta^{\prime} \subset \in \iota c$, as a directive still in its underlying meaning 'you will do well', took the aorist participle as its compulsory complement, i.e. its argument. There are 47 examples of this idiom in my data, of which a little more than half, namely 25 , certainly took the aorist participle as the verbal argument.

There was more variation in the lower-register usage of this idiom, especially among non-native Greek speakers. It seems that the idiom was not understood in its original meaning any more, but had instead a very weak meaning that resulted in a paratactic structure similar to one common in Latin polite requests (see Dickey in Chapter 13). Thus ка入ิิс $\pi о \iota \eta$ и́єєь was frequently followed by the imperative (8-10), which cannot be the argument of $\pi o \iota \eta$ с́єıc in standard Greek. The illocutionary force of this idiom was more or less the same as please + imperative in English. Sometimes the verbal complement looks like an infinitive (11), but a rigorous analysis is necessary. Of the twelve instances where the idiom is certainly not followed by the aorist participle (there are, in addition, ten examples in which we cannot tell, or which have a different structure), there is not a single certain example of the infinitive: there are nine imperatives, and three ambivalent cases that all are

[^68]one and the same- $\pi \epsilon \prime \mu \psi \epsilon \mu o c .{ }^{12}$ Note that in cases when assimilation was possible, e.g. in the combination of $[\mathrm{n}]+[\mathrm{k}]$, or if hiatus would be the result, the normally weak final [n] could be maintained, and $\pi \epsilon \epsilon \mu \psi \epsilon$ and $\pi \epsilon \prime \mu \psi \epsilon \nu$ could represent the same form (see 25 and 43). ${ }^{13}$ What makes the analysis difficult is the aspectual state of affairs in requests, which is mostly aoristic. Thus we need verbs with a clear difference between the aorist imperative and the aorist infinitive. Of course, the analysis would be easier if there were examples in the imperfective aspect as well. The only grammatical present found in the data is undoubtedly in the imperative (8). Compare the following examples:
8. O. Claud. II 220, ll. 3-4

Please, brother, go to see the doctor.
9. O. Claud. II 245, ll. 8-10 (Plate 6.1)

Please, brother, when the caravan arrives demand the money for the taskou.
10. O. Claud. II 240, ll. 4-5

Please, Horion, send me five sheets of papyrus.
11. O. Claud. II 243, ll. 2-3
$\kappa \alpha \lambda \hat{\omega} с \pi v \eta^{[ }[\epsilon \epsilon \iota], \mid \stackrel{\alpha}{ } \delta \epsilon \lambda \phi \epsilon, \pi \epsilon ́ \mu \psi \epsilon \mu o \iota \tau o ̀ ~ \tau o \hat{\tau} \tau o$.
Please, brother, send me this (sum) here.
The form in (8) and (9) is the imperative, in (10) it is most probably the imperative, and in (11) it is ambiguous. The editors cannot decide either; in (11) $\pi \epsilon \epsilon \mu \psi \epsilon$ is analysed as an imperative, but in II 246 (see (43) and Plate 6.2) the same form is analysed as either an imperative or an infinitive, and in II 284 the same form again is analysed as an infinitive. If it is considered an infinitive ( $\pi \epsilon \prime \mu \psi \alpha \iota$ ), we should have other examples where the infinitive is the only possible

[^69]

Plate 6.1. O. Claud. II 245: Letter from Petenephotes to Valerius
solution or else we cannot be sure that the infinitive ever was an option. The following (12) is the only example where the verbal complement seems to be an infinitive, but the reading and the meaning as well as the whole syntactic structure of the phrase are uncertain, and, in addition, the next connected complement is, in any case, the standard aorist participle. All this makes it very difficult to take it as evidence for the optional use of the infinitive.

## 12. O. Claud. I 159, ll. 3-7


 $\pi \rho \omega ́ \tau \eta с$ 入úcıc.
Please . . in Claudianus from your own oven (?) and let me have two minae of meat and a foot from the first (?) ... (trans. A. Bülow-Jacobsen).

In (13) there seems to be an infinitive ( $[\pi \epsilon \prime \mu] \psi a \iota$ ), but that is governed by ${ }_{\epsilon} \dot{\alpha} \nu \theta \epsilon ́ \lambda \eta c$. This makes it a different construction, where the idiom was expanded with a polite conditional, just as in (14). Often



Plate 6.2. O. Claud. II 246: Letter from Petenephotes to Valerius
be a real condition as well. When it is a real condition, the verb is in the imperative mood again (15).
13. O. Claud. I 129, ll. 4-5 (embedded imperative)

Could you, please, send me new water-skins, and write to me?
14. O. Claud. I 133, ll. 1-4 (embedded imperative)


Could you, please, send us ropes of palm-fibre(?).
15. O. Claud. II 243, ll. 9-12 (real condition)
 $\tau а с к о[v]$.
So, please, if camels leave, send me the four taskou.

The idiom can also be expanded with an expression of necessity (16), though this addition is usually more or less banal and may have its origin in the spoken language, where explicit, even trivial, reasons are often expressed.
16. O. Claud. II 252, ll. 4-7

Please, if you have my letters, send them to me since I need them.
The idiom had even more variation as regards the choice of its complements, as it could take the aorist subjunctive or the future indicative with directive meaning. I shall address the latter more thoroughly below. These variants confirm the weak and idiomatic meaning of $\kappa \alpha \lambda \hat{\omega} с \pi о \iota \dot{\eta} \subset \epsilon \iota c$, since in the standard language it would be impossible for $\pi o \iota \epsilon \epsilon \omega$ to take such complements (17, and see below), but the use is again close to that of Latin requests (see Dickey in Chapter 13).

## 17. O. Claud. II 277, Il. 3-4


Please, brother, would you procure me some oil at whatever the price.
The idiom can also be followed by a very complex set of structures (18).
18. O. Claud. I 171, 11. 1-7

 à ${ }^{\text {opácáca. }}$
Menelaos to Menelaos greetings. Please, I ask you, since my rose-oil has been stolen, send me the flask, for I do not find any here to buy (trans. A. BülowJacobsen).

Accordingly, I can reach only one conclusion: it is not possible to find indisputable examples for the use of the infinitive with кад $\hat{\omega} c$ $\pi o r \dot{\eta} \subset \in \iota$ from the Mons Claudianus ostraca letters, but there were many other options used. There are, however, examples of the use of
 This means that the scribes used the idiom with the infinitive, and it may be a mere coincidence that the infinitive is not used at Mons

Claudianus．${ }^{14}$ But it may also mean that the scribes considered the infinitive to be a correct Greek expression，and the use of the im－ perative was contact－induced in a Roman military context．

## 3．2．Plain Imperative

The plain imperative was also very common in letters between equals which may，at the same time，have both кад⿳亠人口с поьйсєє in some requests and the plain imperative in others．It is also used in com－ mands to a person of lower rank（see 43）．

The imperative forms had a great deal of orthographic variation， which I deal with below．Here are some examples of their use：

19．O．Claud．II 221，ll．2－3

Send me a bandage for my head，because．．．
20．O．Claud．II 225，ll．14－17
 $\pi \epsilon \rho[i] \tau \eta \hat{}$ с с $\omega \tau \eta \rho i ́ a c \dot{\eta} \mu \omega \hat{\nu}$ ．
Procure me some fish；I shall pay back every denarius．And write to me about your health．

## 21．O．Claud．II 236，ll．4－6


Write me the message＇I have received＇or＇I have not received．＇
22．O．Claud．II 259，ll．6－8
$\mu \epsilon \lambda \eta \subset \alpha ́|\tau \omega \operatorname{col} \pi \epsilon \rho i \hat{\omega} \hat{\nu} \operatorname{col} \hat{\epsilon} \nu \epsilon \tau \epsilon \backslash \lambda \alpha ́| \mu \eta \nu$（an interesting third－person structure）． Do take care of the things I told you to do．

23．O．Claud．II 249，ll．6－8（Plate 6．3）
 $\kappa \alpha ́ \rho \delta a \mu \omega \nu$ ঠıà $\operatorname{\Lambda o\gamma }[\gamma \hat{\alpha} \tau o c]$ ．

[^70]

Plate 6.3. O. Claud. II 249: Letter from Petenephotes to Valerius

Write to me about your health. I hope you are well. Send me a little watercress ${ }^{15}$ through Longas.

The plain imperative can also take an additional conditional clause. An explanation for the request can be added as well, and it is, in fact, quite common in the ostraca letters ( 24 ; note the infinitive $\pi \dot{\epsilon} \mu \psi \epsilon$ ). Often the conditional clause gives a certain degree of politeness to the letter ( 25 , where $\pi \epsilon ́ \mu \psi \epsilon$ is probably an imperative, and 26):
24. O. Claud. II 275, ll. 3-7
 $\pi \epsilon ́ \mu \psi \epsilon$.
Buy me sliced fish and give it to the donkey-driver Achillas, because I want to send it to Egypt.

## 25. O. Claud. II 241, ll. 5-10

 Kגavסıavồ каi $\pi \epsilon \epsilon \mu \mid \psi \epsilon \tau о \hat{v} \epsilon \not \mu о \hat{v} \chi \alpha \lambda \kappa о \hat{v}$.

[^71]Even if you had not brought any from the sea, it would be splendid if you bought from Claudianus, and send for my money.
26. O. Claud. II 242, ll. 3-5
 $\dot{\epsilon} \nu \in \chi \theta \hat{\eta} \nu a \iota$.
If you wish, brother, have fresh fish brought urgently, as many as you can.
A strong emphasis can be obtained with word-order. This kind of topicalization can sometimes be very heavy, as in the letter from Apollonopolis Magna by a decurio Herennius Antoninus, where the object with its modifiers is fronted twice in the same letter:
27. O. Florida 2. 3-11


 $\pi \rho o ̀ c ~ \epsilon ’ \mu \epsilon ́ . ~$
Since the son of Balaneus who is in the watchtower is a boy, speak to the dekanos so that he may place a young man in his stead; for I also have sent orders to him about him. And send to me the civilian who set fire to the reeds near the new praesidium.

## 3.3. ${ }_{\epsilon} \rho \omega \tau \hat{\omega}, \dot{\epsilon} \rho \omega \tau \eta \theta \epsilon i c$, and Other Requests

A common type of request was made with the verb ${ }_{\epsilon} \rho \omega \tau \hat{\omega}$. This idiom was borrowed from Latin (see Dickey in Chapter 13) and was used between equals as well as between different ranks. The $\dot{\epsilon} \rho \omega \tau \hat{\omega}$ took as its complement either an infinitive, a paratactic imperative (28), or other structures, for example, a subjunctive introduced by ivo, a paratactic subjunctive, or a paratactic future indicative (29) (see Dickey). The passive participle $\epsilon^{\prime} \rho \omega \tau \eta \theta \epsilon_{i}^{\prime}$ c was also quite common in the directive meaning, but its history is obscure. It was used six times in my data, taking the imperative as its complement at least four (most probably five) times $(30,31)$ and a final clause introduced with ó $\pi \omega c$ once (32): ${ }^{16}$

[^72]28. O. Claud. II 366, ll. 10-12

And then, I beg you, send me some barley, because...
29. O. Claud. I 155, ll. 5-6
$\dot{\epsilon} \rho \omega \mid \tau \hat{\omega}$ сє $\pi \epsilon ́ \mu \psi \epsilon \iota c \mu о \iota \alpha \dot{v} \tau \eta \eta^{\prime}$.
I beg you, send her to me.
30. O. Claud. II 287, ll. 6-11


Please, Sir, send him with the tabellarius, so that through you and your generosity we can eat bread.
31. O. Claud. I 151, ll. 3-5

Please, see that my children are not violated.
32. O. Claud. II 386, ll. 6-8
 ov̉ $\delta \epsilon \nu \grave{c} \boldsymbol{v} \beta \beta \rho^{\prime} \zeta_{\epsilon \epsilon} \theta \epsilon(=\dot{v} \beta \rho i \zeta \epsilon \epsilon \theta \alpha \iota)$.
Please, Sir, concerning our lass Nike, keep her from being violated by anyone...

The first example of the passive participle in a meaning very close to 'please' seems to date from as early as 22 вс:
33. P. Oxy. VII 1061 ( 22 вс), ll. 10-12


Please interview Ptolemaeus with your brother Apollonius until you effect this for me...

As Dickey shows in Chapter 13, the semantic change from the original meaning 'enquire' of $\dot{\epsilon} \rho \omega \tau \hat{\omega}$ to 'request' was contact-induced. It was a translation of the Latin rogo, but the use of $\dot{\epsilon} \rho \omega \tau \eta \theta \epsilon$ íc as a directive still
P. Mert. II 62, P. Mich. III 206, III 209, VIII 466, XV 751, SB III 6263 (= P. Mich. XV 752), P. Mil.Vogl. III 201, P. Oxf. 19, P. Oxy. I 113, II 269, col. ii, VII 1061, XII 1581, SB III 7258, XIV 12143.
remains strange. It may have its origin in the language of contracts, but evidence for that is difficult to find. My suggestion is the following.

A change of meaning can happen when a word develops a new function. ${ }^{17}$ It is well known that besides requests, the passive participle $\epsilon^{\epsilon} \rho \omega \tau \eta \theta \epsilon$ ic was used in contracts during the Roman period, especially in military ones, when somebody was writing for a person who did not know letters or was a slow writer: $\epsilon^{\epsilon} \gamma \rho \alpha \nLeftarrow \alpha$ vinढ̀ $\rho \alpha \dot{u} \tau o \hat{v} /$
 thing very similar. ${ }^{18}$ This formula had old models from the Ptolemaic period, but in that early period the participles, if they were used at all, were those of standard Greek verbs for begging. ${ }^{19}$ It is evident that $\dot{\epsilon} \rho \omega \tau \eta \theta \epsilon i \epsilon^{\epsilon} \notin \rho \rho \alpha \psi \alpha$ was a translation of rogatus scripsi and there are, in fact, examples of that formula in Latin wax-tablets, though they are later than our earliest example of the word used as a directive. ${ }^{20}$ However, the lack of earlier wax-tablets is a problem of conservation, not a real piece of evidence. The development into a directive may have happened when the word $\epsilon \rho \omega \tau \eta \theta \epsilon i c$ came to be used in two different categories: 'I was begged/asked to do something' and 'you

[^73]are begged/asked to do something'. As the latter meaning is ungrammatical in standard Greek, it must have been a new creation, perhaps an independently understood idiom of politeness to be used in appropriate contexts. Or it could be evidence of change going on in the verbal morphology. We may, indeed, be observing the process of change that resulted in the modern Greek passive aorist subjunctive with the personal endings $-\theta \dot{\omega}^{\prime},-\theta \epsilon i ́ c,-\theta \epsilon i$, , $-\theta o u ́ \mu \epsilon,-\theta \epsilon i \tau \epsilon,-\theta o u ́ v$ (i.e.
 participle in my examples. However the participle does not refer to the first person, i.e. the sender, but the direction of reference is the second person, i.e. the addressee, which makes it a directive. This becomes evident from the following examples:
34. P. Wisc. II 69 (ad 101), ll. 3-5
 Being asked about the blankets I am writing to you if you have them for me through Valerius (transl. P. J. Sijpestejn).
35. P. Oxy. II 269, col. II (ad 57), ll. 3-7
 $\chi \epsilon$ ८о́ү $\rho a \phi o v$.
If you can, please (= you are asked) worry Dioscorus and exact from him his bond (transl. Grenfell and Hunt).
36. P. Oxy. XII 1581 (ii ad; the writer is a woman), ll. 4-7


Please (= you are asked), brother, don't let Sarapion roam and do nothing, but put him to work.

As was shown above (n.17), words may start a new life within a specific speech community. I cannot find any other plausible explanation for the use of ${ }_{\epsilon} \rho \omega \tau \eta \theta$ 位c as a directive than its change of meaning or even lexicalization in a multicultural context where the original passive meaning directed to the first person became directed to the second. This may be evidence of ongoing processes of change in the whole system of passive verbal morphology. ${ }^{21}$

[^74]
### 3.4. Submissive Requests

Sometimes letters were sent to persons who were much higher in rank than the sender. This created even more variation in the use of directives. A very submissive request could be fairly complex, if the writer, owing to his low rank, did not wish to express a request by using common directive structures. Note the use of the passive:
37. O. Claud. II 286 (Asclepiades to Horion the centurio), 1l. 3-8



Well aware of your piety, I have written to you, Sir, that you could supervise as soon as possible that seven matia of grain are received by the soldier Sabbas and delivered to me, my state being too weak. For besides you I have no other god.

### 3.5. Declarative Directives

The declarative directive was generally used in straight commands, and the use of the future indicative was very common just as in modern military language:
38. O. Claud. II 379, 11. 7-11


If you know that they are to be detached here, you will give them their assignments, and send one of them, and notify me.

The use of the future indicative as a directive is attested already in the classical literary language, where the volitive use of the future indicative is well known. ${ }^{22}$ In the papyri this use of the future indicative is regular, ${ }^{23}$ being also fostered by the phonologically induced confusion between the use of the aorist subjunctive and the future indicative which resulted in their merger. ${ }^{24}$ Outside the declarative use, the future indicative is

[^75]often used for subsequent directives after an initial directive in the imperative (39). ${ }^{25}$ It seems that the writers wished to indicate an aspectual difference, since often the directives in the future indicative are to be accomplished after the first directive in the imperative. As there is no future imperative in Greek, writers chose to use the future indicative instead. This observation has to be compared with larger evidence in due course to find out whether it has more general relevance.

### 3.6. Sequential Directives

A very common verb in these letters is коці $\zeta \epsilon \nu$, seen in (39):
39. O. Claud. II 249, ll. 2-4 (see Plate 6.3 above)
 Receive the basket from Longinas and give it to the man.

Here we have imperative + declarative directive. Note the future aspect; first the basket is received, then it will be given to the man. Komi弓etv could just as easily be translated 'get the basket from L. and give it to the man.' This verb is always linked to the following directive. It means 'receive, take care of, carry off', and is generally followed by another verb expressing the action to be performed. The object comes to the possession of the receiver, if the messenger gives it to him or her, with or without the actual verb in the imperative. Hence, it may be a matter of hendiadys, where the first part of the expression is fixed but does not really contribute to the meaning because the second part cannot be done without doing the first (such as 'take and...' [take this letter and give it to X], 'get up and ...' [get up and get me a beer], 'go and...' [go and see who's at the door], 'stop and...' [stop and get me some beer on the way home]).

## 4. VARIATION IN THE IMPERATIVE FORMS

The verb комі抆 may start discussion on the graphic variation. In the letters this verb is often used seemingly in the active ко́भıcov or

ко́ $\mu с є \nu$, instead of the standard middle ко́нıсає in the meaning 'receive'. The editors always emend it to the middle form. A simple explanation of its active use would be that it underwent a real shift of meaning, in which case the verb was used in the active voice to mean 'receive'. But what made this possible? There is an explanation, but it is not possible to understand the muddled morphology of the imperatives without some background.

### 4.1. Spelling and Phonology

The language of the letters has many elements that are not found in official documents, but are common in private letters. The variation that overlay the standard, orthographically and grammatically accurate, Greek can be clearly seen. The change in the Greek vowel system was one of the main issues of variation that created difficulties for writers. To illustrate a deep individual confusion, I take my examples from one person, called Petenephotes, who wrote twelve letters that have survived (O. Claud. II 243-54).

Petenephotes was a civilian who worked as a kibariates in the middle of the second century AD. ${ }^{26}$ As far as I know, the hand is unique among the ostraca, and Bülow-Jacobsen, the editor, considers Petenephotes to be the actual writer. ${ }^{27} \mathrm{He}$ had a trained hand. The letters are mainly written to his real brother Valerius. All letters except one represent a very familiar register. When the register was less casual the writer was more careful, as in O. Claud. II 252, written to a certain Sarapion, who is called $\tau \iota \mu \dot{\omega} \tau \alpha \tau o c .{ }^{28}$ In my view, the writer explicitly tried to use correct orthography with reasonably good success. But generally Petenephotes displays confusion in writing vowels. The origin of the difficulties is, obviously, the difference between speech and writing. ${ }^{29}$

[^76]Writing can be taught morpholexically (like French or English) or phonographically (like Finnish). If it was taught morpholexically, there would be little we could make of it as compared with pronunciation. ${ }^{30}$ The writers of ostracon letters were usually persons who were confused by the actual pronunciation, which they found hard to match with their learned orthography. If the writer did not have a good command of normative orthography, pronunciation caused lack of morphological transparency, which then evoked bizarre effects on written sentences.

It seems that Petenephotes used both above-mentioned writing methods: he sometimes considered words to be sound sequences, as if spoken aloud. Thus he wrote to some extent with his ears, so to speak. He had difficulties especially with the phonemes that were written with $o \iota, v, \omega, o$, and $o v$ in the standard orthography. But, on the other hand, he clearly wrote some words from memory, trying to remember the standard orthography as it was taught to him, i.e. morpholexically. Once, when he noticed that he had left words out, he made a correction which was morphologically and orthographically correct. In fact, it is the only example of the standard aorist participle in his letters in this connection:
40. O. Claud. II 245, ll. 2-6 (see Plate 6.1 above)


Please, brother, if the caravan arrives this night, send me three pairs of loaves because I haven't any bread.

As a modern example for similar writing difficulties, I can cite two modern ostracon-equivalents, i.e. S[hort]M[essage]S[ervice] texts, sent to me by my Egyptian neighbour from his mobile telephone. I consented to take a satellite antenna onto my sixth-floor balcony, because my neighbour had no signal on his balcony below. The two SMS texts belong to this context:
41. (SMS, 31 August 2006)

Hi ihope you are fien. Please have look in your balkone the stalit man he forget thamsing, \& he witanig 4 my answr.

[^77]42. (SMS, 1 September 2006)

Hi please tray to move the desh aletal bet daun and ragth. Ihope you are ok and at home.

The similarities to our ostraca are remarkable, and all the difficulties Petenephotes faced persist. The writer, who has learnt English by listening, knows the spelling of some words ('are', 'please', 'look', etc.) and constructs some spellings phonographically, at the same time trying to remember the correct orthography. As an Arabic-speaker he finds the writing of vowels even more problematic than English children do, for instance, learning to write: fien $=$ fine, stalit $=$ satellite, thamsing $=$ something, witanig $=$ waiting, tray $=$ try, desh $=$ dish, aletal bet $=$ a little bit, daun $=$ down, raght $=$ right.

Against this background let us consider Petenephotes' imperatives. These are representative as they reflect almost all possible variations, the problem being mainly to find the correct letter for the respective vowels. As has been pointed out, unstressed vowels were subject to the most variation, ending in their neutralization, which is explained as partly due to language contact. ${ }^{31}$ This neutralization was problematic for many Egyptian Greek writers as they could not draw a distinction between /a/, /e/, and /o/ in, for example, unstressed final syllables. We also know from many sources that final /n/ was weak or not pronounced at all (cf. n. 13 above), which, together with neutralization, ultimately lead to the phonetic merger of the forms of the type $\pi \epsilon \mu \mu \alpha \iota$, $\pi \epsilon ́ \mu \psi \epsilon, \pi \epsilon ́ \mu \psi \epsilon \nu, \pi \epsilon ́ \mu \psi o \nu, \pi \epsilon^{\prime} \mu \psi \omega \nu$. For example:
43. O. Claud. II 246, ll. 1-10

 Пах $\omega \mid \mu \iota . \pi \epsilon ́ \mu \psi \epsilon \nu$ каі $\pi \iota \tau|\tau \alpha ́ к \iota \nu ~ \mu о \iota ~ \ddot{\alpha} \gamma \nu \alpha| \phi о \nu$.
Petenephotes to Valerius his brother, many greetings. Please send me 4 drachmas, so that I can get the pass and can arrive on the 24th. Send it with Pachomis. Send me also an unfulled (new?) pittacium. (trans. A. Bülow-Jacobsen).

This letter has two certain imperatives ( $\pi \epsilon \prime \mu \psi \epsilon \nu$ ) and one uncertain ( $\pi \epsilon \prime \mu \psi \epsilon$ ) (see above). ${ }^{32}$ In this connection it is important to note that

[^78]Petenephotes wrote, without any doubt, an aorist imperative ending with epsilon though he used omicron ( $\pi \epsilon \epsilon \mu \psi o v$, O. Claud. II 243, II 252) and omega (44) as well. Petenephotes' spelling has a lot of variation, but he tried to be consistent with his choice throughout the individual letter, though even then there was some variation, as in the following example:
44. O. Claud. II 249, II. 2-8




... Receive the basket from Longinas and give it to the man. Say to Apollonius: 'Please do this for me and send it to me through Longas, for I need it. Write to me about your health. I hope you are well. Send me a little watercress through Longas.'

Note the consistency and small variation: ко́нисєv (ко́ $\mu с о \nu)$, av̇т $\dot{\omega} \iota$

 ( $\pi \epsilon ́ \mu \psi o \nu$ ), ка́ $\rho \delta \alpha \mu \omega \nu$ (ќ́ $\rho \delta \alpha \mu о \nu$ ). The spelling problems created strange forms in noun morphology, too, and the second-language (especially Egyptian) speakers' difficulties with Greek noun morphology are an interesting and important question, but outside the scope of this essay. ${ }^{33}$ However, Petenephotes does not show similar difficulties in noun morphology as with the imperatives. ${ }^{34}$ It is obvious that Petenephotes spoke Greek fluently and wrote it with ease. Greek was the language of his correspondence between himself and his brother and he could use structures that are quite sophisticated:
45. O. Claud. II 247, ll. 2-5

As I was already half-way the centurion sent me ... (trans. A. Bülow-Jacobsen).
Because of the spelling problems, the imperatives lost their original transparency and became even more obscure, as the middle ending of

[^79]the 2 nd person imperative $\{$ sai $\}$ was easily mixed with the active endings $\{$ son $\}$ and $\{(s) e\}$. This gave rise to a situation where forms which looked different in their written form were no longer phonetically transparent and were thus merged: ко́рıсор, ко́ $\mu с є \nu$, and
 graphically complex situation craves a psycholinguistic explanation.

## 5. CONCLUDING REMARKS

Every healthy person stores in his/her mind various linguistic rules. As always, there are different views about how a complex morphological system (like Finnish or ancient Greek) is stored in our mind, but it is stored there, no question about that. A theory that has had much influence in the studies of morphology is the model created by Joan Bybee in her 1985 study (see n. 36 below). According to her, our mind stores both basic and inflected forms, which are mentally organized with the help of regularity and similarity that she calls lexical connections. Starting from this model and modifying it with other research on morphological processing, ${ }^{36}$ it is possible to postulate three components that we use in our mental lexicon as we produce forms: (i) combining affixes and stems with the help of grammatical rules; (ii) fetching a complete form from memory; and (iii) producing forms by analogy.

If we apply this theoretical basis to our problem, we can make a suggestion of what may have happened in Petenephotes' mind. First, he combined affixes with verbal stems: pemp + se or son (i). In this process only two imperative morphemes were phonetically activated in his mind: one for the aorist $\{\mathrm{sa}(\mathrm{n})\}$ and, if needed, one for the present $\{\mathrm{e}\}$. He regarded these morphemes as segments which could

[^80]be glued to a stem of any verb to denote a command. On these grounds I suggest that the graphic representations of, for example, $\pi \epsilon ́ \mu \psi \epsilon, \pi \epsilon \prime \mu \psi \epsilon \nu, \pi \epsilon \prime \mu \psi \sigma \nu$, and $\pi \epsilon \prime \mu \psi \omega \nu$ are really one and the same form in Petenephotes' mental lexicon, manifesting itself in pronunciation which could be close to \{pé\}mpsə] regardless of spelling. But in spite of this rule-processing, Petenephotes is still uncertain of the spelling of the imperatives, as he has been taught the correct forms which he tried to memorize.

It is seldom possible to study genuinely individual language use in our data, since scribes were able to change the dictation according to their own habits. Petenephotes' letters show clearly that he had serious difficulties in writing the imperatives. I suggest that this was due to the fact that in speech the morphology of the imperatives was approaching the situation now prevailing in modern Greek. There were two basic forms of imperatives in speech. Owing to the phonological changes the active and middle forms of the aorist imperative were becoming less and less distinct. This lack of transparency caused some individuals to reduce the imperatives to two with the endings $\{-\mathrm{s} 2\}$ and $\{-\mathrm{e}\}$. However, in teaching to write the standard forms were used, which caused difficulties for nonprofessional writers, especially second-language writers, who tried to write according to taught orthography.

## 7

# Do Mothers Matter? The Emergence of Metronymics in Early Roman Egypt* 

Mark Depauw

## 1. INTRODUCTION

The addition of the mother's name in personal identification in Greek has hitherto received relatively little attention. ${ }^{1}$ The traditional interpretation (of the few people who bothered to comment on it) was that it appeared in the late Ptolemaic period and was the 'Nachklang eines früheren "mutterrechtlichen" Zustandes'. In her dissertation of 1939 Lea Bringmann argued against this hypothesis by pointing out that mothers' names only appear in Egyptian texts from the Persian period onwards, which is somehow too late to explain the phenomenon as an atavistic matriarchal remnant. Instead she concurred with Griffith, who thought that in Demotic the addition of the mother's name served the purely practical purpose of distinguishing homonymic individuals. ${ }^{2}$

As I have shown elsewhere, however, this addition to Greek personal identifications is in fact a very rare phenomenon during the Ptolemaic period, when the exceptional examples can in all likelihood be adequately

[^81]explained by Egyptian influence. ${ }^{3}$ In the Roman period the situation changes dramatically: a DDBDP search for $\mu \eta \tau \rho o ́ c$ in Greek documents dated after 30 bc results in not less than 17,493 hits. Even when taking into account that there are significantly more texts from this later period (about 45,396 according to the HGV, or over five times as many as in the Ptolemaic period), ${ }^{4}$ this exponential growth of attestations can hardly be coincidental and raises new questions about the validity of Bringmann's argument. Were there really suddenly that many more homonymic individuals? And why should the-for Greek unusual-addition of the mother's name have been introduced to distinguish them?

In view of the enormous number of attestations, a systematic investigation of all seems out of bounds. ${ }^{5}$ To structure the overwhelming source material, I will concentrate on the beginnings of Roman rule. In all, the period between 30 вс and ад 100 provides a corpus of 2,495 instances (in about 5,071 records according to the HGV), of which over 95 per cent comes from a context of personal identification. Of these I have used 1,378 in 183 more or less precisely dated documents. For reasons which will become clear later, I have distinguished two periods: before and after AD 50 .

## 2. METRONYMICS IN PERSONAL <br> IDENTIFICATION, 30 BC-AD 50

In the period between 30 bC and AD 50 I found 391 examples of identifications including mothers' names in 49 documents (Table 7.1). Three groups can be distinguished:
(i) 163 instances in 33 documents with a marked Egyptian social background. This group includes:

[^82]Table 7.1. Documents including mothers' names 30 bс-ad 50
$P g f=$ mention of the paternal grandfather; $M g f=$ mention of the maternal grandfather

|  |  | Date |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Document | Prov. | AD | Ex. | Context |$\quad$ Pgf $\quad$ Mgf

Table 7.1. (contd.)

| Document | Prov. | Date AD | Ex. | Context |  | $M g f$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P. Ryl. II 160 B | Sokn. Nes. | 37 | 8 | subscription to Dem. contract |  |  |
| P. Congr. XV 13 | Phil. | after 37 | 4 | house survey | 1 |  |
| P. Mich. V 290 | Tebt. | c. 37 | 4 | subscription to Dem. contract? ${ }^{a}$ |  |  |
| CPR XV 47 | Sokn. Nes. | 41-54 | 2 | subscription to Dem. contract |  |  |
| P. Congr. XV 14 | Phil. | 41-48/9 | 50 | census list |  |  |
| P. Ryl. II 160 D | Sokn. Nes. | 42 | 2 | subscription to Dem. contract |  |  |
| PSI VIII 907 | Tebt. | 42 | 6 | subscription to Dem. contract? ${ }^{a}$ |  |  |
| PSI VIII 908 | Tebt. | 42/3 | 3 | subscription to Dem. contract? ${ }^{a}$ |  |  |
| P. Mich. II 121 | Tebt. | 42 | 10 | abstracts of contracts |  |  |
| P. Mich. V 269 | Tebt. | 42 | 3 | subscription to Dem. contract? ${ }^{a}$ |  |  |
| P. Mich. V 270 | Tebt. | 42 | 1 | subscription to Dem. contract? ${ }^{a}$ |  |  |
| P. Mich. V 271 | Tebt. | 42 | 1 | subscription to Dem. contract? ${ }^{a}$ |  |  |
| PSI VIII 909 | Tebt. | 44 | 20 | subscription to Dem. contract |  |  |
| P. Vind. Tand. 24 | Sokn. Nes. | 45 | 4 | subscription to Dem. contract |  |  |
| SB XIV 11895 | Sokn. Nes. | 45 | 5 | subscription to Dem. contract |  |  |
| O. Theb. 97 | Theb. | 46 | 1 | tax receipt | y |  |
| SB I 5247 | Fay. | 47 | 8 | subscription to Dem. contract |  |  |
| P. Mich. V 277 | Tebt. | 48 | 3 | subscription to Dem. contract |  |  |
| P. Fouad 35 | Oxy. | 48 | 1 | contract (grant of power of attorney) |  |  |
| P. Ross. Georg. II 12 | Fay. | 48 | 36 | census list |  |  |
| SB I 4344 | ? | 48 | 1 | tax receipt | $y$ ? |  |
| P. Phil. 5 | Phil. | 49 or 62/3 | 1 | census list |  |  |
| P. Tebt. II 299 | Tebt. | c. 50 | 4 | declaration by priest to komogrammateus of son born in year 10 of Tiberius, entered in list [of exempted priests?] | y | y |

[^83](a) The identification of the contracting parties in the elaborate autograph subscriptions to Demotic contracts. At least in some cases these subscriptions were written before the Demotic and were the only legally valid parts of the document. Hence also the occasional omission of the Demotic body, in which case only the Greek subscriptions were written.
(b) Translations of these bilingual contracts into Greek.
(c) Lists with abstracts of contracts. The two documents in which mothers' names are attested are particularly instructive. In one case, P. Mich. V 241 (ad 16; Tebtunis), there are four abstracts, only one of which (a sale and cession of a house) identifies the parties by adding the mother's name; it is omitted for the three others (loans), perhaps because they were originally written in Greek. The other case is P. Mich. II 121 (ad 42; Tebtunis), a list of 50 abstracts of contracts. In only five contracts, all alimentary contracts dealing with marriage, is the mother's name used for the identification. Since the structure of the abstract is anomalous in comparison with the others in the document (an anomaly in the positions of the names of the contracting parties, which appear at the end), it seems likely that here again the originals may well have been in Demotic with Greek subscriptions.

Paradoxically the higher number of 'Egyptian' metronymica in these Greek documents is related to the obsolescence of Demotic in the course of the first century AD. ${ }^{6}$
(ii) 224 instances in twelve documents related to the census instituted by the Roman government. ${ }^{7}$ This group includes the following subcategories:
(a) Census declarations. At the latest from ad 19 onwards all households in the Egyptian chora were supposed to inform the authorities of their composition in a formal declaration. For some, or even most, family members the name of the mother is provided.

[^84](b) Census and tax lists. The information gathered from the declarations was in a second stage compiled into census lists, and these lists were then used for various taxation purposes.
(iii) Four instances in four other documents, a contract and three tax receipts.

The first of these three groups of Roman period attestations of the mother's name is not fundamentally different from the Ptolemaic examples, but the second constitutes a wholly new category. The crucial question is therefore how in this context the appearance of this (for Greek) new onomastic element can be explained.

A first possibility is that there is no real change, but that the onomastic addition is only an apparent novelty. Perhaps census returns in the Ptolemaic period also had to include both father's and mother's name, just as in the Roman period. This might be suggested by SB VI 8993. In Heichelheim's traditional interpretation this is a decree regulating the declaration of both acquired and houseborn slaves, for whom as always the name of the mother should be given (since that of the father was supposed to be unknown anyway). ${ }^{8}$ According to Scholl, however, this decree stipulates that people should declare their children as well as their slaves, in each case adding the mother's name. ${ }^{9}$ It would in other words regulate a general census for fiscal purposes, similar to the Roman period census.

Dorothy Thompson and Willy Clarysse, whom I have consulted on this matter, brought forward several arguments against this new interpretation. First of all, the few Ptolemaic declarations that are preserved do not feature mothers' names at all, nor are mothers' names included in any of the numerous census lists that were compiled. Second, in their opinion the text of the decree itself is also more in line with Heichelheim's interpretation than with Scholl's. Thus 1. 6, specifying that house-born slaves should be declared with their mother's name, suggests that the first part also deals with slaves, but of another type. The total omission of any reference to fathers' names is also better explained if the entire text deals with slaves. It seems somewhat unlikely that no provisions for supplying fathers' names were made because it was considered self-evident.

[^85]If there is thus indeed real change, one must wonder what might have caused it. A tempting hypothesis is Egyptian influence. Not only is the use of the mother's name well attested in formal Demotic documents, but also Greek is increasingly used by Egyptians in the first century AD, which has led to 'Orientalisms', for example in epistolary formulae. ${ }^{10}$ To determine whether something similar has happened here, I have examined closely the use of mothers' names in census declarations, which has revealed interesting peculiarities.

A first one is that although mothers' names appear regularly even in the earliest census declarations, they initially never seem to be used in the identification of the declarant at the start of the document. In fact the first declarant to identify himself using his mother's name only appears in AD 75 (BGU XI 2088), and it only becomes a regular feature from ad 89 onwards.

The second observation is that at first sight the addition or omission of mothers' names when describing the people living in the house of the declarant seems to be quite unsystematic. In the oldest example, P. Mil. I 3 (ad 11; Arsinoites), two of the three family members (the declarant and his daughter) are identified by adding the mother's name, but for the mother of the declarant this is omitted. In the sole declaration related to the supposed census of ad 19 (?) (P. Oxy. II 254; Oxyrhynchos), the mother's name is provided for the only preserved inhabitant, but since he seems to be an $\dot{\alpha} \pi \dot{\alpha} \tau \omega \rho$, this may be an exceptional case anyway. Two of the best preserved declarations for the ad 33 census show some interesting differences: in P. Oxy. Hels. 10 all seven family members are identified with name, patro-, and metronymic, while in SBX 10759 only four out of six family members and six out of eight free non-kin inhabitants of the house have mothers' names. The sole document related to the AD 47 census is damaged, but the only remaining identification, one of a freedwoman of the declarant's kurios (and in all likelihood husband), does not have a mother's name. No clear pattern seems to emerge.

On the basis of these two observations one might conclude that the practice of adding the mother's name in census declarations was not a legal obligation, but rather an optional addition by the declarant. If this were the case, however, it seems odd that metronymics

[^86]regularly appear in lists of people closely related to the declarations. Thus P. Mich. X 10578, probably dated to ad 22/3 (Philadelphia), lists some ten boys who are approaching or have reached the (taxable) age of 14 with their mothers' names. At the end of the taxation account P. Oxy. II 288 (ad 22-5) an extract is given from the epikrisis of AD 11, and again mothers' names are provided. They also appear in the entries of the tax register P. Princ. I 8 (ad 46/7), the house survey $P$. Congr. XV 13 (after ad 37), and the census lists P. Congr. XV 14 (ad 46/7) and P. Ross. Georg. II 12 (ad 48). One wonders why these lists should systematically include the mothers' names of the taxpayers if it was not always provided by the declarants in the census declaration, which after all were the basis on which these lists were compiled.

Another look at the first-century-AD census declarations, and more specifically at those declarees for which certainly no mother's name is provided, reveals, however, that these are only in very few cases men (Table 7.2). ${ }^{11}$

Table 7.2. Declarations without mothers' names in first century ad

| 11-Ar-1 | Family member no. 3: woman |
| :---: | :---: |
| 33-Ar-1 | Family member no. 3: man, but the mother may be lost in the lacuna |
|  | Family member no. 6: man, but unclear |
|  | Free non-kin no. 7: woman (?) |
|  | Free non-kin no. 8: woman (?) |
| 33-Ar-2 | Family member no. 1: man, but his mother is the declarant and the identification is introduced by ' my son' |
|  | Family member no. 2: woman |
| $33-\mathrm{Ox}-1$ | Family member no. 2: minor, perhaps a girl? |
|  | Family member no. 3: woman |
| 47-Ox-1 | Family member no. 2: woman |
| 75-Ar-1 | Family member no. 2: woman |
| 75-Ar-2 | Family member no. 5: woman |
| 75-Ox-1 | Family member no. 1: perhaps a woman rather than a man? |
|  | Family member no. 2: perhaps a woman rather than a man? |
| 89-Ar-1 | Family member no. 2: woman |
| 103-Ar-1 | Free non-kin no. 1: man (renter) |
|  | Free non-kin no. 2: woman |
|  | Free non-kin no. 4: man (renter) |
|  | Free non-kin no. 6: woman |
| 103-Ar-4 | Family member no. 1: man, but damaged |
| 103-Ar-11 | Family member no. 2: woman |
| 103-Ar-14 | Family member no. 1: man (renter) |

${ }^{11}$ I have used the summaries (and abbreviations) in the catalogue of census declarations found in Bagnall and Frier, Demography, 179-312.

The addition of the mother's name in census declarations thus seems to be almost obligatory for men, but less so for women. To determine why, I will first examine the evidence for mothers' names in personal identification in the period AD 50-100.

## 3. METRONYMICS IN PERSONAL IDENTIFICATION, AD 50-100

With 987 personal identifications adding the mother's name in 134 documents (Table 7.3) the practice has clearly spread further. Five groups can be distinguished:

Table 7.3. Documents including mothers' names ad 50-100

| Document | Prov. | Date AD | Ex. | Context | Pgf | Mgf |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stud. Pal. IV pp. 119-21 | Fay. | 54-68? | 25 | bank account concerning taxes |  |  |
| SB I 5117 | Fay. | 55 | 3 | subscription to Dem. contract |  |  |
| Chr. Wilck. 145 | Herm. | 60 | 2 | membership ephebeia |  | y |
| P. Oxy. II 250 | Oxy. | 61 | 1 | register of property | y |  |
| P. Heid. IV 340 | Herm. | Dec $\text { 61-Jan } 62$ | 1 | membership ephebeia |  |  |
| SB VI 9572 | Tebt. | 61/2 | 5 | census list |  |  |
| P. Heid. IV 339 | Herm. | 61-3 | 1 | membership ephebeia | y |  |
| P. Oxy. XXXVIII 2873 | Oxy. | 62 | 1 | unclear: preparation census? | y | y |
| P. Heid. IV 338 | Herm. | 62 | 1 | membership ephebeia |  |  |
| P. Heid. IV 305 | Herm. | 62-3 | 1 | membership ephebeia | y |  |
| P. Heid. IV 341 | Herm. | 62-3 | 1 | membership ephebeia |  |  |
| P. Heid. IV 342 | Herm. | 63 | 1 | membership ephebeia | y | y |
| P. Ryl. II 101 | Herm. | 63 | 2 | membership ephebeia |  | y |
| PSI I 51 | Thead. | 63/4 | 1 | receipt for work | y | y |
| P. Lond. II 181 | Kerkeesis (Fay.) | 64 | 37 | record of taxes paid into state bank |  |  |
| SB XII 11145 | Oxy. | 65/6? | 1 | declaration to sitologos | y | y? |
| P. Oxy. II 289 | Oxy. | 65-83 | 2 | tax account (copies of receipts) | y | y |
| P. Oxy. II 239 | Oxy. | 66 | 1 | oath concerning tax | y | y |
| P. Oxy. II 246 | Oxy. | 66 | 1 | register of cattle | y | y |
| P. Oxy. II 272 | Oxy. | 66 | 2 | subscription to contract | y | y |
| P. Oxy. II 275 | Oxy. | 66 | 5 | contract (apprenticeship) | y | y |

Table 7.3. (contd.)

| Document | Prov. | Date AD | Ex. | Context | Pgf | Mgf |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PSI VIII 871 | Oxy. | 66 | 1 | declaration of residence (scribe for illiterate woman) | y | y |
| O. Erem. 8 | Theb. | 66 | 1 | tax receipt | y | y |
| P. Giss. 94 | Sokn. Nes. | 66/7 | 1 | tax receipt | y | y |
| O. Wilck. 1397 | Theb. | 66/7 | 1 | tax receipt | y |  |
| C. Pap. Gr. II/1 10 | Sokn. Nes. | 66/7 | 2 | declaration of death | y | y |
| $\begin{aligned} & \text { SB XVI } 12332 \\ & \text { nos. 1-5 } \end{aligned}$ | Phil. | 66-71 | 5 | tax receipt | y | y |
| O. Bodl. II 488 | Theb. | 67 | 1 | tax receipt |  |  |
| O. Bodl. II 603 | Theb. | 67 | 1 | tax receipt | y |  |
| O. Brux. 2 | Theb. | 67 | 1 | tax receipt | y |  |
| O. Wilck. 419 | Theb. | 67 | 1 | tax receipt | y | y |
| O. Wilck. 436 | Theb. | 67 | 1 | tax receipt | y |  |
| SB XVI 12686 | ? | $\begin{aligned} & 67-9 \\ & 69 \mathrm{HGV} \end{aligned}$ | 3 | tax receipt | y | y |
| C. Pap. Gr. I 21 | Oxy. | 68 | 1 | contract (cit. of Alexandria) | y | y |
| P. Oxy. XIV 1641 | Oxy. | 68 | 1 | subscription to contract | y | y |
| O. Wilck. 422 | Theb. | 68 | 1 | tax receipt | y |  |
| O. Bodl. II 489 | Theb. | 68 | 1 | tax receipt | y |  |
| O. Bodl. II 604 | Theb. | 68 | 1 | tax receipt | y |  |
| O. Theb. 32 | Theb. | 68 | 1 | tax receipt |  | y |
| O. Petr. 86 | Theb. | 68 | 1 | tax receipt | y |  |
| O. Stras. 88 | Theb. | 68 | 1 | tax receipt | y |  |
| BGU VII 1614 | Phil. | 69/70 | 18 | tax list | y | y |
| P. IFAO I 32 | Fay. | 69 | 2 | receipt for work | y | y |
| PSI X 1133 | Tebt. | 70/3 |  | tax receipt | $y$ ? |  |
| P. Mil. Congr. XIV <br> p. 78 | Oxy. | 71 | 2 | contract | y | y |
| O. Wilck. 430 | Theb. | 71 | 1 | tax receipt | y |  |
| O. Wilck. 432 | Theb. | 72 | 1 | tax receipt | y | y |
| P. Warren 2 | Fay. | 72 | 1 | declaration of birth | y | y |
| Stud. Pal. IV <br> pp. 58-78 | Arsin. | 72/3 | 157 | census list | y | some |
| O. Stras. 90 | Theb. | 73 | 1 | tax receipt | y |  |
| P. Yale I 64 | Oxy. | 75/6 | 3 | contract (loan) | y | y |
| O. Stras. 92 | Theb. | 76 | 1 | tax receipt | y |  |
| O. Bodl. II 2196 | Theb. | 76 | 1 | tax receipt | y | $y$ ? |
| SB XVI 12238 | Thead. | 76-8 | 3 | tax receipt | y |  |
| SB XII 11232 | Tebt. | 76 | 6 | extract from census list | y | , |
| BGU XI 2088 | Arsin. | 77 | 1 | census declaration | ? | ? |
| SB XVIII 13324 | Arsin. | $\begin{aligned} & 62 \\ & 77 \mathrm{HGV} \end{aligned}$ | 2 | census list | y | 1 |
| SB XVI 12298 | Narm. | 77 | 1 | tax receipt | y |  |
| P. Oxy. II 263 | Oxy. | 77 | 1 | contract (no father) |  |  |
| P. Oxy. II 242 | Oxy. | 77 | 3 | registration of sale contract | y | y |

Table 7.3. (contd.)

| Document | Prov. | Date ad |  | Context | Pgf | Mgf |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P. Mich. XV 690 | Sokn. Nes. | 77/8 |  | receipt for work |  |  |
| P. Oxy. XXXVI | Oxy. | 78/9 |  | declaration of residence |  |  |
| 2756 |  |  |  |  |  |  |
| P. Oxy. II 243 | Oxy. | 79 | 2 | registration contract (mortgage) | y | y |
| SB XVI 12223 | Fay.? | 79/80 |  | list (young) tax payers |  |  |
| P. Oxy. II 248 | Oxy. | 80 |  | registration of property | y | y? |
| P. Oxy. II 249 | Oxy. | 80 |  | registration of property | y | y |
| BGU XIII 2292 | Sokn. Nes. | 81-2 |  | tax receipt | y |  |
| SB XVIII 13120 | Oxy.? | 81/2 |  | contract (wet nurse) | ? | ? |
| BGU VII 1600 | Phil. | 81/2 |  | tax receipt | y | y ? |
| P. Oxy. X 1282 | Oxy. | 83 |  | contract (repayment loan) | 2 | 2 |
| P. Mich. XV 691 | Sokn. Nes. | 83/4 |  | receipt for work | y |  |
| O. Wilck. 1240 | Theb. | 85 |  | tax receipt |  |  |
| P. Oxy. II 258 | Oxy. | 86/7? |  | membership ephebeia | y | y |
| P. Oxy. Hels. 31 | Oxy. | 86 |  | contract (mortgage) | ? | y? |
| C. Pap. Gr. I 24 | Oxy. | 87 | 3 | contract | y ? | y ? |
| C. Pap. Gr. II/1 16 | Backhias | 87 | 1 | declaration of decease | y | y ? |
| P. Coll. Youtie I 22 | Oxy. | 87/8 |  | request for loan | y | y |
| SB XVI 12860 | Phil. | 87/8 |  | tax receipt | y |  |
| O. Bodl. II 429 | Theb. | 88 |  | tax receipt |  |  |
| O. Bodl. II 1181 | Theb. | 88 |  | tax receipt (no father) |  |  |
| P. Köln III 137 | Oxy. | 88 |  | order for delivery of seed |  |  |
| P. Fouad 48 | Oxy. | 89 |  | contract | y | y |
| SB XVI 12600 | Sokn. Nes. | 89 |  | tax receipt | , |  |
| O. Wilck. 474 | Theb. | 89 |  | tax receipt | y |  |
| P. Oxy. II 274 | Oxy. | 89-97 |  | registration of property | 2 | 2 |
| P. Oxy. II 247 | Oxy. | 90 |  | registration of property | y | y |
| P. Hamb. I 60 | Herm. | 90 |  | census declaration | y | y |
| P. Oxy. I 72 | Oxy. | 90 |  | registration of property | y | y |
| PSI VIII 942 | Oxy. | 90 |  | registration of property | 1 | 1 |
| SB VI 9163 | Arsin. | 90/1 |  | membership ephebeia | y | y |
| SB XIV 11847 | Oxy. | 91 |  | contract (loan) | ? | ? |
| SB VI 9569 | ? | 91 |  | contract (sale wine) (no father) |  |  |
| P. Mich. III 176 | Backhias | 91 |  | census declaration | y | y |
| SB V 8025 | Fay.? | 91/2 |  | certificate of tax exemption | y | y |
| P. Michael 9 | Oxy. | c. 92 |  | contract (loan) | y ? | y |
| P. Oxy. XVIII 2185 | Oxy. | 92 |  | order for delivery of seed |  | y |
| P. Oxy. XLVII 3333 | Oxy. | 92 | 24 | request for salary (desert guards) | most |  |
| SB XVIII 13362 | Tebt. | 92/3 |  | tax receipt | y |  |
| PSI X 897 | Oxy. | 93 |  | contract (cession catoecic land) |  |  |
| PSI X 1109 | Oxy. | 93/4 |  | declaration to strategus on tax | y | 1 |
| SB XVI 12861 | Phil. | 93/4 |  | tax receipt | y |  |

Table 7.3. (contd.)

| Document | Prov. | Date AD | Ex. | Context | Pgf | Mgf |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P. Lond. II 259 | Phil. | 94 | 81 | census register | y | y |
| P. Lond. II 258 | Fay. | 94 | 191 | census register | y | y |
| P. Lond. II 257 | Phil. | 94 | 225 | census register | y | y |
| P. Oxy. II 270 | Oxy. | 94 | 4 | contract (indemnification of surety) | 3 | y |
| P. Oxy. I 73 | Oxy. | 94 | 2 | registration of property |  | 1 |
| O. Bodl. II 879 | Theb. | 94-5 | 1 | tax receipt (no father?) |  |  |
| P. Oxy. II 257 | Oxy. | 94/5 | 3 | membership ephebeia | 1 | 2 |
| O. Wilck. 42 | Eleph. | $94 / 5$ $110-12$ <br> HGV | 1 | tax receipt | ? | ? |
| CPR XV 25 | Phil. | 94/5 | 21 | census list | y | y |
| SB XVI 12296 | Arsin. | 95 | 2 | tax receipt | y | y |
| P. Mil. Congr. XIV <br> p. 22 | Arsin. | 96/8 | 2 | official declaration | y | y |
| P. Oxy. II 266 | Oxy. | 96 | 3 | contract (divorce) | y |  |
| P. Oxy. I 104 | Oxy. | 96 | 2 | contract (will) (1 no father) |  | y |
| P. Oxy. IV 713 | Oxy. | 97 | 2 | claim of ownership | y | y |
| SB XIV 11846 | Oxy. | 97 | 1 | contract (marriage) | y | y |
| P. Mert. I 13 | Oxy. | 98-102 | 1 | oath concerning inheritance |  |  |
| O. Wilck. 489 | Theb. | 98 | 1 | tax receipt | ? |  |
| P. Brem. 69 | Herm. | 98 | 3 | contract (loan) |  |  |
| P. Genova II 62 | Oxy. | 98 | 1 | contract (loan) | y | y |
| P. Oxy. II 241 | Oxy. | 98 | 1 | registration of contract (mortgage) | y | y |
| SB XVIII 13363 | Tebt. | 98/9 | 1 | tax receipt | y |  |
| P. Brem. 68 | Herm. | 99 | 4 | contract (loan) |  |  |
| P. Oxy. III 481 | Oxy. | 99 | 1 | registration of property |  |  |
| P. Oxy. LVII 39089 | Oxy. | 99 | 2 | order for delivery of seed |  |  |
| P. Princ. II 32 | Oxy. | 99 | 2 | contract (loan) | y | 1 |
| P. Tebt. II 316 | Tebt. | 99 | 3 | declaration of ephebi (Alexandria) |  |  |
| SB XVI 12793 | Arsin. | 99 | 2 | tax receipt | y | y |
| SB XVIII 13637 | Tebt. | 99 | 3 | tax receipt | y |  |
| P. Harr. I 74A | Oxy. | 99 | 2 | registration of property | y | 1 |
| SB XVIII 13364 | Tebt. | 99/100 | 1 | tax receipt | y |  |
| SB XVIII 13638 | Tebt. | 100 | 1 | tax receipt | y | ? |
| P. Coll. Youtie I 33 | Sokn. Nes. | 100 | 1 | tax receipt (no father?) |  |  |
| SB XVIII 13365 | Tebt. | 100/1 | 1 | tax receipt | y | ? |

(i) Three instances in one document with a marked Egyptian social background.
(ii) 791 examples in 20 documents related to the Roman census.
(iii) 20 examples in 13 documents related to privileged classes (gymnasion, ephebeia): applications for membership (epikrisis, eiskrisis) and related affairs (e.g. corn dole).
(iv) 90 examples in 68 tax receipts and declarations to officials: payment of capitation taxes (laographia, syntaximon, chomatikon); declaration of property (land, house, cattle).
(v) 83 examples in 28 private contracts and related texts: parties of contracts, registration, requests, etc.

Not only do metronymics appear in a wider range of genres, but they have also become more common in types of text where they had already been attested earlier, such as tax receipts: compare the three examples in tax receipts in the period 30 bC-ad 50 with the 48 examples in the period ad 50-100.

Another and perhaps more striking difference with the earlier period is the further addition of two new onomastic elements to the personal identification. The first is the paternal grandfather's name, of which an isolated example first appears in AD 46, but which becomes very common from its next attestation in ad 61 onwards. Apart from an atypical example to be dated around AD 50 , the oldest instance of the maternal grandfather's name, the second addition, is to be found in $\operatorname{AD} 60,{ }^{12}$ but it almost immediately becomes standard whenever the mother is mentioned.

Not only does ad 60 seem rather late to explain these new evolutions by assuming Egyptian influence, since Demotic had practically died out in legal documents by then, but also neither of these papponymic elements is very common in the Egyptian tradition. In my corpus of Demotic contracts I have found only 11 examples where the paternal grandfather's name is added to the identification of party A and 2 examples for party $B$, or 2 per cent and 0.4 per cent of relevant contracts respectively. ${ }^{13}$ That of the maternal grandfather is never mentioned at all. Even on funerary monuments, where the identification tends to be more elaborate, grandfather's names are not exactly

[^87]frequent. In the 800 records of my database of the Late Period in Graeco-Roman Akhmim material, 53 paternal and 18 maternal grandfathers appear, or only 7 per cent and 2 per cent respectively. ${ }^{14}$

Since it has emerged that there are a number of objections to explaining the addition of the mother's name in the Roman period by Egyptian influence, we must consider a third possible factor in the form of Roman regulations. At first sight this seems an unlikely candidate since the metronymic was completely absent from everyday Roman onomastics and its system of the tria nomina. Still, at least from Augustus' promulgation of the Lex Aelia Sentia (ad 4) and Lex Papia Poppaea (AD 9) onwards, children had to be declared after their birth, and in Latin documents related to these proceedings, such as certified extracts from birth registers of Roman citizens or declarations of birth found in Egypt, the name of the mother does invariably appear. ${ }^{15}$ After all, mothers were important in Roman law, since to become a Roman citizen both parents had to have civil rights. ${ }^{16}$ The question is whether these procedures and rules were different from those in Ptolemaic Egypt, and if so, whether the changes in citizenship rights could explain the addition of the mother's name in the Roman period?

The laws of Alexandria and the other Greek cities in Egypt seem to have been modelled after those prevailing in Athens, the most prestigious city-state. Since in $451 / 0$ вс Pericles had limited citizenship to those freeborn with both an Athenian father and mother, it seems likely that the situation was similar in the new capital of the Ptolemies. ${ }^{17}$

[^88]Nevertheless, Fraser has postulated the existence of a kind of second-rate citizenship, probably also found in Cyrene, consisting of those born out of mixed Greek/non-Greek marriages. ${ }^{18}$ Intriguing and ambiguous is the evidence from Chrest. Wilck. 27, where citizens of Antinoopolis discuss the exceptional privilege granted by the emperor Hadrian whereby children begotten by citizens with Egyptians can obtain civil rights. ${ }^{19}$ This is according to the document the only difference between the laws of Naukratis and those of the newly founded city.

For Greek cities in Egypt the rules for citizenship may thus in some cases very well have been less strict than those for Roman civil rights, and in the chora matters almost certainly were even more flexible. Shortage of Greek women probably did play an important role here, as well as an eagerness of the Egyptian upper classes to ally themselves through mixed marriages with the new rulers. It seems likely that Greek status with its fiscal privileges was conveyed to the offspring of a Greek and an Egyptian woman, ${ }^{20}$ and that in the later Ptolemaic period many of the 'Greeks' outside the Greek cities were hellenized Egyptians-or Egyptianized Greeks.

Above all, however, the Roman administrative regulations regarding birth seem to have been novel in many respects. Children had to be declared, a procedure apparently unknown under the Ptolemies. And perhaps to facilitate investigation of any claims to citizenship, their mother's name had to be provided, which according to the little evidence available even seems to have been unusual in Demotic references to birthdays and parentage. ${ }^{21}$

[^89]
## 4. CONCLUSIONS

It thus seems likely that Roman directives played an important role in the appearance of the mother's name in census declarations and lists. The mother's identity was now considered to be important enough for reference to be made to her explicitly in all documents related to the counting of Egypt's population. But the census only took place every 14 years, and even if people may have carried birth certificates with them as proof of their status, we must wonder whether these new rules were on their own sufficient to bring about the onomastic changes investigated here. What remains unexplained is the occasional absence of the mother's name for women especially, as well as the addition of the paternal and maternal grandfather's name in the second half of the first century ad.

When the Romans took over Egypt, however, they did not only change the rules of registration for census purposes. They also introduced new regulations to determine who belonged to one of the fiscally privileged groups such as the $\mu \eta \tau \rho о \pi о \lambda i \tau \alpha a l$ and oi $\dot{\alpha} \pi \grave{o}$ $\gamma v \mu \nu a c i o v$. Initially the gymnasial status was probably accorded to all those with a father of the gymnasial class and a freeborn mother, while all Greek and Hellenized residents of the metropoleis received metropolite status. While the gymnasial indifference to the mother's status was obviously against Roman principles, the migration towards urban settlements and the increasing number of fiscally favoured metropolites also discomfited the new rulers. They therefore, in the third quarter of the first century AD , tightened the rules for admission into the privileged classes: $\mu \eta \tau \rho о \pi о \lambda i ̂ \tau \alpha \iota$ had to prove that they descended from the original inhabitants accorded that status in AD $4 / 5$, while for oi $\dot{\alpha} \pi \grave{o} \gamma \nu \mu \nu a c i o v ~ a n ~ a m e n d m e n t ~ w a s ~$ implemented, stipulating that the status could only be inherited if both father and mother belonged to that class. ${ }^{22}$ The third quarter of the first century ad is precisely the period when the paternal and maternal grandfathers' names suddenly appear, and it therefore

[^90]seems likely that this change was brought about by the Roman tightening of the rules for privileged classes.

Fiscal privileges may also explain why the mother's name was more often omitted for women than for men, since only the latter were liable to pay the poll tax. Still, they cannot be the only explanation, since most of the early census declarations come from the fiscally unprivileged, but have mothers' names nonetheless. Let me try to visualize how exactly in my opinion the onomastic changes in early Roman Egypt came about. (See Table 7.4.)

After their conquest of Egypt, the Romans reorganized the fiscal system and as one of their innovations introduced a poll tax on all adult males. Some privileged categories, such as Roman or Greek citizens, were exempt, while others, such as members of the gymnasial or metropolite classes, paid at a lower rate. This fiscal reform entailed administrative changes such as the introduction of birth declarations and of regular population censuses, once every 14 years. For those claiming fiscal exceptions or privileges, the addition of the mother's name may well have been mandatory to determine whether they qualified.

In any case the fiscal and social changes resulted in an increased attention for one's pedigree, since at least from the third quarter of the first century AD the mother's lineage also had become important for the upper layers of 'Greek' society. Those who claimed to belong to it therefore were more likely to add their mother's name and further genealogy, since, although unconventional, this information had a very practical use.

As the quotation-marks above already indicate, however, by the early Roman period the Greeks outside the few Greek cities in Egypt had actually become quite Egyptian through intermarriage with local women. It therefore cannot be excluded that for some of them, just as for the unprivileged taxpayers for whom it had no practical use at all, the addition of the mother's name was unproblematic since perfectly in line with the Egyptian tradition. ${ }^{23}$

In my view the social changes brought about by the Romans' fiscal reform, so masterfully described by Peter van Minnen, fell on fertile Egyptian soil. Whereas the 'liberal' Ptolemies had allowed intermar-

[^91]Table 7.4. Principles for use of mothers' names
Roman principle
add mother's names for birth declaration and census essential for social status and privileges

riage and the resulting socio-ethnic mobility, the conservative Romans preferred the compartmentalization brought about by intramarriage. In the former, mothers' names and other genealogical elements are unnecessary; in the latter, they are an almost natural consequence. (See Table 7.5.)

There are several social and sociolinguistic parallels for this evolution in other societies. Thus in patriarchal early Vedic society little or no attention is paid to the genealogy on the mother's side, but in the late Vedic period metronymics are increasingly used. This phenomenon is explained by the desire of conservative or reactionary Brahmans to stress their Brahmanic pedigree not only on the father's side, but also on the mother's, in times when some members of their caste increasingly took second and third wives without the proper pedigree. ${ }^{24}$

In the temple of Didyma, the inscriptions of prophets of Apollo and hydrophoroi of Artemis, the two most important sacerdotal offices, frequently mention the mother's name and those of her forebears. This for the Greek world exceptional custom may well be related to the high prestige of the priestesses: both men and women

[^92]Table 7.5. Contrasts between Ptolemaic and Roman societies

| Ptolemaic | Roman |
| :--- | :--- |
| 'liberal' | conservative |
| socio-ethnic mobility <br> intermarriage | compartmentalization <br> no mothers' names |

included matrilineal onomastic references because they cherished their genealogy on both sides. ${ }^{25}$

A far more recent parallel can be found in Spanish onomastics, where the addition of the mother's name first appeared amongst the nobility at the end of the fifteenth and the beginning of the sixteenth century. It seems to be generally accepted that this onomastic change was an indirect result of the so-called limpieza de sangre or 'purity of blood', a statute established in that period which banned converted Jews, converted Muslims, and their descendants from a whole series of civil, military, and ecclesiastical offices. Before new candidates for these positions could be accepted, especially in the sixteenth and early seventeenth century an elaborate investigation into the 'Old Christian' background of both paternal and maternal ancestors had to take place. ${ }^{26}$ Names played an important role in this process, so much so that in the Ley del Registro Civil decreed in 1835, a compulsory double family name, composed of that of the father and the mother, was one of the only remnants of the by then obsolete limpieza de sangre statutes. Here again an increased attention for genealogy made mothers' names relevant and worth mentioning.

In none of these cases, as in Roman Egypt, has the appearance of the metronymic in my view anything to do with supposed archetypical matriarchal and matrilineal aspects of society. ${ }^{27}$ Nevertheless, the

[^93]attention to the maternal genealogical side may have had some social consequences for women. Thus when in 451/0 вс an Athenian mother became required to obtain or keep Athenian citizenship, this not only influenced the nobility's strategy for marriage alliances, but it also seems to have had some repercussions in the form of an increased regard for Athenian women and their domestic world. ${ }^{28}$ Whether something similar holds true for Egyptian women remains to be investigated.
${ }^{28}$ R. Osborne, 'Law, the Democratic Citizen, and the Representation of Women in Classical Athens', in id. (ed.), Studies in Greek and Roman Society (Cambridge, 2004), 38-60.

## 8

# Variation in Complementation to Impersonal verba declarandi in Greek Papyri from the Roman and Byzantine Periods 

Patrick James

## 1. INTRODUCTION

Grammars and studies of Koine Greek ${ }^{1}$ have shown that the impersonal constructions with $\delta \eta \lambda o \hat{v} \tau \alpha \iota$ and $\phi$ dive $\tau \alpha \iota$ and the periphrases involving $\delta \hat{\eta} \lambda o v$ and $\phi a \nu \epsilon$ póv replaced their personal equivalents increasingly from the Hellenistic period onwards. The conclusion of this trend is that only фаivєєaı ó $\tau \iota$ and ф $\downarrow \nu \epsilon \rho o ́$ ó $\tau \iota$ are used in Modern Greek to introduce dependent statements. ${ }^{2}$ The impersonal use of $\delta \hat{\eta} \lambda o v$ did not survive, but the adverb $\delta \eta \lambda o v o ́ \tau \iota ~ h a s ~ b e e n ~$ retained alongside a particle, $\delta \eta \lambda \alpha \delta \dot{\eta} .^{3}$

In addition to the organizers and participants of the 'Buried Linguistic Treasure' conference, I should like to thank Professor Geoffrey Horrocks, Dr James Clackson, and Pippa Steele, who commented on earlier versions of this essay.
${ }^{1}$ See Jannaris, Grammar, $\$ 2124$, Mayser Grammatik, ii/1. 308, and F. Blass, A. Debrunner, and R. Funk, A Greek Grammar of the New Testament and Other Early Christian Literature (Chicago, 1961), $\$ \$ 397$ (4), 414 (3).
${ }^{2}$ D. Holton, P. Mackridge, and I. Philippaki-Warburton, Greek: A Comprehensive Grammar of the Modern Language (London, 1997), 455; O. Eleftheriades, Modern Greek: A Contemporary Grammar (Palo Alto, CA, 1985), 500-1.
${ }^{3}$ Both the adverb and the particle are unusual in Standard Modern Greek or at least give the impression of belonging to katharévousa. I owe this observation to Panagiotis Filos.

Hult's study of fifth-century literary and Christian texts concluded that the distribution of personal and impersonal constructions was a reflection of a difference of register. ${ }^{4}$ The personal construction was retained in the more literary styles as a distinguishing feature. However, the impersonal constructions, as the unmarked of the two options, predominated in those texts which were written in a more colloquial style.

Within the shift towards impersonal constructions, the details of the usage of $\delta \eta \lambda o \hat{v} \tau \alpha \iota$ and $\delta \hat{\eta} \lambda o v$ in this period are of particular interest because these are the constructions that were eliminated subsequently. An examination of the evidence for their use would clarify the details of their decline to the verge of extinction.

The documentary papyri are particularly useful in tracing the later history of impersonal $\delta \hat{\eta} \lambda o v$ and $\delta \eta \lambda o \hat{v} \tau \alpha c$. They represent, to some extent, the use of Greek in personal and administrative contexts that do not share the same conservative or Atticistic tendencies of much of the literature of this period. The documentary papyri provide a corpus that is so large and so varied that a rarity of instances or even an absence of these constructions may be taken, with caution, as a reflection of a scarcity in Greek in this period-at least in the types of documents represented by the papyri, such as private and official letters, petitions, contracts, wills, and various types of records and memoranda. The papyri thus provide a particular perspective on Greek in the very period in which the decline of $\delta \hat{\eta} \lambda o v$ and $\delta \eta \lambda o \hat{v} \tau \alpha \iota$ was in effect.

I shall set out below the papyrological evidence in turn for two of the impersonal verbs of declaration: $\delta \eta \lambda o \hat{v} \tau \alpha \iota$ and $\delta \hat{\eta} \lambda o o_{v} \epsilon \in \tau \tau$. I will explain the decline that resulted in their absence in Modern Greek. I will build on Hult's conclusion ${ }^{5}$ by considering the use of these impersonal verbs in the text types represented by the documentary

[^94]papyri and by investigating the possibility of a further distinction of register between finite clauses (introduced by $\dot{\omega}$ or by ${ }_{o}^{\circ} \tau \iota$ ) and of the accusative and infinitive construction with these impersonal verbs.

## 2. IMPERSONAL $\delta \eta \lambda o \hat{v} \tau \alpha \iota$

The impersonal construction of $\delta \eta \lambda o v ̂ \tau \alpha \iota$ with a complement structure has left very few traces in the surviving documentary papyri. Although formulae such as $\dot{\omega} \subset \dot{\epsilon} \xi \hat{\xi} \hat{c} \delta \eta \lambda o \hat{v} \tau \alpha \iota$ are attested up to the fourth century AD, ${ }^{6}$ the impersonal construction with a complement is attested only nine times in the DDBDP in the Roman and early Byzantine periods. All of these instances occur in official correspondence or in other administrative texts and are used exclusively with the accusative and infinitive. ${ }^{7}$ There are no examples from after the third century. ${ }^{8}$ The best preserved examples are nos. $1-4$ below and the one text which has an infinitive without a subject expressed is no. 5 .

1. BGU IV 1132 (= C. Pap. Jud. II 142), ll. 30-3 (14 вс, contract)
$\kappa \alpha \tau \grave{\alpha} \delta \dot{\epsilon} \tau \grave{\eta} \nu \tau \rho i ́ \tau \eta \nu$
$\tau \grave{\eta} v \gamma \epsilon \gamma o(v v i ̂ \alpha \nu) \tau \hat{\omega} \iota \iota\left({ }^{\prime} \tau \epsilon \iota\right) K a i ́ c a \rho o(c) A \theta \dot{v} \rho \delta \eta \lambda o v ̂ \tau \alpha \iota \tau \grave{\alpha} \subset \pi \rho o \tau \epsilon ́ \rho a c$
episcopos 3, PG. 26. 1033 a), and Theodoret (Hist. Eccl. 2. 24. 6, p. 153 ParmentierHansen; Hist. Relig., vita 2. 14), all of whom wrote in a more classical style.
${ }^{6}$ BGU I 21. r., col. i, l. 21 (ad 340, village taxation); P. Oxy. IX 1190, ll. 9-10 (ad 347, letter of a strategus); P. Lips. I 62, col. ii, l. 11 (ad 384/5, acknowledgement of recruits); Cf. P. Tebt. II 296, ll. 7-8 (ad 123, purchase of a priestly office); P. Thmouis I, col. lxxvii, i. 1.7. 4 (ad 190/1, tax register); SB XIV 11477, col. ii, ll. 20-1 (ad 202, covering letter); cf. P. Oxy. VII 1032, l. 34 (ad 162, petition).

7 SB VI 9228, ll. 19-22 (after ad 160, excerpt from an epikrisis list) appears to


 stele, [by which it is declared] that he served and has been honourably discharged from 28 December in the consulship of Gaius Jul[ius and Titus Junius Severus]'. However, since the main verb is in a supplement, another verb of declaration may have introduced this complementary participle.
${ }^{8}$ The 3rd-c. ad example is found in another piece of official correspondence: P. Oslo III 82, col. i, ll. 10-12. However, the sections of the papyrus that would have contained the introduction of the formula and the complement are lacunose.



And by the third agreement, made in the sixteenth year of Caesar (Augustus) in the month of Hathyr, it is shown that the previous agreements stand and that Theodoros has borrowed in addition from Ammo(nios) through the same bank of Marion and Theogenes.
2. Chrest. Wilck I 77, col. i, ll. 13-17 (ad 149, administrative):
 (ध̈тouc)






And the copies of the census lists of the sixteenth year of the deified Hadrian were inspected and cited from the district record-office, through which it is made clear that their parents are registered as being from a priestly family; likewise, the copies of the census lists of the ninth year of the Lord Antoninus Caesar, through which it is made clear that the parents of the... are registered...
3. P. Princ. III 126, ll. 4-8 (ad 150, official letter):



$\Delta \eta \mu[o c] \theta \epsilon ́ v o v c N_{\iota}[\kappa о] \mu \eta \delta \epsilon \omega c \dot{\alpha} \phi{ }^{\prime}[\hat{\omega} \nu \pi \alpha \rho \epsilon] \chi \omega \rho \eta^{-}$
$\theta \eta(\dot{\alpha} \rho о v \rho \hat{\omega} \nu)$ ) $\epsilon i \subset \dot{\alpha} \mu \pi[\epsilon ́ \lambda]$ ov $\phi v \tau \epsilon i ́ \alpha \nu$ [.....]оьк $\omega$
In the reports of the taxes of the administration sent up by the auditor of the nome for review...it is also made clear that you have bought from Heroninus (also called Demosthenes) son of Nikomedes for the planting of a vineyard from the six arouras transferred...
4. P. Oxy. VII 1032, ll. 17-19 (ad 162, petition to an epistrategus):




We have now discovered that in the time of this komogrammateus and that of another a report was made through which it is declared that the owners involved, although warned in writing to do so, had not made a declaration and that the land was planted.
5. BGU II 432, col. ii, fr. 1, ll. 8-10 (ad 190, letter to a strategus): ${ }^{9}$

тoùc cıтo入óyovc, $\pi \alpha \rho$ ’ oíc $\delta \eta \lambda o v ̂ \tau \alpha \iota$

$[\mu \epsilon \tau \rho \dot{\eta}]$ ] $\epsilon \omega \leftharpoonup \epsilon$ і́c $[\tau \grave{\eta} \nu \kappa \alpha \tau \alpha ́] \beta \alpha c^{\prime} \nu$ cov
As for the sitologoi with whom it is shown that there was a deficiency at the time when the measurement was made, until (?) your descent (?)...

The papyrological evidence shows that the impersonal construction was limited to a particular function. All the texts quoted in nos. 1-4 and the examples from the damaged parallel texts ${ }^{10}$ use $\delta \eta \lambda_{o} \hat{v} \tau \alpha \iota$ to refer to the content of another document. The official letter in no. 5 is exceptional but likewise originated in a similar context of a report submitted by the sitologoi.

Some conclusions may now be drawn from these few surviving examples. First, the impersonal construction seems to have been a feature of the language of business and administration exclusively. Since this construction is only found in texts written for such purposes, we have no evidence about whether it was also a feature of more popular registers. However, its absence from the large and varied corpus of personal letters, which represent more popular registers, suggests that it was only a feature of offical and administrative language. Second, the need for administrative documents to cite other records was the occasion for its use and preservation. The association of $\delta \eta \lambda o \hat{v} \tau \alpha \iota$ with this function provides further evidence that the absence of $\delta \eta \lambda_{o v} \tau \alpha \iota$ from personal letters is significant rather than accidental. Third, since all these official examples employ the accusative and infinitive, it is possible that finite clauses were thought to be inappropriate in more official registers. Fourth, there is no evidence for the survival of $\delta \eta \lambda o \hat{v} \tau \alpha \iota$ after the third century.

These points are made on the basis of the handful of examples that happen to have survived and on the absence of evidence to the

[^95]contrary. However, the evidence for the use of the alternative impersonal construction, $\delta \hat{\eta} \lambda o ́ v ~ \epsilon ’ c \tau \iota$, gives some further support.

## 3. IMPERSONAL $\delta \hat{\eta} \lambda o v$

The corpus represented in the DDBDP contains only sixteen instances, ${ }^{11}$ from this period, of $\delta \hat{\eta} \lambda o v$ and its compounds either with a finite clause or with an accusative and infinitive. ${ }^{12}$ These instances may be divided into three groups: personal letters, early official documents, and sixth-century contracts (mainly sales). The first two of these groups are listed in Table 8.1.

Table 8.1. Impersonal expressions based on $\delta \hat{\eta} \lambda o v$

| Source | Date AD | Expression | Construction |
| :---: | :---: | :---: | :---: |
| Personal Letters |  |  |  |
| PSI XIV 1445, ll. 6-7 | iii |  | ${ }_{\text {ö }}$ ¢ |
| P. Ross. Georg. V 5, 1. 2 | iii | $\delta \hat{\eta} \lambda o v$ | ${ }_{\text {öтı }}$ |
| PSI XIII 1343, ll. 14-17 | v | $\pi \rho o ́ d \eta \lambda o ́ v ~ \epsilon ̇ с \tau \iota ~$ | öть |
| Business and Official Documents |  |  |  |
| P. Oxy. XVII 2111, 1. 8 (record of judicial proceedings) | c. 135 |  | ${ }^{\circ} \tau \iota$ preposed |
| SB X 10292, 1. 22 (indictment) | ii |  | öть |
| P. Oxy. XIX 2228, col. ii, 1. 33 (letter within the report of a strategus) | 283 | $\epsilon \nu ้ \delta \eta \lambda o \nu$ єiva | acc. inf. |
| P. Oxy. XXXIII 2666, col. ii, ll. 8-11 (official correspondence) | 308/9 | $\delta \dot{\lambda} \lambda o v$ каөєст $\hat{\omega} \tau o s$ | acc. inf. |
| SB XII 10989, 1. 18a (advocate's memorandum) | c. 325 | $\delta \hat{\eta}$ 入óv ¢̇¢ $¢$ | acc. inf. |
| P. Oxy. VIII 1101, 1.12 (edict of a prefect) | 367-70 | $\delta \hat{\eta} \lambda o v$ | ${ }^{\circ} \tau \iota$ preposed |
| P. Flor. I 36, l. 28 (petition to a prefect) | iv | $\delta \hat{\eta} \lambda o v$ | őтı |

${ }^{11}$ Others are extant but either the section containing the complement is lost or too damaged, as in BGU III 893, l. 39 (ii/iii AD), or the verb itself is in a supplement, as in P. Michael. 52, 1. 37 (vi Ad).
${ }^{12}$ On the other hand, the adverb $\delta \eta \lambda$ оoó $\tau$ is attested 24 times in the DDBDP, but there are 43 instances of $\delta \eta \lambda a \delta \eta^{\prime}$.

Some observations can be made at once about the choice of complement with $\delta \hat{\eta} \lambda o v$, the text types in which it was used, and the formation of the construction:
(i) It is clear that this impersonal construction was predominantly a feature of business and official documents.
(ii) The accusative and infinitive is not very well attested, but it was used outside formulaic contexts into the fourth century; finite clauses are found more frequently.
(iii) There was a distinction in the use of the finite and infinitival constructions: the use of the accusative and infinitive is limited to official documents; the three examples from personal letters all involve ö́ $\iota \iota$ clauses.
(iv) The papyri show a considerable variety of periphrases involving several forms of the adjective and three auxiliary verbs, as shown in Table 8.1, despite the very limited number of examples.
(v) Unlike $\delta \eta \lambda o \hat{v} \tau \alpha \iota$, the use of $\delta \hat{\eta} \lambda o \nu$ was not confined to one particular function.
(vi) There is a noticeable flexibility of word-order in the use of finite clauses. In official documents the ${ }^{\circ \prime \tau} \iota \iota$ clause was sometimes placed before $\delta \hat{\eta} \lambda o v,{ }^{13}$ and in any case the conjunction did not need to be adjacent to $\delta \hat{\eta} \lambda o v$.

The non-formulaic use of this construction before the fifth century is apparent from these observations.

From here on I shall concentrate on the sixth-century contracts. These are set out in two groups, nos. 6-8 and 9-11. In contracts 6-8 $\delta \hat{\eta} \lambda o v$ introduces a comment on the validity of the transaction:
6. P. Michael. 40, ll. 58-67

$$
\kappa \alpha i \grave{\pi \rho o ̀ c ~ \pi \alpha ́ \nu \tau \alpha ~ \tau \grave{\alpha} \text { Є̀ } \gamma \gamma \epsilon \gamma \rho a \mu \mu \epsilon ́ v a ' ~}
$$


 А А $\pi о \lambda \lambda \grave{\omega}$


[^96]




каї $\tau \hat{\text { й }}$ оіккіас
каì ькаі́о ( $=\delta \iota к \alpha i ́ \omega \nu$ ) $\pi \alpha ́ \nu \tau \omega \nu$.
And when I was formally questioned, I acknowledged all that is written herein. It is clear that my aforementioned [half-share of] ${ }^{14}$ my mother's third share of the jointly held share [is sold] to you, the aforementioned Apollos, son of Joseph, the present purchaser, in addition to the other halfshare, which has accrued to you by a legal sale executed by Phoebammon, my brother on my mother's side, through the agency of his father Mathias, son of Psempnouthios, son of Psyros, the deed of the sale being valid and warranted, wherever it is produced, according to its validity and on all these conditions...
(second hand) it is clear that I have sold to you my sixth share of the lodge, and of the house, and of all the rights related to it.
7. P. Cair. Masp. I 67121, ll. 19-22


$\kappa v \rho i ́ \omega v$ ő ő $\tau \omega \nu$

 $\dot{\epsilon} \gamma \gamma \rho[\alpha ́ \phi] \rho \underset{\rho}{\varphi} \pi \underset{\sim}{\alpha} \rho \ldots$.
The cancellation will be valid and [warranted]. And when I was formally questioned, I agreed to the cancellation. It is clear that since the [agreements] present above from my registration are valid and warranted, and since the present ... from your registration...
8. P. Herm. 32, ll. 30-4

 $\dot{\omega} \mu о \lambda о \gamma \dot{\eta} \subset \alpha \mu \epsilon \nu$.]

 $[\pi \dot{\alpha}] \lambda \iota \nu \dot{\omega} \mu о \lambda o ́ \gamma \eta<\alpha$.
${ }^{14}$ Crawford, P. Michael., p. 77, suggested that words were omitted either in 11. $59-60$ or in l. 61.
${ }^{15}$ These estimates are my own on the basis of an average of 55 letters per line.

And to all that is［written within］，when we were formally questioned，we agreed so to have，give，do，and［keep］these terms．And it is clear that．．． being guaranteed ．．．the other sale（？）．．．from you，being valid and guaran－ teed in accordance with．．．I have again agreed．

However，the contracts in nos． 9,10 ，and 11 do not share any such similarity in the content of the statement introduced by $\delta \hat{\eta} \lambda o v$ ：

9．P．Lond．V 1734，ll．14－20

 $\dot{\alpha} \pi \epsilon \subset \chi \eta \kappa \epsilon ́ v \alpha \iota \pi \alpha \rho \grave{\alpha}$ со̂
 $\tau \grave{\eta} \nu \pi \rho \hat{\alpha} \subset \iota \nu$
 v̇тоүра́фо⿱亠䒑oc каi $\tau \hat{\omega} \nu$
 $\delta \hat{\eta} \lambda o v$ ठ $\grave{\epsilon}$


Because it has been decided by me，being in control，to sell to you the aforementioned living－room，and I have received in full from you the price for this in gold，three solidi，and I have drawn up for you as your security this deed of sale，which is valid and warranted with the signature of the one signing on my behalf and of the witnesses below．And when I was formally questioned in person I made my acknowledgement．
It is clear that（sc．this includes）also the share belonging to me of the shared spaces from the foundations to the sky．And，when I was formally questioned in this way，I made my acknowledgement．${ }^{16}$

10．P．Cair．Masp．I 67097．r．，ll．72－7

$\dot{\epsilon} \pi \epsilon \rho \epsilon v \tau \eta \theta \epsilon!̣!c(s i c) \pi \alpha \rho \grave{\omega} \nu \pi \alpha \rho \dot{\alpha} \pi \alpha \rho\left[{ }^{\prime}\right] \underline{\varphi} \tau \omega \nu \mu \alpha \rho \tau[\dot{v}] \rho \omega \nu$ ，$\dot{\omega} \mu о \lambda o ́ \gamma \eta<\alpha$






[^97]In addition to all the agreements written previously in it, when I was formally questioned, I made my acknowledgement in the presence of witnesses. I agreed so to have, give, do, and keep these terms, and to observe them to the end. It is clear that the public taxes on the same property for all the time past until the present fifth indiction inclusive, both in grain and in...

## 11. P. Münch. I 1, ll. 49-55












 $\dot{\omega} \mu \circ \lambda о \gamma \eta{ }^{\prime}(\alpha \mu \in \nu)$ ?
Next, we shall recognize (that we must provide), because of the attempt and of the [violation], go[ld], two [unciae], that is gold, 2 unciae. Also, nothing shall prevail against the arrangements for this settlement, which for your security we have made valid, warranted, and lawful [wit]h the [sig]nature of the one signing on our behalf and of the witnesses below. And when we were formally questioned, we made our acknowledgement. It is clear that we have received from you one solidus in the weight of Syene, which our aforementioned father Dios has given to you for the military fee of you, his son, and that we have no case against you concerning this matter because, as we said above, we have received it from you and we have so acknowledged. ${ }^{17}$

These seven instances of $\delta \hat{\eta} \lambda o v$ ö̃ $\tau$ show several formal similarities. The construction occurs in the context of the formula $\dot{\epsilon} \pi \epsilon \rho \omega \tau \eta \theta \epsilon i c$ $\dot{\omega} \mu \boldsymbol{\lambda} \begin{gathered}\gamma \\ \eta<\alpha \\ \text { and }\end{gathered}$ in two cases, nos. 8 and 10 above, it is used immediately after one particular variation of this formula: $\dot{\epsilon} \pi \epsilon \rho \omega \tau \eta \theta \in \dot{\epsilon} \nu \tau \epsilon c$


[^98]and 11 share forms of the resumptive $\kappa \alpha i$ oṽ $\tau \omega c \dot{\omega} \mu о \lambda o ́ \gamma \eta \sigma \alpha$. In every instance, this impersonal construction is sentence initial. The conjunction and $\delta \hat{\eta} \lambda o v$ are adjacent or are separated only by the particle $\delta \epsilon$.

However, these texts also show little agreement about how this impersonal construction should be employed or about the content of its dependent statement. This suggests that $\delta \hat{\eta} \lambda o v{ }^{\prime \prime} \tau \iota$ could be used flexibly and that it was not merely a conventional or formulaic element of such contracts. Instead, several details indicate that $\delta \hat{\eta} \lambda o v{ }^{\circ} \tau \iota$ was still a feature of the living language. First, there are only seven instances from hundreds of Byzantine contracts with the formula $\bar{\epsilon} \pi \epsilon \rho \omega \tau \eta \theta \epsilon i c ~ \dot{\omega} \mu о \lambda o ́ \gamma \eta<a$. Second, although nos. 6-8 use this construction to convey a similar point-namely, the validity of the transaction-each text makes that point in a different way. Third, since no. 6 shows $\delta \hat{\eta} \lambda o v{ }^{\circ}$ ơ $\tau$ used repeatedly, it was probably not just an optional feature of a particular part of contracts that happens to be poorly attested. All these variations suggest that the impersonal construction $\delta \hat{\eta} \lambda_{o v}{ }^{\prime \prime} \tau \iota$ was still an element of the living language in the sixth century. Its appearance in additional or parenthetic comments ${ }^{19}$ in documents that are otherwise highly structured and formulaic supports this conclusion. It was not used simply as part of a learned collection of formulae.

The form of the periphrasis itself should now be considered. It is noteworthy that none of these texts employs an auxiliary verb, in contrast to the papyri from the first five centuries AD. Although $\epsilon u ̋ \delta \eta \lambda o v$ is still found in no. 10, $\delta \hat{\eta} \lambda_{o v}$ is obviously the preferred form. The particle $\delta \epsilon$ could intervene between $\delta \hat{\eta} \lambda o v$ and ${ }_{o}{ }^{\prime} \tau \iota$. The delay of the particle in no. 8 suggests uncertainty about the need for its inclusion. Therefore, some overlap with the adverbial univerbated form, $\delta \eta \lambda o \nu o ́ \tau \iota$ (which is retained in modern Greek), would seem very likely in these texts. The absence both of an auxiliary verb in every case and, occasionally, of the particle $\delta \epsilon$ indicates as much. Indeed, Heisenberg and Wenger understood $\delta \hat{\eta} \lambda o v \delta \delta \dot{\epsilon}{ }_{o}^{\prime} \tau \iota$ in no. 11 as adverbial, with the meaning 'evidently' or 'of course'. ${ }^{20}$

[^99]There had, of course, always been potential for confusion between the impersonal construction $\delta \hat{\eta} \lambda o \nu$ ö̃ $\iota$ (with $\dot{\epsilon} c \tau \iota \nu$ suppressed) and the adverb or particle $\delta \hat{\eta} \lambda o v{ }_{\circ}^{\circ}{ }^{\circ} \tau \iota$ (either written as one word or as two). The two passages from Epictetus cited below illustrate this potential for overlap.

## 12. Epictetus 1.1.5



For what else is it that tells us that gold is beautiful? For the gold itself does not tell us. It is clear that (it is) the ability that uses external impressions (that tells us). (Or 'Clearly, the ability....)
13. Epictetus 1.17.1-2


 ö $\pi \epsilon \rho$ à $\delta \dot{v} v a \tau o v$.
Since it is reason that analyses and perfects all else and since reason itself should not remain unanalysed, by what should it be analysed? It is clear that (it should be analysed) either by itself or by something different. That will be either reason or something greater than reason-that is impossible. (Or 'Clearly, either by itself....')

There is no auxiliary verb and no finite verb after ${ }_{o}^{\prime \prime} \tau \iota$ in either of these passages. In both, either $\delta \hat{\eta} \lambda_{o v}{ }^{\circ \prime} \tau \iota$ must be a particle or adverb, or the missing verb must be supplied from the preceding sentence. The elliptical nature of the dialogue form, or, more accurately here, of the rhetorical questions, makes the second of these options a plausible interpretation. In the second passage, the intervening $\gamma \alpha{ }^{\prime} \rho$ in $\delta \hat{\eta} \lambda o v$ $\gamma \dot{\alpha} \rho{ }_{o}^{\circ} \tau \iota$ excludes the possibility of formal univerbation and yet $\delta \hat{\eta} \lambda o \nu$ öт $\iota$ can easily be interpreted as a particle or sentence adverb.

Although such potential for confusion had always existed, these Byzantine papyri show that by that period the impersonal construction with $\delta \hat{\eta} \lambda o v$ had been replaced by the adverb or particle $\delta \hat{\eta} \lambda o v{ }^{\circ \prime} \tau \iota$ to a great extent. The lack of flexibility of word-order, the absence of the accusative and infinitive, the absence of any auxiliary verb, and the rarity of compound forms of $\delta \hat{\eta} \lambda o \nu$, confirm this and give a striking contrast with the usage evident in the Roman period. The examples with the particle $\delta \epsilon$ could be understood as impersonal constructions, but
obviously do not have to be, on the basis of the second passage from Epictetus and following Heisenberg and Wenger.

Before the impersonal construction can be said to have been replaced, questions about pronunciation and word division (in the cases without the particle $\delta$ '́) remain to be addressed. The difference in speech between $\delta \hat{\eta} \lambda o v{ }^{\circ \prime \prime} \tau \iota$ and $\delta \eta \lambda o v o ́ \tau \iota$ would have been reduced as a result of psilosis, which was certainly widespread by the sixth century. ${ }^{21}$ The accentual difference between the two forms would have distinguished them in speech, but a shift to a single accent as part of univerbation is very plausible. Since the documentary papyri very rarely have written accentual markings ${ }^{22}$ and do not have word division, every written occurrence could represent either $\delta \eta \lambda o v o ́ \tau \iota$ or $\delta \hat{\eta} \lambda o v$ ö ö $\tau$. Indeed, the difference in word division in classical texts is largely one of editorial choice. ${ }^{23}$

Further, although they are rare, there are examples (nos. 14-15) of the adverb $\delta \eta \lambda a \delta \dot{\eta}$ used in similar contexts, to add an afterthought or postscript to the $\grave{\epsilon} \pi \epsilon \rho \omega \tau \eta \theta \epsilon i c \dot{\omega} \mu о \lambda$ ó $\gamma \eta<\alpha$ formula. Since the addition in no. 15 was written by a second hand, its supplementary nature is more obvious. These examples indicate that at least the instances of $\delta \hat{\eta} \lambda o v o{ }^{\circ} \tau \iota$ without $\delta \epsilon$ ' could be understood to perform much the same function as the adverb, $\delta \eta \lambda \alpha \delta \eta$.

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14. P. Cair. Masp. I 67107, ll. 18-19
    \eta}\dot{\alpha}\nu\tau\iota\muic0(\omegac\iotac
```



```
    \pi\alpha\rho\epsiloń\xiєєс \muо\iota
```

The contract of lease is [valid and warranted. And when I was formally questioned,] I made my acknowledgement. Clearly, you will also provide for me...

[^100]15. P. Vat. Aphrod. I 7, fr. A, ll. 23-6 (a mid-sixth-century will)
 $\dot{v \pi} \pi \gamma \rho a \phi \hat{\eta} \subset]$
 ஸ̈одór $\eta$ са.]
(second hand)


The will shall be valid and warranted, [written twice with the signature] of the one signing on my behalf and when I was formally questioned, [I agreed to all these terms.]
(second hand) it is clear that answering (?) ... while those giving a written guarantee are registered (?) against Phoebammon...

Conversely, the use of ${ }_{o} \tau \iota$ after $\delta \eta \lambda \alpha \delta \eta^{\eta}$ in no. 16, a unique example in the DDBDP, shows the overlap also at work in the opposite direction. The adverb was used hypercorrectly, again by another hand to add an afterthought.
16. P. Vat. Aphrod. I 7, fr. A, ll. 42-3
(after the illiteracy formula; another hand) $\delta \eta \lambda a \delta \grave{\eta}$ öт $\epsilon i$ i $\delta \grave{\epsilon}$ cúp $\beta$ ıoc

It is clear that if a spouse ... our child having died...
It is very unlikely that the impersonal construction $\delta \hat{\eta} \lambda a \delta \dot{\eta}{ }^{\circ} \tau \iota$ should be read here, because there is a scarcity of supporting evidence. The collocation $\delta \hat{\eta} \lambda \alpha \delta \delta^{\prime} \epsilon \in \tau \tau \iota$ is not attested in the DDBDP. The only secure parallel for the impersonal plural is a single Ptolemaic official letter ( UPZ II 199, 1. 11). There is just one further example of the impersonal construction with the plural $\delta \hat{\eta} \lambda \alpha$ from the Roman and Byzantine periods: P. Oxy. VI 893. That papyrus is contemporary with P. Vat. Aphrod. I 7 and $\delta \hat{\eta} \lambda \alpha$ occurs in its postscript, but the text is particularly problematic: it shows a high frequency of omissions and errors of concord, and $\delta \hat{\eta} \lambda \alpha$ appears to introduce an accusative and infinitive. So the use of the adverb $\delta \eta \lambda \alpha \delta \dot{\eta}$ with ö $\tau \iota$ is secure in $P$. Vat. Aphrod. I 7 and also suggests that the merger of the impersonal

[^101]construction and the adverb was still in progress. There was still sufficient confusion between $\delta \hat{\eta} \lambda o v{ }^{\circ} \tau \iota$ and $\delta \eta \lambda o v o ́ \tau \iota$ for the combination of $\delta \eta \lambda a \delta \dot{\eta}$ with ${ }_{o \prime} \tau \iota$ to be conceivable for a few writers at least.

These observations have several corollaries. If all seven occurrences represent the adverb $\delta \eta \lambda$ ovó $\tau \iota$, a principal factor in the elimination of the impersonal construction with $\delta \hat{\eta} \lambda o v$ has been identified. This
 first five centuries, an auxiliary verb was no longer used with the impersonal construction, and as the particle $\delta \dot{\epsilon}$ retreated, $\delta \hat{\eta} \lambda_{o v}$ merged with $\delta \eta \lambda o \nu o ́ \tau \iota$, leaving фарєрóv and фаivєтaı as the surviving impersonal constructions.

However, if these sixth-century contracts show that $\delta \hat{\eta} \lambda o v$ was not yet completely adverbial, but was still used as an impersonal verb to introduce dependent statements with ${ }_{o}^{\prime} \tau \iota$, the status of the accusative and infinitive is revealed. Although the extant evidence is slight, it seems likely that the accusative and infinitive was no longer an option with the impersonal construction even for the scribes who wrote such contracts. More specifically, since it has been argued that the $\delta \hat{\eta} \lambda o v{ }^{\circ}{ }^{\prime \prime} \tau \iota$ sentences are not simply reflexes of a convention associated with this kind of document, it is probable that the accusative and infinitive was no longer an option when these writers had to depart from their models.

## 4. CONCLUSIONS

Although only a handful of examples of $\delta \eta \lambda o \hat{v} \tau \alpha \iota$ and $\delta \hat{\eta} \lambda o v$ are extant in the Roman and Byzantine papyri, some conclusions can be drawn from the clustered pattern of their attestation. Several mutually reinforcing contrasts emerge. First, $\delta \eta \lambda o \hat{v} \tau \alpha \iota$ only occurs in the earlier or Roman period, whereas $\delta \hat{\eta} \lambda o v$ continued to be used with ${ }_{o}{ }^{\prime} \tau \iota$ in the sixth century and is retained in modern Greek in its adverbial use as $\delta \eta \lambda o \nu o ́ \tau \iota$. Second, $\delta \eta \lambda o u ̂ \tau \alpha \iota$ was subject to several limitations. It is only found in administrative and business texts and only with the accusative and infinitive. Its only function was introducing other documents. However, $\delta \hat{\eta} \lambda o v$ was used with finite clauses more than with infinitives (as far as can be seen from the papyri). There does not appear to have been any limitation on the form, the
function, or the register of $\delta \hat{\eta} \lambda o v$ in the earlier period. The periphrasis is found in a few personal letters from the Roman period and in postscripts in later contracts. Therefore, it would seem that $\delta \eta \lambda o \hat{\tau} \alpha a \iota$ was the weaker of the two alternatives and that it had lost its ground to the periphrasis by the fourth century.

After the fifth century AD, $\delta \hat{\eta} \lambda o v$ itself became more restricted. It was no longer used with the accusative and infinitive. Although it was used with some flexibility and not in a strictly formulaic way, it is only found in one particular kind of document, namely the contract. The flexibility of word-order, the variety of compound forms of $\delta \hat{\eta} \lambda_{o v}$, and the range of auxiliary verbs, all of which are evident in the Roman period, are not found in the Byzantine documents. In some papyri, it no longer introduces a dependent statement and is not distinguishable from the adverb $\delta \eta \lambda$ дoó $\tau$. Other texts are debatable, but the use of the adverb $\delta \eta \lambda \alpha \delta \dot{\eta}$ in the same place in contracts, and even with ${ }_{o}^{\circ} \tau \iota$, suggests that the reanalysis from an impersonal verb to an adverb or particle was already well under way.

The association of the accusative and infinitive with administrative documents should also be noted. The elimination of $\delta \eta \lambda o v ̂ \tau \alpha \iota$, with which only the accusative and infinitive was used, would also be a contributing factor in weakening the position of this complement structure with these impersonal constructions even in administrative texts.

## 9

# Romanes eunt domus! Linguistic Aspects of the Sub-Literary Latin in Pompeian Wall Inscriptions* 

Peter Kruschwitz

## 1. INTRODUCTION: SCOPE OF THIS STUDY

The eruption of Mount Vesuvius in aD 79 caused sudden and painful death, the destruction of some 10,000 people living in the Campanian settlements of Pompeii, Herculaneum, Stabiae, and Oplontis. Poisonous gases, stones dropping from the sky, and fire all of a sudden withdrew the basis for human life and existence in this area, causing panic, flight, and desperation. Yet those people's gruesome death has ironically afforded us a unique opportunity to learn something about the civic life and the material culture of Roman antiquity from an almost lifelike photographic image. ${ }^{1}$

And indeed the excavations of the Vesuvian cities brought to light many fascinating things. Not least among them is a corpus of more

[^102]than 10,000 inscriptions spread all over the walls of these places. ${ }^{2}$ Most of them are available in the fourth volume of the Corpus Inscriptionum Latinarum. ${ }^{3}$ A minor portion, the so-called dipinti, were skilfully painted on the walls; but the vast majority, the graffiti, were simply scratched into their surface. ${ }^{4}$ Most of the texts were of course written in Latin, but there are also Greek and Oscan ones. The value of these inscriptions (and I now concentrate on the Latin ones) has long been recognized and appreciated. ${ }^{5}$ Let me give a brief list of the most important aspects:
(a) Unlike what happened to texts that underwent a manuscript transmission, the shape and content of the texts preserved on the walls of the Vesuvian cities has remained unchanged during the last 1,900 years, deteriorating only in their physical condition.
(b) The texts provide a unique corpus for the study of Latin palaeography.
(c) The texts preserve numerous peculiarities in orthography, vocabulary, syntactical structure, pragmatics, and content; and further in their very typology, which cannot be found elsewhere to the same extent.

[^103](d) There seem to be many traces of so-called everyday language, vulgar Latin, ${ }^{6}$ regional variation, ${ }^{7}$ and traces of bilingualism. ${ }^{8}$ Some of those peculiarities seem to foreshadow the practice of the Romance languages ${ }^{9}$ (although the relationship will not have been as direct as many people think).

This study will concentrate on two aspects: (i) a reappraisal of our knowledge of 'Common' and/or 'Vulgar Latin' from the wall inscriptions (focusing on methodological issues), and (ii) text types and technical languages.

## 2. 'COMMON' AND/OR 'VULGAR LATIN'

There are many people who would seem to believe that the Greeks and Romans of antiquity were seriously lacking flesh and blood. The 'edle Einfalt und stille Größe' of ancient civilizations, as

[^104]J. J. Winckelmann put it with respect to Greek art, seem to be sterile, remote from real life. So where is all the filth? To many, I believe, Plautus, Catullus, Martial, the Priapea, and Petronius are so appealing primarily because they offer something different, something base and obscene. ${ }^{10}$ What an immense relief it will have been to discover the wealthy treasure of the wall inscriptions of the Vesuvian cities, this Corpus Inscriptionum Latrinarum, as it may seem! ${ }^{11}$

But even those who are less interested in all the filth (and who do not subscribe, either, to the nothing-much-has-changed attitude), tend to praise the wall inscriptions as a uox populi. ${ }^{12}$ The following quotation is from one of the most recent introductory books on Roman wall inscriptions, published by Rex E. Wallace: ${ }^{13}$

The Latin of the wall inscriptions from Pompeii and Herculaneum is distinct from the Latin of Roman authors such as Cicero, Caesar, Horace, and Vergil in important respects. Whereas the Latin of those authors reflects a tradition of carefully crafted composition, based on Latin as it was spoken by educated (and therefore in large part) aristocratic Romans, the language of wall inscriptions, particularly the graffiti, reflects the Latin of less educated social orders (working classes, slaves, freedmen, etc.) as it was used during the first century ad. This variety of Latin is generally known as 'Vulgar' Latin, a label derived from the Latin adjective vulgaris, $-e$ meaning 'of the common people'.
${ }^{10}$ Thorough and appropriate scholarly treatment of the relevant material is rather an exception than the rule, but cf. e.g. I. Opelt, Die lateinischen Schimpfwörter und verwandte sprachliche Erscheinungen: Eine Typologie (Heidelberg, 1965); and especially J. N. Adams, The Latin Sexual Vocabulary (London, 1982).
${ }^{11}$ Suffice it to mention such amusing, unambitious, yet sometimes quite useful collections as K.-W. Weeber, Decius war hier... Das Beste aus der römischen GraffitiSzene (Zürich, 1996). On a considerably higher level e.g. T. Kleberg, In den Wirtshäusern und Weinstuben des antiken Rom, 3rd edn. (Darmstadt 1966); or A. Varone, Erotica Pompeiana: Love Inscriptions on the Walls of Pompeii, trans. R. P. Berg, with revisions by D. Harwood and R. Ling, 2nd edn. (Rome, 2002; orig. Erotica pompeiana: iscrizioni d'amore sui muri di Pompei (Rome, 1994)).

12 Cf. even the title of the important study by H. H. Tanzer, The Common People of Pompeii: A Study of the Graffiti (Baltimore, 1939).
${ }^{13}$ R. E. Wallace, An Introduction to Wall Inscriptions from Pompeii and Herculaneum: Introduction, Inscriptions with Notes, Historical Commentary, Vocabulary (Wauconda, IL, 2005), p. xxiv (cf. also P. Kruschwitz's review in BMCR (http://ccat. sas.upenn.edu/bmcr/), 2005.04.58).

Putting the Latin of Caesar and Horace on the same level as if there were no distinction is daring, but even more problematic is the common classification of the Pompeian inscriptions as examples of 'spoken Latin'. They are written texts, so by definition they will show certain stylizations absent in spoken language. ${ }^{14}$ Furthermore, it is often overlooked how complex the material really is. The texts are to be attributed to an unknown number of authors, so the corpus of texts could hardly be more heterogeneous. Additionally, because of our insufficient in-depth knowledge of Latin, in many cases it is virtually impossible to distinguish between features of substandard language varieties, regional variations, dialect forms, ${ }^{15}$ several sociolects, abbreviations, and even plain mistakes and flaws. So in the end what is often treated as a single phenomenon may in reality be far more complex. ${ }^{16}$

Much has been written about the vulgar Latin of the wall inscriptions so far, and most important is of course the influential and comprehensive study by Veikko Väänänen. ${ }^{17}$ This is not the place for a thorough re-evaluation of all related aspects. One of the very first things needed would be an overview of how representative the material collected by Väänänen really is for the entire epigraphy of the Vesuvian area; what percentage of inscriptions is actually affected by the features that he noted? But there are also some very fundamental

[^105]methodological issues that have been largely neglected until now, ${ }^{18}$ and four of them will be addressed here.

### 2.1. Can You Believe Your Eyes?

Reading graffiti is a difficult task, and success depends on various factors. Epigraphists have it as a golden rule that readings of colleagues positively cannot be trusted unless verified by autopsy. (This naturally makes it exceedingly difficult to establish a corpus for linguistic research.) This golden rule is especially sensible when dealing with wall inscriptions, as anyone will know who has ever tried even to locate a certain graffito on a Pompeian wall. In casual handwriting a single line would make the difference between an (orthographically) 'regular' ualeat and an 'irregular' (phonetic) ualiatt ${ }^{19}$ One should bear this in mind, since light conditions often are far from ideal, and a damaged surface may easily interfere with the letters. Even the preconceptions of a reader may result in inaccurate readings. One might wonder in how many instances a futuit has been read where there actually was just a fuit-just because we do not expect it differently from our Pompeians. The delusive power of preconceptions has been displayed usque ad nauseam in Matteo Della Corte's supplement to CIL IV, ${ }^{20}$ and it was rightly castigated by Heikki Solin in his harsh review of it. ${ }^{21}$ (In this case we have even been lucky, since the reviewer was able to check those inscriptions himself; often, especially owing to unfavourable weather conditions, texts completely vanish or are soon in such a pitiful state that earlier readings cannot be verified or falsified anymore.)

It is not necessary to get any more specific here. If a new supplement to CIL IV is to materialize, there will be numerous corrections to Väänänen's study of the vulgar Latin of the Pompeian inscriptions owing to new autopsy-much will be added, and some of the entries will also have to be removed.

[^106]
### 2.2. Anything that Can Go Wrong Will Go Wrong

Heikki Solin published a highly thought-provoking article on psychological causes of errors in inscriptions, ${ }^{22}$ and I am sure there is more to add, especially in respect of the graffiti. There are various reasons for this:

1. The writer might be nervous and in a rush, for fear of getting caught.
2. As it is quite difficult to scratch into a hard surface with a piece of metal, much of one's concentration is distracted by the very act of writing (whence it is difficult to observe the result at the same time).
3. The larger the lettering is, the higher the likelihood of errors, because one cannot see the result at first glance.

The first two considerations may be illustrated by this fragmentary inscription:

1. CIL IV 1754 (cf. p. 211)

Euphem̂us
stecus (!) e fundo et
rota...
Even though there are at least five more examples of omission of postvocalic R before a consonant in the Pompeian inscriptions, ${ }^{23}$ nobody (until now) seems to have claimed that stecus instead of stercus could possibly be anything but a mere slip. ${ }^{24}$ An example proving the third matter is the following advertisement of gladiatorial games:

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2. CIL IV 7994
(Gladiatorum) par(ia) XLIX
(de) familia Capiniana muneri[bus]
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[^107]```
Augustorum pug(nabunt) Puteol(is) a(nte) d(iem) [IV Id(us) Mai(as)]
pr(idie) Id(us) Mai(as) et XVII, XV K(alendas) Iu[n(ias)].
uela erit (!). Magus (scripsit).
```

49 pairs of gladiators of the Capinian troupe are going to fight at the Augustan games in Puteoli on 12, 14, 16, and 18 May. Awnings will be provided. Magus-painter.

In the last line erit is written instead of erunt. Since the phrase uela erunt occurs with great frequency in similar texts, there is no doubt, that Magus, the painter of this text, simply got it wrong, losing sight of the text as a whole. Even though one might easily come up with a linguistic explanation for the phenomenon, there is none. (Or at least there is no actual need for one.)

### 2.3. Conan the Grammarian, or Good Evidence vs. Bad Evidence

As the title of my paper is 'Romanes eunt domus', a reference to the Monty Python film 'Life of Brian', from which this quotation is borrowed, will not come as a surprise. Brian, member of the 'People's Front of Judaea' - to be distinguished from the 'Judaean People's Front'-is meaning to tell the Romans, the unloved invaders of Judaea, to go home. Therefore, in the middle of the night, he smears his statement on a wall. But he does not get it all right. The result: 'Romanes eunt domus'. Brian has hardly finished his act of vandalism when he is caught by a Roman centurion who fails to decipher the message. His understanding of the text: 'People called Romanes they go the house?' The centurion then grabs Brian by the ear, like a schoolboy, and forces him to go through all forms of the words needed to build the sentence originally intended. Finally, he orders Brian to write the more accurate 'Romani ite domum' a hundred times till sunrise. Brian complies.

With this scene in mind, it is worth having a look at the following inscription:
3. CIL IV 2246 (cf. p. 465) $=$ CLE 955 adn.

Hic ego cum uenì, futuì
deìnde redeì domì.

When I came here, I fucked, then I went back-at home.

One might wonder what lesson the centurion would have taught the scribbler of that note. Brian's excuse is his poor command of the Latin language. But what is the excuse of the actual scribbler at Pompeii? Here is what the editors of CIL IV think about it-in the frightening sapienti sat style of the early volumes: 'cf. Plaut. Trin. IV 1, $22[=842]$ pol, quanquam domi cupio, opperiar.'25 So what are we supposed to learn? I feel safe in assuming that this can be expanded to the following (speculative) statement: in colloquial Latin, the locative/ablative domi 'at home' is an acceptable substitute for an accusative domum 'towards home', indicating the goal of motion.

Domi in Plautus, however, is a genitive, governed by cupio, a construction not unparalleled in Plautus (and maybe related to the construction of Greek $\dot{\epsilon} \pi \iota \theta v \mu \hat{\omega}) .{ }^{26}$ This cannot possibly apply to the inscription, hence the evidence given in the CIL at this point proves to be worthless. It is all the more remarkable then, that the editors of CIL unknowingly hit upon the right explanation. Recently Christopher S. Mackay has shown that there was indeed a substandard usage of the locative/ablative in lieu of the accusative indicating the goal of motiongathering reliable evidence from many different subliterary sources. ${ }^{27}$

### 2.4. Beware of Attila the Pun!

Many people writing on walls nowadays seem to regard themselves as remarkably witty in their messages or comebacks, no matter how silly they really are. This tradition of the inscribed witticism surely dates back to the earliest times. But are we always aware of this fact, when it comes to linguistic analysis of Latin wall inscriptions? An acid test (or rather: jack-acid test), challenging our skills in that respect, can easily be provided:

[^108]4. CIL IV $7065=$ CLE 2051

Aedilem Proculam $\{C R\}$ cunctorum turba probauit: hoc pudor ingenuus postulat et pietas.
The entire crowd has approved of Procula as aedilis. This is demanded by innate bashfulness and dutifulness.

The candidate approved of by 'the entire crowd' according to this metrical inscription, there is little doubt, was a man called Publius Paquius Proculus, who is mentioned in other electoral inscriptions as well. But why Proculam instead of Proculum in this inscription? Since the reading is without any doubt (and nobody could possibly take it as an acceptable variation by linguistic means), one might argue, as August Mau did, that this is merely a slip. ${ }^{28}$ But how can one be sure? Ernst Lommatzsch in Carmina Latina Epigraphica argued that this might be a deliberate insult against Proculus, implying homosexual tendencies. ${ }^{29}$ That would certainly add a delightful irony to the pudor ingenuus and pietas. However, lacking any substantiated information about Proculus' personality, how can one decide?

## 3. FUTURE LINGUISTIC RESEARCH ON ROMAN WALL INSCRIPTIONS

Philologists, when dealing with Latin wall inscriptions, often restrict themselves to phonological and morphological issues, usually in order to scrutinize the linguistic development of the Latin language towards the Romance languages. ${ }^{30}$ In their happier moments, wall inscriptions are also taken into account when authors deal with issues of the lexicon or-somewhat broader in conception-with sociolinguistics. ${ }^{31}$ Here a strong case for a new approach shall be made, somewhere in between sociolinguistics and pragmatics. And it

[^109]shall be claimed that it would be a rewarding task to examine the various types of technical text and their specialized language.

I shall start with the technical text-types. Apart from a restricted lexicon, one of the foremost requirements for the constitution of such a text-type is the isomorphy of the texts-think for example about diplomas, timetables, brochures, classified advertisements, consumer information, and so on. Their isomorphy is directly due to a specific, often even normative text lay-out, based upon a limited and almost invariable number of formal or functional macrostructural patterns. ${ }^{32}$

As far as the wall inscriptions of Pompeii and Herculaneum are concerned, there are several technical text types to be found. ${ }^{33}$ The most prominent ones are the electoral programmata and the advertisements for gladiatorial games. I shall exemplify my point focusing only on the latter. ${ }^{34}$ Most of the advertisements for gladiatorial games from Pompeii have not only been included in the volumes of CIL IV, but also collected and edited by Patrizia Sabbatini Tumolesi. ${ }^{35}$ Let us now, for a short moment, return to the inscription already encountered as (2) above:
(Gladiatorum) par(ia) XLIX
(de) familia Capiniana muneri[bus]
Augustorum pug(nabunt) Puteol(is) a(nte) d(iem) [IV Id(us) Mai(as)]
pr(idie) Id(us) Mai(as) et XVII, XV K(alendas) Iu[n(ias)].
uela erit (!). Magus (scripsit).

[^110]49 Pairs of gladiators of the Capinian troupe are going to fight at the Augustan games in Puteoli on 12, 14, 16, and 18 May. Awnings will be provided. Magus-painter.

There are five macrostructural patterns to be found in this text:

1. the number of pairs of gladiators;
2. the occasion (and sponsorship) of the event;
3. the place of the event;
4. the date of the event;
5. any added amenities and benefits.

An extensive examination of the programmata in this respect would show that these patterns recur in almost every single text. (Hence even reconstructing fragmentary advertisements is quite easy.) Furthermore, all the texts would also be united in their common phraseology. One example has already been mentioned, the odd uela erit in
(2) as a mistake by the writer for the ubiquitous uela erunt. ${ }^{36}$

This allows a shift to my second aspect mentioned above, the special or technical language in the wall inscriptions. Special or technical languages, according to my understanding, are varieties of a language developed for specific functional and social purposes. They are defined by a common topic (and not, for instance, a common situation or context), and they are used specifically for communication within functional and/or social groups, defined by a more or less concise common activity, in order to ensure precise, unambiguous, and economic communication.

I should like to make the claim that there was a technical language of consumption (that is, a technical language developed by people professionally engaged in material and cultural production, commerce, and consumption), and that we can find remains of this language in the Pompeian inscriptions. ${ }^{37}$ I shall only demonstrate the most obvious example-the whole issue deserves a more detailed

[^111]study elsewhere. We all know those signs, however varying in their shape and form, informing us about something that is to be sold. In many cases, these signs say hardly more than 'For Sale'. Now here is what will be the Latin equivalent:
5. CIL IV 7678

Vasa faecaria uen(alia)
Garum Pots For Sale.
A second example dates back to the Republican era:
6. CIL IV $7124=\mathrm{I}^{2} 3145$

Tegula cumular(---)
opercula colliquia
uen(alia).
conuenito indide(m).
Not everything in this inscription has so far been well understood; but it is clear that somebody was trading in the rubble of former buildings and demolition waste, especially various types of tiles. As in (5), the expression 'For Sale' has been indicated by three lettersVEN for uenalia.

There is even a third example, setting us straight about the correct resolution of VEN in the other inscriptions, another advertisement for building material:
7. CIL IV 9839c

Materia[e]
uenales.
conueniat ${ }^{38}$
M(arcum) Epidium

Building Material For Sale. See Marcus Epidius...
It seems obvious to me that uenalis must have been the uox propria in the technical language of consumption for the expression 'for sale'. The expression must have been so common in use that it became possible to use the abbreviation only, and-as the second example proves-already in the Republican era.

[^112]So what is the big deal about this tiny and unspectacular observation? If one is ready to share my views on the word uenalis as a technical term, it will be worthwhile having a look at two short passages of Sallust. The first one is from the Bellum Catilinae:

## 8. Sall. Cat. 10

Namque auaritia fidem, probitatem ceterasque artis bonas subuortit; pro his superbiam, crudelitatem, deos neglegere, omnia uenalia habere edocuit.

The other is from the Bellum Iugurthinum, the alleged farewell of Jugurtha to Rome:
9. Sall. Iug. 35:
urbem uenalem et mature perituram, si emptorem inuenerit.
In German translations, one normally finds uenalis rendered by 'käuflich' (= 'venal; buyable'), an expression not only severely outdated (the modern technical equivalent would be 'zu verkaufen'), but also giving a false impression of the actual meaning and connotation of the phrase in this context. ${ }^{39}$ The OLD suggests something like 'open to bribes, venal'. But in the light of the Pompeian inscriptions, it can now be argued that these interpretations may seriously miss the point-and reduce the drastic impact of Sallust's expression; picture the Roman virtues, labelled 'for sale'! Or even the city of Rome herself, stickered the same way. And this indeed was, I believe, what Sallust intended to describe, the idea of Roman society set up for final clearance, when everything has to go at incredible reductions. The point would then be that reconstructing a technical language of consumption will advance understanding of certain registers applied in literary texts.

## 4. CONCLUSIONS

There are at least three things that should have become clear from this paper:

[^113](i) The fact that the texts are not a uniform corpus does not mean that there are no linguistic observations and conclusions to be made. However, the nature of the corpus as well as that of the texts makes it extremely difficult to draw these conclusions.
(ii) There are certain factors, related to the specific conditions underlying the genre of wall inscriptions, that should be considered more carefully in future linguistic research on these texts. ${ }^{40}$ Every single text has to be treated individually, considering the various circumstances surrounding it, in order to avoid mixing up and lumping together phenomena which may well be of distinct origin or purpose in the various texts. (What then is going to remain as common language, one might ask.) The fact that the wall inscriptions do offer interesting material for the historical linguist should not result in the idea that they constitute a common, or even a coherent, language, or even the uox populi.
(iii) There is, apart from current approaches, still much to be discovered in the linguistic data from the Vesuvian cities, which may not only help the interpretation of those texts themselves, but also enhance our understanding of the Latin language and literature in general. Fields of particular interest for future linguistic research cover, inter alia, socio-philological and sociolinguistic aspects as well as technical languages and text types. And probably, based on a new edition which includes all the relevant secondary information on each text, even in the traditional historical-linguistic perspective much still remains to be done.

[^114]
## 10

# Linguistic Varieties and Language Level in Latin Non-Literary Letters* 

Hilla Halla-aho

## 1. INTRODUCTION

The Latin letters on papyri, ostraca, and wooden tablets offer many interesting aspects for the study of variation and change in the Latin language. However, it is not always clear how this evidence should be interpreted.

For any kind of linguistic research on these letters it is reasonable to assume that every writer of these texts tried to write as well as he or she possibly could, and hence that deviations from the standard are unintentional, i.e. that being aware of two variants the writer would not have deliberately chosen the substandard one. ${ }^{1}$ For the most part the writers will have been trying to adhere to a standard of letterwriting, to produce language which they knew to be appropriate for the situation, aiming at a very specific goal, viz. intending to be (a) understood and (b) given the correct answer (without causing annoyance, etc.). ${ }^{2}$ Letters as a text type typically make use of stock

[^115]formulae, especially at the beginning and end. This is naturally even truer in the case of more official letters, or in a particular genre, for example letters of recommendation. In other parts, however, lacking or not knowing adequate formulae, the writers may have simply reproduced expressions, especially as far as morphology is concerned, in a form in which they would have appeared in their vernacular (i.e. according to their native intuitions).

There is often an implicit assumption that a given letter would, as a whole, belong to a certain linguistic variety, in the same way as the author of the letter belongs to a certain social level. In this paper I shall argue that in a given letter, different levels of language organization (phonological/orthographic, morphological, and syntactic) need not, and often do not, consistently relate to one linguistic variety (register or sociolect). ${ }^{3}$ Even within one level, e.g. syntactic, it may be possible to identify different registers occurring next to each other, for example typical letter phrases and colloquial syntax. Acknowledging the fact that more than one kind of sociolinguistic marking may be present in one letter is essential, not only in order to obtain the most accurate picture possible of the language in this material, but also to interpret correctly the evidence of these texts for the study of variation and change in Latin. ${ }^{4}$

I shall pay especial attention to the difference between the language levels in this respect, especially between syntax and morphology.

[^116]I shall demonstrate that as the writer may have had various models for the syntax in a letter, formulaic and even elaborate syntax does not rule out vernacular (substandard) forms in the morphological level, or colloquial elements in the vocabulary. ${ }^{5}$ In the case of autograph letters substandard orthographic forms are also relevant in this regard.

When studying texts which in one way or another give the impression of being closer to the spoken language of the writer than many literary texts, it is essential to make a distinction between these diverse tendencies, as our general conception of a given text has an influence on the way we interpret individual phenomena which appear in it. The important point here is that even if certain orthographic or morphological forms are more or less close representations of spoken language, this does not necessarily apply to the letter as a whole. While it is clear, on the one hand, that in some respects the letters often offer information on the contemporary spoken language, it is also immediately to be seen that most of the writers had a good notion of what a letter, as a written text, should look and sound like. Hence the relationship to spoken language is anything but straightforward. It is the distinction between these tendencies that the present paper will try to clarify.

## 2. A LETTER OF RECOMMENDATION:

$$
\text { CEL } 169=\text { P. OXY. I } 32+\text { II PP. 318-19 }
$$

I shall use the letter CEL 169 as a starting-point as it contains in an exemplary way many interesting phenomena at the same time. I quote the text in full (from CEL):

I[u]lio Domitio tribuno mil(itum) $\operatorname{leg}$ (ionis)
ab Aurel(io) Arc[h]ẹlao benef(iciario)
suo salutem
iam tibi et pristine commen-

[^117]daueram Theonem amicum meum et $\bmod [\mathrm{oqu}]$ oque pẹto domine ut euṃ ant(e) oculos habeas tanquam me est enim tales omo ut ametur a te reliquit enim su[o]s [e]t rem suam et actum et me secutus est et per omnia me sẹ[c]ụrum fecit et ideo peto a te ut habeat intr[o]itum aṭ te et omniạ țibi refererẹ potest de actu[m] nostrum quitquit $\mathrm{m}[$ ihi d$]$ ixit [i]l-
$1[\mathrm{u}] \mathrm{t}$ et fact[um esse scito ạmauị $\mathrm{h}[\mathrm{o}] \mathrm{mi}[\mathrm{n}]$ ẹm $[$.
ṃ[. . . . . .].[. .] set ḍeṣ[.
ạ [te peto] domin[e
m[. . . . . . . . . ib ib[i] es[t.
c[. . . . . . . .] hạb [
h[. . . . . . . . ..] et [. . . . . . . .
tor t....[. .].ic̣o [.
illum ut [. . . .]ypse [. . . . inter-
ceṣsoris $u[t \mathrm{t}$ il]ium co[mmendarem
opto te felicissi[mum domine mul-
ṭis annis cum [tuis omnibus
ben[e ualere
hanc epistulam ant(e) ocu-
los habeto domine puta $[\mathrm{t}]$ o
me $t[\mathrm{e}]$ cum loqui
vасиит
uale
verso
Ioulio Domitio tribuno militum leg(ionis)
ab Aurelio Archelao b(eneficiario)
To Iulius Domitius, legionary military tribune, from his Aurelius Archelaus, beneficiarius, greetings. I have already previously recommended to you my friend Theo, and now again I ask you, lord, that you have him before your eyes in the same way as you have me. For he is such a man that he should be loved by you. He left his family, and belongings, and his work and followed me, and he made me secure about everything. Thus I ask you, that he be
admitted to you, and be able to tell you about everything. About our business, whatever he told me...I have loved the man...that I should recommend him. I hope that you, my lord, will be very happy and in good health for many years with your family. Hold this letter before your eyes, my lord, and imagine that I am talking to you. Farewell.

## verso

To Iulius Domitius, legionary military tribune, from Aurelius Archelaus, beneficiarius.

Aurelius Archelaus' letter of recommendation is datable to the second century ad. ${ }^{6}$ There is no second hand discernible in the closing or elsewhere, and it is therefore likely that the document is an autograph. ${ }^{7}$ Cotton has discussed this letter as evidence concerning the practice of recommendation, ${ }^{8}$ noting that, as is perhaps typical of the genre, it does not contain much of interest, especially as the only part where some actual information may have been stated is now lost (ll. 20-6).

A military tribune such as Iulius Domitius was far above a beneficiarius like Archelaus in the military hierarchy, and the latter is likely to have belonged to the tribune's officium. ${ }^{9}$ Cotton sees the fact that Archelaus most probably wrote the letter in his own hand as 'another demonstration of [his] respect towards his superior,', ${ }^{10}$ and the ordering in the opening formula with the recipient's name in the first place may point in the same direction. The context thus makes it clear that the writer wanted to produce as good language as possible, and this is the most important aspect for my purposes here.

The letter contains many expressions commonly used in letters of this kind. Such expressions emphasize, as is customary, the close

[^118]relationship between the author and the person being recommended as well as the good qualities of the latter. Many sentiments expressed in this letter are common in this genre, and even the idea, if not the exact wording, can be paralleled in literary letters of recommendation in Latin as well as in Greek letters of recommendation on papyrus. ${ }^{11}$ As examples the following passages may be quoted: pẹto, domine, ut euṃ aṇt oculos habeas tanquam me, est enim tales omo ut ametur a te (ll. 6-10); hanc epistulam ant oculos habeto domine puta [ $t$ ] o me $t[e]$ cum loqui (ll. 31-3). The latter passage is rendered rather formal by the second imperatives and the word-order OV with the first of them. Noteworthy also is the verb peto in the first passage. This is current in recommendations, whereas otherwise in epistolary context rogo is the usual verb (note also ll. 13-15 peto a te ut habeat intr[ 0$]$ itum at te). ${ }^{12}$ It is more than obvious that, whatever the source, the writer of this letter was familiar with suitable ways of expressing the recommendation.

Thus, on the syntactical and phraseological levels this document seems to be composed according to the standard of such letters. But as far as orthography is concerned, there are phonetic spellings tales omo (9) and ant oculos ( 7,31 , both cited above) which are quite remarkable given that the letter most probably is an autograph. In addition, the address on the verso has a spelling modelled on Greek, Ioulio. And there is even more to find, namely an instance of substandard morphology, referere (15-16), an analogical formation for referre, which, according to Cugusi, is not otherwise attested. ${ }^{13}$

Furthermore, as far as the syntax of this letter is concerned, it is interesting to observe the frequent use of et connecting sentences. From l. 10 onwards there is a long sequence of clauses connected with et. reliquit enim su[o]s [e]t rem suam et actum et me secutus est et per omnia me sẹ [c] urum fecit et ideo peto a te ut habeat intr[o]itum ạt te et omnia tibi referere potest. Here we may also note potest instead of

[^119]possit, a change from the subjunctive to the indicative in the second part of the subordination, which is dependent on peto a te and connected by et to habeat. Also de actu $[m]$ nostrum (16), with $d e+$ acc., must reflect the common use in spoken language of prepositions with the accusative.

This letter offers some interesting evidence for the assumption that at least in part the writer was composing the syntax after models which he remembered, as opposed to having a written model. The syntax in the passage quoted in the previous paragraph already gives this impression by the et sequence and the indicative potest. The analogical formation referere supports, as it were, the impression given by the syntax. A perhaps even more interesting case is found in the phrase peto, domine, ut eum aṇt oculos habeas tanquam me, est enim tales omo ut ametur a te (6-10), which undoubtedly was part of the sentiments usually expressed in recommendations. The occurrence of the phonetic spelling tales omo here offers clear evidence that the writer did not have a written model at his disposal but was composing the phrase following his own conceptions about how such sentiments should be expressed.

We may sum up by stating that this letter contains word choice and phraseology which are typical for the genre in question (letters of recommendation). But, on the other hand, there are also indications that the writer was not completely fluent in the written register in those parts where he had to resort to his own abilities in composing the text outside the stock formulae. The use of substandard case syntax (de actu[ m ] nostrum) must reflect a usage common in spoken language, whereas spellings (tales omo, Ioulio) reveal that the writer's knowledge of the standard orthography was not perfect. The writer of this letter might have been a bilingual whose better language was Greek, but this is not essential for my point here.

As far as the use of et is concerned, I am not implying that in spoken language all sentences would be connected with et or the like, but rather that it clearly was the simplest way of organizing the syntax in this kind of context and hence the writer may have resorted to it in need of more refined syntactic models.

Whereas $d e+$ acc. may have been, for all we know, a common phenomenon in speech, the case of the analogical formation referere
is more complicated. It is difficult to tell whether forms like referere were used commonly in speaking by nearly everyone at certain social levels and transformed to referre in writing as a standard process, or this is a rarely used, or even idiosyncratic variant. ${ }^{14}$

## 3. THE EARLIEST LATIN LETTERS ON PAPYRUS

Next I shall offer some obervations on two of the earliest Latin letters on papyrus, paying attention in a similar way to the sociolinguistic marking of the elements. The letter CEL 8 (P. Vindob. Lat. 1a) which I also quote in full is a letter from Paconius to Macedo and usually dated to the Augustan period.

P]ạconiụ [s] Macedoni suo salutem
dissimulare nón potuI ut tibI nón scriberem te ualdissime decrIminatum apuḍ [I]cundum et Didom a ..... ce e l(iberto) itaque
mI fráter dá operam ut
ualenter satisfacias illis
Nireo quoque conlibertó suó multa
sc[e]lẹra de te scrIpsit quI ut
suspicor credidit eI et té nón mediocriter
lacerat contubernáles meI te
salutant [e]g̣ọ tuos salutes rogọ
aṃa nós ut instituistI
uale
XIIII Kal(endas) August(as) ${ }^{'} E \pi \epsilon i \phi \overline{\kappa \zeta}$
Paconius to his Macedo, greetings. I could not conceal, so as not to write to you, that you have been ill represented to Iucundus and Didus by ... the freedman. Accordingly, my brother, take care that you fulfil their wishes carefully. He also wrote many bad things about you to his fellow freedman Nereus, and the latter, I suspect, believed him and causes you much damage.

[^120]My companions salute you, I ask you to salute yours. Love me as you have been established to do. Farewell. 19 July, 27 Epeiph.

Both the sender and the recipient are probably freedmen. ${ }^{15}$ The letter proper, after the salutation, begins with the verb dissimulare (dissimulare non potui ut non scriberem te ualdissime decriminatum apud [I] ucundum et Didom), with the meaning 'to neglect, to omit'. The verb is attested with this construction (a dependent $u t$-clause) only in Cassiodorus. ${ }^{16}$ The phrase undoubtedly is formal in this letter, regardless of how we see the relationship between these two attestations. However, in this case it might even be possible to take te ualdissime decriminatum as dependent on dissimulare, with the normal construction of the verb (acc. and inf.). The intervening ut non scriberem might then be an independent consecutive clause.

The affective sentiment in the closing salutation ama nos ut instituisti can be paralleled in letters. ${ }^{17}$ Interesting in this connection is also the rather elegant word order in the closing salutation, ego tuos salutes rogo. On the other hand, concerning lexical choices, there are adverbs which are colloquial (at least according to Cugusi): ualdissime, ualenter, non mediocriter. In addition, the hapax verb decriminare, with the intensifying prefix de-, has been claimed to be 'umgangssprachlich. ${ }^{18}$

This letter, too, seems to be an autograph, and accordingly we may also note the phonetic spellings Didom (Didus $<$ Didjus $<$ Didius), Nireo ( $<$ Nereus). ${ }^{19}$ The fact that these spellings are in personal names is well in accordance with the assumption that the writers had been taught the correct orthography of common phrases. In case of personal names the writer would have had to find the appropriate spelling as best he could, and according to the way he pronounced them.

The same mixture of different tendencies can also be found in CEL 10 (P. Oxy. XLIV 3208). ${ }^{20}$ I give here some examples from this letter,

[^121]too. First of all, it contains some instances of sentiments that are probably more or less proverbial, such as nimia bonitas hominibus pernicies est uel maxsuma, and clamare debeo si quod uideo deuom atque hominum [[fidem si tu ista non cuibis]]. ${ }^{21}$ It is not easy to locate phrases of this type on a scale between 'literate' and 'oral' when they appear in a letter, but at least clamare deuom atque hominum fidem most probably had a literary ring to it, especially with the form deuom, archaizing both with regard to the archaic diuus and the spelling $\langle\mathrm{e}\rangle$ for long /i/. ${ }^{22}$ Hence, I should be inclined to maintain that the writer had received literary education above the most elementary level, even though he can be associated with a servile context, both on the basis of his name (Suneros), and because the recipient is a slave (Chio Caesaris in the address). ${ }^{23}$

As far as morphology is concerned, the form patiarus in this letter (l. 4) shows the ending -rus, otherwise attested mainly in inscriptions, but in epistolary context also in CEL 9, l. 5 (misererus). Whatever the precise history and distribution of this ending, its source nevertheless was in the vernacular of the writer. ${ }^{24}$ The name Epaphraes shows the common ending of the first-declension genitive sg. -aes. This ending was, at least partly, created in the written language as a Latinized version of the Greek ending -es, and it shows a common written practice in Latin-Greek bilingual communities. ${ }^{25}$ Also a levelled dative form alio (for alii) appears in this letter.

On the other hand, there is no reason to think that clamare debeo here would be a future periphrasis (pace Cugusi's interpretation). ${ }^{26}$

[^122]Even if an expression with e.g. debeo can be interpreted as referring to future time, this does not mean that it would automatically be a future periphrasis. ${ }^{27}$ What is more, here debeo very clearly has its deontic meaning. There do not seem to be examples of future periphrases of this type in the Latin non-literary letters. ${ }^{28}$

## 4. SOME RELATED CASES FROM VINDOLANDA

While the sociolinguistic marking of forms like referere and even patiarus is far from clear, the non-literary letters contain an example of substandard verb morphology which can be placed with some confidence among the widely distributed features of spoken Latin. This is the second-conjugation 3 rd pl . ending in -unt, as in debunt, which occurs in the renuntium documents from Vindolanda. ${ }^{29}$ A similar case is ualunt in Claudius Terentianus (P. Mich. VIII 468). ${ }^{30}$ The new Vindolanda tablets also contain an example of this phenomenon, habunt (Tab. Vindol. III 628. ii, 1. 5). ${ }^{31}$ Hence, there seem to be good reasons for attributing these forms to the Latin of certain social dialects in different parts of the Empire, in Egypt as well as in Britain, and, consequently, on the basis of the Romance reflex (Fr. ont $<^{*}$ aunt $<$ habunt ) also to spoken Latin more generally.

The appearance of the form habunt in Tab. Vindol. III 628 is relevant for my present purposes. This letter also contains a future

[^123]form rediemus, reinforcing the impression that the text is an example of colloquial language. Judging by the presence of only one hand, this letter, too, is an autograph, ${ }^{32}$ so that scribal practices and their influence can be ruled out with some certainty.

Against the appearance of substandard morphology it may be surprising to see in the same letter an example of the construction where a perfect infinitive (fecisse) is attached to uelis, with reference to future time: cras quid uelis nos fecisse, rogo, domine praecipias. ${ }^{33}$ This construction is usually thought to be a feature of the archaic legal language, later revived by the Augustan poets. The construction is used in prose as well, mainly by Livy but also by others. ${ }^{34}$ In such prose contexts, especially as many of the examples in Livy occur in imitations of legal language, the impact of the legal formulae is more easily to be understood.

The co-appearance in this letter of substandard morphology (habunt, rediemus) with uelis fecisse has been used to argue that the aspectual nuance (visible in early legal texts) of fecisse with verbs like uolo was preserved in spoken Latin. Accordingly, the appearance of this structure in Augustan poetry (in the second half of the pentameter) has been placed into a new context, that of the living spoken language, instead of regarding it as a poetic archaism, used mainly for rhythmical reasons. ${ }^{35}$

In my opinion, however, the source of this construction remains to be sought somewhere else than in the spoken language-or, to say the least, the archaic or legal character cannot be denied solely on the basis of the letter under study here. ${ }^{36}$ The writer of the Vindolanda

[^124]letter may well have been aware of this old use of uolo with perfect infinitive and reference to future time. As I have sought to demonstrate above, the language in one letter need not consistently testify to one source, e.g. a colloquial or formal variety.

As for the motivation for the use of this construction, it is easily conceivable that the sender Masclus, a decurio, wanted to use formal syntax in his letter to the prefect Cerialis, whom he addresses as Ceriali regi suo in the opening (rex meaning 'patron'). ${ }^{37}$ A further instance of the writer's attempt to use elegant language (in fact in the same sentence where habunt is attested) is the use of the free relative connection which is usually thought to be typical of more literary or polished registers of Latin: ${ }^{38}$ cervesam commilitones non habunt quam rogo iubeas mitti.

This text highlights the necessity of making a careful distinction between different linguistic stratifications inside one letter.

## 5. CONCLUSION

It is hardly surprising that the linguistic output in this kind of material is a mixture of different varieties of the language. The writers of this type of letter may have used syntactic formulations they had learnt, or were used to seeing in letters (or elsewhere), and at the same time reproduced in writing a form which did not belong to the standard written form of Latin, such as a phonetic spelling or a substandard analogical formation. This is not in any way unexpected. Morphological processes are probably rooted more deeply in the language processing system, and therefore suppressing vernacular morphology requires more effort than adhering to syntactic patterns. These tendencies illuminate well the nature of the linguistic competence of these writers. One should not label a text as a whole as colloquial only on the basis of substandard morphology or phonetic spellings.

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## II

## Language Contact

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## 11

# Language Contact and Personal Names in Early Ptolemaic Egypt* 

Brian Muhs

## 1. INTRODUCTION

One of the most common results of language contact is the appearance of personal names originating in one language within speeches or texts predominantly of another language. In cases where the grammar or phonology of the two languages is significantly different, the personal names may be transformed or translated to fit the grammar or phonology of the recipient language, or they may simply be transliterated. The choice of translation or transliteration of the personal names may depend on a variety of sociolinguistic factors, such as the competence of individual bilinguals in the originating and the recipient languages, and the degree to which either translated or transliterated forms of personal names have been integrated into the recipient language. This essay will examine the translation and transliteration of Egyptian personal names into Greek following the conquest of Egypt by Alexander the Great in 332 вс, and particularly in the early Ptolemaic period, between 332 вс and around 200 вс.

[^126]
## 2. MODELS OF LANGUAGE CONTACT AND PERSONAL NAMES

The translation and transliteration of personal names can to some extent be treated as a special case within the broader discussion of bilingualism. Many observations on translation and the alternate use of two languages within the same speech or text can also be applied to the translation and transliteration of personal names. For example, J. N. Adams has developed a classificatory system for language alternation based on sociolinguistic motivations. Having defined apparently conscious alternation by individuals presumably fluent in both languages as code-switching, he then distinguishes several different motivations for code-switching, such as establishing identity, or making social commentary: he defines apparently unconscious alternation that occurs as a result of loan-words and phrases that have been thoroughly integrated into a second language as borrowing, and unconscious alternation that occurs as a result of a bilingual's imperfect command of a second language as interference. ${ }^{1}$ Similar motivations probably also affected the choice of translation or transliteration of personal names.

Personal names are nonetheless a special case within the discussion of bilingualism. They are closely tied to personal, local, and ethnic identity, and hence are often resistant to linguistic change or translation, and susceptible to code-switching or transliteration. Anna Morpurgo Davies notes that in the Hellenistic period, Arcadian Greek names (and titles) tended to preserve linguistic features that had disappeared elsewhere in the Arcadian dialect under the influence of Koine Greek. ${ }^{2}$ Adams notes that personal names associated with one language, such as Greek, may retain the inflections of that language when cited in another language, such as Latin. Furthermore, methods of indicating filiation seem to be closely associated with the personal names to which they are applied, and thus may also retain the inflections of the language associated with the personal

[^127]names when cited in another language. ${ }^{3}$ Finally, continuity and change in script seems to play an important role in the choice of translation or transliteration of personal names. Morpurgo Davies observes that in Hellenistic Cyprus, Cypriot Greek names written in the traditional Cypriot syllabic script tended to preserve archaic linguistic features, but the same names written in alphabetic Greek show the influence of Koine Greek. ${ }^{4}$ Perhaps continuity in script encourages conservatism in personal names, whereas shifts in scripts make personal names more susceptible to translation.

## 3. LANGUAGE CONTACT AND PERSONAL NAMES IN EARLY PTOLEMAIC EGYPT

The Egyptian and Greek languages are sufficiently different that Egyptian personal names could undergo a considerable transformation to fit the grammar of the Greek language. Egyptian was a language without declensions, in which the grammatical position of nouns and adjectives was indicated by word-order and prefixed markers. Greek, on the other hand, primarily relied on declensions to indicate the grammatical position of nouns and adjectives. The introduction of Egyptian personal names into Greek therefore could result either in a translation of the Egyptian names through the addition of a declensional ending, or in a simple transliteration of the undeclined Egyptian names.

The Greek and Egyptian languages had been in sustained contact from the beginning of the Saite Period (664-525 вс), when the Egyptian pharaohs began to settle Greek-speaking Ionians in Egypt to serve as mercenaries, and Greek merchants established an emporium in Naucratis. Consequently, some Egyptian names were introduced into written Greek already in the inscriptions left by Greek mercenaries at Abu Simbel, probably in 591 bс, ${ }^{5}$ or in Herodotus' Histories, written in

[^128]the later fifth century вс. The preferred treatment of Egyptian names in both sources was translation.

Contact between the Greek and Egyptian languages undoubtedly intensified following the conquest of Egypt by Alexander the Great in 332 вс, and its seizure by his general Ptolemy in 323 вс, but the contact was probably unevenly distributed. The satrap and later king Ptolemy I (305-285 вс) and his son Ptolemy II (285-246 вс) attracted numerous Greek immigrants to Egypt, but very many of these probably settled in Alexandria, or in the Fayum, where a great deal of land was being reclaimed. ${ }^{6}$ Elsewhere, Greek immigrants were probably much less common, and Ptolemy I probably had little choice but to allow lower-ranking Egyptian officials to continue to conduct much of the local administration in the Egyptian language, in the script known as Demotic.

The spread of Greek through the local administration began in the reign of Ptolemy II. Early in his reign, he introduced a poll tax on males known as the yoke tax. ${ }^{7}$ Then in his 22nd regnal year, that is 263 bc, Ptolemy II replaced the yoke tax with a nearly universal poll tax on both males and females known as the salt tax. ${ }^{8}$ These taxes were necessarily based on censuses, which would have been used by tax-farmers to estimate tax revenues and to calculate their bids, and by tax collectors to control the actual tax collection. ${ }^{9}$ At the same time, these taxes also resulted in innumerable tax receipts issued to taxpayers to protect them from overzealous tax collectors. ${ }^{10}$ The earliest censuses do not seem to have survived, but the earliest yoke tax receipts are almost exclusively in Demotic. ${ }^{11}$ After the salt tax was introduced in 263 вс, however, bilingual and Greek censuses and salt-tax receipts appear in increasing numbers. ${ }^{12}$ Perhaps this was the result of the regulations for tax-farming introduced by

[^129]Ptolemy II between his 22nd and 27th regnal years, preserved in the Papyrus Revenue Laws (P. Rev.). ${ }^{13}$ These regulations required taxfarmers to balance their accounts monthly with higher-ranking Greek officials (P. Rev., cols. xvi-xxii), which may have encouraged the use of bilingual or fully Greek censuses and tax receipts. In any case, after Ptolemy II's 27th regnal year, that is 258 вс, а rapidly growing proportion of the Egyptian onomastic repertoire was being represented in Greek, much of it presumably for the first time.

## 4. TRANSLATION AND TRANSLITERATION OF NAMES IN EARLY PTOLEMAIC EGYPT

The administrative reforms of Ptolemy II required the writing of large numbers of Egyptian personal names in Greek on census lists and tax receipts, which resulted in transliteration as well as translation. Translation and transliteration could and did occur in both purely Greek and in bilingual Greek and Demotic texts, but for didactic purposes many of the following examples are drawn from bilingual Greek and Demotic salt-tax receipts from Upper Egypt. Comparison of the Greek and Demotic versions of the same names reveals most clearly the transformations involved in translation or transliteration. Furthermore, the presence of Demotic on bilingual texts points to the sociolinguistic context of the scribes. ${ }^{14}$

For an example of translation in a bilingual salt-tax receipt from Thebes, consider the Brooklyn ostracon inv. 127681754 ( $=$ P. Brooklyn $32+$ Cat. Brookl. Dem. 73), dated to fiscal year 31 of Ptolemy II, Thoth 21. The transliteration of the Demotic text gives the taxpayer's name as $\underline{D} h w t y$ - $i w$ s3 $P 3-h b$, which can be translated into English as 'Thoteu son of Phib'; the Demotic only writes the consonantal and semi-consonantal skeletons of words, and by Egyptological convention the 'traditional' phonetic values of signs are

[^130]used for the transliterations rather than their contemporary spoken values, which can only occasionally be recovered anyway. ${ }^{15}$ The relationship between the name and the patronym is indicated by the filiation-marker $s 3$, 'son of', preceding the patronym. In Demotic texts from the Ptolemaic period these markers were usually either s3 'son of' or $p a$ 'the (male) one of'; and either s3.t 'daughter of' or ta 'the (female) one of'. The Greek text gives the same taxpayer's name as $\Theta o \tau \epsilon \dot{v} \subset ~ \Phi i ́ \beta ı o c$, that is 'Thoteus (son) of Phibis'. The Demotic $\underline{D} h w t y$ - $i w$ is transformed into the nominative $\Theta_{o} \tau \epsilon \dot{v} c$ by the addition of a sigma, while the Demotic P3-hb is transformed into the genitive $\Phi i \beta \iota o c$ by the addition of -ıoc. The use of the genitive form of the patronym to indicate the relationship between the name and the patronym is typical of Greek, and can be described as a translation of the Egyptian.

For an example of transliteration in a bilingual salt-tax receipt from Thebes, consider the unpublished British Museum ostracon O. BM EA inv. 20166, dated to fiscal year 30 of Ptolemy II, Pachons 26. It was issued to the same taxpayer as the previous example. The Demotic text gives the taxpayer's name as D$\underline{D} w t y-i w P 3-h b$, which can be translated into English as 'Thoteu (son of) Phib', the same as in the previous example except that the filiation-marker has been omitted. The Greek text, however, gives the same taxpayer's name as $\Theta_{o} \mid \tau \in v \pi \alpha$ $\Phi_{\iota} \beta$, that is 'Thoteus son of Phib'. This appears to be a representation in Greek letters of the undeclined Egyptian name, presumably reflecting contemporary pronunciation. Note the presence of an Egyptian filiation-marker transcribed as $\pi \alpha$ preceding the patronym, despite the fact that no filiation-marker was written in Demotic. In spoken language this interference would be called code-switching, but in these bilingual Greek and Demotic texts, this terminology becomes problematic. In such texts, the Demotic script is also a form of codeswitching, visually as well as linguistically, whereas the Egyptian names written in Greek letters in the middle of a Greek text are a form of visual translation, though not a linguistic one. ${ }^{16}$

[^131]For another example of interference in a bilingual salt－tax receipt from Thebes，consider O．Bodl．Gr．Inscr． 260 （ $=$ O．Wilck．II 1494），${ }^{17}$ dated to fiscal year 30 of Ptolemy II，Mesore 9．It was written and signed in Demotic by the same group of Egyptian scribes as the previous example．The Demotic text gives the taxpayer＇s name as Pa－iw s3 Twtw，which can be translated into English as＇Paa son of Totoe＇．The Greek text gives the same taxpayer＇s name as Пa $\pi \alpha \mid$ Toтoŋ，that is＇Paa son of Totoe＇．Again，this appears to be a repre－ sentation in Greek letters of the undeclined Egyptian name，presum－ ably reflecting contemporary pronunciation．Note，however，that the Greek gives the filiation－marker as $\pi \alpha$ ，where the Demotic writes $s 3$ ． This may reveal divergence between written Demotic，which pre－ serves the ancient filiation－marker $s 3$ ，and spoken Demotic，which apparently used the word $\pi \alpha$ with the same meaning．The divergence would not have been obvious to the Egyptians，however，because the filiation－marker $s 3$ is not written phonetically in Demotic．

Finally，translation and transliteration sometimes occur within the same bilingual salt－tax receipts from Thebes，as in O．BM $5838(=O$ ． Wilck．II 1337），${ }^{18}$ dated to fiscal year 29 of Ptolemy II，Tybi 23．The Demotic text gives the taxpayer＇s name as $P a-{ }^{-} \mathrm{w}$ s3 $\mathrm{P} 3-\mathrm{mrl} 3$ ，which can be translated into English as＇Paou son of Pabul＇．The Greek text gives the same taxpayer＇s name as $\Pi_{\alpha} \hat{\alpha} \subset \pi \alpha \Pi_{\circ} \beta v \lambda$ ，that is＇Paas son of Pobul．＇The final sigma in Пa人⿱㇒⿻二亅⿱八乂，is not part of the consonantal skeleton of the Demotic version of the name Pa－c $w$ ，and is therefore presumably an attempt to create a nominative，that is translation．Yet the patronym is indicated by an Egyptian filiation－marker $\pi \alpha$ and an undeclined name，that is by transliteration．${ }^{19}$ Such combinations of translation and transliteration，like the use of Greek letters rather than Demotic，suggest that the scribes wanted to translate Egyptian names into Greek，and that the transliteration arose from ignorance

[^132]of the correct forms in individual names, rather than deliberate codeswitching.

Transliteration of Egyptian names similar to that in bilingual salttax receipts is also seen in predominantly or purely Greek tax receipts from Upper Egypt. There is a group of texts described as 'the oldest Greek ostraca from Egypt', dating from year 11 to year 18 of an unnamed king who was probably Ptolemy II. ${ }^{20}$ Transliteration can be seen in a payment made $\pi \alpha \rho \alpha \dot{\alpha} \Psi_{\epsilon \nu v \rho \epsilon \iota} A_{\rho \alpha \pi}{ }^{\prime} \eta$ 'from Psenurei (son of) Harapre' in O. Leipzig (without number $=$ Archiv, 19, p. 67 $\$ 4)$. Transliteration employing the Egyptian filiation-marker $\pi \alpha$ may be seen in a payment made $\pi \alpha \rho \alpha ̀ ~ C a \mu \pi \alpha ~ \Psi o c \nu a$, 'from Sam son of Psosna' in O. Bodl. Gr. Inscr. 2868 ( $=$ O. Bodl. I 1), though the absence of a Demotic version of the name makes certainty impossible. ${ }^{21}$ Finally, a mixture of translation and transliteration may be seen in a payment made $\pi \alpha \rho \grave{\alpha}$ Па人̂тос каi $X_{\alpha \rho \beta}$ ) $\phi$, 'from Paas and Kharboph' in O. Berlin P. 9304 ( $=B G U$ VI 1416). Again, the absence of a Demotic version of the names makes certainty impossible, but a brief Demotic note giving the amount paid suggests that an Egyptian scribe may have been responsible for the transliteration.

The transliteration of personal names seen in tax receipts from Upper Egypt is more common than that seen elsewhere in early Ptolemaic Egypt. In early Ptolemaic Greek census lists from the Fayum, translation of names predominates. ${ }^{22}$ There transliteration seems to be restricted to the very occasional omission of declensional endings from names, ${ }^{23}$ though the frequent use of abbreviations may make this kind of transliteration seem much rarer than it was. ${ }^{24}$ In any case, the use of Egyptian filiation-markers seen in tax receipts from Upper Egypt seems to be absent from the Fayum. The large and predominantly Greek archive of Zenon, also from the early Ptolemaic

[^133]Fayum, provides a similar picture to that of the Greek census lists with regard to translation and transliteration. ${ }^{25}$

Frequent transliteration of personal names was not only restricted in space to Upper Egypt. It was also restricted in time, to the reign of Ptolemy II and the beginning of the reign of Ptolemy III. ${ }^{26}$ Before the reign of Ptolemy II, few Greek texts of any kind survive from Egypt. From the middle of the reign of Ptolemy III onwards, through the late Ptolemaic and Roman periods, translations of Egyptian names in Greek became the rule, and omission of declensional endings became rare, though incorrect declensional endings were common, undoubtedly due to recurring interference from Egyptian on bilingual writers of Greek. ${ }^{27}$

## 5. CONCLUSIONS

It has been shown that Greek texts from the early Ptolemaic Period represented Egyptian names in a variety of ways. In most cases, Egyptian names were translated to fit the grammar and phonology of Greek. In some cases, however, Egyptian names were simply transcribed in Greek letters, without being adapted to Greek grammar. The latter practice occurred occasionally in the Fayum, and more frequently in Upper Egypt. In a very few cases, Egyptian filiation-markers were also transcribed in Greek letters, preceding undeclined patronyms. This practice is only attested in Upper Egypt, and is restricted to a handful of scribes. This diversity of representations of Egyptian names in Greek was relatively short-lived, however,

[^134]being largely restricted in the preserved material to the second half of the reign of Ptolemy II and the beginning of the reign of Ptolemy III.

This sudden diversification in the representation of Egyptian names in Greek in the reign of Ptolemy II presumably reflects a sudden increase in language contact in some parts of Egypt. The Greek and Egyptian languages had been in contact since the beginning of the Saite Period ( $664-525$ вс), and the practice of translating Egyptian names into Greek was established at a very early stage. Nonetheless, the administrative reforms of Ptolemy II probably made it necessary for large numbers of Egyptian scribes, who had previously had very limited contact with Greek, to write large numbers of Egyptian personal names in Greek for the first time. Not surprisingly, a greater amount of transliteration seems to have occurred in Upper Egypt than in the Fayum. At the time of the reforms, there were probably already large numbers of Greek immigrants in the Fayum, and thus more Greek scribes and more opportunities for Egyptian scribes to learn Greek with a greater level of sophistication than in Upper Egypt.

The renewed predominance of regular translations of Egyptian names into Greek in the reign of Ptolemy III presumably shows in turn the effects of education and writing on language contact. The same administrative reforms of Ptolemy II that stimulated Egyptian scribes to write Egyptian names in Greek, also gave tax-breaks to teachers of Greek, ${ }^{28}$ which may have helped to reduce the language interference arising from bilingual writers. Furthermore, the very increase in the writing of Egyptian names in Greek may have helped to stabilize representations of Egyptian names, by providing increasing numbers of models that other writers could copy. The occurrence of translation and transliteration in Egyptian names together in the same texts in the reign of Ptolemy II suggests that scribes wanted to translate all the names, and that transliterations arose from ignorance concerning individual names, which would naturally diminish as

[^135]more written translations of names became available in the reign of Ptolemy III.

It would appear, then, that the model of language contact, interference, and change can indeed be applied to the introduction of Egyptian personal names into the Greek language in the early Ptolemaic period. A sudden increase in contact, prompted by administrative reforms, led to increased interference. Sociolinguistic factors, however, primarily education and writing, prevented this interference from leading to permanent language change.

# Bilingualism in Roman Egypt? Exploring the Archive of Phatres of Narmuthis* 

I. C. Rutherford

## 1. SCRIPT AND LANGUAGE USE <br> IN ROMAN EGYPT

By the Roman period Greek had gradually replaced Demotic as the language of administration in Egypt. ${ }^{1}$ Demotic still throve as the language of Egyptian religion and cultural tradition-'script death'2 did not come until the fourth century-but it was probably practised exclusively by a small number of priests in temples, and all of them were probably literate in Greek as well. ${ }^{3}$ For most of the population, as Bagnall puts it, 'there was no way to have an Egyptian sentence recorded except to translate it into Greek. ${ }^{4}$ The Demotic language for its part had proved quite resistant to influence from Greek: loan words show up in only a small number of contexts, ${ }^{5}$ and

[^136]it is possible that written Demotic was rather conservative in comparison to the form of Egyptian used in everyday speech. ${ }^{6}$ The primary sign of bilingualism-code-switching-is conspicuous by its absence in Demotic texts, except occasionally in magical papyri. ${ }^{7}$

This makes it all the more surprising that when Coptic emerges, around ad 300, it has such a conspicuously large element of Greek colouring: not just the script, but the vocabulary and even the syntax. Where does this come from? one might ask. The answer is that popular spoken Egyptian was probably developing alongside the more conservative written Demotic without leaving much evidence for its existence. So we need to postulate at least three levels of script and language use:
(a) Greek, which was widely spoken even in the villages, ${ }^{8}$ and which was the exclusive language for administration;
(b) Demotic, which is by this time wholly or mostly a written phenomenon, confined to temples, and which shows little interference from Greek
(c) Spoken Egyptian, which must already have included a good deal of interference from Greek.

## 2. THE DEMOTIC OSTRACA FROM NARMUTHIS

It might be thought that the dossier of the 'Old Coptic' texts-a group of texts written in an expanded alphabet representing a form of Egyptian somewhere between Demotic and Coptic and dating from the Late Hellenistic and Early Roman periods-would provide

[^137]an insight into popular Egyptian before Coptic, but, as has been pointed out, these texts (like Demotic in general) seem to be largely lacking in Greek coloration. ${ }^{9}$ Another clue about the pre-history of Coptic is provided by an archive of Demotic ostraca from Narmuthis in the Fayum, which contain embedded within them Greek words written in alphabetic script. Half a century ago Donadoni suggested that these ostraca reflected bilingualism, ${ }^{10}$ and more recently Bresciani and Pintaudi have argued that they show the influence of a 'profoundly mixed culture', and 'cultural bilingualism.' ${ }^{11}$

Understanding of these bigraphic texts was somewhat held up by the delay in their publication. Bresciani, Pernigotti, and Betro published a small batch of school exercises in 1983 (O. Narm. Dem. I, containing nos. 1-33), and another set was published in 1997 by Paolo Gallo, comprising temple accounts and various other things (O. Narm. Dem. II, containing nos. 34-99). Because of the limited range of the published ostraca it has been possible to argue that the Narmuthis texts are not evidence for bilingualism, but rather for the playful whimsy of the temple scribes. Some of them clearly do reflect a school environment, such as O. Narm. Dem. I 27, which consists of three disconnected sentences, the first of which recommends regular study over a twenty-four-year period, while the second describes the benefits of making correct astrological predictions. This ostracon, cited and translated by Fewster, is described by her as a 'standardly irritating piece of moralising, probably dictated to some hapless trainee temple-scribes'. ${ }^{12}$ This interpretation might also be thought to apply to the difficult O. Narm. Dem. I 5, which she also cites, and which its first editors interpreted as:

## 

I will not write in the writing of Greek writing. Another thing, I make cтú申ıv. 55.

[^138]The embedded Greek infinitive $c \tau \dot{v} \phi \epsilon \epsilon \nu$ (the basic meaning of which is 'to contract') was interpreted by the first editors as 'be stubborn', which would be a lighthearted protest, or perhaps the teacher is preempting the protest of his students. That meaning for Greek crú申ıv is, however, unattested. This ostracon was reinterpreted by Gallo ( $O$. Narm. Dem. II 96) as:

$$
\check{s}^{c} /-j / \operatorname{sh} w j^{c} n-n / k . t-m t i ̉ i r y / \operatorname{c\tau u} \phi \omega \bar{\epsilon} \mid \bar{\epsilon}
$$

Letters written in Greek. Another thing. Be concise. 55.
Although there is no precise parallel for the verb in this sense, Gallo's interpretation of $c \tau u ́ \phi \iota \nu$ seems more plausible: the writer is urged to contract his letters to fit the potsherd. ${ }^{13}$ Whatever it means (and it is probably impossible to know), it need have nothing to do with the preceding sentence. Angiolo Menchetti recently published a new set of ostraca from Narmuthis, including one which makes a different joke about learning to write Greek: ${ }^{14}$
 tr.tsb(3) mnj،
10 Salios does not know how to write in Greek. He earns a living in the villages (?) teaching himself in secret everyday. 10

The embedded Greek infinitive $\beta \iota \boldsymbol{\beta} \boldsymbol{\sigma} \boldsymbol{\rho} \iota \tau \tau \in \hat{\nu}$ ('to earn a living') is attested in a later Greek literary text. ${ }^{15}$ It is perhaps a good comment on the relationship between Greek and Egyptian in this period, and the eventual success of Greek, that the very idea of 'making a living' is more easily expressed in Greek than in Egyptian.

## 3. BILINGUALISM AND BIGRAPHISM IN THE ARCHIVE OF PHATRES

One would be forgiven for thinking that the Narmuthis Ostraca were all about bored Egyptian scribes finding innovative ways to stimulate the teaching of Greek, but the picture is now a little different, since

[^139]the publication of the new batch ( $O$. Narm. Dem. III, containing nos. 100-88) by Menchetti, which appeared in 2005. Menchetti's ostraca constitute the archive of one particular scribe, whose name was Phatres ( $\mathrm{P} 3-\underline{h} t r$ ), and they document his legal problems over a period of years, around AD 200. The ostraca are numbered, which gives us a degree of control over the material. But, needless to say, there are still lots of problems in interpretation. Hardly any of them is entirely clear, and some of them are almost entirely obscure. About half have a word or two written in Greek script; some proper names are written in Greek script as well. Apart from the latter, the correlation between script and language is watertight.

### 3.1. Greek Words

In all, excluding the proper names, we have about one hundred Greek words, most of them nouns or verbs in the infinitive; there are a few adjectives, very few prepositions, and no conjunctions. Usually the Greek words occur in isolation, though there are a couple of cases where several Greek words occur together, for example in O. Narm. Dem. III 160:

He denounces (i.e. $\mu \eta \nu \dot{v} \epsilon \nu$ ) from deception on account of his temper.
Spelling is more often than not in line with standard Greek of the period, though there are systematic irregularities: infinitives end in $-\omega \nu$ rather than $-\epsilon \omega$, for example, and voiced stops sometimes appear as unvoiced. ${ }^{16}$ Sometimes the Demotic text seems to imply awareness of the grammatical form of Greek words, and sometimes it does not. Feminine nouns in Greek sometimes have a feminine definite article in Egyptian, for example ( $t 3$ 色 $\xi \in \notin \tau \alpha c ı$ in no. 108, $t 3$ $\pi \rho o ́ c o \delta o c$ in no. 132). On the other hand, to use a Greek noun in the plural, the writer generally uses the singular of the Greek noun with a Demotic plural definite article ( $n 3$ ä $\rho \chi \omega \nu$ in no. 104; $n 3$ є̇ $\pi \iota \tau \eta \rho \eta \tau \eta{ }^{\prime} \subset$

[^140]in no. 121; $n з е=f \mu \eta_{\nu} \nu \cup \subset \iota \nu$ in no. 175). Awareness of Greek grammatical case is also hit and miss. ${ }^{17}$

Generally speaking, the Greek words are drawn from legal and technical administration. For example, we have several words for 'register': $\dot{\alpha} \boldsymbol{\pi} \gamma \rho a ́ \phi \omega$ (no. 147); катахш ${ }^{\prime} \grave{\zeta} \omega$ (no. 130); $\pi \alpha \rho \alpha \gamma \rho a ́ \phi \omega$ (no. 135). ${ }^{18}$ There are numerous legal terms, such as $\dot{\alpha} \nu \theta a \iota \rho \epsilon ́ c \iota \mu o c$ (no. 156), 'claim' (not in LSJ); á $\delta \iota \kappa \epsilon ́ \omega / \hat{\alpha} \nu \tau \alpha \delta \iota \kappa \epsilon ́ \omega$ (no. 167), 'commit/ repay an injustice'; $\dot{\alpha} \nu \tau i \rho \rho \eta с и$ (passim), 'counter declaration';
 sim), 'denunciation'. There are also some from the financial sphere, such as $\delta \iota a<\tau о \lambda \eta$ ' (no. 121), 'payment'; סıacто入ıкóv (no. 128), 'order of payment'; 'єркодаßia ( $=\dot{\epsilon} \rho \gamma о \lambda \alpha \beta i a$, no. 122), 'contract of labour'; кıcтápıov (no. 169), 'casket'; òvoнácıa (no. 127), 'audit' (not in LSJ); систатıкóv (no. 112), 'letter of procurement'. The use of such Greek words within Demotic texts is a vivid reminder that by the Roman period Greek was the only language for administration in Egypt. ${ }^{19}$

### 3.2. Syntactic Accommodation of Greek Words

As far as syntax is concerned, a particularly common pattern is for a Greek verb or verbal noun to be used in a sort of periphrastic construction. There are several types:
(a) A Greek infinitive can be used with the Demotic auxiliary ir ('make'). We have seen an example of this already in ir $\beta$ ıo $\quad$ opıc $\tau \hat{\imath} v$ above. (The infinitive is always written $-\iota \nu$, not $-\epsilon \nu \nu$, and always in the present tense form, usually the active, though a few middles also occur.) For example, in no. 103, the first in the collection, Pachrates complains:

The people of the village prosecuted me.
The initial base wah gives a perfect sense, with the syntactic structure: Base + Subject $+i r+$ Greek Infinitive + Optional Object

Again in no. 114, ll. 3-4:

[^141]
Sarapion son of Ploution denounced Sokonopi.
Notice that the periphrastic verb takes direct object in this case without any preceding preposition $n$. Another is no. 160, where the circumstantial present 'base' $i w$ is followed by subject pronoun $-f$, then $i r+$ Greek infinitive. (The ostracon with the Greek verb $\beta \iota \sigma$ орıcтîv seems to have this construction also.)
(b) The second form is $i r+$ verbal noun in -cıc. This is rarer; $i r$ $\mu \eta \eta^{\prime} \nu v c \iota c$ in no. 117 is one case. (This is with a different verbal base $\check{s}^{c}-i r$, which is a feature in which the Demotic of these ostraca is more like Coptic than Demotic. $)^{20}$ So in no. 111:

They put in difficulty Tryphon called also Sarapion.
In no. 112:
$t w=j$ ir / катах $\omega \rho \iota \mid c \iota v$ hn sh n.tr.t
I register some documents...
Here Menchetti restores $\kappa \alpha \tau \alpha \chi \omega \rho i \zeta \iota \nu$, since $\zeta$ and $с$ are often confused in papyri. ${ }^{21}$ Notice, however, that the consequence of that is that the infinitive and the accusative of the -cıc noun had become in some cases identical in this form of Greek.
(c) The third form is $t j+$ verbal noun; tj means 'give' $(t j+$ infinitive is $\varnothing$ ). This form is commonly manifested by tj $\mu \eta \nu v c \iota \nu$, 'make a denunciation', as in no. $143 .{ }^{22}$
(d) The fourth form is ir + a noun other than a verbal noun. So for example ir $\dot{\alpha} \kappa o ́ \lambda o v \theta o v ~ i n ~ n o . ~ 132 ~ o r ~ i r ~ \alpha ́ к о \lambda o v \theta i ́ a ~ i n ~ n o . ~ 133: ~ ' f o l l o w ~$ through, comply with'. In Greek you can say $\pi о \iota \hat{\omega}$ 人̇ко́入ov $\theta \alpha$ with the same sense, so one could argue that $\hat{i} r$ áкódov $\theta o v$ is a calque. ${ }^{23}$

[^142](e) Fifth, ir + an adjective (meaning 'become $x^{\prime}$ ). The one instance of this is ir ádavíc (no. 143), which means 'he became invisible, he didn't show'. This seems to replicate the Greek idiom
 almost be seen as a calque.

The five types of verbal periphrasis distinguished here form the basis for a sort of syntactic rule about how Narmuthian Demotic deals with Greek: if an idea to be expressed in Greek is verbal, you use a Greek verbal noun, or sometimes a non-verbal noun, supported by a Demotic auxiliary verb. What were the alternatives? Well, the Egyptian speaker might have tried to use the form of the Greek verb appropriate to the Egyptian context, third plural present indicative active or whatever; or he could have used some form of the verb, perhaps the stem, and treated it just like a Demotic verb, so that there would be no need for the auxiliary. That is, instead of base + subject $+i r+$ Greek infinitive, we should have just base + subject + Greek infinitive. This pattern may in fact be present in no. 157, where the Greek verb immediately follows the base; Menchetti actually restores ir in front of a Greek infinitive, normalizing it:
$i w=n$ (ir) $\mu \eta \nu v v^{\nu}\left(=\mu \eta \nu v v_{\epsilon} \nu\right)$
But perhaps no. 157 has a different syntax. However that may be, it is clear that the normal pattern in Narmuthian Demotic is the periphrastic construction of auxiliary $\overline{i r}+$ infinitive.

So what are we to make of the code-switching idiolect of Phatres? Is this a sign of 'profoundly mixed culture', a testament to 'cultural bilingualism', or are the relevant texts to be explained as scribal exercises, like some others among the ostraca from Narmuthis? There seem to be three main points here:

First, on the semantic side Greek is an established part of Phatres' linguistic repertoire, and the Greek words that he uses tend to be ones connected with legal process and administration, which are precisely the areas of Egyptian life that had become exclusively the province of the Greek language in this period.

Secondly, his usage is highly regular; for example, in the ninety ostraca he uses ir + Greek infinitive in a perfective sentence introduced by w$w h$ some ten times. The regularity of the structure suggests

Table 12.1. Perfective wsh-clauses with ir + Greek infinitive in Phatres

| 103 | w3 $h$ | S | ir | $\delta \iota \omega ́ к \iota \nu$ | O |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 114 | w3 $h$ | S | ir |  | O |
| 123 | w3 $h$ |  | ir | ${ }_{\text {c }}$ |  |
| 135 | w3 $h$ | S | ir | $\pi \alpha \rho \alpha \gamma \rho \dot{\alpha}$ ¢ $\downarrow$ |  |
| 145 | w3 ${ }^{\text {h }}$ | S | $i r$ | $\pi \alpha \rho \alpha \gamma \rho a ́ \phi \iota \nu$ | O |
| 147 | w3 $h$ |  | ir |  | O |
| 148 | w3! |  | ir | $\pi \alpha \rho \alpha \gamma \rho a ́ \phi ı \nu$ | O |
| 167 | w3 $h$ |  | ir | $\dot{\alpha} \tau \iota \kappa \hat{\nu}$ | O |
| 167 | w3 $h$ |  | ir | ${ }_{\alpha} \nu \tau \alpha \tau \iota \kappa \stackrel{\nu}{\nu}$ |  |
| 167 | w3 $h$ |  | ir | $\dot{\alpha} \tau \iota \kappa \hat{\nu}$ | O |

to me that Phatres' code-switching is not just a grammatical game, but a stable part of his linguistic repertoire. (See Table 12.1.)

Third, another factor which seems to support this is that these bilingual periphrases seem to look forward to a common pattern in Coptic. ${ }^{24}$ One of the commonest auxiliaries in Coptic (at least in Bohairic Coptic) is ep, 'make', and this is systematically used to introduce originally Greek verbs: ${ }^{25}$ e.g. ер-пוстеүıin, ep- $\Delta$ окimazin, ep-mapabenin. This structure is not found equally in all Coptic dialects, occurring in Bohairic but not in Sahidic. ${ }^{26}$ And surely the likeliest explanation for this parallel between Coptic and Narmuthian Demotic is that such periphrastic constructions with Egyptian auxiliary and Greek infinitive were established in ordinary speech in this period, at least in certain parts of Egypt. ${ }^{27}$

## 4. CONCLUSION

It would be a short step from here to drawing the conclusion that the Narmuthis ostraca reproduced popular bilingual speech patterns,

[^143]even though the Demotic script would have been obscure to most Egyptians. To accept this, we should have to believe that the Demotic of the ostraca was close to contemporary popular Egyptian, but in fact it seems likely that it is much more conservative than that, even though it may contain some intimations of Coptic. ${ }^{28}$ It would therefore be safer to conclude that the use of the embedded Greek words in the Narmuthis ostraca may reflect the use of Greek vocabulary in popular Egyptian, though the Demotic they are embedded in need not reflect popular speech.

Phatres' scribal practice is still puzzling, not just because of the inherent complexity of bigraphism, which demands a greater skill from the reader than writing in one script alone, but also because the use of Demotic for administrative purposes is by this period highly anomalous. The explanation for this choice of script is likely to be that these scribes were caught between a sentimental attachment to Demotic and the practical need to use Greek vocabulary for administrative purposes. It might have been more straightforward to abandon Demotic entirely, but given that that was ruled out, they had to find some way of incorporating Greek technical vocabulary within it, which meant either (a) citing Greek words in Greek script or (b) using Demotic transliterations of Greek words; (a) seems to have been felt to be more acceptable than (b). The bigraphism attested in the Narmuthis ostraca should thus be seen not merely as playful school exercises, but rather as a serious, though ultimately unsuccessful, experiment in forging a new composite script suited to the bicultural environment of Roman Egypt. In the end, the best strategy for that purpose proved to be the one already intimated in the various 'Old Coptic' texts, namely that of devising a new expanded alphabet which could easily accommodate both native Egyptian and Greek borrowings into Egyptian, but that was not to happen for another century.

[^144]
## 13

# Latin Influence and Greek Request Formulae* 

Eleanor Dickey

## 1. INTRODUCTION

The writers of Greek papyrus letters make use of a number of standardized polite request formulae. Two of these expressions, $\epsilon \quad \epsilon \omega \tau \hat{\omega}$ 'I ask' and $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ 'I beg', show features characteristic of Latinisms and are probably translations of the Latin polite request formulae rogo and oro.

## 2. THE REQUEST FORMULA $\epsilon \rho \omega \tau \hat{\omega}$

The request formula ${ }_{\epsilon} \rho \omega \tau \hat{\omega}$ is common in letters of certain periods, with more than a hundred examples attested before the fourth century ad. It functions with another verb to provide a more polite alternative to the use of that other verb in the imperative; for example:

1. P. Mich. VIII 498, ll. 17-19, ii AD

[^145]And I ask, brother, that you make acknowledgement to Rufus if you write to him.

The double sense of English 'ask', which can mean both 'enquire' and 'request', obscures the extent to which this usage is alien to the classical language. In classical Greek the verb $\epsilon \rho \omega \tau \alpha ́ \omega$ can only mean 'ask' in the sense of 'enquire', never in the sense of 'request' (cf. LSJ s.v.). For example:
2. Plato, Rep. 487 E

I said, 'You are asking a question that needs an answer spoken in the form of a comparison.'

The development of the post-classical meaning of $\dot{\epsilon}^{\rho} \rho \omega \tau \alpha \dot{\alpha} \omega$ was influenced by the Latin use of rogare, which always conveyed both the 'enquire' and 'request' senses of English 'ask'. Such influence is indicated by the fact that $\epsilon \rho \omega \tau \alpha \alpha^{\prime} \omega$ in the sense of 'request' first occurs in literal translations from Latin in the late second century BC and only gradually spread to naturally produced Greek. Both the first two occurrences of this usage come from Roman senatus consulta, ${ }^{1}$ a type of document that had a tendency to a particularly literal type of translation. Decrees of the Roman senate were always composed in Latin in the first instance, but when they pertained to Greek cities they were then translated into Greek before being sent out from Rome; the resulting translations were uniform in character and seem to have come from a central office with a consistent translation policy. ${ }^{2}$ The translation staff clearly favoured fidelity to the original over the creation of elegant Greek prose, to the extent that 'the translators slavishly reproduced each word of the Latin, so that at times the Greek becomes intelligible only when the Latin idiom is uppermost in the mind. ${ }^{3}$

[^146]It is easy to see why a translator would have used $\dot{\epsilon}^{\rho} \rho \omega \tau \dot{\alpha} \omega$ for 'request' under such circumstances. Latin rogare means both 'enquire' and 'request', and in the second century вс the former meaning seems to have been much more common than the latter one. ${ }^{4}$ The obvious Greek verb for translating rogare in the sense of 'enquire' was $\dot{\epsilon} \rho \omega \tau \alpha \dot{\alpha} \omega$, and once an equivalence between the two verbs had been established in the more common sense of rogare, it would have been natural for a slavishly literal translation to use the same Greek verb for all occurrences of rogare, whatever their sense.

The fact that the early examples of $\epsilon \rho \omega \tau \alpha \dot{\alpha} \omega$ for 'request' come from senatus consulta has two important implications. Since the surviving senatus consulta represent only a tiny fraction of what was originally produced, ${ }^{5}$ the uniform translation system for these documents makes it overwhelmingly likely that the two examples that happen to be preserved are not the only ones that originally existed. Probably many more decrees contained this use of $\hat{\epsilon}^{\rho} \rho \omega \tau \dot{\alpha} \omega$, diffusing it to a wide variety of Greek-speaking cities. Moreover, every example that existed would have been highly visible: inscribed on stone, set up in a public place, and carrying with it all the authority of the Roman government. A usage introduced in this fashion would have had a much better chance of being adopted into the Greek language than mistranslations normally have, and the fact that the verb $\dot{\epsilon}^{\rho} \rho \omega \tau \alpha \dot{\alpha} \omega$ acquired the sense 'request' in naturally produced Greek by the beginning of the first century $\mathrm{AD}^{6}$ suggests that this is indeed what happened.

The use of the first person singular $\dot{\epsilon} \rho \omega \tau \hat{\omega}$ as a polite request formula could in theory have arisen within Greek once the new meaning of the verb was established, without any further Latin influence. The chronology of its appearance, however, suggests that this is not what happened. Whereas third-person forms of the verb are rare in the papyri and mean only 'enquire' till the end of the first century вс, ${ }^{7}$ the first person singular $\epsilon \rho \omega \tau \hat{\omega}$ is comparatively

[^147]common, and has a different meaning, from its very first appearance in the papyri: it is found six times in papyri of the first century вс, always with the meaning 'request'. ${ }^{8}$

In the first century AD , when the new meaning of the verb first appears in third-person forms, 23 of the 50 examples in the papyri of the meaning 'request' are in the first person singular form ${ }_{\epsilon} \rho \omega \tau \hat{\omega}$, while in the same century none of the five preserved examples of the verb meaning 'enquire' are in that form. There was thus a disproportionate tendency to use the new meaning in the first person singular, and that was the form in which the new meaning seems to have entered the papyri in the first place; under those circumstances it would be odd if the usage in the first person singular were an outgrowth of the usage in other forms.

A more likely course of development is that some Greek speakers felt the need for a polite request formula equivalent to Latin rogo, and since they recognized $\dot{\epsilon} \rho \omega \tau \alpha \dot{\alpha} \omega$ as the natural equivalent of rogare, they translated rogo with $\epsilon_{\epsilon} \rho \omega \tau \hat{\omega}$. The usage then caught on and probably provided part of the impetus for the spread of the 'request' meaning of other forms of $\dot{\epsilon}^{\rho} \rho \omega \tau \alpha \dot{\alpha} \omega$.

This hypothesis is supported by the constructions with which $\bar{\epsilon} \rho \omega \tau \hat{\omega}$ is found. ${ }^{`} E \rho \omega \tau \hat{\omega}$ with requests often takes the infinitive, as ${ }^{9}$
3. P. Mich. VIII 465, ll. 29-30, ii AD

And I ask you very much not to grieve my lady Julia in anything.
This is of course not a construction that classical writers would have used with any form of $\dot{\epsilon} \rho \omega \tau \alpha \dot{\alpha} \omega$, since it is an indirect command rather than an indirect question, and the latter was the only construction a

Tor. Choach. 11 bis, 1. 34, ii вс), [ $\eta$ ] $\rho \omega ́ \tau \eta<\alpha \nu(B G U$ VIII 1877, 1. 5, і вс), $\epsilon \rho \omega \tau \eta \theta \dot{\epsilon} \nu \tau \alpha$ ( $B G U$ IV 1141, l. 44, і вс); all these clearly mean 'enquire'. Second-person forms in
 2, і вс), $\epsilon^{\epsilon} \rho \omega \tau \eta \theta \epsilon^{\prime}$ ' ( $P$. Oxy. VII 1061, l. 10, і вс); the first of these means 'enquire', the second probably has the same sense but is too close to lacunae to be certain, and the third (which is attached to a command and therefore functions like $\epsilon \rho \omega \tau \hat{\omega}$ ) means 'request'. There are also the first-person aorists $\eta \rho \omega \dot{\tau} \eta \subset \alpha$ at $P$. Oxy. VII 1061, 1.19 (i вс) and $S B$ VI 9564, 1.2 (i вс); the first of these probably means 'enquire', and the meaning of the second is uncertain owing to lacunae in the papyrus.
${ }^{8}$ The examples are P. Wash. Univ. II 106, ll. 5, 7 (18 вс), BGU IV 1141.9 (13 вс), P. Oxy. IV 744, ll. 6, 13 (1 вс), SB VI 9564, l. 4 (i вс).
${ }^{9}$ Other examples include P. Herm. 1, 1.3 (i Ad), P. Mich. XII 656, 1.3 (i Ad), SB VI 9271, 1.11 (i-ii AD), P. Berl. Leihg. I 10, 1. 3 (ii AD), P. Giss. 71, 1. 4 (ii AD), P. Mich. VIII $465,1.23$ (ii AD).
verb of enquiring could govern. Otherwise, however, it is unobjectionable by the standards of Greek syntax: the infinitive is the expected construction for a verb of requesting to take.

But ${ }_{\epsilon} \rho \omega \tau \hat{\omega}$ with requests frequently ${ }^{10}$ takes two other constructions, both of which are more surprising: the imperative and the subjunctive (usually introduced by ${ }_{i v}^{\prime \prime}$ ). For example: ${ }^{11}$
4. P. Mich. VIII 491, ll. 9-10, ii AD

Therefore I ask you, mother, take care of yourself, don't worry at all about me.

## 5. P. Brem. 17, ll. 5-8, ii AD

 $\mu \epsilon \tau \epsilon \dot{\omega} \rho \omega \nu$
And now I ask that you help as you promised, so that I may be delivered from this suspense.

These constructions cannot be justified in terms of Greek syntax, either classical or Koine. Indirect commands in the papyri, like those in classical Greek, normally take an infinitive; for example $\dot{\alpha} \xi \iota \hat{\omega}$ 'I ask', which is also commonly used as a polite request formula in the early Roman period, almost always takes an infinitive in the papyri. ${ }^{12}$ But both the use of the imperative and that of the subjunctive have exact parallels in the constructions used with rogo in informal Latin from a wide range of periods: ${ }^{13}$

[^148]6. Cicero, Att. 2. 24. 5
qua re, ut Numestio mandavi tecum ut ageret, item atque eo, si potest, acrius te rogo ut plane ad nos advoles.
Therefore, as I asked Numestius to do, so do I likewise and, if possible, more keenly ask that you simply fly to us.

## 7. Decimus Brutus in Cic. Fam. 11. 26

rogo te, videte quibus hominibus negotium detis qui ad me legiones adducant. I ask you, be careful which men you give the job of bringing me the legions.
8. Tab. Vindol. II 255, ll. 6-8, ii AD
rogo ut ea quae ussibus puerorum meorum opus sunt mittas mihi I ask that you send me the things that are necessary for the use of my boys.
9. Tab. Vindol. II 343, ll. 14-15, ii AD
ita rogo quam primum aliquit (denariorum) mi mitte.
So I ask you, send me some (money) as soon as possible.
The only plausible explanation for the frequent use of these constructions with $\epsilon \rho \omega \tau \hat{\omega}$ is that they were adopted along with the usage itself from Latin rogo. It is therefore notable that they are the only constructions the new usage of $\dot{\epsilon} \rho \omega \tau \hat{\omega}$ could take in the first century bс; the infinitive is not attested until the first century ad. ${ }^{14}$ The infinitive, of course, is not normally used with rogo to make requests in Latin; its use is the result of an integration of the new usage of $\epsilon \rho \omega \tau \hat{\omega}$ into the standard grammar of Greek. By the second century AD that integration had taken place to such an extent that the infinitive was probably the most common of the three constructions. ${ }^{15}$

## 3. THE REQUEST FORMULA $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$

Another polite request formula that starts in the first century $\mathbf{B C}^{16}$ and then becomes common in letters is $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$, of which more

[^149]than a hundred examples are attested before the fourth century ad. This verb, traditionally translated 'I beg' when used as a request formula, functions much like $\epsilon \rho \omega \tau \hat{\omega}$. For example:
10. P. Oxy. LIX 3992, ll. 6-9, ii ad


And now I do the same thing [i.e. greet family] and beg you to forgive me if I have not yet sent any sweets to this same lady of ours.

Once again, the word's meaning when used as a request formula is different from its classical meaning. In classical Attic тарака入 $\hat{\omega}$ has two meanings, 'invite' and 'exhort, encourage'; in the latter it can take an infinitive in indirect command. For example:

## 11. Aeschines 1.24


He invites him to the platform and urges him to speak.
12. Xen. Anab. 5. 6. 19


for Xenophon wishes [this] and exhorts us, as soon as the ships come, to say at once to the army...

Though the difference in meaning between 'beg' and 'exhort' may seem minor to us, to a Greek it was significant enough to put $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ 'beg' on a par with $\epsilon \rho \omega \tau \hat{\omega}$ 'request' as a non-Attic usage. Ps.-Hermogenes condemns the use of both $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ and $\dot{\epsilon} \rho \omega \tau \hat{\omega}$ as request formulae, on the grounds that both require non-Attic meanings of the words:
13. Ps.-Hermogenes, Пєєi $\mu \in$ Єódov $\delta \epsilon \iota v o ́ \tau \eta \tau o c ~ 3$

 є́pшт $\hat{\nu}$ тvvӨávєє $\theta a u$.

Address System of the Roman Period and its Relationship to Latin', $C Q^{2} 54$ (2004), $494-527$ at 516 n. 74), BGU IV 1141, l. 10 (13 вс), P. Oxy. IV 744, 1. 6 ( 1 вс), $B G U$ VIII 1875, ll. 9?, 25 (івс), BGU XIV 2419, 1. 5 (і вс).

Improper usage: for example, if someone says $\left.{ }_{\epsilon} \rho \rho \omega \tau \hat{\omega} \kappa \alpha i \begin{array}{l}\text { па }\end{array}\right)$ of $\delta \epsilon ́ \sigma \mu \alpha \iota$, he has spoken improperly; for $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ means either 'invite' or 'urge', and $\epsilon \in \omega \omega \tau \hat{\omega}$ means 'enquire'.

The question of when and how the new meaning of $\pi \alpha \rho а к а \lambda \epsilon \epsilon \omega$ developed is a difficult and complex one, indeed more difficult and complex than is acknowledged in the lexica, making it impossible at present to determine whether or not Latin influence was involved. Even if Latin was not involved, however, the development of the new meaning resulted in a close parallelism between $\pi \alpha \rho \alpha \kappa \alpha \lambda \epsilon \epsilon \omega$ and Latin orare, which had long had the meaning 'beg'. This parallelism would have made it possible to use $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ as a translation of the Latin request formula oro.

Like $\epsilon \rho \omega \tau \hat{\omega}$, тарака入 $\hat{\omega}$ used as a request formula can take a dependent verb not only in the expected infinitive construction, but also frequently ${ }^{17}$ in the imperative or subjunctive. For example: ${ }^{18}$

## 14. P. Wisc. II 71, ll. 10-13, ii ad



If he wants you to come another time in good health, I beg you to come up to me.
15. P. Sarap. 95, ll. 4-7, ii ad

Therefore I beg you, write us immediately about your health.
16. P. Haun. 2. 28. 6-8, i AD
 I greatly beg you to look after yourself so that you may be healthy.

The situation here is not quite analogous to that of $\bar{\epsilon} \rho \omega \tau \hat{\omega}$, because $\pi \alpha \rho \alpha к а \lambda \epsilon \epsilon$, unlike $\epsilon \rho \omega \tau \alpha ́ \omega$, already had the ability to take an infini-

[^150]tive in indirect command; the use of $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ with the infinitive in Roman-period Greek therefore represents no change of construction. But once again the imperative and subjunctive are new constructions that would not be expected from a purely Greek perspective, and once again they match the constructions used with the Latin equivalent oro: ${ }^{19}$

## 17. Cicero, Att. 3.3

sed te oro ut ad me Vibonem statim venias, quo ego multis de causis converti iter meum.

But I beg you to come to me at once at Vibo, whither I have diverted my journey for a variety of reasons.
18. Cicero, Att. 4. 8a. 1
dic, oro te, clarius; vix enim mihi exaudisse videor.
Speak more clearly, I beg you; I seem scarcely to have understood you.
19. Petronius, Sat. 17. 9
protendo igitur ad genua vestra supinas manus petoque et oro ne nocturnas religiones iocum risumque faciatis neve traducere velitis tot annorum secreta, quae vix tres homines noverunt.
Therefore stretching out my upturned hands toward your knees I ask and beg that you not make a joke and a mock of our nocturnal rites nor choose to betray secrets that have been kept for so many years, which scarcely three people know.
20. Petronius, Sat. 61.2
oro te, sic felicem me videas, narra illud quod tibi usu venit.
I beg you, as you want to see me happy, tell me what happened to you.
Unfortunately, it is difficult to determine the date at which each construction first became usable, because the early papyri containing this word happen to be more fragmentary than those for $\epsilon \rho \omega \tau \hat{\omega}$ and in addition make use of doubtful forms that could be either imperatives or infinitives. All one can say for sure is that in the first century bC both the imperative and the infinitive are attested at least once each; ${ }^{20}$

[^151]the subjunctive certainly appears by the first century AD , but it is reduced in frequency in the second century under pressure from the infinitive. It seems likely that the use of $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ as a request formula was borrowed from Latin oro along with the Latinate constructions, but that because $\pi \alpha \rho \alpha \kappa \alpha \lambda \epsilon \epsilon \omega$ already had the capacity to take an infinitive, this option was immediately available for the new usage of $\pi \alpha \rho \alpha к \alpha \lambda \hat{\omega}$. In time, as in the case of $\bar{\epsilon} \rho \omega \tau \hat{\omega}$, the new usage was more fully integrated into Greek syntax and the Latinate constructions became less common under pressure from the infinitive.

## 4. PAIRING OF $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ WITH $\epsilon \rho \omega \tau \hat{\omega}$

Паракал $\hat{\omega}$ is often paired with ${ }_{\epsilon}^{\epsilon} \rho \omega \tau \hat{\omega}$, and because this pairing goes back to the first century BC , it suggests a common origin. For example: ${ }^{21}$
21. P. Oxy. IV 744, ll. 6-7, i вс
$\dot{\epsilon} \rho \omega \tau \hat{\omega}$ сє каi $\pi а \rho а к а \lambda \hat{\omega} ~ с \epsilon ~ \grave{\epsilon} \pi \mu \mu \epsilon \lambda \dot{\eta} \theta<\eta \tau>\iota \tau \hat{\omega} \pi \alpha \iota \delta \dot{\omega} \omega$
I ask and beg you, take care of the child.
22. P. Col. VIII 215, ll. 8-10, i-ii ad
 I greatly ask and beg you, look after yourself and also the little girl.

The combination is always in the same order (cf. also Ps.-Hermogenes quoted in ex. 13 above), and restricted to the first-person singular; other forms of $\dot{\epsilon}^{\prime} \rho \omega \tau \dot{\alpha} \omega$ and $\pi \alpha \rho \alpha \kappa \alpha \lambda \epsilon \epsilon \omega$ are very rarely combined in the early Roman period. ${ }^{22}$ Cicero uses rogo and oro together, always in this same order, as part of a wider tendency in

[^152]Ciceronian Latin to combine forms of rogare and orare with each other; ${ }^{23}$ that combination persists for centuries in vulgar Latin:

## 23. Cicero, Fam. 5. 18. 1

tamen te magno opere non hortor solum sed etiam pro amore nostro rogo atque oro te colligas virumque praebeas
Nevertheless with great earnestness I not only urge you but even ask and beg you by our mutual affection to pull yourself together and show yourself a man.
24. Claudius Terentianus, P. Mich. VIII 467, ll. 29-31, ii ad
rogo et or $[\mathbf{o}$ te, $]$ pa[ter, $u]$ t eas ad $D[e l] \operatorname{ta} \operatorname{mer}[\mathrm{ca}] \mathrm{t}[\mathrm{o}] \mathrm{r}[\mathrm{ia}]$ navi ut em[a]s et mittas $\operatorname{tr}[\mathrm{e}]$ s toc [adas]
I ask and beg you, father, to go in a merchant ship to the Delta in order to buy and send three breeding animals.

The combination $\epsilon \rho \omega \tau \hat{\omega} \kappa \alpha a i \pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ is thus likely to be based on rogo atque oro. The fact that the combination is restricted to the first person singular in Greek but not in Latin is additional evidence that the use of the first person singular in Greek was more influenced by Latin than that of other forms of the same verbs.

## 5. CONCLUSION

One could argue that the normal direction of influence went from Greek to Latin, not the other way around, and that therefore if the similarities between the two languages are too great to be coincidental, Greek must have influenced Latin. But such an argument would be difficult to sustain, given that the usages in question are attested in Latin well before they appear in Greek-indeed well before they could possibly have appeared in Greek, given the fact that the Greek verbs involved could not have been used as request formulae until they had acquired their post-classical meanings.

Moreover, recent work has revealed that there was far more Latin influence on Greek than has previously been appreciated.

[^153]Latinisms are detectable as early as the third century вс, fairly widespread in the second century вс, ${ }^{24}$ and increasingly common thereafter. ${ }^{25}$ Their effect on the language was so pervasive that some elements of the core vocabulary of modern Greek, words such as $<\pi i \tau \iota ~ ' h o u s e ' ~ a n d ~ \pi о ́ \rho \tau \alpha ~ ' d o o r ', ~ a r e ~ d e r i v e d ~ n o t ~ f r o m ~ a n c i e n t ~ G r e e k ~$ but from Latin. ${ }^{26}$ And since other elements of the politeness system of the papyrus letters, including the vocatives and some of the letteropening and letter-ending formulae, are demonstrably Latinate, ${ }^{27}$ it is far from surprising that some of the request formulae should also be Latinate.

But is the first appearance of $\pi \alpha \rho \alpha к \alpha \lambda \hat{\omega}, 57-56$ вс, too early for Latin influence in an Egyptian context? Certainly this date, more than 20 years before the battle of Actium, falls in the Ptolemaic rather than the Roman period, but it does not follow from that that it must pre-date all Roman influence. Hellenistic Egypt was no isolated backwater; it was connected to the rest of the Mediterranean world by extensive cultural and commercial ties. Quite apart from the numerous Latin speakers who came to Egypt and the numerous Egyptians who travelled to Latin-speaking areas, Greek-speaking Egyptians had substantial contact with Greek speakers from other regions. And since Egypt was one of the last areas of the Hellenistic world to come under Roman control, such contact inevitably meant contact with Romanized Greeks, in many cases ones whose families

[^154]had lived for generations under Roman government. It is possible, even likely, that the request formulae we see for the first time in papyri were created elsewhere in the Greek world at an earlier date than their first appearance in the papyri, and that we lack evidence of their earlier use elsewhere simply because we do not have equivalents of the papyri for other regions.
It is generally accepted that Latin was used on coins minted in Britain before the Roman conquest, and that such usage is evidence for some degree of pre-conquest Romanization of Britain. ${ }^{28}$ If Latin could make it to a region as remote as Britain before the Romans themselves arrived, surely it would have had no difficulty having an impact on an international centre like Egypt.
${ }^{28}$ Cf. J. Williams, 'Coinage and Identity in Pre-Conquest Britain: 50 bc-ad 50', in C. Howgego, V. Heuchert, and A. Burnett (eds.), Coinage and Identity in the Roman Provinces (Oxford, 2005), 69-78 at 73.

## 14

# Greek Papyri and Graeco-Latin Hybrid Compounds* 

Panagiotis Filos

## 1. INTRODUCTION

In recent years, the contacts between Greek and Latin have attracted renewed interest. The links between the two classical languages had long been viewed from a primarily descriptive and historical point of view. The emphasis is now on examining two interacting linguistic systems, with the focus of current research moving from the more traditional and better-studied fields (phonology, morphology, lexical borrowings, etc.) into new, or almost new, areas such as syntax, sociolinguistics (bilingualism, code-switching, etc.), and other related areas. ${ }^{1}$

[^155]However, even the more traditional fields (morphology, lexicon, etc.) deserve renewed attention. There are topics within them which have not been adequately considered or indeed have not at all been studied, but above all on a more detailed analysis it becomes clear that there is not a clear dividing line between the two approaches, which necessarily feed each other. Terms like cú $к є є \lambda$ ос 'who shares a cella (room)' (usually of a monk) < Gk. cóv + Lat. cella, ${ }^{2}$ àv $\tau \iota \kappa \kappa$ íßac '(deputy?) scribe, judicial officer' < Gk. à $\nu \tau i$ + Lat. scriba, or even $\dot{\alpha} \beta \alpha ́ \kappa \tau \eta c$ 'senior secretary, registrar' < Latin $a b$ actis, univerbated and treated like a nomen agentis, are Graeco-Latin formations which must have either been formed or adapted in a bilingual set-up, were then integrated into the Greek language, and eventually found their way into the language of the church or the administration; their history is as relevant to cultural phenomena as are other studies of bilingualism. ${ }^{3}$

A study of the 'Latinate' hybrid compounds, ${ }^{4}$ as in the examples above, i.e. of those terms that (normally) include both Greek and Latin material, does not exist and remains very much a desideratum. This essay is a first attempt at examining the way in which new compound forms with Latin material were coined in the multilingual set-up of the Greek-speaking world. We shall look at the typology of these forms but also at word-formation and semantics since they are important as a source of data about the integration of the new words into Greek and also the way in which they were perceived (for a list of all the forms examined in the essay see the Appendix).

[^156]For reasons of space, we shall have to concentrate on a few crucial points, occasionally with some inevitable need for brevity. The basic evidence is provided by non-literary papyri from Egypt (first to eighth centuries AD).

## 2. LATIN LOANWORDS IN THE GREEK PAPYRI

### 2.1. Sources

The available sources for the study of the Latin loanwords are not limited to literary texts, but also include copious epigraphic material from all over the eastern Mediterranean (and beyond) and numerous papyrus documents (primarily from Egypt, but also from other areas such as Palestine, Arabia, the Euphrates area, etc.).

There is no complete and fully up-to-date list of all the Latinate forms from all these three categories of sources. Hofmann, ${ }^{5}$ who provides the most comprehensive list of Latin loanwords (normally headwords) from all types of written sources up until ad 600, lists c.1,730 (his own figure) Latin forms. ${ }^{6}$ However, it is obvious that there are forms missing, e.g. from papyrus sources, since the major part of his research has been carried out through second-hand sources (dictionaries, etc.). In addition, the lists of attestations provided for each form are often merely indicative and not complete. Daris, ${ }^{7}$ on the other hand, is the standard work for the Latinisms in the Greek papyri. He lists some 900 Latin loanwords (not always headwords) in the Greek papyri from the first century вс to the eighth century ad. Cervenka-Ehrenstrasser and Diethart ${ }^{8}$ offer a

[^157]more complete picture of the papyrus data, but have covered so far only the first four letters of the alphabet.

It is evident that the figures for Latinisms quoted above cannot be fully trusted, especially as regards the numbers of attestations; however, they are not far apart from the actual current numbers. Thus, for the purposes of this paper, we shall confine ourselves to the data provided by Daris (as amended by Cervenka-Ehrenstrasser and Diethart and checked/revised as to the attestations through the DDBDP data). On the one hand, this is a representative corpus of data and relatively up to date; on the other, it allows us to leave aside problems pertaining to particular forms (e.g. a very few forms come from Coptic inscriptions, some others are dubious, etc.). Moreover, it is possible to compare statistical results with figures from other studies, which have also taken Daris's data into account (Dickey). ${ }^{9}$

### 2.2. A Typological Classification of Latin Loanwords

### 2.2.1. Introduction

The majority of the works that examine linguistic aspects of the Latin loanwords in Greek are normally limited to the treatment of phonological (e.g. Sallés Verdaguer, Gignac), ${ }^{10}$ inflectional (e.g. Döttling, Gignac), ${ }^{11}$ or derivational issues (e.g. Palmer, Cavenaile). ${ }^{12}$ At the same time, most special dictionaries/vocabularies (e.g. Meinersmann, ${ }^{13}$ Hofmann, Daris, Cervenka-Ehrenstrasser and Diethart), devoted to the collection of Latin loanwords, offer little general discussion and primarily focus on the individual entries; but cf. (partial) exceptions like Viscidi (see above), who examines selected

[^158]terms per semantic category, or Mason, ${ }^{14}$ who deals with special/ technical Latin vocabularies.

Thus there is a gap concerning the typology of the Latin(ate) forms within Greek. What kind of words are we really dealing with? How many of them, for instance, are simple loanwords, which, with little or no modification (phonological, morphological, etc.), entered the Greek language directly? How can this be explained? And what other kinds of forms do we find in Greek, which were created on the basis of the Latin material, but did not come directly from the donor language as such? How far-reaching was this? ${ }^{15}$

So far there has hardly been any work on the actual typology of the Latin loans and/or other relevant aspects of word-formation as a whole. Apart from some useful comments found in works like the ones above, we are practically short of a monograph on this subject. In particular, we lack any treatment of the subject of the Latinate hybrid forms; a short reference, basically examples, by Cavenaile ${ }^{16}$ has offered nothing more than a glimpse at the relevant material.

### 2.2.2. Typology

Apart from a very few verbal and indeclinable (adverbial, etc.) forms, which amount to about twenty, all the other Latin loans in the Greek papyri are nouns, predominantly substantives but also a few adjectives. The basic reason for this predominance of the nominal forms is that the Greek and the Latin verbal systems are quite different from a structural point of view. ${ }^{17}$ Thus it was difficult to transfer verbal forms from Latin to Greek directly. In those cases where a Latin verb has been acclimatized to Greek (not always directly since sometimes a cognate Latin noun which had already entered Greek served as the actual basis for the coining of the Greek form of the verb), a suffix -i'ઈ $\omega$ or - $\epsilon \dot{v} \omega$ (e.g.

[^159]$\kappa о \mu \pi \lambda \epsilon \dot{v} \omega$, 'to fill' < Lat compleo, etc.) was added to facilitate the 'naturalization' of the form into Greek. In addition to the morphological mismatch, we could also refer to the general tendency amongst languages to borrow nominal rather than verbal forms (cf., for instance, a similar phenomenon in English verbal loans in European languages). ${ }^{18}$

A somewhat conventional, yet reasonably representative, classification of the Latin forms is the following:
(i) 'Latin' creations: Latin words that were imported from the donor language as such, i.e. as non-transparent monomorphemic units, and which, with some small adaptation to Greek grammar (usually in the ending), were used as regular Greek forms. They form the large bulk of the Latinisms in the papyri: ${ }^{19}$
(a) simple words: e.g. $\mu$ ó $\delta \iota o<$ Lat. modius;

(c) derivatives: e.g. $\pi \rho \iota \mu \alpha ́ \rho \iota o c<$ Lat. primarius.
(ii) 'Greek' creations: Latin words which, by and large, are thought of as imported into Greek and subsequently adapted to the rules of Greek grammar through the addition of Greek morphemes (stems and/or derivational suffixes) producing hybrid forms. However, some of these forms might have been used first in the context of either language or in parallel in Greek and Latin: cf. e.g. archistator 'chief usher; head of police' which is found first in the Greek papyri as $\dot{\alpha} \rho \chi \iota c \tau \dot{\alpha} \tau \omega \rho$, but is also used in Latin texts. ${ }^{20}$ See also words like leptospathium 'thin spatula' which represent the opposite case, i.e. 'Latin' terms with exclusively Greek material that are only attested in Latin, but not in Greek. ${ }^{21}$

[^160]（a）Derivatives（c． 45 forms，excluding plain diminutives in $-(\imath)$ ov）：Latin stem + Greek suffix：e．g．caф $\omega \nu i ́ \tau \eta c<$ Lat．sapo．At times，we find competing formations：e．g．$\dot{\alpha} \rho \gamma \epsilon \nu \tau \alpha \dot{\rho} \not \rho o c$ but also $\dot{\alpha}^{\rho} \rho \gamma \epsilon \nu \tau \alpha \rho i ́ \tau \eta c<$ Lat．argentarius（argentum）．${ }^{22}$
（b）Compounds（c． 75 forms）：
（1）Latin first member + Greek second member：e．g． iсıкıот⿳亠二口丸 $\eta$ с＇sausage－／mince－seller＇＜Lat．i（n）sicium＇sausage， mince＇＋Gk．$-\pi \omega \dot{\lambda} \eta \mathrm{c}$＇seller＇；
（2）Greek first member（including prepositions，adverbs）＋ Latin second member：e．g．$\lambda \epsilon \pi \tau \alpha \mu \iota \tau \dot{\omega} \rho \iota o \nu$＇a fine cloak＇$<\mathrm{Gk}$ ． $\lambda \epsilon \pi \tau o$＇－＇fine＇＋Lat．amictorium＇cloak，etc．＇；$\epsilon \hat{\pi} \pi \lambda o v \mu o c$＇well－embroi－ dered，decorated＇＜Gk．$\epsilon \dot{v}-+$ Lat．pluma＇feather＇；
（3）Latin first member＋Latin second member（compounds which are attested as such in Greek only）：e．g．кодıтот $\rho \iota \beta$ и̂voc（title of a Roman officer）＜Lat．comes tribunus．
（c）Univerbated forms（c． 10 forms）：A univerbation is a syntagm of two words retaining their endings，if inflecting，and combined under a single accent；in the case of the Latin forms here，it is usually the joining－together of a preposition／adverb + a following noun： e．g．áßáктıcl－ךc＇registrar，secretary＇＜Lat．ab actis（lit．）＇from the acta＇；$\beta_{\iota c} \eta_{\lambda \epsilon \kappa \tau о с ~ ' t w i c e-s e l e c t e d ~(s o l d i e r) ' ~}^{<}$Lat．bis electus．${ }^{23}$

The number alone of the hybrid compounds（b）（2）shows that these types represent a regular phenomenon of word－formation in that period．Moreover，these forms cannot be attributed to＇literary artifici－ ality＇or the like；on the contrary，they are found in documents of many different genres（official documents，legal documents，private letters，

[^161]lists/accounts; etc.). Therefore a closer examination is necessary in order to determine their linguistic character and the level of their integration into the Greek of that period. In what follows, I shall concentrate on the main linguistic aspects of these formations, i.e. word-formation, semantics, etc. as well as their distribution in time and in the corpus of the papyrus texts.

## 3. LATINATE COMPOUNDS IN GREEK PAPYRI (I): WORD-FORMATION

Adams ${ }^{24}$ has rightly pointed out that 'Loan-words are relevant to bilingualism, in that the original transfer is usually effected by someone who knows the donor as well as the receiving language. But integrated loan-words [...] are also used by monolinguals who may not know the donor language and may even be unaware that a word is a borrowing.' Hybrid compounds display, at first glance, clear features of bilingualism. In fact these forms point to 'high-level' bilingualism, since they apparently draw upon, and could theoretically belong to, both languages. Nevertheless, it is questionable whether these compounds, with some apparent degree of language 'contamination', can be related directly to bilingualism; the use of loan material in word-formation normally presupposes some degree of integration into the recipient language. Therefore, in many cases the 'Latin' part of the hybrid should be seen in a Greek rather than a Latin context, in the sense indicated by Adams in the passage above. Thus, for instance, Graeco-Latin compounds like $\pi \epsilon v \tau a \xi \in \epsilon \tau \iota a i ̂ o c$ 'containing/weighing five sextarii' was derived from Greek $\pi \epsilon ́ v \tau \epsilon$ and $\xi \in \epsilon \in \tau \eta \subset$, the 'acclimatized' form of Latin sextarius, rather than from the Latin form itself.

We are usually tempted to consider such hybrid words, when found in Greek texts, as 'Greek' formations, whereas we might treat them as 'Latin' creations when used in the context of Latin. There is little doubt though, that bilinguals could coin and use such hybrids
in both languages. ${ }^{25}$ Nevertheless, a comparison between the two languages shows that hybrid compounds in Greek differ from those in Latin: hybrid forms in Latin are usually of more technical or literary character. ${ }^{26}$

In Greek, we find Graeco-Latin hybrid formations in literature as well as in epigraphic and papyrus texts. A selective look at Hofmann's data offers a representative picture of the diversity of these forms. The present essay confines itself, as stated above, to the examination of hybrids from papyrus sources alone.

The large majority of the papyrus hybrids are substantives, and only a very few (c.5) are adjectives. The discrepancy can be explained by the very semantics of the forms (titles of office(r)s, everyday life terms, objects, etc.). Notice that there are also some forms (e.g.
 and of very dubious etymology/meaning.

### 3.1. Compound Types

It is natural to tend to compare the compounds of this period to the types of compounds of the classical age, since the latter have been studied much more thoroughly. However, the compounds of the post-classical period show some clear instances of independent development.

[^162]Some works briefly or marginally refer to the Greek compounds of this period. ${ }^{27}$ Yet they cannot make up for the lack of a proper study on the topic. The general picture is made up of 'new' types emerging/ growing in numbers (copulative compounds) and some old types diminishing (verbal-governing and preposition-governing compounds), whereas some other types flourish (determinative compounds). In addition, there are many polysyllabic formations which demonstrate 'overabundant expressiveness', a feature of compounding since the Hellenistic period. It is regrettable that we lack detailed information about the frequency of each compound type, the chronological order of the changes, the reasons that might have triggered them, etc.

It might seem absurd to speak about types of Latinate hybrid compounds when we do not really know much about the Greek compounds of this late period in the first place. But even a superficial look at the structure of the hybrid compounds reveals that there is considerable typological variation given the small number of attested forms:
(i) Possessive compounds (the $\rho 0 \delta o \delta \alpha ́ \kappa \tau v \lambda о$ с 'rosy-fingered' type:
 weight) of two ounces', and adjectives with $-\pi \lambda$ оинос 'plumatus, embroidered' as a second member, e.g. $\epsilon^{\prime \prime} \mu \pi \lambda_{0} \mu \mu о с$ 'embroidered'.
(ii) Verbal-governing compounds (the $\lambda_{\iota} \theta_{o} \beta$ óloc 'stone-thrower' type: c.5-6 forms): only a few Latinate verbal compounds, with a Greek verbal morpheme as a second member-e.g. $\lambda \omega \rho о \tau о ́ \mu о с$ 'thong-cutter' < Lat. lorus/-um + Gk. -тонос, сє $\epsilon \lambda о \pi о ь o ́ c ~ ' s a d d l e r, ~$ seat-maker' $<$ Lat. sella + Gk. $-\pi o \iota o c$. On the other hand, there are no compounds of the $\tau \epsilon \rho \psi i \mu \beta \rho o \tau o c ~ t y p e ~\left(c f . ~ a l s o ~(i v) ~ b e l o w ~ o n ~ t h e ~ \dot{\alpha} \rho \chi^{-}\right.$ compounds).
${ }^{27}$ Cf. e.g. H. Zilliacus, Zur Abundanz der spätgriechischen Gebrauchssprache (Helsinki, 1967), $90-4$; N. P. Andriotis, 'Die wechselnde Stellung von Kompositionsgliedern im Spät-, Mittel-, und Neugriechischen', Glotta, 27 (1939), 92-134; Browning, Greek, 67; S. B. Psaltes, Grammatik der byzantinischen Chroniken (Göttingen, 1913, repr. 1974), 343-71; BDR, Grammatik, 92-9; Jannaris, Grammar, 303-11. For the Ptolemaic period see Mayser-Schmoll, 153-206. For a general overview of compounds in Greek see e.g. Schwyzer, Grammatik, 415-55.
${ }_{28}$ The numbers in brackets indicate the (approximate) number of compounds which can be attributed with certainty to each particular type. The remaining compounds can possibly belong to more than one type, depending on the interpretation of the internal syntactic structure and of the overall semantics of the form.
(iii) Preposition-governing compounds (the $\pi \alpha^{\prime} \rho \alpha \lambda$ oc 'by/near the sea' type: c.6-7 possible forms): several compounds start with a preposition but most forms fit better other compound types-e.g. $\epsilon^{\prime} \mu \pi \lambda о \nu \mu о с$ (adj.) is better understood as a possessive adjective: 'plumatus, having embroidery, embroidered' (see (i) above), while $\pi \alpha \rho \alpha \kappa \epsilon ́ \lambda \lambda \iota o \nu$ (or $\pi \epsilon \rho \iota \kappa \epsilon ́ \lambda \lambda \iota o \nu$ ), 'adjoining room' < Lat. cella could be determinative as well.
(iv) Determinative compounds (the $\chi \in \iota \rho o \lambda v \chi \nu i a ~ ' h a n d-l a m p ' ~$ type: $c .40$ forms): this category is by far the largest amongst the Latinate compounds (more than half in total)—e.g. obvouá $\gamma \gamma \omega v$ ‘donkey-seller’ < Gk. ővoc + Lat. mango, $\pi \epsilon \rho ı с \tau \epsilon \rho o ́ \pi \pi о v \lambda \lambda o \nu$ 'little pigeon, squab'. There are also some forms beginning with $\dot{\alpha} \rho \chi^{-}$, which in this late period function as determinative compounds: e.g. $\dot{\alpha} \rho \chi \iota \tau \tau \beta \lambda_{i} \tau \eta c<$ Lat. stabulum 'stableman-in-chief'.
(v) Copulative/additive (dvandva) compounds: the $\nu v \chi \theta \theta \dot{\eta} \mu \in \rho \circ \subset$ 'lasting a day and a night' type: one probable form-one or two more forms might belong here but are dubious. The form $\dot{\alpha} \nu \nu \omega \nu о к \alpha ́ \pi \iota \tau о \nu$ '(the total of) the (agricultural) food provisions for people and animals' (?) < Lat. annona + Gk.-Lat. ка́тьтоv/capitum < caput belongs to this type, if its semantics is interpreted correctly here.

Overall, the typology of the hybrids is characterized by considerable variation. The presence of long, polysyllabic (and multi-morphemic) formations is a clear reflection of the standard features of post-classical word-formation.

### 3.2. Morpheme Boundaries

Latin compounds are often of the type centimanus (adj.) 'hundredhanded', where synchronically the first element is joined to the second by a linking - $i$ - vowel ('Kompositionsfuge'), which originally, and indeed in this example, was the final vowel of the first element of the compound. Greek compounds usually have an - $o$ - vowel in this function ( $\dot{\rho} \mu a \tau о \pi \eta \gamma o ́ c$ 'wheelwright, chariot-maker', etc.), presumably reflecting the last vowel of a thematic stem.

In the Latinate compounds of the papyri we might expect both patterns but in fact we find the following situation:
(i) deletion of the final vowel of the first member before the initial vowel of the second member (regardless of whether the first member is Greek or Latin) ${ }^{29}$-e.g. $\dot{\alpha} \nu \nu \omega \nu \bar{\epsilon} \pi{ }^{\prime} \pi \alpha \rho \chi o c<\dot{\alpha} \nu \nu \hat{\omega} \nu \alpha$ ( $<$ Lat.
 Gk. $\epsilon^{\epsilon} v+$ Lat. pluma) + -ápıoc.
(ii) use of an -o- linking vowel regardless of the declension and of whether the first part is Greek or Latin (except for forms beginning with a numeral; cf., for example, forms like $\pi \epsilon \nu \tau-\alpha-\xi \in c \tau \iota \alpha \hat{\imath} o c, \hat{\epsilon} \xi-\alpha-$ $\xi \in \subset \tau \iota a i o c)$ :

Greek-Latin: $\dot{\alpha} \pi \lambda-o-\pi \alpha ́ \lambda \lambda \iota o \nu<$ Gk. $\dot{\alpha} \pi \lambda_{o-}+$ Lat. pallium;
Latin-Greek: сє $\lambda$-о-тоьóc < Lat. sella + Gk. -тоьос;
Latin-Latin: конı $\tau$-о-тр»ßо̂voс < Lat. comes/comit- + Lat. tribunus.
Clearly the Greek morphophonological patterns prevail in full; the Latinate compounds are fully integrated in the Greek language irrespective of their origin. This is confirmed by a further observation: the Latin - $i$ - linking vowel does indeed exist, but only in pure Latin compounds borrowed as such into Greek. Thus a form like $\dot{\alpha} \rho \mu \iota к о и ́ c \tau \omega \rho^{30}$ with linking $-i$ - vowel is, by and large, a rendering into (written) Greek of the word armicustos 'weapon guard'. Notice, however, that some morphological adaptation to Greek has indeed taken place in another part of the form; the original Latin -tos $<-t \bar{o} d$-s termination has been replaced by the quasi-homophonous Greek (-Latin) $-\tau \omega \rho$ ending. ${ }^{31}$

### 3.3. Suffixation

A significant number of Latin suffixes, basically derivational ones, like -atus, -ianus, -inus, -tor, -ura, -arium, etc., were gradually introduced into Greek, and after their integration into the morphological

[^163]system became productive within it. On the other hand, almost all Greek suffixes of the classical period continued to exist in the post-classical period, which occasionally led to competition and/or coexistence with the newly imported Latin suffixes. ${ }^{32}$

There are cases, of course, where it is difficult to determine the exact nature of a suffix. One could speak of a primarily derivational morpheme, which, however, can have an inflectional function as well. For instance, a neuter suffix - $o v$ can also be used for the adaptation of a Latin noun to the Greek inflectional system-e.g. $\pi \epsilon \kappa \tau о \rho a ́ \lambda \iota(o)_{\nu}$ 'breast plate' < Lat. pectorale.

The Latinate compounds show an interesting number of features concerning their suffixes:
(i) They can take both Latin and Greek suffixes regardless of whether the second member was Greek or Latin(ate)-e.g. $\dot{\eta} \mu$ uои́үкьоv 'half-ounce' < Lat. uncia.
(ii) The suffix normally belongs to the second member of the compound rather than to the compound as a whole; cf., for example, ${ }_{c \tau \alpha \beta \lambda i ́ \tau \eta c}$ 'stableman' next to $\dot{\alpha} \rho \chi \iota \tau \alpha \beta \lambda i ́ \tau \eta c$ 'stableman-in-chief'. However, there are exceptions to this and some compounds take a compositional suffix; cf., for instance, the adjectival forms of the word
 even forms like ỏ $\theta$ ovє $\mu \pi \lambda$ оинápıoc 'linen-embroiderer': ỏ $\theta o ́ v \eta ~+~$ ${ }_{\epsilon}^{\epsilon} \mu \pi \lambda$ доинос ( $<\mathrm{Gk} . \dot{\epsilon} \nu+$ Lat. pluma) + - -́pıoc, probably facilitated by the form $\pi \lambda o v \mu$ - $\alpha^{\rho} \rho o c<$ Lat. plumarius $)$.

In general, hybrid compounds do not normally have interchangeable Greek and Latin suffixes, as is occasionally the case with simple words-e.g. $\mu \alpha ́ \gamma ı \tau \tau \rho o c / \mu a \gamma i ́ c \tau \omega \rho / \mu a \gamma i ́ c \tau \in \rho$ ( $<$ Lat. magister), but no * $\dot{\alpha} \rho \chi \iota \tau \tau \alpha \beta \lambda \dot{\alpha} \rho \iota o c$ attested next to $\dot{\alpha} \rho \chi \iota \tau \tau \alpha \beta \lambda i ́ \tau \eta c$.

Clearly there is a functional interface between the forms and their endings, even if not all possible combinations are attested; this is what one would expect from any regular forms of the Greek language.

[^164]
### 3.4. Summary

All aspects of morphology point to well-formed compounds, coined in accordance with the rules of Greek word-formation. The use of Latin(ate) material in the hybrids did not cause or allow any significant interference from the rules of Latin word-formation.

## 4. LATINATE COMPOUNDS IN GREEK PAPYRI (II): SEMANTICS

### 4.1. The Hybrid Compound Vocabulary

A simple calculation of the attestations of the hybrid compounds reveals that half of the forms are hapax legomena in the Greek papyri and of these the largest group are also hapax legomena in Greek in general. These numbers point, at first glance, to a sporadic appearance of the hybrids in writing, but are not necessarily proof of limited use in speech. On the contrary, even the infrequent appearance of some of these forms in writing might be an indication of some degree of consolidation in language use; cf. similar hybrid formations in modern languages (usually including borrowed English lexical material), which are broadly used in colloquial speech, but probably appear less frequently in writing (e.g. German Fleischshop 'butcher's' instead of the standard Fleischerei). ${ }^{33}$

The forms with the largest number of attestations are those belonging to the group of $\pi \alpha \gamma \alpha$ ' $\rho \chi \eta c$ 'district/village governor' and its derivatives, which amount to a few hundreds. However, these terms are specifically linked to the administrative system of Egypt and should be treated differently from all the other hybrids, at least as far as statistics is concerned.

### 4.2. Semantic Categories

The semantics of the hybrid compounds is diverse and many different fields are represented, even if for some of them the evidence is
limited. The following classification with a few representative examples provides a clear picture of this variety:
(i) administrative terms (esp. titles of officers)—e.g. $\pi a \gamma \alpha \alpha^{\rho} \chi \chi \subset{ }^{\prime}$ $\pi \alpha \gamma \alpha \rho \chi i ́ \tau \eta c / \pi \alpha ́ \gamma \alpha \rho \chi о с$ 'a village/district governor'; $\pi \rho \omega \tau о \pi \alpha \tau \rho i ́ к \iota о с$ 'first patrician (title)'.
(ii) military terms-e.g. $\beta \eta \xi \iota \lambda \lambda \iota \phi o ́ \rho o c /-o \phi o ́ \rho o c ~ ' f l a g-b e a r e r ' ; ~$ $\dot{\alpha} \pi о \pi \rho \alpha \iota \pi o ́ c \iota \tau о с ~ ' f o r m e r ~ p r a e p o s i t u s ' ~ o r ~ ' f r o m / o n e ~ o f ~ t h e ~ p r a e p o s i t i ' . ~$
(iii) financial terms-e.g. $\mu о \nu о \rho \epsilon ́(\gamma) \kappa а \nu \tau о \nu<G k . \mu o ́ v o-+$ Lat. recauta, -orum ( pl .) '(a form of) quittance'.
(iv) terms of everyday vocabulary:
 (adj.) 'containing/weighing five sextarii. ${ }^{34}$
 'sausage-seller'.
(c) objects-e.g. $\pi \epsilon \nu \tau \alpha \rho \rho o ́ c \tau o v \lambda o \nu ~ ' f i v e-a r m ~ c a n d l e s t i c k ~(?) ' . ~$
 fowl)'; $\pi \epsilon \rho \iota \tau \tau \epsilon \rho o ́ \pi o v \lambda \lambda o v ~ ' y o u n g / s m a l l ~ p i g e o n ' . ~$
(e) clothing-e.g. viтока́дıсоv 'under-shirt'; $\chi є \iota \rho о \mu а \nu i к \iota(o) v ~ ' h a n d-~$ sleeve'.

In general, the large majority of the Latinate compounds are words of the everyday vocabulary (especially clothing and measures; the latter has a financial/commercial aspect too) as well as administrative terms and titles of officers. This picture provides another clear indication of the dual character ('top-down' and 'bottom-up') of the coining and the spreading of the hybrids and is further supported by the different genres of the papyrus documents in which these compounds appear.

## 5. LATINATE COMPOUNDS IN GREEK PAPYRI (III): DOCUMENT TYPES—TIMESPAN

### 5.1. Document Types

The distribution of the hybrid compounds in the papyri is characterized by considerably higher numbers of attestations in some types

[^165]of documents such as lists, contracts, accounts, and receipts. The presence of hybrids is quite noticeable in private letters as well. Official documents (administrative, military, etc.) contain hybrids too, but in proportionally smaller numbers. ${ }^{35}$

These differences in the distribution of the forms between the different types of documents are primarily determined by semantics; cf., for example, the four hybrid compounds referring to measures ( $\tau \epsilon \tau \rho \alpha-, \pi \epsilon \nu \tau \alpha-, \hat{\epsilon} \xi \alpha-$, $\grave{\kappa} \tau \alpha-\xi \in \epsilon \tau \iota \alpha \hat{\imath} о c$ ), which appear five times in lists/accounts, twenty-two times in financial documents (contracts, loans, receipts, orders), and only once in a legal-financial document (inheritance agreement). Almost all these documents are dated in the sixth century ad (the few exceptions are dated even later).

On the other hand, it is remarkable that we rarely find two, or even more, hybrid compounds attested in the same document (except for measures and clothes). This is not over-surprising, given the relatively small numbers of attestations. On the other hand, it demonstrates the regular distribution of the hybrids in the written corpus and suppresses any potential suspicions of random/inaccurate results in the statistics. ${ }^{36}$

### 5.2. Statistical Classification (per century): Latin Loanwords vs. Compounds

Statistics can help us to reach a better understanding of the time dimension in the appearance and distribution of the hybrid compounds. In addition, they enable us to add a comparison with the statistical data from the broader corpus of all the documented Latinisms in the papyri.

### 5.2.1. Loanwords

Dickey's analysis ${ }^{37}$ of the occurrences of Latin borrowings in Greek papyri reveals significant differences between the various centuries.

[^166]The following two tables (14.1-2) reproduce part of her statistics, but in Table 14.2 I have scaled down the numbers of both the lexemes and their tokens per 500 documents-instead of Dickey's two-scale system: per 100 (for tokens) and per 500 (for lexemes)-to fit them into a common diagram.

The statistical analysis of the absolute numbers of Latin borrowings (both as lexemes and as individual attestations) in the Greek papyri shows some significant differentiation in the use of the Latin loan material per century. ${ }^{38}$ It is evident that the fourth and the sixth centuries AD are the centuries with the largest number of Latin loanwords, followed by the second and third centuries ad. Yet this picture is misleading, ${ }^{39}$ as Dickey has pointed out. There are fewer papyri from some centuries (e.g. fifth, seventh, eighth) owing to a

Table 14.1. Daris's Latinisms: lexemes/tokens (i-viii AD; after Dickey, 'Latin Influence')



Centuries

[^167]Table 14.2. Daris's Latinisms: lexemes/tokens per 500 documents (i-viii AD; after Dickey, 'Latin Influence', adapted)

| $\square$Daris's Latinisms <br> (lexemes) per 500 <br> docs |
| :--- |
| $\square$Daris's Latinisms <br> (tokens) per 500 <br> docs |



Centuries
number of causes such as historical events (e.g. the Arab conquest of Egypt in the mid-seventh century ad changed the linguistic situation), the factor of chance in the preservation and modern rediscovery of the papyri, etc.

A proportional scaling-down of the numbers of both the Latin words and their tokens per 500 documents (a suitable number, for practical reasons) can provide a more representative picture of the actual distribution of the Latin loanwords and their attestations per century. ${ }^{40}$ However, the eighth century ad remains problematic from this point of view too: the proportion of the number of Latinisms to the number of texts is now very high and should not be taken at face value.

It is obvious that the peak time for Latin loanwords, as documented in the Egyptian papyri, was the period from the fourth to the sixth centuries AD. ${ }^{41}$ This in practice means that Latinisms in the Greek papyri become more abundant when actual bilingualism in Egypt is disappearing. The high number of the loanwords (obviously no longer foreign words) in this period is primarily the result of the

[^168]Graeco-Latin bilingualism (only a part of the complicated multilingual picture in Roman Egypt) of the previous three centuries. Of course, bilingualism must have continued for some time into this period, but with progressively reduced strength.

### 5.2.2. Compounds

Keeping in mind the results of Dickey's study we can now return to the hybrid compounds. The emerging picture from a statistical study of the time distribution of the hybrid compounds alone ${ }^{42}$ is somewhat

Table 14.3. Latinate hybrid compounds: lexemes/tokens (i-viii AD; Daris, Lessico; DDBDP)

${ }^{42}$ Some hybrids appear in documents which are not dated accurately. I have incorporated these compounds into my statistics by following roughly the same methodology as Dickey, 'Latin Influence', 251 n .7 : I have omitted all hybrids that cannot be dated within the range of two centuries. However, hybrids which can be dated within a period of two centuries have been included in the statistics and are split between the two centuries in proportion to the numbers of the safely attested hybrids for each century. The application of this method to the allocation of unsafely dated hybrids as lexemes has been more difficult due to their very small numbers. In addition there is a further constraint. Since I cannot count the same lexeme for each century twice, when I split lexical forms between two centuries, one of which
different (Table 14.3), especially as regards the crucial period from the fourth to the sixth centuries AD.

The chronological distribution of the hybrids shows some important differences from the previous distribution of all Latinisms (cf. Table 14.1):
(i) the peak for the hybrids in absolute terms, both as lexemes and tokens, is the sixth century AD , which has far higher figures than all other centuries; the fifth century AD, which is next in size, would have been richer had it been represented by a larger number of preserved documents;
(ii) the fourth century AD stands, to our surprise, at a lower level in comparison to the fifth and the sixth centuries AD;
(iii) the differences between centuries are sharper in terms of tokens than in terms of lexemes. ${ }^{43}$

The reliability of the above data could be questioned owing to their paucity. In addition, it is possible that some documents might contain a disproportionately large number of compounds and thus create a statistically distorted picture. However, a look at the number of texts per century, in which the hybrids occur, refutes any such counterargument. Hybrids are distributed in a regular way amongst the papyri of each century and in proportion to the number of their attestations above (Table 14.4). ${ }^{44}$

Table 14.4. No. of documents with hybrid compounds by century aD

| Century | i | ii | iii | iv | v | vi | vii | viii |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Documents | 2 | 13 | 9 | 13 | 12 | 51 | 9 | 9 |

(centuries) already includes one safe attestation of the lexeme, but the other one does not, I have only counted (proportionally) this form for the latter. Some rounding of figures to avoid decimals has been inevitable in some cases. In addition the table does not include any numbers for forms attested in inscriptions (see list at the end) as well as for forms of the $\pi \alpha \gamma a ́ \rho \chi \eta$ c group because they are so frequent that they would in practice dominate the statistics.
${ }^{43}$ Note that almost one-third of the overall number of hybrid tokens in the 6th c . ad belong to compounds of $\xi \in \epsilon \in \tau \eta c$ (measures).
${ }^{44}$ I provide numbers only for the safely dated documents because the allocation of unsafely dated documents to centuries on a proportional basis would be a complicated task (e.g. according to numbers of tokens or lexemes?) and minimally useful given the very small numbers. Therefore, numbers in this table are indicative rather than definitive.

In summary, the period between the fourth and the sixth centuries AD is the time when most Latinisms in general are attested in the papyri. The peak for the hybrids is clearly at the end of this period (sixth century). For the Latinisms as a whole it is the fourth, although the fifth and sixth centuries follow at a close distance, at least when numbers are scaled down in proportion to the number of texts (Table 14.2).

So how is this quantitative discrepancy in the chronological distribution of the two groups of data (Latinisms vs. hybrids) to be explained? Three accounts are possible: (i) there is a considerable time-lag between the introduction of a Latin word into Greek and its use in a hybrid compound; (ii) there was not such a time-lag but hybrids took some time to catch on and spread out amongst the speakers; ${ }^{45}$ (iii) hybrids may have been coined early but did not appear in writing till later. ${ }^{46}$

The three scenarios are all possible and they are not mutually exclusive; each one may be more or less plausible in individual cases. The problem is that since we depend on written evidence it is difficult to provide data for anything except the time at which written forms appear, and consequently a decision between (iii) on the one hand and (i) or (ii) on the other is not easy to reach.

One fact is relevant, however. We know that hybrids were coined as early as the first century AD, since some are already attested in that period and in general in the first centuries. Consequently it is more than possible that some of the later words go back a while. The first hybrids will then have served as models for (some of) the later creations, but it is likely that some of these were coined when the basic Latin material had been thoroughly integrated into Greek.

But there is a second important point. There is also a qualitative, i.e. semantic and/or morphological, and mainly sociolinguistic, aspect that we ought to examine in a chronological context. Some Latin hybrids belong to high-register language (e.g. administrative and

[^169]military terms basically, although some of the latter can belong to a lower register too), whereas the majority of the hybrids have features of low-register language (clothes, objects, measures, etc.). It is surprising perhaps, but there are no sharp differences in the proportion of high vs. low register when we compare earlier with later centuries. Naturally, low-register terms are always predominant, both in terms of lexemes and, particularly, tokens. But we cannot argue, for instance, that in the second century ad there are proportionally many more high-register to low-register hybrid lexemes than e.g. in the sixth. In fact, the numbers (safely dated data only) are 5 (high) vs. 6 (low) in the former and 11 (high) vs 15 (low) in the latter.

There are no noticeable differences, either, in the morphological patterns of the earlier and the later attestations. For instance, many forms which are loan-translations/adaptations of Roman terms occur in the later centuries-e.g. $\alpha \nu \nu \omega \nu$ е́ $\pi \alpha \rho \chi$ ос (v Ad) < praefectus annonae;
 < aduocatus fisci. ${ }^{47}$

Overall, it would be sensible to say that the figures are too small for statistical reliability; moreover, hybridization is such a complicated linguistic phenomenon that ideally we should require for its analysis, besides our written evidence, the spoken evidence that we cannot have. Thus the final conclusion is inevitably tentative: it seems likely that the belated appearance of the bulk of the Latinate compounds in writing reflects the need for a degree of linguistic integration of the loan material into the host language.

## 6. THE LATINATE COMPOUNDS IN CONTEMPORARY AND LATER GREEK

### 6.1. The Position of 'Egyptian' Greek within Koine Greek

The papyri we have examined so far are of (almost) exclusively Egyptian provenance. This raises a question: what can the papyrus material

[^170]tell us about the presence of Latinate hybrids in contemporary Greek in general? An answer to this presupposes good knowledge of the relationship between 'Egyptian' Greek and Koine Greek, both in a general sense and with reference to Latin borrowings in particular.

The linguistic situation in Roman and early Byzantine Egypt, from the first to the seventh century AD, is characterized by the coexistence of two and, for some time, three different languages: Egyptian (first Demotic and later on, from the third century ad, Coptic), spoken basically by the indigenous population outside cities and towns; Greek, spoken basically by the middle and upper classes in cities and major towns; and finally Latin, the lingua legitima of the Roman administration and army (partly). Nevertheless, Greek retained its semi-official status, at least up to certain levels of the Roman imperial system. Gradually Latin declined, and despite efforts for its revival, e.g. Diocletian's attempt in the early fourth century ad, Greek increased in importance throughout the early Byzantine period. At the same time the knowledge of written Greek shows signs of recession amongst the native, Christianized, Egyptian population, who nevertheless had adopted a very large number of Greek loanwords and other grammatical features, as evidenced by the Coptic texts, which were written in a script based on the Greek alphabet. ${ }^{48}$

So much for the conventional picture of the linguistic situation in Egypt, which must have been much more nuanced, to allow inter alia for a high level of bilingualism (Greek-Egyptian and to a much smaller extent Greek-Latin).

Despite previous views which supported the 'exceptional character' of the Greek of the papyri and ascribed it to an alleged strong Egyptian influence, it is now established that we cannot unmistakably distinguish the Greek of Egypt from that used in other areas. There were, of course, regional variations, not only in Greece proper, where the process of
technical terms, is a regular feature of Greek, esp. in the post-classical period. However, this linguistic trait was not considered 'Attic(izing)' and therefore was not sanctioned by the ancient grammarians: see e.g. Andriotis, 'Wechselnde Stellung', 105.

[^171]dialectal demarcation was concluded later，but also in all other areas such as Asia Minor，where there was a strong indigenous substrate； however，this fact does not change the picture dramatically．${ }^{49}$

Table 14．5．Papyrus hybrids attested in（contemporary and later）literature Source：TLG online（as of June 2006）

| Semantic category | Compound | Timespan （centuries AD） | Attestations／ texts |
| :---: | :---: | :---: | :---: |
| Administrative terms／ titles |  |  |  |
|  |  | ix－xiii | 4／2 |
|  |  | iv－vi | 9／4 |
|  | таүархía | v／vi | 2／1 |
|  | трштотатріккос | v －x | 4／4 |
|  | фıскосvขйүоросl－аิтос， фıскосvрпүорі́a | v－xiii | 55／5 |
| Everyday vocabulary professions | $\lambda$ моото́нос | ii－xi（／xv）${ }^{\text {a }}$ | $13(+4) / 10$ |
|  | с $\epsilon \lambda$（ $\lambda$ ）отооо́с | viii－x（／xix）${ }^{\text {b }}$ | 3／3 |
| clothing + relevant items | （Коутоßра́кпс）（name） |  |  |
|  |  | v －xv | 40／22 |
|  |  | v－xiii | 8／7 |
| measures | סьo（v́）$\gamma к ⿺ 𠃊 \nu$ | v－xiv | $13(+1) / 8$ |
|  | $\hat{\epsilon} \xi \alpha \dot{\xi} \epsilon \subset \tau(\llcorner a \hat{\imath}) o c$ | i－iii | 2／2 |
|  | ض̀ньо́ккьоу | iv－vii | 2／2 |
|  | $\tau \epsilon \tau \rho \alpha \xi \in \subset \tau \iota a \hat{o} \nu$ | vi | 1／1 |
| animals |  | iv－xi | 7／6 |
|  |  | ix | 1／1 |
| Varia（esp．ecclesiastical） | таракє́入入ı（o）v | $\mathrm{v}-\mathrm{xv}$（？） | 6／2 |
|  |  | $\mathrm{v}-\mathrm{xv}$ | c．290／95 |
|  | $\pi \rho \omega \tau о с$ ช́үкєл入ос | $\mathrm{v}-\mathrm{xvi}(/ \mathrm{xx})^{\text {d }}$ | （＋c．112／50） |
|  |  | ix－xiv | 20／6 |
|  | $\chi \in \rho \nu \iota$ ßóg $\epsilon \subset \tau о \nu$ | $\mathrm{v}-\mathrm{xv}$ | 15／11 |

NB：Some of the attestations come from monastery documents，lexicographers，or even scholia on classical texts．
${ }^{a}$ This late date in parentheses refers to attestations in the form of proper names only．The same holds true for the numbers in parentheses in the rightmost column（number of attestations）．
${ }^{b}$ The date in parentheses refers to a particular form from a document with no secure date（ $\mathrm{x}-\mathrm{xix}$ ）．
${ }^{c}$ This compound as well as the following two occurs in two alternative forms，which are accented in different ways．
${ }^{d}$ This late date refers to forms from monastery documents with no secure date．
${ }^{49}$ One of the safest criteria we can use to ascertain whether a feature of＇Egyptian＇ Greek was not an isolated local feature when it does not occur in contemporary texts from elsewhere，is the evidence from the late Byzantine vernacular Greek and／or the

### 6.2. The Papyrus Compounds in Literature

A survey of the Thesaurus Linguae Graecae (TLG) online (as of June 2006) reveals that only a small number of the papyrus hybrid compounds appear in contemporary and later (medieval) Greek literature (Table 14.5). Basically, these are terms of everyday vocabulary (clothes, animals, measures). Administrative and ecclesiastical terms, except фıскосvv ${ }^{\prime}$ रорос and related terms, are limited in numbers of forms and attestations and have a shorter timespan.

This picture would be different if we searched the TLG not only for the Latinate hybrids that occur in papyri, but for all the Latinate hybrids found in Greek (literary texts, inscriptions, papyri). In that case, the list would be much longer and would include numerous administrative terms and related vocabulary. ${ }^{50}$

### 6.3. The Survival of the Latin(ate) Compounds in Modern Greek

A considerable number of the Latin forms that entered Greek in antiquity survived throughout medieval Greek and some of them reached the modern stages of the language. ${ }^{51}$ Occasionally some phonological, morphological, or even semantic modification occurred, e.g. Latin adj. asper, $-a$, -um 'rough' > late/Byzantine Greek
modern Greek dialects. A corresponding attestation from these sources can demonstrate with plausibility that we are dealing with a more general trait of Greek of the post-classical period (cf. S. G. Kapsomenos, 'Das Griechische in Ägypten', Museum Helveticum, 10 (1953), 248-63, esp. 262-3).
${ }^{50}$ See Hofmann, Die lateinischen Wörter, passim.
${ }^{51}$ The survival of the imported Latin material has been the subject of many studies so far, either exclusively or partly. For medieval Greek see the comprehensive overview by Kahane and Kahane, 'Western Impact', 128-36 and 150-3, who provide an exhaustive amount of secondary bibliography too. For modern Greek see G. Meyer, Neugriechische Studien, iii: Die lateinischen Lehnworte im Neugriechischen; iv: Die romanischen Lehnworte im Neugriechischen (Sitzungsberichte der kaiserlichen Akademie der Wissenschaften in Wien, Philosophisch-historische Klasse, Band 132/3, 6; Vienna, 1895), which remains the standard work of reference although it is partly out of date. See also N. Katsanis, 'Greek and Latin: Evidence from the Modern Greek Dialects', in Christidis, History of Ancient Greek, 800-4, 857-8, for examples and up-to-date bibliography (with particular reference to Mihăescu's works) on vulgar Latin material in modern Greek.
$\ddot{\alpha} \subset \pi \rho o c,-\eta$, $-o \nu$ (frequently in the form of a substantivized neut. pl. ${ }_{\alpha} \subset \pi \rho \alpha$ ) 'rough, i.e. new and shining (silver coin)' > modern Greek adj. á $\subset \pi \rho o c,-\eta$, -o 'white'.

A warning is necessary. Not all Latinate forms go back to antiquity or indeed to Latin. Greek acquired forms of this type at various stages: in the early middle ages from medieval Latin, or even through Balkan Latin; ${ }^{52}$ in the late middle ages through a Romance language like GalloRomance or the Italian dialects (Venetian, Genoese); in the modern period through a modern Romance language (French, Italian, etc.). ${ }^{53}$

We can at least be more certain about the provenance of the hybrid compounds of the papyri. It is highly unlikely that such special forms could have become obsolete at some stage and then be recoined and reintroduced to language use at a later stage. Viscidi ${ }^{54}$ estimated that out of $c .2,900$ Latin borrowings (his own figure, based mainly on literary texts), some 200 forms (on the basis of Meyer's data) ${ }^{55}$ managed to make their way down to modern Greek. In other words, the surviving material is $c .7$ per cent of the total number of the Latin loanwords that originally entered Greek. For the hybrids from the papyri, the percentage is roughly the same: 6 out of $c .75$ forms, i.e. just below 10 per cent (slightly more when we take into account form(s) from the modern Greek dialects too; but given the small number of the hybrid forms, such small differences would be statistically unimportant).

In modern Greek we find survivals of the following Latinate compounds:
(i) Three words referring to clothing: коутоßра́кє 'short trousers,
 ( $<\chi \in \iota \rho о \mu а \nu і ́ к \iota(о) \nu)$.

[^172] 'little chicken' and $\pi \epsilon \rho ı \tau \tau \epsilon \rho o ́ \pi o v \lambda o$ 'squab; little pigeon'.
(iii) words surviving only in a particular context (ecclesiastical): e.g. си́ $к \kappa \epsilon \lambda$ дос, usually found as $\pi \rho \omega \tau о с \dot{\prime} \gamma \kappa \epsilon \lambda \lambda$ oc 'a cleric acting as a secretary to a bishop/metropolitan' (literally having the meaning 'a monk living next to an abbot, i.e. his assistant').

The modern Greek dialects ${ }^{56}$ can offer a very little additional evidence: thus we find the term $\pi \alpha \rho \alpha \kappa \epsilon ́ \lambda \lambda \iota(o v)$ (provided that the attested word in papyrus BGU II 459, 1.11 is indeed $\pi \alpha \rho \rho a \kappa \epsilon ́ \lambda \lambda \iota o v$ and not $\pi \epsilon \rho!\rho_{\kappa} \epsilon$ ' $\lambda \iota \iota \nu$ ), meaning 'a room/cell (in a monastery) next to a bigger room/cell', or 'a small building next to a house, used as a storeroom'.

In general, the comparison of the modern Greek data with the evidence from medieval literature shows that it was basically some terms of the everyday vocabulary that managed to make their way through the medieval period and survive until the present time. This fact might indicate a different degree of integration for the lowregister vocabulary from that for the high-register terms: administrative, political, and military terms are much more closely related to the social superstructure; once major historical changes (political, socioeconomic, cultural) affecting those structures occurred-primarily the gradual transformation and waning of the Eastern Roman Empirea large part of the relevant vocabulary became obsolete.

## 7. CONCLUSIONS

The majority of the Latinate compounds show through their linguistic features and their distribution that they were as integrated into Greek as the standard Latin loanwords. Not only do the phonology, morphology, derivational patterns, and semantics match those that we expect, but also their diachronic development follows that of other Latinisms. However, the hybrid forms stand out because of their more complicated morphological structure, which reflects creative word-formation processes occurring primarily within Greek.

[^173]On the other hand, it is tempting to stress that the hybrid compounds of the papyri differ from those found in literature because they are closer, in some instances at least, to the spoken language. It is undeniable, however, that some of these words are marginal, if at all real, as evidenced by their poor attestation and indicated by their odd semantics and strange morphology (e.g. '̇vє $\hat{\rho} \alpha \delta \nu o u ́ \mu \iota o \nu, \pi \alpha \tau \iota \kappa о v \rho \hat{\alpha})$ ).

This last point is significant. Because of the way in which they are integrated into the Greek vocabulary the hybrids offer us additional insights into the different ways in which Latin exerted influence on Greek; the chronological distribution of the hybrids is particularly interesting from this point of view. On the other hand, we must resist the temptation to treat all these forms as a coherent group. We have seen that the list includes both high- and low-register forms, and in all likelihood it also includes spur-of the-moment formations which were never part of the mainstream vocabulary as well as fully integrated words. A complete study must look beyond the statistics at the individual words in their context.

## Appendix: List of Hybrid Compound Forms

(i) The forms are provided here on the basis of Daris, as amended by Cervenka-Ehrenstrasser and Diethart for the entries beginning with $A-\Delta$. The selection/omission of some forms on the basis of these two works does not necessarily imply full acceptance of their views about every particular (problematic) form. Entries marked with an asterisk (*) are problematic as to their word formation/etymology, in general or with reference to the Latin(ate) member, and/or the safe reading of their attestation(s).
(ii) A very few attestations, especially of $\dot{\alpha} \pi o-$ compounds, might come exclusively from inscriptions (Coptic or not) from Egypt. I have chosen to follow Daris (as amended by Cervenka-Ehrenstrasser and Diethart) and include them in the list of hybrids. These forms are marked with a $\bullet$ symbol.
(iii) Words which are deemed to be hybrids or univerbations in Latin already (though the 'precedence' of one language over another in terms of time is often questionable), e.g. diloris, paragauda, usu(s)-fructus, fidei-commissa(rius), have been omitted since they are not Latinate in the same respect (with some reservations for the first two examples) as the forms in the list. Similarly, I have omitted calque forms like ai $\omega \nu о к о \lambda \lambda \eta \tau i \omega \nu$ (Gk. ко $\lambda \lambda \eta \tau i \omega v$ : Lat. glutinator) (see Cervenka-Ehrenstrasser and Diethart, s.v.).
(iv) The Latin morpheme/word inside the brackets indicates only the closest standard original form in Latin (which in its turn might be a loan from another language: e.g. $\operatorname{bra}(c) \operatorname{ca}(e)<$ Celto-Germanic, maforte $<$ Semitic). However, in many cases a vulgar Latin or a more adapted ('Hellenized') form of the Latin morpheme/word might have in fact served as the actual Latinate basis for the creation of the attested Graeco-Latin hybrid, e.g. $\tau \in \tau \rho a \xi \in \epsilon \tau \iota a \hat{o}$ c 'containing four sextarii' (<Gk. $\tau \in \tau \rho a-+\xi \in \in \in \tau \eta \mathrm{c}<\mathrm{Lat}$. sextarius).
(v) Words in square brackets [ ] are univerbations, not hybrids, and have not been examined nor been counted for the purpose of the statistics of this paper.
á $\delta \eta \lambda \eta \gamma a ́ \tau \epsilon v \tau o v, ~ \tau o ́ ~ ' w h a t ~ i s ~ n o t ~ r e c o r d e d, ~ e n t e r e d ~ u p ~ a s ~ t a x(: ~ d e l e g a t i o) ' ~ ' ~$ $<$ Gk. $\dot{\alpha}^{-}+$Gk. $\delta \eta \lambda \eta \gamma a \tau \epsilon \dot{\prime}-\omega+-\tau o v<$ Lat. delegatio/delegare/delegatum. $\dot{\alpha} \lambda \lambda \eta \lambda о \mu a \nu \delta \dot{\alpha} \tau о \rho \epsilon \subset$, oi (pl.) 'mandatores of each other, mutual guarantors (?)' $<\mathrm{Gk} . a^{\prime} \lambda \lambda \eta \lambda o-c+$ Lat. mandator.
$\dot{\alpha} \nu \nu \omega \nu$ étapхос, $\dot{\delta}$ '(lit.) prefect of the annona; officer in charge of the distribution of cereals' < Lat. annona + Gk. ë $\bar{\pi} \alpha \rho \chi o c$.
*àvขшขока́тьтоv, тó 'agricultural produce for people and animals' < Lat. aпnona + Gk. ка́тıтоv < Lat. caput.
$\dot{\alpha} \nu \tau \iota с к \rho i \beta a(c), \delta{ }^{\prime}$ '(lit.) deputy (?) scribe; judicial officer in charge of issues of civill law' < Gk. àv $i$ i + Lat. scriba.
$\dot{\alpha} \pi \lambda o \pi \alpha ́ \lambda \lambda \iota o v, ~ \tau o ́ ~ ' a ~ s i m p l e ~ p a l l i u m ’ ~<~ G k . ~ \dot{\alpha} \pi \lambda o(\hat{v}) c+$ Lat. pallium.
 class of) the draconarii' < Gk. $\dot{a} \pi o ́+$ Lat. draconarius.
$\dot{\alpha} \pi о к о ́ \mu \eta с, \delta$ 'former comes'; or 'one of/from (the class of) the comites' < Gk. à áo + Lat. comes.

- ȧ $\pi о \pi \rho a \iota \pi o ́ c \iota \tau o c, ~ o ́ ~ ' f o r m e r ~ p r a e p o s i t u s ~(m i l i t a r y ~ c o m m a n d e r) ' ; ~ o r ~ ' o n e ~ o f / ~$ from (the class of) the praepositi' < Gk. $\dot{\alpha} \pi o ́+$ Lat. praepositus.
$\dot{\alpha} \pi о \pi \rho о \tau \dot{\eta} \kappa \tau \omega \rho, \delta$ 'former protector'; or 'one of/from (the class of) the protectores' < Gk. àmó + Lat. protector.
- $\dot{\alpha} \pi о \tau \rho \iota \beta o v ̂ v o c, \dot{o}$ 'former tribunus' or 'one who belongs to the class of the tribuni’ < Gk. àmó + Lat. tribunus.
${ }^{*} \dot{\alpha} \rho \chi \iota \tau \tau \beta \lambda i ́ \tau \eta c, \dot{o}^{\circ}$ 'stable-man-in-chief' < Gk. $\dot{\alpha} \rho \chi l^{-}+$Lat. stabulum.
$\dot{\alpha} \rho \chi \iota \tau \tau \alpha ́ \tau \omega \rho, \delta$ ' 'chief usher, head messenger' < Gk. $\dot{\alpha} \rho \chi$ ו- + Lat. stator.
- ג̀ $\rho \chi \iota \tau \alpha \beta(o v) \lambda \alpha ́ \rho \iota o c, ~ \delta$ 'record keeper' < Gk. $\dot{\alpha} \rho \chi \iota-+$ Lat. $\operatorname{tab}(u)$ larius.
*ảұаómavpoc, -ov ‘dark red (?)’ < Gk. äұaoc (?) + Lat.(?) maurus, -a, -um.
$\beta \eta \xi \iota \lambda \lambda-\iota-$-o-фópoc, $o$ 'flag-bearer' < Lat. uexillum + Gk. - -ó $\rho o c$.
${ }^{*} \delta \epsilon \lambda \mu а \tau \iota к о \mu а ф о ́ \rho \tau \eta с$, ó / $\delta \epsilon \lambda \mu a \tau \iota к о \mu а ф о ́ \rho(\tau) \iota(o) \nu$, тó (also $\delta a \lambda \mu a \tau \iota к о-$ $\mu a \phi$ ópıov) 'veil with sleeves and head cover' < Lat. delmatica/dalmatica + Lat. (?) mavors/maforte < Sem. ma'aforet or ma'aforta.
бьóvкьov, тó (and $\delta \iota o u ́ \gamma к \iota o \nu, \tau o ́) ~ '(w e i g h t ~ o f) ~ t w o ~ o u n c e s ' ~<~ G k . ~ \delta i ́(c) ~+~$ Lat. uncia.
$\epsilon \bar{\epsilon} \mu \pi \lambda о v \mu о с,-\eta$ ，－ov＇plumatus，embroidered＇＜Gk．$\epsilon^{\epsilon} v+$ Lat．pluma．

 $+\xi^{\prime} \subset \tau \eta c<$ Lat．sextarius．
－＊є́тıса入тькóc，ó［doubtful reading－obscure meaning］＇head dancer（？）， dance master（？）＇＜Gk．$\grave{\epsilon} \pi \grave{\imath}+$ Lat．salticus，$-a$ ，$-u m$（？）．
$\dot{\epsilon} \pi \tau \alpha \kappa \epsilon \lambda \lambda \dot{\alpha} \rho \iota o \nu, \tau o ́$（or $\grave{\epsilon} \pi \tau \alpha \kappa \epsilon ́ \lambda \lambda \alpha \rho o \nu)$＇（perh．）chest，or similar，with seven compartments＇＜Gk．$\hat{\epsilon} \pi \tau \alpha \dot{\alpha}+$ Lat．cellarium $<$ cella．
$\epsilon$ є̈т $\pi$ доидос，－ov＇embroidered，etc．＇＜Gk．adverb $\epsilon \hat{v}+$ Lat．pluma．

$i \pi \pi o \beta o v ́ \rho \delta \omega \nu$ ，o ‘a mule（？）＇＜Gk．í $\pi \pi \pi-c+$ Lat．burdo．
iсıкьо $\alpha \dot{\alpha} \boldsymbol{\epsilon \iota \rho о с , ~ o ́ ~ ' s a u s a g e - c o o k ; ~ s a u s a g e - s e l l e r ' ~ < ~ L a t . ~ i ( n ) s i c i u m ~}+$ Gk． $\mu \alpha ́ \gamma \epsilon \iota \rho о с$.
iськьот $\dot{\lambda} \lambda \eta$ с，ó＇sausage／mince－seller＇$<$ Lat．$i(n)$ sicium $+\mathrm{Gk} .-\pi \omega ́ \lambda \eta с$ ．

（？）maforte／mavors $<$ Sem．ma＇aforet or ma＇afort．
комітотрьßои̂voc，ó＇title of an imperial officer＇＜Lat．comes tribunus．
коьтоßра́кь（о）, ，то́＇short pants＇＜Gk．коуто́－с＋Lat．bra（c）cae，－arum／bra （c）ca，－ae．
коvротєрс $\omega \nu$ 人́ $ь о с, ~ o ́ ~ ‘ o f f i c i a l ~ o f ~ s o m e ~ k i n d ' ~<~ L a t . ~ c u r a ~+~ L a t . ~ p e r s o n a l i s / ~$ cura（tor）＋personarum．
$\lambda \alpha v a \tau o v \rho \gamma o ́ c$, o＇woolweaver＇＜Lat．lanatum + Gk．－ovp
$\lambda \epsilon \pi \tau \alpha \mu \iota \tau \tau \dot{\omega} \rho \iota \circ, \tau o ́$＇a fine cloak＇＜Gk．$\lambda \epsilon \pi \tau$ ó－с + Lat．amictorium．
$\lambda \omega \rho о т о ́ \mu о с$ ，ó＇thong－cutter（？）＇＜Lat．lorum／lorus＋Gk．－тонос．
$\mu \epsilon \tau \rho ⿺ 夂 卜$ кооистос，－ov＇（perhaps）simple－woven，simple－dyed（？）＇$<\mathrm{Gk}$ ． $\mu \epsilon ́ \tau \rho \iota o-с+$ Lat．crusta／crustus，$-a$ ，－um．
цо⿱огорє́（ $\gamma$ ）каvтоv，тó＇form of a quittance（？）＇＜Gk．нóvo－с＋Lat．recauta．
 $<\mathrm{Gk} . \dot{\epsilon} \nu+$ Lat．pluma + －ápıo（under the influence of plumarius）．


${ }_{\text {ỏvo }}{ }^{\prime} \gamma \gamma \omega \nu$ ，ó＇donkey－seller＇＜Gk．òvo－c＋Lat．mango．

 ő $\rho \nu \iota \theta-+$ Lat．pullus．
ov̉ $\eta$ 人ó $\theta v \rho o v, ~ \tau o ́ ~ ' d o o r-c u r t a i n ' ~<~ L a t . ~ u e l u m ~+~ G k . ~ \theta v ́ \rho a . ~$
$\pi \alpha \gamma \alpha ́ \rho \chi \eta с, ~ o ́ ~($ and $\pi \alpha ́ \gamma \alpha \rho \chi о с, ~ o ́, ~ a l s o ~ \pi \alpha \gamma а \rho \chi i ́ \tau \eta с, ~ o) ~ ' g o v e r n o r ~ o f ~ a ~ v i l l a g e, ~$ district（pagus）＇＜Lat．pagus＇village，district＇+ Gk．－$\alpha \rho \chi o c$ or $-\alpha \rho \chi \eta c$ ；cf． also $\pi \alpha \gamma \alpha \rho \chi i ́ \alpha, ~ \dot{\eta}$ and $\pi \alpha \gamma \alpha \rho \chi \iota \kappa o ́ c, ~-\eta ́, ~-o ́ v . ~$
$\pi \alpha \rho \alpha \kappa \epsilon ́ \lambda \lambda \iota o \nu, \tau o ́$（or $\pi \epsilon \rho \iota \kappa \epsilon ́ \lambda \lambda \iota o \nu, \tau o ́$ ）＇adjoining room＇＜Gk．$\pi \alpha \rho \alpha ́ /(\pi \epsilon \rho \imath$＇）+ Lat．cella．
${ }^{\star}$ татєкоv $\hat{\alpha}$ с, $\delta$ 'one in charge of pasturing (?)' < Lat. pastus (?) + cura (?). $\pi \epsilon \nu \tau \alpha \xi \epsilon \subset \tau \iota \alpha \hat{\iota} \circ \subset,-\alpha,-o \nu(\mathrm{adj}$.$) 'containing five sextarii' <\mathrm{Gk} . \pi \epsilon \in \nu \tau-\epsilon+\xi \xi^{\prime} \subset \tau \eta \subset$
$<$ Lat. sextarius.
$\pi \epsilon \nu \tau \alpha \rho \rho o ́ c \tau o v \lambda o \nu, \tau o ́$ 'five-arm candlestick (?)' < Gk. $\pi \epsilon \in \nu \tau-\epsilon+$ Latin(ate) óócтovגov < Lat. rostulum $<$ Lat. rostrum.
$\pi \epsilon \rho \iota с \tau \epsilon \rho o ́ \pi о v \lambda \lambda o v, \tau o$ 'small pigeon' < Gk. $\pi \epsilon \rho \iota \tau \tau \epsilon \rho-\alpha$ + Lat. pullus.
$\pi о \lambda \iota \tau \iota к о \pi \rho \alpha \iota \tau \omega \rho \iota о с,-\alpha$, -ov 'according to both ius ciuile and ius praetoriиm' < Gk. тодıтько́-с + Lat. praetorius, $-a$, -ит.
$\pi \rho o \delta \eta \lambda \eta \gamma \hat{\alpha} \tau o \nu$, $\tau o$ ' $k$ kind of tax (?)' < Gk. $\pi \rho o ́+$ Lat. delegatum.
$\pi \rho о \mu \dot{\alpha} \xi \iota \mu o v, \tau o ́$ 'name of a garment' < Gk. $\pi \rho o ́+$ Lat. maximum.
$\pi \rho \omega \tau о \pi \alpha \tau \rho i ́ \kappa \iota о с$, $\delta$ 'first patrician (title)' < Gk. $\pi \rho \hat{\omega} \tau о-с+$ Lat. patricius.

caүóßvooc, ó ‘a woollen cloak (?)' < Lat. sagum / sagus + Lat. birrus.

${ }^{*}$ cıvoóv́ $\alpha a \xi$, $\dot{o}$ (a personal name (?)) 'the guardian of a standard or a maniple (?)'; or 'warden of a prison (?)' < Lat. signum $+\mathrm{Gk} . \phi$ v́дa .
соиßрєконафо́ $\tau \eta с$, ó / - тьov, тó 'outer veil’ < Lat. subricula + Lat.(?)
maforte/mavors $<$ Sem. ma'aforet or ma‘aforta.
$\operatorname{cov}(\beta) \rho \iota к о \pi \alpha ́ \lambda \lambda \iota o v, \tau o ́$ 'outer cloak' < Lat. subricula + Lat. pallium.
 maforte/mavors $<$ Sem. ma'aforet or ma'aforta.
 mate; an abbot's assistant (: monk)' < Gk. cúv + Lat. cella.

cvvovєт $\rho a \nu o ́ c$, ó 'fellow-veteran' < Gk. cúv + Lat. ueteranus.
$\tau \epsilon \tau \rho \alpha \xi \epsilon \subset \tau \iota \alpha \hat{\iota} \circ$, $-\alpha$, - ov 'containing four sextarii'< $\mathrm{Gk} . \tau \epsilon \tau \rho \alpha-+\xi \in \epsilon \subset \tau \eta \subset$ $<$ Lat. sextarius.
$\tau \rho i ́ c \epsilon \lambda \lambda o \nu, \tau o ́($ substantivized) 'having three seats' $<\mathrm{Gk} . \tau \rho \iota-+$ Lat. sella.
 camisia.
v́тovoт́́pıoc, ó 'deputy notarius (?)'< Gk. vimó + Lat. notarius.
$\phi$ скосvข ${ }^{\prime}$ 'орос, $\delta$ 'one who represents the interests of the imperial treas-
ury in the courts' < Lat. fiscus + Gk. cvv $\eta$ борос.
$\chi є \iota \rho о \mu а \nu і к \iota(o) \nu$, тó 'hand-sleeve' < Gk. $\chi$ єí + Lat. manica/-ae (pl.).
$\chi є \iota \rho о \mu \alpha ́ \pi \pi \iota о \nu, \tau o ́$ '(hand)-towel’ < Gk. $\chi є i \rho-$ Lat. тарра.

[Univerbations]
[ $\dot{\alpha} \beta \alpha ́ \kappa \tau \iota c / \dot{\alpha} \beta \alpha ́ \kappa \tau \eta с, ~ o ́ ~ ' r e g i s t r a r, ~ s e n i o r ~ s e c r e t a r y ' ~<~ L a t . ~ a b ~ a c t i s] . ~ . ~$
[ $\alpha \beta \rho \epsilon ́ \beta \iota c$, o 'administrative officer' < Lat. a breui(bu)s (?); cf. $\dot{\alpha} \beta \alpha ́ к \tau \iota c]$.

[ $\dot{\alpha} к о \mu \epsilon \nu \tau \alpha \rho \dot{\eta}-/-\nu \dot{\eta} с \iota o c, \dot{o}$ 'protocol officer' < Lat. a commentariis; cf. the other $a b$-noun forms: $\dot{\alpha} \beta \dot{\alpha} \kappa \tau \iota c$, etc.) in contamination with commentariensis].
[ảvvóú $\rho \rho о с$, ó 'military title' < Lat. $a(b)$ numeris].
 custos: univerbation, regularized into a pseudo-compound (?)].
[ $\beta \iota \subset \dot{\eta} \lambda \epsilon \kappa \tau о с$, $\delta^{\prime}$ 'twice selected (soldier), i.e. outstanding soldier of a special military unit' < Lat. bis electus].
[ $\dot{\epsilon} \dot{\xi} \kappa \epsilon \nu \tau v \rho i \omega \nu, o \quad$ 'a former centurio'; or 'one of/from (the class of) the centuriones' < Lat. ex + centurio].
 princeps].


# Vina fictitia from Latin into Greek: The Evidence of the Papyri* 

Anastasia Maravela-Solbakk

## 1. INTRODUCTION

It is generally admitted that the suffixes - $\hat{\alpha} \tau o c$ and $-\hat{\alpha} \tau o v$, amply used in Greek derivation from the late Roman period onwards, are Latinate suffixes, that is they represent a transplantation into Greek of the Latin suffixes -atus and -atum. ${ }^{1}$ The morphological incorporation of these suffixes into the Greek suffixation system was an easy matter. The derivative words could be neatly subsumed under the group of verbal adjectives (and their derivative nouns) in $-\tau o c,-\tau o v$, well established in Greek since the time of Homer. ${ }^{2}$ The present paper seeks to shed light on the early linguistic career in Greek of a subgroup of nouns from this important family of words, namely neuter nouns in - $\hat{\alpha}$ тov signifying aromatic or artificial wines ( $\hat{\rho o c \hat{\alpha} \tau o \nu, ~} \dot{\alpha} \psi \iota \nu \theta \hat{\alpha} \tau o v ~ e t c.), ~ t h e ~ s o-c a l l e d ~ v i n a ~$ fictitia of Latin, ${ }^{3}$ in the light of a growing body of evidence furnished by

[^174]documentary papyri from Egypt. While L. R. Palmer in his Grammar of the Post-Ptolemaic Papyri (1945) asserted apropos of the - $\hat{\alpha}$ тoc derivatives that 'the rich development of this suffix in Greek...took place after the period which our texts cover,', ${ }^{4}$ a number of attestations yielded by papyri in the meantime have generated new evidence concerning the timespan and process of the translation of wine names in - $\hat{\alpha} \tau o v$ from Latin to Greek. For comparison, the evidence of the papyri concerning the circumstances and effect of the introduction into Greek from Latin of another, very common, noun for an artificial wine, namely коvঠітоv, will be brought to bear on the discussion.

## 2. AROMATIC OR ARTIFICIAL WINES IN GREEK

Mentions of aromatic or artificial wines in Greek are to be found largely in two types of sources:
(a) Greek medical, veterinary, and pharmacological writings from the Hippocratic writers in the fifth/fourth century вс, through Dioscorides (i AD) and Galen (ii AD), to Oribasius (iv AD), Aetius ( v AD ), Alexander of Tralles ( $\mathrm{v} / \mathrm{vi} \mathrm{Ad}$ ), and Paul of Aegina (vii AD), the wines in question being, as explicitly stated by Pliny ( $H N$ 14.98), employed in therapeutics; ${ }^{5}$
(b) documentary texts, mostly papyri from Egypt.

The present discussion will take the papyrological evidence as its starting point and will investigate: (i) how the testimony of the papyri contributes to our understanding of the process of linguistic contact and cross-fertilization between Greek and Latin at the time

 $\pi \rho о \pi о ́ \mu а \tau \alpha$ (Alex. Trall. Ther. ii. 341. 15-18).
${ }^{4}$ Palmer, Grammar, 46 (italics mine).
${ }^{5}$ The following Latin authors discuss or mention the artificial wines examined in the present paper: Columella in De Re Rustica (c. ad 60-5), Pliny the Elder in Historia Naturalis (d. ad 79), Ps.Apicius in De Re Coquinaria (4th c. AD), Palladius in Opus Agriculturae (end of 4th/early 5th c. AD), the author of the life of the emperor Heliogabalus (Aelius Lampridius?) in Historia Augusta (c. ad 400), and Plinius Valerianus in De Medicina (6th/7th c. Ad).
around the transition from the Roman to the Byzantine period; (ii) how the papyrological evidence relates to the former group of sources.

## 2.1. когдîтоv, 'Mulled/Spiced Wine'

As the mentions of ког $\boldsymbol{i} \tau \boldsymbol{\tau} \boldsymbol{\nu}$ ('mulled/spiced wine') are by far the most numerous, it seems appropriate to begin the discussion with this artificial wine that took its name from the Latin vinum conditum. ${ }^{6}$ This wine was not only employed for medicinal purposes, but also consumed for pleasure, ${ }^{7}$ as suggested by the private letter SB XX 14226 (iv/v AD), at ll. 15-18. The female author asks the male addressee in a tone of ironic bitterness whether the fact that she did not receive anything from him ahead of the festivity means that she does not 'deserve the sweets and mulled wine of the Kalendae (sc. Ianиariae). ${ }^{8}$ This letter, the entry коvбítov ( $\left.\delta \rho а \chi \mu a i\right) \rho$ in the travel accounts of Theophanes (P.Ryl. IV 629, 1. 367; dated to AD 317-23), and another private letter, Stud. Pal. XX 107 (iv ad), replete with errors, in which a certain Ioannes asks Leontios to contact the wineseller Annianos and find out whether he has mulled wine according to his instructions, ${ }^{9}$ are the earliest papyrological attestations of коуঠíтov. Its occurrences in the papyri span the period from the fourth to the seventh century ad. ${ }^{10}$ From the early fourth century

[^175](AD 301 or a short time afterwards) dates the only epigraphical attestation of the word, the entry коv $\{\{\epsilon\} i ́ \tau o v ~ i \tau \alpha \lambda(\varkappa к о ̀ с) ~ \xi(\epsilon ́ є \tau \eta с) ~ a ~$ ( $\delta \eta \nu \alpha ́ \rho ı \alpha) ~ \kappa \delta$ in the Greek translation of Diocletian's Edictum de pretiis rerum venalium (Ed. Diocl. II 17 Giacchero). ${ }^{11}$ The above documentary evidence-at least those pieces that may be dated by criteria other than palaeography alone-proves invaluable for determining the time of the introduction of the word into Greek as the late third century AD and thus supplements the more confused chronological picture offered by the earliest occurrences of the word in medical or med-ico-magical literature. All these (Orib. Coll. med. 5. 33. 8. 1, 5. 33. 9. 1; ${ }^{12}$ Ecl. med. 62. 8. 1, 62. 9. 2, Hipp. Berol. 2. 20. 11, 2. 25. 8, 30. 7. 4, etc.; Hipp. Paris. 560. 2; Hipp. Cantabr. 5. 4. 1, 24. 11. 3;13 Cyranides 2. 24.36; 3. 1.62;3.3.16;3.3.21; 4.17.3;14 Ps.-Gal. De rem. par. xiv. 383. $8,9,11,573.1,5 \mathrm{~K})^{15}$ point to the late fourth century AD at the earliest.

So far the papyrological evidence for artificial wines in - $\hat{\alpha}$ тov amounts to fourteen texts yielding mentions of eleven different wine-types ( $\rho \circ c \hat{\alpha} \tau o v, \dot{\alpha} \psi \iota \nu \theta \hat{\alpha} \tau o \nu, \kappa \iota \tau \rho \hat{\alpha} \tau o v, \kappa \alpha \rho v o \phi v \lambda \lambda \hat{\alpha} \tau o v, \mu v \rho \subset \iota \nu \hat{\alpha} \tau o v, \mu \alpha \subset \tau \iota \chi-$


коขঠîтov...(medical prescription; vi AD); MPER, NS XIII 18 ког $\delta i ̂ \tau \omega \nu \mid \pi o \iota \rho o \hat{\nu} \nu$ ( $=$ кov $\delta i \not \tau o v \mid \pi v \rho o \hat{v} v$ ) (remedy label; vii AD). In two other cases, Stud. Pal. VIII 967,
 AD ), the noun in question is not neuter когдiтоv, 'wine' but masc. коудiтос, 'spice', as argued by J. Kramer, 'Gewürze und Mulsum', 552-3.
${ }^{11}$ For an earlier reference to this kind of wine in Latin see Pliny, HN 14. 108.
12 It is belived that Oribasius' Collectiones Medicae was completed before Julian's death in AD 363, but 5.33 has been deemed a later interpolation, see $n .46$ below.
${ }_{13}$ The treatises that constitute the Corpus Hippiatricorum Graecorum draw on veterinary writers of the 4th c. ad (Apsyrtus, Eumelus, Hierocles, et al.) but the compilation-though placed within the early Byzantine period-necessarily postdates these works, see L. Bodson, 'Veterinary Medicine', OCD 1592-3 at 1593.

14 The date of this medico-magical tract on animals, birds, plants, and stones cannot be established with certainty. Some of the material contained in it goes back to a work of the 1st or 2nd c. AD, but the compilation that has reached us must postdate one of its sources, the work of a certain Harpocratio-believed to have lived in Alexandria in the 4th c. AD; see J. Scarborough, 'Cyranides', OCD, 421, and D. Kaimakis, Die Kyraniden (Meisenheim am Glan, 1976), 3.

15 Books I and II of this compilation have been dated to $c$. AD 400 , while book III is considered a later interpolation, see M. Wellmann, Die Schrift des Dioskurides: Ein Beitrag zur Geschichte der Medizin (Berlin, 1914), 16 n. 1. I gratefully acknowledge the help of Professor I. Andorlini (Univ. of Parma) concerning the date of this work.
${ }_{16}$ Also accentuated in the sources as -á $\tau o v$, see S. B. Psaltes, Grammatik der byzantinischen Chroniken (Göttingen, 1913, repr. 1974), 136-7.

## 2.2. $\dot{\alpha} \nLeftarrow \iota \nu \theta \hat{\alpha} \tau o v, ~ ' W i n e ~ F l a v o u r e d ~ w i t h ~ W o r m w o o d ' ~$

Another medicinal wine that surfaces in the documentary record as early as the fourth century ad is $\dot{\alpha} \psi \iota \nu \theta \hat{\alpha} \tau o v$ ('wine flavoured with wormwood', 'vermouth'). In Diocletian's price edict (Ed. Diocl. II 18
 translates the Latin apsinthi, itself a loan from Greek. ${ }^{17}$ Presumably a reason that the suffix - $\hat{\alpha} \tau o \nu$ was chosen when the word was borrowed back to Greek-instead of the expected $\dot{\alpha} \psi \iota \nu \theta^{\prime}{ }^{\prime} v^{18}$ —is that in Greek the noun $\dot{\alpha} \psi \dot{i} \nu \theta \iota o \nu$ was already reserved for the herb. ${ }^{19}$

The earliest papyrological attestation of the new noun is the entry $\left[\dot{\alpha} \psi_{\imath}\right] v \theta \dot{\alpha} \tau o v$ ( $\left.\delta \rho \alpha \chi \mu \alpha i\right) v$ in the monthly accounts of Theophanes (P.Ryl. IV 639, l. 73; ad 317-23). More interesting is a slightly later occurrence of the word as part of a record of accounts (P.Lond. III 1259r, iv. 32, p. 240; dated to $c$. ad 330), ${ }^{20}$ in which the word has the form $\dot{\alpha} \psi \iota \nu \theta \dot{\alpha} \tau \iota o v$. Whereas in the former two examples a noun ending in -ium in Latin has received the end-suffix - $\hat{\alpha} \tau o v$ in Greek (instead of the expected -ıov), in this case the Greek user has opted for the hybrid suffix -á $\tau \iota o v$, presumably in order to align the word with the very common Greek diminutives in -átıov (c $\omega \mu \alpha ́ \tau \iota o v, ~ i \mu a ́ \tau \iota o v, ~ e t c) ~ p o p u l a r$. in the Koine of the Roman period. ${ }^{21}$ Such an operation of trivialization seems compatible with the overall linguistic competence of the scribe, as reflected by his use of Greek in the rest of the text. The choice of form, conscious or not, suggests that the suffix - $\hat{\alpha} \tau o \nu$ was not yet firmly established within the Greek suffixation system. In addition to these early attestations, the noun has been read on the sixth-century list of

[^176]medicinal wines GMP I 15. 4. ${ }^{22}$ In the Latin corpus the word apsinthatum surfaces in the late fourth/early fifth century ad (Scr. Hist. Aug. Heliog. 21. 6 Hohl condito piscinas et solia temperavit et rosato atque absentato). In the Greek medical corpus absinth-wine is mentioned by Oribasius (Coll. med. 5. 33. 13), Aetius (Iatr. 3. 69, 70, 71, etc.), Alexander of Tralles (Ther. ii. 341. 17, 457. 12, etc.), and other authors. ${ }^{23}$ In contrast, however, to the complete displacement of the term (oîvoc) $\dot{\alpha} \rho \omega \mu \alpha \tau i \tau \eta c$ by the imported term коvঠiтov, in this case the corresponding Greek term for absinth-wine, $\dot{\alpha} \psi \iota v \theta i ́ \tau \eta c$, has a continuous use in Greek medical literature from Dioscorides (Mat. med. 3. 23. 3. 5, 5. 39. 1, etc.) and Galen (Ther. xiv. 219.6 K ) to the mid-Byzantine period, including authors that also use the form in - $\mathrm{a} \tau o v$ (Orib. Coll. med. 5.25. 39, etc.; Aet. Iatr. 4. 51. 11, 6. 43. 14, etc.). ${ }^{24}$

## 2.3. $\rho$ ос $\hat{\alpha} \tau o v, ~ ' R o s e-W i n e ' ~ ' ~$

A third scented wine with roughly the same span of documentary attestation is $\dot{\rho}$ ocâ $\tau o v$. From the fourth century ad we have only one attestation, in Diocletian's price edict (Ed. Diocl. II 19 Giacchero:
 the Latin rhosati. ${ }^{25}$ The 'rose-wine' is also mentioned in an Oxyrhynchite bill of lading, dated to the fifth or sixth century ad, that lists among other goods to be transported from a boat to a house


[^177]word may be restored with some plausibility in a fifth/sixth-century ad inventory of provisions (P. Ashm. inv. 33, col. i, 1. $2 \dot{\rho}[o c a ́] \tau(o v)$ $[\dot{\alpha} \gamma] \gamma(\epsilon \hat{\imath})$ [). On the preparation and medical use of this wine we are informed by Ps.-Galen (De remed. parab. xiv. 563. 12 K), Oribasius (Coll. med. 5. 33. 1, 2, 4, 5), Aetius (Iatr. 3. 73, 74), Alexander of Tralles (Ther. i. 585. 9, ii. 473. 9, 483. 30, etc.), Paul of Aegina (Epit. med. 3. 45.10.8), and other authors. ${ }^{27}$ Once again, the Greek version of the noun, (oîvoc) podít $\eta \mathrm{c}$, employed by Dioscorides (Mat. med. 5. 27. 1), is used alongside the Latin loanword from Oribasius (Coll. med. 5. 25. 25) to the mid-Byzantine Geoponica corpus (8. 2, etc.). ${ }^{28}$

### 2.4. Later-Attested Aromatic Wines

The papyrological attestations pertaining to the rest of the scented wines are later, more specifically from the fifth, sixth, and seventh centuries ad. The drinks concerned are:

### 2.4.1. $\mu v \rho c \iota v a ̂ \tau o v, ~ ' m y r t l e-w i n e ' ~ ' ~$

This word is a plausible restoration in the fifth/sixth-century-ad inventory P.Ashm. inv. 33, col. I, l. 3 ( $\mu[v \rho c]_{\iota v \alpha ́ \tau(o v) ~}^{\alpha} \gamma \gamma(\epsilon \hat{\imath})$ [). It also occurs in the sixth century list of medicinal wines GMP I 15, 1.1 ( $\mu v \rho \subset \iota \nu \hat{\alpha} \tau o v$ ). In Greek literature the word is used by all major medical authors between Oribasius and Paul of Aegina. However, the product signified by it is either an oil (Orib. Syn. ad Eust. 3. 9. 2. 2; Paul. Aeg. Epit. med. 3. 3. 5. 5; Alex. Trall. Ther. ii. 327. 29) or a liquid preparation containing both oil and wine (Orib. Syn. ad Eust. 3. 9. 1; Aet. Iatr. 15. 42. 6, etc.). Only in a prescription from the Hippiatric corpus (Hipp. Berol. ch. 35. 7.3-4, i. 194 Hoppe-Oder: $\delta \iota$ oivov $\mu v \rho \subset \iota \nu a ́ \tau o v \epsilon \dot{\epsilon} \gamma \chi v \mu a ́ \tau \iota \zeta \epsilon)$ does the word feature as a qualifier of

[^178]oîvoc. Although in the two papyri mentioned above the word stands without the noun oivoc, the fact that in both cases it is listed with other medicinal wines suggests that the product in question is likely to represent a vinum fictitium. The Greek terms for myrtle-wine are (oîvoc) $\mu v \rho с \iota \nu i ́ \tau \eta c, \mu v ́ \rho \tau \iota \nu o c$ (oîvoc), and (oîvoc) $\mu \nu \rho \tau i ́ \tau \eta c$. The use of the first is restricted to Dioscorides (Mat. med. 5. 29. 1) and Aetius (Iatr. 11.30.55), of the second to the Galenic corpus (Gal. De Comp. med. sec. loc. xii. 638. 4 K, etc.; Ps.-Gal. De rem. parab. xiv. 531. 9 K) and Oribasius (Coll .med. 5. 31. 12. 1), while the third enjoys ample attestation from Dioscorides (Eupor. 1. 93. 1. 6, 1. 99. 1. 9, etc.) and Galen (De Comp. med. sec. loc. xiii. 85. 7 K, etc.) to Oribasius (Coll. med. 5. 25. 28; 44.26.28. 1, etc.), Aetius (Iatr. 6. 43. 14, 70. 28, etc.), Alexander of Tralles (Ther. ii. 325. 3, 327. 10, etc.), and Paul of Aegina (Epit. med. 3. 39. 2. 4, etc.). ${ }^{29}$ Latin authors (Plin. HN 14. 104, etc.; Colum. 12. 38. 7; Pallad. 2. 18) designate the 'myrtle-wine' by the Greek-derived myrtites, while the stem myrsin- is never employed in Latin in connection with this wine.

### 2.4.2. $\mu a c \tau \iota \chi \hat{\alpha} \tau o v, ~ ' m a s t i c h ~ w i n e ' ~$

This is so far attested only in P. Ant. II 64 (vi ad), l. 19, a papyrus codex preserving the title only of a prescription for the preparation of juice of mastich wine (cкєvacía $\chi[v \lambda]$ ộ $\mu \alpha \subset \tau \iota \chi \alpha ́ \tau o[v]$ ). ${ }^{30}$ In Latin the earliest reference to mastich wine comes from Scr. Hist. Aug. Heliog. 19. 4 (ed. Hohl), who associates its invention with the emperor Elagabalus (AD 218-22): mastichatum et puleiatum et omnia haec, quae nunc luxuria retinet, primus invenit, while the Greek occurrences come from the table of contents to Aetius' 16th book (Iatr. 16. 148) and Alex. Trall. (Ther. ii. 341. 17). ${ }^{31}$

[^179]
## 2．4．3．стирак $\hat{\tau} \tau \boldsymbol{\tau}$ ，＇wine scented with storax＇

This is attested in GMP I 15，l． 2 （vi ad）．The drink is known only through this papyrus and Oribasius＇description of its preparation （Coll．med．V 33．12）．In Greek medical literature the adj．стирáкıvос is used as a qualifier not of wine，but of oil（Gal．De Comp．med．per gen．xiii．1018． 10 K；Aet．Iatr．1．123，etc．）or unguent（Gal．De Comp． med．per gen．xiii．1029． 13 K ），but as already noted by J．－L．Fournet the storax is combined with wine in prescriptions for remedies against affections of the stomach．${ }^{32}$ In Latin only the noun styrax／ storax is attested．${ }^{33}$

## 2．4．4．карvофv入入人 $\alpha \tau о \nu$ ，＇wine scented with cloves＇

This is attested in GMPI 15， 1.6 （vi AD）．The word is a hapax in Greek but its basic ingredient，the карvó申u入入ov（＇grain of the Eugenia caryophyllata or clove tree＇），is known as an aromatic and as a medicament（Plin．HN 12．30）to medical authors since Ps．－ Galen．${ }^{34}$ In recipes from the Greek medical corpus this ingredient often appears in combination with wine（Ps．－Gal．De rem．parab．xiv． 462． 3 K，etc．；Hieroph．De nutr．meth．3．10． 1 ff．（ $=$ Anon．De duodec．mens．nat．7．7．2－3 Ideler）є́к $\delta \dot{\epsilon} \gamma \lambda \nu$ котосíac，$\lambda а \mu \beta \alpha ́ v є \iota \nu$

 133；Paul Aeg．Epit．med．7．11．30，etc．）．${ }^{35}$ No reference to a wine of this kind survives from the Latin corpus．

## 2．4．5．кıт $\hat{\alpha} \tau o v$ ，＇wine scented with citron＇

This is attested in GMP I 15，l． 7 （vi AD）．The recipe for its prepar－ ation is given by Aetius（Iatr．16．138．3），while Alexander of Tralles lists it among the best propomata（Ther．ii．241． 15 ff ．）．It is worth noting that not only the end－suffix of the word is Latinate；its initial component is too，according to Dioscorides，derived from the Latin

[^180]


### 2.4.6. 'ẫov, 'wine scented with violets'

A recipe for the preparation of this wine is to be found in P. Ant. II 64, ll. 14-18 (vi ad). A slightly different recipe is reported by Oribasius (Coll. med. V 33. 6). ${ }^{37}$ The Latin version of the word is represented in the noun violacium, 'violet-scented (wine)' (Apic. De re coqu. 1. 4, Pallad. Op. agric. 3. 32).

### 2.4.7. $\kappa v \delta \omega \nu \hat{\alpha} \tau o \nu$, 'wine scented with quinces'

The preparation of this wine is documented in a recipe preserved at MPER, NS XIII 14, ll. 27-35 (vii ad). Other recipes for its preparation are given by Aetius (Iatr. 5. 143) and Paul of Aegina (Epit. med. 7. 11. 30). In Latin only the Greek-derived cydonites is encountered (Pallad. Op. agric. 11. 20).

### 2.4.8. $\dot{v} \delta \rho о \rho о с \hat{\alpha} \tau o v$, ' $a$ rosatum with water'

This term is attested in P. Ashm. inv. 33 (v/vi ad) col. i, l. 9 ( $\dot{v} \delta \rho о \rho о с а ́ \tau(o v)$ д̀ $ф ф о к(\eta \rho \alpha \iota) \gamma$ ). In Latin this propoma is mentioned by the medical author Plinius Valerianus (De med. 5. 13), while recipes for its preparation are provided by Oribasius (Coll. med. V 33. 3) and Aetius (Iatr. 5. 140). In Greek the word exists side by side with $\dot{v} \delta \rho o \rho o ́ \delta \iota v o v$, employed by medical authors from Ps.-Galen onwards (De Remed. Parab. xiv. 388. 7; Aet. Iatr. iv 37. 16, etc.).

### 2.4.9. $\mu$ оис $\chi о \rho о с \hat{\alpha} \tau o v, ~ ' r o s e-w i n e ~ s c e n t e d ~ w i t h ~ m u s k ' ~$

The word is attested only in the label MPER, ns XIII 17 (vii Ad). The musk ( $\mu$ óc $\chi$ ос) $)^{38}$ is an ingredient of remedies (Ps.-Gal. De rem. parab.

[^181]xiv. 547. 13 K; Hipp. Berol. App. 7. 8; Aet. Iatr. 1. 131. 42; Paul. Epit. med. 7. 18. 8. 9, etc.), but the composition and even the exact nature of the potion is unknown. Comparison with $\mu \circ с \chi$ є́ $\lambda a \iota o v$ (attested as such in Paul Aeg. Epit. med. 7. 20. 3. 15 and Hipp. Berol. App. 7. 60, 34, but as $\mu o v \subset \chi \epsilon \lambda[a i o v]$ in a Louvre papyrus) ${ }^{39}$ suggests that the grammatically 'correct' form of the noun may be presumed to have been $\mu о с \chi о \rho о с \hat{\alpha} \tau о \nu .{ }^{40}$

## 3. PATTERNS OF DEVELOPMENT

In what follows some general observations regarding the appearance and early development in Greek of neuters in - $\hat{\alpha} \tau o \nu /-\hat{i} \tau o \nu^{41}$ signifying aromatic wines will be formulated. It would appear that the noun $\tau \grave{o}$ коvסíтov was the first term for a wine of this kind to be introduced into Greek from Latin. In view of its occurrence in papyrus texts from the early fourth century AD its introduction appears to have taken place in the third century AD (perhaps in the course of its second half or last quarter). ${ }^{\text {P }}$ oc $\hat{\alpha} \tau o \nu$ appears to be the first among the $-\hat{\alpha} \tau o \nu$ nouns to be translated into Greek. Since this noun occurs in the Greek translation of Diocletian's price edict, it may be presumed that its incorporation into the Greek vocabulary also took place sometime in the second half or last quarter of the third century ad. The same process of translation from Latin into Greek may be assumed for $\mu a c \tau \iota \chi \hat{\alpha} \tau o v$, only that it appears to have taken place later (probably in the latter half of the fourth century AD) since this noun is encountered in the fifth-century medical writer Aetius and in papyrus texts of the sixth century AD. ${ }^{42}$ While the adoption of the term ког $\delta i \tau o v$ from Latin into Greek does not result in the analogical creation of more nouns in -îTov designating aromatic wines, ${ }^{43}$ the introduction of $-\hat{\alpha}$ тov nouns triggers in Greek a

[^182]process of expansion of this family of words and creation of neologisms for which no corresponding -atum term exists in Latin ( $\dot{\alpha} \psi \iota \nu \theta \hat{\alpha} \tau o v$, $\mu v \rho c \iota v \hat{\alpha} \tau o v, ~ с \tau v \rho а к \hat{\alpha} \tau о \nu, \kappa а \rho v o \phi u \lambda \lambda \hat{\alpha} \tau o v, \kappa \iota \tau \rho \hat{a} \tau o v, \kappa v \delta \omega \nu \hat{\alpha} \tau o v, ~ i \hat{a} \tau o v$, $\dot{v} \delta \rho о \rho о с \hat{\alpha} \tau o v, \mu о с \chi о \rho о с \hat{a} \tau o v) .{ }^{44}$ To be sure, a word is always inextricably connected with a reference object but the creation of these neologisms in Greek does not necessarily imply that the Greek users of these nouns also invented the scented wines in question. The Latin author Palladius, for example, employs the Greek-derived term cydonites for quincescented wine (Pall. 11. 20), while his contemporary Aetius prefers the Latin-derived term $\kappa v \delta \omega \nu \hat{\alpha} \tau o \nu$ for the same product, and Apicius' and Palladius' violacium is the Latin equivalent of iârov. Certain among these neologisms result from the combination of a Greek ingredient
 suffix, ${ }^{45}$ while in others the Latinate suffix is combined with an ingre-dient-name imported independently from Latin ( $\kappa і \tau \rho \rho \nu$ ) or from another language ( $\mu o ́ c \chi o c$ ). The - $\hat{\tau} \tau o \nu$ nouns created in Greek (and not translated from Latin) are documented in medical texts from the late fourth century $\mathrm{AD}^{46}$ and in papyrus texts from the fifth century. This may suggest that they were coined in the field of medicine during the second half of the fourth century AD and that not much time intervened before their adoption in the everyday sphere and medical practice.

So far we have been discussing examples of $-\hat{\alpha}$ tov nouns for scented wines that were either imported from Latin into Greek or coined in Greek as a result of the stimulus provided by the translation

[^183]of certain cognate nouns from Latin into Greek. Two of the - $\hat{\alpha} \tau o v$ nouns attested through papyri, $\dot{v} \delta \rho o \rho o c \hat{\alpha} \tau o v$ and $\dot{\alpha} \psi \iota v \theta \hat{\alpha} \tau o v$, appear to have been first created in Greek as a result of the derivation stimulus exerted by Latin, and to be subsequently 'borrowed back' into Latin. The noun $\dot{v} \delta \rho o \rho o c \hat{a} \tau o v$, attested in Greek from the late fourth (Oribasius) to the fifth century AD (papyri), occurs in Latin only in the treatise on domestic medicine that goes under the name of the sixthor seventh-century-ad writer Plinius Valerianus (one of the sources of his work is the writings of Alexander of Tralles). This entails that in this case the direction of borrowing is from Greek to Latin. A comparable (though not absolutely clear) case may be that of the term $\dot{\alpha} \psi \iota \nu \theta \hat{\alpha} \tau o v:$ in Latin the word does not occur before the years around ad 400 (in the Historia Augusta), while in Greek it is documented in papyrus texts from the early fourth century ad. It is noteworthy that the Greek translation of the entry in Diocletian's price edict renders the Latin absinthi as $\dot{\alpha} \psi \iota \nu \theta \dot{\alpha} \tau o v$. This may suggest that the noun absinthatum was not known in Latin in the early fourth century AD, but was introduced into the language later in the course of that century. This provides additional confirmation that the fertilization of Greek and Latin also in the late Roman and early Byzantine period was mutual-especially in the field of technical vocabulary. ${ }^{47}$

A final observation that pertains to the relationship between the papyrological and other attestations of scented wines in - $\hat{\alpha} \tau o v /-\hat{i} \tau o v$ in Greek is that the authors of the papyrus texts mentioning these wines (be they accounts, inventory lists of products and provisions, medical prescriptions, or private letters) consistently use the $-\hat{\alpha} \tau o v /-i \tau o v$ term, while medical and veterinary authors as a rule vacillate between the Latin derived - $\hat{\alpha} \tau o \nu /-i \tau o \nu$ and the original Greek -í $\eta c$ term (or use the $-i \tau \eta c$ term only). ${ }^{48}$ It is in my view insufficient to evoke the registerdifference between papyrus texts and medical literature (that is, that the latter group of texts have originated at a more elevated level than the papyri, which represent documents of everyday life) in order to explain

[^184]this situation. It is certainly a possible explanation that once an - $\hat{\alpha} \tau o \nu /$ -ícov term for a scented wine had been introduced into or formed in Greek, it tended to suppress the earlier -í $\tau\rangle$ c term; that in certain cases, however, the earlier term proved resistent; and that it is possible to observe this resistance and co-existence of - $\hat{\tau} \tau o \nu /-\hat{i} \tau o \nu$ and $-i \bar{\tau} \eta \subset$ variants in medical texts that reflect a higher literary level, while the papyri show that the - $\hat{\alpha}$ тov/-îтov neologisms completely dominated everyday usage in a province of the Roman empire (Egypt) in which Greek, albeit very well and very long rooted, was not the mother-tongue of its inhabitants.

However, certain caveats should accompany such an explanatory model. First, it is important to point out that some of the medical texts mentioning these wines are products of excerpting and compilation and that the medical authors of the Byzantine period had the habit of drawing heavily on earlier medical literature, especially on Galen. Therefore what in the light of the medical literature would only appear to be linguistic co-existence may simply be a result of the medical writers' excerpting older and contemporary medical works without subsequently editing their text so that terminology would be consistent. The fact that no aromatic wine in -í $\eta>$ c has so far turned up in papyrus texts is, in my view, suggestive of the fact that the only sphere in which the $-\hat{\alpha} \tau o \nu$ and $-i \tau \eta c$ terms for scented wines ever coexisted was that of medical literature by dint of the ancient medical authors' habit of excerpting earlier literature. The fact that the Greek translators of Diocletian's price edict (inscriptions from Aigeira, Lebadeia, and Megara ${ }^{49}$ ) opt for the terms ког $\hat{i} \tau o v, \dot{\alpha} \psi \iota \nu \theta \hat{\alpha} \tau o v$, and $\hat{\rho} о с \hat{\alpha} \tau o v$ where Greek equivalents were available ( $\dot{\alpha} \rho \omega \mu \alpha \tau i ́ \tau \eta c$,
 area of the Greek-speaking part of the Roman empire where the - $\hat{\alpha}$ тov/-îtov terms for scented wines came to replace the earlier Greek names for these wines in everyday life.

[^185]
## 16

# Lexical Translations in the Papyri: Koine Greek, Greek Dialects, and Foreign Languages* 

Francesca Schironi

## 1. LITERARY PAPYRI AND LINGUISTICS

In general, literary papyrology does not offer the modern linguist much insight into the spoken language of the ancient Greeks, since a papyrus containing a literary text is by default a more controlled product than a documentary text. Unlike a private letter, petition, or contract, a literary papyrus is not a 'living' document and does not aim to convey practical information. Rather, it is a copy of a text that was often first written some centuries earlier and in a standardized literary language. Moreover, the scribe of a literary text has a particular 'intellectual' interest; hence his level of education can generally be assumed to be higher than that of the 'author' of a private document. This is not to say that literary papyri do not contain the usual misspellings which arose in the Hellenistic and Roman periods as a result of changes in pronunciation; of course they do, but no more so than documentary texts.

There are, however, certain literary papyri that may offer interesting insights into the history of linguistics. Specifically, these are papyri that contain lexica or glossaries of dialectal or foreign words.

[^186]As is well known, Hellenistic scholars did a great deal of work in lexicography and specifically in dialectology, composing glossaries of dialectal words, in addition to glossaries and lexica on specific authors, especially Homer and Hippocrates. ${ }^{1}$ Some of these dialectal glossaries were written out of an interest in the literary authors themselves, who wrote in different literary dialects, such as the lyric poets or Hippocrates. Other glossaries, however, gathered words encountered in antiquarian or ethnographical studies in the tradition of Herodotus. In the period following Alexander's campaign and the consolidation of the Hellenistic kingdoms, Greeks came into close contact with many different peoples and cultures. In this cosmopolitan environment it is not surprising that interest developed in ethnography and that antiquarian studies underwent a particular development in the Hellenistic world as never before. Unfortunately, most of the original Hellenistic works in dialectal glossography are lost, and fragments of them can be gathered only from later products such as the lexicon of Hesychius ( $\mathrm{v}-\mathrm{vi} \mathrm{Ad}$ ) or the Byzantine lexica such as the Suda (ix ad) or the Etymologica (ix-xiii ad). Thus, as the oldest remaining examples of linguistic studies in antiquity, papyri containing glossaries and lexica are of paramount importance in the history of the field. ${ }^{2}$

[^187]In order to analyse the evidence for linguistic interest in dialects and foreign words in papyri, we must first clarify exactly what are we looking for. For, especially when dealing with Greek dialects, the first difficulty we face is that most Greek poetry is written in (literary) dialects; therefore a glossary analysing, say, Aeolic or Ionic words does not necessarily mean that the focus is on Aeolic or Ionic dialects per se, but rather on Sappho or Alcaeus on the one hand, and on Hippocrates, Herodotus, or Homer on the other. Therefore, to distinguish material of real linguistic value from literary $\gamma \lambda \hat{\omega}$ ccaı one needs a more precise criterion than the simple presence of a dialectal 'varnish'. A better method is to see whether the lemmata, apart from belonging to a certain dialect, also fail to be explained with quotations or references to literary authors and/or to be attested in literary authors. Of course, even if a glossary contains dialectal words neither attested in any literary work nor explained with literary references, the possibility remains, in principle, that the lemma is still a quotation from a lost work. With this unavoidable caveat, we can proceed to our analysis of the preserved material and try to identify a group of works that can bear witness to ancient interest in languages/dialects per se.

In this analysis I have excluded glossaries and lexica limited to one author (for example papyri of Apollonius Sophista's Lexicon Homericum and the scholia minora to Homer), as well as bilingual glossaries, which, though they are linguistic tools, do not actually betray any speculative interest in other idioms but serve a more practical purpose: that of communicating with people speaking another language or (for glossaries/lexica on literary authors) that of translating written texts, whether for use or for school. ${ }^{3}$ I have also omitted onomastica, lists of words without explanations, since their lack of explanations does not provide any proof that whoever collected the words classified them as proper to a particular dialect or language. With these criteria, a complete analysis of the material has led me to isolate the following texts:

## Glossaries containing dialectal words

[P. Berol. inv. 9965]
[P. Oxy. XV 1801]

[^188]P. Oxy. XV 1802

Glossaries containing non-Greek words
[P. Oxy. XV 1801]
P. Oxy. XV 1802
P. Ness. II 8

The evidence is disappointingly scarce. We have only four papyri, and, moreover, two of them (P. Berol. inv. 9965 and P. Oxy. XV 1801) do not offer reliable evidence, for while they do contain words not attested in literature (and which could therefore be dialectal or foreign), those words are never defined as such in these two glossaries. P. Oxy. XV 1802 does, however, give positive evidence, since it collects several eclectic $\gamma \lambda \hat{\omega}$ ccaı unattested in literary texts and defines them as belonging to other dialects or languages. Before we turn to P. Oxy. XV 1802, a look at the other three glossaries will make it clear why that manuscript deserves special attention.
P. Berol. inv. 9965 (iii/ii вс) ${ }^{4}$ contains a list of words starting with $\beta \eta, \beta \iota, \beta \lambda, \beta_{0}$, with brief translations. The words, which follow an alphabetical order limited to the first two letters, are taken from Homer, tragedy, and Hellenistic poetry. Possible dialectal words might be the otherwise unattested $\beta \lambda \eta \chi \circ c$ (1.30), $\beta \lambda v$ v́ıov (1. 22),
 and $\beta o v \pi \rho \epsilon \iota o ́[\nu \epsilon c]$ (1. 31), which probably stands for $\beta o v \pi \rho \eta o ́ v \epsilon \epsilon$,
 $\lambda^{\prime}$ ' $\phi$ ot). Similar is the case of P. Oxy. XV 1801 (mid i AD), ${ }^{5}$ showing two columns of rare words beginning with $\beta$. Citations come from comedy or satyr play (Eupolis, Cratinus, Hermippus, Aristophanes, Alexis, Sophocles) and from the historian Phylarchus. There are two possible dialectal words: $[\beta \epsilon і \rho \alpha к \epsilon \subset]=i \not \epsilon \rho \alpha к \epsilon c(1.7)$, attested only in Hsch. $\beta 461$ ( $\beta$ єірракєс іє́ $\rho \alpha к є \subset$ ), for which a possible Libyan origin has been proposed on the basis of Hsch. $\beta$ 216: $\beta \dot{\alpha} \rho \beta a \xi$. $i \epsilon ́ \rho \alpha \xi, \pi \alpha \rho \grave{\alpha}$
 $\kappa \dot{\omega} \mu \eta \tau[\hat{\eta} \subset \Lambda \alpha]_{\kappa \omega \nu}[\iota \kappa \hat{\eta} \subset$ (as also in Steph. Byz. 161. 12), which could

[^189]indeed be a Laconian toponym. As is clear, none of these papyri provides reliable evidence for dialectal or foreign words. They present only words that are not attested elsewhere or, if they are, are found only in Hesychius and other lexicographical or erudite sources which often do collect dialectal words. Yet in none of these parallel attestations are these words attributed to a particular dialect. Thus P. Berol. inv. 9965 and P. Oxy. XV 1801 cannot safely be considered good evidence for Hellenistic and early Roman interest in linguistics. A slightly better witness is $P$. Ness. II 8 , a seventh-century codex that preserves a glossary with miscellaneous words and short explanations. All the lemmata are standard Greek words, except one in 1.
 Persian and Parthian loose trousers. The word is attested in various sources that define it as belonging to the Persian language (Hsch. c 190. 896; Suda c 109; Phot. ii. 146.1 Naber; EGud. 496.19 Sturz). It is also attested in the comic poet Antiphanes (fr. 199 PCG). So, in principle, the lemma may be part of a commentary on Antiphanes' play rather than a work of purely linguistic content. Compared with these three papyri, P. Oxy. XV 1802 stands out in terms of both quality and quantity. In quantity, it includes many lemmata belonging to either a dialect or a foreign language that are unattested in any literary source; in terms of quality, the entries are rich and well preserved, and include explicit evidence that these lemmata were considered foreign or dialectal words.

## 2. P. OXY. XV 1802

P. Oxy. XV 1802 (Pl. 16.1) is written across the fibres of a roll and dated on palaeographical grounds to the second/third century AD. ${ }^{7}$ The lemmata are set in ekthesis followed by a blank space and then by an explanation, generally of from one to seven lines. Lemmata from $\kappa, \lambda$, and $\mu$ are preserved, and are ordered in a strict alphabetical

[^190]

Plate 16.1. P. Oxy. XV 1802: The Oxyrhynchus glossary
order, a very rare feature in ancient lexica and glossaries. I reproduce here the two largest pieces of the glossary, two columns almost entirely preserved: ${ }^{8}$
P. Oxy. XV 1802, fr. 3 ii
 $\bar{\alpha} \cdot \dot{\epsilon} \pi[a \gamma o v-$




 $\kappa \lambda \eta \theta \hat{\eta} \nu \alpha \iota \tau \alpha \dot{c} \Theta \epsilon \subset \mu о \phi$ орıӑ̧v́cac $\{\kappa \lambda \eta \theta \hat{\eta} \nu \alpha \iota\}$ रvvaîкас.
 $\kappa \in!-$



 $\nu \eta[c] \tau \iota \nu o ̀ c ~ \epsilon ́ \mu \beta \alpha \lambda \lambda o \mu \epsilon ́ v \eta c . \phi \epsilon ́ \rho \epsilon \iota \gamma \grave{\alpha} \rho \alpha v ̉ \tau \hat{\omega} \nu \dot{\eta} \chi \dot{\omega} \rho \alpha \pi o \lambda \grave{v} \tau o ̀ ~ \mu \epsilon ́-$

 $\mu \nu \eta ́ \mu a c ı \nu$.
${ }^{8}$ What I present here is part of my edition with new supplements and corrections, which differ in part from Hunt's editio princeps of 1922.







[] acıv []
[ ]ıк. [...] ب̣[...].оı!са.[
P. Oxy. XV 1802, fr. 3 iii


' $\tau \grave{\eta} \nu M \hat{\eta} \tau u$ '.

норíc ${ }^{\nu}$


$\lambda \eta \subset{ }^{\epsilon} \nu \tau \hat{\eta}$ Co $\lambda_{\epsilon ́ \omega} \omega \nu \pi o \lambda \iota \tau \epsilon$ íá.




$\mu \iota \lambda \eta \chi \quad \gamma \epsilon ́ v \epsilon \iota \circ \nu$ víò $\begin{gathered}A \lambda \beta \alpha \nu i ́ \omega \nu \\ \tau \\ \omega \\ \nu \\ \text { ó } \mu о \rho о и ́ \nu \tau \omega[\nu\end{gathered}$


$\kappa \alpha \tau \alpha ̀ ~ B \alpha \beta v \lambda \hat{\omega} \nu \alpha$

$\rho i \operatorname{\pi o\tau } \alpha \mu \hat{\omega} \nu$

$\mu \iota c a \iota\{o ̂\} \pi \alpha \rho \dot{\alpha} X \alpha \lambda \delta \alpha i ́ o \iota c ~ \dot{\eta} \tau \hat{\omega} \nu \mu \epsilon \lambda \lambda o ́ v \tau \omega \nu \pi \rho o ́ \gamma \nu \omega c!!\left[с \ldots \dot{\epsilon} \nu^{-}\right.$
T $\hat{\nu}$ кат $\dot{\alpha} B \alpha \beta v \lambda \hat{\omega} \nu \alpha$

....... $!$ [ $\pm 22$ ] $\rho \rho \iota \alpha \chi[\ldots .$.

Apart from the $\gamma \lambda \hat{\omega}$ ccaı taken from a Greek dialect or a Near Eastern language, P. Oxy. XV 1802 also contains a collection of rare Greek words ( $\mu \epsilon \lambda \omega \delta i \alpha)$ ), cult-related ( $\mu \epsilon$ '́ $\iota c c a \iota, ~ М \hat{\eta} \tau \iota c$ ) or ethnic
 supported by the authority of Aristotle ( $\mu \epsilon \epsilon^{\prime} \rho \neq$ and $\mu \hat{\eta} \tau \rho \alpha \iota$ ). The
peculiarity of the content together with the authorities quoted suggests that this work derives from an original composed in Alexandria between the first century BC and the first century AD , making it a product of Hellenistic erudition. ${ }^{9}$

I shall now focus on the more properly linguistic entries. As for entries concerned with Greek dialects, we have:

Meropes: foolish men by the Euboeans. Dionysius in...
The sense of $\alpha \not \phi \rho o v \epsilon c$ for $\mu \epsilon$ ' $\rho о \pi \epsilon \epsilon$ is not elsewhere attested. Generally $\mu \epsilon ́ \rho o \pi \epsilon c$ is understood as a synonym for mortals (cf. Il. 18. 288). The etymology given by the ancient grammarians was from $\mu \epsilon$ í $\rho o \mu \alpha \iota$ and ó $\psi$, 'those who are able to divide, to articulate, the voice ( $\left.{ }^{\circ} \psi \psi\right){ }^{\prime}{ }^{10}$ As a pure suggestion, the meaning $\ddot{\alpha} \phi \rho o v \epsilon c$ might have originated as an extension from the idea of the mortality and frailty of mortals, who are ${ }^{\prime} \phi \rho о \nu є \subset$, 'senseless' (as is common in lyric poetry, for example in Semonides 1.1-5). ${ }^{11}$ Still, the mention of the Euboeans remains a mystery.

Mesoteleston: half-finished the Aitolians (acc.)...
The equivalence $\mu$ є́coc $=\dot{\eta} \mu \iota$ - is self-evident; I have not, however, found any evidence that $\mu$ écoc was used instead of $\dot{\eta} \mu \iota-$ by the Aitolians.

Minodes: some grape-vines are so called among the Rhodians.
The only other source for this lemma is Hesychius $\mu$ 1417: $\mu \iota \nu \hat{\omega} \delta \epsilon \subset$ єîdoc ả $\mu \pi \epsilon ́ \lambda o u$.

 $\pi о \lambda \iota \tau \in$ ía.
${ }^{9}$ A full account of the dating and the proposed attribution will appear in my forthcoming study.
${ }^{10}$ Cf. Hsch. $\mu$ 886; Sch. Il. 1. 250c; Sch. Il. 18. 288.

 є́кастоv є̇ктє入єvтй́єє $\theta \epsilon$ óc, 'Boy, loud-thundering Zeus controls the outcome of everything there is and disposes it as he wishes. There is no intelligence among men, but we live like grazing animals, subject to what the day brings, with no knowledge of how the god will bring each thing to pass'; trans. D. E. Gerber, Greek Elegiac Poetry: From the Seventh to the Fifth Centuries bC (Cambridge, MA, 1999), 299.

Metrai: in Tarsos and Soloi writing tablets in which they register the houses are called 'metrai', and they are also called 'public (tablets)'. Aristotle in the Constitution of Soli.

The Soli mentioned here can only be the Soli in Cilicia and not that in Cyprus because it is mentioned in close connection with Tarsus. It is not easy to determine which language $\mu \dot{\eta} \tau \rho \alpha$ is taken from. Soli was originally a Phoenician city, and was then colonized by the Rhodians. In the fifth century bc Soli was under the Persians and after Alexander's conquest it was ruled by the Seleucids. Furthermore, Tarsus has a Semitic origin, but we have also inscriptions written in Hellenistic Koine. Thus in both Soli and Tarsus there was a strong Greek element together with a Semitic and perhaps Persian background. ${ }^{12}$ Thus $\mu \hat{\eta} \tau \rho a \iota$ could be a local name in Hellenistic Koine, but could also be a Semitic or Persian word that had perhaps already passed into the Greek vocabulary in Soli and Tarsus.

More numerous, however, are the lemmata taken from non-Greek languages of people living in the Near East:
$\mu \epsilon \rho \mu \nu a ́ \delta a \iota:$ oi $\left.\tau \rho i ́ o \rho \chi o \iota \pi \alpha \rho \alpha ̀ ~ \Lambda v \delta o i ̂ c . ~ ’ A \nu \delta \rho \omega \nu \frac{\epsilon}{\epsilon}\left[\nu^{-} \pi \epsilon \rho i ̀ \tau o \hat{v} \pi o \lambda \epsilon ́\right] \right\rvert\, \mu o v \tau o \hat{v} \pi \rho o ̀ c$ тov̀c $\beta$ а $\beta \beta$ á $\rho$ ovc.
Mermnadai: hawks among the Lydians. Andron in [the $x$ th book $O n$ ] the War against the Barbarians.
$M \epsilon \rho \mu \nu a ́ \delta a \iota$ are said to be a type of hawk. This, however, is also the name of the family of Croesus according to Herodotus (1.7.2), and it might be that $\mu \epsilon \rho \mu \nu \alpha \dot{\delta} \alpha \iota$ were actually the totemic animal adopted by the Lydian royal clan. ${ }^{13}$






Melugion: a Scythian beverage. Glaucus in the first book of the Description of Places Lying towards the Left of the Black Sea (says): 'when the drivers agreed he dismissed the assembly and going back each to his own home they

[^191]prepared the melugion. This drink is more intoxicating than wine and is made of honey boiled with water, with the addition of a certain herb; for their country produces much honey, and also beer, which they make out of millet'.

The gloss connects this Scythian beverage with $\mu$ é $\lambda \iota$, 'honey'. This drink may or may not be mead. ${ }^{14}$ What it is certain is that for a Greek, $\mu \epsilon \lambda \dot{v} \gamma \iota o v$ was interpreted as deriving from $\mu \epsilon \in \lambda \iota$. We are, however, probably dealing with a popular etymology, because in Iranian there is no attested word derived from IE ${ }^{*}$ meli $(t)-.{ }^{15}$ It is therefore either a Greek, not Scythian, word for a Scythian honeydrink, or an Iranian word that is not likely to be derived from the IE *meli $(t)$-, 'honey'.

Menemani: water among the Persians. $\mathrm{D}(\mathrm{e})$ inon in [book $x$ ] of the Persian History.

We are probably dealing with a reduplicated root. No Iranian word for 'water' is known that shows linguistic similarities to $\mu \epsilon \nu \epsilon \mu a \nu \nu$.

Mithras: Prometheus; but according to others the sun among the Persians.
Normally Mithras is Apollo, Helios, and later also Hermes, but never Prometheus. ${ }^{16}$ This identification may draw on the demiurgic functions of both Mithras and Prometheus ${ }^{17}$ and on the fact that the Iranian Mithras is often associated with fire. ${ }^{18}$

[^192]
Mithorg: type of harmony among the Chaldaeans...

Minodoloessa: numerical system among the Chaldaeans ... in Babylon.
$M$ ıvo $\delta$ о入óєсса is perhaps to be related to the Akkadian verb manû, 'to count.
 Baßv入ิิva.
Misai: the foreknowledge of the future among the Chaldaeans [ $\ldots$ in the $x$ th book] of the work on Babylon.
 $\xi \epsilon \in \eta \eta \subset \phi \omega \nu \hat{\eta}$.
Milech: chin by the Albanians, those who are neighbours of... as Heracleides in the first book of On the Foreign Language.

According to the ancients Albania was a region near the Caspian Sea, bordering on Armenia and Colchis. Our lemma for once seems to have a plausible Semitic-root shape; the most obvious parallel would be $m(e) l \bar{e} k$, 'king' in Aramaic. The appearance of a Semitic word in a Caucasian region is not impossible, given that Aramaic was the lingua franca in the area between the Black Sea and the Caspian Sea. If this is right, we may need to correct the 'translation' because $\gamma \epsilon \boldsymbol{\nu} \epsilon \iota o \nu$, 'chin; beard' does not make obvious sense (unless 'beard' could advance in meaning to 'bearded one', that is 'king', among the ancient Albanians). A very suitable solution would be $\gamma \epsilon \nu v a i o v$, which means 'noble' (where the semantic path towards 'king' would be shorter), and could have been easily corrupted into $\gamma \epsilon \boldsymbol{\epsilon} \in \epsilon \circ \nu$ by the omission of one $\nu$ and an iotacistic error. ${ }^{19}$ Nevertheless, the fact that the adjective is neuter here renders this interpretation difficult to accept (could the meaning be 'nobility', that is neuter adjective as substantive?). We are hardly in a position to attempt emendation of the papyrus reading.

To set these foreign $\gamma \lambda \hat{\omega}$ ccal against a wider background, we may briefly review the evidence we have of Hellenistic work in non-Greek languages. The evidence for glossaries gathering foreign words is scarce. In the third century bс Neoptolemus of Parium wrote about

[^193]Phrygian $\gamma \lambda \hat{\omega}$ ccal, but nothing of this work has survived; Athenaeus preserves a $\gamma \lambda \hat{\omega}$ cca from Phrygia and one from Soli taken from the work of Cleitarchus of Aegina (second/first century вс); we know of
 of Ascalon (first century AD). Most evidence is again to be found in Hesychius, who of course derives most of his material from Pamphilus (again first century AD). P. Oxy. XV 1802 is thus the only extant collection of foreign and dialectal words dating back to the late Hellenistic-Roman period. Although the lack of other comparable texts makes this papyrus so interesting, it also raises many questions as to the value and the content of this glossary.

With the foreign words of P. Oxy. XV 1802 the first problem is to determine what these labels (Persian, Babylonian, Chaldaean) mean. If we are dealing with three different types of languages, Persian is probably Old Persian or Middle Persian. ${ }^{20}$ For Babylonian we can understand some variety of Akkadian. ${ }^{21}$ For Chaldaean, one possibility would be to identify it with the Aramaic, the lingua franca of the Near East at the time, but it could also be read as a synonym for Babylonian, i.e. Akkadian. Nor can we rule out the possibility that these divisions (that is Persian, Babylonian, and Chaldaean) were not so clearly defined. Perhaps they just meant the language spoken in the (ex-)Persian Empire, without any further distinction. In the end, the linguistic strata of those regions were so complex that it would probably be difficult for a Hellenistic Greek to draw clear distinctions between all these different languages, especially as they were spoken in the same area (with many reciprocal influences in terms of lexicon). Moreover, they would probably all sound equally 'barbarian' to Greek ears.

The second problem is that most of these Semitic and Persian $\gamma \lambda \hat{\omega}$ ccal have not been recognized in any of these languages and some of them do not even sound phonetically compatible with the languages they are claimed to be. Most probably whoever collected these

[^194]words did not transcribe them correctly. Furthermore these foreign words, whether Persian, Babylonian, or Chaldaean, were very likely acquired by $\dot{\alpha} к о \dot{\eta}$, by hearsay. Inscriptions and written records of these exotic languages were not the kind of evidence in which the Hellenistic antiquarians were interested or to which they had easy access. Their modus operandi seems instead much more in the line of Herodotean ictopí $\eta$. If we think thus in terms of oral transmission, this opens up the possibility of many corruptions to the original word; in any linguistic exchange attempts to reproduce the sounds of an unfamiliar language can result in gross inaccuracies. To sum up, the first feature that makes this glossary linguistically unique is the number of words from Greek dialects and Near Eastern languages. It also offers an interesting historical perspective on the knowledge of non-Greek languages among the Hellenistic Greeks, and points to the various possible mistakes in transmission between these languages.

## 3. QUOTATION OF SOURCES

There is, moreover, another important aspect that makes this glossary extremely interesting for assessing what 'linguistic studies' amounted to in the Hellenistic or Early Roman era: P. Oxy. XV 1802 almost always includes a quotation or a reference in the explanation of the lemma. The works quoted in the glossary are glossographical, historical, and ethnographical and include Aristotle (Constitution of Soli and Historia Animalium), Callimachus, Berossus, Apollodorus, and Erasistratus. ${ }^{22}$ Further, the authorities quoted, as far as we can recognize them, are not later than the first century вс, and most of them are dated to the third or second century вс. The behaviour of our glossographer is in striking contrast with the rest of the lexicographical evidence. Among the lexica and glossaries that are preserved, both in papyri and in the medieval tradition, only a few consistently mention the sources of the $\gamma \lambda \hat{\omega}$ ccal, and when they do so the sources are usually very well-known literary authors. This tendency to quote the locus classicus where a word

[^195]appears is evident in the following list of glossaries on papyrus. These texts are comparable to $P$. Oxy. XV 1802 in that they are not glossaries limited to one particular author but generally gather words from different literary sources:

- O. Berl. inv. 12605: Homer, Antimachus, Hipponax;
- P. Berol. inv. 13360: Herodotus, Teleclides;
- P. Hamb. II 137: Homer;
- P. Oxy. XV 1801: Eupolis, Cratinus, Hermippus, Aristophanes, Alexis, Sophocles, Phylarchus;
- P. Oxy. XV 1803: Aristophanes, Demosthenes, Eupolis, Menander, Thucydides, Xenophon;
- P. Oxy. XV 1804: Aeschines, Dinarchus, Demosthenes, Hyperides;
- P. Oxy. XVII 2087: Aeschines Socraticus, Aristotle, Demosthenes, Herodotus, Plato, Thucydides;
- P. Oxy. XLVII 3329: Rhinton.

The fact that these glossaries quote classical authors to elucidate their lemmata implies that they were intended as a tool for reading literary texts. On the other hand, we do not find quotations from more technical works of antiquarians, periegetes, and historians to explain the lemmata, as happens constantly in P. Oxy. XV 1802, in which entries follow a constant pattern: 1 . lemma ( $=\gamma \lambda \hat{\omega}$ cca) ; 2. translation into Koine Greek ( $=$ gloss); 3 . quotation of the source. In addition, it must be noticed that the sources quoted in P. Oxy. XV 1802 are not other lexica or glossaries, but indeed antiquarian or historical works, which must have been the first sources of the glosses. All these features and in particular the presence of the primary sources suggest that this glossary was recopied onto our papyrus in nearly its original form.

## 4. THE APPROACH TO DIALECTS AND NON-GREEK LANGUAGES

The content of this text, words taken from Greek dialects as well as from other languages that have come into contact with Greeks, is indeed remarkable. However, to see this document as evidence of
interest in dialectology or even of a conscious distinction between language and dialect would be misleading. A closer look at the way this glossary works is indeed revealing of these limits.

Notwithstanding the variety of the $\gamma \lambda \hat{\omega} c c a l$, all the entries more or less adhere to the same pattern. The lemma is followed by the gloss. The ethnic origin of the lemma is normally then specified with the expression 'lemma X $\pi \alpha \rho \alpha ́+$ dative' (for instance, $\pi \alpha \rho \grave{\alpha} ~ \Pi \epsilon ́ \rho с а \iota c, ~ \pi \alpha \rho \grave{\alpha}$ Mvסoic). Sometimes a verbum dicendi in the passive form is added
 quently the gloss is introduced with $\dot{v} \pi o ́$ and genitive (so, $\mu \dot{\epsilon} \rho o \pi \epsilon \subset$ : oi äфроvєc $\dot{v} \pi \grave{o}$ Eủßoє́ $\omega \nu$, fr. 3, ii. 20). In one entry we find $\kappa \alpha \tau \grave{\alpha}$ with accusative ( $\theta \dot{\alpha} \lambda \alpha с с \alpha \kappa \alpha \tau \dot{\alpha}$ Пє́ $\rho \subset \alpha c$, fr. 109), in another $\dot{\epsilon} \nu+$ dative and a verbum dicendi (or better nominandi) ( $\epsilon v$ Tapcê каì Cóخoıc $\tau \grave{a} c$ $\delta \epsilon ́ \lambda \tau o v c . . . \pi \rho o c a \gamma o \rho \epsilon \dot{v} \epsilon \subset \theta a l$, fr. 3, iii. 5). The entry ends almost invariably with the quotation of the sources for the gloss. This pattern, which repeats itself almost constantly, points to a library compilation.

A product like this papyrus thus presupposes two steps. First a historian or an antiquarian must collect stories and curiosities about the region he is describing. Then a glossographer, with different antiquarian books in front of him, systematically reads and selects all the 'exotic' words. These $\gamma \lambda \hat{\omega}$ ccat are thus taken from Greek books: collections of mirabilia, histories, periegeses, and in general the erudite literature that flourished in the Hellenistic period. There is no instance of an entry that seems the result of actual fieldwork by the glossographer. There is also no hint that these words are actually part of a spoken language. It is thus interesting to notice that we
 Persians/Euboeans say...'), but always $\pi \alpha \rho \alpha ̀ ~ \tau o i ̂ c . . . ~ o r ~ s i m i l a r ~ e x-~$ pressions. Moreover, most entries do not have any verbum dicendi, giving the following syntax: 'among the Persians/Euboeans there is word X'. Though minimal, this syntactical format is in my view revealing of the attitude of our glossographer. ${ }^{23}$ This collection of

[^196]words in P. Oxy. XV 1802 is thus not a collection of words as 'spoken by some people', but as 'read in some books'. It is a bookish collection, a product no doubt of one of the most incredible libraries of the ancient world, where these kinds of 'new' and learned works could be found. This is why Alexandria seems the most likely candidate. While reading in the library, our glossographer would have annotated all these strange words, which he then collected in the glossary.

Moreover, in this glossary dialects and languages are put on the same level. There is no sense that Euboean is Greek and in particular a variety of Ionic, and instead that Chaldaean, whatever branch of Semitic it may be, is in any case another language, not at all related to Greek. Here Persians are equal to Rhodians or Aitolians. We may imagine our glossographer facing a map of the oiкоинє́v $\eta$ and busy to place all these $\gamma \lambda \hat{\omega}$ ccaı at the right place; the criterion is geographical (or ethnographic) but not linguistic. ${ }^{24}$

This papyrus also clearly shows that the first interest in dialects concerns their vocabulary. This may be obvious because we are dealing with a glossary that by default collects $\gamma \lambda \hat{\omega}$ ccau, 'exotic words'. However, in my opinion this idea of 'vocabulary' can be pushed further. In this glossary the lack of differentiation between, say, Persian and Euboean on the one hand, and on the other hand the lack of any sense that these words come from spoken languages, seems to lead almost to a cancellation of the concept of language differentiation. It seems as if the gloss is needed not because of the difference of language but because of difference of context. To give a modern example, it is as if an American explained to a Briton that 'a

[^197]${ }_{24}$ Although the Greeks distinguished between Greek dialects on the one hand and non-Greek languages on the other, a lack of precise taxonomic distinction between dialects (of languages) and languages (as such) among the Greeks, at least before the 1 st c. вс, has been noticed by many scholars, e.g. A. Morpurgo Davies, 'The Greek Notion of Dialect', in T. Harrison (ed.), Greeks and Barbarians (Edinburgh, 2002), 153-71 at 161-3, 169; T. Harrison, 'Herodotus' Conception of Foreign Languages', Histos, 2 (1998; at http://www.dur.ac.uk/Classics/histos/1998/harrison.html).
senior' among the Americans is a final-year undergraduate student. Obviously 'senior' is an English word for the Briton; he or she simply does not know its semantic value 'among the Americans'. It is a question of explaining a particular social habit to someone extraneous to it. For example, when Aristotle-and our glossographer-said that $\mu \hat{\eta} \tau \rho \alpha \iota$ meant writing tablets on which houses were registered at Soli, were they conscious that there was a possibility (though a remote one perhaps) that that word might not have been Greek? Or was $\mu \dot{\eta} \tau \rho \alpha$ just considered a Greek word used in a technical sense, within the administration of a faraway (Greek) city like, say, є" єо оос at Sparta? As it happens, there is indeed a word $\mu \dot{\eta} \tau \rho \alpha$ in Greek, which is moreover present in our glossary in the preceding entry (see P. Oxy. XV 1802, fr. 3, iii. l. 4) and it means a kind of bee. There too Aristotle is the authority quoted. Aristotle thus had at least encountered the word $\mu \dot{\eta} \tau \rho a$ in two semantic contexts. Did he think it was the same word, indicating a bee in mainland Greece and a houseregistration tablet at Soli? Or was the question of non-Greekness raised for $\mu \dot{\eta} \tau \rho a$ in Soli?

It seems that the Hellenistic glossographers gathered all these nouns not so much out of a conscious interest in a different language, but rather out of a curiosity for 'exotic' objects. This also seems to be strengthened by the fact that alongside these words that we would define as dialectal or foreign, in P. Oxy. XV 1802 we also have words that are purely Koine Greek. They do not belong to a particular dialect, but just indicate unfamiliar objects or animals. In this sense, I would argue that from the Hellenistic glossographer's point of view there is no linguistic difference at all between $\mu \epsilon \nu \epsilon \mu a \nu \iota$, allegedly 'water' in Persian, $\mu \iota \nu \hat{\omega} \delta \epsilon \epsilon$, the name of grape-wines in Rhodian dialect, a variety of Doric, and $\mu \epsilon \lambda \omega \delta i a$, a Koine Greek word. There is no recognition that the first is from a different language, the second from a Greek dialect, and the third just an unusual but purely Koine Greek word. They are gathered together here only because they are interesting for what they mean, because the relationship between signified and signifier is not obvious in any of them. The reasons, however, for that and the differences in these three cases are not considered relevant. This view is in fact in keeping with the Aristotelian definition of a $\gamma \lambda \hat{\omega}$ cca:


 $\gamma \lambda \hat{\omega} \tau \tau \alpha \nu$ каì кúpıov єîvaı $\delta v \nu \alpha \tau o ̀ v ~ \tau o ̀ ~ \alpha v ̉ \tau o ́, ~ \mu \grave{\eta} \tau o i ̂ c ~ a v ̉ \tau o i ̂ c ~ \delta \epsilon ́ . ~$
Every noun is standard, or a $\gamma \lambda \hat{\omega} c c a$, a metaphor, an ornament, invented, lengthened, reduced, or altered. I define 'standard noun' as the one which each one uses; $\gamma \lambda \omega$ cca as what the others use. Thus it is clear that it is possible for the same word to be a $\gamma \lambda \hat{\omega}$ cc $\alpha$ and a standard noun, but not for the same people.

A $\gamma \lambda \hat{\omega}$ cca $\alpha$ is what the others say, not what is said in other people's languages. The lack of a highly developed sense of dialects and linguistic differentiation in our papyrus and, I would contend, in early glossography in general, does not mean that the Greeks in the Hellenistic period had no concept of dialects and linguistic differences at all. Of course they did. In my view, however, we must not look in works of glossography for a 'technical' interest in dialectology. It is instead in the exegesis of poetry that this idea is emerging. Here there is an interest in Ionic or Aeolic dialects, as they pertain to reading Homer and Sappho. Instead, the study of the dialect per se does not exist, at least in Hellenistic times. Thus it is probably only because Greek literature was written in different (literary) dialects that Greek grammarians took an interest in different (spoken) dialects. As for dialectal glossography, like P. Oxy. XV 1802, it is an heir of Herodotean icтopí $\eta$ more than a forerunner of modern dialectology.

III
General

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## 17

# Building and Examining Linguistic Phenomena in a Corpus of Representative Papyri 

S. E. Porter and M. B. O'Donnell

## 1. INTRODUCTION

Imagine, if you will, becoming the primary researcher on a study that has received grant funding to study the language people use to greet each other in a variety of situations in modern America. Full of vigour and enthusiasm for this new endeavour, you set out to carry out the necessary field work. 'Surely the data can be collected in a few hours', you think to yourself, 'and then we can move on to the real work of analysis and model development'. To this end you drive to the gates of a large factory in a nearby town as you are aware a new shift of workers are about to clock-in. Clipboard at the ready, you watch as a stream of several hundred people go through the gate and you take note of the words they use to greet each other. Quickly, you have identified the two or three phrases used over and over again. Satisfied, you return to your lab to begin the analysis. However, your keen graduate assistant quickly dampens your enthusiasm-though perhaps saves your professional reputation-by pointing out that collecting data from one shift of factory workers in a non-conversational setting could hardly be considered to entirely represent the use of greeting language in modern America. In response, you suggest a plan to return to the factory each day for the next two weeks and to observe
each of the three different groups of workers as they begin their shifts, thereby adding a longitudinal aspect and also incorporating the variation of the types of people who work day versus night shifts. And further it would be possible to repeat the same two-week study on an annual basis for the next 50 years. 'But does that really address the issue of representativeness', asks your assistant, 'or is it just adding more of the same?' After some reflection, you see that your assistant is probably right and after briefly entertaining the idea of simply extending your factorybased study to include the quad of the local college, you come to the conclusion that ad hoc, opportunistic collection has severe limitations for providing the data you require. What is needed instead is careful consideration of the sample space or population and the appropriate structure of a framework to collect results in a way that can be said to represent the range of variation in this sample. Such questions are not novel and are at the core of any market research survey or the public opinion polls presented on the daily news.

As our analogy makes clear, to mine the documentary papyri as sources of information for the day-to-day language and cultural patterns of the ancient world requires consideration of which particular and how many papyri should be consulted. In the present study, we should like to report on a current initiative underway to compile, annotate, and analyse papyri from a sociolinguistic perspective as part of the OpenText.org project. We draw upon the theory and practice of the field of corpus linguistics within a context of sociolinguistically based register analysis. We first introduce some of the basic elements of corpus linguistics and particularly the elements of corpus design and annotation. As our starting-point we have built upon the small collection of papyrus letters compiled by White, as we have found him to be sensitive to many of the issues of representativeness that should be considered. On the bases of these data, we then explore questions of how the resultant corpus should be utilized and what kind of linguistic model provides a suitable framework for analyzing the resulting data. We then in a preliminary way examine some of the data that our corpus has produced.

## 2. CORPUS LINGUISTICS AS TOOL FOR PAPYROLOGICAL STUDIES

The term 'corpus linguistics' may be foreign to many if not most papyrologists. Most papyrologists are familiar with various corpora of texts, such as those associated with particular archives (e.g. the Zenon Archive) or the finds of a particular place (e.g. Oxyrhynchus). Corpus linguistics, however, refines and develops such an understanding in several ways. Simply defined, corpus linguistics is the computer-aided empirical study of naturally occurring language that has been collected into a representative sample, that is, the corpus. ${ }^{1}$ More specifically:

A corpus, for people who study language and languages, is a collection of specimens of a language as used in real life, in speech or writing, selected as a sizable 'fair sample' of the language as a whole or of some linguistic genre, and hence as a useful source of evidence for research on the language. ${ }^{2}$

To some extent, corpus linguistics is more a method of linguistic analysis than a specific linguistic theory, but with its focus on naturally occurring language, as opposed to idealized invented data, and the use of empirical procedures to discover patterns of language, as opposed to the development of formal rules, corpus linguistics is generally more at home among functional and applied schools of linguistics than the generative tradition most frequently associated with the work of Chomsky. ${ }^{3}$ A classic example of a corpus study is Fries's Structure

[^198]of English, which was carried out before the use of computers became a central part of the definition of corpus linguistics. ${ }^{4}$ He assembled a corpus of nearly 250,000 words, transcribed from telephone conversations with the goal of examining how 'certain native speakers actually do use [English] in natural, practical conversations carrying on the various activities of a community.'. ${ }^{\text {I }}$ In this and earlier corpus-based investigations, Fries was able to make some surprising findings related to the way in which particular grammatical constructions were used by speakers with a range of educational backgrounds, for example, that the passive form is found six times as frequently in letters produced by highly educated writers in comparison to those by the less highly educated. Such insights were contrary to the prescriptive notions presented in the grammar books of the time. ${ }^{6}$ While these conclusions might be reached by other means for modern languages, where native speakers can be consulted or the linguists themselves are native speakers, we are left in the dark when it comes to a language like the Greek of the Hellenistic and Roman periods. Corpus linguistics, however, offers an empirical method of moving from a recorded sample of language in use (i.e. a collection of texts) towards generalizations concerning the correlation of certain language forms and particular social contexts and functions. ${ }^{7}$

The motivation behind our papyrus-letter corpus project conforms with the statement of Pestman concerning modern trends in papyrology that 'papyrologists have gradually become aware of the fact that much more information is to be gained from texts studied in relation with other sources than from single texts taken separately'. ${ }^{8}$

[^199]He mentions collections arranged by topical concerns, such as documents dealing with wet-nurses, notifications of death and the recompilation of dispersed archives, as examples of this trend (what we label below extra-linguistic features). Turner is more concrete in his observation that it is 'the very bulk of the material available' from the documentary papyri that 'gives it significance':

In isolation each text is an antiquarian curiosity; when the texts are collected together, compared and contrasted with each other, in a word subjected to systematic study, results of scientific value can be obtained, though the quantity of material poses a problem for the investigator. ${ }^{9}$

We suggest that corpus linguistics is a method that can be particularly helpful for facilitating the tasks of collection and comparison and contrast, and the use of a computerized corpus begins to address the problem of quantity to which Turner refers.

## 3. CORPUS BUILDING, ANNOTATION, AND ANALYSIS

As illustrated in our opening scenario, the careful design of a language collection is the fundamental and crucial first step in a corpusbased project. If the investigator intends the resulting observations to apply to the language as a whole, or at least to a specific type of language, i.e. private letters, he or she must show how the sample fairly represents this 'population', and that the corpus is annotated in such a way as to capture the desired information. ${ }^{10}$

### 3.1. Corpus Design and Representativeness

A number of concepts in corpus linguistics must be distinguished that help us to focus on the nature of our corpus of papyri. These include the notions of an archive and a corpus, in which an archive is

[^200]a haphazardly assembled collection of data (e.g. the texts discovered at Oxyrhynchus) and a corpus implies some kind of structure and representativeness. There are numerous types of corpora, compiled according to factors such as size, source, purpose, or use. Some corpus linguists distinguish between sample and monitor corpora, the former being limited in sample size and the latter attempting to capture an entire language. Obviously in dealing with the ancient Greek papyri we can only ever hope to have a sample corpus, such as the one we have compiled and annotated. Once certain parameters have been established, one must determine the population and the method for sampling that population. Either internal criteria-such internal features as topic and style-or external criteria-such as date, authorship, provenance-are used. One of the most important factors to keep in mind is the need for the corpus to be structured in such a way that it is representative of the population being surveyed.

### 3.2. Corpus Annotation

The use of computer technology in corpus linguistics requires that the texts be annotated for electronic retrieval purposes. One of the developments and innovations of the OpenText.org project (see www.opentext.org) has been to define the pertinent levels of linguistic annotation, so that the information that is entered into the database about the representative corpus is linguistically precise, retrievable according to established parameters, and potentially insightful. Annotation can occur at any number of different levels. These levels include orthographic, morphological, grammatical, syntactical, semantic, and discursive levels, among others. We have found the categories from sociolinguistically based register analysis useful for annotation as well, including information regarding the field, tenor, and mode of a discourse (see below on these sociosemantic categories). There are various criteria for annotation, but we have found it useful to differentiate levels of discourse and to annotate each level on the basis of its linguistic features. Thus, annotation at the word-group level will differentiate the head term and its types of modifiers, and attempt to categorize these modifiers according to a transparent set of annotation criteria. To date, we have
annotated 45 papyrus letters, totaling 3,341 words. We acknowledge that this is a relatively small corpus, when compared with modernlanguage corpora and even in relation to the number of published papyri. However, it is to our knowledge the first and so far only structured, representative corpus of papyri assembled. This corpus is far short of providing definitive data, but it constitutes a bold move in what we believe is the right direction-that of building the corpus into a much larger one. However, that stated, the linguistic model that we introduce in the next major section is based upon no particular corpus size, and instead squeezes all the data for the largest amount of information.

## 4. CORPUS COMPILATION AND PAPYROLOGICAL STUDIES

Most of the work in corpus linguistics has been done on contemporary languages, and especially on English. Once we turned to designing a representative corpus of Greek documentary letters, we needed to evaluate the criteria for corpus compilation.

### 4.1. Evaluating the Compilation Criteria in White's Light from Ancient Letters

White's collection of documentary papyrus letters, Light from Ancient Letters, ${ }^{11}$ serves as a good example of creating a small representative collection of papyrus letters-even though he does not use the categories of corpus linguistics (nor is his collection of texts searchable). In his introduction, he outlines the three main classification principles that guided him in the selection of letters. They are: (1) to include letters covering the chronological period of the third century BC to the third century AD , (2) to represent the most common 'epistolary categories or types' from this period (i.e. letters of recommendation, family letters, petitions) and (3) 'to include letters from

[^201]various societal levels, from both sexes, from different ethnic groups, and so on? ${ }^{12}$ White's third principle is perhaps the most interesting from a sociolinguistic standpoint, as it is similar to the sampling methodology used in sociolinguistic studies. ${ }^{13}$ White states that he added the third principle to the first two in order 'to properly represent something of the breadth of Greek letter writing.' ${ }^{14} \mathrm{He}$ makes the claim that his collection of letters is broadly representative of ancient Greek letters in general. His selection can be subjected to a number of criticisms, concerning the dates he has chosen, his categorization of epistolary categories, and especially his analysis of sociological data. Nevertheless, at this stage in our research, White's corpus as a conscious effort to create a representative collection may provide the foundation of a representative sample corpus of papyri for sociolinguistic analysis.

### 4.2. Value of a Representative Corpus

The importance of a structured representative corpus for the purposes of linguistic analysis cannot and should not be underestimated. It is only with a structured and representative corpus that quantification of results can move beyond impression to verification of significance-not only for the documentary papyri contained within it but also for the entire corpus of Greek texts included. This provides the means for a significant advance beyond the concordance-based data-gathering of previous generations-as thankful as we are for this kind of necessary previous and preliminary work. With this tool, it is not enough simply to note that there is an occurrence of a particular linguistic phenomenon-whether it be a morphological,

[^202]syntactical, or discourse feature-unless one can say how frequent and in what relation it is found with regard to all the possible instances.

Some general facts regarding the letters that we have annotated are worth noting. We have categorized the letters on the basis of White's socially based classification according to whether the letter is addressed between equals ( $=$ ), from a person of higher social status to lower $(+)$, or from a person of lower social status to higher ( - ). Of the 45 letters, there are fifteen of each. This is the representative structured corpus of papyri with which we begin.

## 5. REGISTER ANALYSIS AND SOCIOLINGUISTIC RECONSTRUCTION

Having established the nature, scope and contents of a structured corpus of documentary papyri, we now wish to explore how such a corpus might be used in papyrological research. This section is formulated around a register-based analysis of texts that we have been pioneering in ancient-text studies, and the next asks questions concerning letter structure. One of the optimistic thoughts of early papyrological study was that it would lead to greater insight into the world in which these documents were written. For example, Milligan, writing in 1910, notes their value for the palaeographer, the historian, and the student of the Bible especially in respect of language, form of expression (e.g. letter), and general social and religious environment. ${ }^{15}$ These major areas-palaeography, history, language, and environment-have continued to be of interest to papyrologists and those in related disciplines. Nevertheless, despite these continued

[^203]efforts in some quarters, ${ }^{16}$ some have increasingly begun to despair that such systematic and widespread efforts are possible. There seem to be two major and obvious reasons for this. One is simply the amount of material that has been uncovered, and another the no doubt justified effort simply to get this material published before worrying about larger theoretical constructs. As a result, Bagnall can rightly point out that 'Many papyrologists do not seek to go beyond reading, translating, and commenting on unpublished papyri.... ${ }^{17}$ But it is more than simply that the evidence is so overwhelming. Pestman notes that one of the 'fascinating aspects of papyrology' is that we are working with primary documents that enable us 'to read indiscretely [sic] a personal letter, to gain insight in a person's financial situation, to catch someone else at evading the law, etc.: reading papyri is like reading a diary'. ${ }^{18}$ After citing a number of individual instances like this, he also cites insight that can be gained into early Christian and literary texts. ${ }^{19}$ We note here that what was at first a more optimistic view of synthesizing the results of papyrological discovery has become a far more personal and intimate attempt to analyse individual instances, with the assumption that such individual instances might have broader significance. However, what if such instances do not deliver what they seem to promise? Besides being apparently overwhelmed by the volume of material, yet wishing to see any instance within a larger collective context, Turner is pessimistic that much can be gained from 'private' documents. He asserts that the notion of private
is not used in the common modern sense of 'intimate', meaning a text that reveals the secret hopes and aspirations of an individual to a select confidant or even eases the soul of the writer in the confessional. Such composition would be beyond the powers of self-expression of the only just literate. Touches of personal idiosyncrasy will of course be found in private letters; but they are relatively rare. Not only do the common formalities of life such as invitations, to dinner or to a wedding, take on set forms: letters, too, tend

[^204]to follow the models set out in the letter books (of which several series have come down to us). ${ }^{20}$

Turner seems to indicate that what is found in a given letter is too small for analysis (hence idiosyncratic) and that it is not pertinent for study anyway as the form is entirely formulaic.

We can certainly understand Turner's scepticism, especially after being involved in the kind of work necessary simply to enter and annotate a small corpus of 45 texts. However, in the course of our work, we begin from a different set of presuppositions. We believe, first, that there is in fact sufficient measurable linguistic difference between texts to warrant their study individually and collectively; second, that register analysis as it has been developed over the years is a sufficiently robust and rigorous theoretical model that can be usefully employed for analysis of texts of any size; and third, that register analysis in its differentiation and integration of a variety of linguistic components related to the forms and functions of discourse is able to integrate grammatical, literary, and social factors into a single heuristic mechanism.

Register is a notion from functional linguistics concerned with what is sometimes called transient varieties of language usage, or 'variety according to use' (as opposed to 'variety according to user' or dialect). The concept of register has been developed to provide a framework for approaching variety of language from the perspective of use in context. Communicative acts, including the writing of papyrus letters, occur in relation to a grid with two major axes, that of other kinds of linguistic behaviour and that of their sociolinguistic context. There is an interplay between these two. Language use varies according to the situation in which the author writes, and language usage reflects the situation in which composition occurs. We can begin to understand each one through the other. Register does not directly determine the specific lexico-grammatical realizations that may be used in a given statement, but it constrains a number of functional components that determine the linguistic parameters in which a text is realized. In this model, there are three conceptual categories that are used to categorize the situation: field, tenor, and mode of discourse. Similarly, the meaning of a text is
described in terms of three components: ideational, interpersonal, and textual meanings. Thus there is a correlation between the situational or sociolinguistic context and the semantic components. These semantic components are activated through realization of components within the lexicogrammar. ${ }^{21}$

### 5.1. Mode of Discourse and the Textual Semantic Component

The mode or medium of discourse activates the textual component in terms of several structuring factors. These include focus (thematization, such as prime and subsequent, theme and rheme, and topic and comment), cohesion, information structure, levels of conjunction, and literary type. Many of the features of the mode of discourse are what are called non-structural features, in the sense that they are features at levels higher than the clause or sentence and extend over larger units of discourse.

A number of useful studies may come out of our database regarding the mode of discourse. Here are some examples of categories of analysis, with inclusion of data from our corpus as appropriate.

### 5.1.1. Conjunctions

There are various types of conjunctions in Greek, but they are often studied as if they all functioned on the same level. The annotated corpus of documentary papyri enables tagging of the texts so that differentiation between word-group, clausal, and paragraph conjunctions is analysable. ${ }^{22}$ For example, we can analyse not only which conjunctions are the most frequent but at what discourse level they function. In the papyri that we have studied, the most common clausal level conjunctions are these (with their number of occurrences

[^205]in this environment given): каí (99 instances), $\delta \epsilon$ (39), ivva (23), ô̂v
 There has been relatively little study of conjunctions, and especially of $\kappa а i ́$ (except by those who wish to label its use in the New Testament as falling under Semitic usage). Despite the contentions of some scholars, paratactic conjunctions were more frequent in Greek than is often realized. ${ }^{23}$ With some localized variation, the distribution of conjunctions in the papyri is roughly consistent with other strata of Greek, such as that of the New Testament: каí and $\delta \epsilon$ are the most frequent, and каi by some margin. This might appear to be counterintuitive to what we should expect from literary language, but it is consistent with the Koine of the papyri and such sources as the Greek of the New Testament.

### 5.1.2. Information structure

There are a number of ways in which information structure is conveyed. Incorporation of information regarding semantic domains/ fields is one of the major means of providing a more precise determination of the information structure of a text. Information structure provides a means of examining not just the topic of a given letter, but how that particular topic and the information related to it are organized in the letter.

### 5.1.3. Focus

The way that particular material is focused in Greek discourse revolves around whether an item is the first element in its respective unit. Each level of discourse has its own structure for establishing marked elements. At the clause level, this focus is called thematization (theme and rheme material). In the clause structure of Greek, the elements of the clause-Subject (S), Predicator (P), Complement (C), and Adjunct (A-the adjunct is used for optional modifying units)—are arranged in various orders in order to thematize material (non-thematic material is rhematic). The first element of the clause (excluding conjunctions, etc.) constitutes the thematized element.

[^206]Table 17.1. Thematization and word-order

| Thematization (frequency of element thematized) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | P | A | S | C | Thematized order |  |
| + | 72 (40\%) | 50 (27\%) | 22 (12\%) | 38 (21\%) | PACS |  |
|  | 69 (48\%) | 22 (15\%) | 22 (15\%) | 31 (22\%) | PCA/S |  |
| - | 33 (44\%) | 11 (15\%) | 10 (13\%) | 21 (28\%) | PCAS |  |
| Word-order (ordering of clausal elements) |  |  |  |  |  |  |
|  | $\mathrm{P}>\mathrm{C}$ | $\mathrm{C}>\mathrm{P}$ | $\mathrm{P}>\mathrm{S}$ | $\mathrm{S}>\mathrm{P}$ | $\mathrm{S}+\mathrm{P}$ | P |
| + | 77 (63\%) | 45 (37\%) | 13 (50\%) | 13 (50\%) | 26 (14\%) | 156 (86\%) |
|  | 74 (66\%) | 38 (34\%) | 15 (45\%) | 18 (55\%) | 33 (18\%) | 152 (82\%) |
|  | 25 (60\%) | 17 (40\%) | 4 (44\%) | 5 (56\%) | 9 (13\%) | 62 (87\%) |

The pattern of frequency of thematized clausal elements in the Greek of the New Testament is: $\mathrm{P}>\mathrm{A}>\mathrm{S}>\mathrm{C}$ (that is, the Predicator occurs more frequently than the Adjunct, than the Subject, than the Complement). In our corpus of papyri, the frequency of elements is as follows: $\mathrm{P}>\mathrm{C}>\mathrm{A}>\mathrm{S}$. In the papyri, the Complement is more frequently thematized than the Adjunct or Subject. This perhaps reflects the fact that 'things' are being treated in the papyri, or it may indicate a downgrading of the grammaticalized Subject (see below), or it may reflect the proportional significance of the address and postscript.

More particularly, the arrangement of thematized elements of the clause in our corpus is as shown in Table 17.1. These data indicate several interesting patterns among the papyri of our corpus. So far as thematization is concerned, the pattern of $\mathrm{P}>\mathrm{C}>\mathrm{A} / \mathrm{S}$ in the letters written to equals indicates that the Predicator is thematized in nearly half the instances, followed in frequency by the Complement, but that the Adjunct and Subject are each relatively infrequent. Letters addressed to those of higher social status also thematize the Predicator most often, but less frequently than those to equals, though more than the letters to those of lower status. The Complement is thematized in letters to those of higher status more frequently than it is in letters to equals, followed in frequency by the Adjunct and then Subject. Those writing to those of lower social status thematize the Predicator less than the other social configurations, and thematize the Adjunct significantly more, followed by the Complement, and then distantly the Subject. This too indicates that writing to a person
of lower social status leads to less emphasis upon the subject (note that first person is less frequent in this type of letter as well, as noted below). The Subject is thematized most in letters to equals, perhaps indicating that a grammaticalized Subject is less thematically important in socially unequal situations (not necessary when writing to an inferior, and presumptuous when writing to a superior).

Word-order for the papyri in our corpus indicates that for all types of letters the Predicator precedes the Complement roughly 60-66 per cent, or two-thirds, of the time. Similar ratios are also to be found among the letter types regarding the Subject and Predicator, with the letters to equals and to those of higher status having slightly more instances of Subject preceding Predicator, while letters to inferiors are equal. Letters to equals have both Subject and Predicator expressed in 18 per cent of instances, while those to inequals are roughly the same with $13 / 14$ per cent. In the vast majority of instances for each type ( 80 per cent + ) the Predicator appears alone. Thus word order is consistent across the types of letters.

### 5.1.4. Cohesion

There are a variety of factors that can be analysed in examining cohesion. Besides conjunctions, one can examine referential relations, such as reference, substitution, and ellipsis, the degrees of reference (grammaticalized, reduced, and implied), and partici-pant-reference chains, and lexical cohesion, including sense relations, collocation, lexical clusters, and chain interaction. Much of this is based on the use of semantic domain/field data ideally (but not yet) provided in the annotation. The study of cohesion is a means of determining how it is that texts hold together, and in this case possibly provides a means of determining those texts that hold together better than others, on the basis of determinable features.

### 5.1.5. Literary type

The final topic to include in relation to the mode of discourse is that of literary type. The material we are discussing here is documentary
papyri. However, there may well be quantifiable differences that can be made in subtypes of letters. Traditionally a number of types of letters have been differentiated, such as letters of recommendation. However, the data that we are collecting may provide for either a more nuanced or refined set of categories, or a list of determinable characteristics to distinguish such a letter form. Such a set of characteristics would allow for the classification of other letters, such as those entered into the database at a later time, those recently discovered and edited, and even those that fall outside the realm of documentary papyri, such as the letters of the New Testament.

### 5.2. Tenor of Discourse and Interpersonal Semantic Component

The tenor of discourse is concerned with participant structure. It is concerned with who is taking part in the discourse, and the relations that exist between the participants, including their status, permanence, and role relationships. There are two kinds of social relationships that enter into considerations: extralinguistic and intralinguistic. Extralinguistic relations are those defined apart from language, although they will often be defined in and by language, and the intralinguistic relations are those defined by the linguistic systems. The former are called first-order social roles and the latter second-order social roles.

In the documentary papyri, one of the key factors to note so far as the extralinguistic social relations are concerned is the rank and status of the many and various officials who either write or receive the letters. On top of this might be others of significance, such as other political and military officials. There are also the intralinguistically formulated interpersonal relations to consider, such as those of questioner, informer, and responder. The extralinguistic relations are determined by extralinguistic data, that is, by what is known of the ancient world. However, the kinds of relations depicted in the papyri themselves might serve as useful data in determining the nature of the function of some of these officials. The intralinguistic relations are determined on the basis of structural data within the papyri themselves to determine participant reference and identity and the attitude (realized through the mood form) of the participant
to others, and non-structural data at the paragraph and higher levels regarding participant status and interaction.

Some of the data worth studying are examined in what follows.

### 5.2.1. Participant reference

Participants are usually introduced by fully grammaticalized reference at the outset of their participation, and then referred to using a combination of reduced and implied forms. Whereas the use of grammaticalized, reduced, and implied forms falls under the discussion of cohesion, as it is the pattern of their usage that causes the discourse to cohere, the reference to the participants and their frequency is what is important to the tenor of discourse.

### 5.2.2. Participant identification

Participant identification is established through extra- and intralinguistic relations, as noted above. Some participants will only be identified on the basis of their rank or status, others by their name, and others simply through reduced (pronominal) or implied reference. Participant identification is important for the issue of participant status.

### 5.2.3. Participant status

Participant status is concerned with the relative levels of relation among the participants. For our purposes, we have identified (so far as possible-we realize there is noise in the data) two types of status, high and low. This may seem particularly crude, but it is useful on two fronts. The first is that it is consonant with what we know of the ancient world, in that the vast majority of people were those who were poor and disenfranchised, as opposed to a very small elite. More important than this, however, is the fact that relational dynamics can be predicated upon the simple fact of whether one is obedient to or commanding others. If through the study of grammaticalization of status relations through definable linguistic criteria more precise status relations can be established, however, that information would add to the serviceability of the database.

Table 17.2. Effect of participant status on word-use

|  | Words | Avg. words/text | Noun/verb ratio | Type/token |
| :--- | :---: | :---: | :---: | :---: |
| + | 1206 | 80.4 | 1.12 | 0.65 |
| $=$ | 1184 | 78.9 | 1.005 | 0.53 |
| - | 951 | 73.2 | 0.95 | 0.53 |

Some of the results of our study concern participant status in relation to the number of words per text, the average number of words per text, the noun/verb ratio, and the type/token ratio (Table 17.2).

These results will merit further examination as the corpus expands. Again, if we take equal social status as the norm for ratios, some patterns emerge. More words tend to be used in texts that are addressed to a person of lower social status, with there being a greater proportion of nouns (content words) to verbs (process words). There is also more lexical variation in terms of new words compared to the number of words used (the type/token ratio indicates the amount of relative repetition, with a ratio of 1.0 indicating that each word used is a different lexeme). This indicates that there is less being said in terms of performing actions than giving of information, perhaps unexpected from one of higher status informing or responding to one of lower status. By contrast, when one addresses an superior there are fewer words used per text, more verbs than nouns proportionately, and less variation in wordchoice. This is inconsistent with a scenario in which one is addressing an inferior in terms of performing actions, rather than giving information (see below).

### 5.2.4. Participant interaction and reality

Participant interaction is concerned with the relations that the various participants have to each other, regardless of their identity or status, and their relation to reality. However, knowledge of these factors is no doubt important in establishing the dynamic of their relationship. We have identified three broad categories of social status relation as a guide to classification of data and retrieval. We have identified high to low $(+)$, low to high $(-)$, and equal to equal $(=)$. The identification of this relative status is not dependent upon a fine-tuning of

Table 17.3. Participation as marked by person and number

|  | 1st Singular | 1st Plural | 2nd Singular | 2nd Plural | 3rd Singular | 3rd Plural |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: |
| + | $60(30 \%)$ | $17(8 \%)$ | $87(40 \%)$ | $13(6 \%)$ | $31(14 \%)$ | $7(2 \%)$ |
| $=$ | $37(20 \%)$ | $24(13 \%)$ | $75(40 \%)$ | $11(6 \%)$ | $35(19 \%)$ | $4(2 \%)$ |
| - | $56(32 \%)$ | $20(11 \%)$ | $65(36 \%)$ | $10(5 \%)$ | $23(13 \%)$ | $3(3 \%)$ |

the various possible status relations in the ancient world, but enables the social dynamic to be at play in analysis of linguistic usage. The semantics of attitude (realized by mood forms) plays a significant role in identifying the interaction. For example, the use of commands from a higher to a lower social status might be expected and is in fact realized in our corpus.

The analysis of the papyri in our corpus leads to some interesting observations regarding participants. We note in Table 17.3 that second person, especially singular, is predominant in the letters written to those of equal social status. The same is true of those written to those of lower social status. However, there is a much larger occurrence of first person in letters written to those of higher social status, with especially greater frequency of occurrence over letters written to those of equal social status (and hence less use of second person). One of the characteristics of letters written to those of higher social status appears to be a focus upon the writer, whereas letters written to equals or to those of lower status focus upon the recipient. There is also a greater frequency of third-person participation in letters written to equals. This pattern of participant reference is in some ways reinforced by the attitude semantics of the verbs. Letters written to those of equal or lower status have similar distributions of mood-forms. However, letters written to those of a higher social level have greater occurrence of indicative and optative forms, and lower occurrence of imperative forms (Table 17.4). One might expect more imperative forms in letters to those of lower social status, directing their behaviour. ${ }^{24}$ There are also more verbs in the indicative in letters to superiors. This indicates that perhaps those

[^207]Table 17.4. Attitude as marked by mood

|  | Indicative | Imperative | Subjunctive | Optative |
| :--- | :---: | :---: | :---: | :---: |
| + | $72(51 \%)$ | $43(30 \%)$ | $25(18 \%)$ | 0 |
| $=$ | $61(49 \%)$ | $34(28 \%)$ | $28(22 \%)$ | 0 |
| - | $67(64 \%)$ | $22(14 \%)$ | $12(11 \%)$ | $4(4 \%)$ |

writing to those of lower social status are defining reality for those of the lower status by means of their use of the directive attitude.

### 5.3. Field of Discourse and Ideational Semantic Component

The field of discourse is concerned with the purpose and the subjectmatter of the communication. The field of discourse may be concerned with extra- or intralinguistic items, and the reasons for their being selected for linguistic action. The field of discourse may include any item that falls within the larger ideational sphere of human existence. The transitivity network is realized at the clause level and is very important for the field of discourse. The lexicon is important for establishing the field of discourse, especially as it is organized by semantic domains/fields.

The documentary papyri have both extra- and intra-linguistic fields of discourse. Extra-linguistic items include the events that are being recorded in the texts, such as a census, or payment of a particular bill, or the like. The range and type of event discussed are circumscribed, although there are a number of references to items that cannot be precisely identified. Intralinguistic items include those that are simply topics discussed within the papyri themselves. They are fewer than the extra-linguistic, but are nevertheless important to establishing the range of fields of discourse of the papyri.

There are a number of features of the documentary papyri that can be studied by means of the field of discourse.

### 5.3.1. Semantic domains, relations, and patterns

The various semantic domains/fields that are invoked and their frequency of occurrence give us insight into the topic of a given
letter. The central topic is usually introduced with a full grammatical form, and then continues to be referenced through either reduced or implied forms throughout the discourse. The extension of the semantic domains across an entire discourse, rather than simply in a given paragraph, helps to establish the topic of the entire discourse.

### 5.3.2. Clauses and their components

As noted above, the clause has four major components-Subject, Predicator, Complement, and Adjunct. These elements comprise the structure of the clause. The exemplification of these elements and their ordering are important for thematization and topicalization. Greek syntax is linear, including its clausal structure, and this analysis allows examination of the clauses as being part of the main line of argument (primary clauses) or development off-line (secondary and embedded clauses). As a result, clauses themselves can be distinguished between primary, secondary, and embedded clauses. We have found it useful to differentiate clauses in this way, based primarily upon the conjunction used to connect them (for the relation of secondary to primary clauses) or whether their Predicator (see this terminology below) is an infinitive or participle (embedded clause). ${ }^{25}$ In terms of the clauses within the papyri we have annotated, the following data are worth noting.

If we take the texts addressed between those of equal social status as the norm, we notice a number of patterns of usage (Table 17.5). Texts addressed to those of lower social status use a far larger number

Table 17.5. Complexity of sentence-structure

|  | Total Clauses | Avg. \# Clauses/Text | Primary | Secondary | Embedded |
| :--- | :---: | :---: | :---: | :---: | :---: |
| + | 312 | 20.8 | $196(63 \%)$ | $43(14 \%)$ | $73(23 \%)$ |
| $=$ | 250 | 16.8 | $172(69 \%)$ | $44(17 \%)$ | $34(14 \%)$ |
| - | 115 | 8.8 | $81(70 \%)$ | $16(14 \%)$ | $18(16 \%)$ |

[^208]of clauses (does this reveal the better educated writing to the less well educated?). There are fewer primary clauses, but a far greater number of embedded clauses. Texts addressed to those of higher social status use a far smaller number of clauses. These clauses have a larger number of primary clauses (slightly more than the norm, and higher than those addressed to lower social status). When these data are taken in relation to the average number of words per text (see above), it indicates that the average clause length is higher in texts addressed to those of higher social status, but with the primary clauses used more frequently. This perhaps reflects the complexity of thought conveyed (there is greater complexity in letters addressed to those of lower status), or possibly the social status factors that allow better writing or the use of (better) scribes.

### 5.3.3. Aspect and causality

Aspect and causality are two semantic components that function at the clause and paragraph level. Aspect describes the writer's perspective on the process, and causality the means by which the action is performed. ${ }^{26}$ Aspectual and causality patterns variegate the ideational component, and play an important part in the transitivity system. The patterns as found in the papyri of our corpus are shown in Tables 17.6 (aspect) and 17.7 (causality).

Balance in the use of the tense-forms is found in all three social strata of letters. The proportionate use of perfective and imperfective aspect is to be expected in the letter form. The causality system is

Table 17.6. Aspect as marked by tense

|  | Perfective | Imperfective | Stative |
| :--- | :--- | :--- | :--- |
| + | $94(41 \%)$ | $93(41 \%)$ | $41(18 \%)$ |
| $=$ | $68(40 \%)$ | $72(42 \%)$ | $32(18 \%)$ |
| - | $58(40 \%)$ | $61(42 \%)$ | $24(18 \%)$ |

[^209]Table 17.7. Causality as marked by voice

|  | Active | Middle | Mid./Pass. | Passive |
| :--- | :--- | :--- | :--- | :--- |
| + | $162(67 \%)$ | $12(5 \%)$ | $61(25 \%)$ | $6(3 \%)$ |
| $=$ | $125(69 \%)$ | $4(3 \%)$ | $42(23 \%)$ | $8(5 \%)$ |
| - | $114(74 \%)$ | $5(3 \%)$ | $31(20 \%)$ | $5(3 \%)$ |

made more complex by inability to differentiate formally the middle and passive forms in the present and perfect tense-forms (we hope to refine this over time). Nevertheless, taking the equal social status as normative, those addressing a lower social level use more middle and passive forms (taking all three categories above together) than those addressing a higher social level, who use more active voice verbs. This may reflect a more agent-oriented orientation, in which the speaker is directly causing action, rather than demoting causality, as occurs in the use of the non-active forms.

### 5.3.4. Transitivity roles

Transitivity, which is realized at the clause level, is concerned with the verb and everything that depends upon it. This means that the Predicator specifies the types of processes; the Subject the kinds and types of participants, and their class, quality, and quantity; the Complement the kinds and types of participants, and their class, quality, and quantity; the Adjunct the types of circumstances of the actions. Included within the parameters of transitivity are the relations between a process and agency, in which there is either an internal or external cause of events (see above on causality).

## 6. LETTER STRUCTURE

The papyrus letter structure is typically described in terms of three components: opening, body, and closing. Other features are also often described, such as the health wish at the beginning of the body. In many instances, the divisions of the letter form are clearly demarcated by linguistic features. A corpus-based study of the letter
form of the documentary papyri potentially enables quantification of the various letter parts, and the building up of a profile of letter features. In other corpus-based studies of literary forms, there is often a confluence of linguistic features at the transition points. For example, the transition from the letter opening to the body normally contains the following features: no conjunction, a Predicator consisting of a word group with a single verb form, usually in the aorist tense-form and often first-person plural. In some instances, the Predicator (of the primary clause) is preceded by an Adjunct consisting of a prepositional word group or a secondary conditional clause.

This type of description has potential application to other corpora of letters, literary and documentary, in order to establish similarities and differences. We are especially interested in the relation of the documentary letter form to the letters of the New Testament. The letter that is closest in size to documentary papyri is the letter to Philemon. Quantification of the characteristics of the divisions of the letter allows for further quantification of the divisions of the letter parts of the New Testament letters.

## 7. CONCLUSION

The building of a structured representative corpus of documentary papyri, and integrating this corpus within the larger corpus of Greek texts of the OpenText.org project, allows for the quantification of a number of linguistic features. These no doubt will prove important in studying this body of materials itself, as well as expanding the potential of the use of this corpus for study of other letter collections. Our results are preliminary, but we believe that they give some hope for future research as we include more texts within our corpus and refine our search criteria. We should like to conclude with two types of comments. The first is on the global level. We believe that the early optimism of papyrologists concerning the implications of their finds can be realized through the use of corpus-based technology and analytical tools such as register analysis. What appears to be overwhelming data can be constrained through the use of technol-
ogy. A tool such as register analysis, which is not predicated upon a particular corpus size or constituent components but is integrative in its analytical framework, provides a reasonable starting-point for such analysis. At the more particular level, we can see that there are a number of patterns that emerge from analysis of specific features of register that potentially open up new insights into the documentary papyri.

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[^0]:    ${ }^{1}$ On the process of chance rediscovery and the early phases of organized excavation see E. G. Turner, Greek Papyri: An Introduction, 2nd edn. (Oxford, 1980), 17-41.

[^1]:    ${ }^{2}$ For brief surveys of research before the 1970s see Gignac, Grammar, i. 41-2; Mandilaras, Verb, 41-4.
    ${ }^{3}$ Ibid. 43.
    ${ }^{4}$ See e.g. Trevor Evans's comments on the modern dispersal of the Zenon Archive and its implications (Ch. 4 below, $\S 5$ ).

    5 Cf. Mandilaras, Verb, 43-4; also Willy Clarysse's remarks on the original edition of the Petrie Papyri in Ch. 3 below.
    $6<$ http://ldab.arts.kuleuven.be $>$.
    $7<$ http://www.trismegistos.org>.

[^2]:    $8<$ http://www.columbia.edu/cu/lweb/projects/digital/apis>.
    $9<$ http://www.papyrology.ox.ac.uk/POxy>.
    10 [http://www.csad.ox.ac.uk](http://www.csad.ox.ac.uk).
    ${ }^{11}$ See e.g. POxy: Oxyrhynchus Online (as at n. 9 above) on multispectral imaging of problematic carbonized Herculaneum papyri and the Derveni papyrus and noncarbonized Oxyrhynchus papyri, and Bowman and Thomas, Tab. Vindol. III, p. 14, on recent advances in imaging techniques applied to the Vindolanda texts.

[^3]:    12 Cf. T. Reinhardt, M. Lapidge, and J. N. Adams (eds.), Aspects of the Language of Latin Prose (Oxford, 2005), 2.

    13 Turner, Greek Papyri, p. vi.
    14 For a demonstration of the linguistic potential of the Arabic papyri see e.g. E. Grob, 'Arabic Epistolography over the Centuries' (forthcoming in Proceedings of the XXV International Congress of Papyrology).

[^4]:    15 This in itself ought to provide an important stimulus to study the material; cf. A. Willi, The Languages of Aristophanes: Aspects of Linguistic Variation in Classical Attic Greek (Oxford, 2003), 2 on linguists' lamenting the 'almost complete lack of sociolinguistic data' to be extracted from classical Greek.

[^5]:    ${ }^{16}$ See e.g. Reinhardt-Lapidge-Adams, Latin Prose, 4-7.

[^6]:    ${ }_{17}$ For the application of the term paraliterary, used of technical documents of various types, see M. Huys and A. Nodar, 'A Catalogue of Paraliterary Papyri (CPP): Presentation of the Project', in J. Frösén, T. Purola, and E. Salmenkivi (eds.), Proceedings of the XXIV International Congress of Papyrology, Helsinki, 1st-7th of August 2004 (Helsinki, 2007), 453-61 at 453-4; cf. also Mark Huys's electronic Catalogue of Paraliterary Papyri (at http://cpp.arts.kuleuven.be).

    18 A monograph-length treatment is forthcoming: F. Schironi, Near Eastern Languages and Hellenistic Erudition in the Oxyrhynchus Glossary (P. Oxy. $1802+4812$ ): Introduction, Text, and Commentary.

[^7]:    ${ }^{19}$ Adams's special contribution, not only to our understanding of Latin, but also to our methodological approaches to Greek documentary sources, needs to be highlighted. His influence on many of the essays included in this volume can be seen in repeated citations of his series of important studies appearing since the 1970s.

[^8]:    ${ }^{20}$ For a recent discussion of classificatory problems cf. M. Choat, Belief and Cult in Fourth-Century Papyri (Turnhout, 2006), 12-15.

[^9]:    ${ }^{21}$ See T. V. Evans, 'Standard Koine Greek in Third Century bс Papyri' (forthcoming in Proceedings of the XXV International Congress of Papyrology).
    ${ }_{22}$ Cf. S.-T. Teodorsson, The Phonology of Ptolemaic Koine (Göteborg, 1977), 17-24.

[^10]:    ${ }^{23}$ J. A. L. Lee, ' 'E $\xi a \pi o \sigma \tau \epsilon ́ \lambda \lambda \omega$ ' in J. Joosten and P. J. Tomson (eds.), Voces Biblicae: Septuagint Greek and its Significance for the New Testament (Leuven, 2007), 99-113 at 113 .

[^11]:    ${ }^{1}$ Cf. P. J. Hopper and E. C. Traugott, Grammaticalization, 2nd edn (Cambridge, 2003), 6-7.
    ${ }^{2}$ B. D. Joseph, Morphology and Universals in Syntactic Change: Evidence from Medieval and Modern Greek (New York, 1990), 114-59. Cf. Horrocks, Greek, 167, 229-32; P. A. Pappas, 'The Microcosm of a Morphological Change: Variation in

[^12]:    ${ }^{5}$ Browning, Greek, 34. He goes on (p. 35) to list the numerous ways of expressing futurity in John Moschos, again without citing examples except one (not of $\theta \epsilon^{\prime} \lambda \omega$ ). The unnamed source from which these data are derived, E. Mihevc-Gabrovec, Études sur la syntaxe de Ioannes Moschos (Ljubljana, 1960), noted (pp. 64-5) only one instance of $\theta \dot{\epsilon} \lambda \omega$ as a future auxiliary in Moschos (see under no. 1 in my list of examples below).
    ${ }^{6}$ Gignac, Grammar, ii. 290, with n. 3. He adds a reference to P. Burguière, Histoire de l'infinitif en grec (Paris, 1960), but this work yields no Koine Greek examples of auxiliary $\theta \epsilon \in \lambda \omega$. Gignac's examples are at no. 6 in my list of examples below.
    ${ }^{7}$ Mandilaras, Verb, 180.
    ${ }^{8}$ Joseph, Morphology, 114, 116, with nn. p. 150.
    ${ }^{9}$ Horrocks, Greek, 76, cf. 229-32.
    ${ }^{10}$ K. Dieterich, Untersuchungen zur Geschichte der griechischen Sprache von der hellenistischen Zeit bis zum 10. Jahrhundert n. Chr. (Leipzig, 1898), 245-6. See nos. 7 to 10 in the list of examples. The lengthy discussion in A. Mirambel, 'Essai sur l'évolution du verbe en grec byzantin', BSL 61 (1966), 167-90 at 179-88, yields one example, the same one as noted by Mihevc-Gabrovec in Moschos (cf. n. 5 above).
    ${ }^{11}$ I have not been able to see J. Psichari, Quelques travaux de linguistique, de philologie et de littérature helléniques (1884-1928), i (Paris, 1930).

[^13]:    12 LSJ, s.v. ${ }^{\epsilon} \theta \epsilon \in \lambda \omega$. The whole section II is headed 'of inanimate things' and examples of that kind are cited first under II.1.; then LSJ add 'very rarely of living things' and proceed to cite an equal number. The distinction has no effect on the lexical meaning, but, as Willy Clarysse pointed out to me after my paper at the 'Buried Linguistic Treasure' Conference, examples applied to inanimates are strong proof of the development. On the same occasion Andreas Willi made the somewhat similar point that the clearest examples will be those where the verb is in the third person, and not in an if-clause (as no. 35 below). The 'etc.' in LSJ covers some good Plato examples that had been in the 7th and 8th edns. but were dropped in the 9th, leaving only R. 370 в, an unconvincing case.
    ${ }^{13}$ Lampe, Lexicon, s.v. $\theta \epsilon ́ \lambda \omega$ IV; Sophocles, Lexicon, s.v. $\theta \epsilon \in \lambda \omega 5$.
    ${ }^{14}$ See BDAG, s.v. $\theta \epsilon \in \lambda \omega$; Louw-Nida, Lexicon, Subdomains 25. 1, 102; 30. 58; 31. 4. J. P. Louw, 'The Analysis of Meaning in Lexicography', FNT 6 (1993), 139-48 at 142 specifically rejects Mark 6: 48 (no. 23 below) in reply to me (J. A. L. Lee, 'The United Bible Societies' Lexicon and its Analysis of Meanings', FNT 5 (1992), 167-89 at 179).
    ${ }^{15} D G E$, Vol. VI, s.v. ${ }^{\epsilon} \theta \dot{\epsilon} \lambda \omega t$ [am]b [ién] $\theta \in \dot{\epsilon} \lambda \omega$.

[^14]:    16 Cf. Hopper and Traugott, Grammaticalization, 6-7, 9.

[^15]:    ${ }^{17}$ Mayser, Grammatik, ii/1. 226.
    18 Cf. T. V. Evans, Verbal Syntax in the Greek Pentateuch: Natural Greek Usage and Hebrew Interference (Oxford, 2001), 229, where $\theta$ ' $\lambda \omega$ is taken to be 'mean/intend': 'surely you don't mean to kill me?' My understanding of $\mu \eta$ ' here as introducing a neutral question makes a slight difference.

[^16]:    19 Cf. Hopper and Traugott, Grammaticalization, 97 on the persistence of alternative future markers in English since the time of Beowulf.
    ${ }^{20}$ A recent Cambridge PhD dissertation by Theodore Markopoulos, 'The Category "Future" in Greek: A Diachronic Investigation of Three Future-referring Periphrastic Forms', deals with $\mu \epsilon ́ \lambda \lambda \omega$, ${ }^{\epsilon} \chi \omega$, and $\theta$ é $\lambda \omega$ from the Hellenistic to the late Medieval period. I thank the author and others for bringing this to my notice after my 'Buried Linguistic Treasure' paper. My examples have been collected independently.

[^17]:    ${ }^{21}$ I first noticed this example some years ago at a seminar on this text by the late Kevin Lee in Sydney. Coles's translation in P. Oxy. was 'Hecabe who wished to kill him'; in C. Collard et al., Euripides: Selected Fragmentary Plays, with Introductions, Translations, and Commentaries, 2 vols. (Warminster, 1995-2004), ii. 50-1, it is 'Hecuba, who was ready to kill him'. There is no comment on $\theta$ '́ $\boldsymbol{\lambda}_{\text {ouca }}$ in either edition.

[^18]:    ${ }^{22}$ In their translation, H. W. Hollander and M. De Jonge, The Testaments of the Twelve Patriarchs: A Commentary (Leiden, 1985), supply 'I would have died' before

[^19]:    ${ }^{1}$ On the editio princeps of the Petrie papyri and its faults, see E. Van 't Dack, 'On a Re-Edition of the Petrie Papyri', AncSoc 3 (1972), 135-47.
    ${ }^{2}$ For a short description of the archive and a list of the sources search for 'Kleon' under 'Archives' on the Trismegistos website (http://www.trismegistos.org).
    ${ }^{3}$ See now http://www.uai-iua.org/english/projects/proj_index_en.asp., where a description is found with a list of volumes under no. 72.

[^20]:    ${ }^{4}$ In PSI V 528 the boy Kleon addresses Zenon as 'father' and ends with the reverential $\epsilon \dot{v} \tau \dot{v} \chi \epsilon \iota$, but Kleon was a boy 'adopted' by Zenon, not his real son; cf. W. Clarysse and K. Vandorpe, Zénon: un homme d'affaires grec à l'ombre des pyramides (Leuven, 1995), 61-2. Cf. 19th-c. European society, where the distance between children and fathers could be such that children addressed their father as 'sir' and used the polite forms 'vous' or 'Sie' instead of the colloquial 'tu' and 'du'; see e.g. W. Besch, Duzen, Siezen, Titulieren: Zur Anrede im Deutschen heute und gestern (Göttingen, 1996), 103-6. For variation of address forms according to social groups, see e.g. R. Fasold, The Sociolinguistics of Language (Oxford, 1990), 16-21.
    ${ }^{5}$ U. von Wilamowitz-Moellendorf, Griechisches Lesebuch, i/2 (Berlin, 1902), 396-7.

[^21]:    ${ }^{6}$ This is a papyrus from Trinity College Dublin, transcribed by Smyly in cahier 3231. 105.
    ${ }^{7}$ Cf. J. A. L. Lee, 'Some Features of the Speech of Jesus in Mark's Gospel', NovT 27 (1985), 1-26, esp. 1-7, who argues that in the Gospel of Mark $\mu \dot{\epsilon} \nu . . . \delta \epsilon$ is only used for the words of Jesus himself. It is one element of a more formal style, stressing Jesus' elevated status.
    ${ }^{8}$ Even in classical authors an abundance of particles is a feature of literary style, cf. J. D. Denniston, The Greek Particles, 2nd edn. (Oxford, 1954), p. xlv, who points out that Andocides and Xenophon are far more reticent than most orators.
    ${ }^{9}$ Mayser, Grammatik ii/3. 147.
    ${ }^{10}$ Cf. J. Blomqvist, Greek Particles in Hellenistic Prose (Lund, 1969), 56.
    ${ }^{11}$ Mayser, Grammatik, ii/3. 170: 'meist aus dem Feder gebildeter Verfasser'. One of his examples is the case from Philonides (Witkowski, Epistulae 4, 1. 13: ov $\mu \grave{\eta}[\nu \dot{\alpha} \lambda \lambda] \dot{\alpha}$ $\pi \epsilon \dot{v} с о \mu \epsilon \theta \alpha \dot{\alpha} \kappa \rho(\beta \dot{\epsilon} \subset \tau \epsilon \rho \circ \nu)$ ). Another is in the rambling letter of the dioiketes Herodes (UPZ II 110). Add also P. Col. Zen. II 115 verso, where 1.2 should be read: [ov̉к $\mathfrak{\alpha}] \gamma v o \hat{\omega}$ ov̉ $\mu \dot{\eta} \nu \dot{\alpha} \lambda \lambda \dot{\alpha} \kappa \alpha[i ́]$ instead of the edition's $] \epsilon \nu o \omega$ ov̉ $\mu \grave{\eta} \nu \dot{\alpha} \nu \alpha(\delta \rho$.) $\kappa \zeta$ [.

[^22]:    12 Other examples are P. Col. Zen. I 18, 1. 3 (Zenon); P. Mich. Zen. 56, 1.1 (Zenon); $S B$ III 7176, 1. 9 .

[^23]:    ${ }^{13}$ Mayser, Grammatik, ii/3. 120. For the diminishing popularity of this particle in the Hellenistic period, see Blomqvist, Greek Particles, 36. The papyrological attestations of ${ }_{\alpha} \rho \alpha$ are distributed as follows: iii вс: 8 ; іі вс: 1 uncertain (P. Hels. I 31); і вс: 0 ; AD i: 1 (in the famous letter of Claudius to the Alexandrians!); AD ii: 16; AD iii: 18; AD iv: 20. Again the particle returns in the later Roman period after having disappeared in Ptolemaic Koine.
    ${ }^{14}$ Only one of them found its way into the DDBDP (P. Cair. Zen. IV 59618).

[^24]:    15 Mayser-Schmoll, Grammatik, i/1. 88.
    ${ }^{16}$ L. Threatte, The Grammar of Attic Inscriptions, i: Phonology (Berlin, 1980), 326-30.
    ${ }^{17}$ W. Clarysse, ‘Egyptian Scribes Writing Greek', CdÉ 68 (1993), 186-201 at 199-200.

[^25]:    ${ }^{18}$ For this royal visit see W. Clarysse, 'A Royal Visit to Memphis and the End of the Second Syrian War', in D. J. Crawford, J. Quaegebeur, and W. Clarysse (eds.), Studies on Ptolemaic Memphis (Leuven, 1980), 83-9; also id., 'The Ptolemies Visiting the Egyptian Chora', in L. Mooren (ed.), Politics, Administration, and Society in the Hellenistic and Roman World: Proceedings of the International Colloquium, Bertinoro 19-24 July 1997 (Leuven, 2000), 29-53 at 37-8 and 45.

    19 Mayser, Grammatik, ii/1. 243 n. 1.
    ${ }^{20}$ Ibid. 247 n. 3. Cf. also S. Amigues, Les Subordonnées finales par ö $\pi \omega$ s en attique classique (Paris, 1977), 104: ivva indicates the 'but vu de l'extérieur, notion abstraite de finalité', whereas with oo $\pi \omega c$ the author expresses 'complexité secrète, préoccupation psychologique, incertitude', etc.

[^26]:    ${ }^{21}$ This view is based on the old collection of material by K. Meisterhans and E. Schwyzer, Grammatik der attischen Inschriften, 3rd edn. (Berlin, 1900), 253. For Greek authors see J. M. Stahl, Kritisch-historische Syntax des griechischen Verbums der klassischen Zeit (Heidelberg, 1907), 477-8, and the table in S. Amigues, Les Subordonnées finales, 100.

[^27]:    22 Mayser, Grammatik, ii/1. 247.
    23 The DDBDP gives two examples, but in P. Oxy. VIII 1119, 1. 23 the supplement [ö $\pi \omega c$ ] should be corrected into [iva], whereas Chrest. Wilck. 50 is wrongly dated in the DDBDP and belongs in fact to the 3rd c. Bc.
    ${ }_{24}$ To be honest, there is also a correction the other way round: in P. Cair. Zen. II 59256, 1. 5 the writer changes $\circ \not \pi \omega c$ to $\ddot{\nu} \nu \alpha$.

[^28]:    ${ }^{25}$ See W. Clarysse, 'Abbreviations and Lexicography', AncSoc 21 (1990), 33-44 at 36.
    ${ }^{26}$ Id., 'Egyptian Scribes', 197.

[^29]:    ${ }^{1}$ Cf. in general R. S. Bagnall and R. Cribiore, Women's Letters from Ancient Egypt, 300 bc-ad 800, with contributions by E. Ahtaridis (Ann Arbor, 2006), 6-8.

[^30]:    ${ }^{2}$ For dittography of the first epsilon cf. below, n. 18.

[^31]:    ${ }^{3}$ For the palaeographic assessment of the original editors, H. C. Youtie and J. G. Winter, see the introductions to $P$. Mich. VIII 467-471. They conclude that P. Mich. VIII 470 and 471 were written by the same scribe. For recent doubts based on orthography see H. Halla-aho, 'Scribes and the Letters of Claudius Terentianus', in H. Solin, M. Leiwo, and H. Halla-aho (eds.), Latin vulgaire-latin tardif VI: Actes du $V I^{e}$ colloque international sur le latin vulgaire et tardif, Helsinki, 29 août-2 septembre 2000 (Hildesheim, 2003), 245-52 at 249.
    ${ }^{4}$ J. N. Adams, The Vulgar Latin of the Letters of Claudius Terentianus (P.Mich. VIII, 467-72) (Manchester, 1977), 3, 84.

[^32]:    ${ }^{5}$ Many of the documents cannot be dated precisely. The earliest dated text which definitely belongs to the Archive is P. Cair. Zen. V 59801, a letter from Apollonios the finance minister to Zenon (c. Oct./Nov. 261 BC ); the latest dated document to mention Zenon is P. L. Bat. XX Suppl. E, which deals with taxes owed by him (14 February 229); the latest known document from the Archive is C. Ord. Ptol. 28, a copy of a royal decree (Nov./Dec. 229). See P. W. Pestman (ed.), A Guide to the Zenon Archive, with contributions by W. Clarysse et al. (P. L. Bat. XXI; Leiden, 1981), 220, 256, 258.

[^33]:    ${ }^{6}$ On general issues of literacy see T. V. Evans, 'Orality, Greek Literacy, and Early Ptolemaic Papyri', in C. J. Mackie (ed.), Oral Performance and its Context (Leiden, 2004), 195-208.

[^34]:    ${ }^{7}$ On the obscure circumstances of discovery see Edgar, P. Mich. Zen., p. 1; also P. Cair. Zen. I, p. v: 'Little is known about the circumstances of this remarkable find. The sebakh-diggers who divided the spoil were naturally shy of speaking about it to anyone connected with the Antiquities Department, and I have tried in vain to ascertain the exact spot of the discovery.'
    ${ }^{8}$ On the modern distribution see especially Pestman, Guide, 3-97.
    ${ }^{9}$ Cf. W. Clarysse, ibid. 273-4.

[^35]:    ${ }^{10}$ Edgar, P. Cair. Zen. II 59287, introd.
    ${ }^{11}$ Edgar, P. Cair. Zen. III 59341, introd.; W. L. Westermann and E. S. Hasenoehrl, P. Col. Zen. I 59, introd.; E. Crisci, Pap. Flor. XXVII, p. 19; see also Seider, Pal. Gr. iii/1. 192-207.

    12 Skeat, P. Lond. VII 1941, introd.; for discussion of this hand see also J. M. S. Cowey, 'Parted Pieces: P.Zaki Aly 15b (= SB XVIII 13617) and P. Lond. VII 1946', in M. Baumbach, H. Köhler, and A. M. Ritter (eds.), Mousopolos Stephanos: Festschrift für Herwig Görgemanns (Heidelberg, 1998), 201-9 at 205.

[^36]:    ${ }^{13}$ Edgar, P. Cair. Zen. I 59054, introd. (P. Cair. Zen. I 59054, a list of items required for boats in preparation for a voyage, 'is written, no doubt by a clerk, in an almost literary hand'; it was found attached to P. Cair. Zen. I 59053, the covering letter, which 'may perhaps have been written by Amyntas himself'); Seider, Pal. Gr. iii/1. 208.
    ${ }^{14}$ Skeat identifies the London papyrus in this set as 'written... in a hasty, semicursive hand' (P. Lond. VII 1935, introd.). This I take on the basis of an examination of the original to be identical with the hand of the Cairo group listed. I am grateful to Willy Clarysse for comments (private communication) on images of some of the Cairo papyri (it should not necessarily be assumed that he accepts the identification of the same hand in all these items). For discussion of the hand see Seider, Pal. Gr. iii/ 1. 212.

    15 Ibid. 16 Skeat, P. Lond. VII 1941, n. to l. 12.

[^37]:    ${ }_{17}$ False aspiration may seem attractive as an alternative explanation. This can occur as a symptom of the general process of 'psilosis' (loss of aspiration), which develops during the Koine period. The $/ \mathrm{h} /$ phoneme eventually disappears from the consonant system (Gignac, Grammar, i. 133-8, esp. 137-8; Horrocks, Greek, 113). There is already evidence for the process in third-century вс papyri, including the Zenon Archive (Mayser and Schmoll, Grammatik, i/1. 173-6). But apart from aspirated $\dot{\alpha} \phi \epsilon ́ c \tau \alpha \lambda_{\kappa} \alpha$ there is no evidence in Amyntas' usage which could be taken to point in this direction, and two cases of aspirated consonants preceding spiritus asper at word-junction, which provide a measure of counter evidence (in the autograph hand oú $\chi \dot{\omega c}$ in P. Cair. Zen. I 59044, 1. 24; in a professional hand $\dot{v} \phi^{\prime} \dot{\eta} \mu \hat{\omega} \nu$ in PSI V 483, 1. 3). Another (in my view still less likely) possibility is that the form $\dot{\alpha} \phi \dot{\epsilon} \subset \tau \alpha \lambda_{\kappa} \alpha$ is the continuation of an old pattern of reduplication in which the perfect
     Schmoll, 176. I thank Anna Morpurgo Davies for advice on this idea.

[^38]:    18 This identification is based on digital images, which are not entirely reliable for distinguishing hands of professional type, but we can at least observe a very great likeness between the scripts. Willy Clarysse points out (private communication) that the only obvious difference between the two papyri lies in the form of the tau, always uncial in P. Cair. Zen. V 59805, but in P. Cair. Zen. I 59047 of cursive type, except in 1. 1. He suggests that the latter may have been a slightly less careful production of the

[^39]:    ${ }^{23}$ Cf. J. N. Adams, Bilingualism and the Latin Language (Cambridge, 2003), 741, on the importance of comparing 'aberrational' features with 'non-aberrational' ones in this type of analysis.
    ${ }^{24}$ Cf. J. A. L. Lee, 'Some Features of the Speech of Jesus in Mark's Gospel', NovT27 (1985), 1-26 at 1-2.
    ${ }^{25}$ The examples are P. Cair. Zen. I 59044, 1. 3 ( $\mu \grave{\epsilon} \nu . . . \delta \epsilon \in$ ); 11. 8-16 ( $\mu \grave{\epsilon} \gamma \mid \gamma \alpha ́ \rho \ldots \delta \epsilon$ ); ll. 10-14 ( $\mu \dot{\epsilon} \nu . . \delta \hat{\epsilon}$ ); 11. 29-30 ( $\mu \dot{\epsilon} \nu o[\hat{v}] \nu . . . \delta \epsilon^{\prime}$ ); P. Cair. Zen. I 59066, ll. 2-9 ( $\mu \dot{\epsilon} \nu . . . \delta \epsilon ́$ ); P. Cair. Zen. I 59110, ll. 10-19 $\mu$ ẹ̀ y $[o \hat{v} \nu] \ldots[\delta] \epsilon ̣$. The case of P. Cair. Zen. I 59044 is interesting. There are four instances of the $\mu \epsilon \dot{\nu} \ldots \delta \epsilon$ complex in the letter, but at ll. 29-30 the $\delta \epsilon$ is only added as a supralinear correction, while at 1.18 we find $\mu \epsilon \grave{\nu} \gamma \alpha^{\prime} \rho$ without following $\delta \epsilon^{\epsilon}$. The feature would seem to be a conscious flourish for Amyntas (cf. Lee, 'Some Features', 1-7).
    ${ }^{26}$ T. V. Evans, 'Greetings from Alexandria', in J. Frösén, T. Purola, and E. Salmenkivi (eds.), Proceedings of the XXIV International Congress of Papyrology, Helsinki, 1st7th of August 2004 (Helsinki, 2007), 299-308.

[^40]:    27 See Evans, 'Valedictory $E P P \Omega C O$ ' (n. 22).
    28 See also the studies mentioned in nn. 26-7.

[^41]:    ${ }^{1}$ K. J. Dover, The Evolution of Greek Prose Style (Oxford, 1997), 24 (with further references).
    ${ }^{2}$ My chosen time-limit reflects an interest in the evolution of Greek prose style from the early Roman empire down to late antiquity, when Egypt underwent considerable changes in administration, economy, and society; on this see R. S. Bagnall, Egypt in Late Antiquity (Princeton, 1993). It goes without saying that evidence of textual revision relevant to language usage and other compositional aspects is also supplied by the non-literary papyri of the Ptolemaic period, and

[^42]:    surfaces here and there in documents written after the fourth century AD down to the last phases of Greek civilization in Egypt under the Arab administration (see e.g. P. Apoll. 10). I shall occasionally draw on this material when it seems to contribute illuminating evidence.
    ${ }^{3}$ Cf. Dover, Evolution, 1-12 on linguistic style as distinct from other levels which can be subsumed under the category of style.

[^43]:    ${ }^{4}$ On the authorship of private letters on papyrus see R. S. Bagnall and R. Cribiore, Women's Letters from Ancient Egypt, 300 bC-AD 800, with contributions by E. Ahtaridis (Ann Arbor, 2006), 59-65, and H. Zilliacus, Zur Sprache griechischer Familienbriefe des III. Jahrhunderts n. Chr. (P. Michigan 214-221) (Helsinki, 1943), 26. J. N. Adams, Bilingualism and the Latin Language (Cambridge, 2003), 84-93 has an excellent discussion of the authorship of inscriptions.
    ${ }^{5}$ P. Maas, Textkritik, 2nd edn. (Leipzig, 1950), 5.
    ${ }^{6}$ On autographs of literary texts on papyrus see most recently T. Dorandi, Nell'officina dei classici: come lavoravano gli autori antichi (Rome, 2007), 48-51; id.,

[^44]:    ${ }^{10}$ Cf. J. L. White, 'The Greek Documentary Letter Tradition Third Century b.c.e. to Third Century c.e.', Semeia, 22 (1981), 89-106 at 96-7 on other elements of affinity between letter-writing and petitioning.
    ${ }^{11}$ J.-L. Fournet, 'Entre document et littérature: la pétition dans l'antiquité tardive', in D. Feissel and J. Gascou (eds.), La Pétition à Byzance (Paris, 2004), 61-74 at 61.
    ${ }^{12}$ R. A. Kaster, Guardians of Language: The Grammarian and Society in Late Antiquity (Berkeley, CA, 1988), 304-5 (no. 90); see also R. Cribiore, Writing, Teachers, and Students in Graeco-Roman Egypt (Atlanta, 1996), 168 no. 3.
    ${ }^{13}$ P. Oxy. XLVII 3366, ll. $40-70=$ P. Coll.Youtie II 66, ll. 40-70, text C. It is probable that the petition dates from ad 258 or 259 ; see P. J. Parsons, 'Petitions and a Letter: The Grammarian's Complaint', in A. E. Hanson (ed.), Collectanea papyrologica: Texts Published in Honor of H. C. Youtie (Bonn, 1976), ii. 409-46 at 419; also W. H. M. Liesker, 'The Dates of Valerian Caesar and Saloninus', in B. G. Mandilaras (ed.), Proceedings of the XVIII International Congress of Papyrology, Athens 25-31 May 1986 (Athens, 1988), ii. 455-63 at 460, who argues (n. 23) for a date between mid-January and late March 258.
    ${ }^{14}$ See Parsons, 'Petitions', 412, who suggests (plausibly, in my opinion) that the interlinear corrections are Lollianus' own work. The same short roll contains on the front an earlier, yet partial, draft of the same petition (text A, ll. 1-16), written in a sub-literary script which, as Parsons puts it, 'may or may not be his [Lollianus'] attempt at a more formal script'.
    ${ }^{15}$ P. Oxy. XLVII 3366, 1. 61a $=$ P. Coll.Youtie II 66, 1. 61a. This passage will be cited in full below.
    ${ }^{16}$ P. Hamb. IV, p. 232 no. 100.
    ${ }^{17}$ P. J. Sijpesteijn, Nouvelle Liste des gymnasiarques des métropoles de l'Égypte romaine (Zutphen, 1986), 53 no. 25.

[^45]:    18 P. Vind. Tand. 2, ll. 4-5. On the addressee see Sijpesteijn and Worp, P. Vind. Tand., p. 9. If they are right in suggesting that the petition, which is datable to the reign of Gordian III, was written in the year after the past regnal year 2 mentioned in l. 13, then it must date from the third year of Gordian, i.e. 239/40. The prefecture of L . Lucretius Annianus is attested for the second half of May 239. See P. Mich. XIV 675, ll. 14-25; G. Bastianini, 'Il prefetto d’Egitto (30 a.C.-297 d.C.): Addenda (1973-1985)', ANRW II. 10. 1 (Berlin, 1988), 503-17 at 514. But according to P. J. Parsons, 'M. Aurelius Zeno Januarius', in D. H. Samuel (ed.), Proceedings of the Twelfth International Congress of Papyrology (Toronto, 1970), 389-97 at 394, Annianus 'was in office at some time in 239/40' since he reports ( n . 27) that 'an unpublished Oxyrhynchus document mentions him in the third year of Gordian'. See further Rea, $P$. Oxy. XLIII 3108, introd., who deals with the question of possible overlaps with Cn. Domitius Philippus.

    19 On modern societies see Spolsky, Sociolinguistics, 21-2; D. B. Parkinson, Constructing the Social Context of Communication: Terms of Address in Egyptian Arabic (Berlin, 1985), 225. On Greek forms of address see E. Dickey, Greek Forms of Address from Herodotus to Lucian (Oxford, 1996).

[^46]:    ${ }^{20}$ H. Zilliacus, Zur Abundanz der spätgriechischen Gebrauchssprache (Helsinki, 1967); id., Untersuchungen zu den abstrakten Anredeformen und Höflichkeitstiteln im Griechischen (Helsinki, 1949), esp. 39-50. On titles of address in Greek Christian letters see L. Dinneen, Titles of Address in Christian Greek Epistolography to 527 AD (Washington, DC, 1929); on titles in the papyri of the Roman and Byzantine periods see O. Hornickel, Ehren- und Rangprädikate in den Papyrusurkunden: Ein Beitrag zum römischen und byzantinischen Titelwesen (Giessen, 1930); A. Arjava, 'Zum Gebrauch der griechischen Rangprädikate des Senatorenstandes in den Papyri und Inschriften', Tyche, 6 (1991), 17-35; also A. Stein, 'Griechische Rangtitel in der römischen Kaiserzeit', Wiener Studien, 34 (1912), 160-70.
    ${ }^{21}$ PSI XIV 1422, 1. 32. Frösén and Hagedorn, P. Bub. I, p. 173 noted the uncommon use of $\theta \epsilon o \phi \iota \lambda \epsilon \in \tau \tau \alpha \tau o c$ with reference to the Roman emperor before Constantine. In third-century Egypt it is attested for Elagabalus (P. Bub. I 4, col. xlviii, l. 6), Maximinus Thrax (SB I 421, 1. 4), Decius (SPP XX 54, col. ii, 1. 11), and Diocletian
     Kaícap: Die Ehrenprädikate in der Titulatur der Thronfolger des 3. Jh. n. Chr. nach den Papyri', ZPE 99 (1993), 97-111 at 102 n. 32. In other provinces of the empire it is known for Severus Alexander (SEG XXXI 677B. 2) and some of his successors; see M. Peachin, Roman Imperial Titulature and Chronology, AD 235-284 (Amsterdam, 1990), 512, who lists material referring to Maximinus Thrax, Gordian III (add his no. 180 on p. 189), Philippus Arabs, Decius, and his son Hostilianus, as well as to Valerian II and Saloninus. At Augusta Traiana (Thrace) $\theta \epsilon \sigma \phi \iota \lambda \epsilon \subset \tau \alpha ́ \tau \eta$ is also attested for Marcia Otacilia Severa, the consort of Philippus Arabs (SEG XLVI 843.5). P. Weiss, 'Ein Altar für Gordian III., die älteren Gordiane und die Severer aus Aigeai (Kilikien)', Chiron, 12 (1982), 191-205 at 204 n .53 observes that the notion of the emperor's liberality as a manifestation of $\theta \epsilon о ф \iota \lambda о ́ \tau \eta с$ may lurk behind Menander Rhetor's description (i. 361. 20-3; p. 62 Russell-Wilson) of $\theta \epsilon о ф \iota \lambda o ́ \tau \eta c$ as a constituent element of city encomia. (In Egypt the city of Heracleopolis is called $\theta \epsilon o \phi \iota \lambda \dot{\eta} c$ in third-century documents; see most recently F. Mitthof, Griechische Texte XVI: Neue Dokumente aus dem römischen und spätantiken Ägypten zu Verwaltung und Reichsgeschichte (1.-7. Jh. n. Chr.) (Vienna, 2002), 110.)

[^47]:    ${ }^{22}$ P. Apoll. 42, l. 1 (2nd half of vii AD). The addressee is the pagarch of Apollonopolis (Edfu).

    23 As Maehler, BGU XI. i, p. 3 observed, BGU II 378, ll. 12-13 (= Chrest. Mitt. 60, 11. 12-13) shows that Agrippinus was serving as a soldier of the legio II Traiana fortis in April AD 147.
    ${ }_{24}$ Maehler, $B G U$ XI. i, p. 1.

[^48]:    ${ }^{25}$ PIR ${ }^{2}$ vii/2. 134-5 no. 358; Bastianini, 'Prefetto d'Egitto', 509; P. Bureth, 'Le préfet d’Égypte ( 30 av. J.-C.-297 ap. J.-C.) : état présent de la documentation en 1973', ANRW II 10. 1 (Berlin, 1988), 472-502 at 486; G. Bastianini, 'Lista dei prefetti d'Egitto dal $30^{\mathrm{a}}$ al 299p', ZPE 17 (1975), 263-328 at 292-4.
    ${ }^{26}$ On the date of this petition see G. Bastianini, Gli strateghi dell'Arsinoites in epoca romana (Brussels, 1972), 53; also J. Whitehorne, Strategi and Royal Scribes of Roman Egypt (Florence, 2006), 42.
    ${ }^{27}$ On this formula see Zilliacus, Untersuchungen, 37. The usage of кv́pıє and $\delta \epsilon ́ c \pi o \tau \alpha$ has most recently been reassessed by E. Dickey, 'Kv́pıє, $\triangle \epsilon \in \epsilon \subset \pi о \tau \alpha$, Domine: Greek Politeness in the Roman Empire', JHS 121 (2001), 1-11, esp. 3-9.

[^49]:    ${ }^{28}$ Perhaps it was submitted to the prefect in the spring of ad 179 ；see N．Lewis， ＇Notationes legentis＇，BASP 20 （1983），55－8 at 55.
    ${ }^{29}$ E．Fraenkel，Noch einmal Kolon und Satz（Munich，1965），30－40 argued that when a vocative is placed within a clause，it usually precedes or follows an emphatic unit of utterance，or indeed separates two or more elements of such a unit．Cf． K．J．Dover，Greek Word Order（Cambridge，1960），32－4 for criticisms of the term ＇emphasis＇；I regard his terminology as more serviceable．
    ${ }^{30}$ Cf．Dickey，Greek Forms of Address，197－9 on this function of vocatives which stand at the beginning of a sentence．

[^50]:    ${ }^{31}$ On the authorship of the main text and of the interlineation cf. n. 14 above. On the date of the petition see n .13 .
    ${ }^{32}$ BDR, Grammatik, $\S 284.1$; N. Turner, Syntax, vol. iii of J. H. Moulton, A Grammar of New Testament Greek (Edinburgh, 1963), 189-90. Kühner-Gerth, i. 619 collect evidence from classical Greek.

[^51]:    ${ }^{33}$ On Ammon's level of education see Maresch-Andorlini, P. Ammon II, pp. 21-2, and also Willis-Maresch, P. Ammon I, p. 1. On his brother Harpocration see G. Browne, 'Harpocration Panegyrista', ICS 2 (1977), 184-96 at 193-5; id., 'A Panegyrist from Panopolis', in P. J. Parsons, J. R. Rea, E. G. Turner, and R. A. Coles (eds.), Proceedings of the XIV International Congress of Papyrologists (Oxford, 24-31 July 1974) (London, 1975), 29-33 at 31-2; apparently he cannot be identified with any of the other known Harpocrations; cf. also Kaster, Guardians of Language, 411 no. 226.
    ${ }^{34}$ Maresch and Andorlini, P. Ammon II, pp. 43-5.

[^52]:    ${ }^{35}$ On this epistolary topos see S. K. Stowers, Letter Writing in Greco-Roman Antiquity (Philadelphia, 1986), 186; P. Cugusi, Evoluzione e forme dell' epistolografia latina nella tarda Repubblica e nei primi due secoli dell'Impero con cenni sull'epistolografia preciceroniana (Rome, 1983), 76; H. Koskenniemi, Studien zur Idee und Phraseologie des griechischen Briefes bis 400 n. Chr. (Helsinki, 1956), 64-7.
    ${ }^{36}$ For the expression 'produce a letter' in a 4th-c. papyrus see P. Abinn. 31, 11. 13-14 (c. 340s): $\dot{\epsilon \pi \iota c т о \lambda \grave{\eta} \nu \ldots \mid \text { ойк } \dot{\epsilon} \pi о i ́ \eta \subset \alpha . ~ L a t e r ~ e x a m p l e s ~ o f ~ t h i s ~ u s a g e ~ i n c l u d e ~}$ P. Ant. II 94, l. 15 (vi AD); P. Oxy. I 157, l. 4 (vi ad); P. Giss. 57, 1.2 (vi/vii AD); CPR XIV 54, 1.2 (vii/viii ad); P. Apoll. 27, 1.1 (vii Ad).
    ${ }^{37}$ Parsons, 'Petitions', 412, suggests that the script, a small hand of a type often used for commentaries, may be ascribed to Lollianus.

[^53]:    ${ }^{38}$ For examples in Attic prose see D. iv. 37; Ep. iii. 2; in late-antique epistolography Basil. Ep. 82. 26, 190. 3. 14 (ed. Courtonne); in literary prose of the Roman period Arr. An. vii. 23. 6; Ael. VH xii. 51; Cass. Dio lxi. 3. 2. Cf. the specimens of the type
     xiii. $87(607 \mathrm{f})$; Iul. Ep. 379 d. Aristid. 1. 73 (443. 26 Keil) is also relevant.
    ${ }^{39}$ In general, on mixtures of register see Dover, Evolution, 53-6.
    ${ }^{40}$ For 3rd-c. examples of $\grave{\epsilon} \pi \iota c \tau o \lambda \dot{\eta}$ after $\pi \epsilon \prime \mu \pi \omega$ see BGUIII 814, ll. 29, 31-2; P. Mert. I 28, ll. 5-6; P. Tebt. II 424, 1. 2; SB III 6222, 1. 5; P. Oxy. XLIX 3507, 1. 3; P. Harr. II 235, ll. 13-14; $\dot{\epsilon} \pi \iota c \tau o \lambda \dot{\eta}($ (or $\grave{\epsilon} \pi \iota c \tau o ́ \lambda \iota o v)$ after $\dot{\alpha} \pi o c \tau \epsilon ́ \lambda \lambda \omega$ can be seen at SBXIV 12172, ll. 5-6 (ad 7); P. Berl. Zill. 10, ll. 1-2 (i/ii ad) (on the language of this letter see Zilliacus, P. Berl. Zill., p. 73); P. Oxy. XII 1481, ll. 2-3 (ii ad); P. Mich. XV 752, ll. 30-1 (ii ad); P. Mich. VIII 517, 11. 6-7 (iii/iv Ad); P. Oxy. LIX 4002, 1.3 (iv/v AD). The term $\epsilon$ $\pi \iota c \tau o \lambda \eta$ ' is used in preference to $\gamma \rho \alpha ́ \mu \mu \alpha(\tau \alpha)$ after verbs of writing; cf. CPRVII 57 above, as well as e.g. ll. 4-5 of P. Oxy. I 119 (= A. Deissmann, Light from the Ancient East: The New Testament Illustrated by Recently Discovered Texts of the Graeco-Roman World, trans. L. R. M. Strachan from rev. 4th German edn. (London, 1927), no. 19; J. Hengstl (ed.), Griechische Papyri aus Ägypten als Zeugnisse des öffentlichen und privaten Lebens, with the collaboration of G. Häge and H. Kühnert (Munich, 1978), no. 82), which preserves a piece of colloquial prose of the 2nd or 3rd c. AD; on the language of this letter see A. Debrunner and A. Scherer, Geschichte der griechischen Sprache, ii: Grundfragen und Grundzüge des nachklassischen Griechisch, 2nd edn. (Berlin, 1969), § 13; E. Sabbadini, 'Remarques d'orthographe et de grammaire sur le papyrus non-littéraire, Oxyrhynchos 119', StudPap 6 (1967), 81-94 at 85-94; P. Mourlon Beernaert, 'La lettre du petit égyptien', EtClass 30 (1962), 311-18

[^54]:    ${ }^{44}$ See And. Pa. 17; Arist. HA 521a7; [D.] xxv. 101; D.H. Is. 19. 4; Gal. UP vi. 16 (i. 358. 4 Helmreich $=$ iii. 491. 12 Kühn); [Luc.] Cyn. 7; Synes. Insomn. 2 (146. 12 Terzaghi).
    ${ }^{45}$ See Aristid. xxxiii. 30 (235. 9 Keil); [Gal.] Hum. xix. 488. 7 Kühn. Cf. ä äavtac ä $\pi \alpha<\iota \pi \alpha ́ v \tau \alpha$ in [D.] xxv. 101.

[^55]:    46 SB XII 10803, edited by B. R. Rees, 'Theophanes of Hermopolis Magna', Bulletin of the John Rylands Library, 51 (1968), 164-83 at 176-9 with plate opposite p. 176, and republished with commentary by A. Moscadi, 'Le lettere dell'archivio di Teofane', Aegyptus, 50 (1970), 88-154 at 147-9 (no. 12). The papyrus belongs to the Theophanes archive, on which see H. Cadell, 'Les archives de Théophanès d'Hermoupolis: documents pour l'histoire', in L. Criscuolo and G. Geraci (eds.), Egitto e storia antica dall'ellenismo all'età araba: bilancio di un confronto (Bologna, 1989), 315-23, and CEL II 324-5, III 277. In ll. 5-6 Theophanes, who is known to have made a journey to Syria (on which see J. Matthews, The Journey of Theophanes: Travel, Business, and Daily Life in the Roman East (New Haven, 2006); H.-J. Drexhage, 'Ein Monat in Antiochia: Lebenshaltungskosten und Ernährungsverhalten des Theophanes im Payni (26. Mai-24. Juni) ca. 318 n . Chr.', Münstersche Beiträge zur antiken Handelsgeschichte, 17.1 (1998), 1-10), is said to be on his way to Alexandria. As Worp has observed (CPR XVIIA, p. 50), his journey had been over by 24 July 321, or started some time after that day; see further F. Mitthof, 'Anordnung des rationalis Vitalis betreffs der Instandsetzung von Schiffen: Eine Neuedition von P. Vind.Bosw. 14', ZPE 129 (2000), 259-64 at 261-2; Matthews, Journey, 34-5.

[^56]:    47 Dover, Evolution, 26-7. For a fuller treatment of prepositives and postpositives, see id., Word Order, 12-14.

    48 Cf. id., Evolution, 134.
    ${ }^{49}$ Cf. ibid. 137, table 7. 2, where the intervals of recurrence in some classical prose texts are shown.
    ${ }^{50}$ Rees, 'Theophanes', 178 aptly describes Anatolius' substitution of $\epsilon \lambda \epsilon \epsilon \mathcal{v}^{\prime} \epsilon \epsilon \tau \alpha \iota$ for $\ddot{\eta} \xi \epsilon \iota$ as 'a nice comment on his sense of linguistic fitness'.

[^57]:    ${ }^{51}$ On the complex question of determinants of use see G. H. R. Horsley, 'Papyrology and the Greek Language: A Fragmentary Abecedarius of Desiderata for Future Study', in A. Bülow-Jacobsen (ed.), Proceedings of the $20^{\text {th }}$ International Congress of Papyrologists, Copenhagen, 23-29 August, 1992 (Copenhagen, 1994), 48-70 at 63.

    52 Cf. Denniston, Prose Style, 117-18 on classical Attic prose.

[^58]:    59 J．D．Denniston，The Greek Particles，2nd edn．（Oxford，1954），202；W．Horn， ＇Quaestiones ad Xenophontis elocutionem pertinentes＇（diss．Halle，1926）．As it happens，a fragment from a parchment manuscript of Xenophon＇s Symposium of the late 2nd or early 3 rd c．（P．Ant．I 26）was unearthed on the site of ancient Antinoopolis；for its find spot see J．de M．Johnson，＇Antinoë and its Papyri： Excavation by the Graeco－Roman Branch，1913－14＇，JEA 1 （1914），168－81 at 177.
    
    
     $\gamma \rho a ́ \phi[\epsilon]$, P．Mich．VIII 490 （ii Ad），ll．12－13（＝J．L．White，Light from Ancient Letters
    
    
    
     J．Chapa，Letters of Condolence in Greek Papyri（Florence，1998），no．6，ll．13－14）：öть
    
     pronoun in the first clause may also be understood，see BGU IV 1204 （28 вс），ll．4－6 （＝B．Olsson，Papyrusbriefe aus der frühesten Römerzeit（Uppsala，1925），no．2，11．4－6；
     $\pi \lambda o \hat{o} \nu \mid \chi \omega \rho i ́ \zeta \epsilon c \theta a \iota$. каi cù $\delta \epsilon \grave{\delta \iota a v \delta \rho a \gamma \alpha ́ \theta \epsilon \iota, ~ P . ~ T e b t . ~ I I ~} 408$（ad 3），ll．14－17（＝Olsson，
    
    
     P．Harr．I 108 （early iv AD；see N．Gonis，＇Revisions of Some Harris Papyri（Letters）＇，
    

[^59]:    ${ }^{61}$ P．Oxy．VII 1070，reprinted by G．Tibiletti，Le lettere private nei papiri greci del III e IV secolo d．C．：tra paganesimo e cristianesimo（Milan，1979），no． 16.
    ${ }^{62}$ Literary examples of this usage include Plb．3．87；Jos．AJ 8．168，15．25，16．260； Plu．Marc．2．5，virt．mor． 6 （ 445 E ）；D．Chr．11．11．A touch of balance is added if $\mu \epsilon v^{\prime}$ or $\tau \epsilon$ precedes；see e．g．Gal．UP 9． 13 （ii．40． 9 Helmreich $=$ iii．737． 14 Kühn）．
    ${ }^{63}$ Them．Or．15． 186 c（i．271．1－3 Schenkl／Downey）．Thus the emphasis in Eutropius＇characterization（8．19．1）of Severus as praeter bellicam gloriam etiam ciuilibus studiis clarus is altered in Paeanius＇translation，$[\ldots] \mu \dot{\epsilon} \nu \boldsymbol{\epsilon} v \nu \tau o v ́ \tau o \iota c ~ \lambda a \mu \pi \rho o ́ c$,
    

[^60]:    ${ }^{64}$ P. Oxy. VII 1070. Examples of $\left(b_{1}\right)$ : ll. 9-10, 33-4; of (a): ll. 22-3, 36-7; correction of $(a)$ to $\left(b_{1}\right)$ : 11. 3-4.
    ${ }^{65}$ P. Oxy. XLVII 3366, ll. 61-2 = P. Coll.Youtie II 66, ll. 61-2, text C. The translation is the editor's.
    ${ }^{66}$ On the effect of sequences divided by $\mu \epsilon \in v$ and $\delta \epsilon$ on the reader see Dover, Evolution, 155.

[^61]:    ${ }^{67}$ P. Oxy. XIV 1659, ll. 122-3. In fact the whole sequence was crossed out at a later stage but the reason behind this deletion is not linguistic in nature.
    ${ }^{68}$ On the notion of register see D. Biber, 'An Analytical Framework for Register Studies', in id. and E. Finegan (eds.), Sociolinguistic Perspectives on Register (Oxford, 1994), 31-56 at 32, 51-3; K. Wales, A Dictionary of Stylistics (London, 1989), 397-9.

    69 G. Thomas, Linguistic Purism (London, 1991), 131-3.
    ${ }^{70}$ For features of puristic language in the non-literary papyri see C. Hernández Lara, Estudios sobre el aticismo de Caritón de Afrodisias (Amsterdam, 1994), 142-219. For purism within the framework of cultural history and the evolution of the Greek language in the Roman empire see G. Horrocks, Greek: A History of the Language and its Speakers (London, 1997), 79-86; S. Swain, Hellenism and Empire: Language, Classicism, and Power in the Greek World, ad 50-250 (Oxford, 1996), 17-64, Browning, Greek, 44-50. Book fragments containing Atticist lexica include P. Lond. Lit. 183 (ii ad?) and P. Oxy. VII 1012 (iii AD), fr. 16 and 17. In addition, P. Oxy. XVII 2087 (ii ad) and P. Oxy. XV 1803 (vi ad) share some of their glosses with Phrynichus' Sophist's Stock-in-Trade and Moeris' lexicon;
     154 (2005), 79-85 at 84; M. Naoumides, 'The Fragments of Greek Lexicography in the Papyri', in Classical Studies Presented to Ben Edwin Perry by his Students and Colleagues at the University of Illinois, 1924-60 (Urbana, IL, 1969), 181-202 at 200.
    ${ }^{71}$ Cf. Thomas, Purism, 88-91 on censorship and self-censorship as puristic modes of activity.

[^62]:    72 Frisk, P. Got., p. 25. For data on the ${ }^{\prime \prime} \nu \alpha$ : ö $\pi \omega c$ ratio, see Willy Clarysse in Chapter 3. On ö $\pi \omega c$ and ${ }^{\prime \prime} \nu \alpha$ in unpretentious post-classical prose see Mayser, Grammatik, ii/1. 247-52, 256, 257, 261; Schwyzer-Debrunner, ii. 673; BDR, Grammatik, § 369. 4 n. 7; Turner, Syntax, 106.
    ${ }^{73}$ Cf. Horsley, 'Papyrology', 64.
    ${ }^{74}$ See Clarysse in Chapter 3, and P. Tebt. I 26, l. 23 (114 BC).
    ${ }^{75}$ In Attic prose see Isoc. Areop. 21; Xen. HG vii. 1. 35, Cyr. ii. 4. 21; Hyp. Epit. 17 (col. vii. 2-5). In literary prose of the Hellenistic and Roman periods Plb. iii. 2. 6, xxxi. 33. 4; Aristid. xxxix. 14 (323. 12 Keil); Orig. Comm. in Eu. Io. xxxii. 6. 70; Io. Chrys. in Matth. PG lvii. 315. 6-7, in Acta Apost. PG lx. 97. 1; Eus. PG xxii. 885 c. 5-7.

[^63]:    ${ }^{76}$ For the analytical construction with $i v a$ as a rival of the infinitive of purpose see BDR, Grammatik, $\$ 390$; Turner, Syntax, 134-5. Closely related is the widespread use of iva instead of the infinitive after verbs of willing, asking, permitting, commanding, causing, and the like. For occurrences in the non-literary papyri see H. Serz, 'Der Infinitiv in den griechischen Papyri der Kaiserzeit (von Augustus bis Diokletian)' (diss. Erlangen, 1920), 62-3; P. Aalto, Studien zur Geschichte des Infinitivs im Griechischen (Helsinki, 1953), 100; Mandilaras, Verb, $\$ \$ 584,586$. For those in the New Testament and other literature of the first century ad see BDR, Grammatik, $\$ 392$. 1af; Turner, Syntax, 103-4; WNT6 s.v. iva II 1a; Aalto, Studien, 99. On the novels see A. D. Papanikolaou, Chariton-Studien: Untersuchungen zur Sprache und Chronologie der griechischen Romane (Göttingen, 1973), 149-50; on classicizing prose see K. Hult, Syntactic Variation in Greek of the 5th Century ad (Göteborg, 1990), 156; Aalto, Studien, 99. See further the evidence collected by Hult, Syntactic Variation, 232-44. For later prose see ibid. 171-2; Aalto, Studien, 100-1.

    77 Thomas, Purism, 64.

[^64]:    * This study is part of a 'Centres of Excellence in Research' programme of the Academy of Finland. I am grateful to Robert Whiting for his revision of my English and his substantial comments on some directives.
    ${ }^{1}$ There is no clear-cut difference between private and public/official documents in these letters. All were written by persons functioning within the same military network.
    ${ }^{2}$ Taken philosophically, the propositional content of directives is to get the world to match the words, since directive expressions try to get someone to bring about a future state of affairs (J. R. Searle, 'A Classification of Illocutionary Acts', Language in Society, 5 (1976), 1-24 at 4, 15). Searle calls this world-to-word fit. Other illocutionary or speech acts include statements, descriptions, assertions, explanations, vows, promises, etc. All illocutions have at least three important dimensions: illocutionary point, direction or fit, and psychological state or sincerity condition (i.e. it is possible to say in the third person 'he stated that $p$, but he didn't really believe that $p$ ', but not in the first person 'I state that $p$, but do not believe that $p$ ').

[^65]:    ${ }^{3}$ In contrast to R. Risselada, Imperatives and Other Directive Expressions in Latin: A Study in the Pragmatics of a Dead Language (Amsterdam, 1993), in the present essay pragmatics lies in the background. I believe that the complex questions of morphosyntax and phonology have to be studied as accurately as possible before we can reliably approach pragmatics in low registers.
    ${ }^{4}$ S. Ervin-Tripp, 'Is Sybil There? The Structure of Some American English Directives', Language in Society, 5 (1976), 25-66 at 29, made a distinction between embedded imperatives and permission directives: e.g. Could you gimme a beer and May I have a beer, respectively.
    ${ }_{5}$ Ibid.

[^66]:    6 Ibid. 43.
    7 Ibid. 22.
    8 The idiom was included in the model letter for ( $\tau$ úтос) фıлєкóc and ( $\tau$ úтос) систатıко́с. See the so-called Demetrius Rhetor, Formae epistolicae (i вс/ad i, ed. V.
     $\tau \iota v o c$ '́ $\chi \omega \subset \iota \chi \rho \epsilon$ 'av 'Please visit those at home more often and see that they are not in
    
     sake and his sake, but even for your own sake as well.'
    ${ }^{9}$ Besides the cited examples, I have found only (Ps.-)Dem. Ep. 2.26 and Ps.Philem. [= Philistion] F 140-1 (Kock).

[^67]:    ${ }^{10}$ All translations are mine and Riku Partanen's, if not otherwise stated (as here).

[^68]:    ${ }^{11}$ A 'food supplier' (Leofranc Holford-Strevens suggests 'quartermaster'). The word is connected with cibaria, -orum 'food, provisions'.

[^69]:    12 The imperatives: O. Claud. I 129, II 220, II 240, II 243, II 245, II 252, II 276, II 279, II 285, II 375. Ambivalent: II 243 (the letter has both $\pi \epsilon ́ \mu \psi o \nu$ and $\pi \epsilon \epsilon \mu \epsilon$ ), II 246, II 284. Obscure: I 153: $\delta \omega$ çc ( aor. subj., part., or imp.). Too fragmentary for certain analysis: I 159, II 267, and II 378.
    ${ }^{13}$ Final [n] was articulated weakly, especially before a following plosive, which caused its general omission or assimilation in writing; see Horrocks, Greek, 113. If the form was $\pi \epsilon ́ \mu \psi o v$, it was never written without the final $\nu$ regardless of the following word.

[^70]:    ${ }^{14}$ For example P．Mich．VIII 479，11．9－10（a letter of Claudius Terentianus）：ка入 $\hat{\omega}$ с ô̂v
    
    

[^71]:    15 The meaning of ќ́ $\rho \delta \alpha \mu о \nu$ may be 'watercress' ( $\nu \in$ рока́ $\rho \delta \alpha \mu о$ in Modern Greek).

[^72]:    16 O. Claud. I 151, II 222, II 249, II 287, II 385, II 386. In the papyrus letters I have found 19 instances in the meaning 'please': BGU I 332, II 596, P. Bour. 23, P. Gen. I 74,

[^73]:    ${ }^{17}$ Here is a modern example: the idiom 'sustainable development' came into use from Gro Harlem Brundtland's UN commission report in 1987. It was translated into Finnish as kestävä kehitys. The term kestävä = ‘durable, enduring, long-lasting, strong, resistant'. In recent years this word has become the symbol of positive ideas, and it is used in novel connections, especially in commercial advertisements. Therefore, we have in Finnish (translated with the original English word): 'sustainable Christmas', 'sustainable building', 'sustainable lipstick', 'sustainable mp3 player', 'sustainable and reparable domestic appliance', 'the city of Oulu grows sustainably', etc. (T. Kolehmainen, 'Kieli-ikkuna', Helsingin Sanomat, 24 Sept. 2006). The real meaning has changed, and the word refers to all environmentally good entities.
    ${ }^{18}$ The earliest example to my knowledge is P. Fam.Tebt. 2, ad 92 (= P. L. Bat. VI), which is a deposit of money. Many examples from military contexts are attested in Rom. Mil. Rec. 76, ad 179.
    
    
     romano', Aegyptus, 30 (1950), 14-41 at 17-18. The participle was according to Calderini either $\dot{a} \dot{\xi} \iota \omega \theta \epsilon^{\prime} i c, \dot{\epsilon} \pi \iota \tau \rho a \pi \epsilon i ́ c$, or $\alpha i \tau \eta \theta \in \epsilon^{\prime}$. The model was thus already existing, but the verb $\epsilon^{\epsilon} \rho \omega \tau \eta \theta \epsilon i c$ was new. In fact, Calderini does not give $\epsilon^{\epsilon} \rho \omega \tau \eta \theta \epsilon \epsilon^{\prime}$ as an option at all.
    ${ }^{20}$ FIRA III 150a (before ad 164), ll. 1-4: Flavius Secundinus scripsi rogatus a Memmio Asclepi, quia se lit[ter]as scire negavit, and FIRA III 150b (not dated), 11. 1-4: - - - -]cus scripsi rogatus per [--]m Restitutum agno[m(ine)] Senioris, quia se litter $[a] s$ scire negavit.... These are mining contracts from Dacia.

[^74]:    ${ }^{21}$ This kind of development can be manifested more easily in bi- or multilingual speech communities, as the real passive meaning of the Greek word is not fully understood by L2 speakers.

[^75]:    22 Kühner-Gerth, i.176; B. L. Gildersleeve, Syntax of Classical Greek from Homer to Demosthenes, 2 vols. (New York, 1900-11; repr. with co-operation of C. W. E. Miller, Groningen, 1980), i. 116-17; Schwyzer-Debrunner, 291.

    23 Mayser, Grammatik, ii/1. 212-13; Mandilaras, Verb, 184-90.
    24 Mandilaras, Verb, 178-9.

[^76]:    ${ }^{26}$ Cf. n. 11 above.
    27 O. Claud. II, p. 69.
    
    
     most honourable Sarapion, greetings. Because they say you have letters for us from Egypt, please, if you have letters for me, send them to me, because they are necessary. Greet all your friends. Farewell.'
    ${ }^{29}$ Lists of attested spellings have been made in S.-T. Teodorsson, The Phonology of Ptolemaic Koine (Göteborg, 1977), and Gignac, Grammar, i. On this subject generally see C. Brixhe, 'Bulletin de dialectologie grecque', REG 103 (1990), 201-30.

[^77]:    ${ }^{30}$ R.A. Wright, A Sociophilological Study of Late Latin (Turnhout, 2002), 317.

[^78]:    31 Horrocks, Greek, 62-3.
    32 Phonetically the final $/ \mathrm{n} /$ is not necessary in $\pi \epsilon \prime \mu \psi \epsilon \mu \circ \iota$, because it does not form an assimilation as in $\pi \epsilon \prime \mu \psi \epsilon \nu \kappa \alpha i$. The assimilation of final [ n ] to the initial [m] was not common, and in standard modern Greek it does not exist.

[^79]:    ${ }^{33}$ See M. Leiwo, 'Both and All Together? The meaning of $\dot{\alpha} \mu \phi$ о́ $\tau \epsilon \rho o \iota$ ', Arctos, 37 (2003), 81-99; id., 'Scribes and Language Variation', in L. Pietilä-Castrén and M. Vesterinen (eds.), Grapta poikila, i (Helsinki, 2003), 1-11.
    ${ }^{34} \mathrm{He}$ did use $\pi \alpha \rho \alpha$ with the dative when it took the genitive in the standard:
    

[^80]:    35 See also Mandilaras, Verb, 293; Gignac, Grammar, ii. 349-50.
    ${ }^{36}$ There is a vast bibliography on morphological processing. The interested reader is advised to begin from J. Bybee, Morphology: A Study of the Relation between Meaning and Form (Amsterdam, 1985); ead. and P. Hopper (eds.), Frequency and the Emergence of Linguistic Structure (Amsterdam, 2001); J. Niemi, M. Laine, and J. Tuominen, 'Cognitive Morphology in Finnish: Foundations of a New Model', Language and Cognitive Processes, 9 (1994), 423-46; and W. U. Dressler, On Productivity and Potentiality in Inflectional Morphology (Montreal, 1997).

[^81]:    * I should like to thank Willy Clarysse, Dorothy Thompson, and Katelijn Vandorpe for advice and suggestions.
    ${ }^{1}$ D. Hobson, 'Naming Practices in Roman Egypt', BASP 26 (1989), 157-74 at 161-2 briefly mentions the inclusion of mothers' names as evidence for the bilateral society of Roman Egypt, but concentrates on the transmission of names from the maternal side of the family.
    ${ }^{2}$ L. Bringmann, Die Frau im ptolemäisch-kaiserlichen Aegypten (Bonn, 1939), 35-6.

[^82]:    ${ }^{3}$ See M. Depauw, 'The Use of Mothers' Names in Ptolemaic Documents: A Case of Greek-Egyptian Mutual Influence?', JJP 37 (2007), 21-9.
    ${ }^{4}$ My DDBDP (online version) and HGV figures were accessed on 30 Aug. 2005.
    5 The majority of examples seem to be concentrated in the first three centuries of Roman rule: compare the 16,443 hits for the period 30 BC-ad 300 (HGV: c.29,025 records) with the mere 1,132 hits for that between AD 301 and 800 (HGV: c. 14,505 records). It would be interesting to investigate why the number of attestations is again reduced in this later period.

[^83]:    ${ }^{a}$ Space for Demotic left blank.

[^84]:    ${ }^{6}$ See M. Depauw, 'Autograph Confirmation in Demotic Private Contracts', CdÉ 78 (2003), 66-111 at 89-105.
    ${ }^{7}$ See R. S. Bagnall and B. W. Frier, The Demography of Roman Egypt (Cambridge, 1994).

[^85]:    8 F. M. Heichelheim, 'An Alexandrian Decree of 175/174 вс', JEA 26 (1940), 154-6.
    ${ }^{9}$ R. Scholl, Corpus der ptolemäischen Sklaventexte (Stuttgart, 1990), pp. 51-7, doc. no. 8, esp. ll. 3-4, 8.

[^86]:    ${ }^{10}$ See M. Depauw, The Demotic Letter: A Study of Epistolographic Scribal Traditions against their Intra- and Intercultural Background (Sommerhausen, 2006), 295-8.

[^87]:    12 Chrest. Wilck. 145.
    ${ }^{13}$ See Depauw, 'Use of Mothers' Names'.

[^88]:    ${ }^{14}$ For a presentation of this as yet unpublished Akhmim database, see M. Depauw, 'The Late Funerary Material from Akhmim', in A. Egberts, B. P. Muhs, and J. van der Vliet (eds.), Perspectives on Panopolis: An Egyptian Town from Alexander the Great to the Arab Conquest. Acts of an International Symposium held in Leiden on 16, 17, and 18 December 1998 (Leiden, 2002), 71-81.
    ${ }^{15}$ An example of an extract from a birth register of Roman citizens in Alexandria is the wax tablet Cairo 29812 (see P. Mich. III, pp. 154-5) from ad 62. The names of the boy's father, mother, and maternal grandfather are provided: see O. Guéraud, ‘À propos des certificats de naissance du Musée du Caire', EtPap, 4 (1938), 14-32 at 17-31. An example of a declaration of birth for a girl is PSI XI 1183 (dated between ad 45 and 54). Compare also F. Schulz, 'Roman Registers of Births and Birth Certificates', JRS 32 (1942), 78-91 at 85-6; M. Corbier, 'Child Exposure and Abandonment', in S. Dixon (ed.), Childhood, Class, and Kin in the Roman World (London, 2001), 52-73 at 56-7.
    ${ }^{16}$ See e.g. G. Schiemann, s.v. conubium, NP, Altertum Band III, 158-9.
    ${ }^{17}$ See e.g. J. Bingen, 'Le papyrus du gynéconome', CdÉ 32 (1957), 337-9 (P. Hib. II $196=S B$ VI 9559).

[^89]:    18 P. M. Fraser, Ptolemaic Alexandria, 3 vols. (Oxford, 1972), i. 48-9.
    19 For a recent discussion of this privilege, probably inspired by Latin civil rights, see the literature cited in J. Bingen, 'L'inscription éphébique de Léontopolis ( 220 p . C.)', CdÉ 76 (2001), 209-29 at 221 n . 28 . This article suggests the existence of a similar privilege for Leontopolis in the early third century AD; see ibid. 215 and 220-5.
    ${ }^{20}$ In the Greek world 'the political status of the mother had no influence': Ph. V. Pistorius, 'Indices Antinoopolitani' (diss. Leiden, 1939), 125, cit. H. Braunert, 'Griechische und römische Komponenten im Stadtrecht von Antinoopolis', JJP 14 (1962), 73-88 at 78 n . 23. For the privileges see Clarysse-Thompson ii. 138-47.
    ${ }^{21}$ There are no exact Ptolemaic parallels for birth declarations or certificates, either in Greek or Demotic, but even in the few unofficial lists referring to births that are preserved, the name of the mother is notoriously absent; so P. Tor. Amen. 3, where the father's name appears in all five cases, but not the mother's. Cf. also P. Berlin 3113a (published in P. Tor. Amen., p. 42).

[^90]:     Metropoleis of Roman Egypt', in H. Melaerts and L. Mooren (eds.), Le Rôle et le statut de la femme en Égypte hellénistique, romaine et byzantine: actes du colloque international, Bruxelles-Leuven 27-29 novembre 1997 (Leuven, 2002), 337-53 at 339-46.

[^91]:    23 Ibid. 348-51.

[^92]:    ${ }^{24}$ E. Eichler, G. Hilty, H. Loffler, H. Steger, and L. Zgusta (eds.), Namenforschung/ Name Studies/Les Noms propres: Ein internationales Handbuch zur Onomastik/An International Handbook of Onomastics/Manuel international d'onomastique (Berlin, 1995-6), 652.

[^93]:    ${ }^{25}$ For these inscriptions dating to the late Hellenistic and early Roman period see I. Didyma 202-388.
    ${ }^{26}$ Cf. e.g. L. P. Wright, 'The Military Orders in Sixteenth and Seventeenth Century Spanish Society: The Institutional Embodiment of a Historical Tradition', Past and Present, 43 (1969), 34-70.
    ${ }^{27}$ Probably because of Herodotos' remark on their use by the Lycians (1. 173), metronymics are often referred to when reconstructing a primeval gynaecocracy in the ancient Mediterranean; cf. B. Wagner-Hasel (ed.), Matriarchatstheorien der Altertumswissenschaft (Darmstadt, 1992), 397 s.v. Metronymikon/metronymic.

[^94]:    ${ }^{4}$ K. Hult, Syntactic Variation in Greek of the 5th Century ad (Göteborg, 1990), 191-2.
    ${ }^{5}$ Hult does not discuss $\delta \hat{\eta} \lambda o v$ and $\delta \eta \lambda o \hat{v} \tau \alpha \iota$ specifically. The impersonal construction is only found in authors who wrote in less classical styles: Callinicus, Vita Hypatii 28.46 (a comment on scripture; cf. LSJ $\delta \eta \lambda$ дovó $\iota$ s. v. II on the impersonal construction in scholia); Mark the Deacon, Vita Porphyrii 5, 67. Palladius, de gentibus Indiae et Bragmanibus 2. 10, may be added from outside Hult's corpus. The personal construction is used by Eunapius (Vit. soph., p. 497 Boissonade), Athanasius (Ep. ad Afros

[^95]:    ${ }^{9}$ The text of this document has been restored following a second copy preserved in BGU XV 2467, ll. 16-18.
     160), quoted in part in. 7 above, refers to a bronze $\epsilon \in \kappa ф ф о ́ \gamma \iota с \mu \alpha$ of a bronze stele. $B G U$ IV 1132, l. 5 mentions four $c v \gamma \chi \omega \rho \dot{\eta} \subset \epsilon \iota$, documents, specifically 'agreements (submitted in court)' (see LSJ s.v. 2 and $W B$ s.v.). In ll. 30-3, the passage quoted in my (1) above, the first two of these previous agreements are mentioned.

[^96]:    ${ }^{13}$ Preposed subordinate clauses were primarily a feature of official and literary texts in the Roman period. For the stylistic characteristics of official and bureaucratic texts see Skeat, P. Panop. Beatty, p. xxxix. All the instances of impersonal $\delta \hat{\eta} \lambda o v$ in Plutarch, for example, have the ö̀ $\iota$ clause preposed. See D. Wyttenbach, Plutarchi Chaeronensis Moralia, id est opera, exceptis vitiis, reliqua, operum tomus VIII: index Graecitatis (Oxford, 1830).

[^97]:    ${ }^{16}$ The text and translation given here are based on Porten＇s interpretation and version of this document as D 25 in B．Porten，The Elephantine Papyri in English： Three Millennia of Cross－Cultural Continuity and Change（Leiden，1996）．

[^98]:    ${ }^{17}$ I have followed Porten's interpretation and drawn on his version of D 29 in Elephantine Papyri.
    ${ }^{18}$ P. Cair. Masp. I 67097, my (10) above, adds another infinitive, ${ }^{\alpha} \gamma \epsilon \epsilon \nu$, here.

[^99]:    19 Cf. Bell, P. Lond. V, p. 196, who referred to 1.18 of my no. 9 as an 'afterthought'. See also the additions introduced after the staurogram, which was used to mark the end of a document, by $\delta \hat{\eta} \lambda o \nu$ in 1.53 of no. 11 above and by $\delta \eta \lambda a \delta \dot{\eta}$ in 1.19 of no. 14 below.
    ${ }^{20}$ P. Münch. I, p. 24.

[^100]:    ${ }^{21}$ For examples of psilosis and hypercorrect aspiration from the 1st c. AD onwards, see Gignac, Grammar, i. 134-8. E. H. Sturtevant, The Pronunciation of Greek and Latin, 2nd edn. (Philadelphia, 1940; repr. Groningen, 1968), 72-3, argued on the basis of breathings in the papyri and errors of aspiration in loanwords in Georgian, Hebrew, and Armenian that aspiration declined steadily from the 2nd c. ad and had been lost in ordinary speech by the 4th or 5th c.
    ${ }^{22}$ For an example of the occasional use of accents see R. Cribiore, Gymnastics of the Mind: Greek Education in Hellenistic and Roman Egypt (Princeton, 2001), 217-18.
    ${ }^{23}$ See e.g. Xenophon, Anabasis 1.3. 9, Cyropaedia 2. 4. 24, which have $\delta \hat{\eta} \lambda o v$ ö ${ }^{\prime} \iota$ (as two words and accented accordingly) as an adverb, while $\delta \eta \lambda o v o ́ \tau \iota$ is printed by the same editor in Xenophon, Cyropaedia 5. 4. 6. These references are given in LSJ s.vv.

[^101]:    ${ }^{24}$ This interpretation is based on the discussion and examples in Gignac, Grammar, i. 209, ii. 363-5.
    ${ }^{25}$ I have restored $\tau \epsilon ́ \lambda$ - and - $\hat{\omega} \nu$ following P. Lond. V 1727, 1l. 15, 29 (ad 584, will) and following P. Münch. I 1, 1. 14 (ad 574, settlement of a legacy dispute).

[^102]:    * During the 'Buried Linguistic Treasure’ conference (Christ Church, Oxford, 2006) I received numerous very helpful suggestions on a version of this treatment, for which I am grateful. I should especially like to thank Jim Adams and Hilla Hallaaho for their comments on earlier versions, and John Lee and Trevor Evans for correcting the English. For all remaining inconsistencies and errors my resistance to better advice is to blame.
    ${ }^{1}$ For a general introduction to the site, the volcanic activity, and the long story of Pompeii's rediscovery one might now recommend inter alia A. E. Cooley, Pompeii (London, 2003).

[^103]:    ${ }^{2}$ It has, however, been pointed out that there are certain differences to be seen in the 'epigraphic habit' of those cities (as far as writing on the wall is concerned); cf. H. Solin, 'Die herkulanensischen Wandinschriften: Ein soziologischer Versuch', CErc 3 (1973), 97-103.
    ${ }^{3}$ K. Zangemeister and R. Schoene (eds.), Inscriptiones parietariae Pompeianae Herculanenses Stabianae (= CIL IV; Berlin, 1871); K. Zangemeister (ed.), Tabulae ceratae Pompeiis repertae ( = CIL IV, Suppl. I; Berlin, 1898); A. Mau (ed.), Inscriptiones parietariae et vasorum fictilium (= CIL IV, Suppl. II; Berlin, 1909); M. Della Corte and P. Ciprotti (eds.), Inscriptiones Pompeianae Herculanenses parietariae et vasorum fictilium (= CIL IV, Suppl. III; Berlin 1952-70).
    ${ }^{4}$ It has sometimes been noted that the terminology is not entirely consistent with the 'modern' one, which has painted (or rather sprayed) texts as graffiti too; see now H. Solin in W. Kolbmann and H. Solin, Architekturwände: Römische Wandmalerei aus einer Stadtvilla bei Stazione Termini in Rom (Berlin, 2005), 85-7. For research on modern graffiti see e.g. E. L. Abel and B. E. Buckley, The Handwriting on the Wall: Toward a Sociology and Psychology of Graffiti (Westport, CT, 1977); B. Bosmans and A. Thiel, Guide to Graffiti-Research, with contributions by M. Balt and W. Lots (Ghent, 1996).
    ${ }^{5}$ See for an introduction e.g. P. Ciprotti, 'Die Graffiti', Altertum, 13 (1967), 85-94; or K. M. Coleman, 'Graffiti for Beginners', Classical Outlook, 76 (1999), 41-7; cf. also M. G. Schmidt, Einführung in die lateinische Epigraphik (Darmstadt, 2004), 73-8.

[^104]:    6 'Everyday language' and 'vulgar Latin', even though they will almost inevitably share certain features, ought to be separated more carefully. Everyday language, in my understanding, is spoken language, comprising various kinds of e.g. social registers, for unspecific (i.e. non-technical) everyday use; it does contain subliterary, but not necessarily also substandard features (which may then depend on aspects of social layers). Hardly more than faint traces of those usages might surface (e.g. in punning) even in literature, but will then have to be understood either as a minor or major 'scandal' or (when occurring to a larger extent in certain genres like comedy) as a deliberate reflection. Vulgar Latin, however, is usually to be seen as a register established and (originally) used by specific social groups, containing subliterary and substandard features on a whole range of grammatical levels; furthermore it is not exclusively to be detected in spoken language, but to a very high degree also in written language. Vulgar Latin with a focus on the Pompeian wall inscriptions is dealt with e.g. in L. R. Palmer, The Latin Language (London, 1954, 148-80 ('Vulgar Latin'); spoken Latin in P. Baldi, The Foundations of Latin, 2nd edn. (Berlin, 2002), 235-7.
    ${ }^{7}$ In this respect the so-called Oscan substrate especially deserves mention, on which cf. J. F. Eska, 'The Language of the Latin Inscriptions of Pompeii and the Question of an Oscan Substratum', Glotta, 65 (1987), 146-61; A. E. Cooley, 'The Survival of Oscan in Roman Pompeii', in ead. (ed.), Becoming Roman, Writing Latin? Literacy and Epigraphy in the Roman West (Portsmouth, RI, 2002), 77-86. Most of the material in question is at best inconclusive and of doubtful explanation.
    ${ }^{8}$ On this aspect see now J. N. Adams, Bilingualism and the Latin Language (Cambridge, 2003), 145-8.
    ${ }^{9}$ This is the preconception e.g. in E. Pulgram, Italic, Latin, Italian, 600 bC to $A D$ 1260: Texts and Commentaries (Heidelberg, 1978); J. Herman, Du latin aux langues romanes: études de linguistique historique (Tübingen, 1990); and M. Iliescu and D. Slusanski (eds.), Du latin aux langues romanes: choix de textes traduits et commentés (du IIe siècle avant J.-C. jusqu'au $X^{e}$ siècle après J.-C.) (Wilhelmsfeld, 1991).

[^105]:    14 In fact quite a few show even highly stylized and literary features; cf. M. Gigante, Civiltà delle forme letterarie nell'antica Pompei (Naples, 1979).

    15 The fundamental difference between 'regional variation' and 'dialect forms', in my understanding, is that a regional variation or Regiolekt is a variety of a standard language that is influenced by e.g. local dialects (but clearly based on and aiming at the standard variety) and can be determined by the ear by a specific accent, while a dialect form is more detached from the standard variety, showing various features (originally) restricted to the inhabitants and offspring of a certain area. While a speaker of a regional variety will in many cases at least think he or she is using the standard variety, a speaker of a dialect will in most cases be aware of this fact (and perhaps even resort to code-switching when talking to somebody who is not familiar with the particular dialect).
    ${ }^{16}$ On this aspect, the complexity of written language and the coincidence of various registers on various language levels, see also the very useful observations of Hilla Halla-aho in this volume.
    ${ }_{17}$ V. Väänänen, Le Latin vulgaire des inscriptions pompéiennes, 3rd edn. (Berlin, 1966); cf. also id., Introduction au latin vulgaire, 3rd edn. (Paris, 1981).

[^106]:    18 In many respects groundbreaking is a recent article by R. Hernández Pérez, 'Las inscripciones parietales latinas: consideraciones básicas para su interpretación', SPhV 6, ns 3 (2002-3), 247-79.

    19 An $E$ is often represented by two upright lines (\|), an I always by a single line (|); cf. Halla-aho, Ch. 10 below, n. 19.
    ${ }^{20}$ See n. 3 above.
    ${ }^{21}$ H. Solin, review of CIL IV Supp. 3, 3-4, in Gnomon, 45 (1973), 258-77.

[^107]:    ${ }^{22}$ Id., 'Zur Entstehung und Psychologie von Schreibfehlern in lateinischen Inschriften', in id., O. Salomies, and U.-M. Liertz (eds.), Acta colloquii epigraphici Latini Helsingiae 3.-6. sept. 1991 habiti (Helsinki, 1995), 93-111.
    ${ }_{23}$ Cf. Vä̈nänen, Le Latin vulgaire, 69.
    ${ }^{24}$ R. Lass, Historical Linguistics and Language Change (Cambridge, 1997), 62, rightly acknowledges the importance of keeping away 'garbage' spellings, i.e. very obvious lapsus calami, from studies of historical linguistics.

[^108]:    ${ }^{25}$ Zangemeister, CIL IV, p. 141 ad loc.
    ${ }^{26}$ Cf. J. H. Gray, T. Macci Plauti Trinummus. With an Introduction and Notes (Cambridge, 1897), 156 ad loc. One might add that the constitution of the text is not entirely beyond doubt; cf. C. Questa, Titi Macci Plauti cantica (Urbino, 1995), 406-7 (with further references).
    ${ }^{27}$ C. S. Mackay, 'Expressions to Indicate Goal of Motion in the Colloquial Latin of the Early Empire', ZPE 126 (1999), 229-39.

[^109]:    ${ }^{28}$ Mau, CIL IV, p. 737 ad loc.
    ${ }^{29}$ Lommatzsch, CLE III, p. 74 ad loc.
    ${ }^{30}$ A couple of such studies have been mentioned above in nn. 6 and 9.
    ${ }^{31}$ I am aware of the fact that sociolinguistics comprises phonological and morphological issues, too. However, it is an approach fundamentally different from e.g. traditional historical morphology, considering all kinds of additional aspects surrounding every single utterance.

[^110]:    32 A very useful introduction to the theoretical framework may be found in T. Roelcke, Fachsprachen, 2nd edn. (Berlin, 2005), with further references. For a more general documentation see the authoritative work by L. Hoffmann, H. Kalverkämper, and H. E. Wiegand (eds.), Fachsprachen—Languages for Special Purposes. Ein internationales Handbuch zur Fachsprachenforschung und TerminologiewissenschaftAn International Handbook of Special Languages and Terminology Research, in association with C. Galinski and W. Hüllen, 2 vols. (Berlin, 1998-9).
    33 An up-to-date account and discussion of ancient technical texts and their language may now be found in T. Fögen (ed.), Antike Fachtexte/Ancient Technical Texts (Berlin, 2005).
    ${ }^{34}$ On the electoral programmata see e.g. H. Mouritsen, Elections, Magistrates, and Municipal Elite: Studies in Pompeian Epigraphy (Rome, 1988); C. Chiavia, Programmata: manifesti elettorali nella colonia romana di Pompei (Turin, 2002).
    ${ }^{35}$ P. Sabbatini Tumolesi, Gladiatorum paria: annunci di spettacoli gladiatorii a Pompei (Rome, 1980).

[^111]:    ${ }^{36}$ Cf. e.g. R. Graefe, Vela erunt: Die Zeltdächer der römischen Theater und ähnlicher Anlagen, 2 vols. (Mainz am Rhein, 1979).
    ${ }^{37}$ On Roman inscriptional advertisements in general see P. Kruschwitz, 'Römische Werbeinschriften', Gymnasium, 106 (1999), 231-53. Much interesting material, executed in handwriting, is also to be found in M. Reuter and M. Scholz (eds.), Geritzt und entziffert: Schriftzeugnisse der römischen Informationsgesellschaft (Stuttgart, 2004).

[^112]:    38 The 3rd person subjunctive conveniat is very odd as an alternative for conuenito (cf. my text (6) above).

[^113]:    ${ }^{39}$ I am referring explicitly to German translations, as in English ones the phrase 'for sale' does occur. There is reason to believe, however, that many will not be aware of the specific implications and connotations of the Latin phrase.

[^114]:    ${ }^{40}$ I have dealt with a couple of those methodological issues in greater detail (but focusing on metrical inscriptions in particular) in P. Kruschwitz, 'Carmina latina epigraphica pompeiana: Ein Dossier', Arctos, 38 (2004), 27-58; also id., 'Die Edition und Interpretation metrischer Kursivinschriften: Eine Methodenkritik am Beispiel von CLE 354', in C. Fernández Martínez and J. Gómez Pallarès (eds.), Temptanda viast: nuevos estudios sobre la poesía epigráfica latina (Bellaterra, 2006; CD-Rom ISBN 84-490-2444-7); and id., 'Die Bedeutung der Caupona des Euxinus für die epigraphische Poesie Pompejis (und darüber hinaus)', RSP 17 (2006), 7-13.

[^115]:    * I should like to thank J. N. Adams, Peter Kruschwitz, Martti Leiwo, and Marja Vierros for comments on an earlier version of this essay, as well as all those who commented on my paper (partly on the same subject) at the 'Buried Linguistic Treasure' conference, especially Eleanor Dickey.
    ${ }^{1}$ This is an important difference as compared to literary texts, where the incongruity of registers is generated by design to create a certain effect, see J. N. Adams and R. G. Mayer (eds.), Aspects of the Language of Latin Poetry (Oxford, 1999), 5-10.
    ${ }^{2}$ There may even have been models available in letter-writing manuals, but see below for some evidence that models were not always in the written form.

[^116]:    ${ }^{3}$ I use the term 'language level' when referring to different levels of language organization, i.e. phonology, morphology, and syntax; see E. W. Schneider, 'Investigating Variation and Change in Written Documents', in J. K. Chambers, P. Trudgill, and N. Schilling-Estes (eds.), The Handbook of Language Variation and Change (Oxford, 2002), 67-96 at 87. 'Sociolect', or social dialect, refers to a socially determined variety, 'register' to a situationally determined variety of the language (such as the language of the letters), see e.g. A. Willi, The Languages of Aristophanes: Aspects of Linguistic Variation in Classical Attic Greek (Oxford, 2003), 8-9 for the terminology and further references.
    ${ }^{4}$ See Schneider, 'Investigating Variation', 75-7, M. Montgomery, 'The Linguistic Value of Ulster Emigrant Letters', Ulster Folklife, 41 (1995), 26-41, and A. MeurmanSolin, 'Letters as a Source of Data for Reconstructing Early Spoken Scots', in I. Taavitsainen, G. Melchers, and P. Pahta (eds.), Writing in Nonstandard English (Amsterdam, 1999), 305-22 for private letters as sources for the study of language variation and change. Peter Kruschwitz's study in this volume (Ch. 9) addresses the same general theme, the relationship of non-literary texts to spoken language and the complexities involved in this issue, in a different body of material (the Pompeian inscriptions) and from a slightly different perspective.

[^117]:    ${ }^{5}$ It is only natural that syntactic forms, being longer and containing more 'material', are memorized better than morphological or orthographic ones, see Schneider, 'Investigating Variation', 87.

[^118]:    ${ }^{6}$ Perhaps near to the middle of the second century; cf. Cugusi, CEL 169, introd.
    ${ }^{7}$ It should be noted that, inasmuch as the language in this letter is the output of one person who was trying to write as well as he could, it does not matter whether that person is the scribe or the sender of the letter.
    ${ }^{8}$ H. Cotton, Documentary Letters of Recommendation in Latin from the Roman Empire (Königstein im Taunus, 1981), 16-23.
    ${ }_{9} \mathrm{Ibid} .16$, with further references.
    ${ }^{10}$ Ibid. 17. Cf. the same observation concerning another letter of recommendation, CEL 81 (P. Ryl. IV 608): 'A lower status is perhaps confirmed by the fact that, as in P. Oxy. I 32, here too we have an autograph: a sign of respect on the part of an inferior towards his superior in the social or imperial hierarchy' (Cotton, Documentary Letters, 29). Both this letter and CEL 83 (P. Berlin inv. 11649, also a letter of recommendation) contain nothing outside the stock formulae.

[^119]:    ${ }^{11}$ See Cotton, Documentary Letters, 17-23; Cugusi, CEL II 169, introd.
    12 For peto in recommendations see Cic. Fam. 2. 17. 6; 5. 5. 3; 13. 21. 2; 13. 32. 2; Fronto ad Am. 1. 9.
    ${ }^{13}$ The evidence from grammarians concerning fero implies that analogical formations like this were probably not uncommon in the spoken language. TLL, s.v. fero 527, 72 sgg. cites fereris from Diom. Gramm. i. 361.28 K, 386.26 K; Prob. Gramm. iv. 190. 36 K. For analogical formations of irregular verbs in Latin, see J. N. Adams, Bilingualism and the Latin Language (Cambridge, 2003), 613.

[^120]:    ${ }^{14}$ Note also the form offere sc. offerre (or offerere?) in CEL 178, ll. 2, 7 (P. Dura $60=$ Rom. Mil. Rec. 98).

[^121]:    15 P. Cugusi, 'Le più antiche lettere papiracee latine', AAT 107 (1973), 641-92 at 655.
    16 Cassiod. Var. 2. 10. 1, 2. 24. 5; cf. TLL iv. 1484, 79-84.
    17 See Cugusi, 'Lettere', 662 for discussion and examples.
    18 Cugusi, CEL, ad loc. cites defrustratur from Plaut. Most. 944, also a hapax, as a parallel to this case. See also Hofmann-Szantyr, Lateinische Syntax, 263-4.

    19 For the latter see V. Väänänen, Le Latin vulgaire des inscriptions pompéiennes, 3rd edn. (Berlin, 1966), 20. But, as Väänänen notes, the evidence from Pompeii is difficult to interpret here because of the likelihood of writing | for ||.
    ${ }^{20}$ First published in V. Brown, 'A Latin Letter from Oxyrhynchos', BICS 17 (1970), 136-43.

[^122]:    ${ }^{21}$ The word fidem has apparently been removed erroneously, see Brown, 'Latin Letter', ad loc. For proverbial sayings cf. also qui de tam pusilla summa tam magnum lucrum facit (CEL 10, l. 7). The use of quod for quid in this letter, apparently the earliest attestation of this phenomenon, is treated in H. Halla-aho, The Non-Literary Latin Letters: A Study of their Syntax and Pragmatics (forthcoming).
    ${ }^{22}$ See M. Leumann, J. B. Hofmann, and A. Szantyr, Lateinische Grammatik, i: Lateinische Laut- und Formenlehre, 6th edn. (Munich, 1977), 76-8; also J. N. Adams, The Regional Diversification of Latin 200 bс-600 AD (Cambridge, 2007), ch. 7.8.
    ${ }^{23}$ See Cugusi, CEL II 10, 1.1 n.
    ${ }^{24}$ See now the comprehensive discussion of this ending, together with all the extant examples, in Adams, Regional Diversification, ch. 7.9-14. I am grateful to J. N. Adams for letting me see the relevant pages of his forthcoming book; earlier observations are in Väänänen, Latin vulgaire, 87; Leumann-Hofmann-Szantyr, Lateinische Grammatik, 517; F. Neue and C. Wagener, Formenlehre der lateinischen Sprache, iii: Das Verbum, 3rd edn. (Leipzig, 1897), 201; A. L. Sihler, New Comparative Grammar of Greek and Latin (New York, 1995), 475.
    ${ }^{25}$ See Adams, Bilingualism, 479-83. ${ }^{26}$ Cugusi, CEL 10, 1.8 n .

[^123]:    ${ }^{27}$ See H. Pinkster, 'Some Methodological Remarks on Research on Future Tense Auxiliaries in Latin', in G. Calboli (ed.), Subordination and Other Topics in Latin: Proceedings of the Third Colloquium on Latin Linguistics, Bologna, 1-5 April 1985 (Amsterdam, 1989), 311-26 at 317.
    ${ }^{28}$ See also Adams, Bilingualism, 742-3.
    ${ }^{29}$ See the discussion in J. N. Adams, 'The Language of the Vindolanda Writing Tablets: An Interim Report', JRS 85 (1995), 86-134 at 102-3. He thinks that the different optiones all independently produced the form debunt, but it is of course possible that they had a written model for this type of a report.
    ${ }^{30}$ For verb morphology in Claudius Terentianus' letters (compared with the Cerialis archive from Vindolanda), see Adams, Bilingualism, 741-50. The conclusion offered there is that Terentianus' Latin shows analogical formations which can be paralleled elsewhere in substandard texts, and his Latinity is not a learner's variety (although he was bilingual).
    ${ }^{31}$ See J. N. Adams, 'The New Vindolanda Writing-Tablets', CQ2 53 (2003), 530-75 at 544-5.

[^124]:    32 Bowman and Thomas, Tab. Vindol. III 628, introd., characterize the hand as 'a rather fine, right-sloping hand, with a marked difference in the size of the letters'.
    ${ }^{33}$ See Adams, 'Vindolanda', 545-6 on this passage.
    ${ }^{34}$ Hofmann-Szantyr, Lateinische Syntax, 351-2; Kühner-Stegmann, Grammatik, ii/1. 133-4. See also Adams-Mayer, Aspects, 8 n. 5 and R. Coleman, 'Poetic Diction, Poetic Discourse, and the Poetic Register', ibid. 21-93 at 83-4.
    35 Adams-Mayer, Aspects, 8.
    ${ }^{36}$ There is also some internal evidence in the poetical usage which might be used against seeing there a feature of spoken language (see the references cited in $n .34$ ): (1) the -isse forms are attached to a greater variety of verbs than is attested in early Latin (in early Latin only with verbs of forbidding); (2) its Nebenstellung to a present infinitive. Even if there is sometimes discernible an aspectual nuance modelled on Greek, as Coleman ('Poetic Diction', 83) points out, this does not mean that the construction would have been characteristic of the living language.

[^125]:    ${ }^{37}$ See Bowman-Thomas, Tab. Vindol. III 628, n. to line 1. The same use is found in P. Mich. VIII 472, l. 2.
    ${ }^{38}$ See e.g. Adams, 'Language', 103.

[^126]:    * A version of this chapter was presented at the 'Buried Linguistic Treasure' conference. I would like to thank Trevor Evans and Dirk Obbink for organizing that event and for inviting me to participate, the other participants for their comments and suggestions, and especially Trevor Evans for greatly facilitating my research at Oxford in the days preceding the conference. The accentuation of Egyptian names in Greek follows W. Clarysse, 'Greek Accents on Egyptian Names', ZPE 119 (1997), 177-84, except where the reading is explicitly said to be that of the edition.

[^127]:    ${ }^{1}$ J. N. Adams, Bilingualism and the Latin Language (Cambridge, 2003), 18-29 and 297-305.
    ${ }^{2}$ A. Morpurgo Davies, 'Greek Personal Names and Linguistic Continuity', in S. Hornblower and E. Matthews (eds.), Greek Personal Names: Their Value as Evidence (Oxford, 2000), 15-39 at 23-34.

[^128]:    ${ }^{3}$ Adams, Bilingualism, 369-80.
    ${ }^{4}$ Morpurgo Davies, 'Greek Personal Names', 23-34.
    ${ }^{5}$ R. Meiggs and D. Lewis, A Selection of Greek Historical Inscriptions to the End of the Fifth Century $B C$, 2nd rev. edn. (Oxford, 1988), 12-13.

[^129]:    ${ }^{6}$ Census records suggest that 'ethnic' Greeks and Greek soldiers may have constituted more than 30 per cent of the population of the Fayum in the reigns of Ptolemy II and III; see Clarysse-Thompson, ii. 156.

    7 B. P. Muhs, Tax Receipts, Taxpayers, and Taxes in Early Ptolemaic Thebes (Chicago, 2005), 6-8, 29-40.
    ${ }^{8}$ Ibid. 8-9, 41-60; Clarysse-Thompson, ii. 36-89.
    ${ }^{9}$ Muhs, Tax Receipts, 13-17; Clarysse-Thompson, ii. 10-35.
    ${ }^{10}$ Muhs, Tax Receipts, 21-3.
    ${ }^{11}$ Ibid. 29-40.
    ${ }^{12}$ For censuses, see Clarysse-Thompson, i. For tax receipts, see Muhs, Tax Receipts, 41-60.

[^130]:    ${ }^{13}$ For a new translation of the Greek text see R. S. Bagnall and P. Derow (eds.), The Hellenistic Period: Historical Sources in Translation (Malden, 2004), 181-95.

    14 See B. P. Muhs, 'Linguistic Hellenization in Early Ptolemaic Thebes', in J. Frösén, T. Purola, and E. Salmenkivi (eds.), Proceedings of the XXIV International Congress of Papyrology, Helsinki, 1st-7th of August 2004 (Helsinki, 2007), 793-806 at 794-5.

[^131]:    ${ }^{15}$ See M. Smith, 'The Transliteration of Demotic', Enchoria, 8 (1978), 33-6.
    16 Similar examples are O. OIM 19330 ( $=$ O. Taxes 38), dated to fiscal year 30 of Ptolemy II, Epeiph 25, where ${ }^{\prime} \mu \epsilon \tau \omega \theta \pi \alpha \Phi_{\alpha \rho \alpha \tau}=$ 'Imn-htp (ss) Pa-rt, and O. Bodl. Gr. Inscr. 1874 ( $=$ O. Bodl. I 7), dated to fiscal year 30 of Ptolemy II, Thoth 21, where $\Theta_{o \tau c v \mid \tau o \mu ~ \pi \alpha ~} \prod_{\alpha v \omega v}=\underline{D} h w t y-s \underline{d} m$ (s3) Pa-wn. The edition reads the taxpayer's name as $\Theta_{o \tau c v} \mid \tau о \mu ~ \Pi a \lambda \lambda v v^{\omega} \omega=$ 'Thotsutmis ...' (Demotic and Greek corrected from original).

[^132]:    ${ }^{17}$ The edition reads the taxpayer＇s name as $\Pi_{\alpha} \hat{\alpha} \Pi \alpha \mid$ $о \tau о \eta$（Demotic read from original）．

    18 The edition reads the taxpayer＇s name as Пâ̂c Пaтoŋ̣（Demotic read and Greek corrected from original）．

    19 Similar examples are O．Ash．GO 108 （＝O．Ashm．Shelt．1），dated to fiscal year
     O．Bodl．Gr．Inscr． 2133 （O．Bodl．I 5），dated to fiscal year 30 of Ptolemy II，Pachons 7， where $T i \pi \eta$ A A $\lambda^{\prime} \lambda_{l o c}=T з y-p y$ ta ${ }^{c} \mathcal{k} l$ ．The edition reads the taxpayer＇s name as $T i \pi \eta \lambda \lambda$ ọódooc $=$＇Ti－py－ta－elole＇（Demotic and Greek corrected from original）．

[^133]:    ${ }^{20}$ F. Uebel, ‘Ostraka aus frühptolemaïscher Zeit’, Archiv, 19 (1969), 62-73 at 67-73.
     possible.

    22 Clarysse-Thompson, i. 589-651.
    ${ }^{23}$ Ibid. 616 (24.53, ' $O_{\rho \pi \gamma \eta \tau}$ for ' ${ }^{\circ} \rho \pi \gamma a \tau o c$ ) is a rare clear example. Ibid. 594 (26.35, $A_{\rho} \beta \hat{\eta} \subset$ for $\left.A_{\rho} \beta \hat{\eta} с \iota \subset\right), 622$ (49.208, Пє́кис for Пє́кисıс), and 625 (6.46, 6.47, 24.175, Пєт'́ $\chi \omega \nu$ for $\Pi \epsilon \tau \epsilon ́ \chi \omega \nu c ı c)$ are ambiguous examples. They could reflect undeclined forms, but could also be understood as declined.
    ${ }_{24}$ Abbreviations are normally understood to represent declined forms, but in many cases could also obscure undeclined forms.

[^134]:    ${ }^{25}$ W. Clarysse, 'Prosopography', in P. W. Pestman (ed.), A Guide to the Zenon Archive, with contributions by W. Clarysse et al. (P. L. Bat. XXI; Leiden, 1981), 271-457.
    ${ }^{26}$ Id., 'Egyptian Scribes Writing Greek', CdÉ 68 (1993), 186-201 at 198.
    ${ }^{27}$ P. Fewster, 'Bilingualism in Roman Egypt', in J. N. Adams, M. Janse, and S. Swain (eds.), Bilingualism in Ancient Society: Language Contact and the Written Word (Oxford, 2002), 220-45 at 235; M. Leiwo, 'Scribes and Language Variation', in L. Pietilä-Castrén and M. Vesterinen (eds.), Grapta Poikila, i (Helsinki, 2003), 1-11 at 3-4; id., 'Substandard Greek: Remarks from Mons Claudianus', in N. M. Kennell and J. E. Tomlinson (eds.), Ancient Greece at the Turn of the Millennium: Recent Work and Future Perspectives, Proceedings of the Athens Symposium 18-20 May 2001 (Athens, 2005), 237-61 at 241-3.

[^135]:    ${ }^{28}$ D. J. Thompson, 'Literacy and the Administration in Early Ptolemaic Egypt', in J. H. Johnson (ed.), Life in a Multi-Cultural Society: Egypt from Cambyses to Constantine and Beyond (Chicago, 1992) 323-6; ead., 'Literacy and Power in Ptolemaic Egypt', in A. K. Bowman and G. Woolf (eds.), Literacy and Power in the Ancient World (Cambridge, 1994), 67-83 at 72-9; also Clarysse-Thompson, ii. 125-33.

[^136]:    * A version of this chapter was also presented at the multilingualism colloquium at Oxford in September 2006. I thank all those who commented on either version, especially Roger Bagnall, John Lee, and Sebastian Richter.
    ${ }^{1}$ See N. Lewis, 'The Demise of the Demotic Document: When and Why', JEA 79 (1993), 276-81; R. S. Bagnall, Egypt in Late Antiquity (Princeton, 1993), 236-7; B. Muhs, 'The Grapheion and the Disappearance of Demotic Contracts in Early Roman Tebtynis and Soknopaiou Nesos', in S. Lippert and M. Schentuleit (eds.), Tebtynis und Soknopaiou Nesos: Leben im römerzeitlichen Fajum (Wiesbaden, 2005), 93-104.
    ${ }^{2}$ For 'script death', see S. Houston, J. Baines, and J. Cooper, 'Last Writing: Script Obsolescence in Egypt, Mesopotamia, and Mesoamerica', CSSH 45 (2003), 430-79.
    ${ }^{3}$ Bagnall, Egypt, 241.
    ${ }^{4}$ Ibid. 238.
    ${ }^{5}$ W. Clarysse, 'Greek Loan-Words in Demotic', in S. P. Vleeming (ed.), Aspects of Demotic Lexicography (Leuven, 1987), 9-33.

[^137]:    6 J. Ray, ‘How Demotic is Demotic?', in E. Bresciani (ed.), Acta Demotica: Acts of the Fifth International Conference for Demotists (Pisa, 4th-8th September 1993) (= Egitto e Vicino Oriente 17; Pisa, 1994), 251-64.
    7 Possibly a thorough survey of the evidence would reveal instances of syntactic and stylistic interference, but there is not much. For cases in Demotic letters see now M. Depauw, The Demotic Letter: A Study of Epistolographic Scribal Traditions against their Intra- and Intercultural Background (Sommerhausen, 2006), 294-8. Some things in the magical papyri look like code-switching, but of a special, ritual sort; see J. Dieleman, Priests, Tongues, and Rites: The London-Leiden Magical Manuscripts and Translation in Egyptian Ritual (100-300 CE) (Leiden, 2005).
    ${ }^{8}$ Bagnall, Egypt, 240-6.

[^138]:    ${ }^{9}$ H. Satzinger, 'Old Coptic', in A. S. Atiya (ed.), The Coptic Encyclopaedia, viii (New York, 1991), 169-75; Bagnall, Egypt, 238.
    ${ }^{10}$ See S. Donadoni, 'Il greco di un sacerdote di Narmuthis', Acme, 8 (1955), 73-83.
    ${ }^{11}$ E. Bresciani and R. Pintaudi, 'Textes démotico-grecs et gréco-démotiques des ostraca de Medinet Madi: un problème de bilinguisme', in Vleeming, Aspects of Demotic Lexicography, 123-6.

    12 P. Fewster, 'Bilingualism in Roman Egypt', in J. N. Adams, M. Janse, and S. Swain (eds.), Bilingualism in Ancient Society: Language Contact and the Written Word (Oxford, 2002), 220-45 at 223.

[^139]:    13 Gallo supports this from the use of the verb cтv́ $\phi \omega$ in Dionysius, DCV 15. 12, but there the application is to sound which grates on the ear.

    14 A. Menchetti, 'Esercizi scolastici in demotico, da Medinet Madi (II)', EVO 26 (2003), 22-31, at 26-7.

    15 Aes. Fab. 56. (I) 3 Hausrath-Hunger.

[^140]:    ${ }^{16}$ For the former see Gignac, Grammar, i. 189-90; for the latter ibid. i. 76-85.
     $\mu \epsilon \nu v($ ) for $\mu \eta \nu v()$ in no. 179 .

[^141]:    ${ }_{17}$ Some examples: Capađi $\omega \nu$ ППоvтi $\omega \nu$ ('Sarapion son of Ploution') in no. 114;
    
     (no. 170), 'conforming to the original'.

    19 Lewis, 'Demise', 280.

[^142]:    20 See S. Pernigotti, 'Il "copto" degli ostraka di Medinet Madi', in Atti del XVII Congresso Internazionale di Papirologia, ii (Naples, 1984), 787-91.
    ${ }^{21}$ See Gignac, Grammar, i. 123.
    22 Greek verbal nouns in -cıc can also be used as the object of other Demotic verbs, e.g. $h b$ пзe $=f \mu \eta{ }^{\prime} \nu v \subset \iota \nu$ (no. 175), 'hasten his denunciations'.
    ${ }^{23}$ Other examples: no. 112: m-s3 p3 ír cucт $\alpha \tau \iota \kappa o ́ v, ~ ' a f t e r ~ I ~ p r e p a r e d ~ a ~ l e t t e r ~ o f ~$ procurement'; no. 130: $t w=j$ ìr $\epsilon ้ \epsilon \in \chi v \rho o v, ~ ' I ~ m a k e ~ a ~ p l e d g e ' ; ~ n o . ~ 127 w 3 h=f i r ~ o ́ v o \mu a c i ́ a, ~$ 'he made a review'; no. 166: ir к $\alpha \rho \pi i \eta \nu\left(=\kappa \alpha \rho \pi \epsilon_{i}^{\prime} \alpha \nu\right)$, 'gather income'; cf. O. Narm. Dem. I 28, 1. 3: ir $\dot{\alpha} \gamma \omega \kappa i \not \eta(=\dot{\alpha} \gamma \omega \gamma \eta$ '), 'bring a legal action'.

[^143]:    ${ }^{24}$ The fullest list of these verbs is in L. C. Stern, Koptische Grammatik (Leipzig, 1880), §491.
    ${ }^{25}$ Ibid., $\$ 331$; see now C. Reintges, 'Code-Mixing Strategies in Coptic Egyptian', LingAeg 9 (2001), 193-237.
    ${ }^{26}$ On this see R. Kasser, 'Vocabulary, Copto-Greek', in Atiya, Coptic Encyclopaedia, viii, 215-22 at 220, who talks of Copto-Greek 'pseudo-verbs' like $\boldsymbol{\Delta \mathbf { u }}$ үормн for $\mu о \rho \phi о \hat{c} \theta \theta a \iota$ and $\boldsymbol{\lambda г п н ~ f o r ~} \lambda v \pi \epsilon i \hat{\imath} \theta a \iota$.
    ${ }^{27}$ This observation was first made, as far as I know, in Bresciani et al., O. Narm. Dem. I 33, 1. 29 n. Notice the argument in Pernigotti, 'Il "copto"', that the form of Demotic in the Narmuthis ostraca is on the way to becoming Coptic.

[^144]:    28 See ibid.; also Ray, 'Demotic', 257.

[^145]:    * I am grateful to J. N. Adams, Philomen Probert, Trevor Evans, and the other participants in the 'Buried Linguistic Treasure' conference for their suggestions, encouragement, and advice.

[^146]:    1 They are $\eta \rho \omega \dot{\tau} \eta \subset \alpha \nu$, no. 15. 56 in R. K. Sherk, Roman Documents from the Greek East: senatus consulta and epistulae to the Age of Augustus (Baltimore, 1969), from 112 BC , and $\eta \rho \dot{\omega} \tau \eta \subset \epsilon \nu$, ibid. no. 48 . 3, from $88 / 7 \mathrm{BC}$; on the former see also E. García Domingo, Latinismos en la Koiné: en los documentos epigráficos desde el 212 a. J.C. hasta el 14 d. J.C. (Burgos, 1979), 443.

    2 Sherk, Roman Documents, 13.
    ${ }^{3}$ Ibid. 7, cf. 13-19.

[^147]:    ${ }^{4}$ Examination of the use of rogare in six plays each of Plautus and Terence yields 95 examples of the verb, of which $78 \%$ mean 'enquire' and $22 \%$ 'request'.
    ${ }^{5}$ Sherk, Roman Documents, 5.
    ${ }^{6}$ e.g. $\grave{\rho} \boldsymbol{\omega} \tau \eta \subset \alpha$ (P. Tebt. II 409, 1. 4) from ad 5, ク̉ $\rho \dot{\tau} \tau \eta \subset \in \nu$ (P. Oxy. IV 746, 1. 5) from AD 16.

    7 The complete list of third-person forms that I can find down to the end of і вс is:
    

[^148]:    ${ }^{10}$ The exact frequency with which the different constructions are found is impossible to ascertain because of a tendency towards confusion between infinitive and imperative resulting from confusion between $-\epsilon$ and -au. But if one takes the most conservative position possible and counts all ambiguous forms as infinitives, $46 \%$ of the examples of $\dot{\epsilon} \rho \omega \tau \hat{\omega}$ from і вс to ii ad (excluding those in which there is no dependent verb or its construction is doubtful) use constructions other than the infinitive.
    ${ }^{11}$ Other examples with imperative include P. Col. VIII 215, 1.15 (i-ii ad), P. Mich. VIII 487, l. 11 (ii AD), P. Wisc. II 72, 1.23 (ii Ad), P. Würzb. II 21a, 1.12 (ii Ad), $S B$ VI 9636, 1.7 (ii AD), O.Claud. I 145, 1.5 (ii AD); other examples with subjunctive include P. Turner 18, 1.10 (i Ad), SBV 7600, 1.4 (i Ad), VI 9122, 1.3 (i Ad), P. Mich. VIII 475, 1. 10 (ii Ad), O. Claud. I 152, 1.8 (ii Ad), I 156, l. 5 (ii ad).
    ${ }^{12}$ A calculation following the method in n .10 indicates that only $1 \%$ of examples of $\dot{\alpha} \xi \iota \hat{\omega}$ from i BC to ii AD take constructions other than the infinitive.
    ${ }_{13}$ Rogo can also take a subjunctive not preceded by $u t$, it is difficult to tell whether this possibility exists in Greek as well, owing to spelling confusions that make most subjunctives indistinguishable from future indicatives, which can be freely used instead of the imperative in Roman-period Greek.

[^149]:    14 The documents from i bс have the imperative with $\epsilon \rho \omega \tau \hat{\omega}$ at $P$. Oxy. IV 744, 1.6 and SB VI 9564, 1. 4, and the subjunctive at P. Wash.Univ. II 106, ll. 5, 7, P. Oxy. IV $744,1.13$; there is no dependent verb at $B G U$ IV 1141, 1. 9.

    15 The exact number of infinitives is once again impossible to establish, but by this period wholly unambiguous infinitive forms (e.g. $-\epsilon \iota \nu$ ) are common enough with $\epsilon \quad \epsilon \omega \tau \hat{\omega}$ to make this statement true.

    16 The examples from this century are $B G U$ VIII $1871,1.6$ ( $57-56 \mathrm{BC}$ ), $B G U$ VIII 1874, l. 9 (70-69 or 41-40 вс), P. Amst. I 88, 1. 8 ( 89 or 2 вс, cf. E. Dickey, 'The Greek

[^150]:    ${ }^{17}$ A calculation following the method in n. 10 indicates that $30 \%$ of examples of $\pi а \rho а к а \lambda \hat{\omega}$ from і вс to ii ad take constructions other than the infinitive.
    ${ }^{18}$ Other examples of $\pi \alpha \rho \alpha \kappa \alpha \lambda \hat{\omega}$ with infinitive include BGU II 531. i, 1.21 (i Ad), P. Stras. IX 844, 1.8 (i-ii ad), P. Giss. 25, 1.10 (i-ii ad), P. Brem. 20, 1.12 (ii ad), P. Mich. VIII 499, l. 15 (ii Ad), P. Oxy. LIX 3992, 1.7 (ii ad); other examples with imperative include BGUIII 846, 1. 10 (ii AD), P. Giss. 12, 1. 4 (ii Ad), 21, l. 12 (ii AD), P. Mert. I 24, 1. 12 (ii Ad), P. Oxy.Hels. 47c, 1.3 (ii Ad), SB XVI 13058, 1.6 (ii AD). With subjunctive the secure additional examples are only BGU II 531. ii, 1.14 (i AD), II 665. ii, l. 20 (i Ad), P. Lond. III 897, l. 22 (i AD), SB V 7600, l. 4 (i AD), P. Mich. VIII 503, l. 14 (ii ad).

[^151]:    19 Again spelling confusion makes it unclear whether there is also a Greek equivalent of the third possible construction with oro, the subjunctive without $u t$.

    20 The examples are: imperative at P. Oxy. IV 744, l. $6 \dot{\epsilon} \pi \iota \mu \epsilon \lambda \eta_{\eta} \theta<\eta \tau>_{\iota}$, infinitive at $B G U$ VIII 1871, ll. 6-8 $c^{c} \nu \tau \epsilon \gamma \epsilon \epsilon \hat{\imath}$, probably infinitive at $B G U$ VIII 1874, 1. 9 $\dot{\epsilon} \pi \iota \mu \epsilon ́ \lambda \epsilon \subset \theta \alpha \iota$ (could be for $\dot{\epsilon} \pi \iota \mu \epsilon ́ \lambda \epsilon c \theta \epsilon$, but this is unlikely as the letter is addressed to

[^152]:    a single individual), ambiguous abbreviation at $B G U$ XIV 2419, $1.5 \pi \alpha \rho \alpha \lambda(\epsilon i \pi \epsilon \tau \nu)$, fragmentary context at P. Amst. I 88, 1. 8, BGU VIII 1875, 11. 9, 25, no dependent verb at $B G U$ IV 1141, 1. 10.
    ${ }^{21}$ Others include BGU IV 1141, ll. 9-10 (i вс), P. Oxy. II 294, ll. 28-9 (i ad), $S B$ V 7600, l. 4 (i ad), P. Col. VIII 215, l. 21 (i-ii ad), P. Stras. V 334b, ll. 5-6 (i-ii Ad), P. Wuerzb. II 21a, 1l. 18-19 (ii Ad).
    ${ }^{22}$ The only example of such a combination I can find (based on a DDBDP search going up to 100 AD ) is O.WadiHamm. 26, ll. 3-4 (i Ad).

[^153]:    ${ }^{23}$ Examples include rogat oratque (S. Rosc. 144), rogat et orat (Ver. 1.72), rogant et orant (Ver. 2.147), rogare et orare (Div. Caec. 3), rogare atque orare (Ver. 2.103, 3.69).

[^154]:    ${ }^{24}$ Cf. M. Dubuisson, Le Latin de Polybe: les implications historiques d'un cas de bilinguisme (Paris, 1985); García Domingo, Latinismos.
    ${ }^{25}$ Cf. R. A. Kearsley, Greeks and Romans in Imperial Asia: Mixed Language Inscriptions and Linguistic Evidence for Cultural Interaction until the end of AD III, with the collaboration of T. V. Evans (Bonn, 2001); B. Rochette, Le Latin dans le monde grec: recherches sur la diffusion de la langue et des lettres latines dans les provinces hellénophones de l'empire romain (Brussels, 1997); L. Zgusta, 'Die Rolle des Griechischen im römischen Kaiserreich', in G. Neumann and J. Untermann (eds.), Die Sprachen im römischen Reich der Kaiserzeit. Kolloquium vom 8. bis 10. April 1974 (Cologne, 1980), 121-45.
    ${ }^{26}$ P. Mackridge, The Modern Greek Language: A Descriptive Analysis of Standard Modern Greek (Oxford, 1985), 311; cf. R. Cavenaile, 'Influence latine sur le vocabulaire grec d'Égypte', CdÉ 26 (1951), 391-404 at 404.
    ${ }^{27}$ Cf. E. Dickey, ' $K \dot{v} \rho \iota \epsilon, \Delta \epsilon ́ c \pi о \tau a, ~ D o m i n e: ~ G r e e k ~ P o l i t e n e s s ~ i n ~ t h e ~ R o m a n ~ E m p i r e ', ~$ JHS 121 (2001), 1-11; ead., 'The Greek Address System'; H. Cuvigny, 'Remarques sur l'emploi de 'i̊́oc dans le praescriptum épistolaire', BIFAO, 102 (2002), 143-53; Parsons, P. Rain. Cent. 164, 1. 15 n.

[^155]:    * This study is based on my contribution to the Conference 'Buried Linguistic Treasure' held at Oxford, 30 June-2 July 2006. An earlier version was presented in the Comparative Philology Graduate Seminar in Oxford (May 2003). I am grateful to my supervisor, Prof. Anna Morpurgo Davies, for her very constructive and helpful comments. I must also express my thanks to the directors of the $\Lambda \epsilon \xi \iota \kappa o ́ ~ \tau \eta s$
     and of the $І \sigma \tau о \rho \iota к o ́ ~ \Lambda \epsilon \xi \iota \kappa o ́ ~ \tau \eta s ~ N \epsilon ́ a s ~ E \lambda \lambda \eta \nu \iota \kappa \eta ́ s ~(R e s e a r c h ~ C e n t r e ~ f o r ~ M o d e r n ~ G r e e k ~$ Dialects-I $\Lambda N E$, Academy of Athens), Professor I. N. Kazazis and Dr E. Giakoumaki respectively, for permission to use the archives and consult as yet unpublished material. Finally, I should make particular mention of Ms V. Afentoulidou (Research Centre for Modern Greek Dialects-I $\Lambda N E$, Academy of Athens) for her help with the searching of the electronic database of the $I \Lambda N E$ archive. Naturally I am responsible for all mistakes and/or omissions.
    ${ }^{1}$ See e.g. J. N. Adams, M. Janse, and S. Swain (eds.), Bilingualism in Ancient Society: Language Contact and the Written Word (Oxford, 2002); also J. N. Adams, Bilingualism and the Latin Language (Cambridge, 2003).

[^156]:    ${ }^{2}$ This word appears first on an ostracon (O. Claud. I 143, 1. 7) of the 2nd c. ad in the form of сvүкє $\lambda \lambda$ 人́ $\rho \circ о с$, 'contubernalis'(?) (military term), admittedly showing a very distinctive Latin(ate) morphology (Gk. cúv + Lat. cellarius); when it is found again in papyrus texts of the 6th and 8th cc. AD, it appears as cú $\gamma \kappa \epsilon \lambda \lambda o c$ and cvүкє́ $\lambda_{\lambda \iota o c ~ r e s p e c t i v e l y, ~ a n d ~ h a s ~ b y ~ n o w ~ a c q u i r e d ~ a n ~ e c c l e s i a s t i c a l ~ m e a n i n g . ~}^{\text {. }}$
    ${ }^{3}$ In addition, the survival or otherwise of these terms in the history of Greek also gives us a glimpse of the impact that earlier contacts with other languages might have had on Greek in general.
    ${ }^{4}$ I use 'Latin' for words and forms that actually occur in Latin texts too and 'Latinate' for words and forms that are based on Latin but normally also have features (including stems and suffixes) which are clearly Greek. A secondary meaning of 'Latinate' refers to material which might have entered Greek through some later form of Latin, i.e. Balkan Latin, late medieval Latin, early Romance, etc; this secondary meaning, however, does not apply to the Latin(ate) material of the Greek papyri. Finally, 'Latinism' in the context of the Greek papyri refers to both a 'Latin' and a 'Latinate' form.

[^157]:    ${ }^{5}$ H. Hofmann, Die lateinischen Wörter im Griechischen bis 600 n. Chr. (diss. Erlangen-Nürnberg, 1989).
    ${ }^{6}$ However, F. Viscidi, I prestiti latini nel greco antico e bizantino (Padua, 1944), ii. 58 , speaks of $c .2,900$ Latin loans (including derivatives and other new formations from them), primarily on the basis of data from literary texts. Once again, this number is indicative of the size of the Latin lexical material found in Greek texts, but cannot be seen as a precise or definitive number, as the figures from other (later) works show.

    7 S. Daris, Il lessico latino nel greco d'Egitto, 2nd edn. (Barcelona, 1991).
    ${ }^{8}$ I.-M. Cervenka-Ehrenstrasser and J. Diethart, Lexikon der lateinischen Lehnwörter in den griechischsprachigen dokumentarischen Texten Ägyptens mit Berücksichtigung koptischer Quellen, Fasc. 1 ( $A$ ) and Fasc. 2 ( $B-\Delta$ ) (Vienna-Purkersdorf, 1996-2000).

[^158]:    ${ }^{9}$ E. Dickey, 'Latin Influence on the Greek of Documentary Papyri: An Analysis of Its Chronological Distribution', ZPE 145 (2003), 249-57. Note, however, that Dickey's figures are based on the first edition (1971) of Daris, Lessico.
    ${ }^{10}$ F. Sallés Verdaguer, Estudio fonológico de la transcripción griega de vocablos latinos (diss. Barcelona, 1976); Gignac, Grammar, i.
    ${ }^{11}$ C. F. Döttling, Die Flexionsformen lateinischer Nomina in den griechischen Papyri (Lausanne, 1920); Gignac, Grammar, ii.

    12 Palmer, Grammar; R. Cavenaile, 'Quelques aspects de l'apport linguistique du grec au latin d'Égypte', Aegyptus, 32 (1952), 191-203.
    ${ }^{13}$ B. Meinersmann, Die lateinischen Wörter und Namen in den griechischen Papyri (Leipzig, 1927).

[^159]:    ${ }^{14}$ H. J. Mason, Greek Terms for Roman Institutions: A Lexicon and Analysis (Toronto, 1974).
    ${ }^{15}$ In recent literature too there are works which demonstrate the need for a clear analysis and classification of the features (phonological, morphological, semantic, etc.) of the loanwords as well as of some discussion of their typology as a necessary introduction to any theoretical, sociolinguistic, or other treatment of the forms which may follow; cf. e.g. M. Görlach (ed.), English in Europe (Oxford, 2002), on the Anglicisms in modern European languages.
    ${ }^{16}$ Cavenaile, 'Quelques aspects', 199.
    ${ }^{17}$ Cf. Browning, Greek, 40-1.

[^160]:    18 Görlach, English, 8.
    19 There are cases, however, where a fully Latinate form might have been coined in a Greek linguistic environment, or at least is attested there, by means of Latin loan morphemes: e.g. $\beta \rho a \kappa \epsilon ́ \lambda \lambda \alpha(\iota)$ 'short trousers' (<bra(c)ca(e) (originally Celto-Germanic probably) + -ella; cf. Cervenka-Ehrenstrasser-Diethart, Lexikon, s.v. $\beta \rho \alpha \kappa \epsilon ́ \lambda \lambda \alpha)$.
    ${ }^{20}$ See J. F. Gilliam, 'Ala Agrippiana and archistator', CPh 56 (1961), 100-3; Mason, Greek Terms, 113-15; H. and R. Kahane, 'The Western Impact on Byzantium: The Linguistic Evidence', DOP 36 (1982), 127-53 at 128-33.
    ${ }^{21}$ See D. R. Langslow, Medical Latin in the Roman Empire (Oxford, 2000), 80, esp. n. 9; cf. also F. Biville, 'The Graeco-Romans and Graeco-Latin: A Terminological Framework for Cases of Bilingualism', in Adams-Janse-Swain, Bilingualism in Ancient Society, 77-102 at 92-102.

[^161]:    ${ }^{22}$ There are also examples of the reverse phenomenon，i．e．Greek stems with Latin suffixes，such as $\mu \eta \chi \alpha \nu$ ápoc＇engineer＇（i AD onwards）；the equivalent form of this hybrid in Latin is machinarius，which is not attested until as late as vi AD（Justinian） although it might have existed from much earlier．However，since forms with a Greek stem and a Latin termination are normally not Latin loanwords（there are a few exceptions，e．g．$\delta \rho \rho \mu \epsilon \delta \dot{\alpha} \rho \iota(o)$ c＇a dromedary（camel）；a dromedary soldier（i．e．rider）’ $<$ Lat．dromedarius $<$ Gk．$\delta \rho o \mu a ́ c$, ，（－ádoc），＇a running（camel），a dromedary＇＋Lat． －arius），they are not included in Daris，Il lessico latino and therefore are not examined here．
    ${ }^{23}$ For a detailed discussion of some of these univerbations，see P．Filos，＇On Some Latin Univerbations in Greek，＇Oxford University Working Papers in Linguistics，Phil－ ology and Phonetics， 11 （2006），43－61．

[^162]:    ${ }^{25}$ Biville, 'Graeco-Romans', 100-2, argues that hybrid formations like petra-bulum 'catapult' seem not to belong to either language, but to a 'contact' language instead, with 'interlexemes' and 'intermorphemes'. This is particularly true of the literary, esp. poetic, language. On the other hand, the language of the papyrus documents is closer to actual language use, and we are entitled to consider many of the hybrid formations found in those texts as part of the actual (written) language, even if in certain cases (e.g. some administrative terms in official documents; other technical terms) the coining and spreading of the hybrids has apparently been the result of a 'superimposed', 'top-down' process. Biville's remark applies well to those semantic fields where both languages played a major role together, e.g. early Christian vocabulary:
    
    ${ }^{26}$ See Biville, 'Graeco-Romans', 97; for Greek see e.g. Viscidi, Prestiti, 8-9. This semantic differentiation corresponds to the general semantic difference between the loans of the one language into the other. Greek borrowings into Latin are predominantly (but not exclusively) high-register words whereas Latin loans into Greek come from both the high and the low registers; for Greek, see e.g. Viscidi, Prestiti, 10-43; Mason, Greek Terms, 3-16; cf. also Kahane and Kahane, 'Western Impact', 128-33.

[^163]:    ${ }^{29}$ In the New Testament there are cases of Greek compounds where hiatus is preserved (especially when the first member of the compound is a numeral) at a morpheme boundary, as in e.g. $\tau \epsilon \tau \rho \alpha \alpha \alpha^{\rho} \chi \eta c$ (cf. BDR, Grammatik, 99).
    ${ }^{30}$ However, this word has an alternative form in Greek, $\alpha \rho \mu о(\rho о) \kappa о и ́ с \tau \omega \rho$, which is likely to have derived via univerbation from a Latin periphrasis $\operatorname{armoru}(m)$ custos. At a second stage it must have acquired the more regular form of a 'Hellenized' pseudocompound (?) (cf. also Cervenka-Ehrenstrasser-Diethart, Lexikon, s.v. d́ $\rho \iota \kappa о \dot{c} с \tau \omega \rho$ ). ${ }^{31}$ See Palmer, Grammar, 118-19; Cavenaile, 'Quelques aspects', 193, 199-202.

[^164]:    32 Palmer, Grammar, 6-17, 29-39, 42-50, 83-93, 108-21; Cavenaile, 'Quelques aspects', 193-7, 199-202; R. Coleman, 'Greek and Latin', in A.-F. Christidis (ed.), A History of Ancient Greek. From the Beginnings to Late Antiquity (Cambridge, 2007), 792-9, 856-7 at 796-7.

[^165]:    ${ }^{34}$ Measures are also related to financial (and commercial) vocabulary, i.e. they could also be classified within the semantic field (iii) in $\$ 4.2$ above.

[^166]:    ${ }^{35}$ I shall refrain from providing comprehensive statistics per document category because some documents show a dual character (a legal document such as a contract can be a list of items at the same time, and so on). Thus I shall provide examples per century only when necessary.
    ${ }^{36}$ By contrast, simple Latin loanwords can occasionally be found in large numbers within the same document, e.g. in lists of items such as clothes or household equipment.
    ${ }^{37}$ See Dickey, 'Latin Influence', esp. 252-3, 256-7.

[^167]:    ${ }^{38}$ I have left out the scanty data ( 22 forms, according to Dickey's figures) from і вс since they had no statistical significance and no correspondence with hybrid forms from the same century.
    ${ }^{39}$ This is indicated in all the tables through the hatched colour pattern of the columns of the last two centuries.

[^168]:    ${ }^{40}$ Dickey, 'Latin Influence', 251-3.
    ${ }^{41}$ For a number of possible reasons for this, see ibid. 256-7.

[^169]:    ${ }^{45}$ But cf. Görlach, English, 9 on hybrid formations in modern languages: 'Loanwords become available for use in compounds very soon after their adoption if the receiving language has the same pattern....
    ${ }^{46}$ If these hybrids were ad hoc formations created by their writers, they would only be attested sporadically or once; of course this is the case with many of them, but not with all: this rarity might point to marginal but not necessarily artificial formations. In addition, the attestations of some of them in literature as well as their partial survival in modern Greek (see below) indicates that some of them were well integrated in the Greek language of that period.

[^170]:    ${ }^{47}$ The coining of compounds out of/in the place of nominal phrases (e.g. cúa $\gamma \rho o c: ~ c \hat{c} c$ $\ddot{\alpha} \gamma \rho \iota o c)$, which is seen here in the form of the loan translation/adaptation of some Latin

[^171]:    ${ }^{48}$ The literature on this subject is extensive. Some very good and comprehensive accounts are found in R. S. Bagnall, Egypt in Late Antiquity (Princeton, 1993), 230-60; V. Bubenik, Hellenistic and Roman Greece as a Sociolinguistic Area (Amsterdam, 1989), 257-64; J. Ray, 'Greek, Egyptian, and Coptic', in Christidis, History of Ancient Greek, 811-18, 859-61, esp. 812-14, 816.

[^172]:    52 See, in addition to the titles in previous n., H. Petersmann, 'Vulgärlateinisches aus Byzanz', in C. W. Müller, K. Sier, and J. Werner (eds.), Zum Umgang mit fremden Sprachen in der griechisch-römischen Antike: Kolloquium der Fachrichtungen Klassische Philologie der Universitäten Leipzig und Saarbrücken am 21. und 22. November 1989 in Saarbrücken (Stuttgart, 1992), 219-31; Browning, Greek, 67-8; Coleman, 'Greek and Latin', 795-9.
    ${ }^{53}$ See Meyer, Neugriechische Studien, iv; cf. also Kahane and Kahane, 'Western Impact', 136-53.
    ${ }_{54}$ Viscidi, Prestiti, 58.
    ${ }_{55}$ Meyer, Neugriechische Studien, iii.

[^173]:    ${ }^{56}$ I have limited my search to the data provided by the archive (including both published and unpublished material) of the $I \Lambda N E$ archive (Academy of Athens).

[^174]:    * I am indebted to Dr David Leith (Wellcome Centre for the History of Medicine, UCL) who read and commented upon a draft of this article.
    ${ }^{1}$ Cf. Palmer, Grammar, 45-6; S. Jannaccone, Recherches sur les éléments grecs du vocabulaire latin de l'empire (Paris, 1950), 58-9; J. N. Adams, Bilingualism and Latin Language (Cambridge, 2003), 495-6; J. Diethart, 'Zu neutralen Abstrakta auf -á $\boldsymbol{\tau} o v$ im byzantinischen Griechisch', Jahrbuch der österreichischen Byzantinistik, 56 (2006), 13-26.

    2 P. Chantraine, La Formation des noms en grec ancien (Paris, 1933), 299-309. See also Adams, Bilingualism, 495: 'If the borrowing language already has a suffix which resembles phonetically a suffix in the contact language conditions are ideal for the suffix in the contact language to be borrowed'.
    ${ }^{3}$ In Greek these wines are labelled either oîvoı є́скєvacнє́voı (Artemid. Onirocr. 1.
    

[^175]:    ${ }^{6}$ The Latin provenance of the word is the topic of AP9.502, going under the name
    
     derivation from condire ('to spice/to season the wine') see J. Kramer, 'Gewürze und Mulsum: Zur Bedeutung von коvঠїос und когдітоv in den Papyri', in B. Kramer, W. Luppe, H. Maehler, and G. Poethke (eds.), Akten des 21. internationalen Papyrologenkongresses, Berlin, 13.-19.8.1995 (Stuttgart, 1997), 547-55 at 547.
    ${ }^{7}$ For this compare also the testimony of Artemidorus (Onirocr. 1. 66. 18-22); see n. 3 .
    ${ }^{8}$ The editio princeps is CPR VIII 52; new edition in M. Paul, ' $C P R$ VIII 52 komplettiert: Brief der Therpe an ihren Vater', Analecta Papyrologica, 4 (1992), 75-8.
    ${ }^{9}$ For this interpretation of the content of the letter see H. Harrauer and P. J. Sijpesteijn, 'Lexikographische Delenda, Corrigenda et Addenda', Wiener Studien, 96 (1983), 68-74 at 69.
     (list of provisions; edition by A. Maravela-Solbakk forthcoming in ZPE; vvi ad);
    

[^176]:    ${ }^{17}$ The noun is still in use with reference to wine about a century later in Latin (Pallad. Op. Agric. 3.32 ed. Rodgers: conditum vel absentium vel rosatum vel violacium procedere sponte fertur ex vitibus...).
    ${ }_{18}$ Note, however, that the Megarian copy of Ed. Diocl. has $\dot{\alpha} \psi \iota v$ ®iou.
    19 Attested in literature as early as the 5th/4th c. bс (Hipp. De Affect. Inter. 52. 8, etc.; Men. Samia 100; Ps.-Arist. Problem. 949², etc.).
    ${ }^{20}$ The date of the text has been established by Bagnall on the basis of $(a)$ the meat prices recorded in it and ( $b$ ) its relation to the text of the verso, see R. S. Bagnall, 'Five Papyri on Fourth Century Money and Prices', BASP 20 (1983), 1-19 at 8.
    ${ }^{21}$ For the proliferation of diminutives in $-\iota o \nu$ in the Koine see Horrocks, Greek, 117-18, and in the papyri R. Cavenaile, 'Quelques aspects de l'apport linguistique du grec au latin d'Égypte', Aegyptus, 32 (1952), 191-203 at 195.

[^177]:    ${ }^{22}$ The word occurs abbreviated but the editor's analysis of the abbreviation as $\dot{\alpha} \psi \iota \nu \theta \hat{\alpha} \tau(o \nu)$ —instead of $\dot{\alpha} \psi \iota \nu \theta \dot{\alpha} \tau(o v)$ —appears warranted given that the non-abbreviated words in the list are in the nominative.
    ${ }^{23}$ Simpl. Comm. in Arist. Cat., CCAG viii. 413. 9; Phot. Bibl. codex 221 (p. 177a40); Hieroph. De Nutr. Meth. 9. 5. 3. Note that in the anonymous version of the latter work that goes under the title De duodecim mensium natura the form used is oivouc ...áucvÁcouc, i.e. a combination that changes the gender of the loanword so that it agrees with the gender of wine in Greek (1.5.4,2.7.2).
    ${ }^{24}$ A Latinized version of the Greek masc. noun $\dot{\alpha} \psi \iota \nu \theta_{i} \tau \eta c$ is used by Pliny ( $H N 14$. 109, 20.65) and Columella (De Re Rustica 12. 35).
    ${ }^{25}$ Leofranc Holford-Strevens observes that the $h$ presumably reflects Greek influence on a Latin word. Latin attestations dating from the same century are the passages quoted already from Pallad. Op. Agric. 3. 32, 1 (see n. 17 above) and Scr. Hist. Aug. Heliog. 21.6 (see discussion of apsinthatum above).
    ${ }^{26}$ P. Cairo Mus. inv. S.R. 3805; editio princeps in A. Hanafi, 'Bill of Lading', in B. G. Mandilaras (ed.), Proceedings of the XVIII International Congress of Papyrology, Athens 25-31 May 1986 (Athens, 1988), ii. 83-90.

[^178]:     Bibl. codex 221 (p. 177²40).
    ${ }^{28}$ Interesting from a linguistic point of view is the hybrid $\dot{\rho} 0 \delta \hat{\alpha} \tau o v$ encountered in two recipes cited by Aetius (Iatr. 16. 134. 5, 135. 1). Provided that the reading is not a result of scribal error, it indicates that the use of forms $\dot{\rho}$ oסí $\eta$ c and $\dot{\rho}$ oc $\hat{\alpha} \tau o v$ side by side in the Byzantine period resulted in amalgamation, the end-product of which combines the new Latinate suffix with the original Greek stem.

[^179]:    ${ }^{29}$ See also J.-L. Fournet's commentary to GMP I 15, 1. 1, pp. 166-7.
    ${ }^{30}$ As rightly pointed out by Harrauer and Sijpesteijn ('Lexikographische Delenda', 71), SB I 5307, 1.3 (in a record of expenses from the Byzantine period), where the editio princeps proposes $\dot{v} \pi \dot{\epsilon} \rho \mu a c \tau \iota \chi(\dot{\alpha} \tau o v)$, should be analysed $\dot{v} \pi \grave{\epsilon} \rho \mu a c \tau i ́ \chi(\eta c)$. The reason is that nard, frankincense, and myrrh-some of the ingredients in the recipe transmitted in SBI 5307-are combined in prescriptions with mastich (see e.g. the prescription for a malagma recorded in Orib. Ecl. med. 51. 8), never with mastich-wine.
    ${ }^{31}$ The adj. $\mu a c \tau i \chi$ ivoc in Greek is used with reference to an oil or unguent scented with myrtle berries.

[^180]:    ${ }^{32}$ GMP I 15，1．2，p． 167.
    ${ }^{33}$ See OLD，s．vv．
    ${ }^{34}$ In prescriptions on papyri it occurs in PSI IV 297， 1.4 （v ad）and P．Coll．Youtie II 87，l． 4 （vi Ad）．
    ${ }^{35}$ More details in J．－L．Fournet＇s commentary to GMP I 15，l．6，p． 170.

[^181]:    36 In Latin the noun citrum, $-i$ signifies the wood of the citron-tree and citrus, $-i$ the citron tree (see OLD s.vv.).
    ${ }^{37}$ The $i \hat{\alpha} \tau o v$ recipes in Aetius (Iatr. 1. 119) and Paul of Aegina (Epit. med. 7. 20. 9) clearly refer to an oil.

    38 The word is a loan from Persian; see P. Chantraine, Dictionnaire étymologique de la langue grecque, iii (Paris, 1975), s.v. $\mu$ óc хос 2.

[^182]:    39 See Harrauer and Sijpesteijn, 'Lexikographische Delenda', 72.
    ${ }^{40}$ On interchange of $o$ and $o v$ in the papyri see Gignac, Grammar, i. 212-13.
    ${ }^{41}$ The formulation - $\hat{\alpha} \tau o \nu /-\hat{i} \tau o v$ is convenient for the present purpose, but it must be remembered that -î̃ov is not a suffix directly parallel to - $\hat{\alpha} \tau o \nu$.
    ${ }^{42}$ Note that in Latin the noun (whether it was coined by the alleged inventor of the mastich-wine, the emperor Elagabalus, or at a later stage) is a hybrid with Greek stem and Latin end-suffix.
    ${ }^{43}$ The similarity of the -îov ending with the original Greek suffix for aromatic wines, -í $\eta \eta$ c, may be one reason.

[^183]:    ${ }^{44}$ The suffix -atum/- $\mathrm{a} \tau o v$ is employed because it signifies 'prepared by addition of... $\therefore$ Pliny (HN 14.108) reports that wines made by addition of pepper and honey are called condita by some and piperata by others.
    ${ }^{45}$ 'Iẫov in particular results from the combination in one new word of the translation into Greek of the first element of the Latin word for violet-wine (violacium) and the Latinate suffix used in Greek in the derivation of terms signifying scented wines.
    ${ }^{46}$ The authenticity of Orib. Coll. med. 5. 33 has been called into question by Bussemaker and Daremberg (Euvres d'Oribase, i. 648-9), who consider this part as an interpolation that bears the marks of a Byzantine redaction. The features that they point out (the mention of Ascalon wine and the formulation $\tau \hat{\eta} \iota \chi \epsilon \iota \rho i$ cov instead of $\tau \hat{\eta} \iota \subset \hat{\eta} \iota \chi \epsilon \iota \rho \hat{\imath})$ indeed indicate a later date, but may represent nothing more than two cases of later tampering with the text. If my assumption in the light of the papyrological evidence that the - $\hat{\alpha} \tau o \nu$ terms for scented wines were introduced into or created within Greek in the course of the 4th c. AD is correct, then Oribasius may have excerpted this section from a contemporary medical manual.

[^184]:    ${ }^{47}$ On this see Horrocks, Greek, 73; P. Poccetti, 'Latein und die griechische Welt', in P. Poccetti, D. Polli, and C. Santini, Eine Geschichte der lateinischen Sprache: Ausformung, Sprachgebrauch, Kommunikation (Tübingen, 2005), 90-130 at 108 and 115.
    ${ }^{48}$ An exception is represented by the term кov $\delta i \tau o v$ that replaces the Greek д$\rho \omega \mu a \tau i \tau \eta<$ oîvoc both in papyri and medical/veterinary texts.

[^185]:    ${ }^{49}$ Excepting $\dot{\alpha} \psi \iota \nu$ Aiov on the Megarian copy, see above, n. 18.

[^186]:    * I should like to thank Anna Morpurgo Davies, Eleanor Dickey, Stephanie Dalley, John Huehnergard, Nino Luraghi, Philomen Probert, Oktor Skjaervo, and Elizabeth Tucker for their comments. All the translations of the Greek texts are mine unless otherwise specified.

[^187]:    ${ }^{1}$ I use the term glossary to denote a collection of exotic or rare words; a glossary can also be a collection of hard words in an author, often following the order in which they appear in his work, as happens for example in the Scholia Minora to Homer. I apply the term lexicon (or dictionary) to works that show an attempt, however successful, at a complete list of the words in a language. To avoid confusion it should also be noted at the outset that I will use the Greek $\gamma \lambda \hat{\omega}$ cca for the exotic word (in the Aristotelian sense) appearing in a glossary as lemma (headword), but the English gloss to indicate the explanation of the lemma. On Greek glossography and lexicography see K. Latte, ‘Glossographika', Philologus, 80 (1925), 136-75; E. Degani, 'Lessicografi', in F. Della Corte (ed.), Dizionario degli scrittori greci e latini, 3 vols. (Milan, 1987), ii. 1169-89; K. Alpers, 'Griechische Lexicographie in Antike und Mittelalter dargestellt an ausgewählten Beispielen', in H.-A. Koch and A. Krup-Ebert (eds.), Welt der Information: Wissen und Wissensvermittlung in Geschichte und Gegenwart (Stuttgart, 1990), 14-38. For dialectal glossography, we have the so-called Г $\bar{\omega} с с а \iota \kappa \alpha \tau \grave{\alpha} \pi o ́ \lambda \epsilon \iota c$, a list of one hundred words divided by geographical areas; cf. Latte, 'Glossographika',
    
    ${ }^{2}$ On lexica and glossaries on papyri, cf. M. Naoumides, 'The Fragments of Greek Lexicography in the Papyri', in Classical Studies Presented to Ben Edwin Perry by His Students and Colleagues at the University of Illinois, 1924-60 (Urbana, IL, 1969), 181-202.

[^188]:    ${ }^{3}$ On bilingual glossaries see J. Kramer, Glossaria bilinguia in papyris et membranis reperta (Bonn, 1983); id., Glossaria bilinguia altera (Leipzig, 2001).

[^189]:    ${ }^{4}$ Ed. G. Poethke, 'Fragment einer alphabetisch geordneten Wörterliste (P. Berol. 9965)', Archiv, 39 (1993), 17-20.
    ${ }^{5}$ Cf. also W. Luppe, 'Das Komikerglossar Pap. Oxy 1801', Philologus, 111 (1967), 86-109.
    ${ }^{6}$ Ibid. 107.

[^190]:    ${ }^{7}$ P. Oxy. XV 1802 was first published by Hunt in 1922. Lobel found some other pieces joining it, but did not publish them. I started working on these new fragments and on Lobel's notes in the summer of 2004. My new edition of the entire papyrus, with translation and full commentary is forthcoming (see p. xxii above).

[^191]:    ${ }^{12}$ On Soloi, cf. W. Ruge, s.v. Soloi (1), RE iiiA. 935-8. On Tarsus, cf. id., s.v. Tarsos (3), $R E$ ivA. 2413-39, esp. 2415-18.
    ${ }^{13}$ Cf. W. Fauth, 'Gyges und die "Falken"', Hermes, 96 (1968), 257-64.

[^192]:    14 As argued by L. Tafuro, 'A proposito dell'idromele nel POxy 1802 e nelle Quaestiones convivales di Plutarco', in M. Capasso (ed.), Da Ercolano all'Egitto, iv: Ricerche varie di papirologia (Galatina, 2003), 143-8.
    ${ }^{15}$ Cf. M. Brust, Die indischen und iranischen Lehnwörter im Griechischen (Innsbruck, 2005) 457-8.

    16 Cf. R. Turcan, Mithras Platonicus: recherches sur l'hellénisation philosophique de Mithra (Leiden, 1975), 119-20, who links this reference to Julian the Apostate, Against the Ignorant Cynics, 3.
    ${ }_{17}$ Cf. F. Cumont, The Mysteries of Mithra, 2nd edn, trans. T. J. McCormack (Chicago, 1903; repr. New York, 1956), 140. I wonder whether the role of Mithras as the mediator between gods and humans (cf. his epithet $\mu \epsilon c i \tau \eta c$ ) could also have played a role in this identification; cf. ibid. 127-9; M. J. Vermaseren, Mithras, the Secret God, trans. T. and V. Megaw (London, 1963), 106-8.
    ${ }^{18}$ Cf. M. Boyce, Zoroastrianism: Its Antiquity and Constant Vigour (Costa Mesa, CA, 1992), 54; it has also been suggested (ibid. 57) that in a pre-Zoroastrian myth Mithras performed the first sacrifice.

[^193]:    ${ }^{19}$ For $\alpha \iota>\epsilon \iota$ cf. Gignac, Grammar, i. 260.

[^194]:    ${ }^{20}$ Persian is divided into Old Persian (attested from the sixth to the fourth century BC and written in a form of cuneiform), Middle Persian (c. 240 bс-AD 620, written in the Pahlavi alphabet), and Neo-Persian or Farsi. Old Persian is the language attested in the Achaemenid inscriptions, but it was never the administrative language or the lingua franca of the Achaemenid Empire (which used Aramaic for this role). Cf. R. Schmitt, 'Old Persian', CEWAL 717-41 at 717.
    ${ }^{21}$ On Akkadian and its divisions see J. Huehnergard and C. Woods, 'Akkadian and Eblaite', CEWAL 218-80 at 218-19.

[^195]:    ${ }^{22}$ A full list with identification and comments will appear in my forthcoming treatment. The only two 'literary' authors quoted are Homer and Xenophon, in entries quite damaged and hence difficult to reconstruct.

[^196]:    ${ }_{23}$ And this is in contrast with the wording in other (later) works concerned with language, linguistic analysis, and glosses, where the usage of active verbs denoting the idea of 'utterance' ( $\lambda \epsilon ́ \gamma o v c \iota)$ and pronunciation (ógúvovcı, $\psi \iota \lambda o u ̂ c \iota, \delta a c u ́ v o u c \iota) ~ i s ~ w e l l ~$
    
    
    

[^197]:    
    
     Choerob. In Theod. Can. i. 326. 12 каì $\tau o ̀ ~ \tau \rho a \chi u ́ \tau \eta c ~ к а i ̀ ~ к о и ф o ́ \tau \eta c ~ o i ́ ~ A \theta \eta \nu a i ̂ o ı ~ o ̉ \xi u ́ v o u c ı ~$
    
    
    

[^198]:    ${ }^{1}$ A useful introduction to corpus linguistics can be gained through the collection of key articles from the discipline recently compiled in G. Sampson and D. McCarthy, Corpus Linguistics: Readings in a Widening Discipline (London, 2004). Other introductions to the field include T. McEnery and A. Wilson, Corpus Linguistics, 2nd edn. (Edinburgh, 2001); D. Biber, S. Conrad, and R. Reppen, Corpus Linguistics: Investigating Language Structure and Use (Cambridge, 1998); and G. Kennedy, An Introduction to Corpus Linguistics (London, 1998). For an exploration of how corpus linguistics might be applied to the study of an ancient language, specifically Hellenistic Greek, see M. B. O'Donnell, Corpus Linguistics and the Greek of the New Testament (Sheffield, 2005).
    ${ }^{2}$ Sampson and McCarthy, Corpus Linguistics, 1 (emphasis original).
    ${ }^{3}$ Kennedy cites work by Leech, who locates the focus of corpus linguistics on the 'study of performance rather than competence, and on observation of language in use leading to theory rather than vice versa' (Kennedy, Introduction, 7). See also O'Donnell, Corpus Linguistics, 1-37, for a location of corpus methods within linguistics.

[^199]:    ${ }^{4}$ C. C. Fries, The Structure of English: An Introduction to the Construction of English Sentences (New York, 1952).
    ${ }_{5}$ Fries, Structure, 3.
    ${ }^{6}$ See evaluation of Fries's early corpus work in Kennedy, Introduction, 17.
    ${ }^{7}$ Discussing the lack of native speakers of ancient Greek in relation to the application of linguistic methods, Porter suggests that this fact 'rather than causing despair should make more pressing the need to reevaluate constantly the interpretative models employed and to rely more heavily upon formal linguistic features of the extant corpus': S. E. Porter, Verbal Aspect in the Greek of the New Testament, with Reference to Tense and Mood (New York, 1989), 4.
    ${ }^{8}$ P. W. Pestman, The New Papyrological Primer, 2nd rev. edn. (Leiden, 1994), 51. The grouping of texts within collections and editions is not novel; see for instance the arrangement of the material in A. S. Hunt and C. C. Edgar, Select Papyri, i: NonLiterary Papyri, Private Affairs (Cambridge, MA, 1932).

[^200]:    ${ }^{9}$ E. G. Turner, Greek Papyri: An Introduction, 2nd edn. (Oxford, 1980), 129 (italics ours).
    ${ }^{10}$ See O'Donnell, Corpus Linguistics, 102-62.

[^201]:    ${ }^{11}$ J. L. White, Light from Ancient Letters (Philadelphia, 1986).

[^202]:    12 Ibid. 3.
    ${ }^{13}$ On sociolinguistics and examples of sociolinguistic studies, see W. Labov, The Social Stratification of English in New York City (Washington, DC, 1966); id., Sociolinguistic Patterns (Philadelphia, 1972); id., Principles of Linguistic Change, i: Internal Factors (Oxford, 1996); J. Milroy, Linguistic Variation and Change: On the Historical Sociolinguistics of English (Oxford, 1992); L. Milroy, Observing and Analysing Natural Language: A Critical Account of Sociolinguistic Method (Oxford, 1987); D. Hymes, 'Models of the Interaction of Language and Social Setting', JSI 23 (1967), 8-28; and id., Foundations in Sociolinguistics: An Ethnographic Approach (Philadelphia, 1974).
    ${ }^{14}$ White, Light, 3.

[^203]:    ${ }^{15}$ G. Milligan, Selections from the Greek Papyri (Cambridge, 1910), pp. xxvii-xxxii. See also H. G. Meecham, Light from Ancient Letters: Private Correspondence in the Non-Literary Papyri of Oxyrhynchus of the First Four Centuries, and its Bearing on New Testament Language and Thought (London, 1923), 17-29; G. Milligan, Here and There among the Papyri (London, 1922), 1-2. On language and literature see also A. Deissmann, Light from the Ancient East: The New Testament Illustrated by Recently Discovered Texts of the Graeco-Roman World, trans. L. R. M. Strachan from rev. 4th German edn. (London, 1927); and J. H. Moulton, A Grammar of New Testament Greek, i: Prolegomena, 3rd edn. (Edinburgh, 1908).

[^204]:    16 More recent proponents include E. D. Head, New Testament Life and Literature as Reflected in the Papyri (Nashville, 1952); White, Light, esp. 2; I. Gallo, Greek and Latin Papyrology, trans. M. R. Falivene and J. R. March (London, 1986), 1-5, 67-81.

    17 R. Bagnall, Reading Papyri, Writing History (London, 1995), p. vii; cf. 2.
    18 Pestman, Primer, 1. 19 Ibid. 3.

[^205]:    ${ }^{21}$ See S. E. Porter, 'Dialect and Register in the Greek of the New Testament: Theory', in M. D. Carroll R. (ed.), Rethinking Contexts, Rereading Texts: Contributions from the Social Sciences to Biblical Interpretation (Sheffield, 2000), 190-208, esp. 197-207.
    ${ }^{22}$ See S. E. Porter and M. B. O'Donnell, 'Conjunctions, Clines, and Levels of Discourse', FNT 20 (2007), 3-14.

[^206]:    ${ }^{23}$ See S. Trenkner, Le Style KAI dans le récit attique oral (Brussels, 1948).

[^207]:    ${ }_{24}$ At this point, we wish to confine our analysis to formally based categories, such as imperative (rather than all the different means by which commands and prohibitions may be formed), in order to establish quantifiable starting-points and minimize subjective judgements in interpreting these data in the initial, annotation stage.

[^208]:    ${ }^{25}$ For a variety of reasons that cannot be developed here, we reject the traditional language of coordination and subordination, as these categories seem to imply value judgements regarding the information presented, rather than indicating how the information is structured.

[^209]:    ${ }^{26}$ See Porter, Verbal Aspect, 88; S. E. Porter and M. B. O'Donnell, 'The Greek Verbal Network Viewed from a Probabilistic Standpoint: An Exercise in Hallidayan Linguistics', FNT 14 (2001), 3-41.

